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**MARKET REACTION TOWARDS CEO APPOINTMENTS: DO EXECUTIVE
GENDER AND AGE MATTER?**

Empirical Evidence from the U.S. 2006-2015

Master's Degree Programme in Finance

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ABSTRACT

The purpose of the thesis is to study how the market reacts to a CEO appointment. Furthermore, it aims to find whether the executive gender or age of the CEO has an impact on the evaluation by market participants. The study will present the irrationality of investor by how they might discriminate the executive candidates by their demographic factors. The study is done in the U.S. market and the timeline is from year 2006 to 2015. The data considering the appointments is collected from ExecuComp and the exact announcement dates of the appointed CEOs are from American Business Journals, such as Wall Street Journal and Business Wire. The historical stock and index prices are collected from Yahoo Finance.

The thesis first presents the research problem and studies related to it. First, it presents studies considering the discrimination towards demographically different people. Secondly, it presents studies about how the CEO of the company affects the stock price and the financial performance of the company. One purpose of the study is to combine the two phenomena. The effect of the CEO has on financial performance of the company has been researched a lot, but the fact how investor perceive demographically different executives to lead the company, has not gotten enough attention.

Previous studies of the subject have found contradictory results. Mostly the results have shown the investor to react more negatively on female executives. The study tries to find whether the "glass ceiling" still exist and have the people become less conservative since the last researches of the subject.

The thesis leads to a conclusion that the "glass ceiling" and the discrimination towards demographically different executives does not exist anymore. The investors do not react more negatively to appointed female CEOs compared to male peer candidates. In addition, the research does not find a significant difference between the reaction by investors towards appointments of differently aged CEOs.

KEYWORDS: CEO, appointment, discrimination, gender, age

1. INTRODUCTION

Since the mid-1970s, the number of women in management in the United States was growing seemingly for over 25 years (US Department of Labor, Bureau of Labor Statistics, 1999). The proportion in 1976 was 21% and it increased to 46% in 1999 (Powell, Butterfield & Parent, 2002). Furthermore, the number of female CEOs in Fortune 1000 list was only seven in 1997 (Oakley, 2000). The percentage of female CEOs is growing globally but in other senior positions the increase has been slowing down. Internationally, the number of females in senior positions has increased by 3% to the level of 24% in the past five years. Businesses without any females in senior positions was at 33% and it didn't change in the past five years (Grant Thornton, 2016).

Why is the number of females in senior business positions so small? That is a question to which many researchers seek an answer. Naturally, the issue can not be explained with a certain answer but it is a combination of partial explanations. Powell et al. (2002) discuss a number of explanations for why it is so hard for women to reach a senior business position. For example, it could be due to stereotypes and discrimination. Stereotypes are "beliefs about the characteristics, attributes, and behaviors of members of certain groups" (Hilton & Von Hippel, 1996, p. 240). Stereotypes of certain groups are often formed by demographic factors. It is easier to categorize people into large groups and remember them based on their demographic factors such as, gender and age (Klatzky, 2014). Morrison & Glinow (1990) state when appointing new seniors in company the executives tend to hire similar people measured by demographic factors in order to maintain certain authority and power with leaders. The authors argue the effect to be consistent with promotion allocation and other decisions. Since the majority of leaders are males and the present authority and power is achieved by majority of male leaders, individuals might argue a female executive to break the situation. According to Morrison & Glinow (1990) since the number of male investor beats the number of female investor, the appointment of a female CEO should have a negative impact on company's stock price.

The similar phenomenon has been studied by others as well. The similarity-attraction paradigm was presented already in the 1970s (Byrne, 1971). The paradigm states people tend to spend time with others who are demographically similar to themselves. According to both discrimination and similarity-attraction

paradigm, the executives would select demographically similar people to other senior business positions. In addition, while major part of the existing top executives are white male, there is a tendency for white males being hired by current executives (Kanter, 1977; Powell, 1999; Thomas & Gabarro, 1999). Kanter (1977) discuss about numerical dominants and rare tokens. Skewed groups contain more dominants than rare tokens. Thus, one could argue dominants being males and rare tokens being females while appointing to senior positions.

Powell & Butterfield (1979) study a good manager needs to have masculine features, such as independence and willingness to take risks, in order to be successful. Hence, women who pursue higher positions in a career should have masculine characteristics to gain the position. The twist makes it harder for women to succeed in their career and creates a disadvantage compared to male competitors (Powell, 1999). Since decision makers seek for a candidate with male characteristics and logically male more often have these characteristics, in most cases they choose a male for the position over equally-qualified woman (Heilman, 1995). Furthermore, when evaluating male and female manager performance, the decisions makers are favoring male managers in a situation of equivalent performance, due to their similarity (Bartol, 1999).

The discrimination between male and female competitors in manager appointments has been studied a lot. However, there is not many studies about how investor react and what happens to the stock price when female top executive is appointed to company (Lee & James, 2007). Eagly, Makhijani & Klonsky (1992) suggest investor would be more critical to female executives than to male executives and investor would watch their action more carefully. By this, one can find a negative correlation between female top executive appointment and the investor and stock price reaction to the appointment.

In the eyes of the investor, female CEOs are more positively received if they are promoted within a firm than coming from outside (Lee & James, 2007). Furthermore, this suggests a certain "glass ceiling" to exist in business life. Glass ceiling is determined as treating a person consciously or unconsciously by their demographical factors, in other words, discrimination. However, despite the discrimination, similarity paradigm and other possible explanations, females have managed to promote in their career to high senior positions (Lee & James,

2007). Since the number of women executives is increasing, does it indicate that the people have at least partly break the glass ceiling?

The female senior managers and their performance has not been studied a lot, due to simple explanation, there has not been many of them (Martin, Nishikawa & Williams, 2009). Lee & James (2007) study the gender effects and stock price reactions to announcement of top executive appointments. The authors find the stock market reaction on female CEO appointment (-3,71 %) is more negative than with appointments on male CEOs (-0,49%) measured by three-day cumulative return. The overall results in the study support the fact that there actually is a glass ceiling and for women it is harder to reach the top management positions. Lee & James (2007) sample period consist of the years between 1990 and 2000. The results are inconsistent with the previous studies where the stock price reaction to a CEO appointment are positive on average (Denis & Denis, 1995).

On the other hand, Martin et al. (2009) find cumulative abnormal returns on a three-day period are not significantly different between female and male CEO appointments. Hence, gender would not have an effect to investor judgment while valuating the risk of a company. In addition, when firms are facing a higher risk they are more likely to appoint female CEO to decrease the risk. Based on the studies mentioned above, this study examines whether people have become less conservative in 10 to 15 years by studying the effect of the stock market reaction on the stock price to top executive announcements from 2006 to 2015.

The discrimination and categorization leads back to natural human behavior and to social psychology. Individuals categorizing others into particular social groups is an important issue in social psychology and has always been (Smith & Zarate, 1990). Social categorization allows the perceiver to evaluate the target by person characteristics and it may have an effect in a behavior towards the target (Fiske & Pavelchak, 1986). In Turner (1987) research about the way people perceive others inside a social group, the social categorization is found as an important factor as well. The results show that inside a group, when perceiving a person as an outsider have important consequences, even if the group does not have significant characteristic differences. The results are interesting on behalf of the subject of this study. It seems that people have a biological need to categorize people and categorizing others by demographical factors is an easy way to it.

People with a need to categorize others into social groups do not have to know the people they want to categorize. They can do it by demographical factors, such as gender, age or by ethnical background. In addition, an individual might have problems to trust demographically different people and the categorizing of others eases the issue. Since the beginning of humans, individuals have always categorized people and it might be a partial explanation of the current phenomenon. It might be a biological need to survive.

1.1. Purpose of the Study

The study examines the effect of a CEO appointment on company's stock price. Previous studies have find contradictory results. Reinganum (1985) finds the impact of a CEO appointment on average to be statistically insignificant with stock market reaction. In contrast, Lee & James (2007) find the change is stock price to be statistically negatively significant with both, the appointment of a female and a male CEO. The research takes the issue to the 21st century and studies whether people have become less conservative in the past 10 to 15 years. By less conservative, the study means lower or no discrimination by investors towards demographically new or different CEO's. Women are more and more common as company leaders so investors might have changed their way of thinking consciously or unconsciously in the past couple of decades. It is important to measure how investor perceive demographically different CEOs. If investor would act rationally, they would ignore the differences between different genders. However, previous literature shows there is a difference in how investor evaluate CEOs based on their gender. This study aims to find whether the problem has changed and does it still exist in the behavior by the market participants.

The research finds which one has more negative effect on stock price, the appointment of a female CEO or the appointment of a male CEO. Secondly, the study finds how the investor perceive CEO's different age. The study is done with companies in the U.S. market and the timeline is from the year 2006 to 2015. By this, the study tries to find if a certain "glass ceiling" towards demographically different and new people still appears by investors. In other words, demographically different people, in this case, female managers might be seen as riskier option to lead the company. Therefore, discrimination due gender is an

issue. However, it is important to study other types of discrimination as well. Hence, the study also measures whether the investors react negatively to young and possibly unexperienced appointed CEO's and takes the age aspect to the research as well.

1.2. Structure of the Study

The structure of the paper consists of a theoretical part and an empirical part. The theoretical part will at first present the previous literature of the field and will provide a wide presentation to the subject. The literature review will present Subliminal Signaling in the Market, Minority of Present Female Executives and Insecure Decision Making, which are all strongly related to the subject. In addition, it will present previous studies from the field of science more carefully. Chapter three concerns the change in the area of finance from rationality towards behavioral finance. It starts by introducing rationality, which was the dominant explanation in the financial markets only three or four decades ago. If the markets would be efficient, the research problem of the study would not exist, since the investor would be rational and would not leave space for emotions in decision making, such as discrimination towards demographically different people. In the eyes of an investor, the CEO candidates would appear similar and every market participant would make decisions completely rationally.

Furthermore, chapter three explains the change in the market participant way of thinking and introduces the aspect of behavioral finance. Chapter four will measure how different demographical factors influence the individual behavior and how outsiders perceive the various demographic factors. Next, Chapter five will concentrate to researches made about the executive outlook and how it may have an effect on the success and financial performance of the company. In addition, chapter five presents stereotypical masculine and feminine characteristics and ponders how they may have an effect to individual success. After theoretical part, chapter six will present the Data and Methodology of how the research is done. Chapter six will go through the collection of data and explains how the data is exploited. Next, chapter seven will present the empirical results of the study through tables, figures and explanations. Finally, chapter eight will have a summary of the thesis and conclusions of the empirical study to end the research.

2. LITERATURE REVIEW

The second chapter is going to present previous literature about the subject and make a preparation of what the theoretical part will consist. It will present previous studies from the subject during the last decades and provide basic information about the issue. The chapter will be a vast peek for the issue as a whole and will not emphasize into more accurate field before moving towards chapter three. In addition, it will introduce the most important previous studies concerning the subject. In the table below, are listed the articles cited in the chapter, which are used as a reference to back up the study.

Studies Presented in Chapter Two		
Year	Authors	Name of the study
1970	Akerlof	The Market for "lemons": Quality uncertainty and the market mechanism
1986	Asquith & Mullins	Equity Issues and Offering Dilution
1998	Bazerman	Judgment in Managerial Decision Making
1993	Boeker & Goodstein	Performance and Successor Choice: the Moderating Effects of Governance and Ownership
2001	Boudreau et al.	Effects of Personality on Executive Career Success in the United States and Europe
1995	Denis & Denis	Performance Changes Following Top Management Dismissals
1992	Eagly et al.	Gender and the Evaluation of Leaders: A Meta-Analysis
1991	Fiske & Taylor	Social Cognition, 2nd.
1977	Kanter	Some Effects of Proportions on Group Life: Skewed Sex Ratios and Responses to Token Women
2007	Lee & James	She'-e-os: Gender Effects and Investor Reactions to the Announcements of Top Executive Appointments

2009	Martin et al.	CEO Gender: Effects on Valuation and Risk
1986	Miller & Toulouse	Chief Executive Personality and Corporate Strategy and Structure in Small Firms
1970	Nelson	Information and Consumer Behavior
2012	Peterson et al.	Ceo Servant Leadership: Exploring Executive Characteristics and Firm Performance
2002	Power & Butterfield	Gender and Managerial Stereotypes: Have the Times Changed?
2004	Ritchie et al.	Individual Executive Characteristics: Explaining the Divergence Between Perceptual and Financial Measures in Nonprofit Organizations
1992	Shenhav	Entrance of Blacks and Women into Managerial Positions in Scientific and Engineering Occupations: A longitudinal Analysis
1973	Spence	Job Market Signaling
1973	Tversky & Kahneman	Availability: A Heuristic for Judging Frequency and Propability
1993	Worrell et al.	Stockholder Reactions to Departures and Appointments of Key Executives Attributable to Firings
1996	Zajac & Westphal	Who Shall Succeed? How CEO/Board Preference and Power Affect the Choice of New CEOs.

Table 1. The studies presented in Chapter two.

