UNIVERSITY OF MANNHEIM
Business School

CHAIR OF FINANCIAL MARKETS AND FINANCIAL INSTITUTIONS

Master's Theses HWS 2023

Topic S1: Stock picking and timing skill of mutual fund managers

Classification: Empirical Topic

Advisor: Frederik Horn

A vast literature in Finance has explored the skill of mutual fund managers focusing on the performance of these fund managers. Many of the early studies find no evidence for fund manager skill (e.g. Carhart, 1997; Berk and Green, 2004). This has led to the common trope that a monkey throwing darts could outperform the average mutual fund manager.

However, Kacperczyk, Nieuwerburgh, and Veldkamp (2014) argue that there is a subset of mutual fund managers that possess skill. They measure mutual fund manager skill as the ability to pick stocks and time they market. The authors find that there are some mutual fund managers that are able to successfully pick stocks in boom markets and time the market during times of recession which results in superior performance of these managers.

This paper only covers 25 years of fund performance until the year 2005. Hence, in a first step it would be interesting to explore whether this proposed measure of mutual fund manager skill persist in more recent years. Furthermore, it would be interesting to explore in more detail where the outperformance of these fund managers stems from. Does it persist over longer time horizons? Is it induced by certain fund characteristics?

First, the student should provide a comprehensive review of the literature concerning mutual fund manager skill. Second, she should replicate the main findings of Kacperczyk et al. (2014). Third, she should extend the time series to include more recent year to test whether the findings persist. Finally, the student should explore in more what drives the higher performance of these funds. Other extensions are possible

Requirements:

The empirical work requires the use of large databases, i.e. CRSP/Compustat and Thompson Reuters. The databases are readily accessible for affiliates of the University of Mannheim. The candidate should feel comfortable with the use of a statistical software program (such as STATA) and econometric methods.

Related Literature:

Berk, J. B., & Green, R. C. (2004). Mutual fund flows and performance in rational markets. *Journal of Political Economy*, *112*(6), 1269-1295.

Carhart, M. M. (1997). On persistence in mutual fund performance. *The Journal of Finance*, *52*(1), 57-82.

Kacperczyk, M., Nieuwerburgh, S. V., & Veldkamp, L. (2014). Time-varying fund manager skill. *The Journal of Finance*, *69*(4), 1455-1484.

Topic S2: The Impact of Adverse Experience on Corporate Finance Decisions and ESG Performance

Classification: Empirical topic

Advisor: Sabrina Yufang Sun

I know of no one who has achieved something significant without also in their own lives experiencing their share of hardship, frustration, and regret . . . if you're like me and you occasionally want to swing for the fences, you can't count on a predictable life.

- Tim Cook, CEO of Apple Inc.

Cook highlights the importance of adverse life experience in a CEO's career. The finance literature has empirically investigated the link between disaster experience of corporate executives and firm outcomes. Bernile et al. (2016) find that CEOs who experience fatal disasters without extremely negative consequences lead firms that behave more aggressively. Chen et al. (2021) find that firms led by CEOs with early-life disaster experience have higher stock price crash risk. These are consistent with the interpretation that disaster experience makes the CEO more risk tolerant.

One open question is whether disaster experience also makes the CEOs more prosocial, and hence improves the firm's ESG performance. It can be speculated that CEOs who have lived through adverse experience have received help from others and are therefore more grateful toward society. This may result in more prosocial decisions and better corporate social impact.

In this master thesis, the candidate will review the relevant literature, replicate the main result of Bernile et al (2016), and extend the findings of Bernile et al. (2016) by investigating whether early life disaster experience of executives leads to better corporate ESG performance.

Requirement:

The empirical work requires the use of large databases. The candidate should feel comfortable with the use of a statistical software program (such as STATA) and econometric methods.

Introductory Literature:

Chen, Y., Fan, Q., Yang, X., & Zolotoy, L. (2021). CEO early-life disaster experience and stock price crash risk. *Journal of Corporate Finance*, *68*, 101928.

