UNIVERSITÄT MANNHEIM
Fakultät für Betriebswirtschaftslehre

LEHRSTUHL FÜR ACCOUNTING UND CAPITAL MARKETS

Bachelorarbeitsthemen im Studiengang Betriebswirtschaftslehre

2025

Thema	Titel	Betreuer/in	Sprache
1	Peer effects in the workplace	*Pascal Schrader*	*Deutsch/Englisch*
2	Behavioral Biases in Professional Decision-Making: Evidence from Sports	*Pascal Schrader*	*Deutsch/Englisch*
3	Attention Washing in ESG Disclosures: Strategic Responses to Adverse Events	*Pascal Schrader*	*Deutsch/Englisch*
4	The Use of Geospatial Data in Accounting and Finance Research	*Kriti Bhattacharya*	*Englisch*
5	Regulating Corporate Transparency: The Role of Impact Assessments in EU Policymaking	*Tobias Kalmbach*	*Deutsch/Englisch*
6	Diversity Targets and Corporate Reporting: Real Change or Just for Image?	*Tobias Kalmbach*	*Deutsch/Englisch*
7	How Companies Use Climate Targets in Sustainability Reports: A Look at the Science-Based Targets Initiative	*Tobias Kalmbach*	*Deutsch/Englisch*
8	Delegation of Hiring Authority	*Felix Fritsch*	*Englisch*
9	The Impact of Climate Change on Firm Disclosures	*Felix Fritsch*	*Englisch*
10	Costs and Benefits of the Use of Artificial Intelligence in Accounting and Finance	*Ilias Nasri*	*Englisch*
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Thema	Titel	Betreuer/in	Sprache
12	Behavioral Biases and Market Cycles: Unveiling Hidden Patterns in Financial Markets Using Big Data	*Ilias Nasri*	*Englisch*
13	Germany's Deposit-Refund System (Pfand) – Impact and International Applicability	*Kriti Bhattacharya*	*Englisch*
14	Towards a Cashless Society: Economic Implications of Declining Cash Use	*Kriti Bhattacharya*	*Englisch*
15	Driving the Electric Transition: Policy Impacts on Electric Vehicle Adoption	*Kriti Bhattacharya*	*Englisch*

Topic 1:

Peer Effects in the Workplace

Supervisor: Pascal Schrader, Dipl. WInf.

Deutscher Titel: Peer-Einflüsse und ihre Auswirkungen im beruflichen Umfeld

Topic Description:

The productivity of a company's employees can be influenced by various factors within the work environment. Peer effects play an important role in this context by producing and exchanging knowledge and information. Studies show that innovation and progress in companies are related to the exchange of knowledge among employees. Considering the importance of information in financial markets, the exchange of information could be particularly useful in the creation and evaluation of financial metrics of companies.

The goal of the thesis is, in a first step, to present potential influences of employees within a company on their colleagues using various examples from empirical literature. In a second step, the significance of information exchange within a company in the evaluation and analysis of financial information will be discussed, based on which analysts, for example, make predictions about the future economic situation. Finally, there is the opportunity to incorporate anecdotal examples from the databases of the University of Mannheim (e.g., I/B/E/S and Compustat) to demonstrate whether the exchange of information between analysts positively affects their performance.

Introductory Literature:

- Hwang, B. H., Liberti, J. M., & Sturgess, J. (2019). Information sharing and spillovers: Evidence from financial analysts. *Management Science, 65*(8), 3624-3636.
- Phua, K., Tham, M., & Wei, C. (2023). Peer effects in equity research. *Journal of Financial and Quantitative Analysis, 58*(2), 647-676.
- Tan, T. F., & Netessine, S. (2019). When You Work with a Superman, Will You Also Fly? An Empirical Study of the Impact of Coworkers on Performance. *Management Science*, *65*(8), 3470-3469.

Topic 2:

Behavioral Biases in Professional Decision-Making: Evidence from Sports

Supervisor: Pascal Schrader, Dipl. WInf.

