

MASTER THESIS

Fall Term 2025

(As of 3. September 2025)

Prerequisites:

- Proficiency in Microsoft Excel and willingness to become acquainted with statistical analysis software (e.g., Stata)
- Solid command of English
- Ability to conduct own data research
- Good knowledge of methods in Corporate Finance (company valuation etc.)

Topics are either case studies or empirical studies in corporate finance. Therefore, conducting literature research in research journals and especially in books is generally less important compared to data research in newspapers, databases, and/or homepages.

The thesis can be written in German or English. Specific requirements are noted in the individual topic descriptions.

Please refer to the information available on our homepage at <https://www.bwl.uni-mannheim.de/maug/lehre/masterlehre/masters-thesis/>, especially the document “How to Write a Thesis”.

For case studies, please regard the following references:

Company valuation:

- In general: see literature references for the course Corporate Finance 1 on our homepage
- Banks: Copeland, T. E., Koller, T., Murrin, J., 2000, Valuation, 3rd Ed., Wiley, Chapter 21
- Implementation in Excel: Benninga, S., 2008, Financial Modeling, 3rd Ed., MIT Press

Event studies:

- Lecture Slides, Corporate Finance 1, Event Study Methodology
- Example: Weston, J. F., Siu, J. A., Johnson, B. A., Takeovers, Restructuring, and Corporate Governance, 3rd Ed., Prentice Hall, Appendix B, pp. 171-185
- Formal representation: Campbell, J. Y., Lo, A. W., and MacKinlay, A. C., 1997, The Econometrics of Financial Markets, Chapter 4
- Additional Method for very (!) many events: Dittmann, I., Maug, E., Schneider, C. (2008), How Preussag became TUI: A Clinical Study of Institutional Blockholders and Restructuring in Europe, Financial Management, 37 (3), pp. 571-598

Topic 1: Figma, Inc. IPO

Supervisor: Bastian Koch

Figma, Inc. (NYSE: FIG), a design software maker, went public on July 31, 2025. The company priced its IPO at \$33 per share, exceeding its planned price range of \$30 to \$32. This offering values the offering at almost \$20 billion.

Figma is a San Francisco-based software company offering a browser-based platform for collaborative user-interface and user-experience design. Its products enable designers to work together in real time, streamlining the product design lifecycle. Figma is backed by top venture capital investors, including Sequoia Capital, Andreessen Horowitz, and Index Ventures. Its listing is seen as an important test of the IPO market for VC-backed start-ups, which is slowly gaining traction after several years of depressed listings. In 2022, Adobe, one of Figma's main competitors, announced it would acquire Figma for \$20 billion. However, the deal was terminated due to regulatory hurdles, particularly from the UK and EU.

The goal of this thesis is to value Figma and determine whether the offer price of \$33 per share was fair. To do so, the candidate should perform a comprehensive analysis of the industry. The candidate should also perform a cash-flow-based valuation and a multiples-based valuation. To assess the market reaction to the announcement, the candidate is required to perform an event study of Figma's competitors.

Preliminaries: Ability to conduct company valuations and event studies in Excel or Stata.

Introductory Literature:

SEC Filing:

<https://www.sec.gov/Archives/edgar/data/1579878/000162828025033742/figma-sx1.htm>

WSJ Article about planned acquisition by Adobe:

<https://www.wsj.com/tech/adobe-figma-scrap-20-billion-acquisition-3488d5a1>

WSJ Article about Figma's IPO and its relevance for VC-backed companies:

<https://www.wsj.com/articles/figma-is-largest-vc-backed-american-tech-company-ipo-in-years-a143c9c5>

Topic 2: Machine Learning and Board of Directors Appointment

Supervisor: Bastian Koch

Corporate boards are central to firm governance, yet the process for selecting directors often lacks transparency and may not always maximize shareholder value. Erel, Stern, Tan, and Weisbach (2021) show that machine learning algorithms can predict the future performance of newly appointed independent directors using director-, board-, and firm-level data. They employ several machine learning algorithms to predict director performance using (public) data available to the nominating committee at the time of the nominating decision.

The goal of this thesis is to replicate the core idea of Erel et al. (2021). The student should replicate the main results of Erel et al. (2021) using (predicted) director turnover as a performance measure. Third, the student should extend the analysis and examine whether predicted director performance is associated with changes in firm-level governance or operating outcomes in the two years following the appointment. This will help determine whether algorithmically “better” directors also coincide with meaningful corporate changes.

