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List of abbreviations

CEO – Chief Executive Officer

CFO – Chief Financial Officer

COB – Chairman of the Board

Et al. – “et alii” – and others

e.g – “exempli gratia” – for example

etc. – “et cetera” – other things

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1. Introduction

There is a lot of problematic questions that CEOs are facing: optimization of production of a company, trend analyzing, product quality control, situation analysis and developing goals in coordination with current state, control of working personnel as well as search for new methods of motivation, communication, conflict management, coordination of group activities, development of self-control and discipline.

One of the main tasks nowadays for any CEO is hard work on oneself: especially developing such features as risk-taking and responsibility. Leading managers and top management teams are responsible for many decisions in an organization. Their decisions will define what happens to an organization in the future, in which direction will it develop: will it be successful or leave the market very quickly. In the times of modern competition, no-one wants to help companies that don't perform as good as the others. So it all lands in the hands of leaders of the company. Managers deal with a lot of problems and challenges in organizations. They search for new strategic goals and tasks, develop detailed plans on how to achieve goals, decide on a division of labor, coordination of social interaction and cooperation of organization with other organizations, optimization of all the operations within the organization, as well as they are continually searching for most effective styles of management.

Responsibilities of management lie nowadays far from being just a leader of a company. The understanding of relationships on the market, constant change of the market economy, differentiation of business, expansion of influence, all these factors make managers seek for possibilities of continuous improvement of their techniques. Organizations don't need specialists anymore; they look for managers with wide-range knowledge of modern management.

A modern image of an organization includes a combination of people's motivation, ambitions, organizational changes and constant adaptation to changes in the environment. An organization is developing together with a leading manager. If changes are happening in an organization the mindset of a CEO will change as well; it is either another challenge that makes him more confident in future or problems, which will make him look for new solutions, get new knowledge.

Every new personal social interaction is bringing new possibilities for a company, thus creating a big supporting pool. Every new possibility for a CEO is also a possibility for a company to grow more. If a CEO is looking for success, he can make it only through a successful implementation of his ideas while leading a company. There is no better way to describe the potential of a new leading manager to a company than looking at all his past work and seeing how many companies profited from his managing style. Aggressiveness, persistence, ambitiousness, openness to everything new - are all those features that create a CEO in a modern world.

A job that CEOs do in a modern economy is not just the hardest and the most stressful field of activity but also is the one that requires most of the responsibility. A modern CEO has to have knowledge in managing and economics, technology, technique, organization of production, psychology, finance, law and all the other parts of science. They have to know how to combine new knowledge in a technology world together with the potential of the company. The ineffectiveness and lack of quality of a leading manager can lead not only to a bankruptcy of an organization or reduction of economic activity but also can have an impact on the economy of the country.

There is a new understanding of what a CEO should be able to achieve thus creating a large amount of pressure for them. CEOs accept that their job is not just delivering a good level of performance but also is a style of their lives. They have to learn time management, communication, how to overcome stress at work, how to have a combination of organizational as well as psychological qualities, as well as to know how to include creativity into their managing styles.

CEOs are the leading force in organizations, they coordinate the work of all the departments and define their connections to each other. A primary task is to make sure that all the departments are working as one unit, that they all understand the goal of the company, and that they work united for the successful implementation of the strategy. Each manager decides on the strategy that is closely related to his own goals, and he does it in his managing style that has a set of characteristics unique to him.

A managing style of a CEO, as well as any other activity he does, is defined by specific personal parameters that are being pursued with more or less effectiveness. These personal parameters include all of the personal as well as professional factors of the CEO but mostly depend on the personality of a CEO. The managing of a company in a modern dynamic economy is a very complicated and stressful job, that can’t be successfully done if only to rely on knowledge that people are getting while they are studying at universities. A manager should be able to combine an understanding of some general statements with an understanding that different outcomes are possible depending on different environments and different combinations.

All the actions and decisions taken by people do not only depend on their wishes and needs but also a lot of cognitive factors hidden in the sub-consciousness or gained as a result of developing of a lot of complicated factors. People are responding to external events in an impulsive way, without in-depth analysis of reasons and consequences. Education, parents, experience and many other factors decide the reaction of a person to a situation. Young people usually form the way they perceive the world through fashion, modern culture and acceptable norms of behavior. Older people are more oriented on an organization of family life, career and moral principles.

I contribute to the literature on the behavioral theory of the firm (Cyert and March, 1963), prospect theory (Kahneman and Tversky, 1979) to explain psychology on how people make their choices depending on situations, and when are they ready to risk and when they prefer to stay away from uncertainty.

Further, I contribute to the literature on Upper echelon theory (Hambrick and Mason 1984) and human resource (Becker 1964, Coff, Kryscynsky 2011, Campbell et al. 2012) to explain why people are so important to organizations, and how their skills and knowledge can create a competitive advantage. I highlight the importance of CEOs for the organization. CEOs are the main drivers of all the changes in an organization. Their knowledge and experiences are of great value, and also how their personal characteristics are used to predict the future changes that will happen in an organization once they become CEOs.

Then I contribute to the literature on risk-taking (Andersen 2008, March and Shapira 1987, Liles 1974) to show how the requirements to the CEOs has changed in the past 20 years, and that if 20 years ago it was essential to keep business running and stability was of highest priority, now risk-taking is associated in the first place with a successful enterprise.

I also contribute to a literature on diverse work experience (Guthrie and Datta 1997, Castanias and Helfat 1991, Finkelstein and Hambrick 1990), to explain how risk-taking changes depending on the experience CEOs possess, and how important it is nowadays to work in a lot of different companies in order to be a successful CEO.

Lastly, I contribute to the literature on performance feedback (Greve 1998, March and Shapira 1987, Cyert and March 1963) to show how CEOs decide on the goals and strategies for new organizations they are being hired to and what is of the highest importance to them when they make such decisions.

2. Theory development

Researches started paying a lot of attention to the risk-taking by managers. It became one of the most important fields in economics. A lot of work has been done in the past few decades to explore what are the main drivers of risk-taking and where do managers find motivation for organization developments. Especially it started gaining attention after World War II; quality of products, relationships between the actors on the market, resources – all these elements got a new meaning, a new understanding. One main conclusion that everyone came to is – successful development of an organization in a modern world is highly unlikely without risky decisions.

In this section I will concentrate on four main research works that brought me to my topic. In Figure 1 Hoskisson et al. gathered all the research works they found on risk-taking and created the overview of the main elements of risk-taking by managers. For my research I will highlight the importance of behavioral theory of the firm – especially the importance of the aspiration levels, that are the subjective level of understanding what is success and what is failure; human capital – the importance of human personal and educational development for an organization; upper echelon theory – to explain what is the role of leading managers for the organization; and prospect theory - to show what attracts attention to the CEOs when they are making decisions.

2.1 Behavioral Theory of the Firm

One of the theories that explains the way decisions are being made, and the way of managing an organization is a behavioral theory of the firm introduced by Cyert and March in 1963. A firm is a unit of a leading manager with many department managers, and behavioral theory of the firm shows how this unit cooperates for the successful performance of an organization.

This theory explains that the decisions are being made under uncertainty and with limited information. Subjects who are deciding on a strategy cannot predict the outcomes of their decisions in the future given the significant amount of information that they cannot take into account while analyzing possible consequences. They are limited in abilities to set the needed goals for the organization to succeed. Also, they cannot concentrate on a realization of all goals at the same time, that is why they prioritize them and try to work on them sequentially. Goals are being chosen carefully since there are risks of unpredictable outcomes.

A behavioral theory of the firm shows how agents are making their decisions, how they choose what information to pay attention to, since they cannot physically analyze every source of information, how they process this information, and how their decisions affect the future of the organization.

Managers while making decisions with a lot of different alternatives and an endless amount of information decide on a subjective level that will satisfy them and a subjective level which will be a failure for them. Those levels will be different for different managers, and what can be a successful outcome for one manager can be a bad outcome for another manager. These levels they choose based on their personal aspiration levels and ambitions. Aspiration level is never the same for a manager, and it changes depending on a choice of comparison as well as success or failure of a manager at a given point in time. Depending on past experiences and personal aspirations managers change aspiration levels for the organizations. (Cyert and March 1963)

2.2 Prospect Theory

A behavioral theory of the firm explains how a firm that is represented by a group of people who are in charge behaves when it comes to making decisions. Prospect theory is a theory by Kahneman and Tversky who researched how an individual behaves under certain circumstances.

First of all, when people are faced with decisions under uncertainty, they see the factors of decision irrationally. People tend to overestimate situations with a high probability of appearance and underestimate situations of low probability of appearance.

Secondly, people do not estimate future income as an absolute number; they see it as a comparison to a regular income or as a comparison to some subjective standard value they accepted for themselves. Also when they make many decisions for achieving one goal under uncertainty and with high levels of risk, they do not see the outcome as one but perceive them separately from each decision. (Whyte 1993, p.433)

People are more risk-averse in situations when there is loss involved than when there are gains. It happens because people tend to forget about the absolute number of what they have, but pay attention to changes, and disappointment of losses has a more significant impact on their psychology than satisfaction from gains. Prospect theory shows that people prefer to take massive risks to avoid losses than to get some extra income with high risk, which leads us to a conclusion that people do not behave rationally. (Kahneman and Tversky, 1979, p.287)

This explains how leading managers make their decisions in organizations especially when are the main instrument of the decision-making process as well as one of the main resource of human capital. (Zhu, Spangler 2005, pp.40-41). This theory gives the first look at all of the empirical researches that try to explain how CEOs set goals and strategies, what they think when faced with loss situation and with gain situations; why are they taking risks and what is the main driver for them to take risks.

2.3 Human Capital

A development of economics in the leading countries changed an understanding of what economics is. New aspects were added to traditional interpretations: the economics of knowledge, innovations, new technology, new informational systems. Human capital is a base of a new economic system and enables a socio-economic development of modern society. Human capital includes a combination of skills, knowledge, and valuable personal characteristics that a person gets while learning and working. It does not stay the same throughout the life of a person. New knowledge and skills are adding up every day to the existent. A process of developing human capital is long: first knowledge people acquire at school, then they add up a university education, first experiences at work and so on. This process lasts as long as a person lives, and the more unique knowledge people get, the more valuable human capital is. (Becker 1964)

Organizations place high demands on the level of qualification, knowledge, and skills of employees. Those knowledge and skills that helped the staff to be successful yesterday are not relevant today anymore, and won’t be demanded tomorrow at all. External (economics, politics of the country, competition) (Wang et al. 2012, p. 121-122) and internal (technological changes, innovations)

(Howard-Grenville J et al. 2008, p. 74) environments are continually changing. Every organization makes sure their staff members are prepared for any unexpected change and always have their knowledge up to date. Social-economic progress is determined by new knowledge obtained by workers and further developed in the process of practice and retraining.

