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The influence of EPS and DPS on share price movements in Nordic tenbaggers

A quantitative study on the influence and significance of EPS and DPS on the immense share price increases in Nordic tenbaggers

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Abstract

This study investigates the influence of earnings per share (EPS) and dividend per share (DPS) on the share price movements of tenbaggers in the Nordic region. The term tenbagger was first coined by the famous investor Peter Lynch and it refers to shares that have generated a return of over 900 percent. The study focuses on this unique sample of companies in the Nordic region, that have been publicly listed during the last 10 years.

According to the previous literature, earnings per share is one of the most significant and relevant variables when it comes to explaining and influencing share price movements, while the views on the relevance of dividends per share are a lot more fragmented. As these two variables are popular in company valuations and have been subject of previous research on share price movements, their influence is of interest to examine in the sample of Nordic tenbaggers. A quantitative method is applied with multiple linear regression models and the results show that earnings per share has had a positive significant influence on the share prices while the dividends per share results were a lot more fragmented, just like in previous research. However, on the basis of the main most comprehensive model, dividends per share was deemed not to have had a significant influence, in line with previous dividends and capital structure irrelevance theories.

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1. Introduction

The first chapter introduces background information, a problem description, the research questions, the study's limitations and the aim of the study. Finally the structure of the thesis is also presented.

1.1 Background

A tenbagger is a description of a share whose price has increased 900 percent and thus returned 10 times the initial investment. The term was first coined by the fund manager Peter Lynch in his book "*One up on Wall Street*" and it has since been used to define shares that have created abnormally high returns. Looking back at the last ten years, it is easy to observe which companies in different regions and markets that have become tenbaggers and outperformed the market by a large margin. However it is at a glance less clear what fundamental factors that have been driving and influential in the creation of these tenbaggers share price increases. When Peter Lynch discusses ways to find and invest in shares that have the fundamentals of becoming tenbaggers in his book, he mentions earnings increases as a core fundamental metric in his investment philosophy, "I own stocks where results depend on ancient fundamentals: a successful company enters new markets, its earnings rise, and the share price follows along".[1]

Besides earnings, dividends is another extremely commonly used financial metric in both determining share prices and trying to forecast share prices. Previous research is divided on whether dividends are relevant or irrelevant for investors and share price movements. On one hand, the capital structure irrelevance theory, created by Miller and Modigliani, argues that investors are indifferent to if a company allocates its earnings via dividends or reinvestments in its operations, and thus, dividends should not significantly affect share prices.[2] On the

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[1]Lynch. P. (1989). *One Up On Wall Street*.

[2]Merton. M H., F Modigliani. (1961) Dividend Policy Growth and the Valuation of Shares. *The Journal of Business*. Vol XXXIV No.4 {online}

other hand, the famous Gordon Growth model, which is based on dividends, is often used in determination of share prices and various previous quantitative research in different markets indicates that share prices are sensitive and changes with real dividend growth.[3]

Both earnings per share and dividends per share can be considered two of the most used and popular financial factors which have historically been of great interest to researchers, shareholders and investors of all sorts. In a study on 400 financial executives in the USA made by Graham, Harvey and Rajgopal, a majority of the executives reported that they considered earnings as one of the most important performance measures they report to various stakeholders.[4]

No found research has been done on how earnings per share and dividends per share influence and explain the immense stock price increases that have been seen in tenbaggers in the Nordic region during the last ten years. This essay will thus quantitatively, through multiple linear regressions models, examine if the sample of Nordic tenbagger-company's share price movements can to any degree be explained by the development in their earnings per share and dividends per share. In order to explore if the influence of earnings per share and dividends per share are in accordance with or opposite to previous research in the field of fundamentals effects on share price movements.

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[3]Chaplinsky. S. Robert S. (2008). *The Dividend Discount Model. {online}*

[4]Graham. J., Campbell Harvey, Shiva Rajgopal. (2004). The Economic Implications of Corporate Financial Reporting. *Journal of Accounting and Economics*. Vol 40. Issue 1-3, 3-73. {online}

1.2 Problem Description

The subject of how financial fundamental factors influence and impact share prices has been researched in countless papers throughout the years. Among these, Ross, Westerfield and Jordan, argue in their paper from 2010 that financial performance is the optimal way to evaluate share prices, which is argued by many others as well.[5] With that said, there are many ways to measure and observe financial performance, with two of the most commonly used and popular fundamental factors being earnings and dividends. The influence and relation of a company's earnings on share prices has been established as positive in numerous papers, while the views and theories on the influence of dividends on prices, is significantly more fragmented.

This is the background to the interest of quantitatively examining how earnings per share and dividends per share has influenced the share price movements of Nordic tenbaggers during the last ten year time period. There have been several previous studies that have done similar work but there are no previous studies on the kind of sample that this thesis observes. The sample in this study is made up of 46 of the highest performing stocks, measured through share price increases, in the Nordic region. This is thus a sample that naturally differs from the average listed companies in the same region and because of this, the study is unique and of interest for both investors and for academic reasons. This study examines if tenbaggers' share price increase can be explained by the same factors in the same magnitude as has been observed on the broader stock market, which is what previous literature has been focused on.

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[5]Ross. A S. & Westerfield, W. and Jordan, D. (2010). *Fundamentals of corporate finance.* 9th Edition. The McGraw-Hill Companies.

With background to earlier studies and theories in the field, the expected results of this research is that the impact of earnings per share and dividends per share both could turn out to be positive, meaning that a higher earnings per share or dividend per share will imply higher share prices in the sampled companies. This would be in line with several previous researches and theories such as the paper "*Performance Metrics and Their Link to Value*" and the Gordon Growth Model, in regards to how both earnings per share and dividend per share are affecting valuations and share prices.[6]

However since this thesis focuses on tenbaggers there might be some differences compared to the previous studies. As the chosen sample of tenbaggers is found to be dominated by sectors that have been fast growing with high valuations compared to the benchmark broad market, then these things could argue to the fact that dividend per share is less relevant for these companies. Since they are growing fast they have a better opportunity to reinvest their earnings and with higher valuations their dividend yield will be lower. Furthermore, The Wall Street Journal reported in 2020 that recently, companies with no profitability, meaning negative earnings per share, have become a larger share of the total amount of publicly listed companies and in many cases experienced immense share price increases.

This could potentially point towards an irrelevance of profitability and positive earnings per share in share price increases in the modern stock market.[7] The fragmented view on the relevance of dividends per share and the increase of share prices that rise in non profitable companies opens up for the results of this study being of interest and potentially quite different from previous studies.

[6]Farient Advisors (2013) *Farient Study – Performance Metrics and Their Link to Value*. {online} ; Chaplinsky. S. Robert S. (2008). *The Dividend Discount Model. {online}*

[7]The Wall Street Journal. (2021). *Money-Losing Companies Mushroom Even as Stocks Hit New Highs*

1.2.1 Research Questions

The thesis is based on the following two main research questions.

- Does EPS influence and explain the share price movements of Nordic tenbaggers?

