**MYKOLAS ROMERIS UNIVERSITY**
**FACULTY OF ECONOMICS AND BUSINESS IN PARTNERSHIP WITH MIDDLESEX UNIVERSITY**

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# ASSESSMENT OF COMPANY'S PERFORMANCE LINKED TO SOCIAL RESPONSIBILITY: CASE STUDY OF INTERNATIONAL CONSULTING GROUP COWI

**A master's thesis**

**Supervisor**
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# INTRODUCTION

**Relevance of the topic.** Under the conditions of a market economy, business activity is constantly changing, so the existing financial and economic information of the company must be constantly analysed in order to adapt in changing conditions and increase performance efficiency. It is a complex economic category, therefore, it is becoming increasingly important in recent years, since this assessment is significant not only in analysing the current financial situation, but also in analysing business perspectives and opportunities for improving their business. Among the other things, corporate social responsibility (CSR) and its principles have an increasing importance in business. The CSR is an implementation concept, where companies can voluntarily involve social, environmental and transparent business principles in their internal processes and in the company's relationship with stakeholders. However, it can be seen that CSR implementation has become not only a voluntarily, optional company's choice, but more likely today's necessity, which is inseparable from an efficient, profitable business. Moreover, it can also have an impact on the survival of companies in general, where the activities of the core business, such as the consultancy in the engineering sector, and its decisions have a huge impact on the society and their work results are closely linked with the daily lives of people.

By many foreign and Lithuanian authors problems of the evaluation companies' performance have been analysed: R. Kaplan, DP Norton (1996), RL Daft (2009), K. Schobel, C. Scholey (2012), J. Dobrovic, M. Lambovsky, P. Gallo, V. Timkova (2018), S. Puškorius (2002), Mackevičius, J., D. Poškaitė (2011), L. Juozaitienė (2008) and others. The concept, problems of the corporate social responsibility have been analysed by many authors also: A. B. Carroll (1991), L. Simionescu, D. Dumitrescu (2014), R. Kovaliov, V. Snieška, A. Simanavičius. (2009) and others.

The assessment of company's performance can be considered as one of the most interesting and beneficial innovations in terms of the ability to combine strategic planning with management control into one whole. For this purpose, there are developed multitude methods and benchmarks that can help to measure the current input, already achieved results, and determine future plans. However, many analysts do not associate the performance assessment of an entity with social responsibility, and this indicates the lack of a deeper analysis in this field, especially for those companies which carry out consultancy services in a specific engineering sector.

**Problem of the research.** What is CSR influence over the company's performance efficiency assessment where main activities are consulting service on the specific engineering sector?

**Object of the research –** performance assessment of enterprises efficiency.

**Hypothesis of the research.** Evaluating and increasing efficiency of a company's performance it is appropriate to consider the Corporate social responsibility activities.

**Aim of the research.** To present theoretically grounded aspects of company's efficiency, its connection with corporate social responsibility and provide a measurement tool of performance evaluation for consulting company which main activities are in specific engineering sector.

**Objectives of research.**

1) To analyse the scientific literature on the topic of company's efficiency evaluation, define the components of it;
2) To analyse and present scientific literature on topic of corporate social responsibility, it's connection with efficiency and carry out the analysis of the main opinions about CSR;
3) To carry out the research by using established or updated measurement tool for consulting company which main activities are in specific engineering sector.

**Methods of the research.** In this thesis methods applies the analysis and systematization of the scientific literature, comparative analysis of authors' opinions.

**Novelty and significance of the research.** In this master's thesis is has been assessed the efficiency of COWI's performance and provided a tool that can help to increase its efficiency through social responsibility and evaluate performance by using prepared balanced scorecard. This work can also be useful for other companies, those main activities are in consulting services in the engineering or other similar sector.

**Structure.** This master's thesis is divided into three parts – theoretical, methodological and practical. The research work volume – 77 pages. Work is based on 76 literature sources (24 in Lithuanian language and 52 in foreign). Master's thesis is presented in 15 figures and 9 tables

In the first part of this work there is theoretically based aspects of companies' efficiency, discussed connection between concept of enterprise performance and efficiency, reviewed corporate social responsibility concept and its connection with performance and efficiency of the companies. In the second part of the work, is presented justification base of the research problem, research methods and the description of the research process. In the last part's sections there are presented COWI, its activities and CSR status, developed COWI balanced scorecard linked to CSR and efficiency improvement and presented measured COWI efficiency by using financial ratio analysis.