Human capital is unique depending on a person that's why it is so valuable. A long time ago human capital became a proven factor of creating a competitive advantage. One of the main reasons is its difficulty or recreation. People possess the knowledge, some of them have unique skills, others have valuable experience. A combination of such human capital under the roof of one organization can be the most significant competitive advantage a firm can create because it is challenging to imitate. (Coff, Kryscynsky 2011, p. 1430)

In recent years we could see a free transition of human capital from one country to another, from one city to another and it happens together with intense international competition and rapid development of new technology. Those countries that invest in the development of human capital attract its transition and create attractive work conditions are staying one step higher than those countries that don't care about their national human capital. (Grubel, Scott, 1966, pp. 270-271)

Growth and development of human capital are the main factors and drivers of the innovative development of the world economy and society. Knowledge is accumulated gradually, then science and education are being developed on its basis. After a highly professional scientific, intellectual and managerial elite is formed that enables the development of a country. Level of national human capital is the highest step in this chain, and without developing it, it will be impossible to compete with the innovative economy. (Becker 1994, p.17)

The accumulation of human capital implies not only an increase in the volume of knowledge but also a development of the skills by applying this knowledge and awareness of its importance and its place in society, the ability to adapt to changing conditions. Human capital is very difficult to find since not all the knowledge is essential to the firm, but also there is no guarantee that people are motivated to acquire firm-specific skills once they are hired. (Coff, Kryscynsky, 2011, 1438)

When science is being developed not only innovations are being created that help production of new technologies and methods of consumption to form, but also people who carry new abilities and knowledge about new innovations change. That is how modern science is turning into human capital. (Dakhli, Clercq, 2004, p.111)

Hambrick and Mason in their research on upper echelons explained that CEOs carry unique knowledge based on their experience and education. They have access to information that might be limited to everyone else, that is why they are a kind of human resource that is the most difficult to imitate. (Hambrick, Mason 1984 p.196)

2.4 Upper Echelon Theory

People are the main instrument of the realization of all organizational ideas and strategic decisions made in an organization. That is why organizations can be seen as a reflection of the top managements' personalities. Recent scientific researches on the decision-making process are showing more and more evidence of the primary role of a value system and other socio-cognitive factors that influence the decision-making process at individual and organizational levels. This idea was explained for the first time by Hambrick and Mason in their Upper Echelon Theory that shows the relationship between the organizational environment, strategic decisions, and top management. One of the main areas of scientific research is the study of the professional and personal potential of top managers and how it impacts their career development, effectiveness, and business (the impact of the personal characteristics of the CEOs on the strategy and performance of the company, the relationship between their life strategy and business strategy.)

Nowadays the technological development has brought us to the point when information is everywhere: newspapers, television, internet. It is physically impossible for a human to process all the information that is continuously being updated. That is why people develop mental models – the way they perceive the world, set of tools through which they think and make their decisions. Each person has their individual mental models. People continually change them because the world around is changing and they are facing new information, new experiences, and new knowledge. (Hall, 2011, p. 69)

Hall explains that company leaders are a perfect example of how mental models work. They face many situations throughout their career, they build up their knowledge base all their life, as well as getting a lot of professional experience. By the time they become CEOs of an organization they already have some set concepts and the way they perceive the world. When they are facing situations they have never experienced before, they coordinate new information together with a mental model that was developed before and thus have an understanding of how to solve this problem. Mental models decide for them how they see the world and how they make decisions. New mental models can be developed during their lives that can give an entirely new way of looking at the world.

Some leaders are working in a lot of different companies, changing their workplace and specialization every few years; others prefer to devote their careers to only one organization and specialize only in what they started working with. There are also leaders who start working on the bottom levels of the organization, and by moving up the career ladder, they become CEOs after trying a lot of different roles. All these examples of the CEOs show that people can build up their experience in a lot of different ways. They are applying different models of behavior while leading an organization and their decision-making process strongly depends on their previous experience. Thus all the outcomes of the organization are seen as a combination of a CEO's intellect together with his personal goals, characteristics, and professional experience. (Hall, 2011, p.70)

CEOs are always in the process of learning and acquiring new skills and information. They start firstly by getting knowledge in universities, then they start working and use knowledge in practice. By working in a company, they start learning a lot of new skills, getting new knowledge on top of university knowledge base. Until the moment they are at the peak of their career they can use all the knowledge resources they acquired. Human resource is the main factor for an organization that generates a competitive advantage. It is not always enough to have an ability to understand what is going on in an organization, but also to have an ability to analyze a firm inside a firm-specific environment and see far beyond one structure. (Becker 1994, p.20)

However, a CEO who is successful at learning new information and analyzing it together with his personal skills and experience can come up with unique ideas and help a company to generate a significant profit and rent. (Castanias, Helfat 1991, p.161) It is essential because they have the most significant impact on the organization, as well as they have the responsibility to make the most considerable changes in organizations. (Castanias, Helfat 1991, p.157)

In the next section I will explain more how these four main theoretical works interact with each other on an enterprise level.

3. Risk taking by leading managers

Risk taking is a part of any human decision, which depends on all the conditions and factors that affect positive outcomes of decisions made by people. Ignoring or underestimating the risk can be very harmful to the scientific and technological progress, it slows the economic system. It is impossible to create a successfully functioning organization without risk-taking which means that risk plays a very important role in entrepreneurship, it affects the relationship with stakeholders, profit, competitive advantage. (Andersen 2008, pp.155-156)

The risk in an organization can be described as any action or decision that is standing on a way of reaching goals by a company. It is a possibility that some factors will happen that can have a negative impact on the economic system of an organization and can change its current performance. A company can lose a considerable amount of money, it is time-consuming, it can affect profit and have many other impacts. There is a direct connection between risk-taking and firm performance. The riskier the strategy of the firm, the better performance the firm will show which can explain why some firms always perform better than the others. (Andersen 2008, pp.167-168)

In psychology there is an explanation of how people are taking risks, especially when there are two alternatives and each alternative has either a higher level of risk and higher outcome or low level of risk but very a low outcome. Majority of people will always choose a low level of risks even if an outcome is not significant. (Kahneman and Tversky, 1979, p.287) However, such a predisposition to no risks can be fatal for organizations because first of all, it lowers the performance but also can take away a competitive advantage for a firm.

The primary goal of any organization is growth, competitive advantage and profit. Organizations need to change together with changing the environment and changing conditions on the market. Once it stops its development, it can lead to adverse outcomes as well as it is even riskier to leave a business strategy without any change than to make some steps towards improvement. Sometimes in order to enable a company’s growth, some significant changes are needed and sometimes only small corrections of business strategy. (Ambrosini et al. 2009, pp.10-11) It all depends on personal goals of CEOs, what goals are they setting, what they want to achieve. If they want to achieve bigger goals, then we can talk about the growth of an organization. However, if they are satisfied with a current economic situation of their organization and don't want to risk losing its position, then the company will not generate more profit. (Fredrickson, 1986, p.291)

Most of the decisions in a company are being made under risk since there is so much information that cannot be physically analyzed and many alternatives no one can be sure that exactly this alternative will give them expected outcome. It is also complicated to predict with 100% certainty what will happen in the future since many factors can impact the result. Those factors can be internal – come from within the organization, and external – come from outside of the organization. External environment factors include all the social and political, economic and ecological conditions within which the firm operates. There are many participants in a market whose behavior is not always predictable, but it has an impact on the uncertainty of situation: demand-supply for goods, money, investments, limited knowledge of business and many other circumstances. (March, Shapira, 1987, pp.1409-1410)

On the other hand, there are a lot of interpretations and ideas on what is a right decision in one situation or another, that is why having even two different alternatives for a decision, a CEO is risk taking by choosing one. If something goes wrong or there is an unpredictable situation, there is a massive risk of losses for an organization.

Nowadays leading an organization is directly associated with risk-taking. Almost every decision a leading manager is doing has a percentage of uncertainty about what's going to happen in the future. If a company wants to grow, current strategies have to be reviewed, and certain decisions about new strategies have to be made. Success depends on how successful the chosen strategy becomes. An economic situation on the market is continuously changing, strategies have to be adapted to new circumstances, and there is no written rule on which strategy leads to a certain outcome, as well as there is no one strategy for every organization. In certain circumstances especially when strategic decisions are being analyzed and rated, the economic and financial risks are the most important factor to pay attention to. New CEOs are being hired by organizations when there is a need for change: new opportunities for business, looking for new markets, the production of innovative products, looking for new resources. It is expected that a CEO will be the primary driver of all the changes due to his experience. The uncertainty on the market makes CEOs learn quickly and develop an intuition that is being added later to his mental model. Intuition helps CEO to make actions and feel secure about a positive outcome. (Quigley, Hambrick, 2012, p.834-835)

The level of risk-taking forms not only objectively but also depends on the economic behavior of a CEO that is based on his individual predisposition to risk-taking towards given opportunities. None of the participants of the market can predict with certainty factors that will guarantee the success. A risk is an integral part of entrepreneurship. (Brockhaus 1980, p.510)

All the individuals understand risk-taking in different ways. It depends on a lot of personal factors, and personal understanding of what success is. The higher is the aspirational level and desire of success, the higher risks will a person take. The events that are happening cannot be described as positive or negative. Only CEOs can give them their interpretation. If the event corresponds to CEOs goals and ideas, then he will perceive this event as positive for the company, if it is not in the interests of an organization, then this event has a negative impact. Different people interpret each event in a different way depending on their personality and personal interests. The more negative impact an event has on an organization, the riskier it is for its performance. (Brockhaus 1980, p.511)

If a person is ambitious and likes to change everything around a lot, then they perceive risk as a possibility to make their life better. (March Shapira 1987, p.1406) CEOs that tend to always look for improvement are always in search for possibilities that emerge on the market because every change is a chance to come up with something new before everyone else thinks about it. (Andersen 2008, p.158) If a strategy turns out to be unsuccessful and a company is facing losses, it is not only a problem for a company but also a personal loss for a CEO. Since their way of managing as well as all the strategies implemented in an organization are the reflections of their personal ambitions. (Brockhaus 1980, pp.510-511) Leading managers are mostly attracted to risk-taking because they do not see problems as threats but as opportunities. Due to the experience as well as a level of confidence any new choice of an alternative is seen as a possibility to achieve a good outcome. (Palich, Bagby 1995, pp.427-428)

At the same time, people who love stability are afraid of taking risks, and they will always try to avoid them. Perception of risk depends on an individual personality that includes his character, psychological characteristics, level of education and knowledge. One CEO sees a particular risk as acceptable when for another one it is unacceptable. (Weber, Hsee, 1998, p.1206) Performance always depends on how interested is a person in achieving success. Given a particular choice of two alternatives, CEOs will choose more or less risky one depending on his strive for success and how much he fears failure. People differ in their motivations, and before they make any decisions, they always analyze what can they get out of the situation. (Atkinson 1957, p.359-360)

Not only personal characteristics can influence the way people understand risks, but also a way the question or task is presented. Kahneman and Tversky presented the so-called “framing effect” in 1981. It shows us how people’s opinion on risk-taking in a situation changes depending on the way the question is being asked. When the center of attention is being attracted to gains, people are ready to take definite little profit, and they are not ready to risk, because they can get nothing. However, when a question is being asked so that attention is being shifted to losses the majority of people will take huge risks. It shows us that people are getting more emotional when they can lose something than when they can gain from the situation. (Tversky, Kahneman, 1986, pp.257-258)

Some CEOs have a predisposition for risk-taking, other CEOs are satisfied with the stability. Their personal characteristics influence the decisions they make throughout their careers. These decisions I will describe in the next section of my research.

4. Diversity of CEOs' experience

We are living at the time of technological changes and the more innovations we are being faced with, the more professionals do we need. Industries interfere with each other; companies specialize in more than just one product or service, and so the leader is being required who can successfully develop the strategies and make sure that the company is moving in a consistently positive direction. Managers are expected to be flexible, to be able to understand new technologies as well as to be able to analyze how these technologies will change the industry and the company.

