

Master's Theses HWS 2021

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Topic S1: Institutional ESG Investing: Does it make a difference?

Classification: Empirical Topic

Advisor: Frederik Horn

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 trend comes as no surprise as the damages done to the environment and the human rights violations committed by global companies are becoming more salient to consumers and investors.

Classic finance models would predict no effect of these activities as prices already reflect all available information and, as long as there are no limits to arbitrage, there will be always investors that bring stock prices back to fundamentals. However, several papers demonstrate effects of CSR activities on financial performance. For example, Hong and Kacperczyk (2009) show that so called sin stocks are shunned by investors and subsequently have higher returns. Similarly, Choi et al. (2020) claim that attention to climate change triggers the buying of low emission stocks and subsequently results in higher returns for these companies. Conversely, Chen et al. (2020) show that institutional investors also help to pressure companies into taking action regarding CSR issues.

In a seminal paper, Chava (2014) shows that companies facing environmental concerns have higher cost of capital. He argues that this is due to institutional investors applying exclusionary screens to their portfolios resulting in some firms being shunned. One shortcoming of the paper is that it only considers environmental aspects of a firm. Considering the aforementioned exploding industry of socially responsible investing it would be interesting to extend the results to also include social and governance related aspects of CSR. Furthermore, Chava (2014) does not discriminate between different institutional investors when looking at the institutional ownership of these stocks. It would considerably strengthen his results if one could find that environmental concerns primarily reduce ownership by ESG funds and ETFs.

First the student should provide a comprehensive survey of the academic literature on CSR activities, institutional ownership, and financial performance. Second, she should replicate the main findings of Chava (2014) concerning the effect of environmental concerns on expected stock returns. Finally, she should extend these analyses by analyzing other aspects of CSR and differentiating between ESG and non-ESG funds.

Requirements:

The empirical work requires the use of large databases, i.e. Thompson Reuters or IBES. 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:

- Chava, S. (2014). Environmental externalities and cost of capital. *Management Science*, 60(9), 2223-2247.
- Chen, T., Dong, H., & Lin, C. (2020). Institutional shareholders and corporate social responsibility. *Journal of Financial Economics*, 135(2), 483-504.
- Choi, D., Gao, Z., & Jiang, W. (2020). Attention to global warming. *The Review of Financial Studies*, 33(3), 1112-1145.
- Hong, H., & Kacperczyk, M. (2009). The price of sin: The effects of social norms on markets. *Journal of Financial Economics*, 93(1), 15-36.

Topic S2: Institutional shareholders and corporate social responsibility: A replication

Classification: Empirical Topic

Advisor: Frederik Horn

Replicability of research is a cornerstone of the sciences. Only if findings are independently confirmed by other researchers one can be sure of their validity and robustness. In finance research, replicability is a delicate topic as many papers are based on sensitive data of companies that do not allow publication of said data. This makes it difficult for journals to implement stringent submission policies. Furthermore, the surrounding world might respond to the publication of, for example, a profitable trading strategy and start trading on it resulting in a disappearance of the anomaly. Subsequently, it is impossible to know whether it constituted an actual anomaly or just a statistical artifact.

Recent events have shaken trust in the replicability of finance research. Hou et al. (2020) find for example that many asset pricing anomalies cannot be replicated. Similarly, this year a paper in the *Journal of Finance* was retracted after it was found that it was impossible to replicate the results (Guest, 2021). Besides aforementioned issues, critically replicating the work of others helps to understand potential missing pieces and provides a starting point for own research ideas.

Recently, one of the most salient trends in the fund industry is the implementation of socially responsible investment (SRI) strategies. In recent paper, Chen et al. (2020) claim that institutional investors increase the CSR performance of companies. They argue that this relationship is causal. However, other research finds that companies engaging in CSR activities are held more by institutional investors (Hartzmark and Sussman, 2019) or at least companies with CSR concerns are shunned by investors (Hong and Kacperczyk, 2009). This makes it difficult to attribute the improvement with respect to CSR activities solely to the influence of institutional investors. The importance of the topic and the difficulty of the author's task to demonstrate a causal relationship makes this paper a great candidate for a critical replication. Replicating the results helps to gain a better understanding how and whether institutional investors positively influence the CSR performance of a firm.

