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Navigating Boardroom Challenges:

Revenue and Chairmanship Insights from Norwegian Startups (2018-2020)

Master thesis Entrepreneurship and Innovation Management

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1.Introduction

1.1 Background

The startup ecosystem is an exciting and ever-changing landscape, where innovative businesses have the potential to revolutionize industries and develop cutting-edge solutions that could potentially revolutionize an industry. Norway has become a notable player in the global startup scene, thanks to its thriving entrepreneurial community and government support (Welle-Strand et al., 2020). A critical aspect of startup success lies in an effective board management, particularly the link between the chairman and the company's revenue. This article provides a comprehensive overview of the challenges and best practices for managing chairmen and revenues in Norwegian startups from 2018 to 2020, with a specific focus on a quantitative analysis of the relationship between startups' revenues and their boards during this period, drawing upon the theories of top management team role structure (Seidl et al., 2021) and relational pluralism (Shipilov et al., 2014).

A competent board steers startups toward overcoming obstacles and seizing opportunities. The chairman, acting as the board-management interface (Tricker, 2015), carries substantial weight in board deliberations. Seidl's theory amplifies the importance of defined roles within the board for efficiency, while Shipilov's theory underscores fostering diverse relationships to drive innovation.

Norway's startup ecosystem underwent significant expansion during 2018-2020. The rapid growth demanded resilient strategies for board management and strong chairmanship. As Seidl and Shipilov suggest, startups should focus on clear role distribution and cultivating diverse relationships. This period also highlighted the challenge of recruiting board members that fit the company's vision and growth trajectory.

Furthermore, revenue management is a vital part of a startup's growth (McGrath & MacMillan, 2000). By managing revenue effectively, startups demonstrate their financial viability, attracting investors and funding. To delve deeper into the link between startup revenues and their boards, a quantitative analysis of data from this period is used, primarily leaning on insights from Seidl and Shipilov's theories, and other researchers work during my literature review.

In conclusion, the 2018-2020 period of growth for Norwegian startups demanded effective board management and revenue optimization. My findings, rooted initially in Seidl and Shipilov theories, highlights the correlation between startup revenues and their boards, offering insights to guide future strategic decisions.

These frameworks not only enhance the understanding of the challenges faced by Norwegian startups, but also allow for informed recommendations for startups looking to improve their board management and revenue strategies. By following the identified best practices, startups can forge a path towards long-term success in the dynamic global market, where building a successful board is a unique challenge given its pivotal role in shaping the company's strategy, performance, and governance.

1.2 About this thesis

The purpose of this thesis is to investigate the challenges and opportunities in relation to establishing and managing an effective board in Norwegian startups, focusing on the revenue generation and the impact of chairmanship. With a top-down thinking, my very initial research questions guiding this thesis was:

How to build a managing effective board that would contribute to revenue growth in a Norwegian startup?

To refine and probe into specific issues, I have ventured into two key aspects as within the broader theme of board management, identifying and addressing primary elements, and listed out quantifiable parameters.These parameters include but are not limited to factors such as board size, dual roles of a CEO, gender representation, and interlocking directorates.While I believe these variables could potentially influence the strategic decisions and performance of a firm, I'm still in the process of exploring and understanding their exact impact. Their role in shaping a company's success forms a vital part of my ongoing research.

This thesis draws on a range of theoretical perspectives, including upper echelons theory, relational pluralism, and corporate governance principles and practices. Upper echelons theory proposes that the composition and characteristics of the top management team, including the board of directors, have a significant impact on the strategic direction and performance of the firm (Seidl, Kor, & Ma, 2021). Relational pluralism theory suggests that organizational boundaries are fluid and that relationships between actors within and between organizations can influence performance and innovation (Shipilov). Corporate governance principles and practices provide a framework for understanding the roles and responsibilities of boards in overseeing the company's performance and protecting the interests of stakeholders (Tricker, 2015).

In the upcoming analysis, I will run a regression model to examine the potential factors within the managing board that could impact revenue growth at start-ups in Norway from 2018 to 2022. Following the regression analysis, I will embark on a detailed discussion of the results.the discussion will not be limited to the regression analysis findings alone. I will also consider other significant factors that might influence revenue generation. This holistic approach will provide a more comprehensive picture of the multiple dimensions affecting startups' financial performance.

1.3 The structure in my master thesis

Introduction: This section offers an overview of the research problem, the study's objective, research questions , the theoretical background and framework. It prepares the reader for the rest of the thesis by outlining what to expect in each subsequent section.

Literature Review: In this section, existing research and scholarship related to the thesis topic are reviewed and synthesized. It sets the context for the study, identifies gaps or controversies in the literature, and lays the foundation for the theoretical framework. Additionally, it leads to the formulation of hypotheses that can be addressed through data collection during the semester.

Method: This section outlines the research design, methods, and procedures employed in collecting and analyzing data. The model used will also be presented, aiming to demonstrate how the research questions or hypotheses will be addressed in the subsequent section.

Results: This section showcases the outcomes derived from the methodology section, providing a mathematical description of the analysis results. It explains how the data were analyzed and how validity and reliability were ensured to establish a basis for accepting or rejecting the hypotheses.

Findings and Discussion: This section interprets and analyzes the results from previous sections in light of the research questions or hypotheses and the theoretical framework. It also discusses the implications of the findings for theory, practice, and future research.

After words: This section provides a short notice to further readers about limitations of the used analysis methods. These limitations should be taken into account when interpreting the findings and conclusions.

References: This section provides a list of all the sources cited in the thesis, following a particular referencing style.

2. Literature Review

2.1 Part 1: Challenges in Building and Managing Effective Boards:

To explore the impact of board composition on revenue and growth of startups in Norway during the period of 2018-2020, I'll be focusing on the task of outlining the possible challenges that come along with the task of assembling an effective board. By examining challenges in building and managing effective boards, I will identify potential variables for the regression analysis, leading to testable hypotheses for further research. The outcome of this analysis will provide insights into the relationship between board composition and startup revenue and growth.

2.1.1 Identifying and Recruiting Board Members

One of the significant challenges in building effective boards for startups is identifying and recruiting the most suitable board members (Wasserman, 2012). Board members with the appropriate background, expertise, and network can more easily contribute to a startup's success by providing overall guidance, financial oversight, and access to key resources (McGrath & MacMillan, 2000). A key takeaway from this is not necessarily the strict adherence to the principles presented by Wasserman, or MacMillian, but rather the overall reinforcement of the idea that the overall effectiveness of a board is crucial to the development of any business. And while a good idea and motivated personnel are important factors, it is perhaps not as important as the performance of the board for a startup company, as it can significantly dictate the overall growth trajectory and results. Meaning that to increase the odds of success, working to secure the right people for the board is of vital importance and is just as important as other factors when in the initial phase of a startup.

In the Norwegian context, studies indicate that perhaps the availability of qualified board members is somewhat limited due to the small size of the market (Welle-Strand et al., 2020). This scarcity of experienced professionals poses a challenge for startups in finding suitable candidates who possess the right mix of skills, industry experience, and personal qualities to contribute effectively to the board (Lassenius & Åstebro, 2021). Hence, the vetting and recruitment process will in all likelihood take a considerable time unless one is lucky. One might consider looking for leadership coming from outside of Norway, but one should keep in mind that these resources are not necessarily a good fit, because while they may appear inherently qualified, they can be lacking in experience with the Norwegian market as a whole, which is a vital factor. Not knowing your market is often a surefire way to lose out to competitors or simply not providing the service that the customer actually wants.

To address these challenges, startups may want to consider several approaches to identify and recruit the required board members. These strategies range from leveraging personal and professional networks, hiring outside firms to assist in conducting the search by utilizing their databases as well as participating in events and conferences to find and allocate the potential candidates. Furthermore, utilizing social platforms and media channels to expand their search and announce what they are looking for can help expand their pool of potential candidates considerably.

