

St. Petersburg University
Graduate School of Management

Master in Management Program

**HUMAN CAPITAL OF FOREIGN MEMBERS OF BOARD
OF DIRECTORS AND COMPANY FINANCIAL
PERFORMANCE: RUSSIAN EVIDENCE**

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ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

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АННОТАЦИЯ

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Ключевые слова	Человеческий капитал, совет директоров, финансовые показатели деятельности компании, иностранные члены совета директоров

ABSTRACT

Master Student's Name	Anastasiia A. kozlova
Master Thesis Title	Human capital of foreign members of board of directors and company financial performance: Russian evidence
Faculty	Graduate School of Management
Major subject	International Management
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Academic Advisor's Name	Tatiana A. Garanina
Description of the goal, tasks and main results	<p>The goal of this study is to define relationship between human capital of foreign board members and financial performance of Russian joint-stock companies</p> <p>The main objectives of the study are the following:</p> <ul style="list-style-type: none"> - to study the specifics of corporate governance in Russia; - to conduct literature review on the topic of the role of intellectual capital of board of directors in company's performance; - to develop the regression model for testing the developed hypotheses; - to gather necessary data and to conduct empirical study; - to develop managerial implications of the obtained results. <p>The result of this study is following: there is a positive relationship between human capital of foreign board members and company's market value, and no relationship between human capital of foreign board members and accounting indicator, such as return on assets (ROA)</p>
Keywords	Human capital, board of directors, financial performance, foreign board membership

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INTRODUCTION

Board of directors is perceived to be a major link between the shareholders and the management of a company (Bodie & Merton, 2009). It acts as an instrument of corporate governance that receives the insider information and transfers it to external stakeholders. Thereby, it becomes crucial for board members to objectively represent interest of all the stakeholders and to take the decisions that are mostly beneficial for company as a whole. In order to do this, board members should be educated, experienced, ethical and skilled. The influence of personal characteristics of company's board members on their decisions and firm performance as a result of decisions made is becoming more debatable among researchers (Hermalin & Weisbach, 1991). Surveys' results showed that a company's value and investors opinions on it strongly depend on the quality of control and decision-making process undertaken by board members (Shleifer & Vishy, 1997) and that investors are ready to pay a premium to a company that is better-governed than its rivals (McKinsey & Company, 2000).

There are studies that investigate the relationship between specific characteristics of company's board of directors with its performance. Thus, it was proven that there is a relationship between a board size of a firm and its financial results (Yermack, 1996). The existence of correlation between political connections of board members and company performance was also proven by a group of researchers (Faccio, 2006; Bertrand, 2004). It was also claimed that there is a correlation between a board size and company's market attractiveness measured by Tobin's Q ratio (Berezinets, Ilyina and Cherkasskaja, 2013).

Therefore, the relevance of the topic of this paper is explained by existing interest to the problem of board characteristics and their influence on company performance among scholars and practitioners. As for specific studies exploring the relationship between foreign board membership and firm's value, there were such studies conducted for Korea (Mi Choi & Sul & Kee Min, 2012), Sweden and Norway (Oxelheim & Randøy, 2003), but there are no publications about Russia so far. Due to the fact, that a share of foreigners in board of directors of Russian companies is constantly increasing (Bauer & Shvyrkov & Reukova, 2012), it is important to investigate the influence of them on overall company value.

The goal of the study is to define relationship between human capital of foreign board members and financial performance of russian joint-stock companies. This study attempted to define the contribution of a group of specific characteristics of foreign board members to a firm's value. In order to achieve the goal, several human capital indicators of foreign board members and their relationship with a firm's financial performance expressed by market capitalization and return on assets (ROA) were studied.

In order to achieve the main goal, the following research objectives were set:

- to study the specifics of corporate governance in Russia;
- to conduct literature review on the topic of the role of intellectual capital of board of directors in company's performance;
- to develop the regression model for testing the developed hypotheses;
- to gather necessary data and to conduct empirical study;
- to develop managerial implications of the obtained results.

The subject of the study is the relation between human capital characteristics of foreign board members of Russian companies and their financial results.

Methodology of the study consists of applying multivariable linear regression model to the sample of Russian joint-stock companies with foreign board membership. The set of independent variables remains the same, while ROA and company's market capitalization act as dependent variables.

Expected result is to find out that human capital of foreigners in board of directors is positively related to financial results of Russian joint-stock companies. Positive relation is expected to be identified between accomplishment of MBA/EMBA degree, tenure, industry and diversified working experiences of foreign members of board of directors and company ROA and market capitalization as dependent variables. All regression coefficients are expected to stay statistically significant and of the same sign regardless of the dependent variable used. However, if the opposite is found, it can be seen as a valuable evidence of no need for Russian companies to actively attract foreigners as assurers of higher value of a company.

The thesis consists of two chapters: theoretical background and empirical study. The first section is devoted to the introduction to concepts of intellectual and human capital, specifics of corporate governance in Russia and analysis of existing studies about correlation between board of directors' characteristics and company's performance. The second chapter of the paper begins with hypothesis formulation, explanation of methodology and data collection process. Then, the resulting sample is analyzed and regression analysis is conducted. The paper is concluded with discussion of the findings, their theoretical and managerial implications and suggestions for further research.

The outcomes of this study can be of value for both practitioners and researchers. Moreover, it will generate an opportunity to develop managerial implications based on the estimated results and conclusions from the research, providing recommendations to companies with regard to the issues of board structure. The theoretical contribution of the study is to link characteristics of foreign members of board of directors to the financial performance results of Russian joint-stock companies - the issue that is not investigated so far. Practical implications of

the research are expected to provide shareholders with precious information and evidence on the statistically significant relationship between human capital of foreign board members and financial results of Russian companies. The information can be used by directors and shareholders while taking strategically important managerial decisions.

1. HUMAN CAPITAL OF FOREIGN BOARD MEMBERS

There is a large number of factors that are influencing a firm's performance. Company's assets are perceived to increase its value and to add competitive advantages. As far as all the assets are classified as tangible and intangible ones, intellectual capital as a group of intangible assets is also a value creation instrument for firm and its stakeholders. Company's intellectual capital is generated not only by employees, but also by board of directors. While using their knowledge, experience and skills, board members are forming intellectual capital that can be used while generating a firm's value.

There are three main elements of intellectual capital: relational capital that is defined as a scope of connections and access to resources that were obtained through network relationships, structural capital that includes intellectual assets such as patents, know-how, hardware and databases and human capital, representing a group of specific knowledge and skills obtained by board members through education and work experience (Hilman and Daziel, 2003). Structural capital is not applicable for characterizing people, while two other elements are personal characteristics. Nevertheless, they differ from each other in terms of the sources: human capital refers to special knowledge that were received on personal or individual level through education, whereas a relational capital refers to access to special sources through personal interactions (Burt, 1997).

Due to the fact, that a company's board of directors including the general manager or CEO is usually responsible for the whole business strategy, it is important to appoint the most qualified and experienced professionals to handle those issues. Therefore, it is quite common for Russian companies to assign foreigners as board members due to the higher qualification and experience of those professionals. According to the study conducted by Deloitte in 2012, it becomes more common for Russian joint-stock companies to attract foreigners as board members. The average amount of foreigners in boards reached an average European figure of 24% and it is continuing to grow (Bauer, Shvyrkov and Reukova, 2012). Therefore, a human capital of foreign board members (as one of the two fundamental elements of intellectual capital) possibly has an influence on an overall company performance.

1.1 Specifics of board of directors in Russia

Board of directors is a central governance body that is managing all company's activities. According to the federal law of Russian Federation "About joint stock companies", it is necessary to form a board of directors only if the amount of shareholders with voting rights is more than fifty. Board members are elected annually on the annual stockholders meeting through

vote. There are no limitations regarding the number of times a person can be elected as a board member. Nevertheless, a board member can become only a private person, even if she/he is not a shareholder. A board's size is determined by shareholders, but it should account for no less than 5 persons and it should be an odd number. In corporations that issue more than one thousand voting shares, a board size should account for at least seven members, for those with more than ten thousand voting shares – for at least nine directors.

In case when company's shareholders need to increase a number of directors in the board, it is feasible to vote for additional members that will join it. As for the chairman and his/her deputy, both persons are elected by board members. Reelection can be organized at any time and it is accomplished by board members vote either. In order to accept the voting results, at least half of the total number of board members should take part in elections. Moreover, a session should be organized at least once per month. Company's ongoing activities are managed by executive body that is reporting to board of directors and stockholders' assembly.

Board of directors is responsible for dealing with general corporate governance issues, apart from those, related to shareholders' assembly responsibilities. Based on functions and competencies of a company's board members outlined by Russian regulatory framework and by Corporate Code of Conduct¹, a board of directors has the following functions:

- Determination of corporate strategy, company's priorities;
- Adoption of a company's financial plan;
- Maintenance of effective control on corporate activities;
- Protection of shareholders' rights and assistance in solving corporate conflicts;
- Control on effectiveness of executive body's activities;
- Formation of executive body and responsibility for its premature termination (if that is indicated in a certificate of incorporation);
- Maintenance of necessary conditions for holding shareholders' meetings;
- Responsibility for operations with securities (if it is indicated in a certificate of incorporation);
- Responsibility for corporate affiliates creation (if other is not indicated in a certificate of incorporation);
- Acceptance of deals, made by a company;
- Other functions that are indicated in a certificate of incorporation.

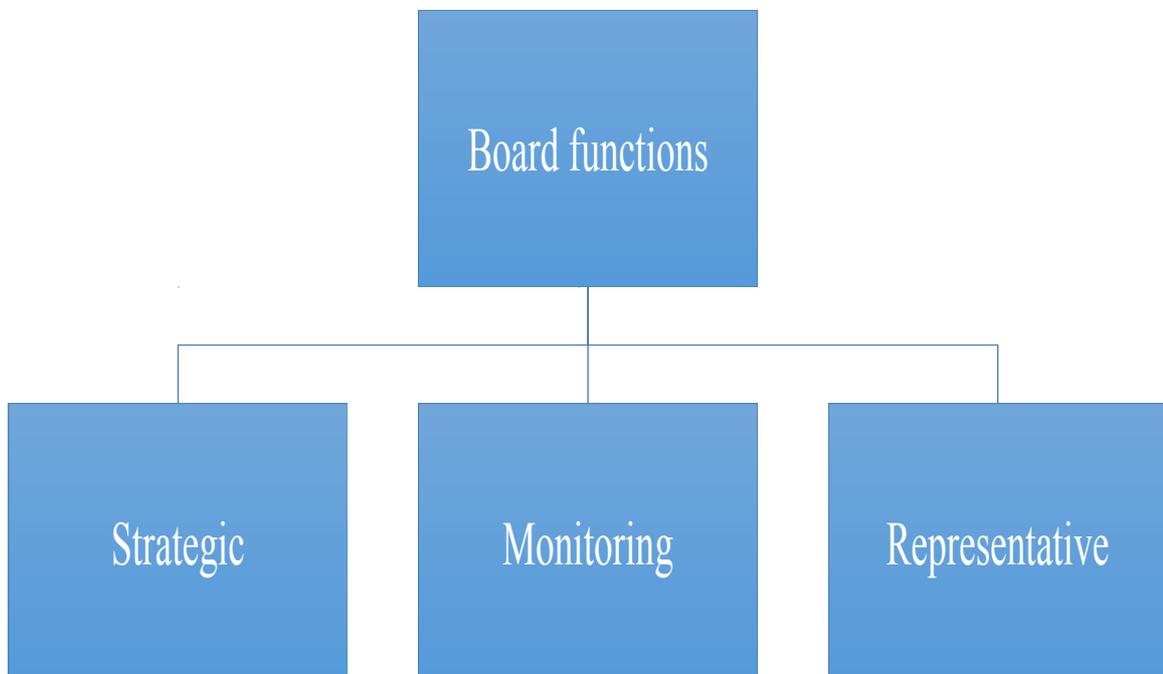
Board's activities can be also classified according to functional differences and divided into three groups (Figure 1):

- Strategic functions, including setting long-term and short-term goals for a company, establishing partnerships with important stakeholders;

¹<http://www.cbr.ru>

- Monitoring functions, including supervision of managers and revision of correspondence between company's functioning and its strategic goals;
- Representative functions, including forming and presenting company's reputation to external environment.