Bernile, G., Bhagwat, V., & Rau, P. (2017). What doesn't kill you will only make you more risk-loving: Early-life disasters and CEO behavior. *The Journal of Finance* 72 (1): 167-206.

Topic S3: The Social Impact of M&A Transactions: Evidence from the Care Industry

Classification: Empirical topic

Advisor: Sabrina Yufang Sun

There has been a growing interest among institutional investors, in particular private equity investors, in generating positive social impact alongside financial returns. This trend is sometimes referred to as "impact investing". One common way to achieve impact is by acquiring target firms with high ESG potential.

One sector that is increasingly targeted by impact-seeking investors is the care industry – healthcare, childcare, and senior care. Over the past ten years, there has been a significant rise in the M&A transactions in this industry, in particular from private equity investors. Investors are increasingly drawn to these sectors because of their long-term growth potential and the critical need for innovative solutions to address complex social challenges.

An important open question is whether these M&A transactions in the care industry leasd to positive social impact. While proponents cite the potential efficiency gain and innovation, critics argue that the focus on financial returns in these sectors can lead to a lack of attention to the needs of vulnerable populations and the quality of care provided, potentially undermining the social impact.

In this master thesis, the candidate will review the relevant literature and empirically investigate the social impact of M&A transactions. Specifically, do M&A transactions in the care industry lead to negative social consequences, including lower quality services, disadvantages to employees and vulnerable populations?

Requirement:

The empirical work requires the use of large databases. The candidate should feel comfortable with the use of a statistical software program (such as STATA) and econometric methods.

Introductory Literature:

Gupta, A., Howell, S. T., Yannelis, C., & Gupta, A. (2021). Does private equity investment in healthcare benefit patients? Evidence from nursing homes. *NBER Working Paper* (No. w28474).

Kassirer, J. P. (1996). Mergers and acquisitions—who benefits? Who loses?. New England Journal of Medicine, 334(11), 722-724.

Pradhan, R., Weech-Maldonado, R., Harman, J. S., & Hyer, K. (2014). Private equity ownership of nursing homes: implications for quality. *Journal of Health Care Finance*, *42*(2).

Topic S4: Differences of Opinion and Corporate Announcements

Classification: Empirical topic

Advisor: Annabelle Bröstl

Many asset pricing theories, such as the Capital Asset Pricing Model, assume homogeneous investor expectations regarding stock return and volatility. Relaxing this important assumption, several theoretical studies have examined how asset prices should behave if investors' opinions diverge (e.g. Hong & Stein 2007; Fama & French 2007). In his seminal paper, E.M. Miller argues that investor disagreement, when paired with short-sale constraints, results in an upward bias of stock prices (Miller 1977).

These theories are difficult to test empirically since it is difficult to measure differences in investor beliefs. One approach to test disagreement models consists in examining market reactions to corporate events that are assumed to either resolve or increase investor disagreement. For example, Berkman et al. (2009) compares the returns of high-disagreement stocks to the returns of low-disagreement stocks around the days on which earnings are being announced.

While events such as earnings announcements plausibly reduce investor disagreement, the relationship between other corporate announcements, such as the release of a company's sustainability report, and investors' opinions on the company's prospects is less clear. An interesting avenue to extend the research by Berkman et al. (2009) thus consists in analyzing how their findings relate to the announcement of non-financial information.

The student's task is it to

i. review the literature on the role of investor disagreement for stock prices, focusing on the empirical literature,

ii. replicate the main findings of Berkman et al. (2009) and

iii. apply the methodology suggested by Berkman et al. (2009) to analyze whether their findings also apply to voluntary ESG disclosure and/or ESG rating announcements.

Requirement:

The empirical work requires the use of large databases. The databases are accessible for affiliates of the University of Mannheim. The candidate should feel comfortable in the use of a statistical software program and econometric methods.