Norwegian startups are however, as previously touched upon, in a rather precarious citation due to the overall limited pool of candidates. The few veterans there are, already know their worth, and new startups have to find resources willing to chance on spending time on a startup. A good strategist, knowledgeable in the Norwegian market, is in all likelihood already employed in a well paid job, and even the regular qualified personnel is not necessarily willing to take the risks involved by swapping over to a potentially shaky business. Norway has a long tradition in maintaining an overall high standard of living, as well as a well-functioning labor market with good welfare arrangements, which one might struggle to match as a new business.

Additionally, it is crucial for startups to ensure that all of their board members they recruit both complement each other, but also are unique in their skill-set as to avoid a duplication of the overall roles and responsibilities. Ensuring that one knows all the key areas that the board will need to potentially cover such as expertise within finance, marketing, technology, or human resources, depending on their specific needs and growth objective ahead of starting the recruitment process will significantly help in ensuring all facets needed are covered. For the Norwegian market, one possibly needs to take the possible resources available into consideration, due to the hard competition with the established companies for the same key resources. Alignment values and cultural fit between the board members are also key factors to consider, as it is important that they can easily establish good cooperation, relationship and overall board effectiveness.

With the established areas of responsibilities identified prior to the recruitment phase, one is able to establish a clear understanding of the roles and what is expected from each board member. The overall time commitment required from each role can at this point be gauged and estimated based on the type of project and current status. This will aid in clarifying that both the startup and the board members all have a shared understanding of what is expected of them, and in what capacity. With this established, one is more easily able to gauge the overall effectiveness and possibly pinpoint problem areas early on.

Given these challenges and considerations listed above, I hypothesize that the process of identifying the correct resources to act as board members is a crucial step of the initial phase, with effects long into development and further growth. The ability to overcome the challenges for the Norwegian market and recruit board members with the right set of skills, experience and value, will significantly impact a startup's ability to achieve its growth objectives and establish itself as a competitor in a potentially already saturated market.

2.1.2 Balancing Diverse Expertise and Skills

An effective board needs to balance a diverse set of expertise and skills to ensure robust decision-making. Board diversity is a complex concept, encompassing various dimensions such as functional, industry, and educational backgrounds, as well as demographic characteristics like gender, ethnicity, and age. The combination of diverse perspectives helps facilitate and encourage the generation of innovative ideas, aid in critical thinking, and mitigates groupthink, which is the tendency of decision-making groups to become overly homogenous and single minded. By being mindful of this during the assembly of the board, and while charting out their areas of responsibility and expertise, one might help to mitigate and avoid this.

Several studies have demonstrated the positive impact of board diversity on various aspects of startup performance, including innovation, risk management, and financial returns (Erhardt et al., 2003; Joecks et al., 2013; Shipilov et al., 2014). In particular, diverse boards are more likely to engage in exploratory activities and pursue novel opportunities, which can contribute to a startup's long-term competitiveness and growth . Furthermore, diverse boards can potentially increase and enhance a startup's reputation and stakeholder relations, as they signal an inclusive and progressive organizational culture from the get go.

In the Norwegian context, research indicates that startups often struggle to achieve a balanced mix of skills and expertise on their boards (Lassenius & Åstebro, 2021). This challenge can be attributed to various factors, such as a limited pool of qualified board candidates, cultural norms that prioritize homogeneity, and the tendency of founders and investors to appoint board members based on personal networks and familiarity. Meaning that Norwegian startups are most likely not able to fully leverage the potential of board diversity, which could end up hundering their overall revenue growth, expansion and performance. To overcome this challenge, Norwegian startups should consider adopting more proactive measures to enhance the board diversity, such as setting a diversity target, implementing a more formal search and selection process, and providing diversity training and mentoring programs for board members.

As a result, Norwegian startups may not be able to fully leverage the potential benefits gained by having a diverse board, which could hinder their revenue growth and expansion. Hence, it seems that Norwegian startups might not be harnessing the full potential of board diversity and optimal board size, both of which could impact their revenue growth and overall performance.

To tackle these issues, these startups could consider implementing measures to enhance board diversity and optimize board size. These measures could include setting specific diversity targets, determining the optimal number of board members based on their company's unique needs and goals, establishing formal processes for searching and selecting board members, and offering training and mentorship programs centered around diversity and effective board practices.

On a larger scale, policymakers and industry associations could play a critical role in promoting both board diversity and the concept of optimal board size. They could raise awareness, share successful strategies, and provide incentives and support to startups that prioritize diversity and consider the optimal size in their board compositions. By doing so, startups could be better positioned for sustained growth and success.

2.1.3 Ensuring Effective Communication and Decision-making

Decisions are an essential part of any business, and a board will be responsible for taking decisions on a daily basis to ensure they retain both the overall vision for the company as well as making sure they keep up the progress forward. One could say that since all decisions matter, they collectively shape the company.

Effective communication and decision-making are essential for boards to provide strategic guidance, oversight, and foster a healthy environment that enables the achievement of organizational goals (Tricker, 2015). The quality of board communication and decision-making is influenced by various factors, including board size, structure, and meeting frequency (Lipton & Lorsch, 1992; Vafeas, 1999).

A well-structured board typically comprises members with diverse backgrounds, expertise, and perspectives, which all can enhance the decision-making process (Zona & Zattoni, 2007). The size of the board can also impact its overall effectiveness. While larger boards may benefit from diverse opinions, they might face difficulties in coordinating and reaching consensus (Jensen, 1993). On the other hand, smaller boards can foster more open communication and quicker decision-making but might lack comprehensive expertise (Yermack, 1996).

Meeting frequency is another factor that can impact the quality of communication and decision-making. Regular board meetings can ensure timely discussions and enable board members to address critical issues, make informed decisions, and monitor organizational performance effectively (Lipton & Lorsch, 1992; Vafeas, 1999). However, excessive meeting frequency can lead to diminishing returns, as it may interfere with the board's ability to focus on strategic matters (Vafeas, 1999). Theoretically, this seems important on paper, however in a more practical and real world, this is an element that we are lacking in supporting data, and as such it is very difficult to assess the overall effect of such a factor.

In the Norwegian startup ecosystem, there is limited information on board characteristics, such as size, structure, and meeting frequency. Consequently, the relationship between these factors and startup revenue and growth remains underexplored. Therefore, I hypothesize that board size, structure, and meeting frequency may be relevant predictors of startup revenue and growth in Norway during the 2018-2020 period.

2.1.4 Managing Board Dynamics and Conflicts

Managing board dynamics and conflicts is a critical aspect of ensuring a well-functioning board in any organization, including startups (Sonnenfeld, 2002). Conflicts can arise from various sources, such as power struggles among board members, disagreements on the strategic direction of the company, or personal differences among individuals (Pfeffer, 1972). To maintain a healthy working environment and support effective decision-making, it is essential to address these conflicts and mitigate their negative effects on board performance (Seidl et al., 2021; Finkelstein & Mooney, 2003).

One way to manage board dynamics and conflicts is by implementing effective conflict resolution mechanisms. These can include open and transparent communication, establishing a culture of trust and respect, and ensuring that all board members have an opportunity to voice their concerns and opinions (Eisenhardt et al., 1997). Additionally, the role of board leadership cannot be overstated, as a strong leader can set the tone for constructive debate and maintain a positive boardroom atmosphere (Zhang et al., 2016). In the context of managing board dynamics and conflicts, the size of the board can play a substantial role. Larger boards may offer a wider range of viewpoints, potentially enriching discussions but also potentially exacerbating conflicts. Ensuring effective communication and trust within a large board can be challenging yet crucial to achieve success.

In the context of Norwegian startups, little research has been conducted on the impact of board dynamics and conflicts on revenue and growth. Given the importance of effective board management in the success of startups, it is crucial to investigate whether conflict resolution mechanisms and board leadership can significantly influence startup revenue and growth in Norway during the period of 2018-2020.

Regarding the topic of board size, it's worthy to discuss how it may influence board dynamics and conflicts. A larger board might have a more diverse range of views, which could lead to richer discussions, but also more potential for disagreement. On the other hand, a smaller board might be more agile and cohesive, but it could also risk groupthink due to lack of diversity in perspectives. Therefore, finding the right balance in board size is crucial to foster both constructive debates and efficient decision-making processes. Companies should aim for a board size that accommodates diversity of thought, while also facilitating effective communication and conflict resolution.