Changes are happening so rapidly, that a simple educational system cannot prepare proper specialists based only on the knowledge they provide. The problem arising here is that the information that CEOs are facing today might be already inefficient in five years. There is a need in a constant update of professional knowledge, which leads to continuous learning till the end of the career. Information overload causes many changes in understanding of what skills and knowledge should CEOs, and top management team have. Changes in the economic environment require constant change in professional orientation of specialist at different stages of their career, learning new fields of activities.

In the first years after the World War II there were different requirements to what functions should CEOs fulfill. Leaders of companies started their careers in one company, where they developed all needed skills, integrated firm-specific knowledge, knew all the information about competitors. This way they became specialists, that was required to become a CEO. Nowadays we live in a period of globalization, and the whole understanding of business has drastically changed. Every day new products are being introduced on the market, there is much pressure towards what CEO should be able to do. Firm-specific skills are not being asked for anymore, CEO should not only be a specialist but to have knowledge in different specializations.

Castanias and Helfat 1991 divide professional skills into three groups. Generic skills - are the skills that CEO develops by working in a lot of different organizations, they are easily transferable between all the organizations, and can be applied everywhere. Those types of skills are characteristic to generalist CEOs. Industry related skills - are already limited skills with knowledge only about the environment the firm operates in. The third group is called firm-specific skills, those are the skills that can be applied only inside of one organization, usually profound knowledge about all the inside operations, that specialist CEOs possess. (Castanias and Helfat, 1991, p.160)

CEOs who devote their career only to one company have a very limited mindset, and not that many possibilities for personal development. They have limited specific knowledge, that can be applied only to one company, as well as they are very devoted and connected with this company. (Hambrick, Mason, 1984, p.200). The longer CEOs stay in one company, the less there is a chance that a company will be associated with novelty. (Helmich 1977, p.253) It is sometimes a big advantage especially if the organization does not operate in a field that requires constant changes in order to be able to compete. In this case, time is saved on introducing the firm-specific knowledge to new managers, as well as costs of compensation are reduced. (Zajac 1990, p.227, Gupta 1984, p.707)

Guthrie and Datta showed in their research that firm profitability directly depends on the functional background of the CEO. (Guthrie, Datta, 1997, p.552) However, this works for the first few years the CEO is being hired. Top management team of organizations understands that the longer CEO stays in one position, the fewer possibilities for innovative ideas they have. (Allgood, Farrell, 2000, pp. 389-390). CEOs stick with the same sources of information and same social connections, they keep on developing past strategies and develop new based on old ones, not seeing new possibilities. They feel more responsible for people, who work for their organizations, thus developing attachments. All these reasons make them careful in making decisions not to harm anyone. They stop making decisions that can involve much risk-taking and start thinking a lot before changing anything. (Finkelstein, Hambrick 1990, p.498). That is why CEOs who have a lot of experience do not stay in one organization for a very long period of time looking for new opportunities.

Not all of the experience is seen as needed for generalist CEO, but only that one that can be transferable from one firm to another. Only then this experience can be seen as valuable. So when a company is hiring a CEO with much experience, it does not mean that this company will gain advantages even if the compensation of a CEO is high. CEO of a lot of little private firms is not the best replacement for a huge corporation, even if the field of activity is the same. (Bragaw and Misangyi, 2017, p.256)

CEOs are being hired depending not only on their past experience. Every decision about a company strategy a CEO will make in the future will directly depend on his professional and personal skills. A huge role in understanding how CEOs make their decisions play their personal skills. Generalists have a predisposition to experimenting, curiosity, openness to all ideas, ambitiousness, creativity. Great past experience of a CEO determines how quickly he can process new information and interpret it as well as how effectively he can use this information in defining the goals of a company. Personal skills of CEOs are defining the way they create goals, and what tactics they choose for company development, and this defines the chosen strategy of organization development. (Miller, Toulouse, 1986, pp.1391-1392).

Companies are looking more and more for CEOs depending on their personal attributes. If the main orientation and goal of the company is to go abroad, then most likely they will hire a CEO who is not afraid of risk taking. Since CEOs have such a wide variety of exclusive responsibilities, they usually are the main triggers of changes in an organization. So every change, operation or developed strategy will depend on who is CEO, and what are his personal attributes. (Bertrand, Schoar, 2003, pp.1203-1204)

Leading managers of companies who worked in a lot of different specializations can detect important information not only for the firm they are working for but also for other firms. During their career they gather such experiences in different situations and see problems from different perspectives. This way when they are facing a difficult financial situation in one firm, they quickly analyze it and make some move thus bringing his experience to another firm. Thus they create a memory for all the combinations of factors gathered from different companies they worked for – mental models, and it will not be a problem to react quick enough if a similar situation happened in a company he works for now. On the other hand, a CEO who worked all his life only in one company even if it was very successful cannot transfer all his experience to another company, because he has a very limited vision of what can be.

Hambrick and Mason divide executives work experience into three groups. The first one is production-oriented, which includes all the processes of production from input to output. The second group is a non-production oriented experience which is directed on all of the innovation processes, as well as research and development. Such an experience is very product oriented because it allows CEOs to understand what is in demand on the market quickly. The third group includes finance and law experience. (Hambrick, Mason, 1984, p.199)

There exists a direct connection between the experience that CEOs get in other organizations and the way a firm will operate in the future and what type of diversification will be chosen. CEOs whose main experience is product-oriented will decide for diversification through production of an entirely new product or service. The ones who have their main experience in firms that are not production-oriented will try to diversify through foreign direct investments. (Song, 1982, p.380)

The job that is connected to constant learning and getting new knowledge and to a possibility of using this knowledge is associated with a lot of risk-taking as well as uncertainty in achieving an expected result. (Garcia, Calantone, 2002, p.111) We see that there is a huge difference in the ways how a human resource is being developed. It is getting harder and harder to find a replacement for valuable specialists in a short period of time. Participation of a CEO in an innovation process is determined by his psychology. Education and diverse work experience positively affects innovation processes in organizations. (Chen, et al. 2011, p.178) If a company sees its future in growing it requires a leader who will be familiar with risk-taking. It is proven that the more diverse the experience of a CEO is then the riskier the policy he will use while managing an organization.

One of the riskiest decisions in organizations are decisions on innovations. It includes all the stages of innovation management starting from the idea being born till the moment when innovation is being brought to a market. Innovation is the central element of the functional characteristics of entrepreneurship and the CEO is the main driving force when it comes to restructuring. Innovation can be seen as a production of a new good, or giving new functional characteristics to an existing good; introductions of new methods of production; development of new markets. Entrepreneurship involves a constant systematic search for changes and use of opportunities. (Garcia, Calantone, 2002, p.112)

CEOs with diverse work experience will make a lot of decisions that include a high level of risk-taking, because they have a predisposition to creativity, creation, and innovation. Their experience in different specialization helps them to see a bigger picture and pay attention to more details before the decision will be made. They are always in a constant search for new ideas and strive to introduce them in a company. They are always willing to expand their activities. But not only creativity defines their strong position among the other CEOs, but also their analytical skills that are necessary when there is not enough reliable information about the future. (Custodio, Ferreira, 2013, pp.472-473)

When companies face the development and production of new innovative products, they are going through a process of acquiring new knowledge and getting a new experience. When a company goes through a stage of adaptation to a new situation on the market, CEOs as well should adapt to new conditions. Sometimes it requires even the change of the management style. The diverse work experience of CEOs helps them to quickly understand what a company needs for growth: is it acquisitions or entering new markets, or growing a company through production of new products and services on the market. (Makri, Scandura, 2010, pp.78-79)

Leading managers with a lot of experience who have worked for several or more companies bring into a new organization not only their knowledge but also social resources – social networks. (Bebchuk, Fried, 2003, p.3). The more substantial amount of social resources a firm has, the more access it has to all the other resources that a firm might lack. Social connections can help a firm to get access to not only all the lacking resources but also to valuable information. CEOs rely on such information more than on the information from different printed sources; there is a benefit for leading managers since they get some valuable specific information before it is exposed to others. (Geletkanycz, Finkelstein 2001, p.890) Information that comes directly to the CEO from their external ties has an impact on executives' decisions under uncertainty since it helps to reduce the number of alternatives or shifts the attention to those alternatives that have more importance to the other executives. Also a social network of the executives can have a great impact on how they process information and how they see the environment. (Geletkanycz, Hambrick 1997, pp.655-656)

A firm that experiences significant losses and is close to bankruptcy relies a lot on its financial reputation. It is essential for banks to check the reputation of a borrower in the business and financial environment to decide for a level of trust. By having required social resources the CEO helps an organization to gain some loyalty from a creditor and to receive credits under unique and more attractive conditions. Social resources can be a deciding factor for an organization in those countries that have economic and political restrictions and in cases where there is a large debt. (Conghui, Liu 2014, p.12)

A demand for generalist CEOs is growing rapidly nowadays, especially that we see economic globalization. It is important not only to understand the business processes of an organization but also to understand all the non-production functions and to have social connections. (Zhang, Rajagopalan 2010, p.335). The requirements of such CEOs are very high, and demand is growing with every year. Organizations are ready to pay a higher compensation to them just to get generalists. (Murphy, Zabojnik, 2004, p.195) Custodia and Ferreira found that CEOs with diverse work experience are being paid 19% more than specialist CEOs. (Custodia, Ferreira, 2013, p.472)

Experience can be different, for some companies a particular experience is valuable when for other companies it is not valuable at all. However, international experience has many advantages for every organization. The compensation of CEOs with international experience is much higher than the compensation of CEOs without such an experience even if they are generalists. Experience of such CEOs is very valuable and highly demanded, and not many CEOs possess such experience. Once its gained and being combined in a future with firm-specific skills it brings a competitive advantage of a firm to a new level since the human resource of such CEOs is inimitable for the competitors. Leading managers with international experience usually have no troubles with entering international markets, (Carpenter et al. 2001, pp.494-495) and such companies go through mergers and acquisitions more often. (Herrmann, Datta, 2002, p.565)

CEOs with international experience have a higher predisposition to leading their companies to international expansion, which helps to grow a company and add more specializations to its activity. It also gives access to new innovational technologies, local knowledge, and more resources. In addition, it gives an opportunity for an organization to stop being dependent on the limited consumer market.