Deutscher Titel: Verhaltensverzerrungen in professionellen Entscheidungen: Evidenz aus dem Sport

Topic Description:

Even experienced professionals are not immune to behavioral biases when making high-stakes decisions. Sports settings offer a unique opportunity to study such distortions due to the availability of high-frequency, objective performance data and clearly defined rules. For example, studies have shown that professional referees, judges, and even top athletes fall prey to cognitive biases such as the gambler's fallacy, loss aversion, or implicit discrimination.

The aim of this thesis is to introduce central behavioral economics concepts using empirical evidence from professional sports. In a first step, the student will present key biases such as loss aversion, reference dependence, and sequential decision-making errors, drawing on recent research that uses sports data to identify these patterns. In a second step, the thesis will explore how these biases might affect financial analysts, investors, or auditors in corporate settings—despite formal training and strong incentives to act rationally. A discussion of implications for performance evaluation, governance, or financial markets will round out the thesis.

If desired, the thesis may include an exploratory analysis of publicly available sports datasets (e.g., NBA or PGA Tour statistics) to illustrate how bias manifests in real-world decisions.

Introductory Literature:

- Pope, D. G., & Schweitzer, M. E. (2011). Is Tiger Woods Loss Averse? Persistent Bias in the Face of Experience, Competition, and High Stakes. *American Economic Review, 101*(1), 129–157.
- Chen, D. L., Moskowitz, T. J., & Shue, K. (2016). Decision Making under the Gambler's Fallacy: Evidence from Asylum Judges, Loan Officers, and Baseball Umpires. *Quarterly Journal of Economics, 131*(3), 1181–1242.
- Parsons, C. A., Sulaeman, J., Yates, M. C., Hamermesh, D. S. (2011). *Strike Three: Discrimination, Incentives, and Evaluation*. American Economic Review, 101(4), 1410–1435.

Topic 3:

Attention Washing in ESG Disclosures: Strategic Responses to Adverse Events

Supervisor: Pascal Schrader, Dipl. WInf.

Deutscher Titel: Aufmerksamkeit statt Aufarbeitung? Strategische ESG-Berichterstattung nach negativen Ereignissen

Topic Description:

In the wake of environmental, social, or governance (ESG) controversies, companies face reputational and financial pressures. While some respond with increased transparency, others may strategically adjust their disclosures to divert attention or obscure negative developments—a behavior referred to as attention washing. This concept extends theories of voluntary disclosure and strategic transparency, which posit that firms weigh the costs and benefits of revealing bad news to stakeholders.

The goal of this thesis is to provide an overview of theoretical and empirical research on how firms manage ESG-related communication in the aftermath of negative events. In a first step, the student will review foundational literature on voluntary and strategic disclosure, as well as emerging work on ESG reporting, greenwashing, and obfuscation. The second part of the thesis focuses on empirical studies that use textual analysis and ESG event data to examine how firms shift the focus of their disclosures after adverse incidents. The discussion will explore whether such disclosure shifts mislead stakeholders, affect ESG ratings, or influence capital market reactions.

The thesis aims to shed light on the boundaries of transparency and offers a critical perspective on how ESG disclosures are used—genuinely or strategically—in response to stakeholder scrutiny.

Introductory Literature:

- Capelle-Blancard, G., & Petit, A. (2019). Every little helps? ESG news and stock market reaction. *Journal of Business Ethics, 157*(2), 543–565.
- Cohen, L., & Nguyen, Q. (2024). Moving Targets. *Working Paper.*
- Fritsch, F., Zhang, Q., & Zheng, X. (2025). Responding to Climate Change Crises: Firms' Tradeoffs, *Journal of Accounting Research*, forthcoming.

Topic 4:

The Use of Geospatial Data in Accounting and Finance Research

Supervisor: Kriti Bhattacharya, M.Sc.