First, the student should provide a comprehensive literature review on the relationship between institutional as well as individual ownership and the CSR performance of the firm. Second, the student should replicate the findings of Chen et al. (2020) in detail. Finally, she should critically engage with the author's methodological choices and approaches. How do these choices change results? How robust are the original findings?

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:

Chen, T., Dong, H., & Lin, C. (2020). Institutional shareholders and corporate social responsibility. *Journal of Financial Economics*, 135(2), 483-504.

Guest, P. M. (2021). Risk Management in Financial Institutions: A Replication. *The Journal of Finance*.

Hartzmark, S. M., & Sussman, A. B. (2019). Do investors value sustainability? A natural experiment examining ranking and fund flows. *The Journal of Finance*, 74(6), 2789-2837.

Hong, H., & Kacperczyk, M. (2009). The price of sin: The effects of social norms on markets. *Journal of Financial Economics*, 93(1), 15-36.

Hou, K., Xue, C., & Zhang, L. (2020). Replicating anomalies. *The Review of Financial Studies*, 33(5), 2019-2133.

Topic S3: Trust and Stock Market Participation

Classification: Empirical topic

Advisor: Sabrina Yufang Sun

As John Campbell pointed out, “textbook financial theory implies that all households, no matter how risk averse, should hold some equities if the equity premium is positive.” Empirically, however, the average stock market participation rate is lower than 50 percent in many developed economies, including Germany. This is known as the “limited participation puzzle”. This is an important puzzle to solve for finance researchers because the limited stock market participation has important implications on equity risk premium, diversification discount, market liquidity, and market crashes.

Many factors have been found to influence investors’ decisions to participate in the stock market, e.g. risk aversion, pessimistic expectation, and so on. Among others, Guiso, Sapienza and Zingales (2008) find a relationship between trust and stock market participation: More trusting individuals are more likely to participate in the stock market, and conditional on participation, they invest more. Moreover, countries characterized by a low level of trust have lower stock market participation rates.

The first goal of the thesis is to replicate the results from the Guiso, Sapienza and Zingales (2008) paper, using micro-level and cross-country data from recent years. The second goal of the thesis is to design an extension – either independently or in discussion with the mentor.

Requirements:

The micro-level data are available for download from public databases. The cross-country data need to be collected by the student. The candidate should feel comfortable in the use of a statistical software program (such as STATA) and econometric methods.

Introductory Literature:

Guiso, L., Sapienza, P., & Zingales, L. (2008). Trusting the stock market. *The Journal of Finance*, 63(6), 2557-2600.

Guiso, L., Sapienza, P., & Zingales, L. (2004). The role of social capital in financial development. *American Economic Review*, 94(3), 526-556.

Topic S4: Lottery Winnings and Stock Market Participation

Classification: Empirical topic

Advisor: Sabrina Yufang Sun

As John Campbell pointed out, “textbook financial theory implies that all households, no matter how risk averse, should hold some equities if the equity premium is positive.” Empirically, however, the average stock market participation rate is lower than 50 percent in many developed economies, including Germany. This is known as the “limited participation puzzle”. This is an important puzzle to solve for finance researchers because the limited stock market participation has important implications on equity risk premium, diversification discount, market liquidity, and market crashes.

One known determinant of stock market participation is household wealth. However, it is hard to single out and quantify the effect of wealth. A recent paper by Briggs et al. (2021) takes advantage of the exogenous nature of lottery winnings to quantify the wealth effect. They show that a \$150,000 lottery winning (one kind of “windfall gains”) increases the stock market participation probability by 12% among those who did not invest in the stock market before the lottery.

The first goal of the thesis is to replicate the results of Briggs et al. (2021) using micro-level data. The second goal of the thesis is to design an extension – either independently or in discussion with the mentor.

Requirements:

The micro-level data needed for the analysis are either available for download from public databases or provided by the mentor. The candidate should feel comfortable in the use of a statistical software program (such as STATA) and econometric methods.

Introductory Literature:

Briggs, J., Cesarini, D., Lindqvist, E., & Östling, R. (2021). Windfall gains and stock market participation. *Journal of Financial Economics*, 139(1), 57-83.

Topic S5: Are female mutual fund managers better investors?