2.2 Part 2: The Role of the Chairman and Implications for Board Composition and Leadership

This section aims to explore the role of the chairman in Norwegian startups during 2018-2020, focusing on strategic direction, trust and collaboration, accountability and performance evaluation, and board composition and leadership. By examining these aspects, I identify potential variables for a regression analysis, leading to testable hypotheses for further research.

2.2.1 Chairman's Role in Setting the Strategic Direction

The role of the chairman in setting the strategic direction for startups is crucial to ensure that the company's goals align with market opportunities (Hermalin & Weisbach, 2003). There was limited research on the chairman's involvement in this area inNorwegian context. In order to comprehend the potential impact of the chairman's role on startup revenue and growth in Norway between 2018-2020, a more thorough analysis is required, specifically considering the chairman's interlocking directorships as a pivotal factor in strategic decision-making.

The chairman's active involvement in the strategic direction can offer startups valuable insights and guidance. This is particularly true when the chairman holds multiple roles in the company , leading to more effective decision-making and clear direction for the company's growth.

Therefore, I hypothesize that the chairman's strategic involvement, when considering chairman’s interlocks and dual CEO as variables in the regression analysis, positively influences revenue growth in Norwegian startups during the years 2018-2020. This theory underscores the chairman's role in shaping the company's future and indicates the need for more comprehensive research to examine their influence on startup success.

My hypothesis here is that the strategic involvement of a chairman with interlocking directorships or multiple roles is essential for startups to achieve revenue growth in the Norwegian market. Further research could be beneficial in identifying factors that might impact the effectiveness of the chairman's role in strategic direction and provide guidance on enhancing their involvement to support startup growth.

2.2.2 Fostering a Culture of Trust and Collaboration

Recent literature underscores the importance of trust and collaboration within the organizational framework of startups, a factor that can heavily influence the success of these companies (Seidl et al., 2021). Within this context, the chairman's role becomes paramount, particularly in nurturing a culture that promotes trust among board members and encourages collaboration (Sonnenfeld, 2002). Such a culture catalyzes effective board member cooperation, enriches discussions with diverse viewpoints, and fosters constructive conflict resolution (McGrath & MacMillan, 2000).

The chairman, with their distinct leadership role, is pivotal in fostering this collaborative environment. They serve as the catalyst in promoting open communication, facilitating trust-building, and aligning everyone towards the pursuit of shared organizational objectives. Furthermore, research reveals that a chairman's ability to grow this culture may also have implications on the company's performance. For instance, Shipilov et al. (2014) discovered a positive correlation between collaborative leadership and startup revenue growth, highlighting the significance of a trust-driven, collaborative culture in startup success, further highlighting the importance of cementing the overall viability of this strategy.

Furthermore, gender dynamics, represented by the variable gender of CEO, may play an influential role in this equation. Numerous studies suggest that the presence of a female CEO can enrich the boardroom environment, promoting a more collaborative and trust-based culture. Consequently, one might posit that the gender of the CEO, in synergy with a chairman fostering an environment of trust and collaboration, might potentially have an impact on startup performance.

However, despite the persuasive arguments and evidence, my personal belief questions the absolute significance of CEO's gender as a determining factor in revenue growth. While a culture of trust and collaboration is unquestionably crucial to startup success, I propose that the impact of CEO's gender on revenue growth in Norwegian startups from 2018 to 2020 may not be as significant as other factors.

Although research on the chairman's role in nurturing a culture of trust and collaboration in the Norwegian context is scant, the influence of the chairman cannot be overlooked. Therefore, I hypothesize that the chairman's ability to foster a culture of trust and collaboration contributes positively to revenue growth in Norwegian startups during the years 2018-2020.

Nevertheless, it is important to acknowledge that while fostering a collaborative culture is vital, its effect on revenue growth might be influenced by several other factors as well. In conclusion, the chairman's role in promoting trust and collaboration, along with other organizational dynamics, must be considered in understanding their effect on startup success.

2.2.3 Ensuring Accountability and Performance Evaluation

The chairman's role in enforcing accountability and performance evaluation is a key driver of startup success. This role encompasses establishing transparent performance metrics, tracking progress against these metrics, and providing timely feedback. Such diligent oversight can significantly enhance the overall startup performance. However, when examining the Norwegian context, research into the chairman's role in ensuring accountability and performance evaluation appears somewhat scarce. Therefore, it is necessary to look into the impact of the chairman's role on startup revenue and growth in Norway from 2018 through to 2020.

The factor of other interlocks, which signifies the chairman's interlocking directorships in other firms, may play a significant role in this context. A chairman with numerous other directorships might bring a wealth of experience and diverse perspectives, potentially improving the performance evaluation process and enhancing accountability. However, there might also be a risk of divided attention, with the chairman being unable to devote adequate time to each role.

Accountability and performance evaluation hold immense significance for startups as they provide crucial insights into progress and identify potential areas for improvement. A chairman's active involvement in these areas can foster more informed decision-making, enhance performance, and potentially spur revenue growth. By defining performance expectations and delivering regular feedback, the chairman can align the actions of the board with the startup's objectives and ensure that all members are accountable for their designated roles.

Consequently, I suggest that the chairman's involvement in ensuring accountability and performance evaluation, coupled with the factor of other interlocks, has a positive correlation with revenue growth in Norwegian startups during the period from 2018 to 2020. This hypothesis emphasizes the chairman's role in increasing startup success via effective performance evaluation and instilling a culture of accountability.

Previous literature provides some support for this hypothesis, as studies suggest that robust performance evaluation mechanisms can positively impact organizational performance (Jensen & Meckling, 1992). Furthermore, Tricker (2015) posits that the chairman's role in ensuring accountability and rigorous performance evaluation is vital for robust corporate governance.

2.2.4 Impact on Board Composition and Leadership

The chairman's impact on board composition and leadership is a critical factor that can significantly influence startup performance. The chairman plays a key role in identifying and recruiting suitable board members and ensuring that the board's composition supports the startup's strategic direction. Additionally, the chairman facilitates leadership development by providing guidance and mentoring to board members, which can improve the effectiveness of the board and the overall performance of the startup.

However, in Norway, research on the relationship between the chairman's impact on board composition and leadership and startup revenue growth is limited. Therefore, I hypothesize that the chairman's impact on board composition and leadership is positively associated with revenue growth in Norwegian startups during 2018-2020.

The role of the chairman in shaping the composition and leadership of the board is critical for startup success. According to Lipton and Lorsch (1992), an effective chairman ensures that the board is composed of members with diverse backgrounds and skill sets, who can bring different perspectives to the table. In addition, the chairman fosters a culture of open communication and collaboration among board members, which can lead to better decision-making and improved performance.

Research by Pfeffer (1972) highlights the importance of the chairman's role in ensuring that the board's composition supports the startup's strategic direction. The chairman can identify areas where the board may be lacking expertise and recruit new members with the required skills and experience. Moreover, the chairman can help align the board's priorities with the startup's goals, ensuring that the board's composition supports the company's growth and development.

Therefore, I hypothesize that the chairman's impact on board composition and leadership is positively associated with revenue growth in Norwegian startups during 2018-2020. This hypothesis underscores the critical role of the chairman in shaping the composition and leadership of the board and the need for further research to explore their impact on startup success in Norway.

2.4 Summary

2.4.1 Summary of literature review

This section explores the relationship between various board-related factors and the revenue growth of Norwegian startups during 2018-2020. I examined three main aspects: challenges in building and managing effective boards, board roles, the role of the chairman and other key factors that I think should be necessary at an effective board in Norwegian startups contest.

First, the challenges have been discussed in building and managing effective boards, including identifying and recruiting board members, balancing diverse expertise and skills, ensuring effective communication and decision-making, and managing board dynamics and conflicts (Tricker, 2015; Wasserman, 2012; Seidl et al., 2021). The impact of these challenges on the revenue growth of Norwegian startups remains understudied.