CEOs with international experience can analyze much more information, to detect all the possible problems and advantages for the company and also make riskier moves because they are confident about what they do. Such CEOs have to change companies often as well because by changing positions they have the best access to all the information and knowledge about international markets. (Hermann, Datta, 2006, p.760)

Thirty years ago when hearing that a leading manager is continually changing from one company to another would be a sign of unprofessionalism. Today it is more of a requirement that CEOs gain their experience in different organizations, go through different scenarios, see what problems can be and be prepared for more prominent organizations. A CEOs personality usually stands behind innovative processes that are being implemented as soon as the CEO is being hired by a new company. His ideas are creative for an organization that gets new opinions on its business and unique views on opportunities. The longer a CEO stays in one company, the older his ideas are as well as developing status quo can have a negative impact in the future. They take fewer risks in comparison to when they just start working at the company. Nowadays CEOs are spending less time at one company and try to change the place of work for a new experience more often on average than before. (Murphy, Zabojnik, 2004, p.193)

Brockman and Salas, divide CEOs not only to generalists and specialists but also to insiders and outsiders. Research shows that generalist-outsiders are the ones who are getting the highest compensation and are the ones who are in most demand. They have a fresh view at the company with new innovative ideas. They are loyal to their new company, but they can see its problems and disadvantages. They have their personal opinion on all the possibilities of a company's strategies and development as well as they can see their company among the competitors since they have more knowledge on the competition in different environments than a generalist-insider. (Brockman, Salas, 2016, pp.54-55) A generalist-insider has the following position when it comes to compensation because together with the fact that they worked on a lot of different positions and gained general knowledge, they also know a company from within and have long time developed firm-specific skills. (Brockman, Salas, 2016, pp.73-74) This way a generalist-insider has a better understanding of new strategies once they are developed by top-management teams and also knows all the substantial firm resources that are needed. (Shepker et al. 2017, pp.703-704). (Hambrick et al. 1993, pp.403-404)

Not only is the international experience of the highest demand but also about 41% of CEOs have their background experience in finance. It is a big advantage for a hiring firm because they save money on looking for a chief financial officer. In this case, a CEO also becomes a CFO, he gets not only the access to all of the most essential information but can also detect the main problems in an organization. A CFO sees an organization through numbers, but a CEO gets a much bigger picture straight away combining numbers with his experience. It is easy for him to make a decision when working with the profitability of the firm. Only one person is making strategic decisions by looking at the situation on the market, competition, market analysis, and firm analysis. (Custodia, Metzger 2014, p.128)

No matter if a CEO is a specialist or a generalist, there is always some level of risk-taking involved once a decision has to be made. In the next section I will describe what is the main reason, why CEOs are taking risks and what do they see as a failure or success after the implementation of their strategies.

5. Performance feedback

Modern organizations are functioning in a dynamic economic environment, which means that a company is always being faced with internal and external challenges with a high level of uncertainty. First of all, a lot of new technology is being brought to a market on an everyday basis. At the same time, there are constant economic and political problems that are sometimes difficult to predict, but they have a significant impact on business. With growing economics there are new demands every day, that is the biggest challenge for every organization because they have to change their strategies very quickly and in time. Once they fail to do so, it can lead to a loss of competitive advantage and a loss of customers.

Changes can occur not only because of an organization underperforming, and there is a need for new strategic moves in a company. Some organizations that are in the process of constant change which is a routine for them. (Greve 1998, p.59)

CEOs are the most prominent representatives of any organization. Will a company succeed or will it fail – it all depends on the decisions of leading managers. When facing different scenarios, they have to decide whether to make little changes and not to set higher goals or to make strategic changes and make their company a leader in an industry. But what is success for a company? When can we say that the organization is performing well.

People are always comparing themselves with others and only based on a comparison they can decide if they are better or worse. The same schema exists in a market, a CEO of one company compares it to the other companies and determines on one level what is standard and then sees if the organization is below or above that standard. CEOs start comparing the numbers of the other organizations to the numbers of their organization, and they form for themselves so-called aspiration levels. (Greve 2008, p.60) The perception of aspiration level differs from one CEO to another, and it always depends on what are the companies that are being chosen for a comparison, and what are the factors that are being compared. (Boyle and Shapira 2012, p.1103) But once the aspiration level has been decided on, it is automatically a point that will explain the success or failure for a CEO. (Greve 2003a, p.686)

CEOs choose aspiration levels depending on personal goals and characteristics, that’s why it’s a bounded decision-making process. In different situations different aspiration levels are being set. Greve 1998 divides them to a social aspiration level or historical aspiration level.

We talk about historical aspiration levels when a company’s performance in the previous years is being analyzed and is being compared to the performance in a given year. It is the best factor for a company to know that they outperform themselves which indicates that the company is growing. CEOs can see the mistakes that have been made in previous years and which can be avoided in the future. (Boyle and Shapira 2012, p.1102) Analyzing past performances gives a possibility for companies to develop positive routines: when some decisions or actions helped a company to generate more profit, they will be used continuously in the future as well. (Levitt, March 1988, p.320) Past historical aspiration levels are seen as anchors and decide whether it is a failure or success how an organization performs in a given year. (Mezias 2002, p.1287)

Social aspiration level shows a company’s performance among the other companies. Leading managers decide on the companies they want to compare theirs to and based on this comparison they decide on an aspiration level. This choice of other organizations for comparison is very subjective. CEOs are trying to find all the possible problems in their organization that are hindering their growth, they analyze all of the deviations and give them their subjective interpretation. (Greve 1998, p.60) There is no general rules or descriptions for deciding if an organization performs well or it requires a lot of changes. Every CEO forms a particular status for their organization based on their knowledge, experience, and expectations and decides what changes have to be done. (Baum et al. 2005, p.541)

A company uses one of the three models for reacting to performance feedback depending on its goals. A weighted average model describes a situation when one aspiration level is being set as a combination of social and historical aspiration levels. A separate model describes a case when a company is looking separately at the historical performance feedback and social. This model is the best for companies to analyse all the operations and to find the weaknesses of the business. A third - switching model - shows that organizations are switching between two aspirational levels depending on the importance of the goals. (Bromiley, Harris, 2014, p.340)

When a company is going through the process of comparison not just one factor is being compared but also many others. This way a lot of different goals are being set. Some goals are a priority; other goals can be postponed for future dates after the main goals are being reached. Organizations do not pay attention to any goals if they are not of the upmost importance. Usually, CEOs are setting some goals that have to be achieved, and those goals are directed towards gains. Once a problem is being allocated that leads a company to losses, all the attention of the CEO will be switched straight away to solve this issue. (Greve, 2003b, p.72) This happens because people tend to pay more attention to all the problems that are connected to a loss, even if there is a possibility to gain much more than the incurred losses will be. (Tversky, Kahneman, 1986, p.256)

Very often CEOs are setting goals in such a way that for the satisfaction of one goal another goal has to be achieved. This way the idea of priority goals can be described. E.g., If a company wants to achieve a higher profit than in previous years they have to grow the company so that they can compete with bigger organizations. In this case, a switching model is being described, when to achieve a historical aspiration level, a social aspiration level has to be satisfied. (Greve 2008, p.477)

If one of the factors is under the aspiration level, CEOs start to analyses all the possible reasons that are hindering the process of achieving a goal. Moreover, when a problem is being found they start taking risks to change the situation. (Greve, 2003, p.686). Some are ready to take huge risks. The others prefer to stay safe and hope for slow improvements. It all depends on the personality of the CEO as well as what levels the CEOs are paying attention to.

Much research has been done on what happens when a CEO gets negative performance feedback. The majority of research shows that the primary reaction of CEOs to negative performance feedback is to look for the problems, what can lead a firm to bad performance. Once all problems are detected, CEOs start changing the existing business models and come up with new strategies. There is no certainty in what strategy gives which result, that is why every decision on changing the current situation is including high risks of failure. This is a very typical situation for people to respond with risk-taking to losses. As prospect theory explains – people prefer to take significant risks not to confront losses. In Figure 2 we can see, that risk-taking function is growing once a firm is further away from bankruptcy and closer to the aspiration level. (Boyle, Shapira 2012, pp.1101)

Except for aspiration levels there is also a survival level. Survival level is a least attractive level a firm can be close to. Firms that perform below the survival level are threatened with bankruptcy. (Boyle, Shapira 2012, pp.1102) CEOs tend to switch their attention from aspiration levels to survival levels depending on what is their current situation in the company, and by deciding on the goal, they will also prioritize them depending on which level is closer they are standing to. Figure 2 shows that if an organization is closer to the aspiration level, then CEOs will take higher risks, but when a company is close to a survival level, usually they will stop risk-taking not to make a situation worse since risk-taking is closely related to uncertainty. (March, Shapira, 1987, p.1413).

There are also some contradictory results stating that when a company reaches their survival level, CEOs will go for greater risks because they want to do everything possible to make a situation better. (Miller, Chen, 2004, p.113) The time gap between these two findings is 17 years, and as it has been explained before there were not that many generalist CEOs in 1987 who were ready to take risks, they were usually hired from the inside of the organization and they spent most of their careers in one organization.

What can also play a huge role in how risky the decisions of CEOs are is the positioning of the organization among the competitors. There is a big difference in the strategies of the organization depending on whether it is a leader in its field or it is a follower. If a company is a follower CEOs set risky strategies in order to achieve their aspiration levels. However, once the goal is reached and a company becomes a leader risk-taking will decrease, because CEOs want to keep their position. (Boyle, Shapira, 2012, p.1101)

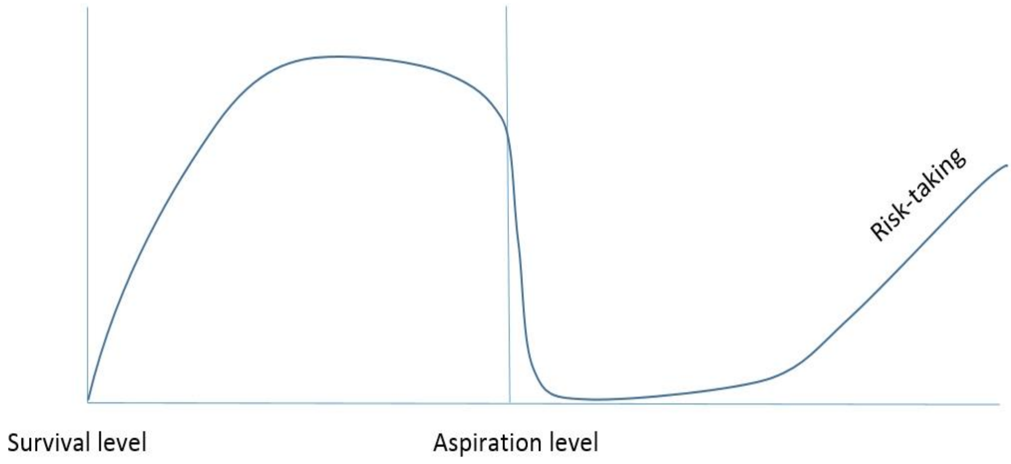


Figure 2: Risk-taking between survival and aspiration level

There is a lot of different opinions and research on what happens to risk-taking once a company is over their aspiration levels. Some researchers agree to the idea, that once a company reaches its perfect size and performance they will stop taking any risks, not to lose their positions (Iyer, Miller, 2008, p.815; Greve 1998, p.80), other researchers found that CEOs tend to take huge risks even if their companies are over their aspiration levels. (Baum et al. 2005, p.565; Chen and Miller 2007, p.379; Chen 2008, p.619)

Labianca et al. found that companies are being compared on two different levels, one is competitive, and one is striving. Firstly, CEOs set social aspiration levels for their company, to achieve the same performance as the leading companies in their environment. After a company reaches the competitive aspiration level, they switch to striving aspiration levels. We talk about striving aspiration levels when an organization once being a leader in its own field wants to achieve a higher level of performance and grow to the level of more prominent corporations. In this situation, CEOs will keep on increasing risk-taking even if their company is over its social aspiration level. For such organizations failure and success will be described depending on what kind of aspiration levels CEOs are looking at. (Labianca et al. 2009, p.437-438)

Before CEOs decide on goals for the organization, all the other companies are seen as direct competitors, but once an aspiration level is being set and goals are formed, these companies become "as someone to follow" (Park 2007, p.398)

Risk-taking behavior is also changing depending on how close or how far an organization is from its aspiration level. Once an organization is far below from its aspiration level, it triggers CEOs to take huge risks. The closer a company is to its aspiration level the smaller level of risks they are taking because once a company is close to its aspiration level, it needs only a little restructuring and thus does not require significant changes in firm strategy. (Baum et al. 2005, p.564)