Requirements:

The empirical work requires access to BoardEx, Compustat, and CRSP. The candidate should be comfortable with statistical software (e.g., Python, R, or STATA) and machine learning methods (e.g., XGBoost, Lasso, Ridge).

Introductory Literature:

Adams, R., B. Hermalin, and M. Weisbach. 2010. The role of boards of directors in corporate governance: A conceptual framework and survey. *Journal of Economic Literature* 48:58–107.

Erel, I., Stern, L. H., Tan, C., & Weisbach, M. S. (2021). Selecting Directors Using Machine Learning. *The Review of Financial Studies*, 34(7), 3226–3264.

Masulis, R. W., & Mobbs, S. (2014). Independent director incentives: Where do talented directors spend their limited time and energy? *Journal of Financial Economics*, 111(2), 406–429.

Topic 3: Synopsys Inc. Acquires Ansys Inc.

Supervisor: Rongrong Wang

On January 15, 2024, Synopsys Inc. (NASDAQ: SNPS) entered into an Agreement and Plan of Merger with Ansys Inc. (NASDAQ: ANSS). Under the terms of the agreement, Synopsys will pay \$390.19 per share for Ansys, implying an estimated enterprise value of approximately \$35 billion. Based on Ansys's closing share price of \$346.48 on January 12, 2024, the last trading day prior to the announcement, the offer represents a bid premium of 12.62%. Relative to the closing share price of USD 296.74 on December 20, 2023, the last trading day before market rumors emerged, the premium increases to 31.49%. Commenting on the transaction, Mr. Aart de Geus, Executive Chair and founder of Synopsys, stated: "Joining forces with Ansys, a company we know from our long-standing partnership, is the latest example of how Synopsys remains at the forefront. The technology-broadening team-up with Ansys is an ideal, value-enhancing step for our company, our shareholders, and the innovative customers we serve."

Ansys Inc. is a high-technology company specializing in the development and commercialization of engineering simulation software and related technologies. Its solutions are used to predict how products will perform during manufacturing and in real-world environments. Headquartered in Canonsburg, Pennsylvania, Ansys serves engineers, designers, and researchers across a wide range of industries, including aerospace and defence, automotive, electronics, and semiconductors.

Synopsys Inc., recognized as the world's leading provider of electronic design automation (EDA) software, delivers solutions enabling engineers to design and test integrated circuits, field-programmable gate arrays, and systems-on-chip for the global semiconductor and electronics industries.

This thesis aims to evaluate the acquisition deal and determine whether the acquisition terms were fair. To achieve this, the candidate should first perform comprehensive industry and firm analyses. Subsequently, the candidate should conduct both a cash-flow-based and a multiples-based valuation for Ansys Inc. and discuss potential synergies. Furthermore, to assess the stock market reaction around the acquisition announcement, the candidate is required to analyse the two companies and their competitors using event-study methods.

Preliminaries: Ability to conduct company valuations and event studies in Excel or Stata.

Introductory Literature:

Press release:

<https://www.ansys.com/news-center/press-releases/1-16-24-synopsys-acquires-ansys>

SEC filing:

<https://www.sec.gov/Archives/edgar/data/883241/000119312524008124/d720113d425.htm>

Topic 4: CoreWeave Inc. IPO

Supervisor: Rongrong Wang

On March 3, 2025, CoreWeave Inc. announced the filing of a preliminary prospectus with the U.S. Securities and Exchange Commission (SEC) for a proposed initial public offering (IPO). On March 27, 2025, the company announced its IPO pricing at \$40 per share, valuing the offering of 37.5 million shares of common stock at approximately \$1.5 billion. CoreWeave debuted on the Nasdaq Global Market (NASDAQ) under the ticker symbol “CRWW” on March 28, 2025.

CoreWeave operates in the AI hyperscale cloud infrastructure industry. Founded in 2017 and headquartered in Roseland, New Jersey, the company positions itself as the “AI Hyperscaler™”—delivering purpose-built cloud infrastructure and software optimized for large-scale AI workloads. Leveraging high-performance computing, networking, and storage integrated with orchestration, automation, and monitoring tools, CoreWeave enables customers to accelerate AI model training, improve inference efficiency, and reduce costs. Its clientele includes leading AI labs and enterprises such as Microsoft, OpenAI, NVIDIA, Meta, and IBM. The company operates a global network of 32 data centers housing over 250,000 GPUs and 360 MW of active power capacity, with expansion plans toward 1.3 GW. Backed by USD 12.9 billion in asset-backed financing and \$15.1 billion in remaining performance obligations, CoreWeave plays a critical role in powering next-generation AI development.