Topic Description:

Measuring how companies affect the environment and society—especially across global supply chains—is a big challenge for researchers and decision-makers. Traditional ESG data that companies report themselves often lacks important details, is not always reliable, and can be hard to compare across firms or countries. This makes it difficult to assess how companies contribute to issues like deforestation, pollution, or the well-being of local communities. A new and promising way to improve this is by using geospatial data—such as satellite images or environmental maps. These data sources allow researchers to directly observe what is happening on the ground, for example in forests or industrial areas, without relying only on what companies say in their reports. While geospatial data is already being used by some NGOs and consultants, its potential in finance and accounting research is only starting to be explored.

The goal of this thesis is to examine how useful geospatial data is for measuring companies' environmental and social performance in business research. In a first step, the student will explain why it is important to measure sustainability impacts and introduce different types of geospatial data, such as satellite images, forest loss maps, pollution data, and population indicators. These data types will be described in terms of where they come from, how they work, and how they can be used in accounting and finance research. In a second step, the thesis will look at recent academic studies that use geospatial data to analyze topics like carbon emissions, biodiversity loss, and the social effects of company activities—such as land conflicts or displacement of communities. Finally, the student will discuss some of the challenges of working with this kind of data.

Introductory Literature:

- Kundu, S., & Ruenzi, S. (2024). Exporting carbon emissions? Evidence from space. *Working Paper*.
- Erbertseder, T., Jacob, M., Taubenböck, H., & Zerwer, K. (2023). How effective are emission taxes in reducing air pollution? *Working Paper*.
- Chen, X., & Nordhaus, W. D. (2011). Using luminosity data as a proxy for economic statistics. *Proceedings of the National Academy of Sciences, 108*(21), 8589–8594.

Topic 5:

Regulating Corporate Transparency: The Role of Impact Assessments in EU Policymaking

Supervisor: Tobias Kalmbach, M.Sc.

Deutscher Titel: Regulierung unternehmerischer Transparenz: Die Rolle von Folgenabschätzungen im EU-Gesetzgebungsprozess

Topic Description:

In recent years, the European Union has introduced several laws to increase transparency in the corporate world—for example, rules on sustainability reporting, tax disclosures, and supply chain due diligence. These regulations aim to help investors, policymakers, and the public better understand companies' actions and impacts. Before such rules are passed, the EU usually carries out an impact assessment to weigh the expected benefits—like more informed decision-making or fairer competition—against potential costs, such as compliance burdens for companies. These assessments are reviewed by the Regulatory Scrutiny Board (RSB) to ensure they are well-prepared and balanced. However, it is not always clear how these assessments are done, how transparent goals are measured, or how much they actually influence final policy decisions.

The goal of this thesis is, in a first step, to explain how the EU uses impact assessments, especially cost-benefit analyses, when designing regulations aimed at improving corporate transparency. This includes financial reporting but also areas like sustainability disclosure, tax transparency, and due diligence. The student will describe how these assessments are carried out, what role the RSB plays, and what the main challenges are—for example, how to measure the value of transparency. In a second step, the thesis will include a review of selected academic studies that look at how impact assessments are used in practice and what effects they have. Finally, the student will conduct a small case studyby looking at the official EU impact assessments for selected transparency regulations to explore how transparency-related benefits and costs are evaluated in real-life policymaking.

Introductory Literature:

- Dunlop, C. A., Maggetti, M., Radaelli, C. M., & Russel, D. (2012). The many uses of regulatory impact assessment: A meta-analysis of EU and UK cases. *Regulation & Governance*, *6*(1), 23-45.
- Leuz, C., & Wysocki, P. D. (2016). The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research. *Journal of Accounting Research, 54*(2), 525–622.
- Radaelli, C. M., & Meuwese, A. C. (2009). Better regulation in Europe: between public management and regulatory reform. *Public Administration*, *87*(3), 639-654.

Topic 6:

Diversity Targets and Corporate Reporting: Real Change or Just for Image?

Supervisor: Tobias Kalmbach, M.Sc.

Deutscher Titel: Vielfaltsziele und Unternehmensberichterstattung: Echte Veränderung oder nur Imagepflege?