Figure 1 – Main roles of company's board of directors



Source: Created by author

The main function of board of directors is control on corporate management authorities and their decisions in order to minimize the potential risk for a company's shareholders and to maximize their value. Company's success is the result of aggregated activities of its board members that is usually represented by resource-holders, such as investors, creditors, suppliers or employees. Board of directors plays an important role in corporate governance and it is responsible for overall management, company's key goals and strategies and annual financial planning. It also controls top management' and executive body's activities, responding to shareholders. Overall, company's board of directors should act on behalf of company's shareholders and of a company as a whole. Therefore, a board should act professionally and

independently in order to implement a proper corporate governance practices in a company (Bebchuk, Cohen, Ferrell, 2009).

Hence, board members should solve the agency problem by guaranteeing the existence of independent directors within it. It is considered, that the less company's success influences on a director's own wealth and the less risks will he/she bear while taking decisions, the more effective and rational are the decisions taken by that director (Fama, 1980). According to the agency theory, independent directors are more efficient in controlling management and protection of shareholders' rights than others (Fama, Jensen, 1983). According to Hillman and Dalziel (2003), the dependence of board members on each other can negatively influence the quality of control on management. Nevertheless, this interdependence can have a positive impact on decision making processes regarding resource provision and allocation.

As it is stated in Corporate Governance Code, directors in Russian companies are divided into three categories: executive, non-executive and independent directors. Executive directors are usually represented by executive body members or by those, holding a position in a company hierarchy. According to Russian legislation, a number of executive directors in a board should not account for more than a quarter of number of board members. Non-executive directors are presented by stakeholders, who do not hold any position in a company, but who are interested in its activities. Independent directors are represented by members with following characteristics (Central Bank of Russia Newsletter, 2014):

- A level of professionalism and experience that is high enough for forming a personal own position on company's development and governance;
- Ability to act independently and objectively;
- Independence from the influence of executive body, certain shareholders' groups and other related parties;
- No affiliation to a company as a whole, its shareholders, customers and lack of personal interest in its activities.
- No affiliation to governmental authorities.

A board member is not an independent director anymore, if he/she has been participating in board activities for more than seven years, if he/she holds company's shares accounting for more than one percent of ownership capital, if a person acts as a part of executive body or has been consulted a company during the last three years.

According to Corporate Governance Code, the number of independent directors should account for no less than one third of the total number of board members in order to have the possibility to influence the decisions taken by the board. According to Independent directors' association, the share of independent directors in boards of Russian companies accounts for 30% of a total number, while in foreign companies that number reaches more than fifty percent.

Summing up, it is worth to be said that a board of directors is a vital part of a company that is responsible for its overall performance. It is obvious that the effectiveness of a board performance heavily depends on its members' characteristics: on how efficient could they integrate all the skills and competencies they have and build relationship in order to take right decisions that are the most beneficial for a company. In case when company's shareholders are interested in its prosperity, they should carefully and responsibly select board members.

Effective corporate governance is one of critically important company's characteristics that influence its reliability and attractiveness for investors, customers and other stakeholders. That is especially important for companies based in emerging countries due to volatile economical and political environment and relatively weak institutions there (compared to advanced economies). In order to attract foreign investments and stay successful in the process of internationalization, Russian companies are paying now more attention to a quality of board functioning. Nevertheless, due to the fact that there still exists an overlap in Russian companies' boards between former planned economy features and those of market economy, there is no universal standard for boards functioning, similar to European code of conduct.

Hence, researchers identify several Russian-specific features that need to be taken into account while assessing Russian companies' boards of directors (McCarthy, Puffer, 2002; Yakovlev, Danilov, 2006):

- High influence of state;
- Hostile attitude toward outsiders;
- The importance of personal connections;
- Active participation of board members in operative administration activities;
- Nondistinct assignment of responsibilities among executive body representatives and board members.

1.2 Intellectual capital: definition and characteristics

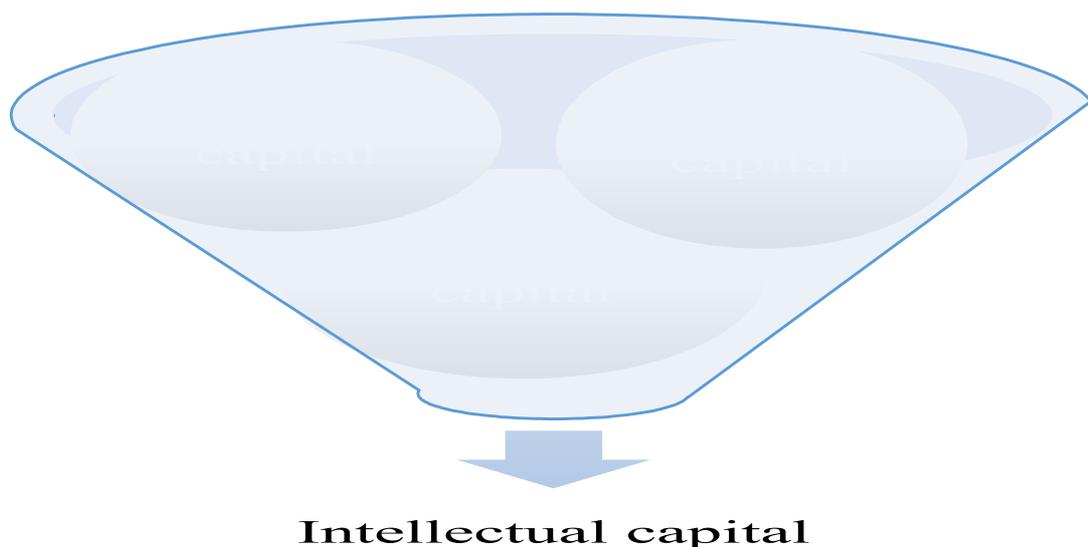
Company assets can be divided into two groups according to their nature as tangible and intangible assets. Tangible assets are those that have a physical form. They include current assets such as inventory, machinery, land and buildings. Intangible assets are not physical by their nature. They are embodied by company's intellectual property, goodwill and brand recognition. Taking into account the specifics of intangible assets, it can be concluded that they play an important role for a company as tangible ones. The problem is that it is much more difficult to evaluate them in money terms. Moreover, some intangible assets should not even be indicated in financial reports.

There is still a discussion among researchers regarding either to assess intellectual capital as a part of intangible assets or not. However, the majority of authors identify intellectual capital

as a group of intangible assets. According to some researchers, intangible assets are those that ensure the future benefits without tangible embodiment (Lev, 2004) or a group of knowledge that should correspond to a company corporate strategy (Bouteiller, 2010). As for the intellectual capital, those authors define it as a group of intangible assets that include company's intellectual property, its market position, infrastructure and human assets (Brooking, 1996;1998). Therefore, intellectual capital and intangible assets are perceived by those scholars as synonymous and have very close roles and definitions. According to Volkov (2006), asset is a possibility to get a potential profit as a result of previous actions conducted. Therefore, intangible assets are defined as any assets that belong to or controlled by a company and that do not have a tangible form but which can bring economic benefits to a company in future. Moreover, a group of such assets can be identified as company's intellectual capital. (Volkov & Garanina, 2007). According to some authors, intellectual capital is characterized as a main indicator of company's revenue generating capabilities (Bontis, 1998; Stewart, 1997; Sveiby, 1997).

In this paper, the following definition of intellectual capital will be used: intellectual capital is defined as all the intangible and non-monetary assets that are partly or fully controlled by the organization, that are creating value for a company and that are improving company's capacities for value creation (Nahapiet & Ghoshal, 1998). In order to make it possible to manage and to evaluate intellectual capital, it is divided into three components: structural, relational and human capital (Figure 2).

Figure 2 – Structure of intellectual capital



Source: Created by author

Structural capital consists of two parts: innovational capital that includes intellectual assets such as patents and know-how and process capital describing organizational procedures and processes. Structural capital also represents strategically important non-human assets, such as hardware, databases and special algorithms that are left in the organization without taking into account human resources (Cabrita, Bontis, 2008).

Relational capital is represented by information and resources that were gathered through interactions with the main stakeholders, such as customers, suppliers, creditors and others who influence the way the organization is functioning.

As for human capital, it specifies the scope of knowledge accrued by a company's employees. It is also represented by each worker's individual experience, expertise, values and attitudes, loyalty and other personal characteristics and competences that have a direct or indirect influence on an overall company's performance.

Management of IC resources differs from that of tangible resources. Intellectual capital resources are non-additive, which means that the amount of resources used does not become smaller during the lifecycle. It is not guaranteed that the intellectual capital resources will increase if investing in them heavily. Moreover, initial investments in intellectual capital begin generating value only after quite a long period of time. It is also important to take into account that after some level of investments in intellectual capital, its efficiency begins decreasing and it can even reach negative growth rates.

The idea that company's competitive advantages are identified not by its market position, but by knowledge and other intangible assets characterizing a company is becoming more popular among researchers (Teece, 1998).

According to resource theory, the difference in companies' ROA strongly depends on assets portfolio. Moreover, the rarer is an asset, the more benefits and higher profitability a company can get. Those benefits are characterized by value that an asset can bring to a company. Nevertheless, such assets should be long-lasting, unique and irreplaceable (Stewart, 1991). It was also stated in the paper, that companies become more and more dependent on knowledge such as patents, managerial qualification, technologies, information about customers, suppliers and other stakeholders. According to the author, intellectual capital is defined as a complex of all the knowledge that company's employees have that are creating competitive advantages for a company (Stewart, 1991). As for the intellectual capital management, it is identified by researchers as an allocation and usage of intellectual capital resources, management and transformation of that resources in order to maximize a current value of a company for its stakeholders.

Therefore, it becomes crucial for company managers to control the allocation and usage of resources and to have special knowledge, skills and instruments to manage the effectiveness of value creation processes. Company's executives should know and understand the portfolio of resources that company has and especially those, that form competitive advantages of a company and make it different from a firm's main rivals. Moreover, it is necessary to classify resources splitting them into tangible and intangible ones. By doing that, company's managers get an opportunity to separately estimate an organizational intellectual capital and to elaborate a policy and strategy to maximize the effectiveness of resource usage through a proper allocation that creates a synergy among them, which can maximize shareholders' value.