- Does DPS influence and explain the share price movements of Nordic tenbaggers?

1.2.2 Limitations

The thesis will only include companies on the nordic stock exchanges whose share prices have increased over 900 percent during the last ten years, making them tenbaggers, and thus representing a sample of interest that has not previously been used in research of earnings per share and dividends per shares influence in share price movements. Furthermore, a company has to have been publicly listed and traded on a nordic stock exchange during all of the last ten years, which creates a balanced data set, reduces risk of errors in the research method and makes sure that all of the data can reliably be collected. The thesis will thus be restricted to only include publicly traded companies from Sweden, Norway, Finland, Denmark and Island. The chosen time period for the study is 10 years and the data for each company is collected yearly, making the sample large enough for statistical significance and reflecting the long term to clear from short term fluctuations in both the fundamental factors and stock prices.

1.3 Aim

The aim of this thesis is to examine what influence earnings per share and dividend per share has had on stock prices in the sample of Nordic tenbaggers during 2011 to 2020. Furthermore, the aim is to investigate which factor of earnings per share and dividend per share that has been the most relevant when it comes to explaining these long term stock price appreciations in the Nordic tenbaggers. The results, discussion and conclusion of the thesis will help to improve knowledge in what driving forces that lie behind and to an extent explains the extreme share price increases that have been generated by the Nordic tenbaggers.

The long term relationship between the popular financial variables earnings per share, dividends per share and share prices in the unique sample of Nordic tenbaggers can be information of interest to many stakeholders, in their decisions on what financial metric that they should deem relevant and focus on.

By looking at Nordic tenbaggers this thesis examines the impact and influence of earnings per share and dividend per share on stock prices in a new geographical area and on a certain set of stocks that have been among the highest performers. Because of this, it should be of interest for stakeholders of all sorts to know if the same results that the previous literature has presented also hold true for tenbaggers. Since this study combines a new geographical area and a new kind of sample, this study aims to bring something new to the table that has an originality value.

1.4 Thesis Structure

The thesis is structured as follows. In the second chapter relevant theories and previous literature are introduced and discussed. In the third chapter choice of method and the data is presented. The study's sample and its geographical and sector distributions are also showcased. In the fourth chapter the study's results are presented together with it's descriptive statistics and a correlation matrix. In the fifth chapter the implications of results are discussed together with a critical discussion of the method and potential problems with the results. Lastly, the sixth chapter consists of a conclusion of the thesis.

2. Theoretical Framework and Literature Review

In the second chapter we introduce relevant theories, a literature review of previous literature and a presentation of the multiple linear regression model. Finally we present the study's hypotheses, which are based on the previous literature and theories.

The study relies on relevant theoretical frameworks within the subject of interest and use of a quantitative method through a regression analysis. Furthermore, the study is based on and created as an addition to previous academic research that examines how underlying fundamental factors influence and affect share prices in publicly traded companies. Literature of similar conducted studies has been read and critically reviewed, of which the results are presented below.

2.1 Earnings Per Share

Earnings per share refers to the profit per unit of a single share in a company. It is calculated by dividing the net income for a certain period with the number of common shares outstanding during the same period.

EPS = Net income / Number of shares outstanding

Previous research in the study "*Performance Metrics and Their Link to Value*", made on a total of 1 800 companies in 24 different industry groups and with data between 1998 to 2011, indicated that both revenue growth and earnings per share growth are financial metrics that have a positive impact on the total stock return of companies. Besides concluding that earnings growth had the greatest impact on total share performance in the chosen sample of companies, the study also showcased that earnings growth was the most popular financial metric. Furthermore, the study noticed and pointed out a difference in share performance and their correlation to financial metrics between different cycles, growth in revenue was clearly

the strongest correlated factor with total stock return in growth cycles, but in recessionary periods, cash flows and return ratios were the stronger correlated metrics.[8]

In another study with the title "*An empirical study of the relationship between stock price and earnings per share in panel data: Korea case*", made by Keun-Yeob Oh , Bonghan Kim and Honkee Kim, they examined the relationship between earnings per share and stock prices using data from companies on the korean stock exchange. A part of the paper that performed an analysis using panel data showed that there existed a positive relationship between earnings per share and share prices. In the chosen sample of companies on the korean stock exchange, share prices seemed to move with firm fundamentals such as earnings per share in the long run on average but the movements between the variables were concluded to not necessarily be on the same rate and simultaneously in time.[9]

Furthermore, the previous study "*Investigating the Relationship between Earnings and Stock Prices in Companies Accepted in the Stock Exchange: A Case Study in Iran (2000-2010)*", made by Vahid Shabani, Seyed Mojtaba Mir Aghaei and Vahideh Shabani, was aimed to investigate the relationship between both earnings per share and predicted earnings with share prices in its chosen sample of companies. It also examined if there existed any possible relationship between earnings per share and dividends per share.This was done on all publicly traded companies on the Iranian stock exchange in the time period of 2000 to 2010. A regression analysis and correlation analysis was developed and the results showed that there existed a relation between earnings per share and share prices in companies on the stock exchange in Iran. The relationship between earnings per share and share prices was positive

[8]Farient Advisors (2013) *Farient Study – Performance Metrics and Their Link to Value*. {online}

[9]Keun-Yeob Oh , Bonghan Kim & Honkee Kim. (2009) An empirical study of the relation between stock price and EPS in panel data: Korea case. *Applied Economics* 38 2361-2369. {online}

and the results also indicated that there appeared to exist a relation between earnings per share and dividends per share in these companies. [10]

In addition to the research of earnings per share and its relation to share prices and firm values, where several of the above mentioned previous studies in different samples have indicated positive relationships, earnings per share is also widely observed as one of the most used and important financial metrics. In the study "*The Economic Implications of Corporate Financial Reporting*", made by Graham, Harvey and Rajgopal, they conclude in their sample of 400 financial executives in the USA, that earnings per share is considered as the most important performance measure that they report to various stakeholders. The managers believed that missing on earnings in a financial report, or reporting very volatile earnings throughout the years is something that affects their companies share price negatively.[11]

2.2 Dividends Per Share

Dividends per share refers to the total dividend paid out to shareholders per unit of shares. It is calculated by dividing the annual amount of dividends paid out by a company to its shareholders with the total number of common outstanding shares during that same period.

DPS = Annual dividend / Number of outstanding shares

2.2.1 Dividend Relevance and Irrelevance

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[10]Shabani. V. S Mojtaba Mir Aghaei, V Shabani. (2013). Investigating the Relationship between Earnings and Stock Prices in Companies Accepted in the Stock Exchange: A Case Study in Iran.

