**CEO overconfidence and company’s value: the role of intangibles**

Behavioral finance is an extremely important field in corporate finance as it helps to understand beliefs and preferences of managers and investors in investment decision making (Baker and Wurgler, 2011). Behavioral corporate finance regards company managers as irrational economic agents that are exposed by biases, framing, loss-aversion, optimism, overconfidence, etc. In last twenty years CEOs’ overconfidence has become very popular motive in explaining managerial preferences together with empire building and enjoying the quiet life.

The main questions that are raised in previous empirical research on overconfidence concern the evidence of its influence on corporate decisions and reasons for hiring overconfident managers. From one side, overconfidence in studies is regarded as a negative feature because overconfident managers are prone to overestimation of company’s ability to create value (Malmendier and Tate, 2008). However, from the other side, some papers highlight the overconfident managers’ specific attitude to risk that might be beneficial in certain cases and lead to higher productivity and company value (Hirshleifer et al., 2012).

The effect of overconfidence on value creation is not completely clear. While investigating mergers and acquisitions, Malmendier & Tate (2008) found out that overconfident managers could undertake value-destroying mergers due to overestimations of their ability to generate returns. Nevertheless, some studies prove that overconfidence can increase a company’s value by reducing the degree of underinvestment problem that is arising from risk-aversion (Campbell et al., 2011; Chen and Lin, 2013)[[1]](#footnote-1). In order to understand impact of overconfidence on firm value, we also observe the relationship between risk and overconfidence by analyzing the role of intangibles in this process.

Investing in any kind of innovation is always a risk and there exists a list of studies that link CEOs’ overconfidence with innovative activities (Galasso and Simcoe, 2011; Hirshleifer et al., 2012). According to these papers, overconfident managers are more likely to change the technological directions of a company and to get advantages of innovative growth opportunities. Investing in intangibles is also connected with risk and uncertainty and influenced by managers’ overconfidence. While the impact of overconfidence on innovation activity is particularly studied, its effects on the investing in intangibles should be investigated. Note that overconfidence and intangibles investments also connected with value creation. Therefore we need to develop and evaluate integral model of interaction between all of them.

The objective of the current research is to reveal the influence of CEOs’ overconfidence on the results of the investments in intangibles. Basically, we assume that overconfident managers invest more in intellectual capital (IC) but with lower effectiveness. In order to reach the objective, the following hypotheses are tested in the empirical part of the research:

**H1:** CEO’ overconfidence increases investments in IC

**H1a:** CEO’ overconfidence increases investments in human capital (HC)

**H1b:** CEO’ overconfidence increases investments in relational capital (RC)

**H1c:** CEO’ overconfidence increases investments in structural capital (ST)

**H2:** Increasing investments of overconfident CEO in IC decrease effectiveness of the company

The sample for the research consists of 1455 large European listed companies (from United Kingdom, Germany, France, Switzerland, Italy, Spain and Netherlands). Time period for the analysis is 2008-2013. The database includes financial data, data on ownership structure, specific information on companies’ CEOs (personal characteristics, remuneration, measures of overconfidence) and indicators of investments in intangibles.

CEOs’ overconfidence is measured with the help of alternative proxies that appeared to be relevant in the previous empirical research. Specifically, we use option-based measure, press-based measure (Deshmukh et al., 2013; Hirshleifer et al., 2012; Malmendier and Tate, 2005) and the number of CEO’s photos and mentions in annual report (Schrand and Zechman, 2010). Statistical package used for the analysis is Stata 12.

We measure investments in IC separately for HC, RC and ST. As an indicator of investments in HC we use costs of employees, for RC we have chosen advertising expenses as an indicator and investments in SC are introduced as R&D costs.

Company’s effectiveness in terms of the current study is measured as a value added. Particularly we use indicators of market value added, economic value added and market-to-book ratio that are common for intellectual capital research.

Our findings suggest that over the period 2008-2013 manager’s overconfidence was of great importance for the level of companies’ investments in intellectual capital. The strongest effect of overconfidence is observed for the investments in RC and SC. That means that for our sample in average overconfident managers are more willing to develop the networks and to innovate more as they strongly believe in their effectiveness. Additionally, our second hypothesis on negative influence of investments in IC of overconfident managers on intellectual capital effectiveness is also justified. That is an evidence of the fact that for companies with overconfident managers the problem of overinvestment exists. Essentially, overconfident CEOs invest in IC too much that leads to the emergence of negative influence of investments on company performance.

The current research contributes to the solution of problem whether or not firm should hire overconfident managers. Moreover, we believe that the important contribution of the study is that the analysis was conducted for the European sample as previously empirical research on overconfidence was focused on the US market.

1. Often authors refer to «overconfidence» as «optimism». Following Malmendier & Tate (2005), we assume self-serving attribution approach and choose «overconfidence» in order to distinguish the overestimation of own's managerial abilities from the general overestimation of exogenous factors (such as the real growth rate of the economy). [↑](#footnote-ref-1)