Introductory Literature:

Berkman, H., Dimitrov, V., Jain, P. C., Koch, P. D., & Tice, S. (2009). Sell on the news: Differences of opinion, short-sales constraints, and returns around earnings announcements. *Journal of Financial Economics*, 92(3), 376-399 .

Fama, E. F., & French, K. R. (2007). Disagreement, tastes, and asset prices. *Journal of Financial Economics*, 83(3), 667-689.

Hong, H., & Stein, J. C. (2007). Disagreement and the stock market. *Journal of Economic Perspectives*, 21(2), 109-128.

Miller, E. M. (1977). Risk, uncertainty, and divergence of opinion. *The Journal of Finance*, 32(4), 1151-1168 .

Topic S5: Fund Size and Investment Performance

Classification: Empirical topic

Advisor: Annabelle Bröstl

Do large investment funds perform worse than small funds? Dating back to Sharpe (1966), this is one of the oldest questions in the active management literature. Answering this question is important for evaluating the performance of investment funds (Pástor et al., 2015).

Several studies have found evidence that fund size is associated with lower fund performance (e.g., Chen et al., 2004; Yan, 2008). Many of these studies quantify scale effects by directly regressing fund returns on lagged fund sizes. This approach has been criticized by several recent papers (Pástor et al., 2015; Reuter & Zitzewitz; 2021; McLemore; 2019), arguing that it suffers from endogeneity problems.

Pástor, Stambaugh & Taylor (2015) propose a new method to address these issues. While they examine the relationship between fund size and performance in the U.S. market, compelling international evidence is still missing.

The student's task is it to

i. review the literature on the relationship between mutual fund size and performance,
ii. replicate the main findings of Pástor, Stambaugh & Taylor (2015) and
iii. extend their analysis by including more recent, as well as international data.

Requirement:

The empirical work requires the use of large databases. The databases are accessible for affiliates of the University of Mannheim. The candidate should feel comfortable in the use of a statistical software program and econometric methods.

Introductory Literature:

Chen, J., Hong, H., Huang, M., & Kubik, J. D. (2004). Does fund size erode mutual fund performance? The role of liquidity and organization. *American Economic Review*, 94(5), 1276-1302.

McLemore, P. (2019). Do mutual funds have decreasing returns to scale? Evidence from fund mergers. *Journal of Financial and Quantitative Analysis*, 54(4), 1683-1711.

Pástor, L., Stambaugh, R. F., & Taylor, L. A. (2015). Scale and skill in active management. *Journal of Financial Economics*, 116(1), 23-45.

Reuter, J., & Zitzewitz, E. (2021). How much does size erode mutual fund performance? A regression discontinuity approach. *Review of Finance*, 25(5), 1395-1432.

Sharpe, W. F. (1966). Mutual fund performance. *The Journal of Business*, 39(1), 119-138.

Yan, X. S. (2008). Liquidity, investment style, and the relation between fund size and fund performance. *Journal of Financial and Quantitative Analysis*, 43(3), 741-767.

Topic S6: Competition Among ESG Mutual Funds

Classification: Empirical topic

Advisor: Leah Zimmerer

Mutual funds play a crucial role in managing individual and institutional investments. The assets of actively managed, domestic US equity mutual funds have grown at an average rate of around 20% per year over the last 20 years. With more than 7,000 unique mutual funds managing a total of approximately 22.1 trillion U.S. dollars in 2022, it becomes to understand how competition influences the performance, fees, and investment strategies of these funds. While Khorana and Servaes (2004) demonstrated that mutual funds which previously had above-average fees and now charge lower fees have gained market share, Gil-Bazo and Ruiz-Verdu (2009) argue that competition "has not been able to prevent funds from setting high fees".