[11]Graham. J., Campbell Harvey, Shiva Rajgopal. (2004). The Economic Implications of Corporate Financial Reporting. *Journal of Accounting and Economics*. Vol 40. Issue 1-3, 3-73. {online}

The relevance of dividend per share is not as clear as for earnings per share, there exists previous theories and research that implies investors' irrelevance to dividends per share and how it does not affect share prices or company valuations. The capital structure irrelevance principle, created by Miller and Modigliani in 1962 is an economic theory which states that how a firm chooses to allocate its earnings, in the form of dividends or reinvestments, is not of relevance to the investors or to the valuation of the firm. The company's ability to generate earnings and risk of investment are the determining factors of its value according to the principle, not how the earnings are distributed. Investors are considered indifferent to whether their gains come from share price increases or dividends and their total gain is thus deemed not to differ if the company has decided to pay dividends or not.[12]

On the dividend relevance side of the research, dividends is the basis and key factor of pricing and analysing share prices in the classic Gordon Growth Model which is a variant of the Dividend Discount Model. The Dividend Discount Model is implemented in practice in many different ways, but in its core it bases the pricing of shares and their performance on the fact that future cash flows from a company which investors receive are coming in the form of cash dividends. The value of a company is a function of the future cash flows received by dividend cash payouts. This model is a core classical model used by market participants when trying to value stocks and examine their prices and thus speaks to the relevance of the factor dividends.[13]

In the research thesis "*What Drives Stock Prices? Identifying the Determinants of Stock Price Movements*", made by the authors Nathan S. Balke and Mark E. Wohar, they conclude among other things that share prices are sensitive and to a certain degree dependent on changes in the real expectations of dividend growth and future payments of dividend.[14] In another study,

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[12]Merton. M H., F Modigliani. (1961) Dividend Policy Growth and the Valuation of Shares. *The Journal of Business*. Vol XXXIV No.4 {online}

[13]Chaplinsky. S. Robert S. (2008). *The Dividend Discount Model. {online}*

[14]Balke. N. S and M. E Wohar (2006). What Drives Stock Prices? Identifying the Determinants of Stock Price Movements. Southern Economic Journal, 73, 55.78. {online}

"Dividend payment affect on stock prices: a panel regression analysis on BIST30 equities", made by Ersin Açıkgöz and Mehmet Pekkaya, they conduct a regression analysis to research if there is any relationship between dividend payouts, retained earnings and changes in share prices. It was done via a panel regression analysis on the stocks in the BIST30 index in Turkey and the results showed that dividend payouts did not have any effect on the market value of the shares in the BIST30. The authors argue that the result of no effect from dividend payouts on share price is in line with the irrelevance theory of Miller and Modigliani and also evidence of the residual dividend theory, which advocates less dividend payments from companies, and that investors are irrelevant to if they receive their returns from a company's dividends or capital gains.[15]

Lastly, a significant positive relationship between both earnings per share and dividends per share on share prices, was found in the research *"Impact of EPS and DPS on stock price: A Study of selected public sector banks of India"*, made by Nandan Velankar. The research was done through a regression analysis of companies in the banking sector in India during the years of 2006 to 2014.[16]

2.3 Total Assets

The size of a company is a relevant fundamental factor which has to be controlled in the quantitative model to enhance the quality in the results and aim of evaluating the earnings per share and dividends per share influence on share prices. A firm's total assets are one of the most common and used ways to determine a firm's size in accordance with the research done in *"Measuring Firm Size in Empirical Corporate Finance"*, made by Chongyu Dang and

[15]Acikgöz. E and Pekkaya. M. (2016) Dividend Payment Affect On Stock Prices: A Panel Regression Analysis On Bist30 Equities. *International Journal of Management Economics and Business*, ICAFR 16 Special Issue. {online}

[16]Velankar. N. Chandani. .A. Ahuja. A k. (2017). Impact of EPS and DPS on Stock Price: A Case Study of Selected Public Sector Banks in India. *Prestige International Journal Management and IT-Sanchayan*. Vol 6 (1), 2017 {online}.

Frank Li. They assess that there are many ways used to determine a company's size, but one of those are total assets and in a collection of previous studies they find that more than half of the papers which include firm size, use total assets as their way of measuring firm size.[17]

In the research paper "*Asset growth and the cross-section of stock returns*", made by Michael J.Cooper, Huseyin Gulen and Michal J.Schill, they examine how growth in a company's assets can be a significant predictor of the cross section of returns in US shares. They conduct a regression analysis and the test variable they use is the year on year change in companies total assets. The conclusion is that the change in yearly total assets in the sampled companies in the USA has a significant predictive ability on future abnormal share returns.[18]

2.4 Debt To Equity Ratio

The debt of a company is another relevant fundamental factor to control for in this quantitative research, the debt to equity ratio refers to the long term debt a company has divided by its total equity. This ratio is often used to assess and analyze the relative amount of leverage in a company and its financial health. Debt to equity is described in "*Corporate Finance Third Edition*", made by Berk and Demarzo, as a very common leverage ratio.[19]

DE = Total long term debt / Total equity

In the study "*Impact of capital structure on stock prices: evidence from Oman*", made by Udayakumari Menon, the research found an inverse relationship between debt and share prices. The research was done on 113 companies on the Muscat Securities Market between 2008 to 2015. Relationships between capital structure, more precisely, the amount and the

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[17]Dang. C D. F Li. (2015). *Measuring Firm Size in Empirical Corporate Finance. Journal of Banking and Finance. {online}*

[18]Cooper. M J.H Gulen, M J. Schill. (2007) Asset Growth and the Cross-Section of Stock Returns. Journal of Finance. Vol LXIII, No. 4. {online}

[19]Berk. J. DeMarzo. P(2013) *Corporate Finance*. 3rd Edition. Stanford University.

ratio of debt, was shown to have a significant effect on share prices in the chosen companies during the time period. The results of the study inclined that adding debt has on average a negative effect on a companies share price, which is in tandem with theories that investors have a negative perception towards more debt.[20]

2.5 Regression Analysis

2.5.1 Assumptions and Potential Problems

This thesis conducts multiple linear regressions in order to answer the stated research questions. The theoretical reasoning behind using a multiple linear regression is that it creates an understanding of the relationship between the chosen dependent variable and multiple variables of interest. There are certain assumptions behind the regression analysis that have to hold for the results to be of quality and to ensure that the conclusions drawn from the regressions are reliable. The model has to be linear, include no endogenous variables, be homoscedastic and have no existence of autocorrelation or multicorrelarity which would result in unreliable outputs.[21]

As this thesis is dealing with relations between share prices and financial data, several possible errors in the regression analysis have to be taken into account, so that the assumptions are not violated. The variables of interest are not allowed to have a too high pairwise correlation, indicating multicollinearity. Furthermore, heteroscedasticity, which is when the residuals do not fulfill the constant variance assumption, and autocorrelation which is when the errors in the model are correlated over time, can occur and have to be accounted for. Lastly, the problem when independent variables explain parts of the error term, called endogeneity, is also a frequent problem.[22]

[20]Menon. U. (2016) Impact of Capital Structure on Stock Prices: Evidence from Oman. International Journal of Economics and Finance, 8(9):249. {online}

[21] Körner. S. Wahlgren. L. (2015). *Statistisk Dataanalys.* 5th Edition. Studentlitteratur.