This thesis aims to assess the valuation of CoreWave, evaluate the fairness of the \$40 per share offer price, and elaborate on the first-day return. To achieve this, the candidate should conduct comprehensive analyses of both the industry and the company and employ fundamental and multiples-based valuation methods. To assess the market reaction to the IPO announcement, the candidate is required to perform an event study of CoreWeave’s competitors.

Preliminaries: Ability to conduct company valuations and event studies in Excel or Stata.

Introductory Literature:

Press release:

<https://investors.coreweave.com/news/news-details/2025/CoreWeave-Announces-Pricing-of-Initial-Public-Offering/default.aspx>

SEC filing:

<https://www.sec.gov/Archives/edgar/data/1769628/000119312525044231/d899798ds1.htm>

Topic 5: Blockholder Heterogeneity and Firm Performance

Supervisor: Rongrong Wang

Blockholders, recognized as shareholders owning at least 5% of a firm's outstanding equity, play a pivotal role in corporate governance (see Edmans and Holderness, 2017). Owing to their substantial financial stakes, these investors possess strong incentives to monitor management and safeguard firm value. Typically, governance is exercised through two primary channels: voice, which entails direct intervention or active engagement with management, and exit—commonly known as the “Wall Street Walk”—whereby the credible threat of divestment disciplines managerial behavior.

Prior research has documented the effects of blockholder presence on firm outcomes (Dlugosz et al., 2006; Holderness, 2009). However, whether heterogeneity in blockholder types is beneficial or detrimental to firm performance remains an open question. On one hand, heterogeneity may enhance performance through complementarities or cross-monitoring among different blockholder types (Edmans and Manso, 2011). On the other hand, divergent objectives among heterogeneous blockholders may generate frictions and increase governance costs (Hadlock and Schwartz-Ziv, 2019). A recent empirical study by Schwartz-Ziv and Volkova (2025) examines blockholder heterogeneity by analyzing market reactions to changes in blockholder composition, its association with frictions or conflicts, portfolio returns, and subsequent performance. Their findings suggest that, overall, blockholder diversity is detrimental to firm value.

This thesis has three main objectives. First, the candidate should provide a comprehensive review of the literature on blockholder ownership and its impact on firm performance. Second, the candidate should gather data and present an overview of the evolution of blockholder structures in the U.S., incorporating the most recent available data. Third, the candidate should replicate the main findings of Schwartz-Ziv and Volkova (2025) and extend the analysis to more recent years.

Preliminaries: The empirical work requires access to Compustat and CRSP. The candidate should be comfortable with statistical software (e.g., R or Stata) and with handling large datasets. Ideally, the candidate will also be proficient in Python or R for extracting information from SEC filings (e.g., Forms 13D/13G).

Introductory Literature:

Dlugosz, J., Fahlenbrach, R., Gompers, P., & Metrick, A. (2006). Large blocks of stock: Prevalence, size, and measurement. *Journal of Corporate Finance*, 12(3), 594–618.

<https://doi.org/10.1016/j.jcorpfin.2005.04.002>

Edmans, A., & Holderness, C. G. (2017). *Blockholders: A Survey of Theory and Evidence* (SSRN Scholarly Paper 2820976). Social Science Research Network.

<https://doi.org/10.2139/ssrn.2820976>

Edmans, A., & Manso, G. (2011). Governance Through Trading and Intervention: A Theory of Multiple Blockholders. *The Review of Financial Studies*, 24(7), 2395–2428.

<https://doi.org/10.1093/rfs/hhq145>

Holderness, C. G. (2009). The Myth of Diffuse Ownership in the United States. *The Review of Financial Studies*, 22(4), 1377–1408.

Hadlock, C., & Schwartz-Ziv, M. (2019). Blockholder Heterogeneity, Multiple Blocks, and the Dance between Blockholders. *The Review of Financial Studies*, 32(11), 4196–4227.

<https://doi.org/10.1093/rfs/hhz022>

Schwartz-Ziv, M., & Volkova, E. (2025). Is Blockholder Diversity Detrimental? *Management Science*, 71(2), 1356–1390. <https://doi.org/10.1287/mnsc.2023.00528>

Topic 6: WeRide IPO

Supervisor: Henrietta Oppong-Adjei

WeRide, a China-based autonomous driving technology company, went public on October 25, 2024, on the Nasdaq under the ticker symbol WRD. The company priced its IPO at \$15.50 per American Depositary Share (ADS), with each ADS representing three Class A ordinary shares. The offering consisted of 7,742,400 ADSs, valuing the IPO at approximately \$120 million. In addition to the public offering, WeRide also completed a concurrent private placement that raised an additional \$320 million, bringing total gross proceeds to about \$440 million. The IPO implied a company valuation exceeding \$4 billion.