When an organization reaches its aspiration level, risk-taking is reduced drastically because leading managers do not want to risk their new position in the market they were aiming for so long. Even if there are new possibilities for changes or new business propositions, leading managers will not take new risks, because the pain from the loss of the aspiration level will have more of an effect than satisfaction from the new achievement. (Greve, 1998, p.76)

One of the possibilities for a company to grow is to grow by size through acquisition or mergers. This is one of the empirical researches that explains risk-taking over the aspiration level. Even if a company managed to reach its aspiration level, CEOs can keep on taking huge risks and set new goals, when they want to achieve next level goals, and those goals can be to grow a company by size. (Greve 2008, pp.479-480)

It has been shown in a few empirical researches that the size of a firm has an impact on the levels of risk-taking by entrepreneurs. If an organization is big, then performance under aspiration level can lead to increased levels of risk-taking, but when a company is small, performance under aspiration level will not trigger risk-taking behavior. (Greve 2011, p.108)

Risk-taking over aspiration level is not always a needed risk. Some CEOs are ready to keep on making risky decisions, even if a company has reached its aspiration level and is not ready yet for another challenge. In this case, risks can be explained as unnecessary and can lead an organization to significant losses, as well as sometimes it can be fatal for an organization. (Boyle and Shapira 2012, p.1109)

Social aspiration levels also help companies to look at their performance in an entirely new way. By finding new partners and looking at other companies sources of information will continuously change, some problems will be detected that have never been noticed before because information also tends to get old. (Baum et al. 2005, pp.536-537) CEOs are reacting more often with risk-taking and changes to social performance feedback than to historical performance feedback. (Greve 1998, pp.73-74)

Corporations always tend to make sure they reach both aspiration levels, which helps them to grow their business as well to be among the leaders in the market. Very little amount of companies would agree to be the leaders on the market but not outperform themselves in comparison to previous years and opposite. Joseph and Gaba 2015 present different types of feedback: consistent, inconsistent and ambiguous. When consistent, companies regularly get an update on their historical as well as social feedback. When inconsistent, companies always get updates on one of the feedbacks, and still in case of negative historical or social feedback they will start a problematic search in order to solve the problem.

However, there also exists a situation, when companies do not outperform, and continually stay on the same level. That is when we talk about ambiguous feedback that is the first signal to big problems. This type of performance feedback does not give a clear picture of the company’s situation in the market, and CEOs might not understand that something needs to be changed because they are always getting stable numbers. When facing consistent or inconsistent feedback there are big chances that CEOs will take significant risks, but when feedback is ambiguous, they will not take any risks, because they do not see any problems. (Joseph, Gaba, 2015, pp.1962-1963)

It is not the only reason why companies might not increase risk-taking when facing negative performance feedback. CEOs interpretation of performance feedback can be different depending on personalities of CEOs. (Miller 1998, p.499) Some CEOs tend to change the meaning of negative feedback because they are so concentrated on the right image they have. In the literature this is called self-enhancement. When leading managers receive negative performance feedback they tend to change the chosen companies they compared themselves to and choose for comparison only those that perform on such a level that their company will look good; they create a new reduced aspiration level. If a company's goal is constant growth and change they have to compare themselves to companies that perform better. Once they start comparing themselves to companies with poor performance just to look better, they will start a harmful process of bringing a company down. (Jordan and Audia 2012, p.214)

In the next section I will develop the hypotheses, and explain how the theoretical part influenced my idea for the research. I will also describe all the data I had for my research as well as the tests I have done and the results.

6. Research question

6.1 Hypotheses development

One of the possibilities to learn more about an organization is to look at its leading manager. People are the central resource for organizations, that is why it is important to highlight the role of the CEOs. CEOs are directly connected to the image of the firm, as well as the performance of the firm creates an image for a leading manager. That is why it is so important for a CEO to use all the surrounding possibilities to make their potential work for them in order to enable the effective managing of an organization.

Nowadays when an organization is facing low profits, bad ratings, bad performance, it signals for the board of directors that some changes have to be done. One of the possibilities for change is to look for a new leading manager with a fresh look on the situation the company is in. The board of directors is looking for the particular types of CEOs - generalists, who are going to restructure their organization.

CEOs with diverse work experience are usually spending very little time in one organization. On the one hand, they have a predisposition to continuous changes, so staying in one company would mean no personal development and no challenges for such a CEO. (Miller, Toulouse, 1986, pp.1391-1392) On the other hand, we know that there are new requirements to what a modern CEO should do. In order to be seen as a successful CEO, they have to learn a lot of new skills and constantly update their experience. That makes a modern CEO motivated to change companies and work in a lot of different industries if he wants to get better compensations in future. (Murphy, Zabojnik, 2004, p.195)

The success of a company depends on the strategy a new CEO is implementing. No strategy is chosen without assuming there is even a little risk involved, and uncertainty about an outcome. Leading managers who just start their career and have no experience in acting at the time of a crisis will hesitate once a strategy is involving high levels of risk. CEOs who spent their careers in one company understand all the operations within the company. They also feel responsible for people working in their organization. Once they have a chance to make changes in a company that involves high risks of failure, they prefer to stay away from such decisions, since they feel responsible for their organization and all the people working there.

On the other hand, CEO with experience in a lot of different companies knows that high risks are always following new strategies. Companies that produce many innovations are always at the high level of risks because it is difficult to predict the reaction of the market an innovation. (Coles et al. 2005, p.436) A generalist CEO who has experience in such companies will take higher risks, when accepting new strategies and bringing new products to the market, than a specialist CEO.

H1: Companies that are led by generalist CEOs will invest more money in Research and Development.

Diverse work experience can be understood as the number of industries and the number of firms a CEO has worked for but also as the number of positions a CEO has had before he started working at a particular company.

A number of industries have a positive impact on the diversity of a CEOs' experience. Such CEOs possess the knowledge that is easily transferable between all the industries, as well as they have experience in many specializations. By working for a few years in one industry, they become specialists in this industry, and then they move on to a different industry. A CEO who was working in a lot of different industries will have the most diverse work experience following a by number of firms he worked for.

A number of firms means that a CEO is familiar with different sizes of companies as well as he gets experience with different economic and financial situations these companies are in. Every organization has its own firm-specific knowledge, and the more companies a CEO works for, the more specific and unique the knowledge he carries. It can be of great advantage by analyzing the competition.

A number of positions usually means that a CEO has worked in a number of different departments in an organization or has had several different positions at every organization he worked for. This type of generalists brings in knowledge about how a company works on different levels, as he is more familiar with different problems that arise on different levels of the organization but can be crucial for it functioning successfully. (Custodio, Ferreira, 2013, p.474)

H2a: Number of industries CEO has worked for increases research and development intensity.

H2b: Number of firms CEO has worked for increases research and development intensity.

H2c: Number of positions CEO has worked at increases research and development intensity.

When generalist CEOs start working at a new company, they are motivated to bring new changes into it. The first thing they do is review the old strategy and business plan, look for all the problems that make an organization perform bad. One possibility is to look at the history of an organization - historical performance feedback - to see what decisions brought a firm to where it is right now. Another option is to compare this firm to similar companies in the same industry - social performance feedback, so they can see where an organization underperforms and where it has potential.

CEOs who are facing a negative performance feedback have a few options: to react to the feedback by searching for all the possible problems in an organization that could have made it impossible to reach a company's aspiration level; to change the group of companies that are being compared to their organization in order to change negative social feedback to a positive one. The third option would be to ignore the feedback at all. (Boyle, Shapira 2012, pp.1101)

There is a possibility that by staying longer in one company a CEO will stop seeing any possibilities for improving it, as well as there is a risk to get too attached to it. Tenure of a CEO has a negative effect on the future development of a company. (Helmich, 1977, p.253; Allgood, Farrell, 2000, pp. 389-390) Modern competition on the market is intense; there are lots of companies that are being directed by different personalities. Each of them is ready to fulfill their ideas in order to succeed. However, working in one field can lead to a situation when there are no more unique ideas and no more possibilities for improvement, and thus they do not see how a company can grow without repeating what their rivals are doing.

By having a lot of different experience leading managers develop their creativity as well as their way of thinking. By moving from one company to another they add new visions to an existing way of thinking and can generate more new ideas than CEOs with limited experience.

The more companies a CEO works for; the more social connections he develops. Social connections are not only an excellent source of support when a company is in a difficult financial situation but also a source for information. First of all, it is insider information about the other organizations, because newspapers and modern media do not always show the real positions of companies. Also, it is another source of valuable information that can be also described as an experience that is not directly achieved but through the sharing of the experiences of others. (Geletkanycz, Finkelstein,2001, p.890)

When having a lot of social connections CEOs start comparing their organization to another organization, slowly developing a habit of looking at the other businesses. In addition to social connections, all the past companies a CEO has worked for will also be a source of comparison.

One of the main tasks of a managing leader is to make sure that an organization is growing and performs according to the goals. This goal is an aspiration level for a company towards which all the steps are being made. However, what is more critical for a generalist at the end of the year: is it to perform better than previous years, or to perform at the same level as the companies that are in the same industry. The more diverse work experience a CEO has, the more he will tend to achieve social aspiration level, so he will start making greater risks when facing negative social performance.

H3*: Risk-taking by generalist CEOs is positively moderated by negative social feedback.*

A number of industries and a number of firms a CEO has worked for has a significant impact on how leading managers see their company among the competitive companies. They will always compare their companies to the ones they worked before for but as well as to the other companies in the same industry.

If talking about insider-generalist CEO, his diversity might also be positively affected by a number of positions he has held in an organization, but I still assume that such a CEO is attached to a firm's strategy and would see as many possibilities for the company's development as CEO outsiders. That is why I do not include the number of positions into my hypothesis about generalist CEOs.

H4a: Hypothesis 1 is positively moderated by number of industries a CEO worked for.

H4b: Hypothesis 1 is positively moderated by number of firms a CEO worked for.

6.2 Sample

To test my hypotheses on risk-taking behavior of the leading managers of the companies I used data on the firms from the S&P500 index list starting from the year 2002 and till the year 2015. In total, I have 6040 observations. My data includes information on firm characteristics: its 4-digit code, so I have access to information in what industry does a company operate; Tobin's Q; size of the top management team, measured in a number of people; firm size - which is a logarithm of the number of employees; Herfindahl index - to know the level of diversification of the firm; information on acquisitions, capital expenditures and research and development, return on assets.

I also have information on CEO's characteristics that includes: CEO's name, CEO's age, a year a CEO became a leading manager of the company, tenure, whether CEO has a master in business administration. Also, I have a data on CEO shares, CEO options, how many firms, industries and positions CEO had prior becoming leading manager of a current company.

All my observations are collected from sources that include S&P500, Compustat, BoardEx, and Excecucomp.[1]

Table 1 is showing all the descriptive statistics on the variables.