[22] Körner. S. Wahlgren. L. (2015). *Statistisk Dataanalys.* 5th Edition. Studentlitteratur.

The mentioned critical possible errors, their relevance in this research and potential effect on the results is further discussed in the critical discussion of the results part. The method part also showcases why certain methods such as robust clustered standard errors are used to parry some of these problems.

2.5.2 Hypothesis Testing and P-value

Hypothesis testing is a method of statistical inference where one generally states a zero hypothesis, which later is rejected or failed to be rejected with the aim of determining if an effect is present or not in the sample. When wanting to find out if an effect is present, the null hypothesis that states that no effect will be seen, has to be rejected. A potential rejection of the null hypothesis can be done through observing p-values. With smaller p-values the chance of finding significance in the data is higher and the chance of rejecting the null hypothesis increases, a standard level to compare the p-value to in statistical analysis is 5 percent, with a p-value lower than 5 percent the null hypothesis can be rejected. [23]

2.6 Hypotheses

The thesis tests two null hypotheses which are developed with background to the findings of previous literature and the expected results that have been thoroughly discussed in the problem description. Referring back to some key previous theories and research findings, earnings per share has comprehensively been found to have a positive relation with share prices in studies on samples in other geographical areas and with other characteristics such as in "*Performance Metrics and Their Link to Value*".[24] While the view on the relevance of dividends is mostly fragmented between irrelevance theories such as the one created by

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[23]Gujarati D N. (2003). *Basic Econometrics, Fourth Edition*. United States Military Academy, West Point.

[24] Farient Advisors (2013) *Farient Study – Performance Metrics and Their Link to Value*. {online} ; Chaplinsky. S. Robert S. (2008). *The Dividend Discount Model. {online}*

Modigliani and Miller and theories pointing towards dividends relevance such as the Gordon Growth Model for valuations.[25] Although the expectations in this study is that both earnings per share and dividends per share are positively related to share prices, the unique sample of tenbaggers and findings on foremost dividends being irrelevant in other studies, among those, the panel data regression made by Ersin Açıkgöz and Mehmet Pekkaya, opens up for different results.[26]

To lay a basis to the answering of this thesis research questions, the following two null hypotheses are tested, with their respective alternative hypotheses outlined as well. The outcome of the hypothesis testing and potential rejections of the null hypotheses forms the basis of the discussion of this work's differences or similarities to the expected results and findings in previous research.

First hypothesis:

H0: There is *no* influence of earnings per share on share prices

HA: There is *an* influence of earnings per share on share prices

Second hypothesis:

H0: There is *no* influence of dividends per share on share prices

HA:There is *an* influence of dividends per share on share prices

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[25] Chaplinsky. S. Robert S. (2008). *The Dividend Discount Model. {online};* Merton. M H., F Modigliani. (1961) Dividend Policy Growth and the Valuation of Shares. *The Journal of Business*. Vol XXXIV No.4 {online}

[26] Acikgöz. E and Pekkaya. M. (2016) Dividend Payment Affect On Stock Prices: A Panel Regression Analysis On Bist30 Equities. *International Journal of Management Economics and Business*, ICAFR 16 Special Issue. {online}

3. Methodology

In the third chapter the method of choice, and the data collection process are introduced. The sample with its distributions and the different variables are also presented. Finally the multiple linear regression models are shown.

3.1 Method Of Choice

This thesis is quantitatively conducted and the chosen method is to use multiple linear regressions, since these will assess the relationship between the dependent variable and the variables of interest. The choice of method is dependent on what type of research that is being performed. Since this paper has its goal of finding significant relationships within a large sample of financial data, the quantitative method of using linear regression analysis is deemed an appropriate fit. As the modeled tests have been performed, the regressions will provide values to analyze, interpret and use in potential rejections of the papers hypotheses and as a basis for answering the thesis research questions. The analysis includes more than one variable of interest, and a necessary control matrix for correlation between the variables is thus presented. Furthermore, the statistical significance of the results is tested through a two tailed test.[27]

The regression models can not, for obvious reasons, include every possible variable that could have impacted the share price movements in the selected sample of tenbaggers during the ten year time period, as it requires extended time and more available data. Nor can every factor that can be imagined to affect prices be quantified and used in a regression. The complete model is as comprehensive as possible given the stated restrictions and includes factors that with background of previous research are of interest and considered of relevance. To evaluate how comprehensive a regression model is, the r-squared value from the regression is examined since it shows how much of the variance in the outcome variable that

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[27]Bryman, A. & Bell, E. (2011) *Business Research Methods*, 3rd Edition. Oxford University Press at University of Oxford

can be explained by the model. A model with an r-squared value lower than 0,5 is in general seen as having a low or even no explanation power. With a r-squared between 0,5 and 0,7, the model is considered to have a moderate explanatory power and with a r-squared above 0,7, the explanatory power is generally considered strong.[28]

3.2 Data Collection

The data collection is done with the use of S&P Capital IQ and Morningstar. The process of collecting the relevant data starts with a screening of the chosen sample, Nordic shares that have been publicly listed during 2011-2020 and that have generated at least 900 percent in share price increases. The sample is thus limited to only include data from companies that have become tenbaggers and who have been publicly traded on a Nordic stock exchange during all of the last ten years. Every company that does not fit the required limitation has been excluded. The sample consists of companies from Sweden, Norway, Denmark and Finland, but no company from Iceland has been included as the country had no shares that met the requirements. The sectors of which the companies belong to are also included and the framework used to identify the sector of a company was taken from Morningstar's statistics. The included sectors are tech, real estate, industry, healthcare, finance, energy, consumer, commodities and communication.

With a determined sample of companies, yearly financial data of each chosen variable in the model is collected with the use of company data from S&P Capital IQ. This, combined with sector and country information is the data that will be used in the quantitative analysis. Since the information is collected for each variable repeatedly over the ten year time period, panel data is used, and the total amount of observations sums up to 460.

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[28]Moore. D S. W I Notz, M Fligner. (2018). *The Basic Practice of Statistics*, 8th Edition. 2018. Macmillian International Higher Education.

3.2.1 Winsorizing

In order to achieve a higher quality result winsorizing is used to deal with outliers within the data. Winsorizing diminishes the effect of extreme values, they are kept in the sample but numerically capped to create an improved distribution.[29] Winsor2 is used in Stata in order to deal with and adapt the outliers that were below the 1st percentile and above the 99th percentile. One should bear in mind that our entire sample can be viewed as an outlier compared to the broad stock market, and the data naturally has a broad distribution with large differences between min and max values, so winsorizing is used to improve the quality of the presented results.