1.3 Intellectual capital of board of directors

As it was discussed above, a company is an owner of tangible and intangible assets. Intellectual capital is a group of intangible assets represented by employees' specific knowledge, skills, experience and expertise. Nevertheless, it is important to understand the main source of intellectual capital. It can be generated by internal human resources or provided by external environment. Company's board of directors also acts as a source of intellectual capital. This conclusion is based on the nature of board of directors: its role is to control a company's management and to protect shareholders' rights. Board's activities are aimed to create a company value and to increase and maximize this value on behalf of shareholders.

The main role of company's board is to sustain and control the effective and efficient corporate governance in order to protect shareholders' interests and rights. In order to reach those goals, board members are monitoring and controlling executive body's activities, providing managers with access to resources and identifying strategic directions for a firm's further development (Hillman and Dalziel, 2003). Thereby, board members' characteristics can potentially add competitive advantages to a company as a whole. When considering intellectual capital from the position of its sources, board of directors in total and its members separately can be assessed as sources of a company's intellectual capital. Therefore, while measuring the overall level of intellectual capital of a firm, IC parameters of board members should be explored.

The term "board's capital" was firstly introduced in 2003 (Hillman and Dalziel, 2003). Authors identified it as a scope of skills and knowledge of board members and their relationship among each other and with other stakeholders. Researchers claimed that a specific level of human and relational capital allows board members to more effectively control management activities and distribute resources. The process of investing intellectual capital characteristics in board activities is realized through improving company's reputation, establishing contacts and provision of executives with management consulting. Thereby, a board of directors is an owner

of relational and human capital that is formed by aggregated human and relational capital of every member (Kor and Sundaramurthy, 2008). As far as a company's board is responsible for corporate strategic planning activities, board's intellectual capital can be defined as the ability of creating value by using intangible assets of its members, such as knowledge, skills, experience and expertise.

Firm's board is responsible for taking decisions regarding the usage of accessible resources in order to increase a company's productivity and its financial performance. As it was stated before, a company is characterized by different types of resources, such as tangible and intangible ones. It is important to structure all the resources a company has in order to identify a proper approach for managing different types of them. Board representatives usually take decisions about huge investments or regarding strategic vision and goals, such as replacement of production facilities, product diversification and other changes in current business activities. Board members are also responsible for identification of accessible intangible resources, their categorization and development of instruments for managing them. Intangible assets management is different from that of tangible ones, therefore a board of directors' responsibility is to estimate intellectual capital potential of a company and to develop strategies for their usage for company's value maximization.

It becomes obvious, that in order to take right decisions about overall business strategy and about managing company's intellectual resources, a board of directors itself should have some knowledge, skills, competencies and experience. Taking into account the definition of intellectual capital provided above, a board of directors can be characterized by two out of three components of intellectual capital: human and relational. Human capital of board members is represented by their professional experience, level of education, competencies and reputation. As for relational capital characteristics, they are presented by an access to resources that an individual gets through his/her connections (Nahapiet, Ghoshal, 1998). In sum, human capital of board of directors is a scope of personal characteristics of its members that increases the productivity and effectiveness of board's activities and improves the decision-making process. Relaitonal capital of a company's board is identified as a scope of connections and relationship of each board member with external environment that can somehow influence company's activities.

As far as board members of some companies are presented not only by Russian citizens, but also by foreigners, this study concentrates on human capital characteristics of foreigners in boards of directors of Russian companies and on the influence of human capital of foreign members on companies' financial results.

1.4 Human capital as a major component of intellectual capital

In spite of the fact that 'human capital' as a separate type of non-tangible resources appeared much later, the first economists began insisting on the difference in workers' quality during the production process already in 17th century. William Petty was the first economist who put the accent on the correlation between production output and workers' experience and skills.

Before the introduction of human capital theory, such scholars as Adam Smith (1776), Alfred Marshal (1890) were assessing original and acquired human knowledge and skills as a fixed capital, similar to that of machines, land and buildings. According to Adam Smith «the improved dexterity of a workman may be considered in the same thing as a machine or instrument of trade which facilitates and abridges labor, and which though it costs a certain expense, repays the expense with a profit» (Smith, 1776/1937, p. 265-266).

In the middle of twentieth century, the role of human capital in the economic activities was re-evaluated and excluded from fixed capital, but started to be assessed as a part of physical capital that also included production facilities, machines and other equipment (Schultz, 1961; Becker, 1964). During that time, a lot of criticism for assessing human capital as a part of non-financial capital was met by scholars. Many economists were still considering physical equipment such as machines, land, buildings and other production facilities as the only non-financial resources. Later on, economists agreed on the vital role of human capital characteristics in analysis of socio-economic development.

After the World War II, the importance of the role of human capital in countries' economic recovery was identified: «structures, equipment and inventories were all heaps of rubble. We gave altogether too much weight to nonhuman capital in making these assessments. We fell into this error because we failed to take into account human capital and the important part it plays in production of a modern economy» (Schultz, 1971).

In the early 1990s, the theory of human capital became noticeable when it appeared to be one of the main factors that changes the standard economical neoclassical growth model. The model was then revised to insert human capital as a separate factor.

At the end of twentieth century an economic importance of human capital and its influence on a country's competitive advantages and contribution to a country's economic growth was identified by several groups of scholars (Nehru, Swanson and Dubey, 1995; Porter, 1998; Drucker, 1999). Summarizing the ideas presented in articles published on that time, human capital was defined as the intelligence and knowledge equal to other influencers on a national economic development.

The human capital theory in its initial version was introduced in twentieth century by such scholars as Jacob Mincer, Theodore Schultz and Gary Becker. It represented the theoretical

background explaining the adoption of education and development policies (Knight, 1996). There were a lot of definitions of human capital published by different scholars. Human capital was defined by Schultz as 'attributes of acquired population quality, which are valuable and can be augmented by appropriate investments' (Schultz, 1997). One of the founders of human capital theory, Becker, identified human capital as a scope of qualities and characteristics that increase future monetary and non-monetary income by positively influencing potential of people.

As far as human capital importance was highlighted not only by economic theories, but also by strategic management scientists, individuals' skills, knowledge and experience were assessed as creators of economic value for companies. Top management's skills started to be evaluated as producers of company's competitive advantages (Barney, 1991). It was determined, that a company's competitive advantage comes from the availability of rare, imperfectly imitable and usable resources. Human capital met all three conditions. Therefore, the role played by human capital characteristics of a company's management was specified as crucial in creating economic value for a company (Castanias and Helfat, 2001).

Several studies were conducted and proved that human capital has the biggest weight in intellectual capital structure and that it is the most relevant component that needs to be considered while measuring company performance (Cabrita and Bontis, 2008; Marr and Roos, 2005). Moreover, it plays a driving role for the two components that are left.

Human capital is identified as a wealth embodied in labor, skills, knowledge and competencies and it reflects to any group of knowledge or other personal characteristics that directly contribute to a person's productivity and efficiency (Garibaldi, 2006). It is also vital to bear in mind that the conception of human capital itself is not limited to professional knowledge and skills and educational background, but covers other areas, such as health conditions, geographical flexibility, etc. Human capital was recognized as a major value creator for companies (Chen, 2004). It was then identified as driver for company's economic activity, competitiveness and overall prosperity (Cabrita, 2008).

After acknowledgement of the importance of humane capital for overall company performance, several studies indicated that intangible assets such as human capital characteristics are a source of a competitive advantage for a business (Zabala, 2005). The intangible nature of human capital brings some difficulties to measure its contribution to a business and to calculate the exact numbers for its value in a financial statement.

Overall, human capital as a non-tangible company asset can be characterized by following:

- Not tradable. As far as human capital is an individual characteristic, it can not be traded or transferred to others;

- Not an organizational property. Creating value for an organization in whole, human capital stays a personal characteristic and can not be owned by a company where an employee is working;
- Generated by professional knowledge and skills of employees. Human capital in the organizational context is represented first of all by professional characteristics of company workers;
- Intangible. It is impossible to measure precisely the size of human capital of a firm as well as the exact share of company's success that is delivered through human capital;
- Influence on company value. Despite the difficulties in measuring it, it is already proved that human capital positively influences company's performance in general;
- Cumulative effect. As far as every worker contributes with his/her human capital to a company value, the more workers are contributing simultaneously, the higher is the overall company' human capital.

Based on the fact, that organizational human capital influences its performance in long-term and short-term perspectives, a short list of human capital strategic values for the company was outlined by researchers (Goll, Johnson, Rasheed, 2008; Finkelstein, Hambrick, Cannella, 2009):

- Human capital influences the efficiency and effectiveness of company activities;
- Human capital helps a firm to exploit market opportunities;
- Human capital helps a firm to neutralize potential risks and threats for a company.

Taking into account the strategic importance and influence of human capital on company performance, it is important to understand which industries are more dependent on its characteristics. According to Edvinsson and Malone (1997), level of human capital is especially important for knowledge-based organizations in which professional knowledge and skills of employees are the only driver of the business.

For service companies, it is crucial to develop sustainable and long-term relations with customers that are largely dependent on employees' personal characteristics as far as they directly contact customers or other stakeholders (Helm, 2011). Moreover, those workers who are in charge of stakeholders relations can influence customer opinions and perceptions about the company.

1.5 Influence of human capital on organizational performance

In global economy that is turning to be based on knowledge, the formation of competitive advantages against rivals becomes one the main goals for companies. Therefore, the factors that

have a stronger influence on competitive advantages have been staying in a scope of study for researchers for many years. Bontis (1998) in his study indicated a reliable, sustainable and significant link between human capital and company financial results.

Several studies were conducted later that proved the main argument of resource based view and identified the correlation between intangible resources and company economic performance (Bontis, Keow and Richardson, 2000; Riahi-Belkaoui, 2003; Li and Wu, 2004; Chen, Cheng and Hwang, 2005).

Later on, human capital was cited as an influential asset for the firm financial performance by other scholars. Moreover, it was proven that it also reduces company expenditures in many ways. Therefore, educational level of employees as well as their professional experience, motivation and other skills and knowledge usually increase a company output and bring extra competitive advantages to it (Young and Snell, 2004).

The empirical research was conducted for a scope of the USA based service and non-service companies in the beginning of 21st century and it was proven that human capital influences not only firms' competitive advantages, but also has a direct influence on their financial performance (Bontis, Keow and Richardson, 2000).

Carmeli and Tischler (2004) proved with their studies that there is a positive correlation between company's human capital and its future financial performance. Nevertheless, the scholars have also indicated that the strength of this correlation is highly dependent on an industry and a country in which a firm is operating. Moreover, scholars outlined three main elements of human capital that have a strong influence on organizational economical output: motivation, education and experience. According to their study, those three elements apart from influencing the overall company performance, strongly depend on each other. For example, motivation without the required level of experience and education is useless, as well as experience without motivation, etc. Therefore, when all three factors characterize employees simultaneously, they strongly enhance corporate financial performance.

There were several studies conducted that proved the influence of human capital on company's profit, survival and profitability (Delios and Beamish, 2001; Chen, Cheng and Hwang, 2005; Ranzijn and Verboom, 2004). It was also indicated, that there is a positive correlation between human capital of employees and firm's profit generating potential, market share and assets base.