# 1. THEORETICAL ASPECTS OF EVALUATING ENTERPRISE EFFICIENCY LINKED TO CSR

## 1.1 Defining the concept of enterprise efficiency

In today's volatile business environment, business is increasingly striving to become more competitive focusing on increasing profit. They focus on the effectiveness of business processes and efficiency[1]. There are a lot of different interpretations about companies' efficiency in scientific literature. The concept is understood and interpreted differently by different authors:

- L.R. Daft – "Efficiency is the amount of resources used to achieve the goals of the organisation."[2].
- K.Lukoševičius describes the efficiency as resource utilization level ensuring the maximum result"[3].
- S. Puškorius, "efficiency is the ratio of the desired result and the complex resource, deposit, cost, and other resources used to achieve these results."[4].
- T. Sudek, in the general sense, efficiency is understood as the ratio between the result and the outcome for achieving the result. The greater the value of this ratio, the greater the efficiency[5].
- J. Mackevičius, D. Daujotaitė – efficiency is the relation between the products created and the complex resources used[6].

Having analysed the various efficiency definitions of Lithuanian and foreign authors presented above, it can be argued that efficiency concept is treated as the relationship between a desirable company's performance results and recourses used to achieve those results. Consequently, the concept

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[1] Plakoutsi, A., Papadogianni, G., Glykas M. *Performance measurement in business Process, workflow and human resource management // Business process management.* – Berlin: Springer, 2013, Nr. 444, p. 129-156. – ISBN 978-3-642-28408-3

[2] Daft, R. L. *Organization theory and design / 10th ed.* – Mason: South – Western Cengage Learning, 2009. p. 20.– ISBN 13: 978-0-324-59889-6

[3] Lukaševičius, K., Martinkus, B. Piktys, R. *Verslo ekonomika*. Kaunas: KTU leidykla Technologija, 2005. p. 150. – ISBN 9955-09-888-0

[4] Puškorius, S. *Bendradarbiavimo efektyvumas // Viešoji politika ir administravimas.* Vilnius: Mykolo Romerio universitetas, 2007, Nr. 20, p. 24-25 - ISSN 1648-2603

[5] Sudek, T. (2008). *Theoretical and Foundations of Banks Efficiency and Empirical Evidence from Poland*. Social studies (interactive). 3(13). Access via EBSCO

[6] Mackevičius, J., Daujotaitė, D. *Veiklos audito elementai: analizė ir auditas* // Socialinių mokslų studijos. Vilnius: Mykolo Romerio universiteto Leidybos centras, 2011, Nr. 3 (2), p. 459-472. – ISSN 2029–2244

of efficiency covers the concept of cost-efficiency. It means that cost-effectiveness are used for efficiency criterion.

Analysing scientific literature have been observed that efficiency can be divided into three main types:

- Allocative
- Technological (technical)
- Dynamic[7]

**Allocative efficiency** or otherwise called **distribution efficiency** is the production of the best compositional set of products using the best combination of costs. Allocative efficiency is considered as an economic organization goal, which achievable in conditions of perfect competition in a market[8]. Wonnacott provides a similar definition of this type of efficiency – allocative efficiency is the production of the most appropriate set of products using the combination of the lowest costs[9]. According to D. Klimašauskienė and V. Moščinskienė, in the theory of neo-classical equilibrium, the interpretation of economic efficiency is based on the concept of Italian economist Wilfredo Pareto optimality. An economic system is considered effective if the welfare of one individual can only be increased by causing impairment to another[10].

It can be summarized that allocative or distribution efficiency is an economical aim of organization to produce the most suitable combination of products with the lowest costs, which is realized of perfect competition in the market. In addition, this type of efficiency is very closely connected with the view that one person's welfare cannot be increased without affecting another. Even so, this viewpoint is more based on static approach of the efficiency and the author of this work would argue that some factors could damage Pareto's optimum in the short term, however in the long run, could increase efficiency.

In order to achieve **Technological (technical) efficiency** all the best available resources must be allocated or distributed without undue effort, waste, or cost[11]. According to K. Lukoševičius production

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[7] "dynamic efficiency." BusinessDictionary.com. WebFinance, Inc. Access on the Internet: http://www.businessdictionary.com/definition/dynamic-efficiency.html, [viewed on 11-09-2018]
[8] "Efficiency." Gale Encyclopedia of U.S. Economic History. . *Encyclopedia.com.* (December 1, 2018). Access on the Internet: https://www.encyclopedia.com/history/encyclopedias-almanacs-transcripts-and-maps/efficiency, [viewed on 11-09-2018]
[9] Wonnacott, P., Wonnacott, R. *Mikroekonomika*. Kaunas: Poligrafija ir informatika, 1998. – p. 549 – ISBN 9986-850-15-0
[10] Klimašauskienė, D., Moščinskienė, V. *Lietuvos kapitalo rinkos efektyvumo problema* // Pinigų studijos: ekonomikos teorija ir praktika. Vilnius: Lietuvos bankas, 1998, Nr. 2. p. 25-34. – ISSN 1648-8970
[11] "Efficiency." Gale Encyclopedia of U.S. Economic History. . *Encyclopedia.com.* (December 1, 2018). Access on the Internet: https://www.encyclopedia.com/history/encyclopedias-almanacs-transcripts-and-maps/efficiency [viewed on 11-09-2018]

is considered technologically efficient if under the same technology of production it produces the same quantity of output at a lower cost, that means it consume less financial and labour resources, energy resources, or increases the volume of produced production with the same resources[12].