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[29]Mayerhofer. L W. (2020). *Winsorizing and Trimming.* Internet Guide to Stata. {online}
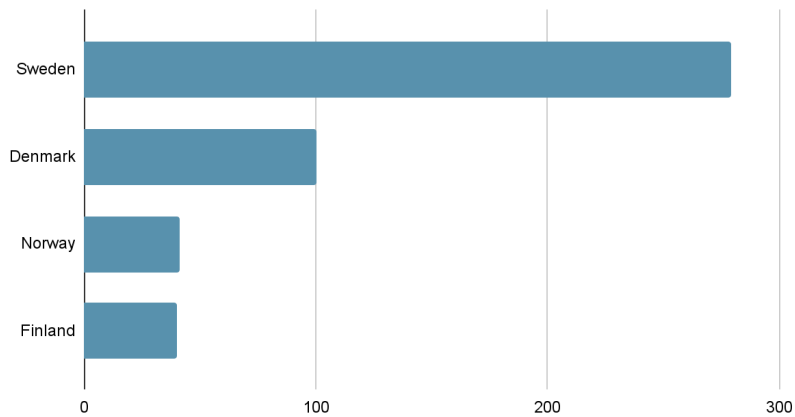
3.3 Sample

The following is the collected sample of nordic shares that have been publicly listed during the last ten years and become tenbaggers by generating a share price increase of at least 900 percent during the period. This is the sample of which the financial data is collected and the quantitative regression analysis is conducted on.

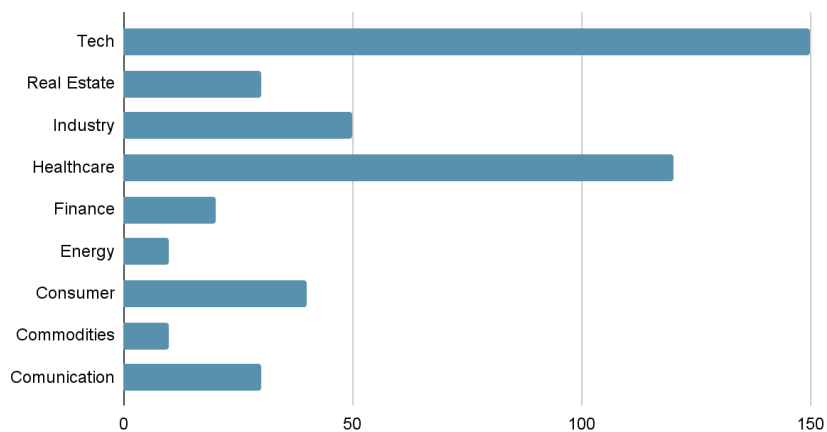|	
Ambu	Hansa Biopharma
Bahnhof	HMS Networks
Bakkafrost	Invisio
Biotage	Kopparbergs
Bittium	Lagercrantz
Boreo	MedCap
Bouvet	Medistim
Brdr. A&O Johansen	Mycronic
Bredband2	Neste
Cbrain	NIBE
Cellavision	Nolato
Chemometec	Nordic Semiconductor
Contextvision	Philly Shipyard
Enlabs	Probi
eQ Oyj	Revenio
Fast Balder	RTX
Fingerprint Cards	Sagax A
Fortnox	Sectra
G5 Entertainment	SP Group
Genesis IT	Stendörren
Genmab	Vitec Software
GN Store Nord	Vitrolife
Wirtek	Zinzino

The tables below show the country and sector distribution within the 460 observations of the sample to give a more comprehensive insight into the origin of the data in the thesis. The country distribution is heavily dominated by Sweden, where a total of 61 percent of the companies are listed.

Country Distribution

In the sector distribution, tech and healthcare are dominant as they stand for 32,6 percent and 26,1 percent of the sample. The tech and healthcare sectors are also reported to, according to historical data from Aswath Damodaran, professor at New York University Stern School of Business, have historically experienced a higher compounded growth rate in net income compared to the broad market.[30]

Sector Distribution

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[30]Damodaran. A. (2021). *Historical (Compounded Annually) Growth Rates by Sector.* New York University Stern School of Business (NYU Stern School of Business)

3.4 Variables

3.4.1 Dependent Variable

The dependent variable of this quantitative research is share price, denominated as SP in the regression model. Share price is thus the variable of which the thesis measures if there exists a significant influence of the variables of interest on. Furthermore, share price is also the basis of the sampled Nordic companies who have become tenbaggers and are of interest to the research.

Share prices are deemed relevant as the dependent variable as this study is fully focused on tenbaggers and they are determined entirely by the development in share prices during the chosen time frame. Furthermore, share prices have also been previously used as the dependent variable in quantitative research conducted in previous studies such as "*Dividend Payment Affect On Stock Prices: A Panel Regression Analysis On Bist30 Equities*", written by Acikgöz. E and Pekkaya. M.[31]

3.4.2 Variables Of Interest

Earnings per share and dividends per share are the two chosen variables of interest, as both of these metrics have been subjects of previous research in how financial performance and certain factors influence share prices. The influence of earnings per share is of interest in the sample of Nordic tenbaggers as earnings per share is considered one of the most important and popular financial metrics. In many studies, including, "*An empirical study of the relation between stock price and EPS in panel data: Korea case*" and "*Farient Study – Performance*

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[31]Acikgöz. E and Pekkaya. M. (2016) Dividend Payment Affect On Stock Prices: A Panel Regression Analysis On Bist30 Equities. *International Journal of Management Economics and Business*, ICAFR 16 Special Issue.

Metrics and Their Link to Value", the authors conclude in different samples that earnings per share is positively related to share prices.[32]

The dividends per share influence on Nordic tenbaggers is of interest to examine as the views on its importance in valuations and share price movements is split. As described in the theoretical part of the thesis, theories from Modigliani and Miller argue for the irrelevance of dividends, while the Gordon Growth model includes dividends as its basis of stock valuations and the regression results from Nandan Velankar suggest that dividends is positively influencing share prices.[33] The different views on dividends relevance that have been concluded in this section and the review of previous literature, together with the overall researched view regarding a positive influence from earnings per share makes these two variables of interest relevant and of interest to examine in the unique sample of Nordic tenbaggers.

3.4.3 Control Variables and Fixed Effects

To enhance and improve the results of the model, control variables are implemented since there exists other factors besides the variables of interest, earnings per share and dividends per share, that can affect share prices. When these factors are controlled for, the bias of the estimation decreases and the results become more reliable. Company size in the form of total assets and debt in the form of debt to equity ratio are the two chosen control variables. These are frequently used in this field of research and deemed to have an effect on share prices in the papers "*Asset growth and the cross-section of stock returns*" as well as "*Impact of capital*

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[32]Farient Advisors (2013) *Farient Study – Performance Metrics and Their Link to Value*. {online}; Keun-Yeob Oh , Bonghan Kim & Honkee Kim. (2009) An empirical study of the relation between stock price and EPS in panel data: Korea case. *Applied Economics* 38 2361-2369. {online}

[33] Merton. M H., F Modigliani. (1961) Dividend Policy Growth and the Valuation of Shares. *The Journal of Business*. Vol XXXIV No.4 {online};Chaplinsky. S. Robert S. (2008). *The Dividend Discount Model. {online};* Velankar. N. Chandani. .A. Ahuja. A k. (2017). Impact of EPS and DPS on Stock Price: A Case Study of Selected Public Sector Banks in India. *Prestige International Journal Management and IT-Sanchayan*. Vol 6 (1), 2017 {online}

structure on stock prices: evidence from Oman". The natural logarithmic of total assets is used in this thesis, as it is normally used in previous research.[34]

A set of fixed effects is also included in the study to further cope with the possible problem of omitted variable bias. These are sector, country, company and year fixed effects. This will control for the fact that for example different sector and country belongings for a company may have impacted its share price movements during the thesis ten year time period in different ways.

