



The Initial Market Choice

*An empirical study of firm characteristics that influence the choice of market
in Norway*

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Master thesis, Economics and Business Administration

Financial Economics

NORWEGIAN SCHOOL OF ECONOMICS

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Abstract

There is a broad consensus in the literature that firms primarily list on junior markets due to the more stringent listing requirements on main markets. However, 83 out of the 143 firms that listed on the Norwegian junior market from 2016 to 2021 were eligible to list on the main market. Therefore, it is pertinent to evaluate the initial market choice as a self-selection decision and evaluate other potential influences beyond listing requirements.

Our thesis examines the influence of firm characteristics on the choice between the main market and the junior market in Norway. We employ probit and multinomial logistic analyses on 214 main and junior market listings, and find that the two attract firms with different characteristics. The results indicate that firms who opt to list on the junior market are smaller, more overvalued and float a lower percentage of shares than those who list on the main market. Contrary to existing literature on other European markets, we do not find firm age, ownership structure and profitability to influence the initial market choice, which indicates a regional discrepancy for the Norwegian stock market.

Keywords – Firm characteristics, junior market, main market, listing requirements, IPO, Oslo Børs, Euronext Growth.

Preface

This thesis is written as part of the MSc degree in Economics and Business Administration at the Norwegian School of Economics (NHH), where both authors are majoring in finance. Writing this thesis has been educational, both regarding our understanding of academic research and the intricacies of financial markets.

We would like to express our sincere gratitude toward our supervisor, Associate Professor Konrad Raff, for his valuable guidance and constructive criticism. The challenge of writing a thesis was amplified by the pandemic, but it was made easier through his adaptability and curiosity for the subject.

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Bergen, December 2021

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1 Introduction

The funding of young and fast-growing firms is an essential mechanism through which financial development contributes to economic growth. However, young firms have long been recognized as a challenging market segment to finance and has historically been subject to a financing gap (Bernstein et al., 2018). Accordingly, a significant focus for policymakers has been to develop new stock exchanges markets for younger and smaller firms. These markets are most commonly referred to as junior markets¹.

Junior markets are similar to main markets but are usually characterized by more stringent listing requirements. These requirements often regard minimum market capitalisation, years of operation and financial reporting (Gresse and Gajewski, 2006). Vismara et al. (2012) outline the purpose of a junior market to be a market with comparable benefits to those of the main market for firms that are ineligible to list on the main market.

The global proliferation of junior markets is evident, with 78 new junior markets established in 48 different countries since 1990 (Bernstein et al., 2018). Furthermore, junior markets experience higher listing activity than their main markets counterparts. Vismara et al. (2012) find that only 845 out of 3,755 listings on the stock exchanges of the four largest European economies² took place on main markets during the period 1995-2009.

The junior markets' traction does not solely stem from young and fast-growing firms. Doukas and Hoque (2016) identify a growing trend of firms listing on junior markets although they meet the listing requirements of main markets. These findings challenge the frequent explanation that firms list on the junior market rather than the main market due to an inability to meet the listing requirements of the latter (Ritter et al., 2013; Doidge et al., 2009; Baker et al., 2002). Although less stringent listing requirements undoubtedly play a role in the initial market choice, Doukas and Hoque's (2016) study demonstrates that there must be other influential factors as well.

Our thesis examines the market choice as a self-selection decision, like any other corporate finance decision. Firms are free to choose whether or not to list, and which market to float their shares on, subject to legal constraints and listing requirements. As such, we

¹Other widely used terms for junior markets include, but are not limited to, second markets, second-tier markets, alternative markets, new markets, and growth markets.

²The four largest economies in Europe are Germany, United Kingdom, France, and Italy.

aim to identify the significance of various firm characteristics, investigating their influence on the initial market choice in the Norwegian stock market.

We find interest in studying the Norwegian stock market for three major reasons. Firstly, due to its relatively recent inception in 2016, this thesis provides the first insights into the initial market choice in this particular market. Secondly, by investigating a new market we expand the geographical scope of the topic, potentially unveiling regional variances. Thirdly, the Norwegian junior market has in recent years eclipsed the main market in annual listing activity, which reflects a high regional degree of adaption to this type of market place. The Norwegian stock market is primarily dominated by exchanges: Oslo Børs and Euronext Growth. Oslo Børs is the main market, whereas Euronext Growth is the junior market.

We find that 83 out of the 143 firms that listed on the Norwegian junior market from 2016 to 2021 met the listing requirements of the main market. Using probit analysis and multinomial logistic analysis, we identify specific firm characteristics that influence the initial market choice. The firms who opt to list on the junior market instead of the main market are smaller, more valued and have a lower percentage of shares floated. These results are consistent with the findings of Vismara et al. (2012) and Doukas and Hoque (2016) that firm size and degree of overvaluation are differentiating factors between the junior market and the main market. Alborno and Pope (2004) argues that smaller firms prefer junior markets because they struggle to generate an adequate amount of funds to finance both the pre and post listing costs of the main market. Junior market listings of smaller firms eligible to list on the main market could also be amplified by the pandemic. A dire need of capital could force these firms to prioritize the faster listing process of the junior market (Ellul et al., 2020). We find that overvalued firms tend to list on the junior market, which is opposite to the finds of Vismara et al. (2012). We theorise that overvalued firms list on junior markets to quickly take advantage of current overvaluation. Finally, the lower percentage of shares floated indicates the management's intention to retain more control of the firm. Goergen and Renneboog (2003) documents a similar effect for UK and German listings.

In contrast to previous studies by Vismara et al. (2012) and Doukas and Hoque (2016), we do not identify firm age, ownership structure or profitability as statistically significant

factors. Analysing the latter, previous studies speculate that less profitable firms are neither comfortable with nor rigged for the comprehensive reporting system and transparency required on the main market. However, our results indicate that this is not the case for the Norwegian market. Furthermore, for the Swedish market, ownership structure was a significantly differentiating factors between the junior and the main market (Baade-Mathiesen and Melnikova, 2019). We theorise that the statistically insignificant results in our models can be partly attributed to the generally low occurrence of majority managerial ownership in the Norwegian stock market. Finally, Euronext Growth has a reputation as an adequate alternative to the main market, even for well-established firms that easily qualify for Oslo Børs (KPMG, 2021). Thus, the presence of older and more established firms skews the collective firm age of the junior market, minimising the firm age difference between Euronext Growth and Oslo Børs.

This thesis is structured as follows: A review of existing literature on the topic is provided in Section 2. Section 3 highlights important aspects of the Norwegian stock market and its listing requirements. Our research question and associated hypotheses are presented in Section 4. After that, Section 5 introduces the data and the variables used throughout the thesis. Section 6 addresses the methodology utilized across the thesis, while Section 7 presents some initial statistical analyses. Furthermore, Section 8 discusses the empirical findings from the analysis, followed by a final summary and conclusion in Section 9.

2 Literature Review

A public listing is a transformative decision in a firm's life, with several upsides and downsides to consider. The financial motivation for going public might be to raise equity, with public firms achieving better access to capital and greater liquidity for the firm's shareholders (Chemmanur and Fulghieri, 1999). Moreover, it is an opportunity for diversification, and the market provides feedback to the firm's management while facilitating efficient capital allocation (Bodnaruk et al., 2008; O'Hara, 2003). On the contrary, the downsides of a listing include more governance rules and regulatory burdens to take into account, alongside a gradual loss of firm control (Mallin and Ow-Yong, 2009; Pagano et al., 1998; Rose and Solomon, 2016). The initial market choice of a firm depends on the relative importance they assign to each of these aspects.

Most stock exchanges throughout Europe consist of both a main market and a junior market. The main market is usually considered superior as it provides better access to external capital, higher liquidity and better post-issue performance (Vismara et al., 2012). The formal distinction between the two markets is generally centred around requirements regarding minimum market capitalisation, years of operation, and financial reporting (Gresse and Gajewski, 2006). These requirements disqualify several younger and smaller firms from listing on the main market. However, young firms in rapid growth demand external capital, which is commonly achieved by going public (Vismara et al., 2012). This was the initial spur behind the creation of junior markets, principally catering to firms ineligible to meet the stringent listing requirements of the main market (Mendoza, 2011). In addition to less stringent listing requirements, junior markets commonly have lower listing fees than main markets, alongside a faster and less complicated listing process.

Vismara et al. (2012) distinguishes between three primary market models of junior markets: sectorial, 'demand-side' segmentation, and sequential segmentation. Sectorial markets are limited to tech companies. The vast majority of sectorial markets were created during the 'internet bubble' of the late 1990s, and is therefore no longer that common. 'Demand-side' segmented markets are officially unregulated markets. Listing on such markets are "non-public offerings" intended for qualified institutional investors rather than retail investors. Lastly, sequentially segmented markets are intended as an intermediate step for firms

preparing to list on the main market. Euronext Growth Oslo most closely resembles a sequentially segmented market model (Oslo Børs, 2021a).

The post-issue financial performance of junior market firms is consistently worse than main market firms, but firms often prefer the former market regardless. Vismara et al. (2012) find an average 3-year BHAR (Buy-and-hold abnormal return) of +12.30% for main market listings and -19.00% for junior market listings. The findings support the notion that main markets are traditionally considered superior in term of post-issue performance. Doukas and Hoque (2016) document similar results for the UK junior market, the Alternative Investment Market (AIM), compared to the main market on the London Stock Exchange, with average 3-year post-issue operating performance³ equal to -19.90% and 7.33%, respectively. Looking specifically at AIM firms that could have listed on the main market but chose not to, the average 3-year post-issue operating performance is 0.33%, while the corresponding figure is +14.32% for the main market. Despite experiencing substantially poorer post-issue performances on junior markets, Doukas and Hoque (2016) identifies a growing trend of firms listing there although they meet the listing requirements of the main markets. A possible explanation of this could be that the less stringent listing requirements on the junior market can contribute to a faster and less costly listing process, which may trump the motivation for a better post-issue financial performance. However, Doukas and Hoque (2016) speculate other factors must also influence the listing decision.

Both Doukas and Hoque (2016) and Vismara et al. (2012) find differences in firm characteristics between firms that go public on the junior market and those listing on the main market. Younger and smaller firms are more inclined to list on the junior market, while more profitable firms will favour a listing on the main market. Furthermore, firms with higher Tobin's Q tend to list on the main market. Interpreting Tobin's Q as a measure of growth prospects, firms that list on the main market experience a superior operating performance than their junior market counterparts (Doukas and Hoque, 2016). A possible explanation is that firms who willingly commit to higher disclosure and greater governance are usually better positioned than firms unwilling to disclose the same information. Consequently, main market firms are expected to perform better, and

³Doukas and Hoque (2016) calculate average 3-year post operating performance based on a 3-year period 5 years after the initial firm listing.

therefore be worth more (Vismara et al., 2012).

For the Swedish stock market, Baade-Mathiesen and Melnikova (2019) document that firms listing on the junior market are structured with mostly of managerial owners. Conversely, firms with institutional owners, such as venture capitalists, private equity firms or other private investors, are more likely to go public on the main market. Moreover, Baade-Mathiesen and Melnikova (2019) finds evidence of firm age being an insignificant factor on a firm's listing decision, which contrasts the findings of both Vismara et al. (2012) and Doukas and Hoque (2016). These differences prove that no unequivocal firm characteristics affect firms' initial market choice, heightening the interest of conducting a similar study between the junior and the main market on the Norwegian stock market.

This thesis aims to contribute to the existing literature in several respects. First, although the topic of public listings is extensively researched, recent literature regarding firms' initial market choice is limited to primarily Vismara et al. (2012) and Doukas and Hoque (2016). Consequently, the research into main market eligible firms listing on junior markets may benefit from the exploration of additional markets. Second, due to the short existence of a Norwegian junior market, there has not been sufficient data for analysis until recently. Hence, this thesis is the first to address the topic in respect to the Norwegian market to our understanding. Third, our study is the only one apart from Doukas and Hoque (2016) and Baade-Mathiesen and Melnikova (2019) to limit the scope of research to only one market. Other studies compare markets across nations, meaning country-specific factors like market sentiment, regulation and taxes are unaccounted for. With our scope restricted to the Norwegian stock market, these unaccounted factors are effectively eliminated.