Several studies fixed the influence of human capital on company's net profit margin (NPM), return on capital employed (ROCE) and earnings per share (Spivey, McMillan, 2002).

Seleim, Ashour and Bontis (2007) analyzed the relationship between human capital and organizational performance and found a positive impact of trainings attended by managers, their teamwork experience on a company's market value.

Bontis and Fitzenz (2002) acknowledged in their research the correlation between human capital characteristics and company's business outcomes. They conducted the analysis of 25 firms selected from financial services industry. The scientists were measuring human capital level and effectiveness by four parameters: revenue factor, expense factor, income factor and return on investments (ROI). The study was based on the assumption that the main goal of an organization is to maximize revenue earned per every worker. The research proved the hypothesis that human capital influences financial results per worker through influencing intellectual capital assets. Therefore, there is a direct impact on ROI of financial services companies by human capital.

The importance of human capital characteristics for organizational financial results was also proven by the model created by Bontis (1998). This model provides the following logics:

- Human capital is the major component of intellectual capital that is also a driver for structural and relational capitals;
- There is a correlation between relational and structural capital, where relational capital has a direct influence on structural capital;
- Both structural and relational capitals represent company's assets in form of sources of information that is vital for its strategic development and has a direct influence on company's financial performance.

The study across five ASEAN countries was conducted in order to measure a Modified Value Added Intellectual Coefficient (MVAIC) and its influence on corporate financial results (Nimtrakoon, 2015). Taking into account that human capital is defined as a major element of intellectual capital, the author supposed that the results proven could be applicable not only to intellectual capital, but also to human capital that is taken separately. The result of the study showed the positive correlation between human capital and company market value, confirming that companies with higher intellectual capital obtain greater market value. Human capital was also positively associated with profit margin and return on assets (ROA). Its efficiency was identified as a major value driver for a company market value and financial performance with structural capital efficiency and relational capital efficiency indicated as less important.

Taking into account the results of conducted researches provided above, it can be indicated, that a relationship between human capital and company financial performance is notable for at least several geographical regions and industries. Nevertheless, there is no such research conducted for Russia. Bearing in mind the role of company's board of directors in its

overall performance, it is important to assess the influence of board human capital of Russian joint-stock companies on their performance. While assessing them, it will be possible to analyze different industries and come up with a broader conclusion regarding the influence of their board on economic performance. Moreover, while establishing the relations between human capital of foreign board membership and company financial performance, several recommendations to shareholders could be formed in order to enhance their decisions.

1.6 Influence of human capital of company's board on its performance

Narrowing down human capital of a company as a whole to that, created or brought by board members, it is necessary to analyze the existing studies that prove that special aspects of human capital of corporate board members influence overall board performance and company's performance as well.

In the publication by Carpenter and Westphal (2001) it is stated that the knowledge, which were acquired by board members holding the same positions at other companies have an influence on strategic decisions-taking process. According to some experts, a participation in board of directors at companies with close strategy or at those, operating on similar markets or similar business environment, positively influences the performance of that member. Nevertheless, the positive impact of industry experience is more common for stable economic environment. In more volatile environment, a diversified industry experience is more helpful for directors, because it provides them with ability to quickly adapt to fast-changing conditions by using experience and benchmark from a plenty of industries.

It was also proven by some researchers (Kor and Sundaramurthy, 2009), that political experience or working experience in public authorities of board members' influences company's market capitalization, Tobin's Q, return on assets (ROA) and return on sales (ROS). It is explained by the fact that such experience helps professionals to better orient in economic and political situation in a country and also to predict different trends in business environment. Moreover, sometimes it can make it easier for directors to get an access to some resources.

Some studies were investigating the correlation between narrow industry experience of board members with a company's performance. It was stated (Carpenter, Pollock and Leary, 2003) that narrow working experience provides directors with a possibility to accumulate knowledge and skills in some area and than to use them while taking strategically important decisions. As far as a board consists of several professionals with focused specialization, it becomes more diversified in terms of functions and is more disposed to innovations through collaboration between different specialist and ideas generation that is based on careful critics from different professional positions and points of view.

Overall, higher level of education and professional experience of board members leads to larger amount of resources that can be used by them while taking strategically important decisions, especially during crisis (Carpenter and Westphal, 2001).

To sum up the information provided above, it can be concluded that human capital of board of directors is considered as a very important source of competitive advantage for a company. Moreover, it is considered to be vital for a company's success because of effecting its performance and providing collective intelligence. Nevertheless, in order to be more precise in assessing the importance of human capital for organization and society, it is necessary to indicate its main characteristics.

1.7 Human capital measurement indicators

Human capital measurement has been staying a very important issue for scholars during the long period of time. Starting from the end of twentieth century, several studies were conducted by scholars in order to address human capital measurement (Table 1). Nevertheless, there is still no unified approach for assessing the value of human resources or human capital of a company.

Table 1 – Human capital measurement approaches

Year	Author	Description
1996	Robert Kaplan, David Norton	Balanced Scorecard: the approach translating a company's mission into a scope of workers' performance measures. An overall organizational performance is evaluated through four 'balanced' perspectives: <ul style="list-style-type: none"> - financial, which measures the economic effect on a company by actions taken by employees; - customer, which measures the effect on targeted customer segments by actions taken by

		<p>employees;</p> <ul style="list-style-type: none"> - internal business process, which set a critical internal processes level that should be excelled by company workers; - learning and growth, which identifies the structure and infrastructure that a company should build in order to achieve the set goals.
2001	Brian Becker	<p>HR Scorecard: this instrument helps HR managers to assess the effectiveness and contribution to overall company performance by its employees. The assessment is run through evaluating the following:</p> <ul style="list-style-type: none"> - HR deliverables, presenting factors that have directly contributed to company's strategic goals; - HR policies, processes and practices, generating the HR deliverables required to support a company strategy; - H R

		<p>system alignment, focusing on specific elements that could produce HR deliverables. It also identifies the alignment of HR system with company strategic goals;</p> <ul style="list-style-type: none"> - HR efficiency, <p>identifying the exact scope of tasks or areas of responsibility of HR managers in order to support company goals and meet board's expectations.</p>
<p>2005</p>	<p>Mark Huselid, Brian Becker, Dick Beatty</p>	<p>Workforce Scorecard: an instrument that helps to assess human resources value not only from HR managers' perspective, but also from employees' perspective. It evaluates 4 elements:</p> <ul style="list-style-type: none"> - workforce success, indicating the accomplishment by employees strategic business goals that were set; - leadership and workforce behaviors,

		<p>assessing the ways of how project teams are working in a way of meeting company's strategic objectives;</p> <ul style="list-style-type: none"> - workforce competencies, indicating the presence of necessary skills and knowledges for achieving strategic goals by workforce; - workforce mindset and culture, implying the understanding of a company strategy and main goals by workers and existence of culture that can support strategy execution.
2009	Brian Becker	<p>Integration of the three scorecards above: the more general and universally applicable approach available to measure the HR potential and inputs even if several assumptions should be taken into account (or not all the information required is available) from both HR managers and other employees sides.</p>

Source: Created by author

Talking about concrete indicators of human capital, that are usually assessed while making conclusions regarding its impact on a company performance, they can be divided into two groups:

- quantitative perspective measures that usually include cost of investment in human capital, wage differences according to workers' educational levels, tenure period;

- qualitative perspective measures that include a level of the formal education received and additional knowledge and skills an employee uses in his/her work.

Scholz, Stein and Bechtel (2004) have outlined several measurement methods of human capital, based on the information availability, company's strategic goals, timing and other conditions that can influence a measurement process:

- oriented on the company market value methods;
- oriented on accounting methods;
- based on indicators methods;
- oriented on value added methods;
- profit oriented methods.

As far as human capital is identified as a group of personal characteristics, such as education, experience and skills, no general approach can be applied to its measurement. It is impossible not only because of the nature of human capital, which is a group of intangible assets, but also due to the plenty of variables that are affecting it. Based on the existing researches on that (Kor and Sundaramurthy, 2009; Carpenter, Pollock, and Leary, 2003; Carpenter and Westphal, 2001; Hillman and Dalziel, 2003), the following indicators of human capital of a company's board of directors can be outlined:

- Education;
- Working experience in the same industry;
- Diversified working experience;
- International experience;
- Participation in structural deals;
- Tenure as a board member;
- Independence.

Taking into account the specifics of this study, in which only the characteristics of foreign board members were analyzed and the results of already published studies on similar subjects (Oxelheim and Randøy, 2003; Mi Choi, Sul and Kee Min, 2012) and number of observations, impact of the following aspects of relational capital of company's board members was investigated:

- Tenure;
- MBA degree;
- Industry working experience;
- Diversified working experience.

Summing up the information provided above, it is important to say that a company's intangible assets are very important and appreciated value creators that should be selected and managed carefully and in accordance with the overall company strategy. A group of such characteristics as education, professional experience, international experience, tenure,

participation in structural deals and etc. is identified as intellectual capital Board of Directors. As far as there are several sources of intellectual capital, members of board of directors as representatives of strategically important firm body act as 'providers' of intellectual capital. Due to the fact that human capital is perceived to be the main element out of those three forming intellectual capital, it possibly influences the overall company performance. There are already several studies published that are proving the positive influence of specific human capital characteristics of board members on a firm financial performance in some countries. As far as human capital is a characteristic of a person, companies are striving to attract the most experienced and educated professionals for taking strategically important decisions. According to differences in countries' development stages, some companies are attracting foreign professionals as board members due to their higher qualification and reputation. This practice is quite common for Russian companies. Moreover, recent studies show that the share of foreign board membership in Russian joint-stock companies is rising and that is already becoming higher than that of some European countries (Bauer, Shvyrkov and Reukova, 2012). Therefore, it is important to estimate the influence of human capital of foreign members of board of directors on financial indicators at Russian companies.

2. HUMAN CAPITAL OF FOREIGN BOARD MEMBERS AND COMPANY FINANCIAL PERFORMANCE – EMPIRICAL STUDY

2.1 Research strategy and hypothesis formulation

Research strategy enables the investigator to answer precisely research questions and to achieve research goals. Therefore, strategy selection process should be guided by both questions and objectives set at the beginning along with a scope of existing knowledge, information available, access to resources and time. Taken into account the availability of all the factors above, several research strategies can be used for conducting this empirical study:

- Experiment, presenting a form of research for studying causes and results. It identifies whether changes in independent variables generate changes in dependent variables (Hakim, 2000). This strategy is also useful when determining a correlation between two factors. Experiment is usually used in exploratory and explanatory studies while identifying causes and special features of variables.

- Survey, presenting a form of research aimed to answer ‘who’, ‘what’, ‘where’, ‘how much/many’ questions. It is usually used while conducting an exploratory or descriptive studies. Surveys are usually organized in a form of a questionnaire with standardized answers that is distributed among sizable population to get a representative answers and to track a tendency if it exists.

- Case study, presenting a form of empirical investigation of a current phenomenon in a real-life context. It is important to take into account the quality of context in order to get representative and realistic results. This strategy usually answers such questions as ‘why’, ‘what’ and ‘how’ in explanatory and exploratory researchers.

Due to the fact that the aim of the current study is to identify the relationship between human capital characteristics of board members (independent variables) and indicators of company financial performance (dependent variables), the most suitable research strategy is an experiment.