6.3 Variables

6.3.1 Dependent variable

Risk taking. To test the first two hypotheses, I used investment in research and development as a variable that shows risk-taking in the firm. Prior literature suggests that risk-taking in the firm can be

[1] All the information on observations including data was provided to me by Dr. Christian Schumacher, Vienna University of Economics

measured by investment into R&D, capital expenditures, acquisitions, diversification. (Coles et al. 2006, p.436; Zhu, Chen, 2015, p.2085). Research and development has been highlighted in the literature as the riskiest investment. (Coles et al. 2006, p.436; Bhagat, Welch, 1995, p.445)

On the other hand, I want to test whether the diverse work experience of CEOs affects risk-taking in the company. CEOs with diverse work experience are known for their easier investment policy in comparison to specialist CEOs. Generalists gather more experience throughout their career and the more companies they are working in and the more decisions they are responsible for, the less they will hesitate when investing in a new product. (Custodio et al. 2017, p.4)

In order to test 3 and 4 hypotheses, I used a risk-taking variable. This variable has combined data on research and development, capital expenditures and acquisitions. I used the idea of a risk-taking variable from Chatterjee and Hambrick 2011, who calculated as a logarithm of the sum of the data on research and development, capital expenditures and acquisitions. (Chatterjee, Hambrick, 2011, p.212) In order to predict if the negative social performance feedback affects risk-taking, I think it is better to use a combination of all three factors to get a clearer picture.

6.3.2 Independent Variables

Diversity of CEO experience: in order to measure how diverse a CEOs experience is I used the model created by Custodio et al. 2013. In their research the generate a new variable which is the General Ability Index. General ability index is a combination of the work experience of the CEO before they started working at the current firms. This combination includes as been discussed above the number of industries, firms and positions a CEO has worked at. It also includes information on whether a CEO worked at a conglomerate and whether a CEO worked in a different firm. The higher this index is; the more diverse a CEOs experience is. (Custodio et al., 2013, p.474).

In order to test hypotheses 2, I used three elements of the general ability index separately. A number of positions indicates how many different positions with different functions a CEO had, e.g., marketing, finance, operations, etc. A number of industries is counted after the Standard Industrial

Classification, using their 4-digit codes. A number of firms is counted as the exact number of firms' a CEO has worked for prior to becoming a CEO at the current company.

Performance feedback: I need to test whether there is a correlation between negative social performance feedback and risk-taking. I used return on assets (ROA) as the measure of performance feedback. (Chen, Miller, 2007, p.373). First I generated a new variable - social feedback - by finding the average of ROA separated by industries (4-digit codes). Then I separated social feedback into negative social feedback and positive social feedback. Negative social feedback is equal to social feedback if Industry average social feedback is higher than firms ROA at a given year. Whenever social feedback was positive I replaced it with 0.

In order to test my 3 and 4 hypotheses, I also created a variable negative social feedback adjusted for diverse work experience. This variable is equal to generalist index multiplied by negative social feedback.

6.3.3 Control Variables

In my tests I used some control variables to exclude the possibility that some other reasons can cause my correlations. I controlled for CEO shares, CEO options, CEO age measured in years – age is proven to have a significant impact on how do people take risks. (Doremus-Fitzwater et al. 2010, p.120); I controlled for if a CEO comes from within the company - insider CEOs can have diverse work experience due to the fact that they worked on a lot of different positions. However, I still believe that even they are generalists, they have developed a status quo, and they are attached to their organizations. I also control for CEO tenure measured in years in which a CEO has worked at the current company and whether the CEO is chairmen of the board.

At the firm level I control for Herfindahl index - which indicated the firm's diversification; for firm size - a total value of assets; for board size – measured by a number of people who are the members of the board team.

6.4 Results

The results of a correlation test are presented in Table 2. There are almost no strong positive correlations between my variables, except for correlations between a number of industries, number of firms and number of positions. All the other correlation numbers tell me that there is no linear relationship between any of my variables.

To test my hypothesis, I used fixed effects regression test. Table 3 presents the results for the first half of my tests that represents the impact of diverse work experience on risk-taking by leading managers. The number of observations is equal to 5,544 for all four tests. The first hypothesis is supported stating that expenditures on research and development increase with a higher diversity of CEOs' experience. P value for the test is p = 0,0006. The only variable that has a significant impact on my dependent variable is CEO options with t = - 3,1.

For hypothesis 2a 2b and 2c I decomposed variable diverse work experience to a number of industries, number of firms and number of positions to see if all three have a significant influence on research and development in an organization. The results support hypothesis 2a with p-value equal to p = 0,0021, that is p < 0,05. The more industries a CEO has worked in, the higher impact it has on research and development in an organization.

Hypothesis 2b was supported with p-value equal to p = 0,0004. The number of firm's a CEO has worked for has a positive effect on research and development in an organization. Hypothesis 2c stating that a number of positions a CEO has held has a positive relationship to research and development. P-value is equal to p = 0,0002.

For all three options of hypothesis 2 p-value is lower than 0,05 and almost close to 0, which shows the significance of my hypothesis and concludes that they are strongly supported. Also for all these hypotheses only CEO options shows a significant effect with t = - 3,1.

Table 2: Correlations between the variables

	Tobins Q	Board size	Firm size	Herfindahl	Acquisitions	Cap. exp.	R&D	ROA	CEO age	CEO shares	CEO opt.	CEO/ MBA	Tenure	№ indust	№ firms	№ position
Tobins Q	1															
Board size	-0.08	1														
Firm size	0.02	-0.01	1													
Herfindahl	-0.06	0.01	0.21	1												
Acquisitions	-0.04	-0.03	0.04	0	1											
Capital exp.	-0.17	0.03	0.03	-0.03	0.18	1										
R&D	0.02	-0.01	0.03	-0.01	0.21	0.19	1									
ROA	0.48	-0.12	0.02	-0.01	0.01	-0.05	0.06	1								
CEO age	-0.06	0.02	0	0.02	0.01	0.05	0.01	-0.01	1							
CEO shares	0.06	-0.03	-0.01	-0.02	-0.01	-0.04	-0.01	0.06	0.16	1						
CEO options	0.02	0.09	-0.01	-0.01	0.05	0.01	0.01	0.02	-0.01	-0.01	1					
CEO/MBA	-0.14	-0.01	-0.02	0.05	0.02	0	0.05	-0.05	0	-0.1	0.02	1				
Tenure	0.12	-0.07	0.02	-0.01	0	-0.01	-0.03	0.03	0.36	-0.01	-0.01	-0.05	1			
№ industries	-0.09	0.07	0.02	0.06	0.07	0.11	0.13	0.01	0.06	-0.07	0.07	0.1	-0.05	1		
№ firms	-0.1	0.09	-0.01	0.03	0.03	0.02	0.04	-0.07	0.1	-0.07	0.06	0.02	-0.04	0.56	1	
№ positions	-0.11	0.1	-0.01	0.03	0.03	0.03	0.04	-0.06	0.1	-0.08	0.06	0.02	-0.08	0.56	0.97	1

Table 3: Results for H1, H2a, H2b, H2c

	Hypothesis 1	**Hypothesis 2a**	**Hypothesis 2b**	**Hypothesis 2c**
	№ observ. = 5,544 P-value = 0,0006 R squared = 0,054	№ observ. = 5,544 P-value = 0,0021 R squared = 0,054	№ observ. = 5,544 P-value = 0,0004 R squared = 0,055	№ observ. = 5,544 P-value = 0,0002 R squared = 0,004
Board size	13,145 (0,155)	13,069 (0,156)	13,13 (0,155)	13,089 (0,156)
Firm size	90,284 (0,396)	90,879 (0,395)	90,071 (0,398)	90,292 (0,397)
Herfindahl index	24,957 (0,788)	24,748 (0,789)	25,513 (0,784)	24,951 (0,788)
Dynamism	105,227 (0,230)	108,38 (0,213)	104,895 (0,235)	105,277 (0,228)
CEO Age	4,685 (0,291)	4,899 (0,280)	4,574 (0,301)	4,641 (0,294)
CEO/COB	-51,014 (0,302)	-51,786 (0,285)	-50,760 (0,306)	-50,201 (0,312)
CEO Insider	-18,699 (0,673)	-22,424 (0,618)	-14,875 (0,737)	-18,986 (0,228)
Tenure	-0,006 (0,674)	-0,005 (0,691)	-0,006 (0,659)	-0,005 (0,676)
CEO shares	2,983 (0,421)	2,472 (0,503)	3,285 (0,376)	2,940 (0,425)
CEO options	-0,016 (0,002)	-0,016 (0,002)	-0,016 (0,002)	-0,016 (0,002)

* The coefitients are being presented with p-values in parenthesis.

For the second part of my hypotheses I include a second independent variable and combine both independent variables into one by multiplying them. After using the same fixed effects regression test I get my results represented in Table 4. This table represents the group of hypotheses that indicates how risk-taking will change after CEOs are getting negative social feedback.

None of my hypotheses for the second group were supported, so I could not find the evidence that CEOs with more diverse work experience would increase risk-taking when facing negative social feedback.

For the hypothesis 3 I used diverse work experience as one composed variable, and the p-value was equal to p = 0,000. Since I tested my hypothesis against negative social feedback my p < 0,05 means that the hypothesis is not supported.

Table 4: Results for H3, H4a, H4b

	Hypothesis 3	Hypothesis 4a	Hypothesis 4b
	№ observ. = 3,864 P-value = 0,000 R squared = 0,135	№ observ. = 3,864 P-value = 0,000 R squared = 0,132	№ observ. = 3,864 P-value = 0,000 R squared = 0,133
TMT size	0,042 (0,000)	0,043 (0,000)	0,043 (0,000)
Board size	0,135 (0,059)	0,134 (0,660)	0,132 (0,069)
Herfindahl index	0,043 (0,654)	0,042 (0,660)	0,045 (0,635)
Dynamism	-0,491 (0,352)	-0,506 (0,341)	-0,518 (0,329)
CEO Age	0,004 (0,323)	0,005 (0,270)	0,005 (0,315)
CEO/COB	-0,081 (0,145)	-0,079 (0,153)	-0,074 (0,187)
CEO Insider	-0,003 (0,952)	-0,003 (0,948)	0,007 (0,888)
Tenure	-0,000 (0,363)	8,98e-06 (0,476)	8,61e-06 (0,493)
CEO shares	-0,012 (0,207)	-0,012 (0,226)	-0,012 (0,251)
CEO options	5,47e-06 (0,042)	5,59e-06 (0,041)	5,61e-06 (0,035)

* The coefficients are being presented with p-values in parenthesis

For the hypothesis 4a and 4b I again decomposed the variable diverse work experience into a number of industries and number of firms. For the hypothesis 4a p-value is equal to p = 0,000 and for the hypothesis 4b p = 0,000. Both of the hypothesis are not supported since they both also included negative social feedback as part of the variable.

For the second group of my hypotheses also variable board size and CEO options that I controlled for showed that there is a possible effect of these variables on my dependent variable which was risk-taking. In all three cases $t > 2$.

6.5 Limitations

My research has some limitations. I think that a better understanding of the STATA program would allow me to use it on a more professional level, but as a student I do not see how my results can be used in research. I also think that the variables that I chose are very generalized and this might have had an impact on the hypotheses that were not supported. For example, I used a variable research and development for the first part of my hypotheses to represent risk-taking by a firm because of a few studies highlighting it as a main risk-taking decision in an organization. (Coles et al. 2006, p.436; Bhagat, Welch, 1995, p.445) Of course, risk-taking is way more complicated in real life and cannot be only understood as the investment in research and development. It is difficult to measure people's personal risk-taking ability which also has to be a part of a risk-taking variable.

It is also difficult to use just negative performance feedback to predict whether risk-taking behavior is changing or not since I have not looked at the effects of risk-taking for positive social feedback as well as for negative or positive historical feedback.

6.6 Future recommendations

I see some possibilities for future research in the area of diverse work experience and performance feedback. First of all, I think that it would be useful to see how historical performance feedback affects CEOs with diverse work experience. It would be very useful information for the companies that are highlighting the importance of improvement over time. It is essential to know what kind of a CEO to hire so that the goals and the consistent look for changes of a CEO are working together with the goals of an organization.