2.1. Personality and Behavior of an Executive

Appointing a new executive is an important job due to success of a company and due to the reaction by the financial market participants. Furthermore, different personal characteristics have an influence to an executive success and it has been proved in several studies. For example, Boudreau, Boswell & Judge (2001) use the five-factor-model of personality, in other words, the "Big Five" to measure an executive performance by personal characteristics. In extension to "Big five" the authors use various dimensions of extrinsic (such as remuneration and ascendancy) and intrinsic (work, life and satisfaction in career) career success. The "Big five" personality traits include openness to experience, extraversion, conscientiousness, neuroticism and agreeableness. The modified "Big five" – model studies both direct and indirect effects of a group of human capital variables used in previous studies. The data in the study considers both American and European executives. Results show the neuroticism to impact negatively on intrinsic executives' success in U.S. and European samples. In contrast, extraversion effects positively on success across both samples. Furthermore, conscientiousness is unrelated to extrinsic success and is negatively correlated with intrinsic success in both American and European sample. In addition, the willingness of an executive to agree on issues, is negatively correlated with extrinsic success in samples from U.S. and in Europe. The authors do not find many differences between the American and European sample. However, in American sample the neuroticism is correlated with smaller extrinsic success, while it does not have an effect in European sample. Also, extroversion has a positive impact to extrinsic success in European sample but in American sample it does not offer a significant correlation. All in all, in both samples, the human capital and variables of motivation are correlated with the predictability of career success, but rarely connected the relationship between personal characteristics and succession. (Boudreau, Boswell & Judge, 2001). Based on the results, market participants should give attention to boards choices especially when it is appointing a new top executive. The selection clearly has an impact on the firms' financial performance.

Miller & Toulouse (1986) examine the correlation between CEOs personality and firm performance. The three aspects measured are the need for achievement, flexibility and locus of control. The CEOs need for achievement was correlated with strategies focusing on marketing, with sophisticated structures and to

analytical decision making. The internal locus of control of an executive is connected with larger willingness to product innovation, are more orienting to future and these executives modify their approaches to different issues the firms are facing. The CEOs ability to be flexible is correlated with intuitive and risk-related decision making. Furthermore, the effect of CEOs personality to firm decisions and performance has a larger impact on small firms and in dynamic environment. To conclude, the need for achievement did not have an effect on firm performance but the flexibility and and locus of control have an effect under certain circumstances (Miller & Toulouse, 1986). The results suggest a CEO who is ambitious and seeks for achievements does not contribute to firm performance. On the other hand, a flexible CEO has a positive impact on the success of the firms, maybe showing as a greater dedication for the company.

Peterson, Galvin & Lange (2012) study relationship between CEO characteristics and ability to servant leadership of technology organizations. In other words, the study finds a correlation between CEO characteristics and company success. The CEO narcissism has a negative impact on servant leadership. In contrast, if the CEO is the founder of the company as well, it has a positive impact on servant management. Furthermore, a servant leadership by the CEO is positively correlated with positive firm performance. Based on the results can be said a liked and operationally involved CEO to have a positive impact on the financial performance and likely to the atmosphere as well. Also Ritchie, Anthony & Rubens (2004) measure the executive characteristics and firm performance. The study is concentrated to examine nonprofit organizations. The results show an executive with locus of control, analytical styles on decision making and high collectivism values to have a higher convergence performance perceptions and ability to measure the financial performance. The study finds support to previous literature, which prove executive characteristics to have a significant effect in handling information and, by this, improving the ability to make perceptions. In addition, the executive characteristics have an effect to strategic choices of a company, which might affect the financial performance of the company. All in all, investor should be critical towards new executives, since everyone is different and the previous literature proves a connection to exist between the CEO of the company and the financial performance of the company.

2.2. Subliminal Signaling in the Market

Market signaling is referred when one party sends information either consciously or unconsciously to another party in the market. For example, the employee attaches an education credential to a job application to prove to the employer he or she is suited for the job (Spence, 1973). The market signaling phenomenon can be connected to Akerlof (1970) when he presents the good investments and the bad investments, so called "lemons". When a person decides to purchase a new car, he or she can choose between new or used car. Furthermore, the car can be good or bad (a lemon). In these situations, it is familiar that the seller knows more about the product than the buyer, which leads to information asymmetry and to "moral hazard" problem. After owning the purchased car for some time, the buyer really knows the quality of the product. The problem with "lemons" can be connected to goods whose quality cannot be proved and which may affect information asymmetry (Nelson, 1970).

Additionally, the market signaling theory is present when companies disclose announcements, such as post-earnings-announcements or reporting of a new top management appointment. The companies can gain positive or negative abnormal returns by these announcements through investor reaction by buying or selling the firms stock (Asquith & Mullins, 1986). Negative announcements, such as negative post-earnings announcements can send signals about a firms' future difficulties, which may result as investors selling their stocks, leading to decreasing stock price of the company. By this, companies might not do this on purpose and they might have some other plans to improve the company's future.

Lee and James (2007) study the market signaling to understand investor reactions to top management female executive appointments. The authors purpose of the study is to produce information about how outsiders perceive firm diversity. Women currently hold 20 (4,0 %) of the CEO positions in S&P500 companies (Catalyst, 2016). Based of the context, the nomination of a female CEO may send negative signals to the market (Lee & James, 2007). Lee & James (2007) collect the sample of appointing top executives from Wall Street Journal between 1990 and 2000. The study examines stock price reaction to the announcements. The study is not biased towards large or small firms since the data is collected using all three exchanges, the New York Stock Exchange, American Stock Exchange and NASDAQ. The results find a three-day cumulative abnormal return to be -0,49

per cent for male CEO and for female CEOs -3,71 per cent. In addition, the impact in stock price is more negative with female CEOs than other female top management team appointments (0,83 per cent). Third hypothesis, which predicts stock price to be more negatively affected by female top management appointments than male top management appointments is rejected in the study. In addition, the results show the women top executives to be received more positively when promoted inside the firm, rather than coming from the outside. The results do not find a significant correlation between the change in stock price and whether a female executive is hired outside the industry or promoted inside the industry (Lee & James, 2007). Thus, the results indicate the “glass ceiling” only to exist on high position appointments such as CEOs and no to exist in middle management positions in female top management team appointments.

2.3. Minority of Present Female Executives

As mentioned, the proportional number of female executives is substantially lower than the number of male executives. While forecasting the success of an appointed CEO or other top management appointments, one can evaluate many factors, such as age, education, previous experience and whether the person is promoted inside the firm or hired from the outside (Lee & James, 2007). Older manager is likely to have more experience, so longer experience is followed by better success. A large part of the CEO succession research is focused distribution between managers hired outside of the firm and promoted inside. Furthermore, the studies focus on does the appointed person has previous experience inside the industry (Boeker & Goodstein, 1993). Zajac & Westphal (1996) state focusing should be expanded from insider/outsider characteristics to concern other fundamental demographic characteristics as well. In a changing world and with increasing number of female managers the gender characteristics also needs attention (Lee & James, 2007).

While Lee & James (2007) discovered significant differences between the investor reaction on female and male executive appointments and the number of women in top management positions has increased since their research, the situation provides a chance to see whether the scenario has changed. Since the number of female executives is lower, the investor might be more aware of the nomination of female executives than of male executives. The logic behind the particular

phenomenon is female executives being new and different, therefore, presenting a proportional rarity of all executives in the United States (Lee & James, 2007). Kanter (1977) presents an example of proportional rarity. If a person observes nine X's and one O,

X X x x X X O X x X

the O gets more amount of attention, despite the fact, that there might be more diversity within the X's. Berlin School of experimental psychology presents the field of Gestalt psychology. According to its principles, those who people see as common become the "ground", and uncommon are seen as "figure". In this context, male can be seen as "ground" and female as "figure", leading the female executives getting extra attention from the stakeholders.

While female executives represent the minority of total executives, investor don't have the same background to evaluate her than with male executives who can be compared better by larger number of other male executives. One might think the new female executive is riskier than a new male executive (Lee & James, 2007). In fact, the roles of executives have deformed with masculine characteristics since they have been by majority held by men, so men in executive positions are measured more positively than women (Eagly, Makhijani & Klonsky, 1992). In addition, the women hired to top management positions are breaking gender-role expectations (Fiske & Taylor ,1991). Since men at the moment hold a major part of top executive positions, people see men as having a better background for managing in the job, while forgetting other succession evaluation factors (Power & Butterfield, 2002). To conclude, people see men are more likely to have masculine characteristics which are appreciated in senior management positions so they prefer male into these positions (Shenhav, 1992). According to statements above, people would see a hired or promoted female executive more negatively than a male top executive. By this, investor see female executives as proportional rarity and would impact more negatively on an appointment by selling the stock and resulting as a decrease in company's stock price.

2.4. Insecure Decision Making

Like proportional rarity, the studies in decision-making can be helpful to explain gender effects while measuring stock market reactions. Kahneman & Tversky (1973) conclude that people do not like uncertainty or ambiguity in decision-making. People rather are sure about what will happen than what might happen (Bazerman, 1998). Therefore, we will have an extra effort to control the possible results (Lee & James, 2007). Hiring a new top executive is usually associated with uncertainties and it can result in insecurity by investors causing the stock price to decrease (Zajac & Westphal, 1996). Uncertainties arise in a situation where the hired executive is new and especially when the person is female, because women are relatively new to lead the company. Person promoted inside the company is not considered as new and as risky option than a person hired from the outside (Lee & James, 2007). However, the markets reaction to hiring a CEO from outside is significantly positive while promoting a CEO from inside the company has no significant effect on the stock price (Worrell, Davidson & Glascock, 1993).

As we can see, the previous literature offers contradictory and inconsistent results about the subject. Lee & James (2007) find the stock price on average to respond negatively on CEO appointments by both male and female appointments. The results are in contrast with several studies which find the stock price to react positively on CEO appointments (Denis & Denis, 1995; Martin et al., 2009). The reason might be the usage of different timelines and other dissimilarities in the samples. Quantitatively, the sample used in the study extends the female executive appointment observations used in previous researches. By this, the study aims to give support for previous studies. All in all, it is an interesting subject and the research encourages further research to consider the issue as well.

3. FROM RATIONALITY TO PSYCHOLOGY

Traditional financial theory says that investors make their decisions rationally and leave no space for psychology or emotions. For example, the demographic differences of an appointed CEO should not have an influence to investor decisions, since the traditional financial theory assumes market participants to act rationally. This chapter is going to explain how investors nowadays take influence to their decisions by also psychological feelings, either consciously or unconsciously. This chapter will present the efficient market hypothesis, when people started to hesitate the efficient market hypothesis and finally what has actually happened to peoples' perspectives to change their behavior in investing.

3.1. Efficient Market Hypothesis

Market efficiency can be divided in to three sections: weak forms, medium forms and strong forms. When markets perform weakly, securities prices reflect all information related to earlier trades, which is taken from the past prices and trading volumes. Technical analysis, which means concerning all the quantitative information such as price and trades and only a bit of investors moods, is not helping at weak forms. As medium forms are prevailing, securities prices reflect all the public information. Fundamental analysis means researching corporations' profits and the economical basics trying to determine are the shares prices at a right stage comparing them to fundamental factors. Fundamental analysis does not help at medium forms. When strong forms are prevailing, prices reflect all information including non-public information known as the insider information. (Fama, 1970).

Fama (1991) presents a modified theory about efficient market levels, where testing can be divided into three divisions. First one, the weak forms, is the predictability of profits: can historical market information predict profits. In this division a cross-sectional analysis by using for example B/M or earlier dividends to predict profits is a big part. Also technical analysis and calendar anomalies are used in this section.

When medium forms are prevailing Fama presents the event-studies. The event study methodology measures how certain actions like earnings announcement or changes in capital structure reflect the market and the stock prices. For strong forms, Fama shows test for insider-information. Event-studies at medium forms try to find out what is the abnormal return. This can be done by deducting expected returns from actual returns. Abnormal returns can be defined by three methods. The simplest one is the market-adjusted returns: deducting the market returns from actual returns, so market return is the same as expected returns. The second one is returns adjusted by market model: deducting expected returns from actual returns, where the systematic risk is taken into account.

Third one is commonly known as Fama-French three-factor model (Fama & French, 1993). Model shows that shares expected return is a cause of three factors: shares systematic risk, size of the corporation and value-factor. In 1992, Fama & French research that Capital Asset Pricing Model doesn't fully explain the stock returns. They found that value stocks do better in the market than growth stocks, when at the same time small cap stocks do outperform the large cap stocks. Stocks value depends not just on market risk but also the size of company and the company Book-to-Market value.

The model uses estimated alphas and betas to define expected returns. The model calculates expected returns by defining the systematic risk, deducting big corporations' profits from small corporations' profits and deducting low book-to-market value from high book-to-market value. After defining the expected returns models works as the second alternative: deducting expected returns from actual returns to get the abnormal returns. Fama-French-model formula looks like:

$$(1.) \quad r_{et} = R_f + B(R_m - R_f) + B \text{ SMB} + B \text{ HML} + a$$

where R_f is the risk-free return rate, R_m is the return of the market portfolio, a is alpha, B is Beta estimated first with deducting big corporations profit from small corporations' profit (SMB) and then deducting low book-to-market value out of

high book-to-market value (HML). Formula in the bracket calculates the expected profit.

Capital Asset Pricing-model (CAPM) in finance is used to determine a security's expected rate of return. According to Capital Asset Pricing-model the rate of return on capital can be calculated by adding detailed beta multiplied by the average market risk premium to risk-free interest rates.

$$(2.) \quad E(R_i) = R_f + B_i (E(R_m) - R_f)$$

Where $E(R_i)$ is the expected earnings being calculated, R_f is risk-free interest rates, B_i is shares beta and $E(R_m)$ market portfolio expected earnings.