3 The Norwegian Stock Market

This section introduces the intricacies of the Norwegian stock market, with a particular focus on listing requirements and market composition. Firstly, Section 3.1 will detail the evolution of the Norwegian stock market. Secondly, Section 3.2 will outline the differences in listing requirements between the separate market places, before Section 3.3 presents the process of obtaining trading admission. Lastly, we present the high listing volumes on the Norwegian stock market during the COVID-19 pandemic in Section 3.4.

3.1 Ownership and Structural Composition

Oslo Børs⁴ has been the centrepiece of the Norwegian stock market since its inception in 1819. In more recent times, the Norwegian stock market has been supplemented by Euronext Expand Oslo (formerly Oslo Axess) in 2007 and Euronext Growth Oslo (formerly Merkur Market) in 2016.

Despite consisting of three exchanges, the Norwegian stock market is primarily dominated by two: Oslo Børs and Euronext Growth. These are currently controlled by the pan-European stock exchange Euronext. Oslo Børs is the main market, whereas Euronext Growth is the junior market. Similarly to Oslo Børs, Euronext Expand is regarded as a main market. Nonetheless, it appeals to different firms, as Euronext Expand has less rigid requirements and regulations than Oslo Børs. Its purpose is to be a stepping stone for firms that seek to list on Oslo Børs. However, with Euronext Growth also sufficiently serving this purpose, Euronext Expand's grounds of existence has been cannibalised. At the time of writing, Euronext Expand only has 16 listed firms, with the most recent listing occurring in November 2019. Subsequently, KPMG (2021) believes Euronext Expand will become less important going forwards. Therefore, this thesis will disregard Euronext Expand, and the Norwegian stock market will henceforth be used to refer solely to Oslo Børs and Euronext Growth. Additionally, Oslo Børs is commonly used to refer to both the market operator and the main market of the Norwegian stock market. This thesis will, for clarity, use "the Norwegian stock market" to refer to the Norwegian market in its entirety, and Oslo Børs to refer to the main market.

⁴Oslo Børs is occasionally referred to as The Oslo Stock Exchange, but this thesis will mirror Euronext's own use of Oslo Børs as the primary terminology.

Euronext Growth has attracted 143 listings since its inception in January 2016 until October 2021, which is more than twice the number of listings on Oslo Børs in the same time period: 71. Interestingly, 83 of the 143 firms that went public on Euronext Growth were eligible to list on Oslo Børs instead, see Table 3.2. Euronext Growth is a platform intended to prepare firms to up-list to the main market, which makes the Euronext Growth market a sequential segmentation model, according to the segmentation models identified by Vismara et al. (2012) (Oslo Børs, 2021a). Despite its intended purpose, only 14 firms have undertaken an up-listing from Euronext Growth to Oslo Børs since the market was established. However, as up-listings rarely occur in the European markets this is no anomaly (Vismara et al., 2012).

3.2 Listing Requirements

The listing requirements on Euronext Growth are lighter and less extensive than for Oslo Børs since it is designed to facilitate a more straightforward listing process. However, the listing requirements for any Euronext market is still substantial, and three components comprise the complete sets of rules: i) Rulebook I: Harmonized rules for all Euronext markets, ii) Rulebook II: Non-harmonized Norwegian-specific rules, and iii) Notices: Processing rules and regulations for the purpose of interpreting or implementing the Rules (Oslo Børs, 2021b). However, this thesis will focus on the different requirements Euronext accentuates as the most influential when firms contemplate their listing choice (Oslo Børs, 2021a). These requirements are summarised in Table 3.1.

Table 3.1: Listing Requirements.

	Euronext Growth	Euronext Expand	Oslo Børs
Market value	No requirement	NOK 8 million	NOK 300 million
History	At least one financial report, either annual or interim.	At least one financial report, either annual or interim.	At least three years of financial history. Exemption may be granted under certain circumstances.
Spread of share ownership	15%	25%	25%
Number of shareholders	30, with at least NOK 5,000 holding value at the time of admission.	100, with at least NOK 5,000 holding value at the time of admission.	500, with at least NOK 10,000 holding value at the time of admission.
Liquidity	No requirement	Must demonstrate sufficient liquidity for 12 months of operations.	Must demonstrate sufficient liquidity for 12 months of operations.
Accounting standards	IFRS or local GAAP	IFRS	IFRS
Intermediary	Listing advisor	No requirement	No requirement
Main document to be provided	Public offer >€8M: EU prospectus Public offer <€8M: Information document	EU prospectus	EU prospectus

Table 3.1 summarises the main listing requirements differences between the three market places that comprise the Norwegian stock market.

As a result of the Euronext acquisition in 2019, it should be noted that the Norwegian markets are now more harmonised than in the years prior (Fagervik and Ausland, 2021). This evolution could be perceived as a source of concern, potentially precipitating a disparate basis of comparison between data for listings pre and post 2019. Nonetheless, the analyst division at Oslo Børs has assured us that despite greater harmonisation, the differences are not notable enough to impact the listing decision significantly (Oslo Børs, 2021a). Consequently, this thesis will not account for slight changes in listing requirements

during the defined observation window.

3.3 Admission to Trading

During the Euronext listing process, issuers must submit a document containing key information about the firm. The information relayed must include a description of the issuers' key financials, ownership structure, and certain liability disclaimers, amongst other details. The document is referred to as a "prospectus"⁵ for firms listing on the Oslo Børs, and an "information document" for firms listing on the Euronext Growth. Much of the essential information in a prospectus and an information document is interchangeable, bar some minor differences. A prospectus is generally more comprehensive and thus more time consuming to produce. For firms going public on Euronext Growth, the listing process is advised by an investment bank authorised by Euronext as a Euronext Growth Advisor (KPMG, 2021). The investment bank is the body that controls the information document. Furthermore, the listing process on Euronext Growth is generally ten business days (Fagervik and Ausland, 2021). In contrast, the process on Oslo Børs lasts approximately eight weeks.

3.3.1 The Private Placement

There are several ways an issuer can list its shares on an Euronext marketplace, and for the firms in our study the vast majority of listings occurs through a private placement. These are equity offerings directed towards predefined categories of investors or high-profile private investors. No previous ownership is formally required to participate in a private placement, but the issuer often targets existing shareholders. Commonly, the placements require a minimum subscription amount to participate, and the shareholders buy shares at a pre-defined price (the subscription price). A private placement is usually a swift way to achieve a successful offering since there are few participants and light formal requirements regarding due diligence or formal documentation for the issuer. The private placement can be administered either by selling shares from insiders with ownership above 20% or by issuing new shares. The rules stated by Euronext determines that the private placement must have been conducted during the year prior to the date the firm goes public.

⁵Prospectus is short for European Economic Area compliant prospectus.

3.4 Listings During the COVID-19 Pandemic

Of the 143 listings on Euronext Growth since its inception, as many as 104 were conducted after the COVID-19 outbreak. The Norwegian stock market has achieved its highest growth in listings during the pandemic and reached a decade-high level, despite the oil price collapse. A study by KPMG (2021) highlights that within Europe, the Norwegian stock market noted the second most listings in 2020 only behind the London Stock Exchange. The hike in Norwegian listings might be closely linked to the findings of Ritter and Welch (2002), that firms choose to list as a reaction to favorable market conditions. The pandemic caused an abrupt change in the market conditions, as interest rates hit historic low levels. Due to this, it has been unfavorable to place capital in the banks, so investors have scoped other investment opportunities instead — particularly looking at growth firms and equity investments (KPMG, 2021). The CEO of Oslo Børs, Øivind Amundsen, suggests that the significant increase in listing volume is due to an incision point where many firms in the Norwegian market have built up over time and are now finding the right opportunity to raise necessary growth capital, combined with a strong investor appetite in the market. This matching between firms and investors has been especially prevalent in the technology sector, and due to a green shift in the economy there has also been a string of listings of ESG⁶ firms as well (KPMG, 2021). Furthermore, firms might expedite their planned listing due to the capital constraint the pandemic has caused their business (Ellul et al., 2020).

⁶During recent years there has been an increased focus on corporate performance on other dimensions than stock price. Many market participants are now attentive to firms' environmental, social and governance (ESG) performance, which has prevalent on the Norwegian stock market as well (Gillan et al., 2021; KPMG, 2021)

Table 3.2: Annual Number of Listings by Market.

Year	Eligible JM Firms	Ineligible JM Firms	MM Firms	Total
<i>2016</i>	2	9	7	18
<i>2017</i>	3	8	15	26
<i>2018</i>	2	11	14	27
<i>2019</i>	1	2	8	11
<i>2020</i>	33	15	9	57
<i>2021</i>	40	17	18	75
Sum	81	62	71	214

Table 3.2 illustrates the number of listings on the market annually. JM stands for junior market and MM for main market. Eligible JM Firms depicts firms that could have listed on Oslo Børs but chose to list on Euronext Growth. Ineligible JM Firms depicts firms that were not eligible for Oslo Børs, and chose to list on Euronext Growth. MM Firms depicts the number of firms that listed on Oslo Børs.

4 Research Question and Hypotheses

83 of the 143 firms that decided to list on the Norwegian junior market since its inception in January 2016 were eligible to list on the main market but dismissed the opportunity. The notion might seem counter-intuitive, as the main market is widely regarded as superior (Vismara et al., 2012). Previous research has outlined firms' motivations to repudiate the chance to go public on the main market, conversely opting to list on the junior market instead (Ritter et al., 2013; Doidge et al., 2009; Baker et al., 2002). However, few studies have analysed which firm characteristics that either drive listing choice or encapsulate the differences between firms opting to go public on different types of markets. Therefore, our research question reads:

Research Question. What firm characteristics affect firms' choice of public market in Norway?

4.1 Hypotheses

In the following, we develop four hypotheses to help answer the research question. These are derived from relevant literature but unique for the Norwegian market and our data set. Consequently, the thesis aims to contribute to new and deeper insights into which firm characteristics affect listing decisions — especially regarding firms that meet the listing requirements of the main market but choose to list on the junior market instead.

4.1.1 Firm Age

There may be an array of reasons as to why younger firms might want to list on the junior market. Younger firms may consist of management uncomfortable with the higher requirements to disclosure on the main market and the greater investor insight this yields. In contrast, older firms may have attracted experienced management more suited to run a firm listed on a more complex market. Evidence from the four largest stock exchanges in Europe has proven that firm age is one of the characteristics that affect the listing decision (Vismara et al., 2012) (Doukas and Hoque, 2016). Older firms tend to list on the main market, while younger firms opt for the junior markets. However, Baade-Mathiesen

and Melnikova (2019) disproved this notion for the Swedish stock market. Therefore, it is interesting to uncover if age plays a significant role when choosing whether to list on the main or junior market in Norway. The hypothesis we develop for the Norwegian market is aligned with the evidence from the four largest European exchanges, as they account for a larger sample size than the Swedish stock market.

Hypothesis 1. Younger firms eligible to list on the main market will favour a listing on the junior market.

4.1.2 Firm Size

The junior markets were created for the smaller firms, and it is interesting to evaluate whether this notion still holds. Smaller firms eligible to list on the main market might be reluctant to do so since they may not be rigged for the comprehensive reporting system with the more stringent listing requirements. In lieu, this reporting might already be in place for larger firms, and thus fewer financial resources are needed to meet the requirements. Furthermore, the steeper listing fee and other costs connected to the main market might financially strain less profitable firms, as they may account for a sizeable part of their revenue. Albornoz and Pope (2004) found that smaller firms are unlikely to go public on a highly regulated stock market, considering their struggle to generate an adequate amount of funds to finance both the pre and post listing costs. PwC (2021) look to 829 firms and find evidence that the average listing costs ranges from 3,5%-7% of the listing gross proceeds.

Hypothesis 2. Smaller firms eligible to list on the main market will favour a listing on the junior market.

4.1.3 Profitability

The studies conducted by Vismara et al. (2012), Doukas and Hoque (2016) and Baade-Mathiesen and Melnikova (2019) all point to profitability as a significant indicator

of whether a firm will list on the junior or the main market. The studies document that the higher the profitability, the higher the chances of a firm listing on the main market. A reasoning for this might be that profitable firms are comfortable with the more stringent financial reporting requirements, and are more probable to disclose comprehensive information due to signaling and/or adverse selection incentives (Ho and Taylor, 2007). Less profitable firms might want to hide potential distress connected to their low profitability, subsequently sceptical of the transparency required on the main market (Bigus and Hillebrand, 2016). Although transparency, obligations regarding disclosure and levels of compliance can be barriers to list on the main market, these are not quantifiable. Hence, we form our hypotheses around firm profitability.