It is necessary to proceed with the formulation of hypotheses based on the conducted literature review on the topic of relationship between human capital of a foreign board members and financial results of Russian companies.

- *Accomplishment of MBA/EMBA degree*

As it was stated above, human capital is a representation of a certain set of intangible assets such as skills, knowledge and experience that were got by directors through education or working experience. As far as MBA/EMBA degrees are aimed to provide students with special

business knowledge that are very practically oriented, it can be supposed that those directors with MBA degree accomplished are able to take decisions regarding company future development quicker and more effectively.

There were conducted a lot of studies that were exploring the correlation between changes in board human capital and a company's financial success. In those studies, scientists were taking education as a major characteristics of board members' human capital. For instance, board members' educational level assessed as a time period, during which every member was studying – from school to graduation from university (Chen, 2014). In some studies, educational level was identified as a time period, which a person spent on receiving a higher education only (Khana, Jones and Boivie, 2013). There are also several studies that are taking education level as a dummy-variable, where the university degree is equal to 1 and a lack of higher education is equal to 0.

There are also several studies published that are investigating the relationship between accomplishment of MBA/EMBA degree by firm's board members and its financial results. Thus, it was proven by several researchers (Carmeli and Tishler, 2004; Chen, Chang and Lee, 2008) that there is a positive correlation between accomplishment of MBA degree by directors and firm's internal financial results, such as ROE and ROA. This statement can be explained by the fact that board directors with special business education are more effective in taking strategic decisions, especially during the time of crisis. It can be also supposed that such directors are able to use benchmarking from other countries, industries and companies. Moreover, some scientists (Choi, Kee and Min, 2012) claimed that there is a positive influence of special business education of foreign board members not only on internal or accounting indicators, but also on company's market attractiveness for investors that was measured with Tobin's Q ratio. It could be explained with the fact that investors rely more on decision-makers that have a special business education that provides them with the ability to act rationally and more professionally. What is more, it can enable directors to think more in long-term perspective, while knowing from the cases of other companies that while acting on behalf from a company as a whole and from its shareholders, it is usually worth to exchange short-term benefits to long-term development.

As far as MBA/EMBA programs are created in order to upgrade the professional level of managers, to give them a special knowledge and know-how in strategic planning, corporate governance, corporate finance and in other areas – it can be supposed, that while having MBA or EMBA degree, a board member can potentially bring more value to a company, when taking strategically important decisions. It was decided to take this variable as a share of foreign

members of board of directors with MBA/EMBA degree accomplished out of total number of foreign board members in a company.

H1a: Accomplishment of MBA/EMBA degree by a foreign board member has a positive relationship with company ROA

H1b: Accomplishment of MBA/EMBA degree by a foreign board member has a positive relationship with company market capitalization

- *Tenure as a board member*

While being a member of a board of directors, a person should act on behalf from company shareholders in order to increase their value. Apart from having a certain group of knowledge, skills and competencies, a director should be aware of internal company processes and tendencies in order to take right decisions quickly and rationally. Therefore, the period during which a person has been holding a seat in a board can possibly play a positive role in a quality and pace of decision-making processes by board members regarding company's further development.

There are still debates among researchers regarding the influence of tenure of a board member on a company performance. Therefore, some authors claim that long-term engagement of director in a company's activities is connected or comes from high practical experience, interest, commitment and competence as far as it provides a director with a vital information regarding the company where he/she is operating and the industry and business environment in general (Vance, 1983). Some researchers have also found that an extended tenure positively influences a person's commitment to a business as well as it provides him/her with a willingness to make a real impact and change for achieving company strategic goals (Buchanan, 1974). It is also common among researchers to connect a director's tenure with a rising commitment to company's activities as far as a director becomes stronger connected with a firm while buying its stocks and while feeling him/herself more confident and experienced from year to year (Salancik, 1977). According to some researchers, even when operating in the same industry, there are some peculiarities that are unique for every single company. During the time a person spent as a board member, he/she is gathering a lot of information and is increasing his/her awareness of company's internal characteristics and unique sources, that helps a member to think more rationally and to take more comprehensive decisions regarding a company development strategy (Kor & Sundaramurthly, 2009). While spending several years in a company's board of directors, a person is aware not only about a company's specifics, but also about other board members that helps to adapt and to work more efficient and effective as a team (Fisher & Pollock, 2004). Therefore, it can be concluded that tenure as a board member can possibly

influence not only professional qualities of a director, but can also improve personal relationship between all the members that can lead to easier consensus and better understanding among directors. Moreover, a positive influence of tenure of foreign citizens as board members in a company on its attractiveness for investors can be explained by the fact, that investors trust more those companies, with stable corporate governance. It can be a sign of well-designed strategy, according to which goals are reached on time, which gets rid of need to re-select board members. Therefore, a tenure as a board member can have a positive influence on a person's decision-making capacities and a board effectiveness in general.

It was decided to take this variable as an average number of years during which a foreign board member has been holding his/her seat in a company.

H2a: Tenure as a board member of a foreign citizen has a positive relationship with company ROA

H2b: Tenure as a board member of a foreign citizen has a positive relationship with company market capitalization

- *Industry working experience*

Working experience in the industry where the company is operating now is often assessed as a human capital characteristics of board members (Tian et al., 2010; Le, Kroll & Walters, 2012; Dulyak, 2015). The reason behind doing that is the fact that while operating in the same industry, companies often face similar problems regarding technologies, governmental regulation, legal requirements, competition, market trends, changes in consumer preferences and others (Kor and Misangyi, 2008). Therefore, a board member that is already aware of possible challenges a company can face in a near future can quicker react to them. Moreover, while being aware of possible consequences, directors with a large industry working experience can take more long-term oriented decisions that are corresponding to overall company strategy.

It is supposed, that a director that is experienced in that very area has a deeper understanding of trends and movements and can take more rational decisions while understanding the way the industry is functioning (Rajagopalan and Datta, 1996). Therefore, when working in the same industry for more than three years, a manager gets a scope of specific knowledge and experience that he/she can apply when working in a board of directors, assessing the information as an expert and correlating the knowledge he/she has with the real situation that helps him/her to take right decisions. According to this statement, it can be concluded that while having a large working experience in the industry where a company is operating now, a director could not only be more effective and efficient when taking decision on behalf from the board, but also when assessing the quality of management and consulting managers regarding the way

they are leading the company. Being an industry expert, a director can suggest to managers to apply some benchmarking practices in order to increase a company value. From investors' point, industry experience of a board member can be a positive sign of his/her expertise and ability to make comprehensive decisions and to control executive bodies while applying professional knowledge. While discussing a foreign board membership, it is necessary to take into account that while taking strategic decisions about a company development, a foreign director can compensate lack of knowledge about a country where a company is operating by having a strong expertise in the industry that is formed by a long-term working experience there. Moreover, a foreign board member could bring changes and the best practices from similar companies operating in other countries when having several years of working experience in a single industry. It is also important to mention a pace of taking decisions by a person who is experienced in some business industry.

It was decided to take this variable as average number of years during which a foreign board member has been working in the industry where a company is operating now.

H3a: Industry working experience of a foreign board member has a positive relationship with company ROA

H3b: Industry working experience of a foreign board member has a positive relationship with company market capitalization

- *Diversified working experience*

According to the information provided above, there are improvements of a positive influence on industry specific experience of foreign members of board of directors and company's financial performance. Nevertheless, there exists an alternative point of view stating that the more diversified is a working experience of a board members, the higher value could they bring to a company in a long-term perspective. When a person has been working for a long period of time in the same industry, he/she has a scope of expert knowledge that give the vision of potential trends in this industry. Therefore, the person is able to make a forecast regarding the development of the industry if it is more or less sustainable. This ability makes a person a narrow focused specialist if he/she is not engaged in any activities in other companies or industries. As for the board member with diversified working experience, he/she is familiar with different trends and has a broader view on a business as a whole. This person is also familiar with a set of practices that are applied while dealing with problems or taking strategic decisions in different industries (Horner, 2015). That can potentially positively influence the development of universal human capital that is as important as a narrow board members' expertise. This idea was broadened by a group of researchers (Oxelheim and Raddøy, 2013; Maditinos, Chatzoudes, Tsairidis, 2008)

that it is much more important for companies that are based in developing countries to attract professionals with diversified working experience as members of board of directors. This idea was explained with the fact, that in unpredictable and volatile economic environment, a decision-making body should be aware of maximum amount of ways of behavior in order to quickly ‘adjust’ a company’s strategy to fast-changing external environment. It was also stated, that diversified working experience provides directors with a broader picture on economy as a whole and allows them to apply more external view on all the processes that are going on inside the company. As for the foreign board members assessed separately, it was proven that a diversified working experience of such specialists make it easier for them to integrate in a new business environment and to adjust their knowledge and points of view to a local environment, its business traditions, volatility and so on (Forbes, Milliken, 1999).

It was decided to take this variable as a share of foreign board members that have a working experience in more than 3 industries.

H4a: Diversified working experience of a foreign board member has a positive relationship with company market capitalization

H4b: Diversified working experience of a foreign board member has a positive relationship with company ROA

While analyzing the relationship between specific characteristics of boards of directors and company’s financial performance, researchers usually assess two aspects of corporate financial performance:

- external performance that is expressed by a company attractiveness to investors, its price per share and market capitalization. There exist several studies that were evaluating the correlation between human capital of board of directors and company’s external financial performance measured as market capitalization, or Tobin’s Q ratio (Berezinets, Ilyina and Cherkasskaja, 2013);
- internal financial performance that is usually measured by accounting identifiers, which express a company efficiency of resource usage as well as the possibility of generating profit depending on how much is invested in its development. There are also published several articles that are proving the positive or negative influence of specific board of directors’ characteristics on a company accounting results (Choi, Kee and Min, 2012).

It was decided to assess one indicator of a company’s external financial success and its attractiveness to potential and existing investors and one accounting characteristic of internal financial results, that can show the company efficiency of resource usage:

- ROA, that shows how human capital of company’s board of directors influences an overall return on the company;

- Market capitalization, that helps to find out the influence on market perception and position of the company in a market and its attractiveness for investors.

2.2 Sample description and research design

Based on previous researches on corporate governance, the model for testing the hypotheses stated above was developed with a group of independent variables in order to diminish specification bias. The linear regression model was used to test the hypothesis. In this model, the variables specifying a scope of characteristics of board's human capital (accomplishment of MBA degree, industry experience, diversified experience, tenure), as well as those, characterizing company's financial results (ROA, market capitalization) along with control variables representing additional financial and non-financial data about a company (company age, board size, share of foreign directors on a board) were analysed. The variables have been selected drawing on past studies about corporate governance and characteristics of intellectual capital. It was especially useful to analyze researches that were considering the following variables: board size (Yermack, 1996), firm age (Forbes and Milliken, 1999), share of foreign citizens in a board (Mi Choi & Sul & Kee Min, 2012; Oxelheim & Randøy, 2003), education (Chen & Chang & Lee, 2008) and experience of board members (Huselid, 1995).