To be functional, the Capital Asset Pricing-model assumes the following parts to occur:

1. No transaction costs
2. The investments are perfectly divisible
3. No taxes
4. Markets are perfectly competitive (Investor can not affect the prices.)
5. Investors compliance with portfolio theory
6. Short selling is allowed
7. Borrowing and lending are possible at the same rate
8. Investor expectations are homogeneous
9. All capital assets are traded

3.2. From Efficient Market Theory to Behavioral Finance

In the 1960s, when the efficient market hypothesis had existed over a decade and really taken into concern, it reached also huge empirical and theoretical success (Schleifer, 2000). Academics in the field created theoretical proves why this hypothesis should hold. The efficient market hypothesis was invented at the University of Chicago and rightly it became a center of the academic field of finance.

In the 1970s, the efficient market theory was at its highest valuation. The efficient market theory was observed widely without suspicion. In the 1970s, the rationality in stock changing was at its beginning and stock prices change only because of rational information was contiguous with prevailing trends (Shiller, 2003).

Lucas Jr. (1978) shows that when rational expectations guide the actions, rational asset prices may have a predictable feature connected to the predictability of consumption. Breeden (1979) published his theory "consumption betas". Beta is used as a factor to measure the sensitiveness of shares return comparing it to some index. In Breeden (1979) theory beta is defined by the correlation of the shares return with per capita consumption. Both, (Lucas, 1978) and (Breeden, 1979) theories brought new point of view to existing theoretical studies at the time (Shiller, 2003).

In the 1980s started the hesitation towards the consistency of the efficient market theory. The existing anomalies that were uncovered may be examined at worst small deflection from the hypothesis of market efficiency, but if a great part of stock markets volatility is in the dark, the questioning of efficient market theory is a correct thing to do (Shiller, 2003). Although, in the mid-1980s there were only a few written academic papers about behavioral finance from researchers like Robert Shiller, Larry Summers and Richard Thaler (Schleifer, 2000).

3.3. Psychology

Psychology is a field of science which studies human activity. By this, human psychology is an important factor to explain how market participants behave irrationally. Furthermore, traditional framework that consists out of rational investors and where are no frictions means that securities price equals company's fundamental value. When investors act irrationally it follows as deviations in fundamental value and rational traders can't do anything about it (Barberis & Thaler, 2003). Nowadays researching investor irrational behavior economists turn to researched evidence about investor preferences and how they form their beliefs.

3.4. Beliefs

Investors' way of making expectations is an important part of any model in financial markets (Barberis & Thaler, 2003). Securities prices form out of agents' actions and investors decisions are a substantial part of it. Psychologists have studied how investors form these beliefs in practice.

Overconfidence means that investors are too confident with their decisions and judgments. Overconfident investors make more trades than less-confident investors (Odean, 1998). This leads to greater transaction costs. Odean (1998) states that investors which tend to be overconfident towards their performances, believe that they make better choices than other investors. However, Odean states that investors who made most trades received a lot smaller profits than the market participants on average.

Weinstein (1980) says that 80 percent of the people are too optimistic in their everyday-life. Montier (2002) nominates optimism or wishful thinking is one of the best psychological errors. For example, a number of drivers were asked about their driving skills. 80 % of the drivers stated themselves as good drivers. If every other is good driver the result should have been 50 %. As Parallel, Frey and Stutzer (2002) say that people are optimistic that a positive event is more likely to concern them than others, however, the possibilities are even. Returning a single lottery ticket gives you exactly same possibilities to win as to the other lottery players.

Conservatism means reluctance to change things. There is a paradigm that earlier studies are proven to be truth and we should blindly trust them. Investors weight too much on earlier evidence when they should equally pay attention to new samples.

Lord, Ross and Lepper (1979) present evidence that changing your once formed opinion is difficult to people. People don't want to search information that doesn't match with their existing opinion. In a situation they have to be in touch with polar information they are very reluctant to agree with it and are very skeptical. Known as confirmation bias, investors try to find evidence that is similar with their existing view (Montier, 2002). People for example denied investors irrationally for a long time despite all the academic

researches made to prove it through. Efficient market hypothesis was so widely accepted and proven to be true that to some people it was difficult to grant.

Availability heuristic means searching information to help your decision that is already available rather than trying to search alternatives and new sources. People use their own experiences to prove the point. Acquaintanceship is one example. If your middle-aged aunt suffered a heart attack you might use it as a proof to middle-aged greater chance of having a heart attack. When your best friend gets mugged in Helsinki your conclusion to this subject may be that Helsinki is a violent city. All in all, it is important to review the psychological traits of individuals before moving to further chapters. It is important to understand why people act irrationally, which might lead for example to discrimination towards demographically different people.

4. MEASURING RISK BY DEMOGRAPHIC FACTORS

Investors seek a suitable way of gaining returns by finding a match between risk and return. In other words, investors are risk averse. Risk averse means an investor, who finds two investment opportunities with the same expected return and chooses the one with the lower risk. Previous literature presents the investor see female CEOs riskier than male CEOs leading them to risk averse by demographical factors. Khan & Vieito (2013) challenge the behavior. The authors find on average the company led by female CEO contains less risk than a company led by male CEO. In addition, while the board of the company is determining compensation packages, they are not considering risk aversion differences. Based on previous studies women are more risk averse leaders than men and should be rewarded by the compensation packages (Jianakoplos & Bernasek, 2008 and Schubert et al. 2000). Khan & Vieito (2013) also find companies led by female CEOs perform better on average than companies led by male CEO's.

Peltomäki, Swidler & Vähämaa (2015) examine the effects of age and gender of a top executive to organizations level of risk. The data in the research is collected from the S&P 1500 companies. The authors find with an older CEO or CFO the company's the stock returns are less volatile and the levels of idiosyncratic risk are lower. The correlation between executives' gender and the risk of a firm are not so clear. However, the research finds a negative correlation between female CEO and riskiness of a company, but shows firms with a female CFO might be riskier. Furthermore, the study shows female executives to be younger on average than male executives. Hence, correlation between executive gender and risk of a company is diffused by the effects of age. Thereby, the research on this subject should be made by controlling both age and gender to get accurate results. (Peltomäki, Swidler & Vähämaa, 2015).

To date, previous literature has shown a significant correlation between the company succession and the personality or behavior of a CEO (Agle et al., 2006). Logically, demographical factors might have an impact on behavior or personality. On the other hand, one problem arises from the studies that measure the correlation between CEO behavior and performance. This is, due to fact CEOs behavior being mostly measured by insiders, for example, other members in top management team or CEOs themselves. However, recent studies have shown

statistically significant information concluded from the results by complete strangers to CEO (Rule & Ambady, 2008).

This part of the study will present how investors measure the risk by demographical factors such as gender, age and education while finding a perfect relationship between the risk of the investment and expected return.

4.1. Gender

Initial Public Offering (IPO) occurs when a company makes the first sale of its stocks to public. Khrisnan & Parsons (2008) find companies with higher diversity and larger number of women top executives to result in higher profitability and greater stock returns after IPO. Based on previous literature, women are under-evaluated by investor due to their gender. Thus, female-headed companies would outperform investor expectations resulting in excess returns (Wolfers, 2006). Financial markets and especially the stock prices provide information about the beliefs towards abilities of male and female executives by the investors. Furthermore, the information might show characteristics of discrimination towards demographically different senior managers by the market participants.

Despite the fact Wolfers (2006) finds no significance about discrimination, the study needs to be taken into concern. The author uses example of investors who mistakenly think companies led by women executives earn 10% less than with male CEOs. The way market participants value the company can be seen from their expectations towards the company. By this, if female CEO were to live in eternity, the valuation of her firm would be 10% less than by same company led by male CEO. However, the investor consciously or unconsciously knows the fact that the CEO tenure in average is 10 years, thus, resulting the investor to discount both the future by 0,5% per month and every month presents a 0,8% chance of a change in CEO position. In addition, the chance of a company hiring a new female CEO, who the investor would underestimate, is 2,5% based on CEO appointments since the 2000. Wolfers (2006), compares the pieces resulting in 3,9% discount for companies with a female CEO. This is even more to Lee & James (2007) study, where the authors find the stock price to decline 3,71% on average after a female CEO appointment. By this, the event study provides

information about the perceptions and discrimination towards the ability on female CEOs.

As mentioned, Martin et al. (2009) don't find significant results about discrimination on behalf of the investors towards female CEOs. However, the authors find changes in risk are significantly lower for female CEOs. By this, the market can be seen as perceiving female CEOs to be risk averse. In addition, the research finds companies with higher risk to be more willing to appoint a female CEO, possibly to decrease the risk. The suggestion is contradictory with the results by Lee & James (2007).

The effect on the appointment of a CEO has been studied by many authors, resulting in contradictory results. Reinganum (1985) does not find a statistically significant correlation between a CEO appointment and stock price. Secondly, Denis & Denis (1995) find the correlation to be significant and positive. In contrast, Lee & James (2007) find to correlation to be negative with both, a nomination on a male CEO and an appointment of a female CEO. This can indicate investor having difficulties on judging and evaluating female CEOs due to the fact that there is not a framework to compare with.

4.1.1. The Impact of the CEO's Gender on Risk

Beatty & Zajac (1987) reported when changing a CEO, it might have an affect to perceived risk. In extension, Martin et al. (2009) find a significant correlation between the appointment of a new CEO and the change in risk. Previous literature shows a few occasions where market participants evaluate the financial risk by gender. Lee & James (2007) say investor judging female CEOs is because they are relatively new to lead a company. On the other hand, it has been studies that women are less willing to take risks while leading the company comparing to male executives (Powell & Ansic, 1997). The behavior of female investors can also be taken into consideration. Jianakoplos & Bernasek (1997) find the women investor to be more conservative and to include less risky investments in their portfolio than male investors. In addition, Barber & Odean (2001) find female to be less risk averse when investing by their common financial instruments. To conclude, these studies support the fact of female executives having higher risk aversion degree than among male executives.

Women invest less than men and they invest to less risky investments than men. Results show that women have a tendency to invest on money market fund and fixed income fund. On the contrary, men tend to invest on riskier instruments like shares and mutual funds. On the other hand, men are more willing to make changes in their investments when profits are not at the expected level, in contrast to women who rather wait in these situations. (Hira & Loibl, 2008). Such behavior by female investor can be connected to the fact that women are less risk averse than male CEOs. The change in risk has also proved to be significantly lower with female CEOs relative to male CEOs (Jianakoplos & Bernasek, 2008 and Schubert et al. 2000).

4.1.2. The Impact of a CEO's Gender on Valuation

The previous literature does not clearly show a significant correlation between valuation and appointments of a female CEO (Martin et al. 2009). Hisrich & Brush (1984) argue the companies owned by male outperform the companies owned by female. Oakley (2000) state people usually stereotype female being less competent managers. Females have also been seen as having less confidence in financial ability, thus, making it harder for women to lose the stereotype (Estes & Hosseini, 1988). In addition, studies have shown the funds managed by female getting less money by customers than funds managed by men (Atkinson, Baird & Frye, 2003). According to Lee & James (2007) while market participant is valuating the company the gender bias does exist.

Prior to Lee & James (2007), the literature does not provide support for their results. Johnson & Powell (1994) do not find differences in decision making with female and male executives. Firms who have two or more female top executives, do not gain lower return on assets measured by Tobin's q (Carter, Simkins & Simpson, 2003). In addition, many studies have shown female investor to be as successful as male investors (Estes & Hosseini, 1998; Barber & Odean, 2001; Atkinson, Baird & Frye, 2003). These findings suggest that while market participants are valuating a company, it should not matter whether the appointed top executive is male or female.

4.2. The Impact of a CEO's Age on Risk and Valuation

Age is a lot researched affecting factor to investors' perspectives and behavior in investing. With age comes a decline in general intelligence. This happens for two reasons. First, the level attention and memory decrease cause of the negative influence of aging. Second is the decrease of sense (Baker & Nofsinger, 2010). The decrease of intelligence gets much worse after the age of 70 (Baltes & Linderberger, 1997). On the other hand, decades lasting effort in financial markets will create a lot of expertise.

Investment advisors recommend investors to move from shares towards more safe financial instruments as they get older. Advisors state their reasons on shares smaller risk to young investors due to their longer investment horizon. Younger people have also more financial obligations to be filled. In the United States tuitions are expensive. This particular obligation does not occur for example in Nordic countries but saving for an own apartment is one possible opportunity to make savings. In addition, justifying younger investor greater need to invest on stocks, they will have a greater amount of years to work to cover their possible losses (Jagannathan & Kocherlakota, 1996). The authors evaluate these pretensions above with economic science and they state that the only reason to invest more on stocks at young age is that the younger people have more years of work left and this way more expected income pending. Jagannathan & Kocherlakota (1996) shoot down the claims about longer horizon and financial obligations.

Using the similarity-attraction paradigm, Davidson, Nemec & Worrell (2006) find board members are more likely to appoint a CEO close to their own age. The authors find a significant and positive correlation between the age of board members and the age of the appointed CEO. By this, the similarity-attraction paradigm seems to guide the decisions while appointing new executives. Furthermore, Davidson et al. (2006) find a slightly positive correlation between appointing age-similar CEO and company's financial performance. Hence, while investors are measuring the risk and valuating a company, they might also expose to similarity-attraction paradigm which leads to discrimination when companies hire new executives.

Brickley (2003) examines the effect of a CEO turnover and performance of the firm. The authors find the age is more important variable while explaining CEO turnover-rate than explaining the succession of a company, so the issue need to be discussed in this study as well. The evidence from the research suggests the probability of CEO leaving the company is almost 30 percent higher when the executive is over 64. Thus, while market participants compare the options and value the company based on a CEO nomination, an older executive might be seen as a risky alternative, since the opportunity to leave the company in a given year is significantly higher.