Hypothesis 3. Firms with higher profitability will favour a listing on the main market.

4.1.4 Ownership Structure

An interesting aspect of initial market choice is the owner structure within each firm. Doukas and Hoque (2016) document that the ownership structure between firms listing on the junior market is significantly different than for the ones listing on the main market. Alavi et al. (2008) suggest that pre-issue ownership structure is a strong influence on the key decisions encompassing a listing. The authors divide ownership into two possibilities: managerial ownership, and non-managerial ownership. Managerial owners are categorized as people inside the organization pre-issue, i.e. senior managers, executive directors, CEO's and founders. On the other hand, non-managerial owners can be either private investors or major institutional owners, like venture capitalists or private equity firms. From this point forward, non-managerial owners will be referred to as institutional owners. These two types of owners often have different incentives when listing, as managerial owners have a higher attentiveness in retaining control over the firm after it has been listed (Alavi et al., 2008). Going public and issuing shares means an immediate dilution of the ownership for all shareholders. Thus, managerial owners might prefer to issue a lower number of shares, which is a possibility on the junior market.

Moreover, Nelson (2003) finds evidence that implies that managerial ownership results in

the owners being more interested in the firm's longevity than institutional owners. Thus, managerial owners will try to retain the ownership for as long as it is viable. Conversely, this is not a major priority for institutional owners, as listing is an overarching exit strategy to realize shareholders' returns. Therefore, the institutional owners are more interested in the liquidity of the stock post-issue, as it heightens the gains from an exit (Alavi et al., 2008). When compared, managerial owners are more likely to own a higher percentage of the firm and issue fewer shares (Nelson, 2003). Since the main market has a stricter requirement of minimum shares floated⁷, it is viable to believe managerial owners will opt for the market with the lowest free float requirement.

Hypothesis 4. Firms with majority managerial ownership eligible to list on the main market will favor a listing on the junior market.

⁷Free float is the percentage of a firms shares that is available to be traded publicly without restriction.

5 Data

This section presents the data utilised in the thesis. First, Section 5.1 will outline the process of data collection and data manipulation. Then, Section 5.2 will define our sub-sample classification. After that, Section 5.3 and Section 5.4 will present the variables used in answering the research question and subsequent hypotheses.

5.1 Data Collection and Manipulation

The data set consists of firms that listed on The Norwegian Stock market from January 2016 to October 2021⁸. It comprises 214 listings, of which 71 are main market listings and 143 are junior market listings. We omit listings before 2016 as they predate the existence of a Norwegian junior market. An argument could be made for Euronext Expand to be used as a junior market equivalent pre-2016, considering its similar purpose to Euronext Growth. On the other hand, this would alter the scope of the thesis and introduce an unnecessary uncertainty for the interpretation of results. Even though Euronext Expand is considerably less rigid than Oslo Børs, it is neither a junior market nor a perfect substitute for Euronext Growth. Accordingly, this approach was not used for our thesis.

We exclude 22 financial institutions from the data sample when running our regressions, primarily banks and holding firms. These firms have different corporate structures and associated actions compared to other firms. Furthermore, these firms have historically not disclosed the information we utilise in our analysis. Only three firms operating within the "financials" industry classification are deemed applicable to our study⁹ based on structure and information disclosure. This approach to data manipulation is consistent with that of Doukas and Hoque (2016), and allows for superior comparison samples. Our final data set consists of 192 listings, of which 63 are main market listings and 129 are junior market listings.

In the absence of a formal database containing firm information at the time of their respective listings, the vast majority of data is retrieved and compiled manually between

⁸Our last data admission was completed on 30/09-2021. Listings post this date are therefore not included in the study.

⁹The three firms within the financial industry included in our regressions are B2Holding, Kolibri Kapital and Infront.

August and November 2021. The primary source of information is the information document or prospectus every firm is obliged to publish when listing. Nonetheless, the documents only partly follow a standardised format. Thus, external sources such as Compustat Global, Proff.no, and Bloomberg are used to collect firm information omitted from the prospectuses or information documents.

The firm characteristics collected relate to the financial and strategic position of the firm at the time of the listing. Variables include industry specification, age, market value, return on assets (ROA), ownership structure, concentration of ownership, fixed assets over total assets, revenue, gross proceeds, percent float, and Tobin's Q. The range of variables is purposely exhaustive to verify and further expand on past research by Vismara et al. (2012) and Doukas and Hoque (2016).

We hypothesise that the lack of comparative research regarding the initial market choice on the Norwegian stock market can partly be attributed to the tedious data collection process. We manually collect 4000+ data points from August to November 2021 to conduct this thesis. Based on our correspondence with the analyst division at Oslo Børs, we are under the impression that our data set is the most comprehensive of its kind regarding the Norwegian stock market (Oslo Børs, 2021a).

5.2 Sub-sample Classification

This thesis aims to identify firm characteristics that influence the initial choice of market. Accordingly, it is necessary to determine the amount and type of firms that were eligible for the main market but still chose to list on the junior market. As such, sub-sample classification will consist of firms that listed on the main market, main market eligible firms that listed on the junior market, and main market ineligible firms that naturally listed on the junior market. We include firms that are ineligible for the main market to supplement our discussion of main market eligible firms that list on the junior market versus those that list on the main market.

To create the sub-sample classification, firms are evaluated based on the listing requirements outlined in Table 3.1. Even so, the analyst division at Oslo Børs abridged the relevant requirements for this thesis to two main requirements; years since incorporation and market value at the time of listing (Oslo Børs, 2021a). The analyst division elucidate that

all firms contemplating a listing on the Norwegian stock market could with relative ease comply with the remaining listing requirements for the main market. Thus, focusing on years of incorporation and market value creates the most accurate basis of analysis.

Table 5.1: Annual Euronext Growth Listings by Oslo Børs Eligibility.

		Qualify	Do not qualify
<i>2016</i>	Market value	5	6
	History	7	4
	Eligibility	3	8
<i>2017</i>	Market value	5	6
	History	9	2
	Eligibility	3	8
<i>2018</i>	Market value	4	9
	History	10	3
	Eligibility	2	11
<i>2019</i>	Market value	1	2
	History	3	0
	Eligibility	1	2
<i>2020</i>	Market value	41	7
	History	40	8
	Eligibility	34	14
<i>2021 (as of 30/09)</i>	Market value	50	7
	History	45	12
	Eligibility	42	17
<i>Total</i>	Market value	106	37
	History	114	29
	Eligibility	83	60

5.1 depicts how many of the annual listings on the Norwegian stock market qualify based on market value and history requirement. The market value variable refers to the number of firms with a market value of NOK >300,000,000, and the history requirement refers to the number of firms that have existed >3 years. Eligibility depicts the number of firms annually that successfully meet both requirements.

Evaluating all past Euronext Growth listings, Table 5.1 depicts the annual degree of eligibility of firms that listed on the junior market. It illustrates that of the 143 total listings on Euronext Growth, 83 of the applicable firms were eligible to list on Oslo Børs. The mere fact that almost 60% of Euronext Growth listings are by firms that qualify for

Oslo Børs serves as an indication of the relevancy of our thesis.

5.3 Independent variables

We base the selection of independent variables on the hypotheses defined in Section 4.1. The remaining variables included in our regressions will be regarded as control variables.

5.3.1 Firm Age

Doukas and Hoque (2016) argue that a significant characteristic for firms that meet the listing criteria of the main market, but still decide to list on the junior market, is firm age. Their study indicates that older firms prefer to list on the main market, whilst the median age for firms listing on the junior market is significantly lower.

Age is measured in years since incorporation, and this data is collected manually from either the prospectuses or Bloomberg for each firm. However, most firms only state the year of incorporation, not a particular month or date. Therefore, age is included in our analysis as an integer, representing the difference between the calendar year a firm was incorporated and the calendar year a firm was listed. This means that firms established early in the year/listed late in the year will be perceived as younger than they are and vice versa: firms established late in the year/listed early in the year will be discerned as older. To ensure linearity in our model and a high degree of readability, the values for firm age are transformed by natural logarithms. Similar to Doukas and Hoque (2016) we have added 1 to every firm's age in order to facilitate the inclusion of firms that are 0 years old, per our age variable.

5.3.2 Firm Size

Doukas and Hoque (2016) indicates that firm size plays a vital role in what market a firm chooses to list on. There exists various ways to measure firm size, and Hart and Oulton (1996) outlines some of the most common ones: total revenue, total assets and market value. In this thesis, we use market value as a proxy for firm size. Firm size when listing is utilised as a proxy variable for risk and information symmetry (Corwin, 2003). To calculate this, we use the same approach as Oslo Børs utilise when deciding whether to accept or reject a listing, verified by the analyst division at Oslo Børs (Oslo Børs, 2021a).

The Oslo Børs approach to calculating market value at the time of listing is as follows: multiply the subscription price in the latest pre-issue private placement by the number of shares the registered share capital is divided into (Oslo Børs, 2021a).

$$\text{Market value} = \text{subscription price} * \text{shares outstanding}$$

A firm's subscription price in the latest private placement pre-issue is found either directly in the prospectus/admission document, through a private placement statement from the firm or its investment banking advisor. The amount of shares the firm's registered share capital is divided into is also stated in the prospectus or information document.

5.3.3 Profitability

Vismara et al. (2012), Doukas and Hoque (2016) and Baade-Mathiesen and Melnikova (2019) all point to profitability as one of the indicators of initial market choice for a firm. The higher the profitability, the higher the chances of a firm listing on the main market. There are several ways to measure a firm's profitability. Khurshed et al. (2005) utilises various profitability measures when documenting the listing experience in the UK, including ROE, CFROA, ROS and ROA. The latter is defined as EBITDA over total assets. This thesis uses ROA as a measurement of profitability, which is consistent with Doukas and Hoque (2016). ROA is calculated as EBITDA over total assets. Several regulators believe ROA is the best indicator for profitability — as it serves as a proxy to determine the ability of a firm to produce income from its assets (Goddard et al., 2004; Rivard and Thomas, 1997).

$$\text{Profitability} = \frac{\text{EBITDA}}{\text{total assets}}$$

Adjusted EBITDA for the year prior to the listing is extracted from Bloomberg¹⁰. Four firms had missing EBITDA values, and were consequently calculated manually using values from the firms' financial reports.

¹⁰The adjusted EBITDA data for each firm was extracted from the NHH Bloomberg terminal on November 25th, 2021

5.3.4 Managerial Situation

Alavi et al. (2008) suggest that pre-issue ownership structure influences the key decisions encompassing a listing. The authors divide ownership into two possibilities: managerial ownership and institutional ownership. To determine whether a firm's ownership structure is either managerial or institutional, we estimate which one of the two categories holds over 50% of the voting stock in the firm. The prospectuses and information documents commonly list all shareholders with an ownership stake higher than 5%, and the percentages pre-issue are calculated based upon this information.

5.4 Control Variables

5.4.1 Ownership Concentration

Doukas and Hoque (2016) find that the ownership structure of firms listing on the junior market is significantly different than for the ones listing on the main market. They document that main market firm shares are being less closely held than the ones on the junior market, meaning that the main market firms have a lower ownership concentration. A high degree of ownership concentration for the junior market firms might insinuate that their management is still in close control of the firm, without having diluted their shares considerably. If significant, this would suggest that control considerations of small and young firms seemingly play an important role when deciding where to list (Doukas and Hoque, 2016).

There are various ways to define ownership concentration. The ownership concentration can be calculated as the percentage of shares owned by the largest shareholder, the five largest shareholders, the 20 largest shareholders or as an approximation of the Herfindahl measure of ownership concentration (Demsetz and Lehn, 1985). In our analysis, we use the percentage of shares held by the five largest shareholders at the time of listing, which is in accordance with de Sousa and Caio Galdi (2016). This information is provided in the prospectuses or information documents. However, firms are not obliged to disclose shareholders that own less than 5% of shares. This means that our ownership estimates cannot be regarded as entirely accurate for firms that do not disclose their top 5 shareholders. Worst case scenario, our estimates could be off by just under 5% for each

undisclosed shareholder.