The research was conducted in order to acknowledge the relationship between human capital of foreign board members of Russian companies and their financial results. The following regression model was used in order to test four hypothesis provided in Chapter 2.1. The choice of this model is based on the existing studies on similar topics, in which linear regression model was used in order to assess the influence of human capital characteristics of foreign membership on financial results (Mi Choi & Sul & Kee Min, 2012; Oxelheim & Randøy, 2003):

$$Y_i = \beta_0 + \beta_1 Control_i + \beta_2 Board_i + u_i(1)$$

Vector of dependent variable Y_i is representing the indicators of financial results (market capitalization, Tobin's Q, ROE) of every company i in the sample. Vector $Board_i$ is representing independent variables that are characteristics of human capital of foreign board members in a company i . Vector $Control_i$ is representing control variables that characterize company financial performance and provide some additional data about company i . β_0 is perceived to be an unknown scalar quantity, when β_1 and β_2 are presenting vectors of unknowing coefficients in a linear regression equation. The description of all the variables used in analysis is presented below (Table 2):

Table 2. Description of variables used in analysis

Dependent variables used in the analysis	
ROA	Ratio that indicates firm's profitability. It was calculated as net profit divided by total assets
mrktcap	Value of all the company's shares outstanding. It is calculated as the amount of shares outstanding multiplied by current market price per share
Independent variables presented in vector $Board_i$	
MBA	Share of foreign board members that received MBA/EMBA degree
tenure	Average number of years, during which foreign members have been holding seats in a company's board
ind_exp	Average time period during which a foreign member have been working in the industry where the analyzed company is operating
diversif_exp	Average number of industries in which foreign members have a working experience
Independent variables presented in vector $Control_i$	
age	The period of time from the registration date till the date used in the analysis
board_size	Total number of board members, including both Russian and foreign citizens
share_foreign	Share of foreigners in the board calculated as number of foreign citizens divided by total amount of members in the board

Source: Created by author

Sample was built from Russian companies that were listed at any point of time on Moscow Exchange. For the purpose of this research certain industries were omitted due to the type of their core activity. For example, all the companies from financial services industry, such as banks, investment funds and insurance companies were excluded from the analysis. In addition, some of the firms were not included due to the lack of information for the time periods being investigated. The period analyzed accounts for two years from 2013 to 2014. This time period was selected in order to analyze the most recent data available while taking into account time lack during which, according to some authors (Hilman & Daziel, 2003), the effect of board of directors' characteristics on a company performance can become visible.

Therefore, the following criteria for inclusion companies into analysis were identified:

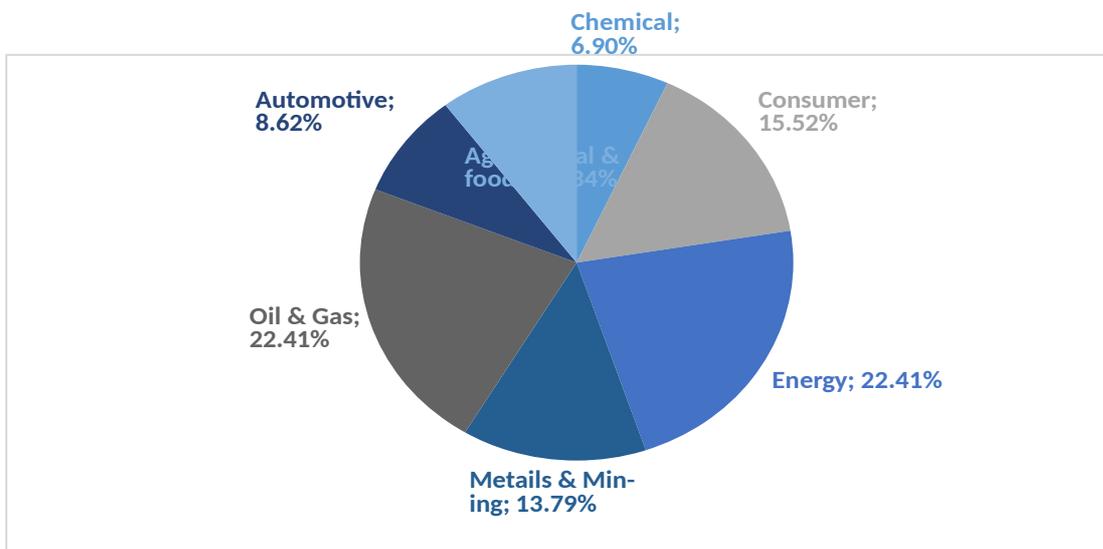
- Joint stock company;
- Company has a board of directors;
- There is at least one foreign resident in a board of directors;
- Company is not a financial institution.

The original panel of data consisted of 60 companies. Nevertheless, after removing those companies with not enough information disclosed in open sources and databases, there were 58 companies left that are fully corresponding to the requirements stated above.

The selection was drawn from the SPARK database. It provides extensive information about companies including data on company’s board structure, market performance and financial results. Companies' official websites were also used as a source for gathering data that were necessary for conducting a research. Using those sources of information, companies' annual reports were downloaded and in cases when there was not enough data provided in annual reports, SPARK database was used for data collection.

Final version of the research sample consists of 58 observations – 58 companies in total. The sample represents 8 industries: 4 – from chemical, 9 – consumer, 13 – energy, 8 companies are presenting metals & mining industry, 13 – oil & gas, 6 companies from agricultural & food industries and 5 companies are representing the automotive industry. Companies were distributed among industries according to classification provided by SPARK database. According to the classification provided above, around 75% of all the companies in the sample refer to manufacturing or resource-extraction sectors with other 25% of companies that are left presenting consumer sector and others. More detailed distribution of companies among industries can be seen on the Figure 3.

Figure 3. Companies distribution among industries



Source: Created by author

2.3 Descriptive statistics

Descriptive statistics of the observed variables is presented in the following table (Table 3):

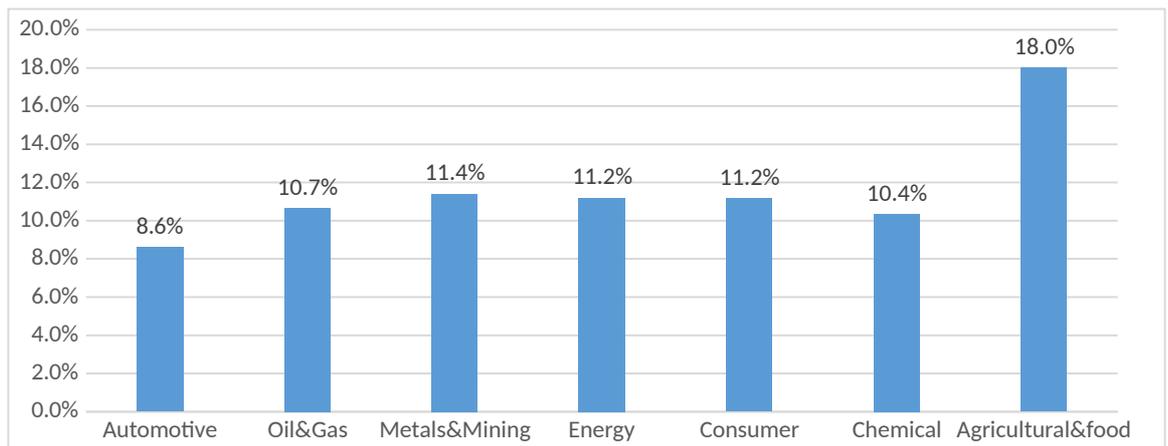
Table 3. Descriptive statistics for regression analysis

Variable	Mean	Standard deviation	Min	Max

Marketcap	206 669 829 270	436 596 915 769	39 382 000	2 360 691 117 847
ROA	0.044	0.051	7.13e-6	0.175
MBA	0.215	0.383	0	1
ind_exp	11. 399	11.675	1	46
diversif_exp	0.744	0.425	0	1
tenure	3.83	2.64	1	11
share_foreign	0.269	0.188	0.08	0.80
age	13.759	15.921	2	23
board_size	9.189	9.320	5	15

Average ROE of the companies observed is equal to 5,4%, which means that on average, companies were generating profit during the period observed that was equal to 5,4% of all the money invested by shareholders. Minimum value equals almost to zero, which identifies that a company was not able to use its resources for generating any profit. As for maximum value of ROE, the profit generated by a company accounts for 67,5% of shareholders' equity. Distribution of average ROE among industries that were investigated is presented below (Figure 4)

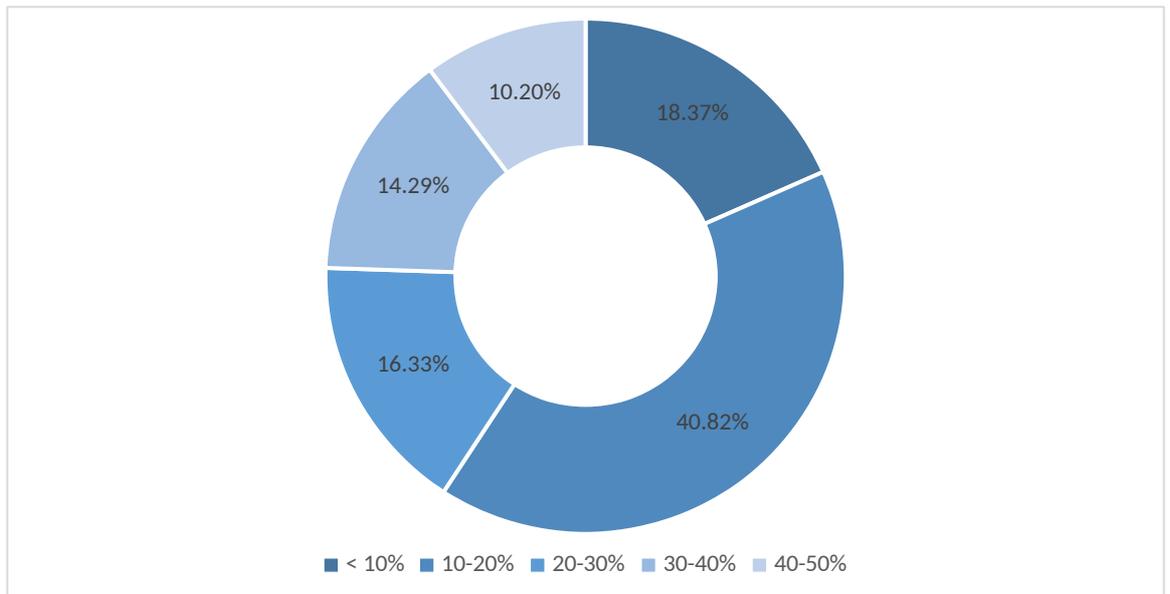
Figure 4. Distribution of average ROE among industries



Source: Created by author

Due to the fact that one of the main criteria of including companies in sample was existence of foreign citizen in board of directors, it is important to detect how companies are distributed by a share of foreign citizens in their boards of directors. The detailed distribution is presented on Figure below (Figure 5).