With age comes experience and longer experience by top executive might result in higher appreciation by market participants. Similarly, age has been seen as a proxy for gained experience and future expectations of a CEO (Cannella & Shen, 2001). Human capital and social awareness increase with experience and age. Effectiveness might also increase with age. Tian, Halebian & Rajagopalan (2011) measure the impact in the amount of boards human capital on market reactions while appointing a new CEO. Hiring a new CEO has widely been accepted as one of the biggest decisions a board can make in a company. Tian et al. (2011) results find CEO nominations by boards having high human and social capital receive a better reaction from the market participants. Thus, the results would indicate investor to appreciate human and social capital, moreover, the experience and the age of the person who they are evaluating.

An older CEO is more likely to step down from a company than a younger executive. This is, because the retirement age is closer. For example, when a CEO is close to retirement age it might be seen as bigger chance for mandatory retirement policies (MRPs). MRPs are positively related to CEO age and are proved to have a negative and significant correlation with with the human capital of the firm (Cline & Yore, 2015). The study also finds the age of a CEO to be significantly negatively correlated with the value of a company. By this, it can be assumed that an older CEO is more likely to have MRP and, logically, it will cost more money to the company. Furthermore, investor might see an older CEO as a negative factor considering future profits of a firm, thus, decreasing stock returns from the company.

4.3. Education

As age, an education is one way to gain human capital and experience. Malmendier & Tate (2005) study shows the CEOs with a background from engineer or scientific education or employment have higher sensitivity in investment cash flows than CEOs with financial education or employment. Thereby, would indicate investors to appreciate financial education over technical education while evaluating the risk and measuring the value of the company. Furthermore, Malmendier et al. (2005) research shows the sensitivity is higher in companies managed by the people born in 1930s, during the great depression. All in all, the authors results show personal characteristics are important while understanding the companies' decision making which affects to expected earnings to investors.

Bhagat, Bolton & Subramanian (2010) measure impact on CEO education and corporation performance. The study does not find a big role in decision-making by education: if the CEOs performance is unpleasant, the CEO gets replaced, regardless their education. However, the education is a significant factor while choosing a replacer for dismissed CEO. Furthermore, an appointed CEO with a MBA-degree is followed by short-term increase in operating performance levels. In contrast, the study does not find a significant positive correlation between CEOs education and long-term profits. The results would indicate the education not to be a necessity for a CEO to manage the company profitably. However, investor might still have trust in education and its capability to increase human capital and they would prefer an educated alternative over uneducated competitor.

People are more disposed to challenge their own judgment when they feel skilled and their knowledge about their awareness is at a great level. Graham, Harvey & Huang (2005) examine how investor competence has influence on the volume of their trading. Investors who feel more effectual trade more and their portfolio is diversified more internationally. In addition, investors with high education and income often tend to consider themselves as effectual investors. Research shows that female investors and investors with less education or lower income do not consider themselves as effectual. Graham et al. (2005) do not present such hypothesis as overconfidence or information advantage to separate these types of investors.

It has been researched that a Master's Degree in any subject makes people to feel more trusting to their actions so people with Master's Degree even if it is not from finance feel more competent making financial decisions. (Graham, Harvey & Huang, 2005.) The authors present that in their research 60% of investors have finished college and 26% have a post-graduate education.

5. SHE'S GOT THE LOOK

"It is amazing how complete is the delusion that beauty in goodness." – Leo Tolstoy.

Previous part of the study has emphasized on perceiving differences in demographical factors based on behavior by these factors. Chapter five will present previous literature also on outlooks of the executives and how it may effect on the performance of the company. Based on the suggestions below, market participants might take into concern the appearance of the possible executive while valuating the company. In addition, while women have faced difficulties to promote to senior management positions, the particular issue might make the situation even harder (Oakley, 2000).

5.1. Attractiveness and Success

Increasing amount of previous literature seems to support the hypothesis "what is beautiful is good", rather than the hypothesis "beauty is beastly" (Frevert & Walker, 2014). Furthermore, the possibilities for a person to promote in his/her career based on attractiveness has been studied by many authors. Heilman & Saruwatari (1979) find attractiveness to be a positive characteristic while applying to managerial position, while attractiveness was a positive factor for women only when applying for non-managerial positions. The comprehensive study was completed by measuring the ratings of qualifications, references and requested salary due to attractiveness. In all of these evaluated factors the attractiveness is seen as a positive impact. To conclude, the results show the attractiveness to emphasize perceptions between genders even more. Paustian-Underdahl & Walker (2015) re-examine the effect of attractiveness. The authors study finds support for the previous phenomenon in a general population. When the study was measured due to answers from human resource professionals, they find partial support for the effect. Furthermore, Paustian-Underdahl & Walker (2015) show gender being related for managing in male-typed jobs, by indirect effect of perceived agency, the one moderated by the attractiveness of the applicant.

Inferences from faces has been connected to the level of success (Rule & Ambady, 2009). The authors argue, it may be important especially for women, who are often evaluated by their outlooks more carefully. In the study "She's Got the Look: Inferences from Female Chief Executive Officers' Faces Predict their Success", 170 undergraduates from the United States evaluated 20 female executives personality and leadership ability from their faces and then the results were compared to same test completed with male executives in the previous study. Rule & Ambady (2009) results show the ratings of competence evaluated by executive faces predicted performance the of the companies managed by evaluated CEOs. Indeed, top executive's success is, by this, connected with the outlooks, regardless of goals and perceived gender.

The positive correlation between attractiveness and likelihood to be hired has been studied by many authors (Dion et al. 1972; Stone et al. 1992 & Hosoda et al. 2003). Indeed, it has been proved attractive people to get more favorable references by their previous employers (Gilmore, 1986). However, attractiveness can be seen as a disadvantage in situations, especially for female applicants (Johnson et al, 2010). Heilman & Saruwatari (1979) and Heilman & Stopeck (1985) studied the "beauty is beastly" effect. The results show attractive women applying masculine- or management jobs are less likely to be appointed and they have a smaller chance is being promoted with both, unattractive women and all male. All in all, in most situations the attractiveness is a plus but there are situations where it can be seen as a disadvantage.

Further to hiring situations, attractiveness can play a role as a factor of status and appreciation (Frevert & Walker, 2014). For instance, Navy sailors being highly attractive compared to fellow competitors were also considered to have a larger ability for leadership and to be more intelligent. In addition, the attractive applicants were ranked higher than less attractive sailors. The example with sailors is a good one, since it extends the discussion not be only concern rivalries between attractive female and male but also shows the problem to occur in military, which is generally known from its specific career ladders and lack of discrimination between male and female applicants. To conclude, it shows it is important to focus on discrimination in further researches but also suggest the phenomenon is happening due to individuals and human psychology, not due to conservative style of making business.

Majority of the previous literature has documented positive correlation between facial attractiveness of a CEO and firm performance (Langlois et al. 2000). Despite the fact, Heilman & Stopeck (1985) find a negative correlation between the attractiveness of a female top executive and financial performance of a company. Previous studies have often seen masculine characteristics to be considered more positively than feminine characteristics (Dawley, Hoffman & Smith, 2004). In addition, feminine-appearing women have often been found more attractive than masculine-appearing men (Rule & Ambady, 2009). These suggestions would indicate masculine male leaders to be more appreciated to promote in their career, rather than attractive females.

It is commonly being acceptable to argue the attractiveness to be “in the eye of the beholder”. However, research has shown people find certain outlook characteristics such as, large eyes, considerable cheekbones and a big smile to be associated with attractiveness by both, male and female (Cunningham, 1986). While comparing attractive applicants and less attractive peers, the attractive applicants are more likely to be hired (Dion, Berscheid & Walster, 1972) and are seen as better students (Ritts, Patterson & Tubbs, 1992). The mentioned positive outcomes might be due to expectations of performance but are, however, often seen to be associated with attractiveness as well (Frevort & Walker, 2014). On the other hand, attractiveness can be seen as a negative competitive edge. Frevort & Walker (2014) mention the aspect with celebrities. Marilyn Monroe, for example, was not considered as being a serious actress during her lifetime (Rollyson, 1987). It is not wrong to argue there still exist a way of thinking that beauty and intelligence can't be in the same body by some people.

Although Frevort & Walker (2014) study rejects the “what is beautiful is good” hypothesis they, in fact, argue the study to support it. First, in the studies which consider beauty as being a disadvantage, beauty can still be a signal of competence, albeit the beauty is seen as a threat. Less attractive women and men might see attractive females as a bigger threat in competition, especially in places which are not task-based. The authors argue that female attractiveness may produce competence in hiring decisions, but in work-related resources the competition can turn out the beauty to be a threat for competitors. Like this, in the study examining the beauty can not be approached, attractive female can even be seen as frightening. However, one should not indicate beauty as being a negative factor, since attractiveness might be seen as higher status, thus, as a

positive factor. In both of the studies by Frevert & Walker (2014) attractiveness is still a disseminating factor but does not apply in every situation. Hence, further research should emphasize on finding the areas where the discrimination due to attractiveness of an applicant actually exists.

A top executive is likely to interact a lot with all stakeholders on daily bases. Mulford et al. (1998) studied the correlation between attractiveness and cooperation in an exchange by two individuals. The results show individuals being in cooperation with the ones they find attractive. In addition, they think the attractive individuals to cooperate and interact more active. The link between subject ratings about their own attractiveness were positively connected with the possibility to cooperate with the ones they found attractive. To conclude, since attractiveness is positively correlated with cooperative behavior, it contributes people to a productive exchange with attractive people (Mulford et al., 1998). In the shade of mentioned previous literature and results, it can be indicated an attractive female to be successful in interactive jobs which are trying to cooperate with as many clients as possible but promoting to an appreciated top executive position might be more difficult. Furthermore, the results would also indicate attractive females more likely to be successful in modern businesses rather in the conservative male industries, where male executives might see an attractive women as different and as a threat to the business.

Even in situations where socializing is considered to be less important, the advantages from attractiveness can emerge (Frevert et al., 2014). Dabbs & Stokes, (1975) use an interesting point of view in their research. The authors studied pedestrian's behavior on the sidewalk. They witnessed the pedestrians to stay further from an attractive woman than from less attractive women, giving support for the "what is beautiful is unapproachable" phenomenon. The authors state attractiveness is followed by social power and with social power people are able to move others either mentally and spatially. In addition, people tend to leave space between themselves and to those with power leading leaving enough distance to attractive people. Hence, the phenomenon can be reached to all situations, such as appointing a new top executive, leading the board of the company to discriminate attractive people, especially very attractive female applicants.

5.2. Masculine/Feminine Characteristics and Success

Traditionally, men have been connected more likely with masculine characteristics and female with feminine characteristics. Stereotypical male characteristics such as independent, aggressive and dominating have been valued in business (Broverman et al., 1972). In addition, traditional gender stereotypes have seen men being more competitive than women, while women are considered to be rather humane and expressive leaders. Furthermore, studies have shown men to be rational competitors, active, rational rather than emotional and independent leaders, while women are often considered to be lacking in these characteristics (Becker, Ayman & Korabik, 2002; Heilman, Block & Martel, 2002). In addition, some studies have shown male and female to be polar opposites, according to many characteristics (Broverman et al., 1972). Next, the study will present stereotypical masculine and feminine characteristics and present studies which have found correlation between succession in leading a company and those characteristics. The increasing amount of the studies considering gender stereotypes and their connection to management is due to increasing amount of female managers.

Already in 1973, Schein study shows a connection between gender stereotypes and perceived characteristics as a requirement to be successful as a manager. The first study by Schein (1973) studied the importance of a middle male manager to have male characteristics in order to be successful. In extension, Schein (1975) studied the same effect with female middle managers. The results suggest women are perceived as less qualified for management positions. Furthermore, leading to discrimination and affecting negatively to possibilities for a woman manager to enter in managerial position (Schein, 1978). In addition, women might feel pressure to change their personal characteristics in order to gain appreciation and reach top management positions. While feeling need for a change in personal traits, it might have an affect to whole type of management, thus, making it even more harder for market participants to evaluate managers fairly. People are used to categorize everything, including people, and sometimes it is difficult to get rid of stereotypes (Stavans & Jaksic, 2011).

Brenner, Tomkiewicz & Schein (1989) renew the study after 15 years. The study was completed by questionnaires to both male and female. From the answers by men, the authors find a significant similarity between male managers and

questionnaires which studied the stereotypical characteristics of males and managers (R-square = 0,72). With female, the results were non-significant and close to zero, confirming the hypothesis men thinking managers hold characteristics common to males more often than characteristics of women. On the other hand, a survey answered by women, produced a bit different results. Women saw male (female) managers to have a slightly more characteristics as a successful leader with a R-square 0,59 (0,52).

Hence, for female executives, Brenner et al. (1989) results do not show the managers to be seen as having more characteristics commonly usual to men rather than to women. To conclude, the situation with men did not significantly change in 15 years but for women, the issue improved since the last research. Men found a successful manager to have characteristics which are stereotypically connected to men, while women see a successful manager to have characteristics from both genders. Since the situation has changed, it might be due to changes in people perceiving women, rather than changes in typical characteristics for a successful leader or in the changes of market participants perceiving male leaders. Furthermore, Brenner et al. (1989) study shows women seeing other females to hold characteristics which are positively correlated to success. Women even saw female leaders more likely to have certain positive characteristics to be more likely possessed by female than male managers. The results indicate middle manager positions to get rid of discrimination due to gender of the applicant. More importantly, the study proves female managers to act more equally than men in appointment, promotion and placement decisions (Brenner et al, 1989). Results would indicate that women have broke the "glass ceiling" but men still got work to do going towards discrimination free and equal society.

