

University of Mannheim · Chair of Financial Markets and Financial Institutions ·
L 9, 1-2 · 68161 Mannheim · Germany

Seminar Theses, HWS 2020

Topic S1: Reaping the benefits of innovation.....	2
Advisor: Frederik Horn	
Topic S2: Market Concentration and Stock Returns.....	3
Advisor: Frederik Horn	
Topic S3: The Impact of CEOs on Corporate Performance	4
Advisor: Leah Zimmerer	
Topic S4: The Impact of Public Opinion on Executive Compensation.....	5
Advisor: Leah Zimmerer	
Topic S5: Population health and employment protection legislation.....	6
Advisor: Jiri Tressl	

Topic S1: Reaping the benefits of innovation

Classification: Empirical Topic

Advisor: Frederik Horn

Innovation is one of the key drivers for the success of a firm. For example, Hall, Jaffe and Trajtenberg (2005) show that companies with more cited patents have considerably higher market valuations. However, their measure does not account for a patent's economic importance. More recently, Kogan, Papanikolaou, Seru and Stoffman (2017) develop a measure of the economic significance of an innovation and demonstrate that more innovative firms exhibit higher growth than less innovative firms. Yet, they only provide little evidence on the channel through which innovation leads to firm growth.

One potential channel might be that innovative firms enjoy higher markups. The markup is the selling price over the cost of that product. In a perfectly competitive and frictionless economy, markups should be equal to one. However, competitive advantages enable a firm to earn economic rents. Intuitively, if a firm develops a new product or innovates his production process, it can charge its customers higher prices or reduce its cost of production. Thus, the firm increases the markup and reaps the benefits of innovation. Measuring markups is notoriously difficult as it requires detailed information on a firm's cost structure. De Loecker, Eeckhout and Unger (2020) propose a new measure based on firm-level accounting data, which allows us to directly test the channel proposed above.

The goal of this thesis is to first provide a short overview on the literature on innovativeness, markups, and stock returns. Second, the student should test whether firms with higher innovativeness subsequently exhibit higher markups. Finally, she could examine whether the higher markups translate into higher future returns. The student will be provided with the markup and accounting data. The patent data is readily available for download.

Introductory Literature:

- De Loecker, J., Eeckhout, J., & Unger, G. (2020). The rise of market power and the macroeconomic implications. *The Quarterly Journal of Economics*, 135(2), 561-644.
- Hall, B. H., Jaffe, A., & Trajtenberg, M. (2005). Market value and patent citations. *RAND Journal of Economics*, 16-38.
- Kogan, L., Papanikolaou, D., Seru, A., & Stoffman, N. (2017). Technological innovation, resource allocation, and growth. *The Quarterly Journal of Economics*, 132(2), 665-712.

Topic S2: Market Concentration and Stock Returns

Classification: Empirical Topic

Advisor: Frederik Horn

Since the 1980s markets in the US have become increasingly concentrated. Fewer companies command higher and higher market shares in their respective industries. This begs the question whether this leads to less competition and more concentrated market power in these industries? What does it mean for capital markets?

Hou and Robinson (2006) find that firms in more concentrated industries earn lower returns. They argue that these firms are inherently less risky as they experience less distress risk and engage less in innovation activities. Hence, these firms should have lower expected returns. On the other hand, Grullon, Larkin and Michaely (2019) find that since the 2000s investing in highly concentrated industries provides abnormal returns to investors. Thus, they claim that market concentration constitutes an asset pricing anomaly. Investors underestimate the value of market power and the associated increase in profitability. Yet, both are only able to provide evidence on an industry level leaving open the possibility for several industry related explanations. This makes it interesting to explore the effect of market power on stock returns on a firm level.

It is notoriously difficult to quantify market power. Traditionally, the Herfindahl index has been used, which measures the market concentration in an industry. More recently, De Loecker, Eeckhout and Unger (2020) suggest using firm-level accounting data to calculate the markup of a firm. The markup is another measure of a firm's market power as it evaluates its pricing power. This measure provides a great opportunity to validate the results of Hou and Robinson (2006) and Grullon et al. (2019) on a firm level.

The goal of the thesis is to first summarize the literature on market power and stock returns. Second, the student should replicate the main findings of Grullon et al. (2019) regarding market concentration and stock returns. Lastly, the student should validate the results by using firm-level markup data. The student will be provided with the markup data. The other data is readily available for download.

Introductory Literature:

- De Loecker, J., Eeckhout, J., & Unger, G. (2020). The rise of market power and the macroeconomic implications. *The Quarterly Journal of Economics*, 135(2), 561-644.
- Grullon, G., Larkin, Y., & Michaely, R. (2019). Are US industries becoming more concentrated?. *Review of Finance*, 23(4), 697-743.
- Hou, K., & Robinson, D. T. (2006). Industry concentration and average stock returns. *The Journal of Finance*, 61(4), 1927-1956.

Topic S3: The Impact of CEOs on Corporate Performance

Classification: Empirical topic

Advisor: Leah Zimmerer

Do CEOs have an impact on firm performance? This question is widely discussed in a large body of literature in economics, organizational theory and finance. While Lieberman and O'Connor (1972) show that CEOs have only very limited influence on firm profitability, Tushman and Romanelli (1985) argue that CEOs matter for firm performance. Finance research focuses on the organizational variables and CEO characteristics that determine whether CEOs have an impact on firm performance. Bertrand and Schoar (2003) show that investment and financing decisions depend on the CEOs making the decisions. Those decisions impact the firm performance.

