UNIVERSITY OF MANNHEIM
Business School

CHAIR OF FINANCIAL MARKETS AND FINANCIAL INSTITUTIONS

Seminar Thesis Winter 2021/2022

Topic S1: Changing investor preferences: Are polluting companies the new sin stocks?

Classification: Empirical Topic

Advisor: Frederik Horn

As the negative effects of climate change are materializing, there have been calls by the public on financial institutions to invest in an environmentally conscious way. These calls have been met by a surge in ESG investment vehicles as well as vows by institutional investors, like the net-zero asset owner alliance, to invest in a carbon-neutral way in the near future. However, the academic literature has not reached a consensus yet whether this affects stock returns negatively (Flammer 2013), positively (Bolton and Kacperczyk 2020) or does not affect them at all as stock prices already reflect all available information.

In a seminal paper, Hong and Kacperczyk (2009) find that stocks that are labeled as sin stocks strongly outperform comparables. Sin stocks are defined as publicly traded companies that are in the alcohol, tobacco, and gambling business. They argue that these stocks are shunned by investors due to societal norms and therefore command lower prices and subsequently higher returns.

More recently, public opinion is turning more and more negative towards companies that are labeled as climate killers. Hence, it would be interesting to test whether high emission stocks are becoming the new sin stocks as there is some recent empirical evidence that investors sell off stocks as attention towards climate change increases (Choi, Gao, and Jiang 2020).

First, the student should provide a comprehensive survey of the academic literature of the effect of ESG measures on financial performance. Second, the student should replicate the main findings of Hong and Kacperczyk (2009) regarding the outperformance of sin stocks. Finally, the student should run similar analyses for companies that engage in environmentally damaging behavior and test whether a similar effect can be found in recent years.

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:

Bolton, P., & Kacperczyk, M. (2020). Do investors care about carbon risk? *National Bureau of Economic Research Working Paper* No. w26968.

Choi, D., Gao, Z., & Jiang, W. (2020). Attention to global warming. *The Review of Financial Studies* 33, 1112-1145.

Flammer, C. (2013). Corporate social responsibility and shareholder reaction: The environmental awareness of investors. *Academy of Management Journal* 56, 758-781.

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

Topic S2: Prejudice against female mutual fund managers

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 into 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) empirically analyze the question whether there exists a gender bias in the mutual fund industry. First, they show that female fund managers receive less inflows than male fund managers. Second, they document that the performance of female fund managers is virtually identical compared to male fund managers. Female fund managers show more persistent investment styles and fund performances than male fund managers. Thus, Niessen-Ruenzi and Ruenzi (2018) conclude that there is gender discrimination in the mutual fund industry and "if anything, fund investors should prefer female fund managers".

The goal of the thesis is to replicate the main findings of Niessen-Ruenzi and Ruenzi (2018) including more recent years. The student should answer the question whether female-managed funds receive lower inflows compared to male-managed funds. Next, the student should analyze whether the fund flow differences can be explained by fund performance or rather by gender bias. Finally, a possible extension could be to explore whether we see changes over time.

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.

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, 3001-3025.

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

Topic S3: State's pension funding status and corporate headquarters relocations

Classification: empirical topic

Advisor: Jiri Tresl

Warren Buffet said in 2021 Berkshire Hathaway's annual shareholder meeting that firms need to consider the state's pension funding status when choosing a firm's location. Specifically he said that one has to "*be very careful and think a long time before you go into some state with a huge pension deficit and a declining population, because you're going to be the last man left and the pensions won't go away*" (4:43:24).

Currently, there is no research study which examines this proposition. The student's task is to fill the void in the literature. The goal of this thesis is to develop an econometric model and test the relationship between corporate headquarters relocations and the state's pension funding status. The student can begin the research with the resent study Chow, Huang, Klassen, and Ng (2021).

Requirements:

The student is expected to have experience in working with STATA and COMPUSTAT. Furthermore, the student should have experience in developing econometrics models.

Introductory Literature:

Chow, T., Huang, S., Klassen, K. J., & Ng, J. (2021). The influence of corporate income taxes on investment location: Evidence from corporate headquarters relocations. *Management Science*.

Berkshire Hathaway 2021 Annual Shareholders Meeting Transcript:

- https://www.rev.com/blog/transcripts/warren-buffett-berkshire-hathaway-annual-meeting-transcript-2021

Useful Data Link:

- https://www.federalreserve.gov/releases/z1/dataviz/pension/funding_status/table/

Topic S4: Is this time the same again? Bank performance in three crises

Classification: Empirical topic

Advisor: Alison Schultz

Are some banks prone to perform poorly during crises? If yes, why? Fahlenbrach, Prilmeier, and Stulz (2012) show that a bank's stock return performance during the 1998 crisis predicts its stock return performance and probability of failure during the global financial crisis of 2007-2009. Banks that relied more on short-term funding, had more leverage, and grew more were more likely to perform poorly in both crises.