Explications of technological efficiency show not only the importance of the selected technology, which reduces the cost of producing a particular product compared with costs without using a technology, but also captures the importance of company's managements. Fundamentally, all technological changes are installed to the company by integrating it into enterprise strategy and by well-planned implementation. In order to use new technology, it is needed to have a good knowledge of the organization's structure, available resources - financial, human, and energy. Thus, in this work, technological efficiency is understood not only as a reduction of costs in the use of appropriate technologies, but also the importance of management, strategy and values of the company while choosing and implementing the appropriate technologies in order to reach Technological (technical) efficiency is recognised.

**Dynamic efficiency** is the emergence of innovative changes in a timely manner. Competition, leading firms to introduce new technology, leads them to dynamic performance[13]. This term used to describe the economic system. Dynamic efficiency encourages promoting long-term investments in researches and development, education. In these circumstances, the resulting innovations help to increase economic efficiency progressively[14]. There it can be distinguished the main factors that affect Dynamic efficiency such as state of technology, investment, access to finance and the motivation of managers and workers[15].

According to different statements how Dynamic efficiency is understood by different authors, it can be stated that this type of efficiency most likely focuses into gains which can be received in the long-term perspective. Investment in new technology, education, researches might be not have the effect in the short run, but It is important to make sustainable decisions and look forward. Enterprises, which are missing innovations, not improving the quality of products and do not lowering costs, are losing competitive advantages. It can result in losing profit in the future or even the disappearance of the company, if the competitors were continually investing on innovations and were lowering their costs.

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[12] Lukoševičius, K., Martinkus, B., Piktys, R. *supra* note 3, p. 150-153,
[13] *Ibid.,* p. 150-153
[14] "dynamic efficiency." BusinessDictionary.com. WebFinance, Inc. Access on the Internet: http://www.businessdictionary.com/definition/dynamic-efficiency.html, [viewed on 11-09-2018]
[15] "dynamic efficiency." EconomicsHelp.org. Happykite.co.uk. Access on the Internet: https://www.economicshelp.org/microessays/costs/dynamic-efficiency/ [viewed on 11-09-2018]

Moreover, A. Andrijauskienė classified one more type of efficiency - **Economical efficiency**. It is efficiency of production activity, showing the dependence between the economic activity and the results of living and constructed work. This author separates between two dimensions of economic efficiency: the economic effect and the use of production resources and cost combination. According to her, the economic effect shows the result achieved by the evaluated person expression, because the result is generally estimated by profit or cost-saving. The size of the company's economic effect depends on the volume of production and cost savings. [16]

In summary, it can be concluded that there are different interpretations of efficiency, but the most commonly efficiency is understood as the ratio between the desirable performance of the company and the resources used for those results to reach. Allocative, Technological, Dynamic, Economical efficiency - all these types of efficiency share one goal - the best result achievement at the lowest cost. To reach this goal it is highly important to implement innovations, technologies, have a good management of the company and human recourses and all this is inseparable from the strategy and values of the company.

## 1.2 Connection between concept of enterprise performance and efficiency

The company's performance is reflected in various indicators. The following are combined with performance: effectiveness; cost-effectiveness; profitability; productivity; quality of service or work, innovation[17]. It is important to find out the differences between these concepts and their relationship with efficiency.

**Effectiveness** indicates whether the company has achieved it's intended goals. The key here is the result and the output, not the input. It is possible to perform a task efficiently, but at the same time to be ineffective when resources are used unnecessarily[18]. S. Puškorius interprets effectiveness as a degree of implementation of the goals set by using a certain amount of resources. He also explains the cost-effectiveness as minimizing the use of resources that are needed to obtain the result while maintaining the quality of the result. The key is the resources, their quantity, consumption, and not output. Cost-effectiveness is also interpreted as the difference in resources between two or more business options [19.]