If there would not be the "glass ceilings", the particular researches would not be necessary. In a situation where it can be expected that market participants will behave irrationally and will let discrimination to affect their judgment, the issue needs to be studied. Even though the chapter did not present the subject based on the outlook of the CEO, the studies presented in the chapter are still relevant for the research and to the investor reaction. In the same way, the CEOs may be evaluated based on their outlooks by the market participants either consciously or unconsciously. An attractive CEO gets more attention from the crowd than a less attractive CEO. By this, in the light of some researches, the companies should

pay attention on CEO attractiveness and to other demographic differences as well.

6. DATA AND METHODOLOGY

By this chapter, the study will introduce the data which will be used, from where the data is collected and with what methodology the research will approach the particular issue. In addition, it explains by certain methods of collecting the data are used and why it was necessary in order to complete the research properly. Furthermore, the chapter will present the hypothesis of the research, due to reading the empirical results in chapter 7.

6.1. Data Description

The research will obtain a sample of announcement of top executives in the U.S. companies from January 1 2006 to December 31 2015. In this research, top executives refer to CEOs. The research examines the stock price reactions, so the sample consists of public companies only. Furthermore, the company needs to be public for 252 trading days before and 10 days after the particular executive appointment in order to get in to the sample. This is for Beta and Alpha to get proper calculations. Furthermore, the 252-day period covers the whole year and eliminates the possible yearly effects from the stock price. The study will explore all kinds of companies and will not be biased towards large or small firms. The data concerning the top executive appointments is from ExecuComp and the exact announcement dates are collected from American business journal articles (Wall Street Journal, Businesswire, Forbes, Reuters and Business Insider). The historical stock prices are collected from Yahoo Finance.

Lee & James (2007) find 17 observations of a female CEO appointment between years 1990 and 2000. A significant number of female executives have been appointed in the 21st century. The study finds 3345 observations on top executive appointments of which 121 are females. To match the study with previous, it uses the nominations of the CEO's only. Out of 149 observations 78 were CEO's. After deleting the other than CEO appointments, the sample finally reduced to 64 observations due to missing or incomplete stock returns by 14 companies. By this, the study extends the research to the 21st century and tries to improve the sample and the result.

After collecting the sample of 64 observations and historical stock prices, the study finds 64 comparable observations from the appointed male CEO announcements. To make the sample comparable with women, it uses observations from the same industry and in the same time period as in the sample of female CEO's. After collecting the results of both samples the study calculates the average results of the 64 observations.

6.2. Hypothesis

Due to the arguments mentioned above, the study will include the following hypothesis. At first, the study measures the impact of a new female top executive appointment on the company's stock price. Based on the arguments stated above, the correlation should be negative.

H1: The reaction in stock price to a female CEO appointment will be negative

Secondly, the previous literature suggests the impact to be more negative when appointing a new female top executive than male top executive.

H2: The reaction in stock price will be less negative for an appointment of a male CEO than for an appointment of a female CEO

Thirdly, top executives such as CEO's based on the arguments earlier in the study are more appreciated if they have gained more experience in previous years. When a person gets older he is more likely to get more experience as well. The study combines the samples of both male and female, calculates the median age (53) and divides the sample in half (less than 53-years-old and over 53-years-old).

H3: The reaction in stock price to an appointment of a less than 53-year-old CEO will be negative

Finally, the study examines the differences between younger and older half of appointed CEO's. Older half of the CEO's have gained more experience in their life based on lived years. Thus, investor might prefer the older half of appointed CEO's more.

H4: The reaction in the stock price will be more positive for older half of the CEO's

6.3. Research Methodology

While measuring investor reaction to a certain event as an issue, the change in stock price needs to be taken under consideration. Therefore, the study is done by event study methodology. Fama, Fisher, Jensen & Roll (1969) present the event study methodology to estimate abnormal returns. After the research, the event study methodology has been widely used in accounting, economics and finance in scenarios such as earnings announcements and money supply announcements to measure the security price reaction to these announcements. In addition, the event study methodology has become a standard way of examining the impact of a certain event to a security's price (Binder, 1998).

First part of the empirical study finds whether the investor reaction to an appointment of a female CEO is negative. The research measures the cumulative abnormal returns (CARs) to examine the impact. The window is 21 days (-10 - +10) from the first public announcement of a female CEO. Second part finds the difference in the impact between male and female CEO. The study examines with 21-day (-10 - +10) CARs of how the effect is different with male and female CEO. After examining the differences in market participant's reactions towards different genders, the study takes the aspect of CEOs age to the research. The study compares the difference in the change of stocks 21-day CARs from -10 to +10 days after the announcement of a less than 53-year-old CEO appointment. The final part of the study finds whether the impact is smaller when a person hired to the CEO position is older than 53. The study measures the 21-day CARs (-10 - +10) to estimate the impact of market participant reactions.

There are certain problems while estimating the right event window to calculate accurate cumulative abnormal returns when using event study methodology. First, on the day of the announcement, the market might have already been closed before the press release or other type of announcement. Therefore, the event window must be extended further the actual announcement date to include to investor reaction properly. Secondly, it is important to start the event window before the actual announcement date. The markets are not efficient and some

market participants might have insider information, in other words, get the information before the actual press release and before major part of the market participants get the information. In addition, market participants might anticipate the future information, which is about to be announced.

To estimate the effect, the study calculates the expected return, abnormal return and cumulative abnormal return in the event-study-period, which is 21 days. Furthermore, the research uses t-test of abnormal returns and cumulative abnormal return to measure if the results are statistically significant. In event-study-methodology it is important to eliminate the other effects in the market to find the effect of a certain event to the stock price. At first, in longer time-period the individual impacts invalidate each other and the standard deviation matches the stocks real standard deviation better. In addition, the 263 trading days cover the entire trading year and the possible yearly anomalies, such as, the January effect can be eliminated. The study uses historical stock prices from 263 trading days (from -252 trading days to +10 trading days) to calculate the Beta and Alpha of the stock. By this, the expected return of the stock is calculated. In addition, the comparable index prices (S&P500) are used from same time period. The index returns of a comparable index need to be taken into research to see how the market has changed in the examined period. Furthermore, it helps to eliminate the effects concerning the whole market and eases finding the influence of a certain event to the to market participants reaction and by this to company's stock price.

7. EMPIRICAL RESULTS

Chapter 7 will present the empirical results of the study. The chapter shows tables and figures to demonstrate the results. All the following tables will have six columns and the leftmost will show the date related to the announcement. For example, day zero is the day of the announcement and -5 is five days before the announcement. In contrast, 5 in the leftmost column equals five days after the announcement. Second column from the left presents the stocks expected return during that day. Third and fourth column present the stocks abnormal return and cumulative abnormal return. Finally, columns five and six present the t-test measures of abnormal returns and cumulative abnormal returns. The tables show the exact numbers but to help the illustration, they will be followed by figures.

7.1. The Empirical Results between Genders

Table 2 shows the results of the female CEO sample. The R-Square of the sample is 0,37, which means 37% of the stocks movement can be explained by the movements in S&P500. The cumulative abnormal return of the sample is 0,04%. On the other hand, the stock return of the announcement day is -0,50%. In addition, when the event-study-window is changed, naturally the results also change. Table 3 shows the 11 trading day window from -5 days to +5 days gives a negative 0,02% return in the stock price. Furthermore, reducing the period to 5 days (-2 to +2 days) and moving closer to the exact announcement days gives a result of -0,69% in stock price. The t-tests of abnormal returns in 21-day event-study-period are ranging from 0,22 to -0,24 and none of them are statistically significant. The t-test of cumulative abnormal returns is 0,12, thus, not statistically significant. The results indicate the glass ceiling not to exist anymore towards female CEO's. The Tables 2 & 3 are followed by figures 1 & 2, which demonstrate the movements of daily abnormal return and cumulative abnormal return during the 21-day event-study time-period of the study.

t	[E] r	AR	CAR	AR t-test	CAR t-test
-10	0,00 %	0,10 %	0,10 %	-0,02	-0,02
-9	0,20 %	-0,13 %	-0,03 %	-0,12	-0,14
-8	0,55 %	0,45 %	0,42 %	0,22	0,08
-7	0,19 %	0,18 %	0,60 %	0,04	0,13
-6	-0,15 %	-0,25 %	0,34 %	-0,10	0,03
-5	0,12 %	0,11 %	0,46 %	0,17	0,20
-4	-0,08 %	0,12 %	0,58 %	0,13	0,32
-3	0,07 %	-0,06 %	0,52 %	-0,02	0,30
-2	0,15 %	0,10 %	0,61 %	0,03	0,33
-1	0,04 %	-0,10 %	0,52 %	-0,10	0,23
0	0,00 %	-0,50 %	0,02 %	-0,24	-0,01
1	0,19 %	-0,14 %	-0,11 %	-0,08	-0,09
2	0,31 %	-0,06 %	-0,18 %	-0,02	-0,11
3	-0,06 %	0,18 %	0,01 %	0,08	-0,03
4	-0,21 %	0,22 %	0,23 %	0,14	0,11
5	0,19 %	0,09 %	0,32 %	-0,02	0,09
6	0,14 %	-0,32 %	0,00 %	-0,08	0,01
7	-0,23 %	-0,23 %	-0,23 %	-0,16	-0,15
8	0,36 %	0,31 %	0,09 %	0,19	0,03
9	0,03 %	-0,01 %	0,08 %	-0,06	-0,03
10	-0,18 %	-0,04 %	0,04 %	0,15	0,12

Table 2. The Event-Study results of the female CEO sample.

Female			
Cumulative period		CAR %	t-test
-10 - +10		0,04 %	0,12
-5 - +5		-0,02 %	0,06
-2 to +2		-0,69 %	-0,41

Table 3. The comparison between different time-windows.

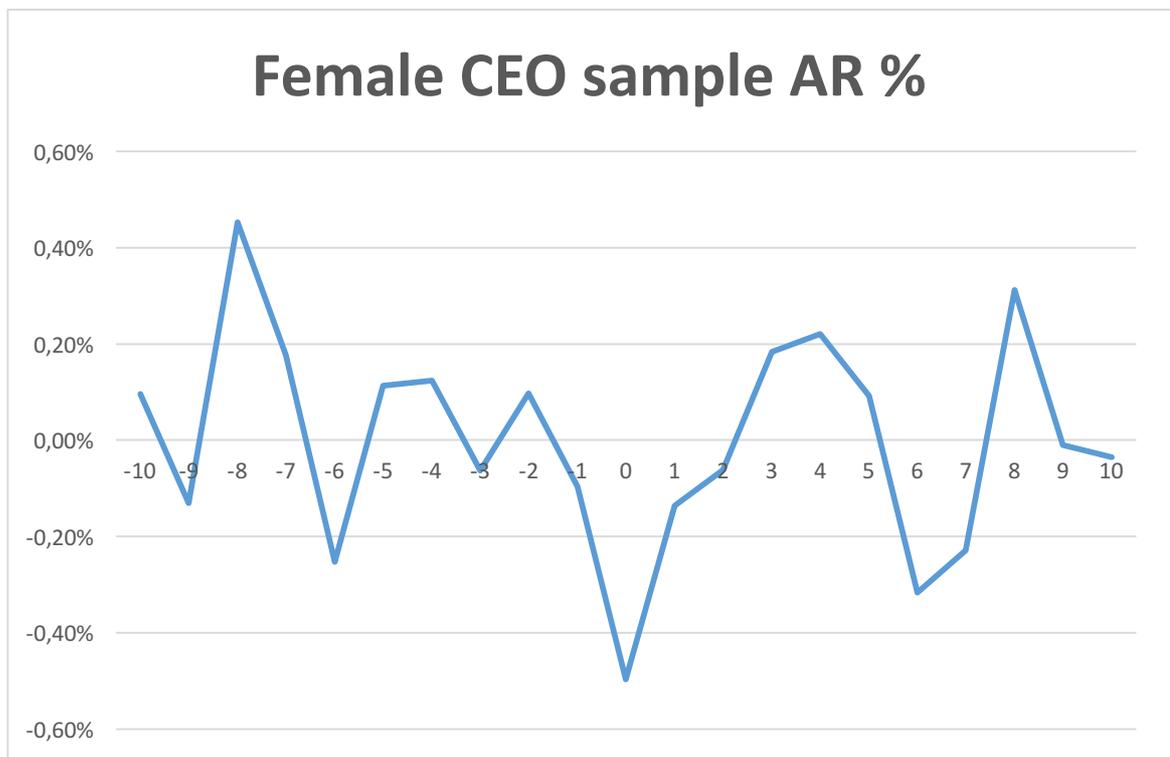


Figure 1. The average abnormal returns around the announcement date.