WeRide develops and deploys Level 4 autonomous driving systems for multiple use cases, including robotaxi services, autonomous buses, and unmanned delivery vehicles. Founded in 2017 and headquartered in Guangzhou, China, the company has expanded operations to over 30 cities across seven countries, holding autonomous driving permits in the U.S., UAE, Singapore, France, and China. It is the first universal autonomous driving technology company to become publicly listed, and the first robotaxi operator to complete an IPO.

The goal of this thesis is to value WeRide and determine whether the IPO price of \$15.50 per ADS was fair. To do so, the candidate should perform a comprehensive analysis of the autonomous driving industry and its regulatory environment. The candidate should also conduct a cash-flow-based valuation and a multiples-based valuation. To examine the stock market reaction to the announcement of the IPO, the candidate should analyze WeRide's competitors in an event study. The candidate should further elaborate on the first-day return.

Preliminaries: Ability to conduct company valuations and event studies in Excel or Stata.

Introductory Literature:

SEC filing:

<https://www.sec.gov/Archives/edgar/data/1867729/000119312524239997/d343706dfla.htm>

Press release:

https://www.globenewswire.com/news-release/2024/10/25/2969274/0/en/WeRide-Inc-Announces-Pricing-of-Initial-Public-Offering.html?utm_source=chatgpt.com

Announcement of completion:

<https://ir.weride.ai/news-releases/news-release-details/worlds-first-ipo-universal-autonomous-driving-technology-0>

Topic 7: CoreWeave acquires Core Scientific

Supervisor: Minrui Gong

On July 7, 2025, CoreWeave Inc. (NASDAQ: CRWV) announced that it had reached a definitive agreement to acquire Core Scientific (NASDAQ: CORZ) in an all-share transaction. Under the agreement, Core Scientific shareholders will receive 0.1235 newly-issued CoreWeave shares for each Core Scientific share held. This exchange ratio values Core Scientific at \$9 billion, or \$20.40 per share, representing a bid premium of 13.34% based on the closing price on July 3, 2025.

The two companies share many similarities: both are U.S. firms founded in 2017, began as cryptocurrency miners, and later transitioned into data center businesses as rewards from cryptocurrency mining declined and interest in AI surged. Before the acquisition, the two companies had already established a close partnership, with Core Scientific leasing 840 megawatts of data center capacity to CoreWeave. Through the acquisition, CoreWeave aims to achieve vertical integration and secure contracts for over 1 gigawatt of future power capacity from Core Scientific. In recent years, power availability has increasingly replaced chip supply as the main bottleneck for training advanced AI models.

Notably, upon the announcement, Core Scientific's stock price fell more than 17%, despite having jumped over 30% on June 26th, 2025, when *The Wall Street Journal* reported that the two companies were in talks. On August 7th, 2025, Two Seas Capital, Core Scientific's largest shareholder, issued an open letter stating it would vote against the proposed sale to CoreWeave, citing "material undervaluation." CoreWeave had sought to acquire Core Scientific for \$1 billion in 2024, but the offer was rejected as "significantly undervaluing the company."

The goal of this thesis is to evaluate the acquisition deal and to determine whether the acquisition terms were fair. To that end, the student should first perform a comprehensive industry analysis. Next, the student should conduct a DCF valuation and a multiples-based valuation for Core Scientific and discuss potential synergies. To examine the stock market reaction to the acquisition announcement, the candidate should analyze the two companies and their competitors with event-study methods.

Preliminaries: Ability to conduct company valuations and event studies in Excel or Stata.

Introductory Literature:

Press release: <https://www.coreweave.com/news/coreweave-to-acquire-core-scientific>

The Wall Street Journal report: <https://www.wsj.com/business/deals/coreweave-in-talks-to-buy-core-scientific-ed821c09>

Rejected 2024 offer: <https://investors.corescientific.com/news-events/press-releases/detail/76/core-scientific-rejects-unsolicited-proposal-from-coreweave>

Two Seas Capital open letter: <https://www.prnewswire.com/news-releases/two-seas-capital-core-scientifics-largest-active-shareholder-announces-intention-to-vote-against-the-proposed-sale-to-coreweave-302524612.html>

Topic 8: DoorDash acquires Deliveroo

Supervisor: Minrui Gong

On May 6, 2025, U.S. meal delivery firm DoorDash (NASDAQ: DASH) announced that it had reached a final agreement with its British rival Deliveroo (LON: ROO) to buy the latter's all outstanding shares for £1.8 per share in cash. The deal values Deliveroo at about £2.9 billion, 4.65% above its market value on May 2, 2025. Earlier on April 25, Deliveroo confirmed that it had received an initial proposal from DoorDash. Its stock rallied 16% in response.