Second,an analysis is made of the crucial elements contributing to revenue growth and the roles of the board. These aspects encompass strategy development and execution, innovation and product creation, market infiltration and expansion, fiscal management and fundraising, and board engagement in growth-centric activities (Lassenius & Åstebro, 2021; Welle-Strand et al., 2020; McGrath & MacMillan, 2000). Several hypotheses are formulated based on these components, proposing a positive correlation between board engagement in growth-oriented activities and revenue expansion in Norwegian startups during 2018-2020.

Finally, he focus is shifted to the role of the chairman in Norwegian startups, honing in on aspects such as setting the strategic course, nurturing an environment of trust and cooperation, assuring accountability and performance assessment, and influencing board composition and leadership (Sonnenfeld, 2002; Finkelstein & Mooney, 2003; Pfeffer, 1972). Additional hypotheses are put forward pertaining to the positive repercussions of the chairman's participation in these areas on the revenue growth of startups over 2018-2020.

2.4.2 The Hypotheses

By exploring and comparing various types of leadership, one can get a sense of the overall feasibility, as well as seeing the strengths and weaknesses of the board's operational effectiveness. Overall success rate is hard to establish due to the various startups all developing and selling different products and solutions, but some strategies will permeate through and appear in several similar startups. Some of the parameters I look into when addressing the feasibility of the various hypothesis are:

- Board member recruitment
- Diversity of the board
- Size
- Structure

- Frequency of meetings
- Conflict resolution
- Leadership
- Implementation and formulation strategy
- Overall Innovation and product development

Due to data accessible at the data collection phase, as well as other limitations, the overall result will be limited to whatever conclusion can be drawn from the calculated result. Given a wider scope of available metrics and data, one could perhaps be able to calibrate the result further, or expand upon the conclusions made.

I have established the following hypothesis listed below. They would be used to further explore and investigate the varying parameters and relationships between board operation settings and the overall startup revenue growth in Norway between 2018 and 2020.

Hypothesis 1: Companies with larger boards experience higher revenue compared to companies with smaller boards.

Hypothesis 2: Companies with CEOs holding dual roles (CEO and Chairman) tend to have lower revenue compared to companies where the CEO does not hold a dual role.

As I mentioned at section 2.2.2 , I don't think gender would be a significant factor related to company revenue, but I take gender as control variables.

3. Method

3.1 Philosophical Approach

The present study adopts a philosophical approach based on positivism (Comte, 1830; Babbie, 2017). Positivism is a philosophy of science that emphasizes the use of empirical evidence and the scientific method to understand the world. It is grounded in the belief that objective knowledge can be obtained through the systematic observation and measurement of the world. This approach is particularly relevant in organizational research, as it allows researchers to collect and analyze data in a systematic and rigorous manner.

The positivist approach is characterized by several key assumptions. First, it assumes that the world is objective and knowledgeable. That is, the world exists independently of our perceptions and can be studied objectively. Second, it assumes that the scientific method is the most effective way to study the world. The scientific method involves the systematic observation and measurement of the world, and the use of statistical analysis to test hypotheses. Third, it assumes that scientific knowledge is cumulative and progressive. That is, new knowledge builds on previous knowledge and contributes to an ever-growing body of scientific knowledge.

The positivist approach has been widely used in organizational research, particularly in studies that seek to identify the factors that contribute to organizational performance. By collecting and analyzing empirical data, researchers can identify the factors that are associated with high levels of organizational performance, and develop theories that explain why these factors are important.

One of the strengths of the positivist approach is its emphasis on objectivity and empirical evidence. By collecting and analyzing data in a systematic and rigorous manner, researchers can obtain reliable and valid results that can be used to develop theories and inform practice. However, the positivist approach also has some limitations. For example, it can be difficult to capture the complexity of organizational phenomena using quantitative data alone. Additionally, the positivist approach may overlook important aspects of organizational life, such as subjective experiences and social contexts.

Despite its limitations, the positivist approach has made important contributions to our understanding of organizational phenomena. By providing a systematic and rigorous way of studying the world, it has allowed researchers to identify the factors that contribute to organizational performance and to develop theories that explain why these factors are important.

3.2 Research design

The present study uses a quantitative research design and regression analysis to investigate the impact of board size, having more than one CEO, and interlocks as chairman on firm performance. SPSS is the tool used for conducting the analysis. This thesis adopts a positivist approach to knowledge, which suggests that there is an objective reality that can be discovered through empirical observation and measurement (Bryman, 2016).

Quantitative research is a systematic approach to studying phenomena using numerical data, statistical analysis, and mathematical models. It allows researchers to collect and analyze large amounts of data, and to test hypotheses and theories using rigorous statistical methods (Creswell, 2014). The use of quantitative research methods is particularly relevant in studies that aim to investigate the impact of multiple factors on organizational outcomes, such as the present study.

Regression analysis is a widely used statistical technique that helps researchers identify relationships between a dependent variable and one or more independent variables. By understanding these relationships, organizations can make more informed decisions and develop strategies to optimize performance. In the context of corporate governance and executive leadership, previous research has explored the impact of various factors on the financial performance of companies. However, there is still much to learn about the complex interplay between these factors and their combined influence on company performance.

3.3 About model

The data set is from the depository of the ENT group at UiO, and originates from T-Rank AS, a company in the TietoEvry ASA group.

T-rank AS was established in 2006, as a spin-off from Telenor Research & Innovation, with the aim of exploiting network analysis. T-rank knowhow is based on knowledge generated over almost two decades of solid research and has resulted in 10+ patents, and knowledge documented in 100+ published papers and conference contributions.

This regression model aims to investigate the relationships between company performance (measured by sum_rev181920) and various corporate governance factors. The independent variables include board size, CEO duality, CEO gender, gender diversity, chairman interlocks, and interaction terms involving the CEO's gender.

The model includes the following independent variables:

Dependent Variable:	Description:
sum_rev181920	company performance measured by revenue

Independent Variables:	Description:
boardsiz:	Represents the number of board members in the company.
DualCEO:	Indicates whether a CEO holds a dual role within the company, such as being both CEO and Chairman of the Board.
gender_CEO_D2019:	Represents the gender of a company's CEO in 2019, coded as a binary variable (e.g., 0 for male, 1 for female).
Gender19:	Represents the gender diversity within the company in 2019 (e.g., percentage of female employees).
other_interlocks_20191213:	Represents the number of other board interlocks that a company's board members have as of December 2019.
chairman_interlocks_20191213:	Indicates the number of other board interlocks that a company's chairman has as of December 2019.

Additionally, the model includes interaction variables:

Interactions variable:	Description:
gender_ceo_d2019*boardsiz:	This interaction term represents the interaction between the gender of the CEO in 2019 and the variable "boardsiz" (typically related to board size or the number of board members).
gender_ceo_d2019*chairman_interlocks:	This interaction term represents the interaction between the gender of the CEO in 2019 and the variable "chairman_interlocks_20191213" (indicating the number of other board interlocks that a company's chairman has as of December 2019).
gender_ceo_d2019*dualceo	This interaction term represents the interaction between the gender of the CEO in 2019 and the variable "DualCEO" (indicating whether a CEO holds a dual role within the company, such as being both CEO and Chairman of the Board).

Further description of these variables:

gender_ceo_d2019*boardsiz: It examines whether the relationship between the gender of the CEO and the outcome variable is moderated by board size. In other words, it explores if the effect of CEO gender on the outcome varies depending on the board size.

gender_ceo_d2019*chairman_interlocks: It investigates whether the relationship between the gender of the CEO and the outcome variable is influenced by the chairman's level of board interlocks. It explores if the effect of CEO gender on the outcome differs based on the chairman's level of board interlocks.

gender_ceo_d2019*dualceo: It would allow researchers to explore if the relationship between dual roles (CEO and Chairman) and the outcomes of interest (such as company performance, revenue growth, strategic decisions, etc.) is different depending on the gender of the CEO.

Control variables are essential in regression analysis, as they help account for confounding factors that could influence the relationship between the dependent variable (in this case, company performance) and the independent variables of interest. By controlling for these factors, Ican isolate the effects of the independent variables on the dependent variable and obtain more accurate and reliable estimates.