Topic Description:

More and more companies are setting diversity goals and reporting on them in their sustainability or ESG reports. These efforts aim to improve fairness and representation, and in some countries, firms are now required by law to publish diversity data. At the same time, debates about these practices are growing—especially in the U.S., where diversity programs have faced new criticism since Donald Trump began his second term in 2025. This shows how politically sensitive and relevant the topic is right now.

The goal of this bachelor thesis is to review what academic research says about diversity targets and how companies report on them. In the first step, the student will explain what diversity targets are, how they are disclosed, and what kinds of laws or rules apply in different countries. In the second step, the student will summarize research on the real effects of these goals: Do they lead to real change inside companies, or are they sometimes used mainly for reputation? The thesis will also cover potential problems, such as tokenism (when companies promote individuals from minority groups only for appearances, without real inclusion) and backlash (negative reactions against diversity efforts that can lead to their reduction or removal). The aim is to better understand the opportunities and challenges of diversity reporting in today's business world.

Introductory Literature:

- Baker, A. C., Larcker, D. F., McClure, C. G., Saraph, D., & Watts, E. M. (2024). Diversity washing. *Journal of Accounting Research*, *62*(5), 1661-1709.
- Cai, W., Chen, Y., Rajgopal, S., & Azinovic-Yang, L. (2024). Diversity targets. *Review of Accounting Studies*, *29*(3), 2157-2208
- Ntantamis, Christos, and Jun Zhou. (2025). Firm Size and Workplace Diversity and Inclusion. *Economics Letters* (2025): 112234.

Topic 7:

How Companies Use Climate Targets in Sustainability Reports: A Look at the Science-Based Targets Initiative

Supervisor: Tobias Kalmbach, M.Sc.

Deutscher Titel: Wie Unternehmen Klimaziele in Nachhaltigkeitsberichten nutzen: Einblick in die Science Based Targets Initiative

Topic Description:

As climate change becomes a more important topic for companies and investors, many firms are starting to set goals to reduce their greenhouse gas emissions. One popular way to do this is through the Science Based Targets initiative (SBTi), which helps companies set climate targets that are in line with international agreements like the Paris Agreement. These targets are often shown in sustainability reports and are used by investors, analysts, and regulators to assess a company's commitment to fighting climate change. But it is still unclear how serious companies are about these goals and whether they actually follow through. This raises questions about whether these targets improve transparency and trust—or whether they might be used just for public image.

The aim of this thesis is to better understand the role of science-based climate targets in corporate sustainability reporting. First, the student will explain what the Science Based Targets initiative is and how it fits into broader trends in climate and ESG reporting. Then, the thesis will look at current research on why companies set these targets, how well they are achieving them, and what effects these targets have—for example, on investor opinions or environmental performance. In the final part, the student will discuss how these targets are communicated in sustainability reports and what this means for corporate transparency and accountability. The goal is to understand whether climate targets like those from the SBTi are a helpful tool for honest reporting or whether they might also be used to make companies look more sustainable than they really are.

Introductory Literature:

- Bolton, P., & Kacperczyk, M. (2023). Firm commitments. National Bureau of Economic Research, *Working Paper No. 31244*.
- Dahlmann, F., Branicki, L., & Brammer, S. (2019). Managing carbon aspirations: The influence of corporate climate change targets on environmental performance. *Journal of Business Ethics, 158*, 1–24.
- Christensen, H. B., Hail, L., & Leuz, C. (2021). Mandatory CSR and sustainability reporting: Economic analysis and literature review. *Review of Accounting Studies, 26*(3), 1176–1248.