5.4.2 Tobin's Q

If capital markets are not perfectly integrated, a driver for choosing a listing on either the junior market or the main market might be existing valuation differences between the two (Vismara et al., 2012). A firm commits itself to higher disclosure and better governance on a more regulated market. Doidge et al. (2009) document that shareholders trade off the cost of market monitoring and improved investor protection, which in turn reduces private benefits, against the greater financing opportunities expected from a superior market. The superior regulation hypothesis can predict that firms with a higher value of Tobin's Q have a higher likelihood to list on the main market (Vismara et al., 2012). This is due to the assumption that firms with greater growth potential will seek these opportunities, and because greater commitment to regulation will result in a higher Tobin's Q. Thus, the expectation is that the firms on the main market are worth more than the ones on the junior market.

Tobin's Q can be used as to measure whether a firm is undervalued or overvalued, utilising the concepts of market value and replacement value. We use Tobin's Q defined as the sum of a firm's market value of equity¹¹ and the book value of its total liabilities¹² divided by the listing gross proceeds and the sum of the book value of its total assets in accordance with Lian and Wang (2019).

$$Tobin's\ Q = \frac{market\ value + total\ liabilities}{listing\ gross\ proceeds + total\ assets}$$

5.4.3 Percent Float

Free float is the percentage of a firms shares that is available to be traded publicly without restriction. Consequently, the percentage of free float is the percentage of shares outstanding that are currently trading publicly. Interestingly, a lower percentage of float may indicate the management's intention to retain more control of the firm—subsequently

¹¹Market value of equity is calculated as subscription price multiplied by the number of outstanding shares.

¹²The book value of total liabilities is the sum of all current and long-term liabilities from the balance sheet,

issuing fewer shares to the public. This has previously proved to be the case with younger firms, often still managed by the firm's founder (Goergen and Renneboog, 2003). Percent float is calculated as the gross proceeds from the latest private placement prior to listing divided by the firm's market value when it goes public (Doukas and Hoque, 2016).

$$\text{Percent float} = \frac{\text{gross proceeds}}{\text{market value}}$$

5.4.4 Gross Proceeds

One of the key motivations for a firm to go public is often to attain better access to capital (Chemmanur and Fulghieri, 1999). Previous studies find evidence that markets with higher liquidity positively affect the amount of capital a firm can raise in a listing (Subrahmanyam and Titman, 1999). Consequently, more liquid markets are more attractive to firms aiming to raise more capital (Vismara et al., 2012). On the Norwegian stock market, the main market is the market with superior liquidity. Granier et al. (2019) document that listings on the junior markets commonly raise smaller amounts of capital. Subsequently, gross proceeds are included as a control variable in the regressions. Gross proceeds is the money raised from the last private placement pre-issue, and this information is stated either in the prospectus or admission documents. It is important to note that although gross proceeds intuitively is correlated with firm size, the correlation between the variables is not breaching an excessive threshold, which can be seen in Appendix A1.

5.4.5 Hot Market Dummy

Listings tend to cluster in time (Vismara et al., 2012). Therefore, a dummy controlling for time effects is also included in the analysis, in the form of a hot market dummy. A hot market is distinguished as a time period with a high volume of listings Ritter (1984). Vismara et al. (2012) note that while the junior markets are attractive in hot periods, they quickly collapse in cold periods. In our analyses, the dummy takes the value of 1 if a listing occurs in January 2020 or later and 0 if the listing instead occurs before. This is done because there has been a vast increase in listings on Euronext Growth following the start of the COVID-19 pandemic. Only 39 of 143 listings on Euronext Growth took place before January 2020, which drives us to categorize it as a cold market.

Listing frequency on the main market has slightly decreased since the COVID-19 outbreak, leading us to assume that it might only affect the junior market observations. This is notable in a European context, where junior markets have historically been unable to attract new listings in cold periods, but are highly active in hot periods (Vismara et al., 2012). According to Helwege and Liang (2004), firms listing during a hot market period are characterised by a higher degree of fixed assets and lower earnings. The findings give grounds to believe that the junior and main market in Norway will attract firms with different characteristics through the hot and cold markets, and the analyses will therefore control for this potential effect.

5.4.6 Balance Sheet Values and Revenue

Although not variables themselves, bar revenue, the balance sheet values are still included in most independent and control variables. An example of this is fixed assets over total assets (FA/TA). Revenue and recorded balance values, which includes total assets, fixed assets, total equity, total liabilities and EBITDA, is collected using the newest annual income statement and the balance sheet for the year prior to a firm's listing. More specifically for revenue, this is the income from service last financial year before listing. Since this is collected annually, values will be more accurate for firms listing early in the year, whereas it is arguably slightly outdated for firms listing late in the year. All the information has primarily been gathered from the prospectuses/information documents pre-issue.

5.4.7 Potential Source Inconsistencies and Data Errors

As previously mentioned, our data set consists of +4000 manually collected data points. Each value is entered manually into an Excel workbook, as part of a collection process spanning several months. Even though each data point is handled with much precision and care, and cross-checked at least once, there is a possibility that there exists errors in our data set. Still, we believe the risk is minimal due to our cautious data collection process. Furthermore, with the magnitude of our data set, a limited number inaccuracies should not have an ample effect to influence our overall conclusions.

6 Methodology

This section outlines the models that will function as a framework for answering the research question. The thesis aims to identify firm characteristics that are indicative of initial market choice between the junior and main market, for firms that are eligible to list on the main market. As such, we study whether firm age, size, profitability and ownership structure affect firms' initial market choice. Subsequently, our dependent variable is "market selection". Since the outcome is binary (main market listing = 0, junior market listing = 1), the primary methodology in this thesis will revolve around the probit regression model. Nonetheless, it could be revealing to also include firms that did not qualify for the main market and consequently list on the junior market in the analysis (main market listing = 0, eligible junior market listing = 1, ineligible junior market listings = 2). We theorize that it could be a useful supplementary to our analysis as it could reveal inter-group differences in junior market listings. For this purpose, a more pertinent methodology is multinomial logistic regression analysis. For verification purposes and future research, we disclose that all models are executed in R.

6.1 Probit Regression Analysis

A probit regression maximises the likelihood of observing a binary outcome of the dependent variable by utilising and extracting information from relevant explanatory variables (Wooldridge, 2016). Thus, the regression outputs are used to interpret whether the explanatory variables increase the prediction of the likelihood of the outcome. The probit regression model measures the probability of "success", i.e. the dependent variable = 1, given the values of our independent variables. It is based on a non-linear maximum likelihood estimator, which means that the probability of the dependent variable = 1 is restricted between 0 and 1. Nevertheless, interpretation of estimated coefficients in probit regression might be intricate. The probit regression coefficient can only explain whether the relationship is negative or positive and significant or insignificant. Thus, the marginal effects will also be estimated to know how much the conditional probability of the dependent variable changes as one of the independent variables changes, *ceteris paribus* (Wooldridge, 2016). The formula for the formal probit regression model is as

follows:

$$P(Y_i) = P(Y_i = 1 | X_{1i}, \dots, X_{ni}) = \Phi(\beta_0 + \beta_1 X_{1i} + \dots + \beta_n X_{ni}) \quad (6.1)$$

In the formula, the Y is the dependent variable, which takes the value of 1. X_n are the independent variables. Φ is a function for normal distribution and is simply the cumulative standard distribution. β_n is the population coefficient, which equals the change in the probability that $Y_1 - 1$ is associated with a unit change in X_n . Subsequently, a positive coefficient indicates an increase in probability. Conversely, a negative coefficient indicates a decrease in probability.

Based upon the variables disclosed in Section 5.3 and 5.4, the probit regression is as follows:

$$P(\text{JuniorMarket} = 1) = \Phi(\beta_0 + \beta_1 \log.Age + \beta_2 \log.Mcap + \beta_3 Oconc + \beta_4 Inst + \beta_5 \log.Rev + \beta_6 \log.GP + \beta_7 Hot + \beta_8 Pfloat + \beta_9 FATA + \beta_{10} ROA + \beta_{11} TQ) \quad (6.2)$$

The dependent variable in the above regression is the public marketplace, which takes on the value of 1 if it is the Euronext Growth. The strength of the probit regressions is tested by utilising a chi-square test. If this test is statistically insignificant, the regression does not account for more variation than one would expect could happen by chance.

6.2 Multinomial Logistic Regression Analysis

The multinomial logistic regression model (MNL) is an extension of binary logistic regression models, such as probit regression analysis. It is fitting to our research as we have unordered categorical variables. A multinomial logistic regression model can extend the dependent variable from two to three potential categorical outcomes. As such, the third group introduced is ineligible junior market firms that have to list on the junior market, as they do not meet the listing requirements on the main market.

An argument could be made for utilising the multinomial probit model (MNP) instead of the MNL. The significant difference between the models is that MNL is based on the often erroneous assumption regarding the independence of irrelevant alternatives (IIA), whereas MNP is not. Hence, general conjecture in research is that MNP is superior to MNL. However, Kropko (2008) shows that MNL nearly always provides more accurate results than MNP, even when the IIA assumption is severely violated. Thus, the MNL is our multinomial model of choice for this thesis.

MNL is also a simple analysis as it does not assume normality, linearity or homoscedasticity. Furthermore, the model assumes non-perfect separation. If the predictors separate the dependent variable categories perfectly, we would have unrealistic coefficients, and effect sizes would be greatly exaggerated (Starkweather and Moske, 2011). No vector correctly allocates all observations in the data sample, meaning we have non-perfect separation. Lastly, our data meets the sample size guidelines for MNL, which is a minimum of 10 cases per independent variable Schwab (2002).

To run the regression, the following numbers are assigned to each category: Main market firms always used as reference level = 0. Euronext Growth firms eligible to list on the main market = 1, and Euronext Growth firms ineligible to list on the main market = 2.

6.3 Linear Probability Model

The Linear Probability Model (LPM) will be used to test the robustness of the results from the probit regression. The LPM utilises Ordinary Least Squares (OLS) to estimate the regression model in standard linear regression. The LMP assumes that the probability of success is a linear function of the independent variable. The coefficients in the model are interpreted as a change in the probability of success when an independent variable changes, *ceteris paribus*, because the dependent variable can only take on two values: 0 and 1. However, some downsides with the LPM are important to note. As the LPM is a linear function of the independent variables, the predicted probabilities are unbounded, meaning that they can be less than 0 or greater than 1 from the LMP—this does not add up. Furthermore, in our LPM models we estimate the outcomes with robust standard errors to minimize the problem with heteroscedasticity (Wooldridge, 2016).

6.4 Evaluation of Regression Models

The significance of estimated coefficients is mainly considered when evaluating the regression models. The significance levels used throughout the thesis is $p \leq 0.01$, $p \leq 0.05$ and $p \leq 0.1$. The LPM regression is evaluated through both Adjusted R^2 and the F-statistic. Adjusted R^2 is used to analyse how much of the overall variation is due to independent values, measuring to what extent the independent variables effectively describe the variation in the dependent variable. An increase in adjusted R^2 means the model captures more of the variation, while a low value means the regression only explains a small proportion of the variance. To measure probit model performance, the McFadden R^2 has been applied as pseudo R^2 in our analysis. A significant F-statistic shows that the estimated coefficients in the regressions are significantly different from zero. For the probit model, chi-square is used for the same purpose the F-statistic is used in the LPM regression. The last evaluation method included in the probit regressions is the percentage of correctly predicted classifications (Wooldridge, 2016). All data is winsorized at the 1% (99%) level to limit extreme values in the statistical data and reduce the effect of spurious outliers. Moreover, a Breusch-Pagan test is used to check for heteroscedasticity in the linear probability model.

7 Descriptive Statistics

Preparatory to our empirical analysis in Section 8, we find it informative to perform some initial statistical analysis to identify the most prominent differences in our independent variables between the three categories defined in Section 5.2.

7.1 Proportion Tests

A two-sided proportion test allows us to compare categorical variables across the groups. We have three categorical variables in our data: managerial or institutional ownership, hot or cold market and firm industry. To justify the use of a two-sided proportion test, there are various assumptions that need to be satisfied:

1. The data is simple and consists of random values from the populations
2. The populations follow a binomial distribution
3. The samples are independent from each other
4. Test results are accurate when both np and $n(1 - p)$ are greater than 5

We adjudge all four assumptions to have been met for our data set.

Table 7.1: Proportion Tests Across Sub-sample Groups.