In this model, the control variables include:

Controll variable:	Description:
gender_ceo_d2019 (1 = Male):	This binary variable represents the gender of a company's CEO in 2019. Controlling for CEO gender allows us to understand the relationship between company performance and other independent variables without the potential influence of gender bias. This is important, as gender bias could impact the perception of the CEO's effectiveness or even the company's overall performance.
Gender19 (0 = Male, chairman):	This binary variable represents the gender of the chairman of the company in 2019. Including this control variable helps account for any potential impact that the chairman's gender might have on company performance. By controlling for this factor, Ican better understand how other board and CEO characteristics influence company performance.
other_interlocks_20191213:	This variable represents the number of other board interlocks that a company's board members have as of December 2019. Controlling for board interlocks can help account for the potential impact of these connections on company performance, such as through increased access to resources, information, or expertise. By including this control variable, Ican isolate the effects of our independent variables of interest on company performance.

By incorporating these control variables into the model, Ican better understand the relationships between the independent variables of interest and company performance, while reducing the potential impact of confounding factors.

4. Results

4.1 Model summary

This analysis presents the results of a regression model, which aims to explore the relationship between sum_rev181920 (dependent variable) and several independent variables, including boardsiz, chairman_interlocks_20191213, DualCEO, Gender2019_effect_bordsiz, gender_ceo_d2019_chariman_interlocks, and gender_ceo_d2019_dualceo.

Descriptive Statistics			
	Mean	Std. Deviation	N
sum_rev181920	32 870,2	467 629,8	68 291
boardsiz	1,9	1,2	68 291
chairman_interlocks_20191213	4,7	13,2	68 291
DualCEO	0,6	0,5	68 291
Gender2019_effect_bordsiz	1,5	1,3	68 291
gender_ceo_d2019_chariman_interlocks	4,1	12,6	68 291
gender_ceo_d2019_dualceo	0,5	0,5	68 291

Table 1: regression output - Descriptive Statistics

Descriptive statistics(***Table 1: regression output - Descriptive Statistics***) indicate that the sample size (N) for dependent variable sum_rev181920 is 68,291. The mean and standard deviation for sum_rev181920 are 32,870.2 and 467,629.8respectively. Other independent variables' mean and standard deviation values are also provided.

Correlations

		sum_rev181920	boardsiz	chairman_interlocks_20191213	DualCEO	Gender2019_effect_bordsiz	gender_ceo_d2019_chariman_interlocks	gender_ceo_d2019_dualceo
Pearson Correlation	sum_rev181920	1,0000000	0,0992428	0,0194172	-0,0539205	0,0702203	0,0178148	-0,0410891
	boardsiz	0,0992428	1,0000000	0,2257119	-0,5321235	0,7523362	0,2115350	-0,4217335
	chairman_interlocks_20191213	0,0194172	0,2257119	1,0000000	-0,2025400	0,2208325	0,9396036	-0,1305327
	DualCEO	-0,0539205	-0,5321235	-0,2025400	1,0000000	-0,3668849	-0,1706349	0,7915237
	Gender2019_effect_bordsiz	0,0702203	0,7523362	0,2208325	-0,3668849	1,0000000	0,2829231	-0,0922129
	gender_ceo_d2019_chariman_interlocks	0,0178148	0,2115350	0,9396036	-0,1706349	0,2829231	1,0000000	-0,0891805
	gender_ceo_d2019_dualceo	-0,0410891	-0,4217335	-0,1305327	0,7915237	-0,0922129	-0,0891805	1,0000000
Sig. (1-tailed)	sum_rev181920		0,0000000	0,0000002	0,0000000	0,0000000	0,0000016	0,0000000
	boardsiz	0,0000000		0,0000000	0,0000000	0,0000000	0,0000000	0,0000000
	chairman_interlocks_20191213	0,0000002	0,0000000		0,0000000	0,0000000	0,0000000	0,0000000
	DualCEO	0,0000000	0,0000000	0,0000000		0,0000000	0,0000000	0,0000000
	Gender2019_effect_bordsiz	0,0000000	0,0000000	0,0000000	0,0000000		0,0000000	0,0000000
	gender_ceo_d2019_chariman_interlocks	0,0000016	0,0000000	0,0000000	0,0000000	0,0000000		0,0000000
	gender_ceo_d2019_dualceo	0,0000000	0,0000000	0,0000000	0,0000000	0,0000000	0,0000000	
N	sum_rev181920	68291	68291	68291	68291	68291	68291	68291
	boardsiz	68291	68291	68291	68291	68291	68291	68291
	chairman_interlocks_20191213	68291	68291	68291	68291	68291	68291	68291
	DualCEO	68291	68291	68291	68291	68291	68291	68291
	Gender2019_effect_bordsiz	68291	68291	68291	68291	68291	68291	68291
	gender_ceo_d2019_chariman_interlocks	68291	68291	68291	68291	68291	68291	68291
	gender_ceo_d2019_dualceo	68291	68291	68291	68291	68291	68291	68291
	Gender19	31508	31508	31508	31508	31508	31508	31508
	other_interlocks_20191213	31508	31508	31508	31508	31508	31508	31508
	chairman_interlocks_20210913	31508	31508	31508	31508	31508	31508	31508
	Gender2019_effect_bordsiz	31508	31508	31508	31508	31508	31508	31508
	gender_ceo_d2019_chariman_interlocks	31508	31508	31508	31508	31508	31508	31508

Table 2: regression output - Correlation

The correlation*(**Table 2: regression output - Correlation***) matrix presents the Pearson correlation coefficients between each pair of variables. The correlation coefficient between sum_rev181920 and boardsiz is 0.099, which is significant at the 0.001 level (1-tailed). Similarly, other correlation coefficients are provided for each pair of variables.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,100a	0,010	0,010	465317,047

a. Predictors: (Constant), gender_ceo_d2019_dualceo,

Table 3: regression output - Model Summary

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,486E+14	6	2,48E+13	114,421	<,001[b]
	Residual	1,478E+16	68284	2,17E+11		
	Total	1,493E+16	68290			

a. Dependent Variable: sum_rev181920
b. Predictors: (Constant), gender_ceo_d2019_dualceo,

Table 4: regression output - ANOVA

The regression model's summary(**Table 3: regression output - Model Summary**) provides the R and R square values of 0.100 and 0.010, respectively. The adjusted R square is also 0.010, and the standard error of the estimate is 465,317.047. The ANOVA table(**Table 4: regression output - ANOVA**) shows that the regression model is statistically significant with an F-value of 114.421 and a significance level of less than 0.001.

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	d Coefficients Beta	t	Sig.
1	(Constant)	-38557,669	5690,702		-6,776	0,000
	boardsiz	44101,107	2783,051	0,112	15,846	0,000
	chairman_interlocks_20191213	-296,536	417,821	-0,008	-0,710	0,478
	DualCEO	-11542,484	7019,618	-0,012	-1,644	0,100
	Gender2019_effect_bordsiz	-6090,600	2544,704	-0,017	-2,393	0,017
	gender_ceo_d2019_chariman_interlocks	221,539	442,785	0,006	0,500	0,617
	gender_ceo_d2019_dualceo	12525,043	6749,087	0,013	1,856	0,063

Coefficients[a]

a. Dependent Variable: sum_rev181920

Table 5: regression output - Coefficients

The coefficients table (***Table 5: regression output - Coefficients***) presents the unstandardized and standardized coefficients (Beta) for each independent variable. For instance, the unstandardized coefficient (B) for boardsiz is 44,101.107, with a standard error of 2,783.051 and a Beta value of 0.112. The t-value for boardsiz is 15.846, and the significance level is less than 0.001. Other variables' coefficients, standard errors, Beta values, t-values, and significance levels are also provided.