Topic 8:

Delegation of Hiring Authority

Supervisor: Prof. Dr. Felix Fritsch

Topic Description:

Delegation of decision rights is a crucial aspect of organizational design. Hiring decisions are central to shaping the workforce, influencing firm performance, and leaving a lasting impact on organizational culture and job design. These decisions also play a key role in structuring incentives (Abernethy et al., 2015). Although previous research has examined the consequences of varying the locus of hiring decision rights (e.g., Deller and Sandino, 2020), little is known about what drives firms to delegate these rights beyond the classic tradeoff between communication efficiency and agency conflicts. This thesis examines the current stand of the literature on delegation/decentralization of decision rights in accounting research, with a particular focus on delegating hiring decisions. The question at the back is how delegation/decentralization could lead to better hiring decisions.

The thesis briefly introduces the relevance of decentralization/delegation within organizations and gives an overview of the different research streams that examine hiring. The second part briefly explains why decentralization exists and presents conceptual underpinnings (theory) on how decentralization in hiring can affect firm structure and operations. The third and main part consists of a systematic literature review sourced from leading peer-reviewed business journals (referencing the UTD 24 journal list). The focus here is on effectively relating research papers and their findings to overarching topics, methods, and relationships. The fourth part of the thesis focuses on hiring and develops concrete testable hypotheses that could be used by empirical research. The thesis briefly concludes with an outlook on future research in this literature stream. Besides summarizing and contrasting recent literature findings qualitatively, the thesis should create a graphical topography of the relevant literature. This may take the form of a mind map or other graph, summarizing the classification and relationships among authors, findings, and methods.

Introductory Literature:

- Abernethy, M. A., Dekker, H. C., & Schulz, A. K. D. (2015). Are employee selection and incentive contracts complements or substitutes? *Journal of Accounting Research*, *53*(4), 633-668.
- Deller, C., & Sandino, T. (2020). Who should select new employees, headquarters or the unit manager? Consequences of centralizing hiring at a retail chain. *The Accounting Review*, *95*(4), 173–198.
- Kramer, S., & Matejka, M. (2024). Decentralization, performance measurement, and CEO incentives. *Working Paper*. Erasmus University Rotterdam; University of Arizona
- Labro, E., Lang, M., & Omartian, J. D. (2023). Predictive analytics and centralization of authority. *Journal of Accounting and Economics*, *75*(1), 101526.
- Mahlendorf, M. D., Martin, M. A., & Smith, D. (2023). Innovative data – use-cases in management accounting research and practice. *The European Accounting Review*, *32*(3), 547–576.

Topic 9:

The Impact of Climate Change on Firm Disclosures

Supervisor: Prof. Dr. Felix Fritsch

Topic Description:

As climate-related events become more frequent and severe, understanding how firms and their decision-makers respond to climate concerns triggered by such events becomes increasingly important for shareholders and stakeholders. This thesis provides an overview of the existing literature (in accounting, finance, and economics), that examines how firms respond to climate change awareness/risks with disclosure. The thesis should reflect on both side: an increase of demand and supply side of ESG-related disclosure.

The first part of the thesis briefly introduces the motivation for firms to increase ESG disclosure. The second part summarizes related theory work on the mechanism of why we observe increased ESG disclosure (that we have been observing over the last decade). The third part and main part provides a systematic literature review of leading peer-reviewed business journals (refer to the UTD 24 journal list). The focus here should be on effectively relating research papers and their findings by overarching topics, methods, and relationships. The thesis concludes with an examination of possible future research streams on studying ESG disclosure. In addition to summarizing and contrasting recent literature findings qualitatively, the thesis should create a graphical topography of the relevant literature in the form of a map (such as a mind map or other graph) in which the classification and relationships among authors, findings, and methods are summarized.

Introductory Literature:

- Bolton, P., & Kacperczyk, M. (2021). Do investors care about carbon risk? *Journal of Financial Economics, 142*(2), 517–549.
- Christensen, H. B., Hail, L., & Leuz, C. (2021). Mandatory CSR and sustainability reporting: Economic analysis and literature review. *Review of Accounting Studies*, 26(3), 1176-1248.
- Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management Science*, 60(11), 2835-2857.
- Fritsch, F., & Uckert, M. (2025). *Climate change awareness & firm actions: Evidence from wildfires* (Working paper). University of Mannheim; University of Amsterdam.
- Fritsch, F., Zhang, Q., & Zheng, X. (forthcoming). Responding to climate change crises: Firms' tradeoffs. *Journal of Accounting Research.*
- Sautner, Z., van Lent, L., Vilkov, G., & Zhang, R. (2023). Firm-level climate change exposure. *The Journal of Finance, 78*(3), 1449–1498.