	Eligible JM firms		Ineligible JM firms		MM firms	
	Number	Proportion	Number	Proportion	Number	Proportion
Ownership Struc.						
Managerial	18	23.08%**	14	27.45%**	5	7.94%
Institutional	60	76.92%**	37	72.55%**	58	92.06%
Market Status						
Hot market	71	91.03%***	29	56.86%	25	39.68%
Cold market	7	8.97%***	22	43.14%	38	60.32%
Industry						
Technology	8	10.26%	9	17.65%	12	19.05%
Telecommunications	4	5.13%	1	1.96%	0	0%
Health Care	5	6.41%	4	7.84%	6	9.52%
Financials	0	0%	1	1.96%	2	3.17%
Real Estate	1	1.28%	1	1.96%	0	0%
Consumer Discretionary	8	10.26%	4	7.84%	6	9.52%
Consumer Staples	19	24.36%**	3	5.88%	6	9.52%
Industrials	11	14.10%	8	15.69%	14	22.22%
Basic Materials	7	8.97%	1	1.96%	2	3.17%
Energy	7	8.97%	12	23.53%	12	19.05%
Utilities	8	10.26%**	7	13.73%	3	4.76%

Table 7.1 reports the proportional differences in categorical variables between our sub-sample groups. *Ownership structure* is managerial if >50% of the firm is controlled by managerial owners, such as founders or the management group. *Market status* refers to periods of high and low listing activity. 'Hot market' refers to the period 2020-2021 in our sample. *Industry* is the industry classification of firms according to ICB Sectorial Classification. *, ** and *** denote statistically significant differences between (in)eligible firms and the main market at the 10%, 5%, and 1% levels, respectively.

When analysing Table 7.1, it is clear that there is a sizeable overweight of institutional owners both on the junior and main market. Still, the proportion of managerial owners for the junior market firms is significantly higher than for the main market firms. Conversely, firms that have institutional owners more often prefer to list on the main market. Moreover, the hot market period is significant for the "main market-eligible" junior market firms, but there is no indication of significance for a hot market on the main market. This amplifies the notion that there exists a "post-COVID outbreak" hot market solely on the junior market, and that the main market remains virtually the same before and throughout the pandemic. This indicates the importance of controlling for a hot market in our data, to ensure that the initial market choice between Euronext Growth and Oslo Børs is not

solely driven by the pandemic. Junior market firms ineligible to list on the main market have no observed significance.

Results from the industry distribution show that there are two differences in the industry distribution. Firstly, the proportion of consumer staples firms is significantly larger on the junior market than on the main market. A closer look reveals that most of the consumer staples firms on Euronext Growth are food producers in the maritime sector, handling seafood. Interestingly, this could possibly suggest some firm clustering on the junior market. Corwin and Harris (2001) document evidence of firm clustering, noting that firms prefer to list on the same market as their peers within the same industry. This aligns well with previous studies from Norway, documenting that Oslo Børs long has been a leading player in maritime finance, and that there exists industrial clustering in the Norwegian maritime sector (Benito et al., 2003). There is also difference within Utilities, however these firms are spread across various sub-sectors. Thus, this difference might exist because there is a small sample size of firms within this industry.

7.2 Mean and Median Comparisons

The two-sided t-test is an inferential statistic used to determine whether means of two separate groups are significantly different. Existing literature such as Doukas and Hoque (2016) relies on the two-sided t-test in their study. However, a prerequisite for the test is that the variable in question is subject to normal distribution within the sub-samples. Using the Shapiro-Wilk normality test, we find that all variables fail to meet this criteria for all three sub-samples, with the most common distribution being fairly right-skewed. Ownership concentration indicated some promise, with normal distribution for both the eligible and ineligible JM firms. Nonetheless, the MM firms group cannot be considered normally distributed with a certainty of $p\text{-value} = 0.0009105$. Nonetheless, Barrett and Goldsmith (1976) document that even with a highly skewed data set, $n = 40$ observations is sufficient to perform a t-test. Considering our smallest sample-group has $n = 60$ observations, we will on the basis of this conclusion perform a two-sided t-test to compare means, despite non-normality in our sample data. The test will use main market firms as the reference group, comparing against the two remaining categories.

To compare medians across our three sub-sample categories, we will use an unpaired

two-samples Wilcoxon test¹³. The test will use main market firms as the reference group, comparing against the two remaining categories.

Table 7.2: Mean and Median Comparisons Across Sub-sample Groups.

	Eligible JM firms		Ineligible JM firms		MM firms	
	Mean	Median	Mean	Median	Mean	Median
Age	13.72*	10	05.33***	2***	18.64	11
Market Value	1877.61***	1258.21***	1098.75***	257.73***	4563.29	2941.93
Ownership Conc.	61.13%	59.85%	61.19%	59.08%	65.14%	66.17%
Revenue	358.84***	36.01***	67.63***	2.18***	2079.32	353.51
Gross Proceeds	390.99***	250***	364.15***	99***	934.78	500
Percent Float	25.43%	21.80%	49.47%***	42.43%***	27.93%	21.16%
FA/TA	49.81%**	54.14%**	43.98%***	46.16%***	60.85%	65.53%
Tobin's Q	2.75***	2.24***	2.16	1.32	1.87	1.30
ROA	-8.28%**	-4.78%***	-17.13%***	-2.02%***	1.51%	8.06%

Table 7.2 reports the mean and median values of discrete variables for our sub-sample groups. *Age* is years since incorporation at the time of listing. *Market Value* is shares outstanding multiplied by subscription price in latest pre-issue private placement, in MNOK. *Ownership Concentration* is the percentage of shares held by the five largest shareholders at the time of listing. *Revenue* is last reported annual revenue pre-issue, in MNOK. *Gross Proceeds* is the money raised from the last private placement pre-issue. *Percent float* is gross proceeds divided by the market value of the firm at the time of listing. *FA/TA* is fixed assets divided by total assets. *ROA* is EBITDA divided by total assets. *Tobin's Q* is the sum of market value of equity and the book value of total liabilities, divided by the sum of gross proceeds and book value of total assets. All data is winsorized at 1% (99%) level. *, ** and *** denote statistically significant differences between (in)eligible firms and the main market at the 10%, 5%, and 1% levels respectively, for a mean two-sided t-test and a median Wilcoxon rank sum test.

Looking to Table 7.2, there are several statistically significant differences between our sub-sample groups. First, it is evident that firm age is a significantly different between the junior and main market firms. The mean (median) age for ineligible junior market firms is 5,33 (2) years, and 13,72 (10) years for junior market firms eligible to list on the main market. The low deviation between median and mean age values is an indicator of normal distribution for the latter. Conversely, the mean (median) is 18,64 (11) years for the main market firms, which is a notably higher mean than for the Euronext Growth firms. Moreover, the market value, and thus the firm size, is significantly different on the two markets as well. Both the eligible and ineligible firms are significant at the 1% level, with a mean (median) of 1877,61 (1258,21) MNOK and 1098,75 (257,73) MNOK respectively.

¹³The unpaired two-samples Wilcoxon test is also commonly referred to as the Wilcoxon rank sum test or the Mann-Whitney U test.

The large discrepancy between mean and median market value, particularly for ineligible firms, indicates that the data is notably right skewed. The values are significantly higher on the main market: 4563,29 (2941,93) MNOK. The results are therefore consistent with previous literature, that firms listed on the junior market are significantly smaller and younger than the firms that go public on the main market (Vismara et al., 2012; Doukas and Hoque, 2016). This stipulates that Euronext Growth have successfully managed to attract its target group of firms.

There is no observed significant difference in ownership concentration between junior and main market firms. The mean (median) values are roughly the same, stabilized around the 60% mark. The low deviation between the mean and the median indicates that the ownership structure is roughly normally distributed. Revenue is significant at the 1% levels between eligible and ineligible junior market firms and the main market firms. This is consistent with previous studies, documenting that revenue is significantly lower for firms listed on the junior market (Doukas and Hoque, 2016). Gross proceeds is also significant at the 1% level between the two marketplaces, which is to be expected when the market value of the main market firms is more than twice the size of the junior market firms. Percent float is significantly different between ineligible firms on the junior market but not between the main market firms and junior market firms eligible to list on the main market.

Overvaluation and undervaluation, as measured by Tobin's Q, is significant at the 1% level for main market firms and junior market firms eligible to list on the main market. Subsequently, the findings show that the firm valuations are higher on the main market. This is also consistent with the previous research conducted by Doukas and Hoque (2016). Lastly, profitability, measured by return on assets (ROA), is significant at the 1% level between eligible and ineligible junior market firms and the main market firms. The mean (median) profitability of eligible and ineligible junior market firms is -8,28% (-4,78%) and -17,13% (-2,02%) respectively. Conversely, it is 1,51% (8,067%) for the main market firms, which is a significantly higher profitability than the Euronext Growth firms can attest to.

8 Empirical Analysis

This section contains our empirical analysis of which firm characteristics that affect the initial market choice, and is structured as follows: The influence of firm characteristics on the listing decision is presented in the probit regression results in Table 8.1. Since the probit regression coefficient can only explain whether the relationship is negative or positive and significant or insignificant, the probit marginal effects are presented in Table 8.2. Furthermore, the results from the multinomial logistic regression are presented in Table 8.2. The implications of the regression results on the research question and hypothesis are analysed in Section 8.3 and Section 8.4. Finally, we evaluate the fit of the regression models in Section 8.5.

8.1 Probit Regression Results

Table 8.1: Probit Regression Model.

	<i>Dependent variable:</i>				
	Market Selection				
	(1)	(2)	(3)	(4)	(5)
log(Age + 1)	0.180 t = 0.914	0.174 t = 0.885	0.184 t = 0.934	0.141 t = 0.746	0.177 t = 0.947
log(Market Value)	-1.406*** t = -3.104	-1.430*** t = -3.196	-1.394*** t = -3.089	-0.633*** t = -3.667	-0.569*** t = -3.466
Ownership Concentration	0.601 t = 0.900	0.643 t = 0.968	0.581 t = 0.880	0.483 t = 0.737	0.231 t = 0.369
Institutional Dummy	-0.321 t = -0.797		-0.307 t = -0.767	-0.342 t = -0.878	-0.362 t = -0.950
log(Revenue + 1)	-0.021 t = -0.320	-0.018 t = -0.267	-0.021 t = -0.311	-0.040 t = -0.613	-0.058 t = -0.916
log(Gross Proceeds)	0.773* t = 1.877	0.773* t = 1.888	0.786* t = 1.915		
Hot Market Dummy	1.638*** t = 5.163	1.642*** t = 5.224	1.619*** t = 5.157	1.715*** t = 5.439	1.722*** t = 5.551
Percent Float	-3.043** t = -2.002	-3.203** t = -2.127	-3.153** t = -2.083	-0.501 t = -0.672	-0.926 t = -1.347
FA/TA	0.299 t = 0.565	0.269 t = 0.514		0.386 t = 0.731	0.133 t = 0.268
ROA	-0.268 t = -0.468	-0.267 t = -0.472	-0.202 t = -0.361	-0.416 t = -0.751	-0.471 t = -0.874
Tobin's Q	0.203** t = 2.070	0.203** t = 2.100	0.189** t = 2.009	0.137 t = 1.494	
Constant	4.739*** t = 2.953	4.688*** t = 2.949	4.808*** t = 3.014	3.106** t = 2.311	3.354** t = 2.569
Observations	141	141	141	141	141
McFadden R^2	0.3952	0.3914	0.3935	0.3739	0.3608
Chi-square	76.6 (11)***	75.9 (10)***	76.3 (10)***	72.5 (10)***	70.0 (9)***
Model Accuracy	82.27%	80.85%	81.56%	82.27%	80.85%

Table 8.1 reports probit regression results for market choice, where *Market Selection* = 0 indicates a main market listing, and *Market Selection* = 1 indicates a junior market listing. The 141 observations are the total amount of main market firms and the number of junior market firms eligible to list on the main market. *Age* is years since incorporation at the time of listing. *Market Value* is shares outstanding multiplied by subscription price in latest pre-issue private placement, in MNOK. *Ownership Concentration* is the percentage of shares held by the five largest shareholders at the time of listing. *Institutional Dummy* indicates institutional owners, such as private equity firms and venture capitalists. *Revenue* is last reported annual revenue pre-issue, in MNOK. *Gross Proceeds* is the money raised from the last private placement pre-issue, in MNOK. *Hot Market Dummy* refers to a period with high listing activity, which is 2020-2021. *Percent float* is gross proceeds divided by the market value of the firm at the time of listing. *FA/TA* is fixed assets divided by total assets. *ROA* is EBITDA divided by total assets. *Tobin's Q* is the sum of market value of equity and the book value of total liabilities, divided by the sum of gross proceeds and book value of total assets. All data is winsorized at 1% (99%) level. *, ** and *** denote statistical significance at a 10%, 5% and 1% level, respectively.