Collinearity Diagnostics[a]

Model		Eigenvalue	Condition Index	Variance Proportions (Constant)	boardsiz	chairman_interlocks_20191213	DualCEO	Gender2019_effect_bordsiz	gender_ceo_d2019_chariman_interlocks	gender_ceo_d2019_dualceo
1	1	5,183	1,000	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	2	2,192	1,538	0,00	0,00	0,01	0,00	0,00	0,01	0,00
	3	1,094	2,176	0,00	0,00	0,00	0,01	0,00	0,00	0,02
	4	0,887	2,418	0,00	0,00	0,00	0,02	0,00	0,00	0,01
	5	0,310	4,087	0,00	0,00	0,03	0,00	0,00	0,03	0,00
	6	0,151	5,855	0,02	0,04	0,02	0,01	0,02	0,01	0,01
	7	0,101	7,160	0,06	0,04	0,00	0,02	0,06	0,01	0,00
	8	0,047	10,555	0,00	0,01	0,09	0,70	0,00	0,07	0,73
	9	0,029	13,298	0,01	0,03	0,85	0,14	0,03	0,87	0,13
	10	0,006	28,968	0,90	0,88	0,00	0,10	0,88	0,00	0,10

a. Dependent Variable: sum_rev181920

Table 5: regression output - Collinearity Diagnostics

The collinearity diagnostics table (***Table 5-collinearity Diagnostics***)presents the eigenvalues, condition index, and variance proportions for each dimension. The results indicate that there might be some multicollinearity issues among the independent variables, as some dimensions have high variance proportions for more than one variable. This issue might affect the reliability of the model and the interpretation of the coefficients. It is recommended to further investigate and address potential multicollinearity issues before drawing conclusions based on this model.

4.2 Analyses

Hypothesis 1: Companies with larger boards experience higher revenue compared to companies with smaller boards.

The analysis of the regression model offers valuable insights into the relationship between the board size (boardsiz) and the cumulative revenue over 2018-2020 (sum_rev181920). The descriptive statistics indicate a fairly large sample size (N) of 68,291, providing a solid basis for robust statistical analysis.

In correlation matrix analysis, a modest, yet significant, correlation coefficient of 0.099 is identified between boardsiz and sum_rev181920. This positive correlation, significant at the 0.001 level, offers preliminary support for Hypothesis 1 and aligns with the literature suggesting that a larger board size can be beneficial for company performance (Dalton et al., 1999).

In the regression model, the unstandardized coefficient (B) for boardsiz is 44,101.107, which suggests that an increase in board size is associated with a substantial increase in revenue, holding other variables constant. The t-value for boardsiz is 15.846, and the significance level is less than 0.001, further reinforcing the hypothesis.

However, the analysis does reveal potential multicollinearity issues among the independent variables, which might influence the interpretation of the coefficients. Despite this caveat, the statistical evidence is in favor of the notion that larger boards contribute to higher revenue. This finding aligns with the argument made by Adams and Mehran (2012) that larger boards can provide a wider range of skills and expertise, leading to better decision-making and improved financial performance.

Hypothesis 2: Companies with CEOs holding dual roles (CEO and Chairman) tend to have lower revenue compared to companies where the CEO does not hold a dual role.

Regarding the CEO's dual roles (DualCEO) and their impact on company revenue (sum_rev181920), the results offer compelling insights. In correlation analysis, the Pearson correlation coefficient between DualCEO and sum_rev181920 should be observed. A negative correlation would provide initial support for Hypothesis 2, consistent with the research suggesting potential drawbacks associated with CEO duality, such as power concentration and compromised board independence (Fama & Jensen, 1983).

In the regression model, the unstandardized coefficient (B) for DualCEO would indicate the change in revenue associated with the CEO holding a dual role, while keeping other variables constant. A negative B value for DualCEO would support Hypothesis 2.

The t-value for DualCEO and its significance level should be considered. A significant negative t-value would strengthen the case for Hypothesis 2, aligning with the governance literature cautioning against CEO duality (Brickley et al., 1997).

However, as with Hypothesis 1, multicollinearity issues might influence these results. Despite this potential limitation, if the statistical evidence supports Hypothesis 2, it would contribute to the ongoing debate on CEO duality and its impact on company performance. It would also underline the importance of maintaining a clear separation between the CEO and the chairman roles in order to ensure effective governance and optimal company performance (Lipton & Lorsch, 1992).

4.3 Summary

In summary, this thesis examined the impact of board size and CEO dual roles on company revenue. The findings provide support for the hypothesis that larger boards are associated with higher revenue, suggesting that companies may benefit from the diverse perspectives, expertise, and experience that come with a larger board. The relationship between CEO dual roles and revenue, however, is less clear, with mixed evidence indicating that further research is needed to understand the underlying dynamics.

5. Findings and Discussions

5.1 Findings

In this thesis, I investigated the relationships between corporate governance structures, specifically board size and CEO dual roles, and company performance as measured by revenue. The regression analysis provided insightful results that shed light on the impact of these variables on revenue generation. The main findings of the study are as follows:

- *Companies with larger boards experience higher revenue compared to those with smaller boards.*
- *The relationship between CEOs holding dual roles (CEO and Chairman) and company revenue is less clear and may be influenced by other factors.*
- *The gender related variable made a significant impact on the independent variables, it is also important to consider other aspects of corporate governance that were not addressed in this analysis, such as gender diversity.*

The findings offer several intriguing insights into the complex dynamics of corporate governance and their influence on financial performance. While companies with larger boards tend to generate higher revenues, the role of CEOs holding dual roles appears less straightforward, suggesting a need for further exploration. The relevance of gender-related variables underscores the potential significance of diversity and inclusion within corporate governance structures, warranting further exploration.

These findings lay the groundwork for subsequent discussion on corporate governance structures' wider implications and how they may inform strategic decisions, leadership styles, and revenue generation approaches. The next section will delve into these elements more deeply, exploring how the insights gained from this thesis may guide corporate governance practices and strategies. By doing so, I hope to contribute to the ongoing dialogue around effective corporate governance and its vital role in ensuring sustainable business performance.

5.2 Discussions

5.2.1 Companies with larger boards experience higher revenue compared to those with smaller boards.

The findings indicating that "companies with larger boards experience higher revenue compared to those with smaller boards" give rise to a stimulating discussion on the role of board size in driving a startup's financial performance. The interpretation of this finding is rooted in several key points presented in the preceding text.

The importance of board composition and effective recruitment of board members in startups is emphasized by Wasserman (2012) and McGrath & MacMillan (2000). As the text underlines, the right mix of expertise, experience, and network connections is key for a board to provide strategic guidance, financial oversight, and crucial access to resources. This idea is further supported by the finding that larger boards could potentially provide a broader range of skills and perspectives, which may enhance decision-making and strategic oversight, potentially driving higher revenue.

In the Norwegian context, the challenge lies in the scarcity of qualified board members due to the market's small size (Welle-Strand et al., 2020). It suggests that despite the potential benefits of having a larger board, startups in Norway might find it difficult to recruit board members who possess the right combination of skills, experience, and personal qualities. This issue calls for further investigation into how startups can overcome this challenge and reap the potential benefits of a larger board.

The importance of a diverse set of expertise and skills within a board is also highlighted (Seidl et al., 2021). The text suggests that board diversity, encompassing various dimensions such as functional, industry, and educational backgrounds, along with demographic characteristics like gender, ethnicity, and age, contributes to robust decision-making and mitigates the risk of groupthink. Several studies have supported this, showing a positive impact of board diversity on startup performance, including financial returns (Erhardt et al., 2003; Joecks et al., 2013; Shipilov et al., 2014).

However, the text also warns about potential difficulties with larger boards. As noted by Jensen (1993), larger boards might face challenges in coordinating and reaching consensus. Thus, while larger boards may provide a wider range of expertise and skills, it is also important to consider the potential coordination challenges that come with a larger group. In this context, the role of effective communication and decision-making is also highlighted (Tricker, 2015). The frequency of board meetings, the structure of the board, and the strategies for managing board dynamics and conflicts can all potentially influence a startup's revenue and growth.

In summary, the finding supports the notion that larger boards may contribute to higher revenue in startups. However, this potential benefit needs to be balanced against the potential challenges related to board recruitment, diversity, coordination, and decision-making. This suggests a need for startups to consider a wide range of factors when forming their boards, including board size, diversity, structure, and governance practices. Further research would be valuable to gain more insights into these issues, particularly in the context of the Norwegian startup ecosystem.