Topic 10:

Costs and Benefits of the Use of Artificial Intelligence in Accounting and Finance

Supervisor: Ilias Nasri, M.Sc.

Topic Description:

The use of machine learning and artificial intelligence (AI) is rapidly transforming the landscape of various industries, including accounting and finance. By automating routine tasks, optimizing data analyses, and supporting strategic decisions, companies can achieve significant cost savings and efficiency improvements. At the same time, the implementation and integration of AI solutions into existing systems, as well as ensuring data quality and compliance with regulatory requirements, pose considerable challenges for companies.

The aim of the bachelor thesis is to investigate the cost-benefit effect of using machine learning and AI in accounting and finance applications by answering the research question: “How do machine learning and AI in accounting and finance influence the efficiency and decision quality in companies?” To achieve this, first, a systematic literature review will be conducted that introduces the topics of machine learning and AI, and critically examines the opportunities, risks, and costs associated with their use. This is followed by a qualitative case study analysis using internet research and document analysis based on current examples—such as those from corporate websites and annual reports—to illustrate the practical application and challenges of AI implementation. Finally, potential future applications and existing limitations will be discussed to derive well-founded recommendations for companies.

Introductory Literature:

- Ding, K., Lev, B., Peng, X., Sun, T., & Vasarhelyi, M. A. (2020). Machine learning improves accounting estimates: Evidence from insurance payments. *Review of Accounting Studies, 25*(3), 1098–1134.
- Dong, M. M., Stratopoulos, T. C., & Wang, V. X. (2024). A scoping review of ChatGPT research in accounting and finance. *International Journal of Accounting Information Systems, 55*, 100715.
- Eloundou, T., Manning, S., Mishkin, P., & Rock, D. (2024). GPTs are GPTs: Labor market impact potential of LLMs. *Science, 384*(6702), 1306–1308.
- Estep, C., Griffith, E. E., & MacKenzie, N. L. (2024). How do financial executives respond to the use of artificial intelligence in financial reporting and auditing? *Review of Accounting Studies, 29*(3), 2798–2831.

Topic 11:

Applications of Machine Learning in Finance

Supervisor: Ilias Nasri, M.Sc.

Topic Description:

The rapid evolution of machine learning (ML) has introduced transformative opportunities within the financial sector. From enhancing predictive accuracy in stock return forecasts to automating the analysis of complex financial statements, ML methods are reshaping traditional financial practices. Various applications—including algorithmic trading, risk assessment, fraud detection, and fundamental analysis—demonstrate how ML can improve decision-making and operational efficiency while simultaneously posing new challenges related to interpretability, data quality, and integration with established financial systems.

The aim of the bachelor thesis is to investigate the diverse applications of machine learning in finance and evaluate their impact on financial decision-making. The central research question guiding the study is: "How are machine learning applications transforming decision processes and performance outcomes in the financial sector?" To answer this, the thesis will first conduct a systematic literature review that outlines the evolution of ML techniques and critically assesses their applications in areas such as financial statement analysis, stock forecasting, and risk management. Drawing on insights from recent academic research—including studies on ML-based stock analyses and financial statement evaluation—a qualitative case study examining industry examples will follow. Finally, the study will discuss potential future developments and integration strategies, culminating in well-founded recommendations for practitioners aiming to leverage ML technologies effectively in finance.