Second of all, I think it would be good to test how CEOs with diverse work experience react to negative performance feedback (social and historical), and if it differs from specialists. Is there a difference in how they perceive both of them and if one is more important than the other?

I think there are a lot more improvements that can be done on this topic because I have not found a lot of information and articles that included diverse work experience and performance feedback. My research is very generalized and doesn’t look at the details.

7. Conclusion

My research provides an overview of the primary literature that was completed on risk-taking, on leading managers, and on performance feedback. I tried to link these three topics by reviewing the main articles and highlighting the important information that can be useful in constructing my research work. This topic is very interesting to me, and it is also very important. As I mentioned in future recommendations, there is an ample amount of information missing and there are still many possibilities for this research to contribute to the understanding of the impact of a CEO on the outcomes in the organizations.

First of all, it is important to highlight that I found a direct connection between innovation policy in the firm and diverse work experience of a CEO. Indeed, the more companies, industries a CEO has worked for, the more unique combination of experiences they have gathered. This includes the problems they have faced in the past and also the outcomes of the decisions they have made in the past. It helps a CEO to be more confident with risks. Investment in innovative processes are very risky decisions. However, the more confidence CEO has, the easier it will be make such decisions.

I also wanted to understand the link between negative social performance feedback and diversity of a CEOs experience. Unfortunately, I did not find any evidence that supports my hypothesis. Of course, there is a lot of improvement that can be done because my variables are very generalized and results, of course, cannot be used by researchers. However, it gives the first insight on a possible exploration of this topic in the future.

References

Allgood S, Farrell KA. 2000. The effect of CEO tenure on the relation between firm performance and turnover. *Journal of Financial Research*, Vol. 23(3), pp.373-390.

Ambrosini V, Bowman C, Collier N. 2009. Dynamic capabilities: an exploration of how firms renew their resource base. *British Journal of Management*, Vol. 20(1), pp.9-24.

Andersen TJ. 2008. The performance relationship of effective risk management: exploring the firm-specific investment rationale. *Long Range Planning*, Vol. 41(2), pp.155-176.

Atkinson JW. 1957. Motivational determinants of risk-taking behavior. *Psychological Review*, Vol. 64(6), Pt.1, pp.359-372.

Baum JAC, Rowley TJ, Shipilov AV, Chuang YT. 2005. Dancing with strangers: aspiration performance and the search for underwriting syndicate partners. *Administrative Science Quarterly*, Vol. 50(4), pp.536-575.

Bebchuk LA, Fried JM. 2003. Executive compensation as an agency problem. *The Journal of Economic Perspectives*, Vol. 17(3), pp. 71-92.

Becker GS. 1994. Human capital revisited. A theoretical and empirical analysis with special reference to education (3rd Edition). *The University of Chicago Press*, pp. 15-28

Bertrand M, Schoar A. 2003. Managing with style: the effect of managers on firm policies. *The Quarterly Journal of Economics*, Vol. 118(4), pp.1169-1208.

Bhagat S, Welch I. 1995. Corporate research and development investments. International comparisons. *Journal of Accounting and Economics*. Vol. 19(2-3), pp.443-470.

Boyle E, Shapira Z. 2012. The liability of leading: battling aspiration and survival goals in the jeopardy! Tournament of champions. *Organisation Science*, Vol. 23(4), pp.1100-1113.

Bragaw NA, Misangyi VF. 2017. The value of CEO mobility: contextual factors that shape the impact of prior CEO experience on market performance and CEO compensation. *Human Resource Management*, Vol. 56(2), pp.243-265.

Brockhaus HR. 1980. Risk taking propensity of entrepreneurs. *Academy of Management Journal*, Vol. 23(3), pp.509-520.

Brockman P, Lee HS, Salas JM. 2016. Determinants of CEO compensation: generalist-specialist versus insider-outsider attributes. *Journal of Corporate Finance*, Vol.39, pp.53-77

Bromiley P, Harris JD. 2013. A comparison of alternative measures of organizational aspirations: comparison of alternative measures of organizational aspirations. *Strategic Management Journal*, Vol. 35(3), pp. 338-357.

Carpenter AM, Sanders G. and Gregersen HB. 2001. Bundling human capital with organizational context: the impact of international assignment experience on multinational firm performance and CEO pay. *The Academy of Management Journal*, Vol. 44(3), pp.493-511.

Castanias RP, Helfat CE. 1991. Managerial Resources and Rents. *Journal of Management*, Vol. 17(1), pp.155-171.

Chatterjee A, Hambrick DC. 2011. Executive personality, capability cues, and risk-taking. *Administrative Science Quarterly*, Vol. 56(2), pp.202-237

Chen WR. 2008. Determinants of firms' backward- and forward-looking R&D search behaviour. *Organization Science*, Vol. 19(4), pp.609-622.

Chen WR, Miller KD. 2007. Situational and institutional determinants of firms' R&D search intensity. *Strategic Management Journal*, Vol. 28(4), pp.369-381.

Chen L, Ping L, Song FM, Li C. 2011. Managerial incentives, CEO characteristics and corporate innovation in China's private sector. *Journal of Comparative Economics*, Vol. 39(2), pp.176-190.

Coff R, Kryscynski D. 2011. Drilling for micro-foundations of human capital–based competitive advantages. *Journal of Management* Vol. 37(5), pp.1429-1443.

Coles JL, Naveen DD, Naveen L. 2005. Managerial incentives and risk-taking. *Journal of Financial Economics*, Vol. 79(2), pp.431-468.

Conghui H, Liu YJ. 2014. Valuing diversity: CEOs‘ career experiences and corporate investment. *Journal of Corporate Finance*, Vol. 30, pp.11-31.

Custodio C, Ferreira MA, Matos P. 2013. Generalists versus specialists: lifetime work experience and chief executive officer pay. *Journal of Financial Economics*, Vol. 108(2), pp.471-492.

Custodio C, Ferreira MA, Matos P. 2017. Do general managerial skills spur innovation? *Management Science*. pp.1-18

Custodio C, Metzger D. 2014. Financial expert CEOs: CEO′s work experience and firm′s financial policies. *Journal of Financial Economics*, Vol. 114(1), pp.125-154.

Cyert RM, March JG. 1963. A behavioural theory of the firm. Prentice Hall: Englewood Cliffs, NJ

Dakhli M, Clercq DD. 2004. Human capital, social capital, and innovation: a multi-country study. *Entrepreneurship and regional Development*, Vol. 16(2), pp. 07-128.

Doremus-Fitzwater TL, Varlinskaya EI, Spear LP. 2010. Motivational systems in adolescence: possible implications for age differences in substance abuse and other risk-taking behaviors. *Brain and Cognition*, Vol.72(1), pp. 114-123.

Finkelstein S, Hambrick DC. 1990. Top-management-team tenure and organizational outcomes: the moderating role of managerial discretion. *Administrative Science Quarterly*, Vol. 35(3), pp.484.

Fredrickson JW. 1986. The strategic decision process and organisational structure. *The Academy of Management Review*, Vol. 11(2) , pp.280-297.

Garcia R, Calantone R. 2002. A critical look at technological innovation typology and innovativeness terminology: a literature review. *Journal of Product Innovation Management*, Vol. 19(2), pp.110-132.

Geletkanycz MA, Boyd BK, Finkelstein S. 2001. The strategic value of CEO external directorate networks: implications for CEO compensation. *Strategic Management Journal*, Vol. 22(9), pp. 889-898.

Geletkanycz MA, Hambrick DC. 1997. The external ties of top executives: implications for strategic choice and performance. *Administrative Science Quarterly*, Vol. 42(4), pp.654-681.

Greve HR. 1998. Performance, aspirations, and risky organisational change. *Administrative Science quarterly*, Vol. 43(1), pp. 58-86.

Greve HR. 2003a. A behavioral theory of R&D expenditures and innovations: evidence from shipbuilding. *Academy of Management Journal*, Vol. 46(6), pp.685-702.

Greve HR. 2003b. Organizational learning from performance feedback: A behavioural perspective on innovation and change. Cambridge: Cambridge University Press.

Greve HR. 2008. A behavioral theory of firm growth: sequential attention to size and performance goals. *Academy of Management Journal*, Vol. 51(3), pp.476-494.

Greve HR. 2011. Positional rigidity: Low performance and resource acquisition in large and small firms. *Strategic Management Journal*, Vol. 32(1), pp.193-114

Grubel HB, Scott AD. 1966. The international flow of human capital. *The American Economic Review*, Vol. 56(1/2), pp. 268-274.

Gupta AK, Govindarajan V. 1984. Resource sharing among SBUs: strategic antecendents and administrative implications. *Academy of Management Journal*, Vol. 29(4), pp.695-714.

Guthrie D, James P, Deepak K. 1997 Contextual influences on executive selection: firm characteristics and CEO experience. *Journal of Management Studies*, Vol. 34(4), pp.537-560.

Hall M. 2011. Do comprehensive performance measurement systems help or hinder managers' mental model development? *Management Accounting Research*, Vol. 22(2), pp. 68-83.

Hambrick DC, Geletkanycz MA, Fredrickson JW. 1993. Top executive commitment to the status quo: some tests of its determinants. *Strategic Management Journal*, Vol. 14(6), pp.401-418.

Hambrick DC, Mason PA. 1984. Upper Echelons: the organization as a reflection of its top managers. *Academy of Management Review*, Vol.9(2), pp.193-206.

Helmich D. 1977. Executive succession in the corporate organization: a current integration. *Academy of Management Review*, Vol. 2(2), pp.252-266.

Herrmann P, Datta DK. 2002. CEO successor and the choice of foreign market entry mode: and empirical study. *Journal of International Business Studies*, Vol. 33(3), pp.551-569.

Herrmann P, Datta DK. 2006. CEO experiences: effects on the choice of FDI entry mode. *Journal of Management Studies*, Vol. 43(4), pp.755-778.

Hoskisson RE, Chirico F. Zyung J, Gambeta E. Managerial Risk Taking: A Multitheoretical Review and Future Research Agenda. *Journal of Management*, Vol. 43(1), pp.137-169.

Howard-Grenville J, Nash J, Cary C. 2008. Constructing the license to operate: internal factors and their influence on corporate environmental decisions. *Law and Policy*, Vol. 30(1), pp. 73-107.

Iyer DN, Miller KD. 2008. Performance feedback, slack, and the timing of acquisitions. *The Academy of Management Journal*, Vol. 51(4), pp.808-822.

Jordan AH, Audia PG. 2012. Self-enhancement and learning from performance feedback. *Academy of Management Review*, Vol. 37(2), pp.211-231.

Joseph J, Gaba V. 2015. The fog of feedback: ambiguity and firm responses to multiple aspiration levels. *Strategic Management Journal*, Vol.36(13), pp.1960-1978.

Kahneman D, Tversky A. 1979. Prospect theory: an analysis of decision under risk. *Econometrica*, Vol. 47(2), pp.263- 291.

Labianca G, Fairbank JF, Andrevski G, Parzen M. 2009. Striving toward the future: aspiration—performance discrepancies and planned organizational change. *Strategic Organisation*, Vol. 7(4), pp.433-466.

Levitt B, March JG. 1988. Organizational Learning. *Annual Review of Sociology*, Vol. 14, pp.319-340.