The paper by Wahal and Wang (2010) introduces a new measure of competition sensitivity to investigate the impact of competition on mutual fund performance and behavior. Using the overlap in portfolio holdings between new mutual funds and incumbents, they find that increased competition leads to enhanced fund performance and greater fee dispersion. They illustrate that competition motivates funds to improve their strategies and reduces the agency costs associated with fund management. Additionally, the study shows that competition drives funds to differentiate themselves by focusing on specific investment styles.

The first goal of the thesis is to replicate the main findings of Wahal and Wang (2010) including more recent years.

One of the most salient trends in the financial industry in recent years has been the push towards socially responsible investing (SRI). For example, in the US sustainably invested assets have risen by 17 percent per annum from 2014 to 2020 (GSIR report, 2020). This raises the question whether the impact of competition on mutual fund performance and behavior is different for ESG mutual funds.

The second goal of the thesis is to explore whether the main findings of Wahal and Wang (2010) are different for ESG mutual funds.

Requirements:

The empirical work requires the use of large databases, i.e. CRSP. The databases are readily accessible for affiliates of the University of Mannheim. The candidate should feel comfortable in the use of a statistical software program (such as STATA) and econometric methods.

Introductory Literature:

Gil-Bazo, J., Ruiz-Verdu, P. (2009). Yet another puzzle? The relation between price and performance in the mutual fund industry. *The Journal of Finance*, 64, 2153–2183.

Khorana, A., Servaes, H. (2004). Conflicts of interest and competition in the mutual fund industry. *Unpublished working paper*, Georgia Institute of Technology.

Wahal, S., & Wang, A. Y. (2011). Competition among mutual funds. *Journal of Financial Economics*, 99(1), 40-59.

Topic S7: Boys will be boys: Gender of Mutual Fund Managers and Overconfidence

Classification: Empirical topic

Advisor: Leah Zimmerer

Managers of mutual funds are usually seen as rational agents making rational choices on mutual fund investments. However, there is empirical evidence that mutual fund managers are also prone to behavioral biases. One widely documented behavioral bias that has been shown to influence retail investors' behavior is overconfidence (Odean, 1999). One common explanation of overconfidence is biased self-attribution. Individuals are more likely to attribute bad outcomes to chance while they attribute good outcomes to their own abilities (Miller and Ross, 1975). As investors become more overconfident after good portfolio performance (Gervais and Odean, 2001), they trade too much because of their over-optimistic beliefs about their own trading skills (Odean, 1999).

Based on these findings, Puetz and Ruenzi (2011) analyze whether mutual fund managers become (more) overconfident after good portfolio performance. They argue that mutual fund managers attribute good past portfolio performance to their own abilities Accordingly, they show that mutual fund managers trade more after good past individual portfolio performance.

The first goal of the thesis is to replicate the main findings of Puetz and Ruenzi (2011) including more recent years.

Many studies show that in masculine tasks men are more overconfident than women. Barber and Odean (2001) analyze the investment decision of retail investors and show male retail investors are more overconfident than female retail investors. This raises the question of whether male and female mutual fund managers differ with respect to their overconfidence.

The second goal of the thesis is to explore whether the findings are different for female and male mutual fund managers.

Requirements:

The empirical work requires the use of large databases, i.e. CRSP. The databases are readily accessible for affiliates of the University of Mannheim. The candidate should feel comfortable in the use of a statistical software program (such as STATA) and econometric methods.

Introductory Literature:

Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The Quarterly Journal of Economics*, *116*(1), 261-292.

Gervais, S., & Odean, T. (2001). Learning to be overconfident. *The Review of Financial Studies*, *14*(1), 1-27.

Miller, D. T., & Ross, M. (1975). Self-serving biases in the attribution of causality: Fact or fiction?. *Psychological Bulletin*, *82*(2), 213.

Puetz, A., & Ruenzi, S. (2011). Overconfidence among professional investors: Evidence from mutual fund managers. *Journal of Business Finance & Accounting*, *38*(5-6), 684-712.

Odean, T. (1999). Do investors trade too much?. *American Economic Review*, *89*(5), 1279-1298.