UNIVERSITY OF MANNHEIM
Business School

CHAIR OF FINANCIAL MARKETS AND FINANCIAL INSTITUTIONS

Seminar Thesis Fall 2022

<u>Topic S1: Gambling attitudes and lottery stocks</u>

Classification: Empirical Topic

Advisor: Frederik Horn

Anecdotally, the stock market has served as an outlet for individuals and institutions to gamble with their money. These episodes can be traced as far back as 17th century Netherlands when investors bought tulip bulbs at astronomical prices in hopes of getting rich fast. More recently, speculation in meme stocks like Gamestop seems to suggest that investors are still placing huge bets on lottery type stocks in the hopes of earning large amounts of money. In a classic asset pricing model, where stock prices equal fundamentals, this should neither work nor matter as rational arbitrageurs are instantly exploiting these inefficiencies and profit of them. However, in reality such mispricings seem to persist for long periods of time.

In line with this observation, there is a large literature in Finance suggesting so called lottery-type stocks exist that have positively skewed returns but earn in the long-run negative risk-adjusted returns (Kumar et al., 2016). On top of that, these stocks seem to be bought by the same demographic that also buys lottery tickets (Kumar, 2009). These findings have important implications both for the functioning of stock markets as well as financial regulators. In a recent paper, Chen, Kumar, and Zhang (2021) argue that there are waves of gambling sentiment in which individuals do not only turn to the lottery but also use the stock market to satisfy this desire. Using Google searches for “lottery” as a direct proxy for this sentiment, they find that these gambling attitudes predict stock returns. This result further challenges the notion that these mispricings are addressed instantly by the market.

First, the student should provide a comprehensive literature review on lottery-type stocks, investors in these stocks, and stock returns. Next, the student should replicate the main results of Chen et al. (2021) regarding lottery sentiment and stock returns. Finally, the analysis could be extended by looking at other predictive horizons like on a monthly level to establish long-term predictive power.

Introductory Literature:

Chen, Y., Kumar, A., & Zhang, C. (2021). Searching for Gambles: Gambling Sentiment and Stock Market Outcomes. *Journal of Financial and Quantitative Analysis*, 56(6), 2010-2038.

Kumar, A. (2009). Who gambles in the stock market?. *The Journal of Finance*, 64(4), 1889-1933.

Kumar, A., Page, J. K., & Spalt, O. G. (2016). Gambling and comovement. *Journal of Financial and Quantitative Analysis*, 51(1), 85-111.

Topic S2: Political Polarization and Media Coverage of Financial Markets

Classification: Empirical topic

Advisor: Sabrina Yufang Sun

Both Western Europe and the United States have been experiencing a recent increase in political polarization. Not only is there less collaboration and mutual understanding between liberals and conservatives, but both sides increasingly view each other in an extremely negative way. While a large amount of literature has been devoted to the understanding of this political division, little is understood about its economic and financial consequences. A growing literature looking into it suggests that political polarization can have important economic implications (see e.g. Fos et al. 2021).

The current seminar thesis aims at understanding an important consequence of political polarization: how political division influences the media coverage of the stock market. Media portrayal of the stock market has important financial implications, as stock market is one of the main channels for firms' capital allocation and households' wealth accumulation.

Specifically, the student will empirically investigate how liberal- vs. conservative-leaning media portray the financial market in different manners, and whether this liberal-conservative gap widens in times of increasing political polarization.

The student has the following tasks:

- Review the literature on the media coverage of financial markets.
- Investigate whether the political leaning of the media outlet influences its coverage of the financial market, i.e. if there is a liberal-conservative gap in covering the financial market.
- Investigate whether the liberal-conservative gap in media widens as political polarization rises.

Requirement:

Fluent German language ability, as well as the capacity and willingness to read and analyze German and English newspaper texts are necessary for the completion of the project. Student should be comfortable with Excel. Knowledge in STATA or econometrics is NOT necessary. All analyses can be done in Excel.

Introductory Literature:

Fiorina, Morris P., and Samuel J. Abrams. "Political polarization in the American public." *Annual Review of Political Science,* 11 (2008): 563-588.

Fos, Vyacheslav, Elisabeth Kempf, and Margarita Tsoutsoura. "The political polarization of US firms." Available at SSRN 3784969 (2021).

Prior, Markus. "Media and political polarization." *Annual Review of Political Science,* 16 (2013): 101-127.

Disclaimer: I am currently working on the topic myself.