Adams et al. (2005) argue that the impact of the CEO (characteristics) on the firm performance should be larger when the CEO has more power. In their paper they support the hypothesis that the firm performance is more variable when the CEO has more power as extreme decisions are more likely to be taken by a powerful CEO.

The goal of the thesis is to first replicate the main findings of Adams et al. (2005) including more recent years. Second, it can be examined how the power of CEOs and the influence on firm performance vary over times. Third, it can be analyzed whether firms with powerful CEOs differ from firms with non-powerful CEOs.

Requirements:

The empirical work requires the use of large databases, i.e. CRSP, ExecuComp and COMPUSTAT. 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:

- Adams, R. B., Almeida, H., & Ferreira, D. (2005). Powerful CEOs and their impact on corporate performance. *The Review of Financial Studies*, 18(4), 1403-1432.
- Lieberman, S., & O'Connor, J. F. (1972). Leadership and organizational performance: A study of large corporations. *American Sociological Review*, 117-130.
- Bertrand, M., & Schoar, A. (2003). Managing with style: The effect of managers on firm policies. *The Quarterly Journal of Economics*, 118(4), 1169-1208.
- Tushman, M. L., & Romanelli, E. (1985). Organizational evolution: A metamorphosis model of convergence and reorientation. *Research in Organizational Behavior*.

Topic S4: The Impact of Public Opinion on Executive Compensation

Classification: Empirical topic

Advisor: Leah Zimmerer

There is a growing literature in finance that analyses the impact of public opinion on corporate decisions. For example, Dyck, Volchkova and Zingales (2008) show that public opinion influences how minority shareholders are treated. Miller (2006) states that public opinion plays an important role in corporate fraud detection. Additionally, Weisbach (2007) shows that firms choose forms of executive compensation that are usually not discussed in the press and thus reduce public attention towards the executive compensation.

Kuhen and Niessen (2012) argue that firms take public opinion, as channeled by the news media, into account when deciding on executive's compensation composition. They measure public opinion by the tone of newspaper articles about the firms' executive compensation. Their results show that negative news influences the composition of pay as firms want to avoid the type of pay that is mostly criticized.

The goal of the thesis is to analyze the impact of attention and public opinion on executive compensation. First, the student should replicate the main findings of Kuhen and Niessen (2012) for the time period 2003-2019. Second, it can be analyzed whether the overall attention has an impact on executive compensation.

Requirements:

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

Introductory Literature:

- Dyck, A., Volchkova, N., & Zingales, L. (2008). The corporate governance role of the media: Evidence from Russia. *The Journal of Finance*, 63(3), 1093-1135.
- Kuhnen, C. M., & Niessen, A. (2012). Public opinion and executive compensation. *Management Science*, 58(7), 1249-1272.
- Miller, G. S. (2006). The press as a watchdog for accounting fraud. *Journal of Accounting Research*, 44(5), 1001-1033.
- Weisbach, M. S. (2007). Optimal executive compensation versus managerial power: A review of Lucian Bebchuk and Jesse Fried's pay without performance: The unfulfilled promise of executive compensation. *Journal of Economic Literature*, 45(2), 419-428.

Topic S5: Population health and employment protection legislation

Classification: Empirical Topic

Advisor: Jiri Tresl

Employment contracts are incomplete in the sense that firms cannot specify the quantity and quality of employee effort. This contracting problem may be overcome by an intrinsically motivated workforce. Akerlof and Kranton (2005) argue that employees may identify themselves with firms and receive utility from doing a good job. The firm becomes a source of belonging, esteem, and self-realization – the most desirable human needs in Maslow’s hierarchy. Employees, however, who dislike their employer will experience disutility from work effort. Firms can nevertheless expect high efforts if the fear of job loss outweighs the workers’ disutility. An example thereof is Mike, the steelworker, illustrated in Akerlof and Kranton (2005). Such employees will often feel anger, stress, and anxiety – costs which ultimately are burdened by society and, thus, reflect externality costs from the firm’s point of view. Following this line of argument, employment protection laws may be an important government intervention to limit increasing stress levels among a country’s workforce.

The student should empirically test the hypothesis whether employment protection laws affect population health. To do so, the student should compile a country panel dataset using the employment protection legislation database EPLex (link provided) and the OECD Health database. The OECD (2019) provides an overview of available health indicators. Alcohol consumption and life expectancy are a good starting point to capture workplace related health outcomes. Moreover, a theoretical framework for analyzing population health is offered by Kinding and Stoddart (2011).

Requirements:

The student is expected to have some understanding of econometrics and experience with statistical software like Stata. Furthermore, the student should be willing to conduct a literature review and derive an appropriate regression equation on population health. The results should be discussed with respect to the literature.

Introductory Literature:

- Akerlof, G. A., & Kranton, R. E. (2005). Identity and the Economics of Organizations. *Journal of Economic Perspectives*, 19(1), 9-32.
- Bowles, S., Carlin, W., & Stevens, M. (2017). The firm: Owners, Managers, and Employees, In: *The Economy*. Oxford University Press, Oxford.
 - Link: <https://core-econ.org/the-economy/book/text/06.html#67-wages-effort-and-profits-in-the-labour-discipline-model>
- OECD (2019). Health at a Glance – OECD Indicators.
- Kindig, D., & Stoddart, G. (2011). What is Population Health? *American Journal of Public Health*, 93, 380-383.

Useful Data Links:

- <https://eplex.ilo.org/#indicators-section>