Table 8.2: Probit Regression Marginal Effects Model.

	(6)	(7)	(8)	(9)	(10)
log(Age + 1)	0.07	0.07	0.07	0.06	0.07
	(0.08)	(0.08)	(0.08)	(0.07)	(0.07)
log(Market Value)	-0.56**	-0.57**	-0.55**	-0.25***	-0.22***
	(0.18)	(0.18)	(0.18)	(0.07)	(0.06)
Ownership Concentration	0.24	0.25	0.23	0.19	0.09
	(0.26)	(0.26)	(0.26)	(0.26)	(0.25)
Institutional dummy	-0.12		-0.12	-0.13	-0.14
	(0.15)		(0.15)	(0.14)	(0.14)
log(Revenue + 1)	-0.01	-0.01	-0.01	-0.02	-0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
log(Gross Proceeds)	0.31	0.31	0.31		
	(0.16)	(0.16)	(0.16)		
Hot Dummy	0.58***	0.58***	0.58***	0.60***	0.60***
	(0.09)	(0.08)	(0.08)	(0.08)	(0.08)
Percent Float	-1.20*	-1.27*	-1.25*	-0.20	-0.37
	(0.60)	(0.60)	(0.60)	(0.29)	(0.27)
FA/TA	0.12	0.11		0.15	0.05
	(0.21)	(0.21)		(0.21)	(0.20)
ROA	-0.11	-0.11	-0.08	-0.16	-0.19
	(0.23)	(0.22)	(0.22)	(0.22)	(0.21)
Tobin's Q	0.08*	0.08*	0.07*	0.05	
	(0.04)	(0.04)	(0.04)	(0.04)	
Num. obs.	141	141	141	141	141
Log Likelihood	-58.62	-58.99	-58.79	-60.69	-61.96
Deviance	117.25	117.98	117.57	121.38	123.92
AIC	141.25	139.98	139.57	143.38	143.92
BIC	176.63	172.42	172.01	175.82	173.40

Table 8.2 reports marginal effects corresponding to probit regressions in Table 8.1. Dependent variable is market choice, where *Market Selection* = 0 indicates a main market listing, and *Market Selection* = 1 indicates a junior market listing. *Age* is years since incorporation at the time of listing. *Market Value* is shares outstanding multiplied by subscription price in latest pre-issue private placement, in MNOK. *Ownership Concentration* is the percentage of shares held by the five largest shareholders at the time of listing. *Institutional Dummy* indicates institutional owners, such as private equity firms and venture capitalists. *Revenue* is last reported annual revenue pre-issue, in MNOK. *Gross Proceeds* is the money raised from the last private placement pre-issue, in MNOK. *Hot Market Dummy* refers to a period with high listing activity, which is 2020-2021. *Percent float* is gross proceeds divided by the market value of the firm at the time of listing. *FA/TA* is fixed assets divided by total assets. *ROA* is EBITDA divided by total assets. *Tobin's Q* is the sum of market value of equity and the book value of total liabilities, divided by the sum of gross proceeds and book value of total assets. Values in parentheses are standard errors. All data is winsorized at 1% (99%) level. *, ** and *** denote statistical significance at a 10%, 5% and 1% level, respectively.

8.2 Multinomial Logistic Regression Results

Table 8.3: Multinomial Logistic Regression Model.

	<i>Dependent variable:</i>	
	Market Selection	
	(11)	(12)
Intercept	8.544*** t = 3.159	19.743*** t = 4.962
log(Age + 1)	0.231 t = 0.727	-2.223*** t = -4.536***
log(Market Value)	-2.691*** t = -3.502	-2.882*** t = -3.736
Ownership Concentration	1.157 t = 1.029	2.531 t = 1.482
Institutional Dummy	-0.644 t = -0.914	0.083 t = 0.093
log(Revenue + 1)	-0.091 t = -0.775	0.025 t = 0.147
log(Gross Proceeds)	1.716** t = 2.479	0.246 t = 0.405
Hot Market Dummy	3.052*** t = 5.183	1.537* t = 1.935
Percent Float	-6.661*** t = -2.745	-1.662 t = -0.759
FA/TA	0.336 t = 0.383	-0.246 t = -0.212
ROA	-0.146 t = -0.147	-0.202 t = -0.156
Tobin's Q	0.380** t = 2.260	0.216 t = 0.813
Observations	192	192

Table 8.2 reports multinomial logistic regression results for market choice, where (11) compares eligible junior market firms to main market firms and (12) compares ineligible junior market firms to main market firms. *Age* is years since incorporation at the time of listing. *Market Value* is shares outstanding multiplied by subscription price in latest pre-issue private placement, in MNOK. *Ownership Concentration* is the percentage of shares held by the five largest shareholders at the time of listing. *Institutional Dummy* indicates institutional owners, such as private equity firms and venture capitalists. *Revenue* is last reported annual revenue pre-issue, in MNOK. *Gross Proceeds* is the money raised from the last private placement pre-issue, in MNOK. *Hot Market Dummy* refers to a period with high listing activity, which is 2020-2021. *Percent float* is gross proceeds divided by the market value of the firm at the time of listing. *FA/TA* is fixed assets divided by total assets. *ROA* is EBITDA divided by total assets. *Tobin's Q* is the sum of market value of equity and the book value of total liabilities, divided by the sum of gross proceeds and book value of total assets. All data is winsorized at 1% (99%) level. *, ** and *** denote statistical significance at a 10%, 5% and 1% level, respectively.

8.3 Independent Variables

8.3.1 Firm Age

Despite uncovering a statistically significant difference between the mean age of eligible junior market firms and main market firms at a 10% significance level in Section 7.2, we find no evidence of firm age as an indicator of market preference. We therefore conclude that firm age does not affect the initial market listing decision, and reject Hypothesis 1: Younger firms eligible to list on the main market will still favour a listing on the junior market.

Interestingly, our finding contradicts studies by both Vismara et al. (2012) and Doukas and Hoque (2016), who find evidence suggesting that firm age contributes to the initial market listing decision. Nevertheless, firm age is not statistically significant in the Swedish market (Baade-Mathiesen and Melnikova, 2019), possibly revealing a Nordic market singularity. We hypothesise that this is due to both old firms listings on the junior market and young firms listing the main market.

Euronext Growth has a reputation as an adequate alternative to the main market, even for well-established firms that easily qualify for Oslo Børs (Oslo Børs, 2021a). In 2021, firms such as Envipco Holding NV, Western Bulk Chartering AS and Rana Gruber AS all listed on the junior market despite qualifying for the main market. These firms are highly established within their fields, and their respective ages range from 39 to 57 years. The presence of such firms greatly skews the collective firm age of the junior market, minimising the firm age difference between Euronext Growth and Oslo Børs.

It is not only older firms listing on the junior market that reduce the difference between Euronext Growth and Oslo Børs; it is also common for younger firms to list on the main market. The majority of these firms are so-called enterprise startups, which means that they are founded by already well-established firms and therefore have corporate structures and actions that do not co-align with typical younger firms. In 2021, 1-year old firms Volue ASA, Aker Horizons ASA and Aker Carbon Capture ASA were all granted exemption from the 3-year listing requirement of Oslo Børs and allowed to list on the main market. The three firms were founded by Arendals Fossekompagni ASA and Aker ASA, and had a combined market capitalisation of almost MNOK 22,300 in the financial year before

their listings. As such, firm age is not as good of an indicator of firm type as we initially hypothesised, at least in the Norwegian stock market. Ultimately, the presence of old firms on the junior market and young firms on the main market contributed to evening out the firm age differences between the two marketplaces, resulting in a variable without statistical significance in our models.

It should be noted that Regression 12 indicates a statistically significant difference in firm age at the 1% level between firms that list on the main market and firms that do not qualify for the main market. This finding can be explained by the listing requirement of the main market being directly related to firm age. From Table 5.1 we see that 29 out of the 60 ineligible firms did not qualify based on the 3-year history requirement. Consequently, firms in this group are naturally younger than those on the main market.

8.3.2 Firm Size

As outlined in Table 8.1, firm size¹⁴, is a statistically significant indicator of market preference at a 1% level. According to our models, larger firms will be inclined to list on the main market, holding all other variables equal. In lieu, this means that smaller firms tend to list on the junior market, despite qualifying for the main market, thereby accepting Hypothesis 2: Small firms eligible to list on the main market will still prefer to go public on the junior market. These findings are consistent with those of Vismara et al. (2012), Doukas and Hoque (2016) and Baade-Mathiesen and Melnikova (2019). Moreover, Jenkinson and Ramadorai (2013) show that markets in the US and UK with lighter regulations have been favoured by smaller firms. Looking to Table 8.2, it is evident especially from Regressions 6-8 that firm size is not just statistically significant; it is also reasonably influential with a coefficient proximate to 55%.

Ellul et al. (2020) document how smaller firms were fighting for survival during the COVID-19 pandemic, facing frictions on the financing side and having a perspicuous need for external capital. Thus, we speculate that smaller firms eligible for the main market would rather list on the junior market due to its much quicker listing process.

As with firm age, Table 8.2 indicates a significant difference between firm size for ineligible firms and main market firms. We will reiterate our argument from Section 8.3.2, and

¹⁴Market value is used as a proxy for firm size.

attribute this difference to the presence of a market value requirement for listing on the main market. Since we, in accordance with the Euronext standard, utilise market capitalisation as a proxy for firm size, ineligible firms will naturally be of smaller firm size. Looking to Table 5.1, 37 of the 60 firms that did not qualify for the main market were disqualified based on market value alone. Additionally, the smallest eligible firms might still be under the impression that more comprehensive reporting on the main market entails unnecessary costs for a firm that achieves its desired capital by simply listing on the junior market.

8.3.3 Profitability

According to our regressions, profitability is not a statistically significant indicator of market preference. Hence, we conclude that profitability does not influence the initial market listing decision, thereby rejecting Hypothesis 3: Firms with higher profitability will favour the main market. This is contrary to the findings of Doukas and Hoque (2016), who outlines that less profitable firms tend to errant the main market. They argue that firms with lower profitability will be more hesitant to prioritise their funds to meet the more stringent listing requirements on the main market. However, this is not applicable to the Norwegian stock market. Moreover, our hypothesis that firms with lower profitability would relish the junior market's lower transparency and reporting requirements is seemingly trivial. This may be because firms on the Norwegian market already have a transparent and comprehensive financial reporting system in place regardless, as Quagli et al. (2021) show that Norway is one of the highest ranking European countries in terms of corporate governance practices.

8.3.4 Ownership Structure

The ownership structure is not statistically significant in any of our regressions in terms of whether the majority of shares are owned by the firm's management or an institution. The result suggests that the ownership structure is not an indication of market preference. Hence, we can reject Hypothesis 3: Firms controlled by a managerial owner will preferably list on the junior market.

The findings contradict those of Baade-Mathiesen and Melnikova (2019), which is the

first instance of a discrepancy between the Scandinavian markets. We theorise that the statistically insignificant result in our models can be partly attributed to the generally low occurrence of majority managerial ownership in the Norwegian stock market, for both markets. In the Swedish market, Baade-Mathiesen and Melnikova (2019) found that managerial ownership is considerably more common on the junior market than the main market.

8.4 Control Variables

Several regressions identify Tobin's Q as a statistically significant variable in the initial market listing decision. Regression 6-8 classify the variable as statistically significant at the 10% level, whereas Regressions 1-3 even suggest a 5% level. Vismara et al. (2012) states that firms with higher Tobin's Q are more inclined to list on the main market, and that firms rigged for more growth potential lists on the main market while firms with lower potential lists on the junior market. This is in contrast to our findings, which show that a higher Tobin's Q makes a firm more probable to list on the junior market. We believe this is because many tech and ESG firms with high growth potential have listed on the junior market during COVID-19 as the listing process is both quicker and simpler. Thus, firms wanted to seize their overvaluation on the junior market during COVID-19 to get a better share price for their shareholders than would be possible on the main market.