Introductory Literature:

- Amel-Zadeh, A., Calliess, J. P., Kaiser, D., & Roberts, S. (2020). *Machine learning-based financial statement analysis*. Available at SSRN 3520684.
- Cao, S., Jiang, W., Wang, J., & Yang, B. (2024). From man vs. machine to man+ machine: The art and AI of stock analyses. *Journal of Financial Economics, 160*, 103910.
- Huang, J., Chai, J., & Cho, S. (2020). Deep learning in finance and banking: A literature review and classification. *Frontiers of Business Research in China, 14*(1), 13.
- Kim, A., Muhn, M., & Nikolaev, V. (2024). *Financial statement analysis with large language models*. arXiv preprint arXiv:2407.17866.
- Li, Y., Wang, S., Ding, H., & Chen, H. (2023, November). Large language models in finance: A survey. In *Proceedings of the Fourth ACM International Conference on AI in Finance* (pp. 374–382).
- Ozbayoglu, A. M., Gudelek, M. U., & Sezer, O. B. (2020). Deep learning for financial applications: A survey. *Applied Soft Computing, 93*, 106384

Topic 12:

Behavioral Biases and Market Cycles: Unveiling Hidden Patterns in Financial Markets Using Big Data

Supervisor: Ilias Nasri, M.Sc.

Topic Description:

Financial markets are inherently complex, with investor behavior often shaped by psychological biases. While traditional finance literature has extensively documented phenomena such as overconfidence, herd behavior, and loss aversion, the advent of big data analytics and advanced machine learning methods offers fresh opportunities to quantify and understand these biases in greater detail. This literature review will examine how behavioral biases influence market cycles and, conversely, how market dynamics may exacerbate or mitigate these biases.

The primary research question guiding the study is: "How can big data analytics and machine learning techniques enhance our understanding of behavioral biases and their impact on market cycles?" To answer this, the review will begin by synthesizing classical theories on behavioral finance and market cycles, drawing on established frameworks such as prospect theory and the adaptive markets hypothesis. Next, it will critically evaluate recent empirical studies that utilize big data—from social media sentiment analysis to high-frequency trading data—to explore the nuanced relationship between investor behavior and market trends. Furthermore, the literature review will address the methodological challenges and opportunities of integrating traditional behavioral finance theories with modern data-driven approaches. Finally, it will discuss potential directions for future research and offer recommendations for policymakers and practitioners seeking to mitigate the adverse effects of behavioral biases while capitalizing on their predictive power in anticipating market turning points.

Introductory Literature:

- Da, Z., Engelberg, J., & Gao, P. (2011). In search of attention. *The Journal of Finance*, *66*(5), 1461-1499.
- Daniel, K., Hirshleifer, D., & Subrahmanyam, A. (1998). Investor psychology and security market under-and overreactions. *The Journal of Finance*, *53*(6), 1839-1885.
- Hirshleifer, D. (2015). Behavioral finance. *Annual Review of Financial Economics*, *7*(1), 133-159.

Topic 13:

Germany's Deposit-Refund System (Pfand) – Impact and International Applicability

Supervisor: Kriti Bhattacharya, M.Sc.

Topic Description:

Germany's deposit-refund scheme (Pfand) for drink containers achieves a return rate of approximately 98%, significantly contributing to litter reduction and promoting recycling practices. This thesis assesses the effectiveness of the Pfand system in Germany by conducting an in-depth, data-driven analysis of historical environmental data from sources such as the German Environment Agency (UBA) and Eurostat. The research focuses on recycling rates, waste generation, and consumer return behavior.

The thesis further explores the international applicability of deposit-refund schemes, employing comparative statistical analysis and predictive modeling, if similar policies might succeed in countries currently facing lower recycling rates and higher waste generation per capita. The study identifies key policy factors behind Germany's success, integrating economic and behavioral theories to clarify the dynamics of consumer participation. An international comparative analysis, leveraging World Bank datasets and insights from case studies in countries that have recently implemented deposit-return systems, will highlight country-specific economic, social, and infrastructural determinants.