Figure 5. Distribution of companies from the sample according to a share of foreigners in board of directors

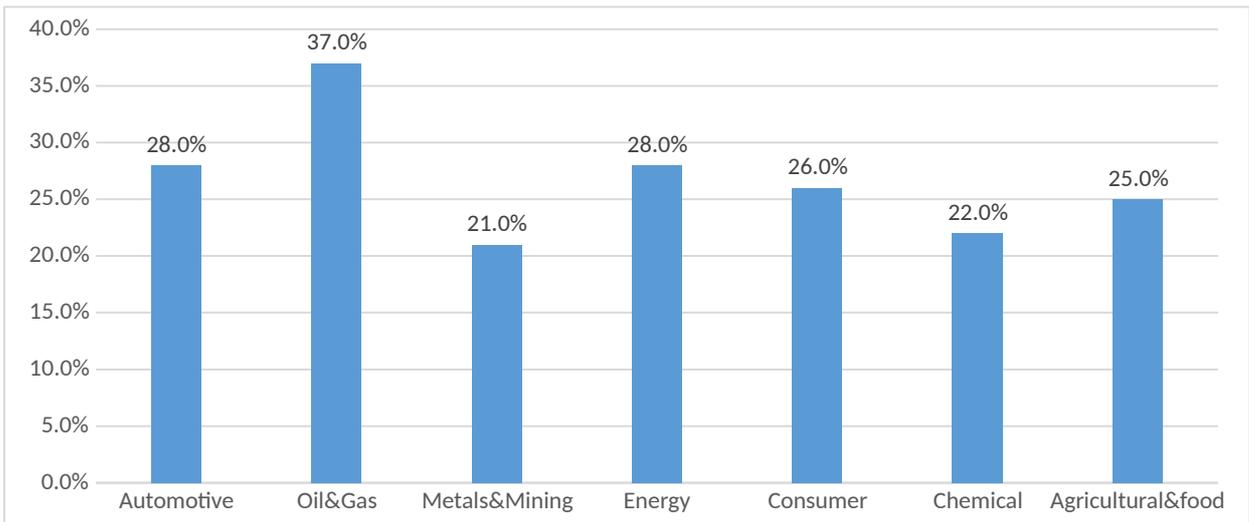


Source: Created by author

It can be seen on the graph that the majority of companies investigated are characterized by a share of foreign board members varying from 10 to 20% of all the members. It can be also seen that despite the dramatic increase in number of foreigners in Russian companies' boards, there are still only a few of them (at least from the sample analyzed) characterized by a share of foreign board membership accounting for a half of a total number of directors.

It was also important to investigate the distribution of foreign members in a board of directors depending on the industry in which a company is operating. Below on the graph the average share of foreign citizens as board members is depicted for different industries (Figure 6).

Figure 6. Average share of foreign citizens in a board in industries observed

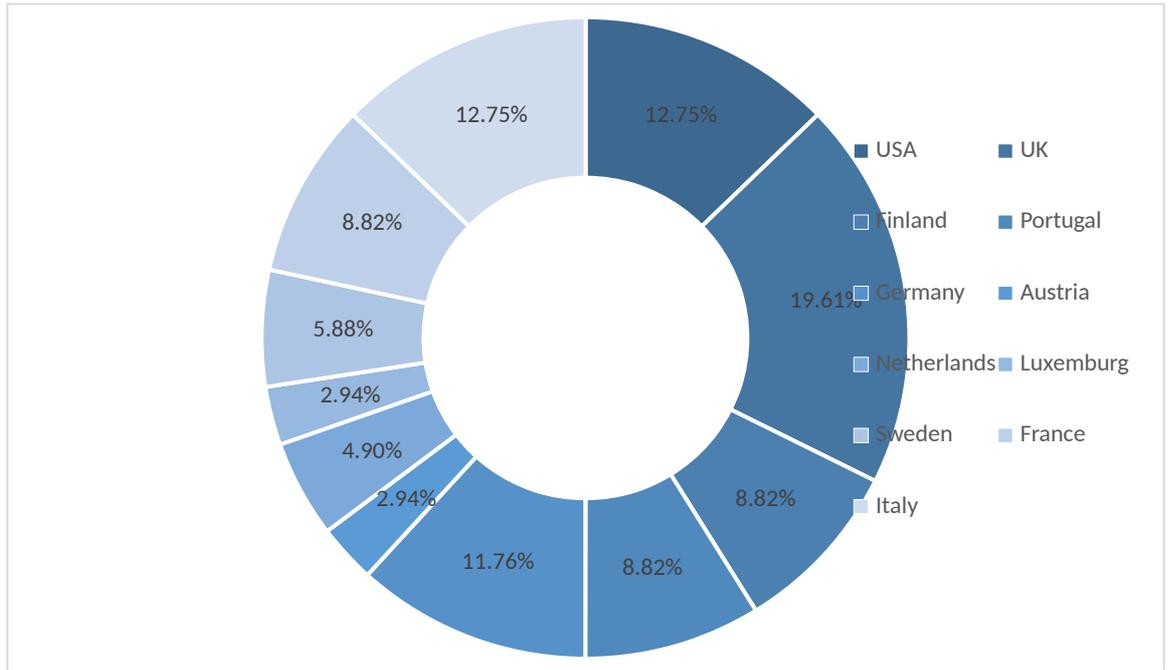


Source: Created by author

As it can be seen on the graph, that bigger share of foreigners in a board is typical for companies from oil and gas industry. It can be explained by the fact that those companies require a strategic body made of the most qualified experts and professionals, as far as the whole country's economy is dependent on activities of those companies. Energy and automotive sectors go next when talking about amount of foreigners in the board. This fact can be connected with a high need of restructuring and innovations in those industries. As far as innovations should be implemented, high volume of investments are required. In order to make a right strategic decision regarding amount of investments that should be attracted and implementation of some processes, board members should probably already have an experience in this industries from developed countries.

Talking about a need of Russian joint ventures to attract experienced and qualified directors from other countries, when probably those stages of development are already passed, it is important to detect the main 'importers' of board members to Russian companies. The distribution of all foreign directors analyzed according to the countries they are citizens of is provided below (Figure 7).

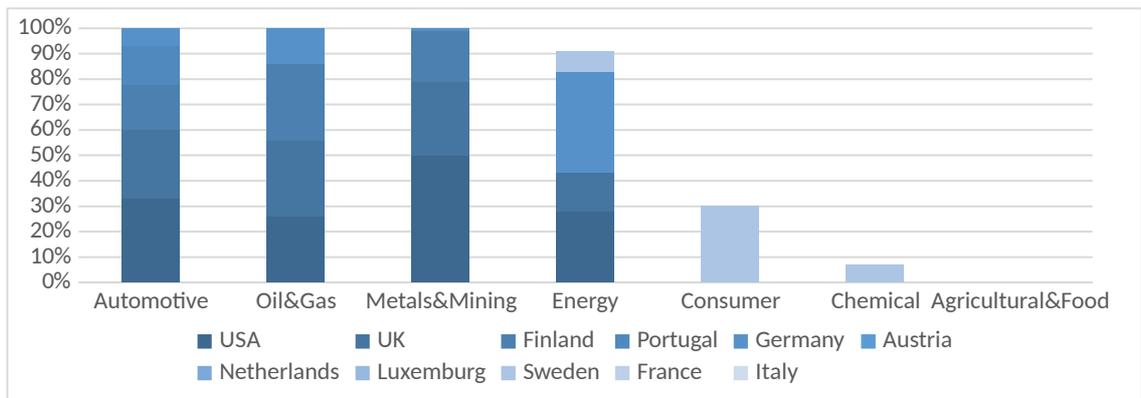
Figure 7. Distribution of foreign board members according to countries of their citizenship



Source: Created by author

According to the graph presented above, the major part of directors in Russian companies came from either USA or UK or Germany. Indeed, it was detected that companies from automotive industry are likely to attract directors from Germany and Italy, when those from Oil & Gas or Metal & Minings sectors are either attract US or UK directors or those, from the closest countries to Russia, such as Finland. More detailed distribution of countries of citizenship of foreigners in board of companies from 8 industries analyzed is presented below (Figure 8).

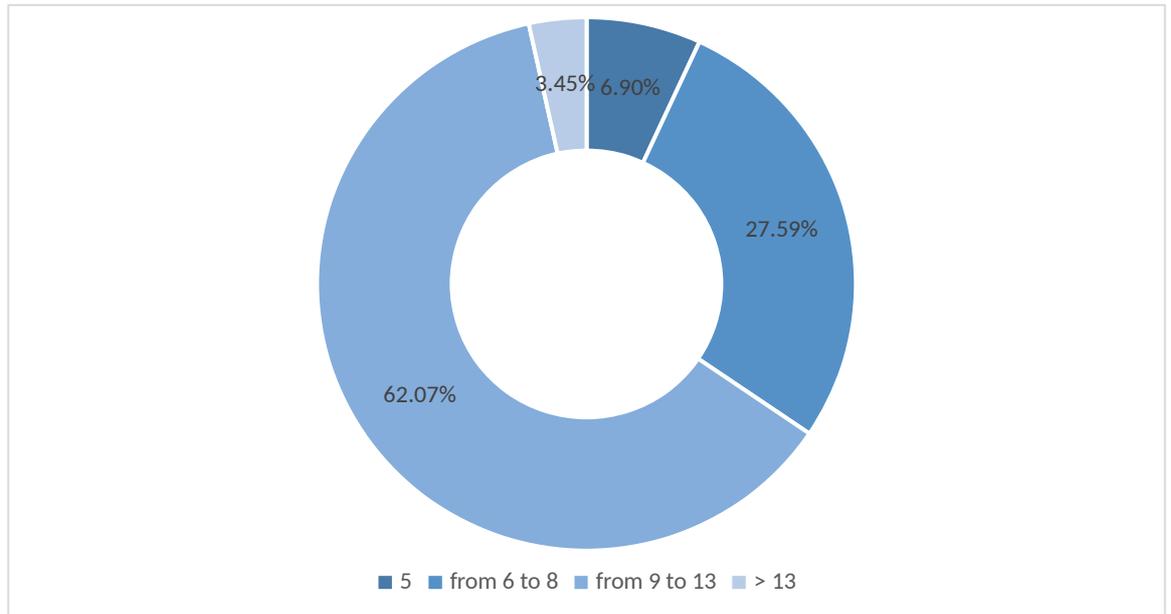
Figure 8. Industry and country distribution of foreign board members in Russian companies



Source: Created by author

Taking into account a share of foreigners in every board analyzed in order to estimate the relative power those members have on a company as a whole, it is important to look at board size distribution (Figure 9).

Figure 9. Board size distribution



Source: Created by author

It can be concluded from the graph that the majority of companies analyzed have quite big board of directors consisting of 9 to 13 persons. It can be explained by the size of companies themselves. As far as the majority of companies analyzed are characterized by a huge amount of employees, production facilities and production volumes, the strategic-planning and decision-making body should correspond to those characteristics.

2.4 Regression analysis

The regression model used for analysis that was suggested in Chapter 2.1 is presented below:

$$Y_i = \beta_0 + \beta_1 Control_i + \beta_2 Board_i + u_i (2)$$

In which Y_i represents dependent variables, such as return on assets (ROA) and market capitalization. The multiple linear regression model was used in order to run the analysis.