Percent float is statistically significant at the 5% level for Regressions 1-3 and the 10% level for Regressions 6-8. Furthermore, Regression 11 indicates that percent float is statistically significant at the 1% level. The results suggest that firms with a higher percent float are more likely to list on the main market. Considering the statistically significant difference in the managerial situation from our mean and median comparisons in Table 7.2, we believe that Goergen and Renneboog's (2003) conclusion is applicable here as well. Goergen and Renneboog (2003) document that founders are less likely to give up control of the firm, subsequently floating fewer shares than institutional owners. Hence, the reason why percent float is a statistically significant indicator of market preference is that a larger proportion of managerial owners decide to list on the junior market instead of the main market. Another theory is related to the stricter percent float requirements of the main market compared to the junior market. With a requirement to issue at least 25% of total

shares in the firm to the market, owners who are not willing to offer this percentage of shares will instead list on the junior market.

Our regressions illustrate contradicting conclusions regarding gross proceeds as a statistically significant variable influencing the initial market listing decision. Regressions 1-3 indicate that gross proceeds is a statistically significant variable at a 10% level, whereas Regression 11 shows a 5% level. However, all results from our probit regression model suggest that it is not statistically significant. Assuming the variable is statistically significant, a firm with higher gross proceeds is more likely to list on the junior market, which directly contradicts the findings of Granier et al. (2019). In conjunction with the implications of this conclusion, the opposing results in our model are inclined to disregard gross proceeds as a variable. Nonetheless, entertaining the possibility that gross proceeds are a good indication of market preference, a possible explanation for why firms with higher gross proceeds lists on the junior market is that gross proceeds are garnered through the final private placement pre-issue. Firms already insistent on listing on the main market are usually larger, subsequently not dependant upon diluting their shares or raise as much capital as firms planning to list on the junior market will have to.

The hot market dummy is statistically significant at a 1% level in all our regression models. Table 8.2 indicates that during our defined period of a hot market, any main market eligible firm is 58-60% more likely to list on the junior market than the main market, *ceteris paribus*. We speculate that one of the reasons firms are more likely to list on the junior market in a hot market is that investors have focused more on ESG in recent years (KPMG, 2021). During the 2020-2021 hot period, listings of ESG-focused firms have escalated, with the majority of these firms choosing the junior market. Moreover, the Norwegian startup environment has developed notably in recent years. Throughout the pandemic, many promising startups were in dire need of external capital (Hevia and Neumeyer, 2020), and the process on the junior market proved both faster and easier. Several of the firms in question were also positioned to benefit from the pandemic, referring primarily to virtual health services such as Patientsky Group and home refurbishing firms such as Elektroimportøren AS.

8.5 Evaluation of Regression Models

The results show that the McFadden R^2 in the regressions has values between 0.36-0.40, which is fairly high for a probit regression. A high percentage of correctly predicted outcomes for the regressions, between 80.9-82.3%, suggests that the model delivered a good performance. The Breusch-Pagan test results for the regressions show values between 7.65-11.17, with a subsequent p-value between 0.39-0.57. Since utilising the robust standard errors does not alter the significance of the variables in any substantial way and the p-value is high for both Breusch-Pagan tests, this indicates that heteroskedasticity is not a substantial problem in the model. The chi-square statistic is significant, which means that all the coefficients are significantly different from zero. The same implication goes for the OLS regression, as the F-statistic is significant, and thus all the coefficients are different from zero.

9 Conclusion

83 of the 143 firms that decided to list on the Norwegian junior market since its inception in January 2016, were eligible to list on the main market. Subsequently, we aim to discover what firm characteristics affect firms' choice of public marketplace in Norway. To warrant this, four hypotheses for firm characteristics that affect the listing decisions among public firms on the Oslo Stock Exchange are analysed.

The results from our analysis show that firms who opt for the junior market are considerably smaller in size than the firms listing on the main market, which confirms Hypothesis 2: Small firms eligible to list on the main market will still prefer to go public on the junior market. As the junior markets were created for smaller firms, this proves Euronext Growth has been successful in attracting its target group of firms. Moreover, we find that Tobin's Q and percent float are significantly differentiating factors between junior market firms and main market firms.

Conversely, our evidence indicates that the firm characteristic age, profitability and ownership structure appear to be insignificant factors unlikely to affect firms' initial market choice. Subsequently, we cannot find enough evidence supporting Hypothesis 1: Younger firms eligible to list on the main market will still favour a listing on the junior market. The same goes for Hypothesis 3: Firms with higher profitability will favour the main market, and for Hypothesis 4: Firms controlled by a managerial owner will preferably list on the junior market. Moreover, we find no statistical significance regarding revenue, gross proceeds or ownership concentration.

With this thesis, the literature investigating which firm characteristics affect listing choice has been extended by analysing the Norwegian stock market utilising probit and multinomial logistic model regressions. The evidence from our thesis indicates that firms' initial choice of market is not exclusively limited to the stock market listing requirements but depends on firm characteristics as well. The insights may help analysts predict which market a firm is probable to list on with more accuracy than before, by studying the firm characteristics it possesses. This is beneficial because listing advisors, i.e. investment banks, may provide firms with clearer market recommendations which subsequently saves time and other resources for both parties.

9.1 Limitations and Avenues for Future Research

A limitation of our research is that we treat the initial market decision as an isolated event. Our model defines market choice as a linear outcome based on a set of inputs. Doukas and Hoque (2016) argue that this is an inaccurate approach as the decision is related to subsequent corporate actions. The market choice is not an outcome of a set of variables. Instead, it should be perceived as a necessary means to an end. Our thesis could therefore be further enhanced by considering post-issue factors.

Therefore, we recommend future researchers, with a larger time frame available, to investigate if post-issue corporate decisions and long-term performance may affect the listing decision and if firms possess different investing and financing strategies that could predict this choice. An example of this could be that firms aiming to acquire other firms would possibly prefer to list on the main market. Conversely, firms acquired in recent years have mainly been listed on the junior market beforehand. Moreover, the correlation between choice of market and dividend announcements, SEOs¹⁵ or capital changes could make an interesting study.

Based on this thesis' results, we claim that Euronext Growth has managed to become a thriving and liquid market. However, as aforementioned, junior markets are attractive in hot periods yet quickly collapse in cold periods. Therefore, it would be interesting to conduct this study again in a couple of years, analysing what changes might yield when Euronext Growth enters another cold market. Perhaps future researchers can examine if the hot period will be preceded by years where the ratio of median valuations between the firms listing on the junior and main market will increase, among other factors.

It would also be possible to trace every up-listing from the junior market to the main market and do a qualitative study into why the firms did not initially list on the main market if they were eligible to do so, instead opting to up-list with extra costs later. A similar study could analyse which firm characteristics make firms down-list from the main market to the junior market. This phenomenon has become evident across several of the marketplaces in Europe, as Hitz et al. (2002) conducted a study on German firms' decisions

¹⁵SEO stands for seasoned equity offering and is a form of capital raising by issuing equity as an already publicly traded company. Although private placements raise capital as well, it most importantly serves as a way of listing, hence the two differ.

to opt-out of highly regulated stock market regimes and down-list to an exchange-regulated stock market¹⁶. The analyst division at Oslo Børs predict this will become more prominent on the Norwegian stock market as well (Oslo Børs, 2021a).

¹⁶The study was primarily connected to the issues concerning mandatory preparation of IFRS financial statements and enforcement oversight.

References

- Alavi, A., Pham, P. K., and Pham, T. M. (2008). Pre-IPO ownership structure and its impact on the IPO process. *Journal of Banking & Finance*, 32(11):2361–2375.
- Albornoz, B. G. d. and Pope, P. F. (2004). The determinants of the going public decision: Evidence from the U.K. Working Papers. Serie AD 2004-22, Instituto Valenciano de Investigaciones Económicas, S.A. (Ivie).
- Baade-Mathiesen, J. and Melnikova, K. (2019). An empirical study of firm-specific characteristics that affect companies' choice of IPO market in Sweden. Master's thesis, Norwegian School of Economics.
- Baker, H. K., Nofsinger, J. R., and Weaver, D. G. (2002). International cross-listing and visibility. *The Journal of Financial and Quantitative Analysis*, 37(3):495–521.
- Barrett, J. P. and Goldsmith, L. (1976). When is n sufficiently large? *The American Statistician*, 30(2):67–70.
- Benito, G. R., Berger, E., de la Forest, E., and Shum, J. (2003). A cluster analysis of the maritime sector in Norway. *International Journal of Transport Management*, 1(4):203–215.
- Bernstein, S., Dev, A., and Lerner, J. (2018). The creation and evolution of entrepreneurial public markets. Working Paper 25414, National Bureau of Economic Research.
- Bigus, J. and Hillebrand, C. (2016). Bank relationships and private firms' financial reporting quality. *European Accounting Review*, 26(2):379–409.
- Bodnaruk, A., Kandel, E., Massa, M., and Simonov, A. (2008). Shareholder diversification and the decision to go public. *The Review of Financial Studies*, 21(6):2779–2824.
- Chemmanur, T. J. and Fulghieri, P. (1999). A theory of the going-public decision. *The Review of Financial Studies*, 12(2):249–279.
- Corwin, S. A. (2003). The determinants of underpricing for seasoned equity offers. *The Journal of Finance*, 58(5):2249–2279.
- Corwin, S. A. and Harris, J. H. (2001). The initial listing decisions of firms that go public. *Financial Management*, 30(1):35–55.
- de Sousa, E. and Caio Galdi, F. (2016). The relationship between equity ownership concentration and earnings quality: Evidence from Brazil. *Revista de Administração*, 51(4):331–343.
- Demsetz, H. and Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, 93(6):1155–1177.
- Doidge, C., Karolyi, G. A., and Stulz, R. M. (2009). Has New York become less competitive than London in global markets? Evaluating foreign listing choices over time. *Journal of Financial Economics*, 91(3):253–277.

- Doukas, J. A. and Hoque, H. (2016). Why firms favour the AIM when they can list on main market? *Journal of International Money and Finance*, 60(C):378–404.
- Ellul, A., Erel, I., and Rajan, U. (2020). The covid-19 pandemic crisis and corporate finance. *The Review of Corporate Finance Studies*, 9(3):421–429.
- Fagervik, R. and Ausland, E. H. (2021). Rekordhøy børsaktivitet: Nye eiere og tilpasset regelverk. *Magma: Econas tidsskrift for økonomi og ledelse*, 24(1):76–82.
- Gillan, S. L., Koch, A., and Starks, L. T. (2021). Firms and social responsibility: A review of esg and csr research in corporate finance. *Journal of Corporate Finance*, 66.
- Goddard, J., Molyneux, P., and Wilson, J. (2004). The profitability of European banks: A cross-sectional and dynamic panel analysis. *Manchester School*, 72:363–381.
- Goergen, M. and Renneboog, L. (2003). Why are the levels of control different in german and UK companies? Evidence from initial public offerings. *The Journal of Law, Economics, and Organization*, 19(1):141–175.
- Granier, C., Revest, V., and Sapio, A. (2019). SMEs and junior stock markets: A comparison between European and Japanese markets. *Journal of Innovation Economics & Management*, 29(2):43–67.
- Gresse, C. and Gajewski, J.-F. (2006). A survey of the European IPO market. Retrieved 01/12-21 from <https://basepub.dauphine.fr/handle/123456789/8670>.
- Hart, P. E. and Oulton, N. (1996). Growth and size of firms. *Economic Journal*, 106(438):1242–1252.
- Helwege, J. and Liang, N. (2004). Initial public offerings in hot and cold markets. *The Journal of Financial and Quantitative Analysis*, 39(3):541–569.
- Hevia, C. and Neumeyer, A. (2020). A conceptual framework for analyzing the economic impact of COVID-19 and its policy implications. Retrieved 30/11-21 from shorturl.at/yFQ35.
- Hitz, J.-M., Koch, S., and Moritz, F. (2002). Downlistings in European exchange-regulated markets: The role of enforcement. *Journal of Accounting and Public Policy*, 39(6).
- Ho, L.-C. J. and Taylor, M. E. (2007). An empirical analysis of triple bottom-line reporting and its determinants: Evidence from the united states and japan. *Journal of International Financial Management & Accounting*, 18(2):123–150.
- Jenkinson, T. and Ramadorai, T. (2013). Does one size fit all? The consequences of switching markets with different regulatory standards. *European Financial Management*, 19(5):852–886.
- Khurshed, A., Paleari, S., and Vismara, S. (2005). The operating performance of initial public offerings: The UK experience. Working paper, Universita di Bergamo.
- KPMG (2021). Børspuls: Det sterkeste året noen gang i norske børs- og kapitalmarkeder. Retrieved 15/11-21 from <http://bit.ly/S8YtWS>.
- Kropko, J. (2008). Choosing between multinomial logit and multinomial probit models for analysis of unordered choice data. Retrieved 05/11-21 from shorturl.at/adsC6.