Introductory Literature:

- Zorpas, A. A. (2024). Promoting circular economy: The transformative impact of deposit refund systems. *Waste Management & Research*, 42(12), 1093-1095.
- Millette, S. (2022). *Global Deposit Book: An Overview of Deposit Return Systems for Single-Use Beverage Containers*. Reloop Platform.
- Ștefan, E. E. (2024). The Deposit-Return System in the Current European Background. *Athens Journal of Law*, 10, 1-13

Topic 14:

Towards a Cashless Society: Economic Implications of Declining Cash Use

Supervisor: Kriti Bhattacharya, M.Sc.

Topic Description:

The continuous shift away from physical cash towards digital payment methods, such as online banking and mobile payment solutions, has become increasingly prevalent in many countries globally. This thesis aims to examine how the reduction in cash usage influences various economic actors and systems, including banks, retailers, and consumers. Initially, the thesis will outline the foundational aspects of a cashless economy, discussing key drivers of the transition towards digital payments. Following this foundation, the student will explore detailed case analyses, focusing particularly on a country, notably at the forefront of cashless transactions and a comparative perspective with Germany—a country that still maintains a relatively high use of cash—will highlight differences in economic outcomes.

Using the available data, the student will investigate potential correlations between declining cash use and economic indicators, such as crime rates associated with cash theft, changes in tax revenues resulting from reduced cash-based transactions, and variations in consumer spending behaviors. The thesis will also assess broader societal implications, including the effects of digitalization on financial inclusion and the potential risks associated with excluding individuals who lack access to digital payment means.

Introductory Literature:

- Rogoff, K. S. (2017). *The Curse of Cash: How Large-Denomination Bills Aid Crime and Tax Evasion and Constrain Monetary Policy* (2nd printing, paperback edition with new afterword). Princeton University Press. ISBN 978-0-691-17836-3.
- Brandl, B., Hengsbach, D., & Moreno, G. (2024). Small money, large profits: How the cashless revolution aggravates social inequality. *Socio-Economic Review*, 00(0), 1–23.
- Khandelwal, R., & Priya, A. (2023). Cashless economy and digitalization: A study of economic implications. *International Journal of Advanced Research in Commerce, Management & Social Science (IJARCMSS)*, 6(03), 1–8. ISSN: 2581-7930.

Topic 15:

Driving the Electric Transition: Policy Impacts on Electric Vehicle Adoption

Supervisor: Kriti Bhattacharya, M.Sc.

Topic Description:

The global shift toward electric vehicles (EVs) has accelerated significantly, largely driven by targeted government policies and technological innovations. This thesis explores how various policy measures, such as purchase subsidies, tax rebates, investments in charging infrastructure, and fuel taxes, quantitatively influence the adoption and market penetration of electric vehicles.

The analysis will begin by an overview of the global electric vehicle market, highlighting key drivers behind increased adoption rates and the substantial disparities that exist across different regions. Utilizing the data available on EV sales, vehicle registrations, and detailed timelines of policy implementation, the thesis will undertake advanced quantitative analysis and econometric methods, such as regression analysis and diffusion models, determining how sensitive EV adoption rates are to various incentives.

Introductory Literature:

- Li, S., Linn, J., & Spiller, E. (2011). Evaluating "Cash-for-Clunkers": Program Effects on Auto Sales and the Environment (RFF Discussion Paper No. 10-39-REV).
- Zhao, X., Li, X., Jiao, D., Mao, Y., Sun, J., & Liu, G. (2024). Policy incentives and electric vehicle adoption in China: From a perspective of policy mixes. *Transportation Research Part A: Policy and Practice*, 190, 104235.
- Mekky, M. F., & Collins, A. R. (2024). The Impact of state policies on electric vehicle adoption—A panel data analysis. *Renewable and Sustainable Energy Reviews*, 191, 114014.
- Zaino, R., Ahmed, V., Alhammadi, A. M., & Alghoush, M. (2024). Electric Vehicle Adoption: A Comprehensive Systematic Review of Technological, Environmental, Organizational, and Policy Impacts. *World Electric Vehicle Journal*, 15(8), 375.