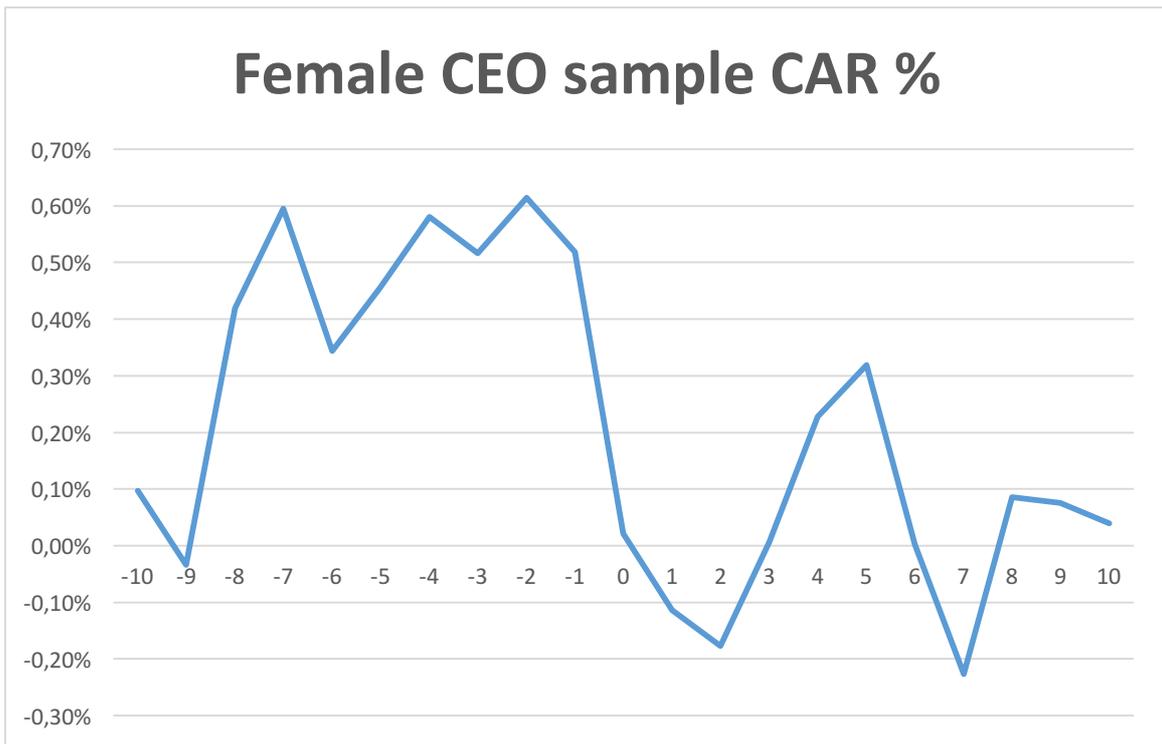


Figure 2. The cumulative abnormal returns around the announcement date.

The results of the male CEO sample give different aspect in Table 4. At first, the R-Square of the whole sample is 0,28, so 28% of the movements in stock price are explained by the movements in S&P500. The R-Square of the male CEO sample is 0,09 smaller than in female CEO sample. Secondly, the cumulative abnormal return of the sample is -0,04%, thus, the reaction by investor towards male CEO's is more negative than towards female CEO's. However, the reaction by shareholders in the day of the announcement of the appointed CEO increases the stock price by 0,91%. That is almost 1,5% more positive than with the announcements of the female CEO's. It can be clearly seen from Table 5 that the effect in stock price improves when shortening the event-study-period. At first, from -5 trading days to +5 trading days the the cumulative abnormal return in 0,58%. Furthermore, decreasing the period to only 5 trading days, the CAR is 0,98%. The t-tests of abnormal returns range from 0,43 to -0,32 and are not statistically significant. The t-test of cumulative abnormal return from 21 trading day period is 0,03 and is not statistically significant. Figures 3 & 4 ease the demonstration on movements in daily abnormal return and in 21-day cumulative abnormal return.

t	[E] r	AR	CAR	AR t-test	CAR t-test
-10	-0,23 %	-0,19 %	-0,19 %	-0,06	-0,06
-9	0,16 %	-0,12 %	-0,31 %	-0,03	-0,09
-8	-0,37 %	0,03 %	-0,28 %	0,02	-0,07
-7	-0,03 %	-0,20 %	-0,48 %	-0,12	-0,20
-6	0,31 %	-0,22 %	-0,70 %	-0,21	-0,40
-5	0,03 %	-0,13 %	-0,83 %	0,04	-0,36
-4	-0,32 %	0,17 %	-0,66 %	0,17	-0,19
-3	0,13 %	-0,01 %	-0,67 %	0,01	-0,18
-2	-0,38 %	-0,39 %	-1,06 %	-0,08	-0,26
-1	0,16 %	0,27 %	-0,79 %	0,28	0,02
0	-0,34 %	0,91 %	0,12 %	0,43	0,45
1	0,16 %	0,45 %	0,57 %	0,16	0,62
2	-0,20 %	-0,27 %	0,31 %	0,02	0,64
3	0,39 %	0,06 %	0,37 %	-0,04	0,60
4	0,12 %	-0,35 %	0,02 %	-0,28	0,31
5	0,00 %	-0,14 %	-0,12 %	-0,18	0,14
6	-0,02 %	0,24 %	0,13 %	0,13	0,27
7	-0,04 %	-0,09 %	0,04 %	-0,06	0,21
8	-0,43 %	0,50 %	0,53 %	0,30	0,51
9	0,16 %	-0,39 %	0,15 %	-0,16	0,35
10	-0,07 %	-0,19 %	-0,04 %	-0,32	0,03

Table 4. The Event-Study results of the male CEO sample.

Male			
Cumulative period		CAR %	t-test
-10 - +10		-0,04 %	0,03
-5 - +5		0,58 %	0,54
-2 to +2		0,98 %	0,81

Table 5. The comparison between different time-windows.

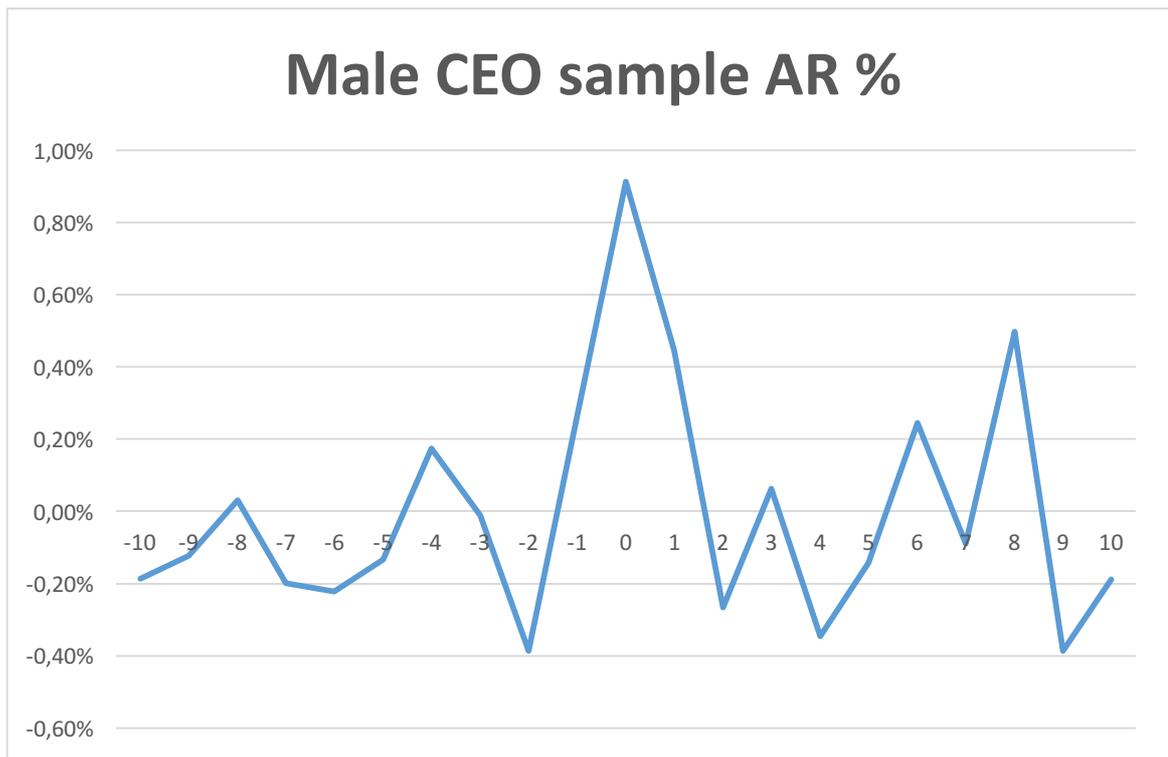


Figure 3. The average abnormal returns around the announcement date.

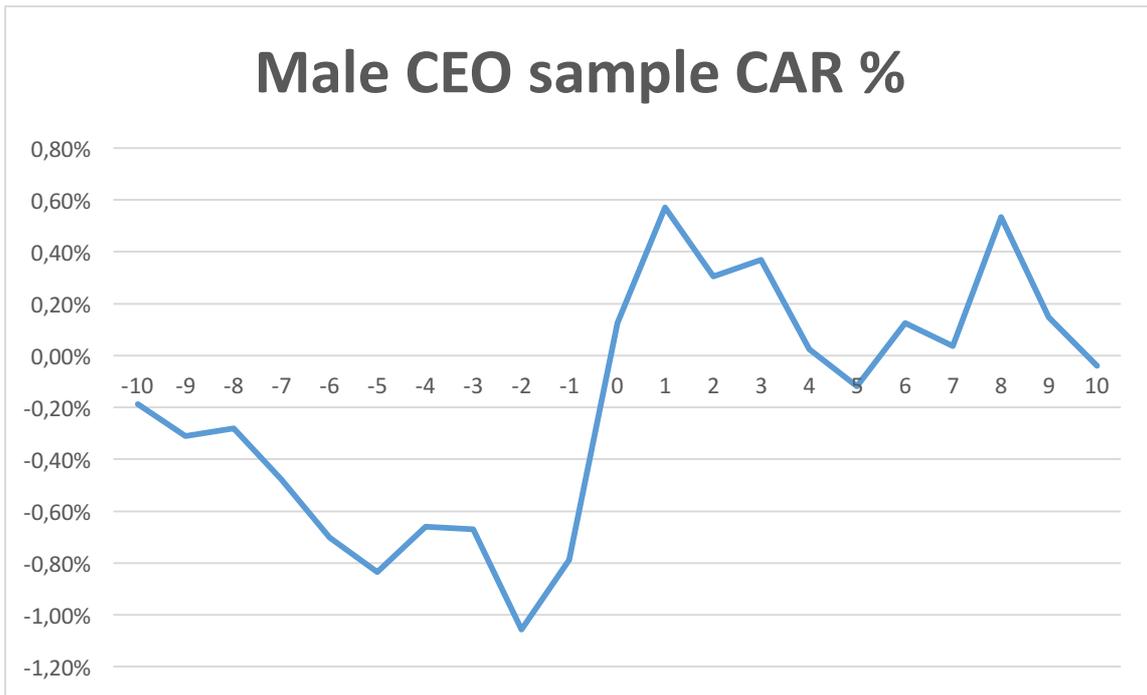


Figure 4. The cumulative abnormal returns around the announcement date.

While measuring individual appointments and their affection on the company's stock price, the results were relatively high, comparing to to average of all data. Naturally, since the individual results were both, negative and positive. With a different sample or by using only a part of the sample, the results might have been significant to either of the directions. Next, the study will present some of the individual results of the market reaction to a CEO appointment.

For example, Advanced Micro Device- company stock gained 10,22% cumulative abnormal return in a 21-day-period around the announcement date. The female CEO who was appointed, clearly affected a large reaction by the market participants. The t-test of the cumulative abnormal return is 3,98, which is statistically significant in 0,001 level. In contrast, the Coldwater Creek Inc. stock suffered a 16,60% decrease by cumulative abnormal return around the appointment of a new female CEO. Even greater decrease occurs with NutriSystem Inc. At the day of the announcement, the company's stocks abnormal return plunged 12,46% and the t-test of the abnormal return was 6,15. 10 days after the announcement, which is also the last day of the measured 21-day-period, the cumulative abnormal return is -24,31% and the t-test is significant -12,00. It can be argued, that the market reacts quite heavily to the appointment

of the new female CEO. The shareholders of NutriSystem Inc. might have some prejudice towards female executives. Similarly, the IBM stock decreased 5,63% cumulative abnormal return in 21 days while a female CEO is appointed to the company and the t-test of the cumulative abnormal return is -7,25, which is statistically significant at the level of 0,001.

As with the results of female CEO appointments, the results of the male CEOs were contradictory as well. First, Starbucks stock increased a significant 10,83% cumulative abnormal return in 21 days around the announcement date. Only at the specific day of the announcement, the stock increased rapidly by almost 10% abnormal return due to strong reaction by the market participants. With Starbucks, the t-test of the stock return was a significant 3,57 on the day of the announcement and the cumulative t-test of the whole 21-day period it was a significant 9,20.

The Gap Inc. stock gained almost 12% cumulative abnormal return on the 21-day measuring period, with the t-test of -8,89. In contrast, the HCP Inc. cumulative abnormal return during the 21-day period was a positive 11,05% and the t-test of the CAR is 8,29, which is significantly positive at 0,001 level. Again, a clear anticipation and reaction by the market participants towards the appointment of a new CEO of the company.

By the individual results of the companies' stock returns, it can be said, that market participants anticipate, react and follow the markets before and after of a CEO appointment. Sometimes it is impossible for investor to measure when a company might appoint a new CEO, but for example if a company has just fired a CEO, the market participants can expect the company to hire a new chief executive officer sometime in the near future. Secondly, it definitely seems to have an effect on investor while the company hires a new CEO. The results between genders are not that big, but the individual results and the cumulative abnormal returns show the market participants to anticipate and react to the appointment of a new chief executive officer. In the future, it would be interesting to see whether the change of a CEO has an impact to the company's stock price in a longer time-period than 21 days around the announcement.