Founded in 2013 and headquartered in San Francisco, DoorDash is the largest food delivery platform in the United States by market share, known for its partnerships with a broad range of restaurants and its on-demand logistics network. Deliveroo, founded in 2013 in London, operates across the U.K. and several other European markets, focusing on premium restaurant partnerships and rapid delivery services. Both companies rely on a gig-economy workforce model and have expanded into adjacent services such as grocery and convenience delivery.

The acquisition marks DoorDash's largest overseas expansion to date and strategically positions the company to penetrate the U.K. and European food delivery market. Both firms have grappled with post-pandemic demand normalization, but through this deal, DoorDash would gain access to Deliveroo's extensive network of restaurant partners and established logistics platform. Yet investors and analysts remain cautious of potential integration risks, especially given Deliveroo's recent profitability challenges and the increasingly complex regulatory environment in several European jurisdictions.

The goal of this thesis is to evaluate the acquisition deal and to determine whether the acquisition terms were fair. To that end, the student should first perform a comprehensive industry analysis. Next, the student should conduct a DCF valuation and a multiples-based valuation for Deliveroo and discuss potential synergies. To examine the stock market reaction to the acquisition announcement, the candidate should analyze the two companies and their competitors with event-study methods.

Preliminaries: Ability to conduct company valuations and event studies in Excel or Stata.

Introductory Literature:

Press release: <https://ir.doordash.com/news/news-details/2025/DoorDash-Announces-Agreement-to-Acquire-Deliveroo/default.aspx>

News report on the initial proposal: <https://www.reuters.com/technology/deliveroo-receives-buyout-proposal-door-dash-180-pence-per-share-2025-04-25/>

Topic 9: The Speed Premium

Supervisor: Minrui Gong

The preparation of financial statements is a seemingly routine yet practically complex process. For this purpose, a firm needs to mobilize a wide range of functional units to complete a chain of inter-dependent tasks. Closing the books quickly, therefore, requires efficient internal coordination.

Coordination capability is a core component of organizational capital—an intangible asset increasingly recognized as a vital yet often overlooked input in production by classic corporate finance theories. Eisfeldt and Papanikolaou (2013) find that firms with higher organizational capital earn higher stock returns. In this light, if the speed of filing financial statements serves as a proxy for a firm's organizational capital, then fast filers should enjoy a "speed premium."

The goal of the thesis is to empirically investigate whether the "speed premium" exists and whether it can be linked to organizational capital. Specifically, the candidate should

1. Develop a thorough understanding of the institutional details surrounding the filing of 10-Ks and 10-Qs, with particular attention to the concept of filer status and the evolution of associated regulations.
2. Briefly review related literature on organizational capital and filing delays.
3. Identify which organizational characteristics (e.g., financial variables, executive attributes, management and governance practices) are correlated with filing delays.
4. Apply conventional asset-pricing empirical methods (e.g., portfolio sorts, Jensen's alpha, Fama-MacBeth cross-sectional regressions) to test for the existence of a "speed premium."
5. Replicate the O/K measure of organizational capital and the OMK factor from Eisfeldt and Papanikolaou (2013), and assess the extent to which they explain the "speed premium."

Requirements:

The empirical work requires access to Compustat, CRSP, and Execucomp. The candidate should be comfortable with statistical software (e.g., Python, R, or STATA) and working with large datasets.

Introductory Literature:

- Eisfeldt, A. L., & Papanikolaou, D. (2013). Organization capital and the cross-section of expected returns. *The Journal of Finance*, 68(4), 1365-1406.
- Bannouh, K., Geng, D., & Peeters, B. (2021). Filing, fast and slow: Reporting lag and stock returns. *Available at SSRN 3432446*.
- Bartov, E., & Konchitchki, Y. (2017). SEC filings, regulatory deadlines, and capital market consequences. *Accounting Horizons*, 31(4), 109-131.
- Fama, E. F., & MacBeth, J. D. (1973). Risk, return, and equilibrium: Empirical tests. *Journal of political economy*, 81(3), 607-636.
- Eugene, F., & French, K. (1992). The cross-section of expected stock returns. *Journal of finance*, 47(2), 427-465.