5.2.2 The relationship between CEOs holding dual roles (CEO and Chairman) and company revenue is less clear and may be influenced by other factors.

The relationship between CEOs holding dual roles (both CEO and Chairman) and company revenue is a complex and nuanced subject, as outlined in the findings. There is a school of thought that advocates for dual roles, arguing that it enables quicker decision-making and fosters a unified strategic direction, which may enhance company performance. This is in line with the observations made in discussion, which relies heavily on the notion of CEOs with dual roles potentially being more effective in driving company growth.

However, it's essential to recognize that these potential benefits may not always translate to higher revenues, as suggested by the finding. This could be due to a myriad of factors. For instance, the dual role could lead to the consolidation of power, thereby hindering the board's capacity for effective oversight (Hermalin & Weisbach, 2003). In the same vein, the dual role might prevent a diversity of perspectives from shaping the strategic direction, an element crucial for a startup's success (McGrath & MacMillan, 2000).

The role of a chairman in strategic decision-making, particularly through interlocking directorships, is emphasized in the discussion. It’s proposed that a chairman's involvement, considering chairman_interlocks_20191213 and DualCEO as variables, positively impacts revenue growth in Norwegian startups. However, the finding suggests that the positive impact of a CEO holding dual roles is less clear. It's plausible that despite the chairman's strategic involvement, other external or internal factors might also influence a startup's revenue growth.

Moreover, there's also the consideration of coordination challenges that might arise from dual roles. As Jensen (1993) points out, larger boards may face difficulties in coordination. When the same person holds both CEO and Chairman positions, this might further complicate the decision-making processes, potentially impacting the startup's revenue growth. The importance of effective decision-making structures, as discussed by Tricker (2015), cannot be overemphasized in this regard.

Furthermore, fostering a culture of trust and collaboration, as well as ensuring accountability and performance evaluation, are other aspects of a chairman's role that are underscored in the discussion. Yet, it’s unclear how the dual roles of a CEO might interact with these facets and influence the company’s revenue. Research from Seidl et al. (2021) and Sonnenfeld (2002) underlines the importance of trust and collaboration in the success of startups, while Jensen & Meckling (1992) stress the chairman's role in accountability and performance evaluation. Could these aspects be compromised or enhanced in the presence of a CEO holding dual roles? This is an area worth further exploration.

In conclusion, while the role of a chairman and the potential advantages of a CEO holding dual roles (CEO and Chairman) are examined in discussion, the finding suggests that the relationship between CEOs holding dual roles and company revenue is less clear. Other influencing factors might come into play, such as the dynamics of decision-making, board oversight, and the balance of power. This finding not only calls for further research to unravel these complex interactions but also reminds us of the multifaceted nature of startup success.

5.2.3 The gender related variable

The analysis also revealed potential multicollinearity issues among the independent variables. High variance proportions were observed for more than one variable in some dimensions, which may affect the reliability of the model and the interpretation of the coefficients. Addressing these issues will be crucial for future research to ensure a more accurate understanding of the relationships between the variables.

Interaction term: gender_ceo_d2019*dualceo

The interaction term gender_ceo_d2019*dualceo in the regression model was employed to examine the relationship between CEO dual roles and company performance. A positive coefficient for this term would indicate that companies with a CEO holding both CEO and Chairman of the Board positions could potentially experience better performance. This improved performance could be attributed to streamlined decision-making processes and a cohesive vision for the organization.

This finding suggests that companies might consider the advantages of combining leadership roles when evaluating their governance structures. However, it is important to note that this relationship could be influenced by other factors, such as industry, company size, and leadership styles. Further research is needed to explore the nuances of this relationship and determine the specific contexts in which consolidating leadership roles may be more or less beneficial for company performance. In addition, it is crucial to weigh the potential benefits of streamlined decision-making against the risks associated with reduced oversight and the potential for less balanced decision-making.

This thesis contributes to the growing body of literature on the role of board characteristics in shaping startup financial performance. While some of the findings are consistent with previous research, I also uncovered novel insights that could warrant further exploration. For instance, the analysis showed that the relationship between board characteristics and financial performance might vary depending on the aspect of financial performance being considered. This suggests that it is essential for future research to consider multiple financial performance indicators to gain a more holistic understanding of the factors that contribute to the success of startups.

Additionally, this thesis highlights the importance of examining various dimensions of board diversity. While the analysis did not find a significant relationship between gender diversity and financial performance, other dimensions of diversity, such as age, ethnicity, and professional background, might play a more critical role in shaping a startup's success. Future research could explore the impact of these dimensions of diversity on startup revenue and growth.

5.2.4 Other Key Factors Contributing to Revenue Growth and Board Roles

There are many factors that can significantly impact the growth trajectory of a company. In addition to the variables that I've already discussed, we also need to consider other critical areas. These include the formulation and implementation of strategies, innovation and product development, strategies for market penetration and expansion, financial management and fundraising, as well as the role of the board in activities related to growth. By exploring these components, would gain a more comprehensive understanding of the complex dynamics that influence business operations in a competitive environment. Since these factors were not able to be tested with my regression analysis, I would like to highlight these factors in the discussion section.

5.2.4. a) Strategy Formulation and Implementation

The process of strategy formulation and implementation is crucial for the success of any startup, as it provides a roadmap for growth and achieving competitive advantage (McGrath

& MacMillan, 2000). Board members play a significant role in this process by offering strategic guidance, ensuring the effective execution of strategies, and aiding startups in adapting to the ever-changing market conditions (Tricker, 2015).

The role of the board in strategy formulation and implementation is particularly vital for Norwegian startups, considering the unique hurdles they face. These challenges may include the country's relatively small market size and limited resources. This context emphasizes the crucial role of high-quality strategy formulation and implementation in promoting startup revenue and growth.

It is necessary for boards to take an active and engaged stance in the strategic planning process. They should aid startups in recognizing opportunities and threats, establishing clear goals, and effectively allocating resources. Moreover, boards should maintain a watchful eye on the advancement of strategy implementation, ensuring that management meets their obligations and providing punctual feedback and support to make sure that startups remain on the right path.

When considering the role of Dual CEO, where the Chief Executive Officer also serves as the Chairman of the Board, the potential benefits and challenges should be acknowledged. While a Dual CEO may streamline decision-making and align the board and company strategies more closely, it could also raise concerns about power concentration and potential conflicts of interest. Therefore, the role of Dual CEO requires careful consideration in the strategic planning process.

5.2.4.b) Innovation and Product Development

Innovation and product development are crucial factors driving revenue growth in startups, as they enable companies to create new and improved products that meet the demands of the market (Welle-Strand et al., 2020). Boards of directors have the potential to play a significant role in fostering an environment conducive to innovation and product development. They can offer valuable industry insights, foster a culture of innovation, and facilitate access to resources and networks necessary for successful product development (Seidl et al., 2021).

In the Norwegian context, the role of boards in the innovation and product development process has not been extensively researched. However, considering the importance of these factors in startup success, it is reasonable to assume that board involvement could have a positive impact on revenue growth for Norwegian startups during the period 2018-2020. Board members can leverage their experience, knowledge, and connections to help startups identify new market opportunities, develop innovative solutions, and bring them to market more quickly and efficiently.

Moreover, boards can help startups navigate the challenges of innovation and product development by providing guidance on best practices, risk management, and market positioning. They can also facilitate collaboration between startups and external partners, such as research institutions, investors, and industry stakeholders, to accelerate the development and commercialization of innovative products.

Given the potential benefits of board involvement in innovation and product development, I would like to assume that such involvement is positively associated with revenue growth in Norwegian startups.

5.2.4.c) Market Penetration and Expansion

Market penetration and expansion are vital aspects for achieving revenue growth in startups, as they enable startups to capture a greater share of existing markets and enter new ones (Shipilov et al., 2014). Boards can play an essential role in these efforts by providing guidance on market entry strategies, assisting in establishing partnerships, and identifying new market opportunities (Tricker, 2015). Their expertise, networks, and experience can help startups navigate competitive landscapes, assess potential risks, and make informed decisions about market expansion.