7.2. The Empirical Results with Different Age of a CEO

Investor seem to react almost equally on the appointment of female and male CEO's. This chapter will study whether the age of the appointed CEO has impact on investors, thus, to stock price as well. As mentioned, the sample consists both appointments of male and female CEO's and is split in half by median age of the sample, which is 53. At first, the Table 6 shows the results of the younger half of appointed CEO's. As can be seen, the cumulative abnormal return of the research is 0,36% and the t-test gives a result of 0,06, which is not statistically significant. The R-square of the sample is 0,45, meaning 45% of the results can be explained by the movements in the comparable index. The abnormal daily returns in the 21-day-period are in the range between 0,54% to -0,28%. The t-tests calculated with same abnormal returns give values between 0,33 and -0,16. By this, the results are not statistically significant. As with the sample of male CEO's, the impact of investors on stock price with younger half of the CEO's at first improves while the event-study-window decreases (Table 7). However, when decreasing the period to 5 days, the reaction of the investors becomes negative. For example, -2 to +2 days-window gives -0,25% cumulative abnormal return and the t-test of 0,03. The other differences in abnormal returns when changing the event-study window can be seen from Table 6. In addition, the tables 6 & 7 are followed by abnormal returns around the announcement date and 21-day cumulative abnormal return figures 5 & 6.

t	[E] r	AR	CAR	AR t-test	CAR t-test
-10	-0,02 %	-0,04 %	-0,04 %	-0,04	-0,04
-9	0,04 %	-0,26 %	-0,30 %	-0,14	-0,19
-8	0,53 %	0,29 %	-0,01 %	0,14	-0,04
-7	-0,14 %	0,06 %	0,05 %	-0,09	-0,13
-6	-0,07 %	-0,36 %	-0,31 %	-0,22	-0,35
-5	-0,12 %	0,01 %	-0,30 %	0,01	-0,34
-4	-0,11 %	0,54 %	0,24 %	0,33	-0,01
-3	0,17 %	-0,14 %	0,10 %	-0,11	-0,13
-2	-0,21 %	-0,16 %	-0,06 %	-0,08	-0,21
-1	0,25 %	-0,19 %	-0,25 %	-0,14	-0,35
0	-0,18 %	0,08 %	-0,17 %	0,08	-0,27
1	0,03 %	-0,09 %	-0,26 %	0,14	-0,13
2	0,09 %	0,11 %	-0,15 %	0,03	-0,10
3	0,01 %	0,15 %	-0,01 %	0,01	-0,09
4	-0,25 %	0,33 %	0,33 %	0,18	0,09
5	0,10 %	0,23 %	0,55 %	0,02	0,11
6	0,08 %	-0,28 %	0,27 %	-0,16	-0,05
7	-0,10 %	-0,05 %	0,23 %	-0,08	-0,13
8	-0,21 %	0,50 %	0,73 %	0,23	0,10
9	0,14 %	-0,13 %	0,60 %	-0,13	-0,03
10	-0,21 %	-0,24 %	0,36 %	-0,03	-0,06

Table 6. The Event-Study results of under 53-year-old CEO's.

Under 53			
Cumulative period		CAR %	t-test
-10 - +10		0,36 %	-0,06
-5 - +5		0,86 %	0,46
-2 to +2		-0,25 %	0,03

Table 7. The comparison between different time-windows.

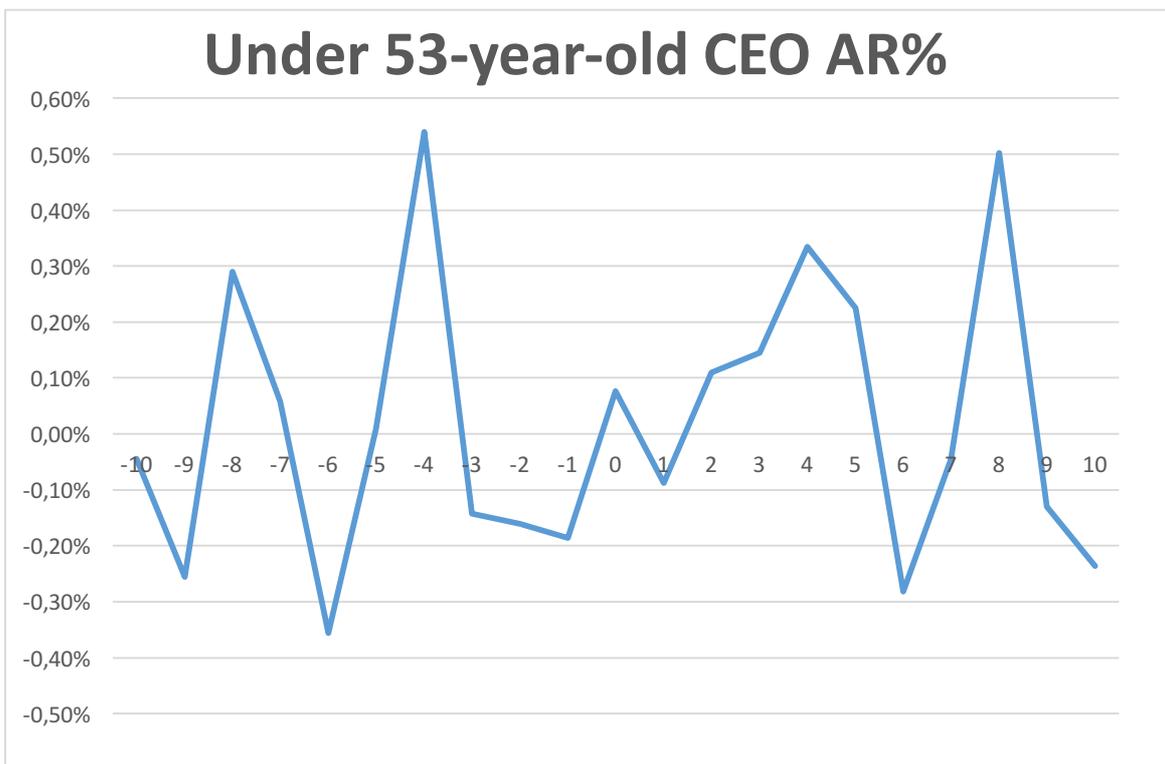


Figure 5. The average abnormal returns around the announcement date.

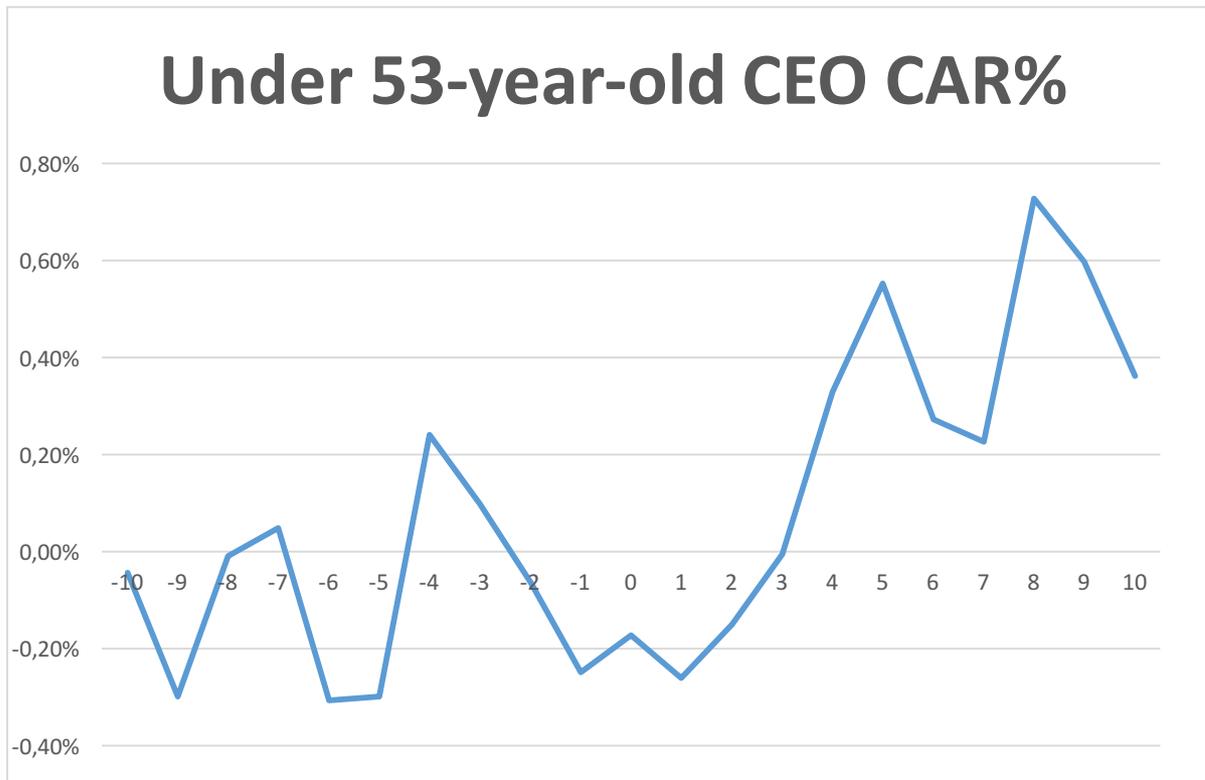


Figure 6. The cumulative abnormal returns around the announcement date.

The results shown in Table 8 describe the investor reaction to over 53-year-old CEO appointment. The cumulative abnormal return in the whole 21-day period is -0,34%. When comparing the effect to younger half of the appointed CEO's, it can be seen that older CEO's are more appreciated by investors. The daily abnormal returns in Figure 7 vary from 0,50% to -0,39%. In addition, the t-tests of the same daily abnormal returns are in the range of 0,23 and -0,28 and are not statistically significant. The t-test of the cumulative abnormal returns during the whole 21-day period is -0,08 and is not statistically significant. Again, like with younger half of the CEO's as well, the impact seems to increase while shortening the event-study-period. The changes can be seen from Table 9. The daily abnormal return and cumulative 21-day abnormal returns are followed after Table 9 in Figures 7 & 8.

t	[E] r	AR	CAR	AR t-test	CAR t-test
-10	-0,07 %	-0,14 %	-0,14 %	-0,04	-0,04
-9	0,33 %	0,03 %	-0,11 %	-0,01	-0,05
-8	-0,31 %	0,20 %	0,09 %	0,07	0,02
-7	0,12 %	-0,04 %	0,04 %	-0,01	0,01
-6	0,18 %	-0,07 %	-0,02 %	-0,09	-0,08
-5	0,21 %	-0,06 %	-0,08 %	0,15	0,07
-4	-0,24 %	-0,09 %	-0,17 %	0,02	0,09
-3	0,12 %	0,26 %	0,09 %	0,16	0,25
-2	-0,08 %	-0,14 %	-0,05 %	0,01	0,26
-1	-0,01 %	-0,01 %	-0,06 %	0,14	0,39
0	-0,24 %	0,50 %	0,44 %	0,23	0,62
1	0,32 %	0,06 %	0,50 %	-0,15	0,47
2	-0,14 %	-0,39 %	0,11 %	-0,04	0,43
3	0,31 %	0,13 %	0,24 %	0,01	0,45
4	0,11 %	-0,37 %	-0,13 %	-0,28	0,16
5	0,09 %	-0,15 %	-0,27 %	-0,17	-0,01
6	0,04 %	0,23 %	-0,04 %	0,20	0,20
7	-0,07 %	-0,26 %	-0,30 %	-0,17	0,02
8	0,11 %	0,24 %	-0,06 %	0,19	0,21
9	0,07 %	-0,15 %	-0,21 %	-0,04	0,18
10	-0,01 %	-0,13 %	-0,34 %	-0,26	-0,08

Table 8. The Event-Study results of over 53-year-old CEO's.

Over 53			
Cumulative period		CAR %	t-test
-10 - +10		-0,34 %	-0,08
-5 - +5		-0,25 %	-0,01
-2 to +2		0,02 %	0,18

Table 9. The comparison between different time-windows.