- Lian, Q. and Wang, Q. (2019). How does the primary market value innovations of newly public firms? *Journal of Accounting, Auditing & Finance*, 34(1):3–29.
- Mallin, C. and Ow-Yong, K. (2009). Corporate governance in alternative investment market (aim) companies: Determinants of corporate governance disclosure. *SSRN Electronic Journal*.
- Mendoza, J. M. (2011). Securities regulation in low-tier listing venues: The rise of the alternative investment market. *Fordham Journal of Corporate & Financial Law*, 13(2):257–328.
- Nelson, T. (2003). The persistence of founder influence: Management, ownership, and performance effects at initial public offering. *Strategic Management Journal*, 24(8):707–724.
- O’Hara, M. (2003). Presidential address: Liquidity and price discovery. *The Journal of Finance*, 58(4):1335–1354.
- Oslo Børs (2021a). Personal communication. Oslo Børs Analyst.
- Oslo Børs (2021b). The issuer rules. Retrieved 30/10-21 from shorturl.at/zHMRS.
- Pagano, M., Panetta, F., and Zingales, L. (1998). Why do companies go public? An empirical analysis. *The Journal of Finance*, 53(1):27–64.
- PwC (2021). Considering an IPO? First, understand the costs. Retrieved 01/12-21 from <https://www.pwc.com/us/en/services/deals/library/cost-of-an-ipo.html>.
- Quagli, A., Lagazio, C., and Ramassa, P. (2021). From enforcement to financial reporting controls (frcs): a country-level composite indicator. *Journal of Management and Governance*, 25(2):397–427.
- Ritter, J. (1984). The "hot issue" market of 1980. *The Journal of Business*, 57(2):215–40.
- Ritter, J. R., Signori, A., and Vismara, S. (2013). *Handbook of Research on IPOs*. Edward Elgar Publishing Ltd.
- Ritter, J. R. and Welch, I. (2002). A review of IPO activity, pricing, and allocations. *The Journal of Finance*, 57(4):1795–1828.
- Rivard, R. J. and Thomas, C. (1997). The effect of interstate banking on large bank holding company profitability and risk. *Journal of Economics and Business*, 49(1):61–76.
- Rose, P. and Solomon, S. (2016). Where have all the ipos gone? the hard life of the small ipo. *Harvard Business Law Review*, 83(6).
- Schwab, J. (2002). Multinomial logistic regression: Basic relationships and complete problems. Retrieved 18/11-21 from shorturl.at/fqstG.
- Starkweather, J. and Moske, A. K. (2011). Multinomial logistic regression. Retrieved 05/11-21 from http://www.unt.edu/rss/class/Jon/Benchmarks/MLR_JDS_Aug2011.pdf.
- Subrahmanyam, A. and Titman, S. (1999). The going-public decision and the development of financial markets. *The Journal of Finance*, 54(3):1045–1082.
- Vismara, S., Paleari, S., and Ritter, J. R. (2012). Europe’s second markets for small companies. *European Financial Management*, 18(3):352–388.

Wooldridge, J. (2016). *Introductory Econometrics*. South-Western College Publishing, 5th edition.

Appendix

A1 Appendix A

A1.1 Multicollinearity Table

We present the correlation between independent and control variables in Table A1.1. A high correlation between variables might be the root of multicollinearity in our models. In cases of multicollinearity, the coefficient are less stable and the predictive power of the model is reduced (Wooldridge, 2016). We highlight the correlations above 0,5 and below -0,5 in bold in the table, which would imply high correlation. We only observe one case of this, log of gross proceeds and market value.

Table A1.1: Multicollinearity Test.

	A	MV	OC	I	R	GP	HM	PF	FT	R	TQ
log(Age + 1)	1										
log(Market Value)	0.210	1									
Ownership Concentration	0.145	0.135	1								
Institutional Dummy	0.031	0.284	0.017	1							
log(Revenue + 1)	0.494	0.429	0.297	0.135	1						
log(Gross Proceeds)	0.000	0.736	0.102	0.301	0.194	1					
Hot Market Dummy	-0.027	0.149	-0.026	0.030	-0.113	0.207	1				
Percent Float	-0.343	-0.358	-0.059	0.040	-0.300	0.260	-0.034	1			
FA/TA	0.138	0.233	0.028	0.032	0.258	0.123	-0.149	-0.201	1		
ROA	0.158	0.334	0.179	0.134	0.468	0.216	0.042	-0.124	0.233	1	
Tobin's Q	-0.015	0.091	-0.121	-0.067	-0.190	-0.206	0.135	-0.0347	-0.143	-0.137	1

Table A1.1 reports the multicollinearity between all variables used in our analysis. *Age* is years since incorporation at the time of listing. *Market Value* is shares outstanding multiplied by subscription price in latest pre-issue private placement. *Ownership Concentration* is the percentage of shares held by the five largest shareholders at the time of listing. *Institutional Dummy* indicates institutional owners, such as private equity firms and venture capitalists. *Revenue* is last reported annual revenue pre-issue. *Gross Proceeds* is the money raised from the last private placement pre-issue. *Hot Market Dummy* refers to a period with high listing activity, which is 2020-2021. *Percent float* is gross proceeds divided by the market value of the firm at the time of listing. *FA/TA* is fixed assets divided by total assets. *ROA* is EBITDA divided by total assets. *Tobin's Q* is the sum of market value of equity and the book value of total liabilities, divided by the sum of gross proceeds and book value of total assets. All data is winsorized at 1% (99%) level. |Correlation coefficient| >0.500 are indicated in bold.

A2 Appendix B

A2.1 Linear Probability Model

Linear probability model utilizes Ordinary Least Squares (OLS) to estimate the regression model in standard linear regression. The OLS method in the regressions minimizes the sum of squared distances between the responses predicated by the linear approximation and the observed responses in the sample. However, to justify the use of OLS, the five Gauss-Markow assumptions need to be satisfied (Wooldridge, 2016):

1. Linearity in the parameters
2. Random sampling
3. No perfect collinearity in the independent variables
4. Exogeneity of the independent variables
5. Homoscedasticity (constant variance in the error term)

As the first assumption states, the model in the population has to be linear in the parameters. In this thesis, many of variables have been transformed to log, including age, market value, revenue and gross proceeds. The aim of this was to reduce outliers¹⁷ and obtain the utmost normally distributed variables as practically viable. Regarding the random sampling, it is not expected to be a problem since practically all listings on both Euronext Growth and Oslo Børs from January 2016 until October 2021 are included. On the issue of perfect collinearity, a multicollinearity test is performed, helping adjudge if the model needs to omit any variables. The final selection of independent and control variables shows no unpropitious cases of collinearity.

Regarding exogeneity¹⁸, the assumption is that the error term u has an expected value of zero given whatever values are produced by the independent variables. Should these variables be correlated by an unobserved factor, also affecting the dependent variable, an endogeneity problem exists. There may be several factors behind this, including simultaneity, measurement error, functional form misspecification and omitted variable bias. These are not considered to be a problem in the data set. We have included

¹⁷The data has also been winsorized at the 1% (99%) level

¹⁸Stating that the independent variables should not be correlated with the error term u

the variables deemed most relevant to gain an understanding of which firm-specific characteristics affects firms' listing decision. However, there may still exists variables that better explain this, than the ones included in this thesis' models.

Lastly, homoskedacity might have an effect on the model's efficiency. For various independent variables, it assumes that there is constant variance in the error term between them. It transpires when variance of the unobserved factors change between disparate segments of the population¹⁹. To minimize the heteroscedacity problem, it is essential to estimate the regression with robust standard errors (Wooldridge, 2016). Thus, robust standard errors are applied in the LPM regression. Furthermore, a Breusch-Pagan test has been utilized to test for heteroscedasticity in the sample.

In this thesis, the response probability of the linear probability model is linear in the parameters β_n . Every β_n coefficient measures change in probability of success when X_n changes, *ceteris paribus*:

$$\Delta P(Y = 1|X) = \beta_n \Delta X_n \quad (.1)$$

The linear probability model utilizes OLS estimator and the estimated equation is identical to how it looks for the standard linear regression when estimating β_n :

$$\hat{Y} = \hat{\beta}_0 + \hat{\beta}_1 X_1 + \dots + \hat{\beta}_k X_k \quad (.2)$$

In the regression equation above, \hat{Y} is the predicted probability of success. When every $X_n = 0$, $\hat{\beta}_0$ is the predicted probability of success. When X_1 increases by one unit, the slope $\hat{\beta}_1$ estimates the predicted change in probability of success. The LPM results can be seen in A2.2.

¹⁹Notwithstanding how heteroskedacity does not result in biased estimators, the standard error and following statistical tests should not be trusted.

A2.2 Linear Probability Model Results

Table A2.1: LPM Regression Model.

	<i>Dependent variable:</i>				
	Grouping				
	(13)	(14)	(15)	(16)	(17)
log(Age + 1)	0.041 t = 0.878	0.038 t = 0.828	0.040 t = 0.864	0.041 t = 0.885	0.048 t = 1.029
log(Market Value)	-0.242*** t = -3.139	-0.252*** t = -3.316	-0.239*** t = -3.121	-0.148*** t = -3.757	-0.138*** t = -3.539
Ownership Concentration	0.088 t = 0.532	0.095 t = 0.571	0.084 t = 0.510	0.094 t = 0.564	0.060 t = 0.360
Institutional Dummy	-0.073 t = -0.774		-0.072 t = -0.765	-0.084 t = -0.891	-0.094 t = -1.002
log(Revenue + 1)	-0.006 t = -0.347	-0.005 t = -0.307	-0.006 t = -0.350	-0.011 t = -0.638	-0.016 t = -0.964
log(Gross Proceeds)	0.095 t = 1.418	0.099 t = 1.489	0.097 t = 1.448		
Hot Market Dummy	0.481*** t = 6.271	0.485*** t = 6.355	0.478*** t = 6.277	0.501*** t = 6.628	0.513*** t = 6.801
Percent Float	-0.458 t = -1.443	-0.496 t = -1.587	-0.477 t = -1.522	-0.103 t = -0.526	-0.215 t = -1.189
FA/TA	0.057 t = 0.438	0.055 t = 0.417		0.067 t = 0.512	0.021 t = 0.166
ROA	-0.082 t = -0.592	-0.083 t = -0.600	-0.070 t = -0.517	-0.094 t = -0.681	-0.114 t = -0.828
Tobin's Q	0.040* t = 1.703	0.041* t = 1.782	0.037 t = 1.652	0.034 t = 1.478	
Constant	1.406*** t = 3.924	1.398*** t = 3.909	1.422*** t = 4.003	1.178*** t = 3.665	1.264*** t = 3.983
Observations	141	141	141	141	141
F-statistic	8.911***	9.772***	9.844***	9.527***	10.25***
Breusch-Pagan Test	11.171 p = 0.4291	9.0339 p = 0.5289	10.56 p = 0.3928	9.1786 p = 0.5152	7.6461 p = 0.5702

Table A2.2 reports linear probability regression results for market choice, where *Market Selection* = 0 indicates a main market listing, and *Market Selection* = 1 indicates a junior market listing. *Age* is years since incorporation at the time of listing. *Market Value* is shares outstanding multiplied by subscription price in latest pre-issue private placement, in MNOK. *Ownership Concentration* is the percentage of shares held by the five largest shareholders at the time of listing. *Institutional Dummy* indicates institutional owners, such as private equity firms and venture capitalists. *Revenue* is last reported annual revenue pre-issue, in MNOK. *Gross Proceeds* is the money raised from the last private placement pre-issue, in MNOK. *Hot Market Dummy* refers to a period with high listing activity, which is 2020-2021. *Percent float* is gross proceeds divided by the market value of the firm at the time of listing. *FA/TA* is fixed assets divided by total assets. *ROA* is EBITDA divided by total assets. *Tobin's Q* is the sum of market value of equity and the book value of total liabilities, divided by the sum of gross proceeds and book value of total assets. All data is winsorized at 1% (99%) level. *, ** and *** denote statistical significance at a 10%, 5% and 1% level, respectively.