Classification: Empirical topic

Advisor: Leah Zimmerer

“There’s something that prevents people from being totally comfortable about signing their money over to a woman . . . a lot of negatives are applied’, says an anonymous fund-of-funds manager” (quoted in National Council for Research on Women 2009, p. 10).

Previous research has shown that there are two main reasons why investors might not invest in funds that are managed by female fund managers. The first reason is rational statistical discrimination (e.g., Phelps 1972). Rational investors could use the manager’s gender as a proxy of investor skill if female fund managers show worse performance and/or investment skills compared to male fund managers. The second reason is an irrational gender bias against female fund managers (e.g., Becker 1971).

Niessen-Ruenzi and Ruenzi (2018) show that female fund managers show more persistent investment styles and fund performances than male fund managers. The performance of female fund managers is virtually identical compared to male fund managers. Thus, Niessen-Ruenzi and Ruenzi (2018) conclude that “if anything, fund investors should prefer female fund managers”.

The first goal of the thesis is to replicate the main findings of Niessen-Ruenzi and Ruenzi (2018) including more recent years. Additionally, the student should explore whether we see changes over time.

Research has demonstrated that women show a higher level of altruism and are more socially-minded than men (e.g. Bertrand, 2011). This raises the question of whether female fund managers choose different stocks and industries compared to male fund managers. The second goal of the thesis is to examine whether female fund managers invest more into socially responsible stocks and are managers of socially responsible investing 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:

Becker G.S. (1971). *The Economics of Discrimination* 2nd ed., *University of Chicago Press*, Chicago.

Bertrand, M. (2011). New perspectives on gender. *Handbook of labor economics* (Volume 4), 1543-1590. Elsevier.

Hong, H., & Kostovetsky, L. (2012). Red and blue investing: Values and finance. *Journal of Financial Economics* 103, 1–19.

National Council for Research on Women (2009). *Women in fund management*. Report, National Council for Research on Women, New York.

Niessen-Ruenzi, A., & Ruenzi, S. (2019). Sex matters: Gender bias in the mutual fund industry. *Management Science*, 65(7), 3001-3025.

Phelps, E. S. (1972). The statistical theory of racism and sexism. *American Economic Review*, 62(4), 659-661.

Topic S6: Early-life natural disaster experiences by CEOs and corporate decisions

Classification: Empirical topic

Advisor: Leah Zimmerer

A growing body of research demonstrates that manager-specific characteristics and preferences affect the performance of firms and their policy choices. Bertrand and Schoar (2003) show that older generations of CEOs appear overall more conservative in their decision-making. Benmelech and Frydman (2015) present evidence that CEOs who served in the military are less likely to be involved in corporate fraudulent activity, and perform better during industry downturns. Thus, those papers, among others, show that CEOs have an impact on firm performance.

Bernile et al. (2017) use early-life natural disaster experiences by CEOs as a measure of CEOs' risk attitude and analyze the impact on various firm decisions and outcomes. They find that the impact of early-life natural disasters depends on the severity of the natural disaster. If CEOs experienced disasters without extremely negative consequences they behave more aggressively. CEOs who experienced disasters with extremely negative consequences behave more conservatively.

The first goal of the thesis is to replicate the main findings of Bernile et al. (2017) including more recent years.

Dessaint and Matray (2017) analyze how recent hurricanes affect the risk perception of managers whose firms are located in a neighboring county of the counties hit by the hurricane. They find that managers overreact to this salient event: Managers express more concerns about potential hurricane risks and increase the firm's cash holdings in the subsequent year.

The second goal of the thesis is to analyze whether CEOs who witness the extreme downside of disasters show higher overreaction compared to CEOs with early-life exposure to natural disasters without extremely negative consequences.

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:

Benmelech, E., & Frydman, C. (2015). Military CEOs. *Journal of Financial Economics*, 117(1), 43-59.

Bernile, G., Bhagwat, V., & Rau, P. R. (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.

Bertrand, M., & Schoar, A. (2003). Managing with style: The effect of managers on firm policies. *The Quarterly Journal of Economics*, 118(4), 1169-1208.

Dessaint, O., & Matray, A. (2017). Do Managers Overreact To Salient Risks? Evidence From Hurricane Strikes. *Journal of Financial Economics*, 126(1), 97-121.