Summarizing table of the models dependent variable, variables of interest and control variables.

Variable	Denomination in the model	Description
Share price	SP	The yearly market share price as the dependent variable
Earnings per share	EPS	Variable of interest derived as: net income / number of shares outstanding
Dividends per share	DP	Variable of interest derived as: annual dividend / number of shares outstanding
Total assets	LogTA	Control variable total assets. Used with logarithmic values to control for company size.
Debt to equity ratio	DEratio	Control variable debt to equity ratio. To control for the ratio of debt.

[34] Cooper. M J.H Gulen, M J. Schill. (2007) Asset Growth and the Cross-Section of Stock Returns. Journal of Finance. Vol LXIII, No. 4. {online}; Menon. U. (2016) Impact of Capital Structure on Stock Prices: Evidence from Oman. International Journal of Economics and Finance, 8(9):249. {online}

3.5 Multiple Linear Regression Models

A main regression model including all the chosen variables and fixed effects is created as the basis of answering the thesis research question. To enable a deeper insight into the explanatory power of each variable and to further test the quality of the model, three more simpler models have also been created. A total of four models are conducted and they are outlined below. All models use share price as their dependent variable, model 3 is the main, most comprehensive model, which includes all variables that have been found of interest and relevance to the study.

(1) SP= β0 +β1(EPS) + β2(LogTA) + β3(DEratio) + βi(Fixed effects) + ε

(2) SP= β0 + β1(DPS) + β2(LogTA) + β3(DEratio) + βi(Fixed effects) + ε

(3) SP= β0 +β1(EPS) + β2(DPS) + β3(LogTA) + β4(DEratio) + βi(Fixed effects) + ε

(4) SP= β0 +β1(EPS) + β2(DPS) + ε

- Model 1 includes earnings per share, all control variables and fixed effects.
- Model 2 includes dividends per share, all control variables and fixed effects.
- Model 3 is the complete model with both variables of interest, all control variables and fixed effects.
- Model 4 includes both variables of interest but the control variables and fixed effects are excluded.

The models use clustered robust standard errors since these regressions deal with panel data and there could be a risk that the observations in the studies sample are not independent of each other. The clustering is done on firm level to parry the risk of the model having idiosyncratic errors that are heteroscedastic or autocorrelated. Furthermore, to check if there could be any alarming degree of correlation between the variables, a correlation matrix is created to ensure that there is no risk that multicollinearity diminishes the quality of the regression.

4. Results

In the fourth chapter the study's results are presented together with a table of descriptive statistics and a correlation matrix. Finally the study's hypotheses are answered based on the regression outputs.

4.1 Descriptive Statistics

Descriptive statistics table.

Variable	Obs	Mean	Std. Dev.	Min	Max
SP	460	111.14	219.598	.17	2463
EPS	460	4.346	8.182	-6.47	48.2
DPS	460	1.096	2.323	0	14
TA	460	3900.871	11699.583	3.8	92623
DEratio	460	.34	.493	0	2.144

The descriptive statistics highlights key information of the dependent variable, variables of interest and control variables used in the regression models. Each variable has 460 (46 companies over a time series of 10 years) observations and their individual means, standard deviations, minimum- and maximum statistics are displayed.

4.2 Correlation Matrix

Pairwise correlations between the variables.

Variables	(1)	(2)	(3)	(4)	(5)
(1) SP	1.000				
(2) EPS	0.666	1.000			
	(0.000)				
(3) DPS	0.280	0.498	1.000		
	(0.000)	(0.000)			
(4) LogTA	0.406	0.506	0.242	1.000	
	(0.000)	(0.000)	(0.000)		
(5) DEratio	0.054	0.290	0.015	0.518	1.000
	(0.246)	(0.000)	(0.749)	(0.000)	

P-values are in parentheses and significance is measured on a 5 percent level.

The correlation matrix shows the pairwise level of correlation between the dependent variable, both of the variables interest and all the control variables, with significance levels included in parentheses. There is a significant correlation of 0,67 between the dependent variable share price and variable of interest earnings per share, whilst the significant correlation between share price and dividends per share is 0,28. Furthermore, the correlation matrix shows a correlation between share price and the control variable LogTa of 0,41, while the correlation between share price and DEratio amounted to 0,05, although it is insignificant as the p-value is higher than the significance level.

The correlation between the variables of interest earnings per share and dividends per share is 49,8 percent, it is significant and showcases a moderate relationship in the movements between the two variables of interest in the sampled tenbaggers. An existing relationship between these variables was also found in the previously mentioned research "*Investigating the Relationship between Earnings and Stock Prices in Companies Accepted in the Stock Exchange: A Case Study in Iran (2000-2010)*". [35] Lastly, the correlation between the control variables LogTA and DEratio is 0,52, showing that there also exists a relationship between these two variables.

The typical cutoff level for correlations between variables, as a rule of thumb, are 0,8 or -0,8, which are considered the limits where concerns of multicollinearity arise, with a degree of correlation that can seriously affect the quality of the model.[36]

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[35]Shabani. V. S Mojtaba Mir Aghaei, V Shabani. (2013). Investigating the Relationship between Earnings and Stock Prices in Companies Accepted in the Stock Exchange: A Case Study in Iran. *European Online Journal of Natural and Social Sciences.*

[36]Gujarati D N. (2003). *Basic Econometrics, Fourth Edition*. United States Military Academy, West Point.

4.3 Multiple Linear Regression Results

Multiple linear regression outputs.

Model number -	(1)	(2)	(3)	(4)
	SP	SP	SP	SP
EPS	20.16***	-	21.76***	22.572***
	(6.968)	-	(7.536)	(7.134)
DPS	-	12.868**	-14.024	-6.795
	-	(6.366)	(26.344)	(12.167)
LogTA	14.757	41.496	10.399	-
	(27.315)	(33.889)	(26.344)	-
DEratio	-14.264	-13.303	-11.289	-
	(25.812)	(27.047)	(24.742)	-
Observations	460	460	460	460
R^2	0.5403	0.2880	0.5504	0.4634

All regressions use robust standard errors clustered on firm level. The standard errors are reported in parentheses.*,** and *** show the significance, through a two tailed p-test, at 10 percent, 5 percent and 1 percent respectively. The control variables are LogTA and DEratio and the fixed effects are on Company, Year, Sector and Country.

Model 1 reports the output with EPS, control variables and fixed effects, while model 2 reports the output with DPS, control variables and fixed effects. Model 3 reports the output from the main complete model, with all variables included. Model 4 reports the output with only EPS and DPS included, no control variable or fixed effects.