Makri M, Scandura T. 2010. Exploring the effects of creative CEO leadership on innovation in high-technology firms. *The Leadership Quarterly*, Vol. 21(1), pp.75-88.

March JG, Shapira Z. 1987. Managerial perspectives on risk and risk-taking. *Management Science*, Vol. 33(11), pp.1404-1418.

March JG, Shapira Z. 1992. Variable risk preferences and the focus of attention. *Psychological Review*, Vol 99(1), pp.172-183.

Mezias SJ. 2002. Adaptive-level aspirations in an American financial services organization: A Field Study. *Management Science* Vol. 48(10), pp.1285-1300.

Miller D, Toulouse JM. 1986. Chief executive personality and corporate strategy and structure in small firms. *Management Science*, Vol. 32(11), pp.1389-1409.

Miller KD. 1998. Economic exposure and integrated risk management. *Strategic Management Journal*, Vol.19(5), pp.497-514.

Miller KD, Chen WR. 2004. Variable organizational risk preferences: tests of the March-Shapira model. *Academy of Management Journal*, Vol. 47(1), pp.105-115.

Murphy KJ, Zabojnik J. 2004. CEO pay and appointments: a market-based explanation for recent trends. *American Economic Review*, Vol. 94(2), pp.192-196.

Palich LE, Bagby DR. 1995. Using cognitive theory to explain entrepreneurial risk-taking: challenging conventional wisdom. *Journal of Business Venturing*, Vol. 10(6), pp.425-438.

Park KM. 2007. Antecedents of convergence and divergence in strategic positioning: the effects of performance and aspiration on the direction of strategic change. *Organisation Science*, Vol. 18(3), pp.386-402.

Quigley TJ, Hambrick DC. 2012. When the former CEO stays on as board chair: effects on successor discretion, strategic change, and performance. *Strategic Management Journal*, Vol. 33(7), pp.834-859.

Schepker DJ, Kim Y, Patel PC, Thatcher SMB, Campion MC. 2017. CEO succession, strategic change, and post-succession performance: A meta-analysis. *The Leadership Quarterly*, Vol. 28(6), pp.701-720.

Singh JV. 1986. Performance, slack, and risk-taking in organisational decision-making. *The Academy of Management Journal*, Vol. 29(3), pp. 562-585.

Song JH. 1982. Diversification strategies and the experience of top executives of large firms. *Strategic Management Journal*, Vol. 3(4), pp.377-380.

Tversky A, Kahneman D. 1986. Rational choice and the framing of decisions. *The Journal of Business*, Vol. 59(4), pp.251-278.

Wang CH, Chen KY, Chen SC. 2012. Total quality management, market orientation and hotel performance: the moderating effects of external environmental factors. *International Journal of Hospitality Management*, Vol. 31(1), pp. 119-129.

Weber EU, See C. 1998. Cross-cultural differences in risk perception, but cross-cultural similarities in attitudes towards perceived risk. *Management science*, Vol. 44(9), pp.1205-1217.

Whyte G. 1993. Escalating commitment in individual and group decision making: a prospect theory approach. *Organizational behavior and human decision processes*, Vol. 54, pp. 430-455.

Zajac EJ. 1990. CEO selection, succession, compensation and firm performance: a theoretical integration and empirical analysis. *Strategic Management Journal*, Vol. 11(3), pp.217-230.

Zhang Y, Rajagopalan N. 2010. Once an outsider, always an outsider? CEO origin, strategic change, and firm performance. *Strategic Management Journal*, Vol. 31(3), pp.334-346.

Zhu DH, Chen G, 2015. Narcissism, director selection and risk-taking spending. *Strategic Management Journal*, Vol. 36(13), pp. 2075-2098.

Zhu W, Chew IKH, Spangler WD. 2005. CEO transformational leadership and organisational outcomes: the mediating role of human-capital-enhancing human resource management. *The leadership Quarterly*, Vol. 16(1), pp. 39-52.

Attachments

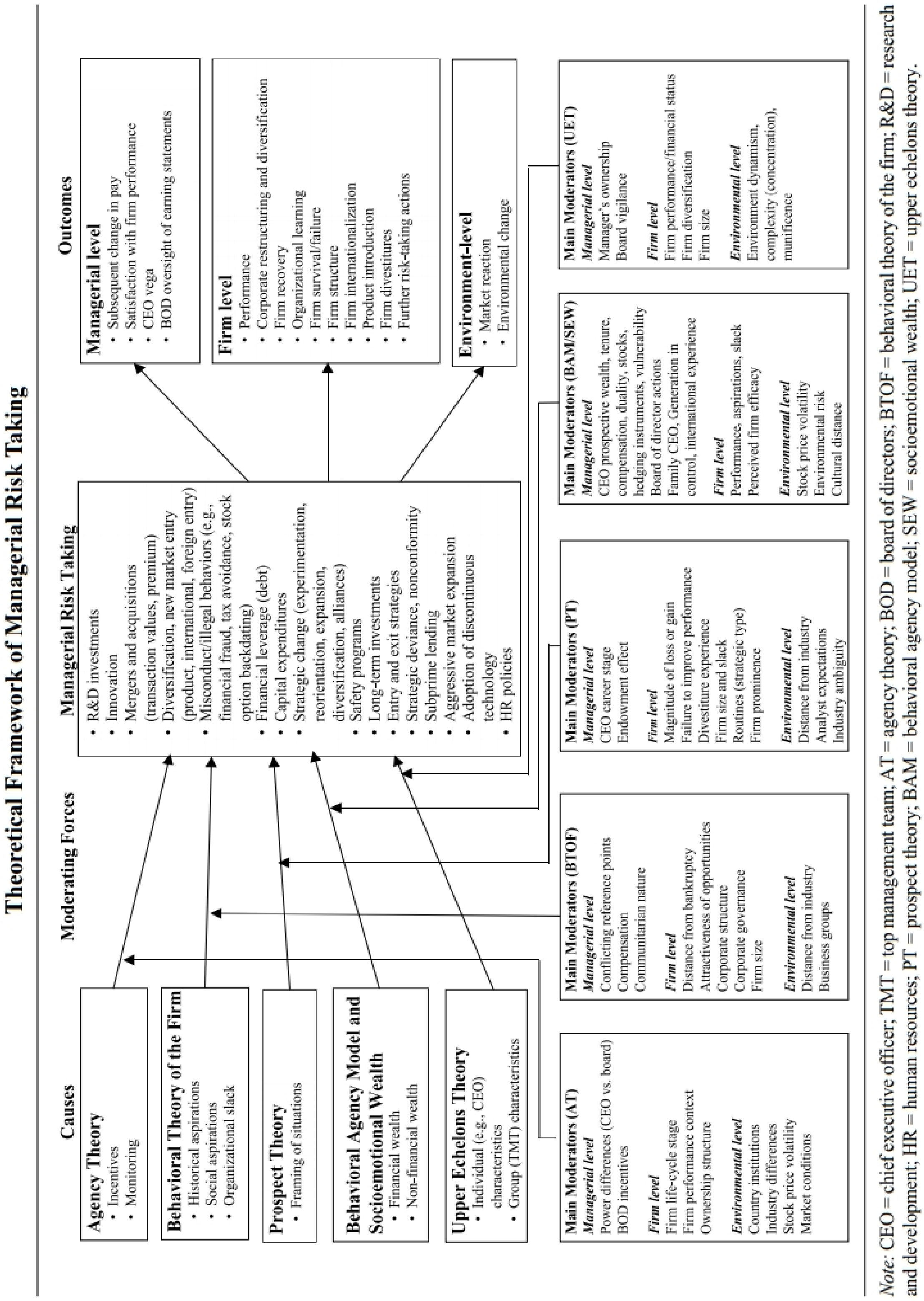
Abstract 1

Risk-taking by leading managers has been the center of researchers' attention for a long time. Many concepts were developed under what circumstances CEOs are ready to make risky decisions in their organizations. In my research I first try to see what relationship exists between research and development and a CEO, who has diverse work experience. I decided to use research and development as a main risk-taking decision CEOs make. The results show strong evidence that there exists a positive effect of diverse work experience on risk-taking behavior of CEOs. I also decompose diverse work experience into three components after Custodio et al. – number of firms, number of industries and number of positions – to get a better understanding on what has the greatest impact on risk-taking. I then try to find whether risk-taking increases when CEOs are getting negative social performance feedback. I predict that once CEOs have worked for a lot of different companies and in a lot of different industries, they pay more attention to negative social feedback and are not affected that much by negative historical feedback. The results did not support my assumption, so I cannot say that social feedback has a stronger effect on leading managers than historical feedback.

Abstract 2

Die Risikobereitschaft führender Manager steht seit langem im Mittelpunkt der Forschungsinteresse der Wissenschafter. Es wurden viele Konzepte entwickelt, die zeigen, unter welchen Umständen ein CEO bereit ist, riskante Entscheidungen in seiner Firma zu treffen. In meiner Forschung versuche ich als aller Erstes zu sehen, welche mögliche Beziehung es zwischen Forschung und Entwicklung, sowie diesen beiden Elementen und einem CEO, der eine vielfältige Arbeitserfahrung hat besteht. In meiner Arbeit entschied ich mich dafür, Forschung und Entwicklung als Hauptrisikoentscheidungen zu verwenden, die CEOs im Laufe ihrer Karriere machen. Die Ergebnisse zeigen, dass vielfältige Arbeitserfahrungen einen positiven Effekt auf das Risikoverhalten der CEOs haben. In meiner Forschung zerlege ich die verschiedenen Arbeitserfahrungen in drei Komponenten nach Custodio et al. - Anzahl der Unternehmen, Anzahl der Branchen und Anzahl der Stellen - um besser zu verstehen, was die Risikobereitschaft am stärksten beeinflusst. In der vorliegenden Arbeit versuche ich auch herauszufinden, ob die Risikobereitschaft eines CEOs durch die Erhaltung eines sozial negativen Feedback zunimmt. Ich gehe davon aus, dass CEOs, die für verschiedene Unternehmen und in verschiedenen Branchen gearbeitet haben, mehr auf sozial negatives Feedback achten, und beihane nicht von dem historisch negativen Feedback beeinflusst werden. Die Forschungsergebnisse haben meine Annahme jedoch nicht bestätigt, weshalb es nicht angenommen werden kann, dass das soziale Feedback eine stärkere Auswirkung auf Führungskräfte als das historische hat.

Figure 1: Theoretical framework of risk-taking



Source: Hoskisson et al. 2017, p. 139

Table 1: Descriptive statistics of the variables

Variable	Mean	Standard deviation	Min	Max
Firm characteristics				
Tobins Q	2,1043	1,3173	0,5818	13,6376
Board size	5,7868	1,0921	1	13
Firm size	2,8738	1,4765	-3,7723	7,7407
Herfindahl index	0,6499	0,5070	0	2,5453
Acquisitions	485,5858	1912,301	-31804	43123
Capital expenditures	1076,88	2354,107	0	37985
Research and development	296,708	1032,722	0	12183
Return on assets	0,0587	0,0809	-1,2270	0,5034
CEO characteristics				
CEO Age	56,2528	6,1991	27	83
Tenure	6,3829	5,7644	0	51
CEO/MBA	0,3709	0,4831	0	1
CEO shares	0,9032	3,4012	0	72,3
CEO options	960,4996	3617,253	0	119458,8
Number of industries	2,2556	1,0968	1	6
Number of firms	3,4632	2,1266	1	20
Number of positions	4,2324	2,2627	1	21