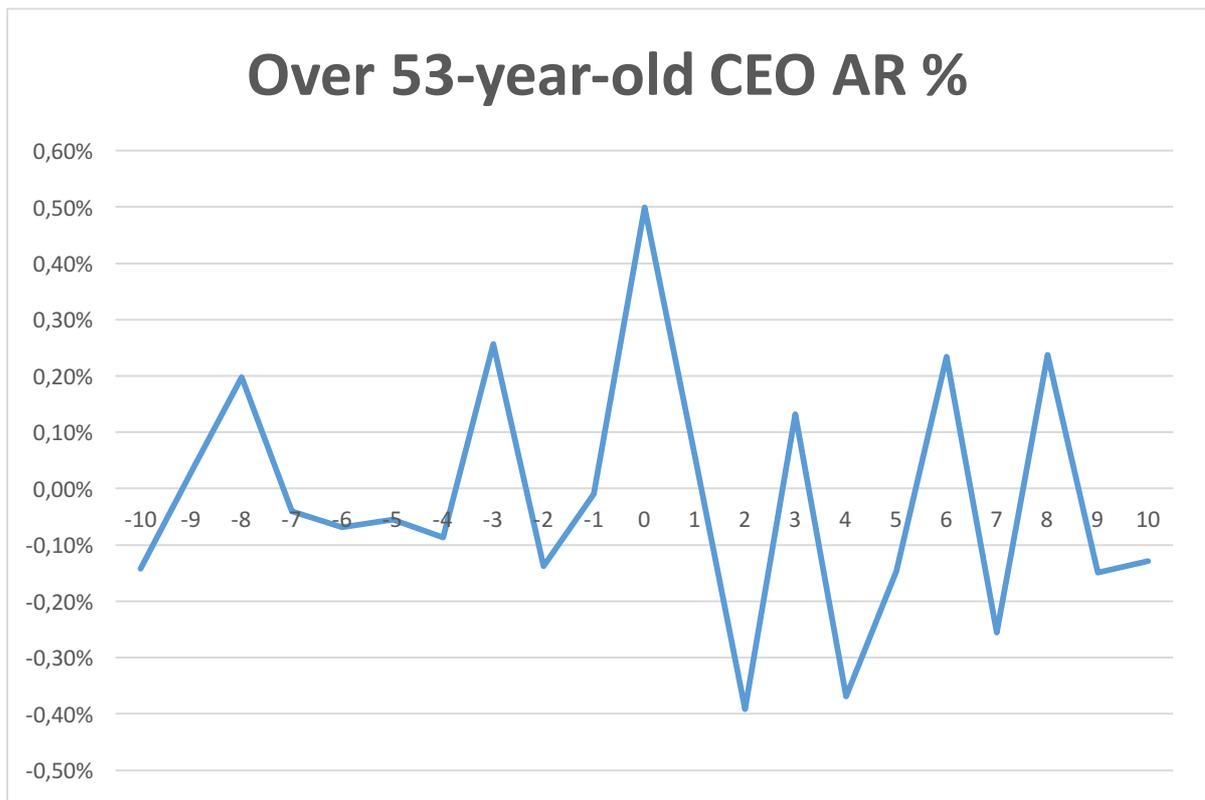


Figure 7. The average abnormal returns around the announcement date.

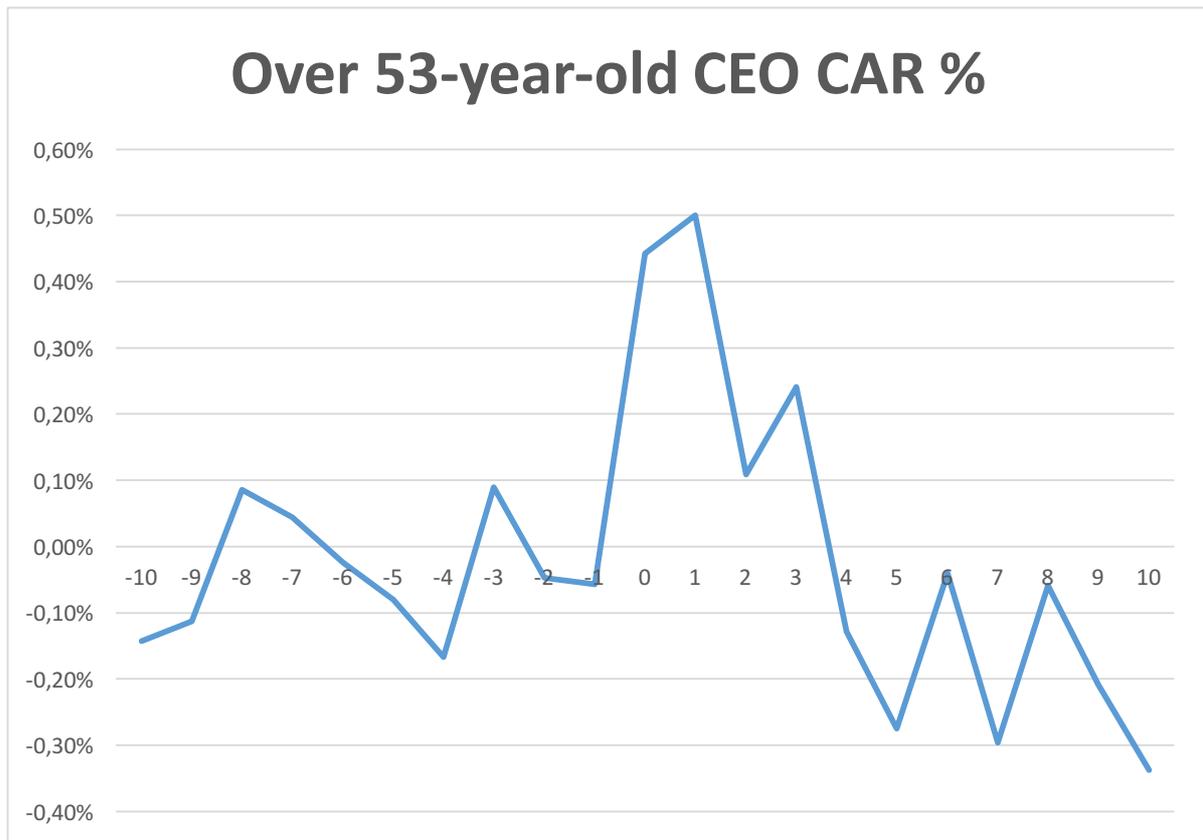


Figure 8. The cumulative abnormal returns around the announcement date.

It can be seen from all of the tables that negative and positive reaction by investors are happening before and after the announcement date. Investor clearly anticipate the announcement as well as react to the announcement afterwards. The appointment of a CEO clearly has an impact on investors and the appointing of a new CEO is an important job. Especially with male CEO's the reaction of the investors during the announcement day was substantial, as the abnormal return was almost 1%.

All in all, the results with male and female CEOs and between younger and older half of the CEOs were interesting, especially when measuring the individual results. At first, one might think the market to react more positively to an older and by this, more experienced CEO, than to freshly graduated in his mid-thirties being young CEO. Naturally, the industry and company explain at least part of the phenomenon. Some industries and companies require young and attractive executive to lead the company. Sometimes they might not even participate to the

management of the company and are only figureheads. In contrast, other companies require strong leadership by the CEO. By these and other arguments, the investor evaluate each executive carefully and form their opinion of how they are capable of running the company.

8. CONCLUSIONS

The main purpose of the study is to examine how the company's stock price is affected when the chief executive officer changes. Especially, the study emphasizes on demographical differences between the appointed Chief Executive Officers. CEO is the head of the company and the research finds how investor perceive demographically different people as company leaders. The research questions are studied with event-study-methodology and the results show there is a difference in investors reaction measured by different samples divided by demographical factors, which in this study consists of gender and age of the executive. Even when the other movements of the market are eliminated or reduced, it is hard to estimate the impact of a certain event on stock price. However, the study shows investors and by this the stock price reacts differently towards demographically different CEO's. After collecting the historical stock prices and comparable index prices of every 128 nominations, the study calculated the Beta and the Alpha to calculate the expected return of the stock. By this, the abnormal returns are calculated by deducting the expected return of the stock from the actual return of the stock. Thus, if the actual return is larger than expected return, the stock has gained positive abnormal return. Finally, it calculates the cumulative abnormal returns and the t-tests for abnormal returns and cumulative abnormal returns to measure whether the results of the study are statistically significant.

The most interesting aspect of the results is definitely the comparison on male and female CEO appointments. As mentioned, the previous literature finds contradictory results of the subject. For example, Lee & James (2007) find the investor and by their actions the stock price of the company to gain almost 4 % abnormal returns in stock price. In contrast to previous literature, the study does not find a significant reaction by the market participants towards the appointments of new CEOs. The results would indicate that investor have break the "glass ceiling" and female CEO are not unappreciated or relatively new and risky candidates anymore. The number of female executive is increasing and the main purpose of the study was to find how investor perceive the female CEO's after 15 years. In other words, have the market participants become less conservative in the past 15 years. The difference in cumulative abnormal returns in the male and female CEO 21-days event-study-period is not much (0,08%) but it is way less than in in the study examined in the 1990s by Lee & James (2007).

In the study average decrease in the stock price was -3,71% with female CEO appointment and -0,49% with male CEO's. From Lee & James study the difference has decreased over 3% and even turned upside down. The first hypothesis of the study was that investors react negatively to the appointment of a female CEO. The hypothesis gets rejected in the 21-day event-study period.

There might be many explanations to the changed phenomenon. The study is made with a will to see whether the investor have changed their way of perceiving female CEOs and the results seem to prove it. Women have been increasingly nominated to top management positions and investor might not see them as risky and relatively new alternatives comparing to male candidates anymore. By this, since there has been 15 years when Lee and James (2007) made their research, a lot has changed and the gender of a CEO does not seem to have an influence on investor decisions.

The second hypothesis of the study was the investor to react more positively to the appointment of a male CEO than to nomination on a female CEO. Table 1 and 3 in chapter 7 present the results. In the 21-day event-study-period, the reaction of the investor towards male CEOs was -0,04% in cumulative abnormal returns. In contrast, the similar results with appointments of the female CEOs show a positive 0,04% CAR of the stock. By this, also the second hypothesis of the study gets rejected. Naturally the effect changes a bit if the perspective and the window of the study changes. For example, if the only focused change in stock price is only the day of the announcement, the reaction turns upside down with 0,91% change in stock price with male CEOs and -0,50% abnormal return with the appointment of a female CEO. However, one day is definitely not enough to measure the effect of the CEO appointment so 21-day period offers better and more reliable results to the event-study-methodology. Measuring only the day of the announcement does not offer any anticipation nor later reactions by investor. Even though the results of the study with the gender part are not statistically significant, it offers a completely different reaction comparing to previous research of the subject and shows the investor to treat CEO candidates equally and not to pay attention to the gender of a CEO anymore.

After going through the results of the impact of the CEOs gender to market participant's reaction is time to move towards the influence of a CEOs age to investors. As mentioned, the sample consisting of both male and female CEO

observations is split in half by median age. Tables 5 and 7 offer interesting results. Usually with age comes more experience, thus investor might see an older CEO candidate as a safer option than a younger competitor. The results of the study give contrary results. Investor react more negatively to older half of the sample. More specifically, under 53-year-old CEO nomination give an average of 0,36% cumulative abnormal return while the other half gains -0,04% of cumulative abnormal return. The results would indicate investor to see an older CEO as a riskier option. The reaction might be due to closer retirement age and by this another change in the company's CEO position. Younger CEOs might also be more capable of managing the public relationships in the eyes of an investor. The third hypothesis of the research was investor to react negatively on relatively young CEO. Based on the results, the hypothesis gets rejected. Again, the results are not statistically significant but the numbers offer interesting view to the questions regarding the investors reaction and possible discrimination towards the appointed CEOs age. Finally, the fourth and last the hypothesis of the research was the investor to react more positively to an older CEO appointment. Based on the results of tables 5 and 7, the hypothesis gets rejected.

The results discussed above are average results of the sample. The individual observations of the results also offered interesting results and a couple of them should also be mentioned. Car industry can be seen as a typical male industry and the appointment of a female CEO Mary Barra is good to be discussed. Investor might think a female is not a right person to lead a company from the car industry. However, when Mary Barra was nominated in December 2013, the cumulative abnormal return for General Motors was 5,66%. Definitely a strong reaction by investor. Another individual example of a female CEO nomination is the appointment of Avon Products CEO Sherilyn S. McCoy in April 2012. The Avon Products stock price cumulative abnormal return on a 21-day-period was a positive 20,27% with the t-test of 10,75, which is statistically significant at 0,001 level.

All in all, the results of the research were interesting and they offered new points of view to earlier literature of the subject. It is not too much to say that investor have brake the "glass ceiling" and discrimination towards female company leaders does not appear anymore. In addition, the nomination of a new CEO seems to have a connection to investor reaction and to stock price. By this, companies need to evaluate properly who is the right person to be in charge of

the company. Furthermore, the timing of the announcement should be properly planned. However, even the research shows the appointment of a new CEO has an impact on company's stock price, the demographical factors of the new CEO do not play as big of a role as they used to do. Based on the results of the study, the age seems to have a larger impact on investor decision than the gender of the CEO. Comparing to results from the study by Lee & James (2007) the number of female CEOs and the number of female investor has increased. Together the two changes explain a part of the results. Other explanation is investor have become less conservative and are not afraid of female CEOs anymore.

Investors reaction towards different CEOs is an interesting aspect and it needs to be studied more. New female top managers are hired and the number of observations and announcements increase. By this, in the future the samples of announcements increase and it is possible to get even more accurate results. Also, in the future literature, it would be interesting to see also other demographical factors and their impact to the investor reaction. For example, how the ethnical background of a CEO has an effect on the company's stock price.

Some countries are also considered to be relatively conservative while comparing to less conservative countries. While the amount of data grows and the number of female executive increases, it would be interesting to see in further research, whether for example investor in Finland and in the United States react differently on demographically different CEOs. At the moment, a study such as this, is not possible to do by the data collected from the companies in Finland, since the number of female CEOs is not sufficient.

The previous studies of the subject have only considered the markets of the United States. As mentioned, the reason might be the lack of data of the insufficient number of female CEOs. However, the number of female CEOs in Thailand is 49 per cent (Grant Thornton, 2013). By this, since the number of female and male CEOs is equal, the results of the similar study would be interesting. Also, an interesting factor for the further research might be the information of male and female as a portion of the whole number of the investor. If the number of male investor significantly beats the number of female investor and the market reacts negatively to female CEO appointment, it can be argued, that male investor are afraid of demographically different CEO and do not trust her. On the other hand, in a similar situation when the market reacts positively,

the reason might be something else, for example that investor have break the glass ceiling and trust equally both genders and demographically different people. In this case, also the promotion possibilities would be equal to both, male and female employees.

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