In the regression output, the main complete model 3 with all variables included displays both significant and insignificant results regarding the influence of the variables of interest on the dependent variable. An r-squared value of 0,55 was obtained, which means that the model manages to explain 55 percent of the variance in share prices for the Nordic tenbaggers during the time period between 2011 to 2020.

When the control variables and fixed effects were removed from the complete model, the output from model 4 shows an r-squared of 0,46, which implies that 46 percent of the variance in share prices could be explained by this model. Furthermore, model 1 which was conducted with earnings per share as the sole variable of interest, also including control variables and fixed effects, has an r-squared value of 0,54. While model 2 with dividends per share as the sole variable of interest and all control variables and fixed effects included, showcases an r-squared value of 0,29.

The results further showcase that earnings per share has a significant positive coefficient, in the main model as well as in all of the others it is included in. The second variable of interest dividend per share has somewhat fragmented results, in the most comprehensive main model, number 3, it has a negative coefficient and is insignificant on all levels between 1 to 10 percent. This is the case in model 4 as well, while it is significant and has a positive coefficient in model 2.

4.3.1 First Hypothesis

As can be derived from the multiple linear regression outputs table, the variable of interest earnings per share has a positive coefficient which is significant on all of the tested levels between 1 percent to 10 percent in the most comprehensive model 3. Furthermore, the coefficient is positive and significant at all levels in model 1 and 4 as well. As its p-value is lower than the significance levels in all of the models that this variable of interest is included in, this leads to a rejection of the first null hypothesis in all of these models, implying that earnings per share has had an influence on share prices.

4.3.2 Second Hypothesis

The variable of interest dividends per share has a positive coefficient which is significant on the 10 and 5 percent levels in model 2, where earnings per share is excluded. The second zero hypothesis can thus, when tested on a significance level of 5 percent be rejected in this model. This would imply that dividends per share has had a positive influence on share prices.

Although, as the paper has previously elaborated, share price is a complex dependent variable with endless factors that can affect its movements, and in model 3 with all of the relevant variables included, the most comprehensive model, dividends per share is not significant at any of the tested levels anymore. The second null hypothesis can thus not be rejected in the most comprehensive model, implying that the variable of interest dividends per share has not had any significant influence on share prices. Similar results for the significance of dividends per share are found in model 4, where it is deemed insignificant on all levels and the null hypothesis can not be rejected.

5. Discussion

In the fifth chapter the study's results are discussed and analyzed further. The results are also connected to the previous literature and theories. In the end, a critical discussion of the study's results is included.

The main most comprehensive multiple linear regression model 3, with all variables included has an r-squared value of 0,55. As share prices are very complex measurements with a lot of variables that can affect them, it would be almost impossible to capture, quantify and include all of these in a regression model. This r-squared value is in the range of 0,5 to 0,7, which is generally implying that the model has a moderate explanatory power, achieving a r-squared of this degree with such a complex dependent variable shows that this model is not perfect, but gives more confidence in drawing further conclusions from the output of this regression. Without the fixed effects and the control variables, model 4 shows a r-squared value of 0,46, indicating that the fixed effects and the control variables were appropriate to include since they increased the explanatory power of the model and their relevance towards share price movements is thus in line with previous research, although including even more variables of relevance would potentially have been giving an even higher quality to the results. With further regards to the quality of the model, it can be observed that the pairwise correlation between the variables of interest amounted to 49,8 percent, this level indicates that a relationship exists between the two variables, but it is significantly lower than the rule of thumb level of 80 percent which generally the general threshold of which multicollinearity can be a problem. A significant correlation of 0,52 can be observed between the control variables, these are variables one does not want to correlate too much, as they are independently meant to increase the explanatory power and quality of the model. However, their correlation is also not in the range where worries of multicollinearity arises. Furthermore, a relatively large correlation can be observed between share price and earnings per share, indicating that the movements in these two variables are to a degree related to each other. The correlation between share price and dividends per share was significantly lower, hinting towards the fact that share prices and dividends per share has had a relatively weak relation between them in the sampled tenbaggers.

Without the control variables and fixed effects the only variables were earnings per share and dividend per share, as shown in model 4. In this model dividend per share was not significant, which also was the case in the main model, earnings per share was thus seemingly able to explain a lot of the stock price movements by itself, whilst also being significant on all tested levels. This was further strengthened by the fact that the r-squared value with only using earnings per share as the sole variable of interest was 0,54, whilst the r-squared value with only dividends per share as the sole variable of interest was 0,29. Simply put, earnings per share managed to explain a lot of the variance in the outcome variable share price, while dividends per share seems to have an almost non existing explanatory power in the main model. The clear results of earnings per share being an important factor for explaining long term stock price movements are in line with the previous research. The results are similar to the ones in "*Performance Metrics and Their Link to Value*", in which earnings per share was deemed to positively have impacted stocks during the long term time period of 1998-2011, in a sample of 1 800 companies in different sectors. Regarding the first research question, it can thus from the regression output be determined that earnings per share has had a significant and positive influence on the share price movements in Nordic tenbaggers.

As these results show that a positive development of earnings per share is influential and of importance to the share price movements in Nordic tenbaggers over the long term period of 10 years, it also argues towards an importance of long term profitability. This speaks against the fact that there would exist any longevity in the recently seen market movements where a higher degree of non-profitable companies see their stocks skyrocketing, as mentioned in the problem description with reference to The Wall Street Journal. An interesting explanation to this may be that the market can reward unprofitable companies short term with immense stock price increases, but that in the long term, drawing from the results of this thesis and previous literature, real profitability with increased earnings per share is what creates durable share price developments.

Dividends per share had a positive coefficient and was significant on 10 and 5 percent levels in model 2, where earnings per share was excluded. This result is in line with the expected results of the study and advocates the theories of dividend relevance. However, model 2 had

a r-squared value of 0,29 indicating a low explanatory power and dividends per share was insignificant in all of the other models it was included in, foremost in the most comprehensive model 3 with all other variables included. As previous studies are fragmented in regards of dividends relevance on share prices or not this is an interesting result. Since this study had a sample that consisted of only tenbaggers with a dominant representation in the tech and healthcare sectors, dividends per share being irrelevant, could simply be a factor of the sample characteristics such as fast growing and having higher valuations. Which means that even if they distributed all their earnings back to their shareholders the dividend yield would be quite low. Furthermore, since they are fast growing many of these companies could also choose to reinvest their earnings back into their business. The fact that no statistical linear dependence of dividends per share on share prices could be seen in the main model is counterintuitive in regards to previous models and theories such as the Gordon Growth model, which suggests that dividend is the most important and relevant variable when it comes to valuing companies.