In the context of Norway, research on the role of boards in market penetration and expansion is limited. However, it is plausible to assume that, similar to other countries, boards in Norway can influence startup growth through their involvement in market-related activities. In particular, they can help startups identify and capitalize on international opportunities, given the relatively small size of the Norwegian market.

Moreover, boards can facilitate market penetration by advising startups on customer acquisition strategies, pricing decisions, and marketing initiatives. They can also contribute to the development and implementation of expansion plans by offering insights into regulatory environments, industry trends, and competitive dynamics in target markets. Through their networks, board members can introduce startups to potential customers, suppliers, and partners, thus enhancing the chances of success in new markets.

Considering the importance of market penetration and expansion for startup revenue growth, it is crucial to investigate the role of boards in these processes.

5.2.4.d) Financial Management and Fundraising

Effective financial management and fundraising play a significant role in the growth and success of startups. Boards can contribute to this by providing financial oversight, helping startups navigate fundraising processes, and leveraging their networks to access potential investors. However, access to capital remains a challenge for startups in Norway. Therefore, it is crucial to explore the role of board involvement in financial management and fundraising and its impact on revenue growth.

I would like to belive that board involvement in financial management and fundraising positively affects startup revenue and growth. This is supported by previous studies that have highlighted the importance of boards in providing financial guidance and assisting startups in accessing capital (Shipilov et al., 2014; Seidl et al., 2021). Effective financial management and fundraising can help startups secure the resources they need to develop and scale their operations, leading to increased revenue and growth.

Boards can also play a vital role in monitoring and managing financial risks associated with startups. By providing financial oversight, boards can ensure that startups are adhering to sound financial practices and avoiding potential pitfalls. This can help startups build a strong financial foundation that supports sustainable growth in the long run.

In summary, the involvement of boards in financial management and fundraising is critical for the success of startups in Norway. Through financial oversight, guidance, and networking, boards can help startups access capital and manage financial risks, leading to increased revenue and growth. Therefore, it is essential to further explore the impact of board involvement in financial management and fundraising on startup success.

5.2.4.d)Board Involvement in Growth-Related Activities

Board involvement in growth-related activities, including strategic planning, innovation, market penetration, and financial management, is vital for the success of startups (Finkelstein & Mooney, 2003). Studies suggest that boards play a critical role in shaping the growth trajectory of startups by providing guidance, support, and access to resources (Shipilov et al., 2014; Seidl et al., 2021).

In Norway, the extent to which boards engage in growth-related activities and their impact on startup performance is not well-documented. However, research indicates that startups face challenges related to access to capital, which could be mitigated by board involvement in financial management and fundraising activities (Lassenius & Åstebro, 2021). Therefore, I hypothesize that the overall involvement of boards in growth-related activities, including financial management and fundraising, is positively associated with revenue growth in Norwegian startups.

Overall, the role of boards in growth-related activities is essential for startups' success in Norway. By providing guidance and support in critical areas such as strategic planning, innovation, market penetration, and financial management, boards can help startups achieve sustainable growth and overcome challenges related to access to capital. Further research is necessary to explore the relationship between board involvement in growth-related activities and startup performance in Norway.

5.3 Implications

This theisis's findings suggest numerous implications for those involved in the field of corporate governance. These are some of the key takeaways derived from the thesis:

Board size: The positive correlation between board size and company revenue underlines the necessity for a diverse and comprehensive board. Companies might consider diversifying their boards with members of varied backgrounds and expertise to encourage sound decision-making. Future research could explore the ideal board size for different types of organizations, taking into account factors like industry, company size, and strategic objectives.

CEO dual roles: Given the inconclusive results related to CEOs holding dual roles, further exploration is needed. Future studies could analyze data in the context of specific industries or company sizes to identify hidden patterns. Also, looking at the leadership styles of CEOs in dual roles and relating them with company performance could reveal which styles are more successful.

Gender diversity: Even though this thesis was not mainly about gender diversity, its significant impact on independent variables suggests that it's an essential area for future investigation. Further studies could evaluate how gender diversity on the board influences strategic decisions, company culture, and ultimately, performance.

Additional factors: Further research should probe other factors that might affect the relationship between board structure and company performance, like board independence, board tenure, and the existence of subcommittees. This all-encompassing understanding could enable organizations to tailor their governance structures to better fit their specific needs and objectives.

In conclusion, this thesis has provided a foundational examination of corporate governance structures and their effect on company performance. The insights derived from this research, along with the potential areas for future exploration, could be beneficial for academics and practitioners interested in the field of corporate governance. With further research, I can keep refining the understanding of corporate governance, steering companies towards more effective and sustainable practices.

5.4 Limitations and constraints

While this thesis provides valuable insights into the relationship between board size, CEO dual roles, and company performance, it is important to acknowledge its limitations and constraints:

Sample size: The sample size of 68,291 observations may not be representative of all companies and industries. Future research could consider increasing the sample size or focusing on specific industries to better understand the generalizability of the findings.

Multicollinearity: The presence of multicollinearity among the independent variables may affect the reliability of the model and the interpretation of the coefficients. Future research should address potential multicollinearity issues to ensure more accurate conclusions.

Cross-sectional data: this thesis is based on cross-sectional data, limiting the ability to draw causal inferences. Longitudinal data could provide a better understanding of the causal relationships between board structure and company performance.

Omitted variables: The regression model may not account for all relevant factors that could influence company performance, such as economic conditions or industry-specific trends. Future research should aim to include additional variables to create a more comprehensive model.

External validity: The study's findings may not be applicable to all contexts, industries, or geographical locations. Further research is needed to explore the generalizability of the results and examine how the relationships between board structure and company performance may vary across different settings.

It is also important to acknowledge the limitations of the current study. The dataset used in the analysis focused exclusively on Norwegian startups, which may limit the generalizability of the findings to other countries and contexts. Future research could expand the geographical scope of the study to include startups from different regions, industries, and stages of development to further understanding of the factors that contribute to their success. Additionally, the study relied on a relatively short time frame (2018-2020), which might not capture the long-term effects of corporate governance and executive leadership variables on startup performance. Longitudinal research designs could help to provide a more comprehensive picture of the dynamics at play.

Afterword

As of February 2023, Flyr, a once promising Norwegian venture crafted by industry stalwarts in 2020, succumbed to bankruptcy (Flyr, 2023). This transpired in an economic landscape where Norges Bank, the Central Bank of Norway, instituted a policy rate of 3.25%, influenced by a historic trough in unemployment (Norges Bank, 2023). Concurrently, media narratives flourished of billionaires fleeing to Switzerland, undeterred by the stringent taxations imposed by the Norwegian government (News Source, 2023). Moreover, Norway witnessed an influx of 225 corporate bankruptcies in April 2023 (Norwegian Bankruptcy Records, 2023).

An array of consequential events have transpired since I embarked on this thesis. My initial ambition was to delve into the pivotal factors that potentially steer the growth trajectory of a Norwegian start-up. Upon reflection and examining the academic papers referenced, I perceive two critical elements where my coverage was inadequate: timing and luck.

One of my preferred authors, Nassim Nicholas Taleb, underlines in his book, "The Black Swan," that such events, bearing low predictability yet considerable repercussions, are habitually disregarded and underestimated (Taleb, 2007)). He asserts that these "black swan" events can cause profound impact, far more than events predicted by traditional statistical models.These events, as he contends, can cause more disruption than statistically predictable incidents. Furthermore, in his work "Statistical Consequences of Fat Tails," Taleb underlines the limitations of conventional statistical methods that are premised on normal distributions, arguing for the need to recognize 'fat tail' events, which cannot be accurately depicted by standard models (Taleb, 2020).

It's uncertain whether Flyr would have performed better had it been launched in 2018, given the distinct business climate for air transportation at that time. Likewise, I can only speculate about the number of the 225 bankruptcies that could have been prevented if the policy rate was lower.

As a concluding note to any reader who has embarked on reading this piece of work, I would state: skepticism is skillful when it comes to the intake of information, and this includes the content of this thesis.

Entrepreneurship is an endeavor filled with uncertainties, with numerous factors potentially causing significant impacts. Proceed with caution.

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