Topic S3: Political Ideology and Equity Analyst Behaviors

Classification: Empirical Topic

Advisor: Sabrina Yufang Sun

The United States is currently more politically divided now than it has been in the past twenty years. There is less collaboration and a lack of mutual understanding between Democrats and Republicans, and members of both political parties increasingly view each other in an extremely negative way.

As a result, partisan politics has begun to shape the relationships individuals have with others, with 50% of Republicans and 35% of Democrats likely to surround themselves with friends who share similar political views. Similar tendencies have been shown in the asset management and corporate finance context. Kempf et al. (2021) show that credit rating analysts are more likely to downgrade in times when the US president comes from the opponent party. Fos et al. (2021) find that there are increasing tendencies for corporate executives to go to firms that are aligned with their political ideology.

This seminar thesis seeks to investigate how US partisan politics shape the recommendation and forecasting behaviors of equity analysts. The reference paper in this context is Jiang et al. (2015), showing that Democratic- and Republican-leaning equity analysts exhibit different characteristics in their stock recommendations and forecasts (Jiang, 2015).

The student has the following tasks:

- Review the literature on how political ideology and polarization shapes behaviors on the financial market.
- Replicate Jiang et al. (2015)
- Extend the analysis from Jiang et al. (2015) to more recent years. (Other extensions are optional but can be performed, e.g. whether the difference in forecasting between Democrat and Republican analysts intensifies in times of high political polarization.)

Requirement:

The student should feel comfortable in the use of a statistical software program (such as STATA) and econometric methods.

Introductory Literature:

Fos, Vyacheslav, Elisabeth Kempf, and Margarita Tsoutsoura. "The political polarization of US firms." Available at SSRN 3784969 (2021).

Jiang, Danling, Alok Kumar, and Kelvin KF Law. "Political contributions and analyst behavior." *Review of Accounting Studies* 21, 1 (2016): 37-88.

Kempf, Elisabeth, and Margarita Tsoutsoura. "Partisan professionals: Evidence from credit rating analysts." *The Journal of Finance* 76, 6 (2021): 2805-2856.

Disclaimer: My coauthor and I are currently working on a related topic.

Topic S4: Information Sharing among Equity Analysts

Classification: Empirical topic

Advisor: Sabrina Yufang Sun

Sell-side equity analysts face the difficult task of predicting the future performance of stocks and making buy/sell recommendations based on their own analysis. To accomplish this task, equity analysts routinely use information from multiple sources to improve their forecasting skill. As competition increases, analysts are likely to exploit alternative and proprietary data sources to gain a competitive advantage. One important source of proprietary information comes from colleagues covering economically related industries along the supply chain, who may intentionally or unintentionally share information among each other.

This seminar thesis aims at understanding the information sharing and social learning among equity analysts and its impact on analysts' performance. Does information sharing increase the accuracy of their forecasts? The reference papers in this context are Huang et al. (2022), who find that analysts whose colleagues cover more economically connected industries have better research performance, especially when their colleagues produce higher-quality research.

The student has the following tasks:

- Review the literature on information sharing among financial market participants.
- Replicate Huang et al. (2022)
- Extend the analysis from Huang et al. (2022). The specific extension will be specified by the mentor. Data source and specific instructions for the extension will be given at the start of the seminar thesis.

Requirement:

The student should feel comfortable in the use of a statistical software program (such as STATA) and econometric methods.

Introductory Literature:

Hope, Ole-Kristian, Pingui Rao, Yanping Xu, and Heng Yue. "Information sharing between mutual funds and auditors." Available at SSRN 3313541 (2021).

Huang, Allen, An-Ping Lin, and Amy Y. Zang. "Cross-industry information sharing among colleagues and analyst research." *Journal of Accounting and Economics,* (2022): 101496.

Kumar, Alok, Ville Rantala, and Rosy Xu. "Social learning and analyst behavior." *Journal of Financial Economics,* 143, no. 1 (2022): 434-461.

<u>Topic S5: Wealth Inequality and the Equity Market</u>

Classification: Empirical topic

Advisor: Sabrina Yufang Sun

There is a growing debate about income inequality in the United States (Acemoglu and Autor, 2011). In theory, capital markets may reduce income inequality by punishing firms that exacerbate such inequality, e.g. those with a higher ratio of CEO salary to the salary of the median worker. The question is, does the capital market care about income inequality?

Pan et al. (2022) investigated this question and found that firms disclosing higher pay ratios experience significantly lower abnormal announcement returns, and that this reaction is particularly strong in more inequality averse regions. The current project aims at better understanding the effect of pay ratio disclosure for household investors.