With regards to the second research question of the study, the answer is not as clear as in the first one, although the results point mainly, with background to the complete model which had the greatest explanation power towards share prices, towards concluding that dividends per share has not significantly influenced or explained the share price movements in the Nordic tenbaggers. With background to the fact that the second null hypothesis could not be rejected in the main model. This is in contradiction to the expected results of dividends having a positive and significant relationship with share prices in the tenbaggers and thus also opposite to the results in the previously examined study "*Impact of EPS and DPS on stock price: A Study of selected public sector banks of India*", where dividends was found to impact share prices positively in Indian bank companies. As previous theories and research are fragmented regarding the significance of dividends in this area, the results of this study are also mostly confirming the dividend irrelevance theory originated from Modigliani and Miller and is also in line with the similar panel data regression research made by Ersin Açıkgöz and Mehmet Pekkaya on stocks in the BIST30, where dividends was found not to have any effect on the market value of the sampled companies. The main findings of dividends insignificant influence thus imply that the capital structure and dividends

irrelevance theories argued by Modigliani and Millers seem present in this sample of Nordic tenbaggers. As the theory argues, stakeholders in these stocks, characterized by sectors with high growth levels, are mostly focusing on the generation of earnings, instead of emphasizing whether the earnings are reinvested or paid out in dividends.

This study's results furthermore indicates that financial performance is of importance to share prices to a degree, corresponding to the analyzes of Ross, S, A. & Westerfield, W. and Jordan, D. who state that financial performance is the optimal way to evaluate share prices. Although, it is clear that in this particular sample of Nordic tenbaggers earnings per share is definitely a relevant financial performance metric which has had significant influence on share prices, while dividends per share according to a majority of the results is not. Thus, indicating that different financial metrics can be of different importance and magnitude depending on the sample of companies and their characteristics.

Lastly, an interesting observation in the sector distribution is that there is a skewness towards tech and healthcare compared to the broad Nordic stock market. This seems reasonable given that this is a sector that has in accordance to the referred data from Aswath Damodaran experienced a high historical growth rate and performed well during the studies time series. These sectors characteristics of high growth and high gross margins, is something that can lay the path for a positive earnings per share development. Furthermore, healthcare is also a sector with a high degree of binary outcomes, meaning that the sector also could be overrepresented among the worst performing stocks.

5.1 Critical Discussion Of The Results

Share price is the dependent variable of this thesis and as previously discussed, it is a very complex variable that is affected by a lot of different factors. A regression analysis can not possibly include every impactful factor and the choice of the variables in this thesis came down to both limitations of time and data, and how they were deemed relevant in numerous previous studies. Still, the presence of such a complex dependent variable raises space for omitted variable bias in the model, meaning that there will be variables that affect the share prices which are not included in the regression, but the effects of the non included variables are attributed to the included variables.[37] Regarding the comprehensiveness of the model, an r-squared of 0,55 was obtained which can be seen as reasonably high, but one still has to bear in mind that there is an absence of more variables that could affect share prices and thus an omitted variable bias is possibly affecting the results.

Endogeneity, which is hard to control for, could also be present in a regression model such as this one. Endogeneity implies that one of the independent variables might explain parts of the error term in the model(all of the things that are not included), and since this thesis is researching share prices this could absolutely be the case and is therefore also something to bear in mind when interpreting the results.[38]

The data collection has been limited to Capital IQ and Morningstar and the results are thus partly dependent on the quality of the data from these data providers. Even though the data collection has been done with care, there could of course exist potential errors from these databases which in that case would affect the results of the regression model. The data that was collected in study was also limited to companies that have been listed for the entire time

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[37]Howland. B. (2006). *Introductory Econometrics: Using Monte Carlo Simulation with Microsoft Excel*. Cambridge University Press.

[38]Jeffre. W. Q M. (2009). *Introductory Econometrics: A Modern Approach* 4th edition. South-Western Gengage Learning.

period (2011-2020). This creates a well balanced dataset and has ensured a qualitative data collection process. Although, because of this limitation companies that are unlisted or only have been listed during a few years of the time period are not included. Meaning that the study potentially misses companies that have become tenbaggers. Including non-public companies and companies that had not been listed during the whole time period could thus potentially lead to a different result.

Lastly, to deal with the statistical outliers in the study's sample winsorizing was conducted. As described in 3.1.1 Winsorizing, this diminishes the effect of the extreme outliers but keeps them in the sample. There are arguments against winsorizing, as the thesis deals with share prices and companies financials, all observations in the sample can be seen as relevant and that they should thus be included in their original non capped form. However, this study wanted to examine the general effect and winsorizing allows it to do that in a better way.

6. Conclusion

In the sixth chapter the study's results and discussion is concluded. The conclusion ties the results back to the aim. Finally suggestions for further research are presented.

This thesis has aimed to investigate if earnings per share and dividends per share has influenced and been of significance to the share price movements in Nordic tenbaggers during 2011 to 2020. By conducting several multiple linear regression models with panel data it was found that earnings per share had a positive coefficient and was significant in all of the models. Showcasing that earnings per share has had a significant positive influence on the share prices of Nordic tenbaggers. Dividends per share was positive and significant in one model, although it was deemed insignificant, with negative coefficients in the rest of the models including the most comprehensive main model, which mainly indicates that dividends per share has not significantly influenced or explained the share price movements.

The main multiple linear regression model with all variables included that was used in this study had an r-square value of 0,55, implying that the model could explain 55 percent of the variance in the share prices of the companies in the study's sample. This is generally considered a moderate explanatory power and is relatively satisfying taking into account how complex share prices are and how many factors that possibly can influence them.

The significance of earnings per share is in line with previous research within the area, where earnings per share has been deemed a popular financial metric with a positive influence on share prices. In this sample of Nordic tenbaggers, the findings imply that long term profitability and positive earnings per share is of importance and relevance to their immense share price movements. On the side of dividends per share, the results mostly stand against the previous studies that determine dividends of crucial importance to share prices, and are instead more in line with the previous research of dividend irrelevance, who argues that investors are indifferent to how the earnings are allocated and that dividends should thus not affect share prices.

As dividends per share was insignificant in the main model while earnings per share was significantly positive, the importance of financial performance can to a degree be confirmed. One can conclude that dividend based valuation models do not seem as suitable for the type of companies sampled in this study, while long term profitability and increases in earnings per share is of higher relevance. The results are thus showcasing how the arguments from Modigliani and Miller seem to be of relevance in these companies. As they argue that a company's ability to generate earnings is one of the determining factors of its value, while how they are distributed, by re-investments or dividends is of far less importance.

Regarding suggestions for future research it would be interesting to keep looking at and further examine specific samples of tenbaggers. Future studies could try to focus on evaluating different characteristics and compare these between the tenbaggers and the broad market. Furthermore, future studies of similar type could try to make the model even more comprehensive by including more variables that are relevant and explanatory to share price movements. This thesis focused on Nordic publicly listed companies so the results may also differ if a similar study is conducted in another country and stock market. It would be of interest to find out if the same results apply to tenbaggers in all markets globally, or if the influence of the variables turns out to be different and in that case what factors that could lie behind it.

The study has also been carried out completely quantitatively by measuring relationships solely within the financial data and share prices of the sampled tenbaggers. In future studies it would be of interest to also examine what qualitative factors that are behind the creation of tenbaggers.

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