Regression analysis was performed using STATA package. Linear regression appeared to be the best model for all the dependent variables – return on assets and market capitalization. After regression analysis was conducted, each variable is checked for significance accordingly to the hypothesis formulated before. Results of the analysis are presented in the table below (Table 4):

Table 4. Results of regression analysis

Variable	ROA	marketcap
tenure	0.07632	0.00810**
MBA	-0.00112	0.03298**
ind_exp	-0.00153	0.00029*
diversif_exp	0.04857	0.01156*
share_foreign	0.08911	0.00248**
age	0.00256	0.06082*
board_size	0.00837	0.01534*
R ²	0.136	0.315
Adjusted R ²	0.034	0.235
N	58	58
Sig.	0.260	0.003

Symbols (*) and (**) correspond to level of significance of the factors – 5 and 10% respectively

Out of two models formed, only one was statistically significant, since probability of failure was less than 5%. As for the first model with ROA acting as a dependent variable, it can be concluded that special characteristics of foreign members of board of directors and even a share of foreign board members do not influence internal accounting results of a company at all. The value brought by education of foreigners, or their professional experience does not directly influence the financial efficiency of a company.

While analyzing results of running a regression for the second model with market capitalization as a dependent variable, it can be claimed that accomplishment of MBA degree of foreign board members, as well as their working experience and tenure are significant for company's market attractiveness indicators. It can be concluded that all the four hypothesis created above are supported with results from statistics. Probably, investors are paying much attention to special characteristics of board members and they are possibly ready to pay more for shares of a company, in which board there are foreign citizens with a specific level of education, industry and diversified experience.

It is also important to mention that control variables *board_size* and *age* are statistically significant in all the models, while *share_foreign* is significant only in the second model with market capitalization as a dependent variable. It can be concluded from the analysis that both board size and company age are positively related to its financial results. As for the share of foreign citizens in a board, it has a positive relationship with company market attractiveness measured as market capitalization, but it has no relationship with company's internal profitability measured as ROA.

CONCLUSION

The study is focused on the analysis of the relationship between human capital of foreign members of board of directors and financial performance of Russian joint-stock companies. The formation of a proper decision-making body formed by specialists that have relevant education and working experience is vital for any company, especially for those, operating in volatile and unstable economic environment and during crisis time.

Usually, when the relationship between human capital characteristics and financial performance of a company were tested empirically, results were showing that such characteristics of human capital of board members as education, industry working experience and tenure in the board positively influence company attractiveness for investors in some cases as well as its internal accounting financial results, usually measured as return on assets (ROA), or return on equity (ROE).

As far as it is an empirical study, the sample of 58 Russian joint-stock companies that have ever been listed on Moscow stock exchange with foreign board membership was formed and analyzed. In the chapter above, the theoretical explanation of the chosen econometric model, research hypotheses and analysis of descriptive statistics are presented and discussed. Dependent variables were formed using indicators of company financial performance, such as market capitalization and return on assets (ROA).

It was detected that such characteristics of foreign members of board of directors as accomplishment of MBA/EMBA degree, tenure in the board as well as industry and diversified working experiences have a positive influence on a firm market capitalization measured by price per share and number of shares outstanding. It was also proven that those dependent variables – human capital characteristics of company foreign board members do not have any impact on its accounting results, measured as return of assets (ROA).

The results of empirical study show that in case when company is striving to increase its attractiveness to investors, it can be assessed as a possible solution to attract foreign citizens as as board members. This conclusion can be explained with the fact, that investors rely on and trust more to Russian companies that have foreigners in boards of directors. It probably characterizes a company as a less volatile to external economic and political conditions, such as economic recession, political elections, currency crisis and the desire of other investors to bring their money to a company. It is also seen from the obtained results of empirical study that special characteristics of foreign citizens on company board and even their presence on the board does not influence company performance and company effectiveness of using assets, measured by accounting identifiers, such as return on assets (ROA).

The results of the regression analysis conducted for this research are answering the research question of the paper – is there a relationship between human capital of foreign members of board of directors of Russian joint-stock companies and their financial performance? The answer is that the presence of foreign board members and their human capital characteristics positively related to company's market capitalization, but have no relationship with return on assets (ROA).

The results were obtained by supporting the following hypotheses:

- Accomplishment of MBA/EMBA degree by a foreign board member has a positive relationship with company market capitalization;
- Tenure as a board member of a foreign citizen has a positive relationship with company market capitalization;
- Industry working experience of a foreign board member has a positive relationship with company market capitalization;
- Diversified working experience of a foreign board member has a positive relationship with company market capitalization.

The second model with return of assets acting as a dependent variable was proven to be insignificant by rejecting the following hypotheses:

- Accomplishment of MBA/EMBA degree by a foreign board member has a positive relationship with company ROA;
- Tenure as a board member of a foreign citizen has a positive relationship with company ROA;
- Industry working experience of a foreign board member has a positive relationship with company ROA;
- Diversified working experience of a foreign board member has a positive relationship with company ROA.

Theoretical contribution of this study is the creation of statistically significant model that can be used in evaluation of company market capitalization while having the information about human capital characteristics of foreign citizens acting as members of board of directors in Russian joint stock companies.

With regard to managerial implications of the research conducted, it is worth to mention that it could be useful for companies' shareholders, CEOs and other parties (if exist) that are participating in strategic decision-making processes, that in case when a company wants to increase its attractiveness for investors and to increase its market capitalization, assignment of foreign citizens as board members can be used as a possible solution. However, if a company has the aim to increase its accounting indicators of financial performance, the citizenship of members of board of directors plays no role.

While discussing both theoretical and practical contributions of the research conducted, it is worth to mention that there are certain limitations of the study, that were unavoidable during the process of conducting the empirical research.

Firstly, the results of the study can not be assessed as universal as far as the sample size (58 observations) is relatively small. This is based on the fact, that it was decided to analyze only those joint-ventures that were ever listed on Moscow Exchange, that have foreign board membership and in case there was enough information about them in the available sources of information. Secondly, as far as only Russian joint-stock companies have been analyzed, the results of the study conducted can be applicable only for Russia – so there is a geographical limitation as well, because of differences in economic situation, stage of country development and the general environment in different countries. Thirdly, due to Russian specifics, there is an unequal distribution of companies analyzed among the industries as far as the majority of them are operating in Oil&Gas, Energy and Metal&Mining markets. While applying the results of the study on practice, it is necessary to take into account the possible inapplicability of the results gained to the companies that are representing other industries.

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Appendix 1. Dependent and control variables

Company	ROA	Market capitalization	Company age	Board size	Share of foreigners
1	7,13E-06	39382	2	5	0,80
2	0,0320	27307105542	9	11	0,73
3	0,1299	521420000000	20	7	0,71
4	0,0043	1586508998	19	7	0,57
5	0,0106	6612720600	21	9	0,56
6	0,1445	142048734945	8	9	0,56
7	0,1750	22057561453	7	9	0,56
8	0,1120	107790500000	20	13	0,54
9	0,0201	416639375551	20	10	0,50
10	0,0460	16607573042	20	15	0,47
11	0,0273	389859431962	20	9	0,44
12	0,0274	2360691117847	18	9	0,44
13	0,1291	354803208595	13	9	0,44
14	0,1655	11857475014	12	9	0,44
15	0,1619	1886038961637	20	11	0,36
16	0,1206	381828866625	21	9	0,33
17	0,0059	124239550406	19	9	0,33
18	0,0181	214581500000	12	9	0,33
19	0,0189	7698585607	8	9	0,33
20	0,0378	1325412411	8	9	0,33
21	0,1570	1323829416000	7	9	0,33
22	0,0031	16391392513	17	7	0,29
23	0,0014	1873796243	17	7	0,29
24	0,0497	1857333167	8	7	0,29
25	0,1154	129599575112	16	13	0,23
26	0,1175	12432619584	10	9	0,22
27	0,0301	7940668400	13	5	0,20
28	0,1091	376110000	9	5	0,20
29	0,0009	897529600	2	5	0,20
30	0,0239	18458691490	23	11	0,18
31	0,1080	209719515914	18	11	0,18
32	0,0433	71959732715	12	11	0,18

33	0,1039	33486414980	7	11	0,18
34	0,1197	525499253870	19	14	0,14
35	0,0594	633209033	21	7	0,14
36	0,0121	191638343750	20	7	0,14
37	0,0003	832025736	20	7	0,14
38	0,0212	17148000000	19	7	0,14
39	0,0161	11882267674	19	7	0,14
40	0,0008	841700000	13	7	0,14
41	0,0790	45321675000	10	7	0,14
42	0,0131	785297369	8	7	0,14
43	0,0205	117285767680	21	8	0,13
44	0,0577	98372097395	20	8	0,13
45	0,0877	44269999874	20	8	0,13
46	0,0097	6119124000	21	9	0,11
47	0,0957	1010247170065	9	9	0,11
48	0,0057	190246491506	7	9	0,11
49	0,0346	7953765100	6	9	0,11
50	0,0753	37579269475	20	11	0,09
51	0,1550	104306049968	11	11	0,09
52	0,0213	56110767521	11	11	0,09
53	0,0265	19021174891	8	11	0,09
54	0,0063	5368231823	8	11	0,09
55	0,0008	5509125165	6	11	0,09
56	0,0433	202977246800	9	13	0,08
57	0,0388	64780431793	8	13	0,08
58	0,0244	9322288701	8	13	0,08

Appendix 2. Human capital characteristics

Company	Tenure	MBA/EMBA	Industry experience	Diversified experience
1	2,43	0,14	6,71	1,00
2	2	0,00	35,00	0,00
3	2	0,00	31,00	0,00
4	2	0,00	6,00	0,00
5	11	1,00	11,00	1,00
6	5	0,00	5,00	0,00
7	8	0,00	8,00	0,00
8	5	0,00	5,00	0,00
9	5	0,14	14,43	0,14
10	2	0,00	27,00	1,00
11	2	0,00	4,00	1,00
12	6	0,00	6,00	1,00
13	2	0,00	2,00	1,00
14	1	0,00	1,00	1,00
15	2,6	0,00	8,00	1,00
16	1	0,00	6,00	1,00
17	2	0,00	1,00	1,00
18	1	0,00	11,00	1,00
19	1,3	0,00	6,00	1,00
20	1	1,00	1,00	1,00
21	1	1,00	1,00	1,00
22	1	0,00	23,00	1,00
23	4	1,00	4,00	0,00
24	2,5	0,50	13,50	0,50
25	7	1,00	7,00	1,00
26	7	0,00	7,00	1,00
27	7	0,50	7,00	1,00
28	1	1,00	1,00	1,00
29	7	1,00	7,00	0,00
30	7	0,00	7,00	1,00
31	7	0,00	7,00	1,00
32	5,5	0,50	5,50	0,75

33	1	0,00	15,00	0,00
34	1	0,00	15,00	0,00
35	5	0,00	5,00	1,00
36	5	0,00	5,00	1,00
37	7	0,00	7,00	1,00
38	7	0,00	7,00	1,00
39	1	0,00	10,00	1,00
40	3	1,00	22,00	1,00
41	1	1,00	6,00	1,00
42	2,25	0,50	10,50	1,00
43	7	1,00	7,00	1,00
44	1	0,00	10,00	1,00
45	4	0,00	4,00	1,00
46	6	0,00	6,00	1,00
47	7	0,00	7,00	0,00
48	5	0,20	6,80	0,80
49	1	0,00	27,00	0,00
50	1	0,00	27,00	0,00
51	3	0,00	4,00	1,00
52	7	0,00	46,00	1,00
53	2	0,00	6,00	1,00
54	3	0,00	3,00	1,00
55	3,75	0,00	14,75	1,00
56	5	0,00	41,00	1,00
57	2	0,00	35,00	1,00
58	10	0,00	29,00	1,00