The student has the following tasks:

- Conduct a literature review on inequality and the financial market
- Replicate a part of the main findings of Pan et al. (2022). The specific part to be replicated will be specified at the beginning of the seminar thesis.
- Extend the analysis by looking at how household investors react to the disclosure of pay ratios. Specific instructions for the extension, including data sources and empirical strategy, will be provided at the start of the seminar thesis.

Requirement:

The student should feel comfortable in the use of Excel and a statistical software program (such as STATA).

Introductory Literature:

Acemoglu, Dcemoglu, and David Autor, 2011, Skills, tasks and technologies: Implications for employment and earnings, in Ashenfelter Orley and David Card ed.: *Handbook of Labor Economics*, Vol. 4B, 1043–1171.

Pan, Y., Pikulina, E., Siegel, S., & Wang, T. Y. (2020). Do Equity Markets Care About Income Inequality? Evidence from Pay Ratio Disclosure. *Journal of Finance, forthcoming*.

Disclaimer: I am currently working on the topic.

Topic S6: Manager Attributes and Corporate ESG: Evidence from Chinese Firms

Classification: Empirical topic

Advisor: Sabrina Yufang Sun

By now, there are sufficient evidence that investors in Europe and the United States care about environmental, social, and governance (ESG) standards of corporations, and that firms cater to these investor preferences by adjusting their corporate behaviors, e.g. improving employee treatment and environmental friendliness. Much less, however, is known about the corporate ESG behaviors in the emerging markets.

The current seminar will fill this gap by empirically investigating the corporate ESG behaviors of Chinese firms. Specifically, the students will

- Characterize the corporate ESG behaviors of Chinese firms. (Detailed instructions will be provided.)
- Investigate whether the characteristics of corporate ESG behaviors are influenced by manager attributes.

Requirement:

The empirical investigation requires reading and collecting data on Chinese firms and managers. Hence, native-level Chinese reading ability is a must for the successful completion of this project. In addition, the student should be comfortable with a statistical software, for example STATA.

Introductory Literature:

Broadstock, David C., Kalok Chan, Louis TW Cheng, and Xiaowei Wang. "The role of ESG performance during times of financial crisis: Evidence from COVID-19 in China." *Finance Research Letters,* 38 (2021): 101716.

He, Feng, Hanyu Du, and Y. U. Bo. "Corporate ESG performance and manager misconduct: Evidence from China." *International Review of Financial Analysis,* (2022): 102201.

Krüger, Philipp. "Corporate goodness and shareholder wealth." *Journal of Financial Economics,* 115, 2 (2015): 304-329.

Disclaimer: I am currently working on the topic.

Topic S7: The Development of the Gender Wage Gap

Classification: Empirical topic

Advisor: Leah Zimmerer

The role of women in the economy has changed dramatically in the last 100 years. Women used to have low labor market participation rates and entirely dropped out of the labor market when they got married. In 2021, women make up 47.1% of the labor force, according to the U.S. Department of Labor.

However, women earn less than their male counterparts. According to a study by Barroso and Brown (2021), the raw gender wage gap in the US amounted to 36% in 1980 and declined to 16% in 2020. This raises the two questions: Are there any observable factors that can explain the decrease of the gender wage gap? Which factors can explain the remaining gender wage gap?

Blau and Kahn (2014) analyze trends in and possible explanations of the gender wage gap in the US from 1980 until 2010. They show that the gender wage gap decreased since 1980. However, there is still a difference in wages between men and women. They decompose (the changes of) the gender wage gap into different possible factors (e.g., schooling, experience, occupation, and industry). Blau and Kahn (2014) argue that while human-capital factors are getting less important over time, the gender differences in occupational and industrial sorting are still very important.

First, the student should provide a comprehensive literature review on the gender wage gap and possible explanations for the gap. Next, the student should replicate the main results of Blau and Kahn (2017) including more recent years. Finally, the analysis could be for example extended by including further explanatory variables.

Requirements:

The Panel Study of Income Dynamics (PSID) data is available for download. The candidate should feel comfortable in the use of a statistical software program (such as STATA) and econometric methods.

Introductory Literature:

Barroso, Amanda and Anna Brown, (2021). Gender pay gap in U.S. held steady in 2020, https://www.pewresearch.org/fact-tank/2021/05/25/gender-pay-gap-facts/

Blau, F. D., & Kahn, L. M. (2017). The gender wage gap: Extent, trends, and explanations. *Journal of Economic Literature*, *55*(3), 789-865.