Does this pattern repeat for the Covid-19 outbreak in early 2020? In contrast to the crises of 1998 and 2007-09, the financial turmoil in 2020 originated in the real sector and banks were generally perceived to perform well. Nevertheless, banks relying on short-term funding and banks with higher leverage could have suffered more given the elevated risk on banks' balance sheet and the general high level of uncertainty.

In this thesis, the student should first replicate the findings of Fahlenbrach et al. (2012). Then, s/he should extend her sample to the end of 2020 and compare bank performance for the 1998, the 2007-09, and the Corona crisis.

Requirements:

The candidate should be highly interested in the topic and motivated to bring her own ideas into the research process. S/he should be willing to read about the different crises and familiar with statistical programming (STATA, R, Python, or Matlab). Data from Compustat and CRSP can be accessed via the University.

Introductory Literature:

Beck, T., & Keil, J. (2021). Are banks catching Corona? Effects of COVID on lending in the U.S., *CEPR Discussion Paper* No. DP15869.

Fahlenbrach, R., Prilmeier, R. & Stulz, R. (2012). This time is the same: Using bank performance in 1998 to explain bank performance during the recent financial crisis, *The Journal of Finance* 67, 2139-2185.

Topic S5: A risky signaling game? Bank dividends in crisis

Classification: Empirical topic

Advisor: Alison Schultz

While industrial firms have largely cut dividends and stopped share buybacks in crisis years, this is not the case for banks. Aggregate dividends paid by U.S. banks in 2008, for instance, exceeded their aggregate earning by about 30% (Floyd & Skinner (2015)). Given the government support banks have received during the financial crisis, this has fueled public debate. Scharfstein and Stein (2008), for example, called for a dividend ban, predicting that dividends would redirect more than USD25 billion of the USD125 billion government rescue package to shareholders. To avoid such capital depletion, in 2020, central banks have suspended dividend payments and share buybacks when introducing immense capital relief policies for banks.

The first explanation for banks' propensity to pay out funds when they should actually save capital refers to moral hazard: Banks benefit shareholders at the expense of debt holders, including taxpayers who fund the bailout. Given the risk of bankruptcy, they pay dividends to secure equity holders' funds before they are seized in case of bankruptcy. A second explanation states that dividends serve as a signal, both for the bank's future solvency and for its ability to rollover funds in troubling times. Given their opaque business model, banks use this signal to attract shareholders and raise funds of short-term lenders. Competing about shareholders and short-term lenders with its peers, each individual bank has the incentive to pay, or even increase, dividends in crisis, no matter how harmful this is for its own capital position (Juelsruf & Nenov (2020)).

The goal of this thesis is to portray banks' payout patterns over the last years and rationalize the observed patterns. First, the student should replicate the (descriptive) findings of Floyd & Skinner (2015) showing different payout strategies of industrial firms versus banks until 2008. The student should extend the sample up to 2020 to investigate if Floyd & Skinner's findings also hold for post-financial crisis years. Second, the student should explore the reasons for the observed patterns, e.g., by using sample splits and/or conducting event studies around the dates of relevant policy decisions.

Requirements:

The candidate should be highly interested in the topic and motivated to bring her own ideas into the research process. Moreover, s/he should be willing to read the (partly theoretical!) literature on banks' dividend payment patterns. S/he should be familiar with statistical programming (STATA, R, Python, or Matlab). Compustat data can be accessed via the University.

Introductory Literature:

Acharya, V., Gujral, I., Kulkarni, N., & Shin, H.S. (2011). Dividends and bank capital in the financial crisis of 2007-2009, *NBER Working Paper 16896*.

Beck, T., Mazzaferro, F., Portes, R., Quin, J., & Schett, C. (2020). Preserving capital in the financial sector to weather the storm, *voxEU.org*, 23 June 2020.

Floyd, E., Li, N., & Skinner, D. (2015). Payout policy through the financial crisis: The growth of repurchases and the resilience of dividends. *Journal of Financial Economics* 118, 299-316.

Juelsrud, R. & Nenov, P. (2020). Dividend payouts and rollover crises. *The Review of Financial Studies* 33, 4139-4185.

Scharfstein, D. & Stein, J. (2008). This bailout doesn't pay dividends. *The New York Times*, 20 October 2020.