[16] Andrijauskienė, A. *Įmonių ekonomika.* Vilnius: Presvika, 2004. p. 113-114 – ISBN 9955- 567-51-1
[17] Lekavičienė, D. *Įmonės ekonominio efektyvumo sąvokos sampratos teoriniai aspektai. Mokslas ir edukaciniai procesai*. Šiauliai: Lucilijus, 1(2), 2011. p. 38-45
[18] Evans, B., Simons, D. *Lean delivery road map - how to make it happen*. Logistics Focus. 2000, 2 (9): p. 30-39.
[19] Puškorius, S. *3E koncepcijos plėtra*. Viešoji politika ir administravimas. Vilnius. Lietuvos teisės universitetas, 2002, Nr. 3: p. 73-78

According to some authors, the terms efficiency and effectiveness are two relative terms and commonly misunderstood as one[20]. Efficiency basically is a production-oriented phenomenon and effectiveness - quality oriented outcome phenomenon. One can be termed as abstract and the other as behavioral. The efficiency is more about the financial costs and results of performance and effectiveness can be used to evaluate different processes that make the company run.

Knowing the cause and effect relationship between performance drivers (strategy, performance management, leadership, teamwork, the structure, and the processes) and what organizations achieve (results) actually enables greater effectiveness. Employees and managers who demonstrate effectiveness in the workplace help produce high-quality results. However, organizational efficiency primarily refers to how well an organization uses money. Increased organizational efficiency make implementation cheaper and smoother, but it is less useful if the plan being implemented was not good. So, it can be stated that organizational efficiency as a factor is important in gauging a business' organizational effectiveness, but it is by no means the only factor of importance[21].

Professor Amar KJR Nayak in his article "Efficiency, Effectiveness and Sustainability: The Basis of Competition and Cooperation" explains that effectiveness incorporates the efficiency driven by the logic of external competition. The professor adds the definition of sustainability and argues that all these three concepts are interconnected, since all of them are used to assess the performance of human endeavor. He also argues that efficiency and effectiveness have limited application over longer time, different contexts and broader space with specific reference to sustainability. According to him, sustainability is holistic, sounds logical and overcomes deficiencies in the ideas of efficiency and effectiveness that have been based on external competition[22].

In other words, even if efficiency and effectiveness definitions describe different things, both are inseparable, since they have an impact on each other. Company's effectiveness is oriented more to quality and efficiency - to production and how well money is used. Unfortunately, not everything is investigated by authors yet, especially the relation between efficiency, effectiveness and sustainability. The author of this work admits the importance of sustainability and agrees that there are missing deeper analysis between sustainability and efficiency.

Some authors consider that **productivity** and efficiency are synonyms[23]. Others point out that productivity is an indicator of efficiency and indicates whether resources are well spent. The more is

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[20] Sampson, Q. "*Organizational Effectiveness Vs. Organizational Efficiency*" last modified June 28, 2018. Access on the Internet: http://smallbusiness.chron.com/organizational-effectiveness-vs-organizational-efficiency-22413.html [viewed on 13-09-2018]

[21] Li, Alan. "What Is the Organizational-Efficiency Factor?" Access on the Internet: http://smallbusiness.chron.com/organizationalefficiency-factor-37839.html [viewed on 14-09-2018]

[22] Amar KJR Nayak. *Efficiency, Effectiveness and Sustainability: The Basis of Competition and Cooperation.* Bhubaneswar. Xavier Institute of Management. 2017. p. 112-118.

[23] Puškorius, S. *supra* note 19, p. 73-78

produced using the available resources, the greater the productivity. According to I. Alsyouf, productivity does not mean the same as efficiency. He understands the concept of productivity much more widely and states that productivity includes both: efficiency and effectiveness. Productivity reflects the relationship between output and the amount of resources consumed, while efficiency is the ratio between the value of output and the cost of resources. Productivity increases when production volume grows faster than consumed resources. Efficiency increases when costs grow less rapidly than output[24].

Some authors tend to ignore the concepts of productivity or efficiency by identifying them as profitability[25]. Profitability is defined as the ratio between gained profit or profit and a certain chosen unit (cost, turnover, capital). In other words, it is the result of a successful activity. Other authors describe profitability as a company's ability to earn profit[26]. On the other hand, profitability is as an indicator that reflects the company's ability to generate more income than spend assets (capital). By working more productively, the company becomes more competitive and maintains a steady, rising level of profitability. Despite some differences in opinion, it can be argued that in order to objectively evaluate the efficiency of a company's activities in various aspects, it is necessary to analyse relative profit indicators and make decisions based on them. So, in this work, profitability is understood as part of efficiency measurements.

The universal theory of quality defines it not only by the quality of the products, but also by all the factors that ensure it: flexibility of production, costs, supply, staffing, and communication. Quality becomes the goal of the company, which includes the quality of the product, activity and the entire company. There are several aspects of this activity: technical - operational efficiency is achieved by evaluating technologies, management processes; object-orientated - good results are achieved only having good materials, equipment and personnel[27].

Although all economic units seek to work efficiently, but there is no definitive interpretation of the concept of efficiency. The concept is described and interpreted differently by different authors, but it can be stated that these are the most common aspects: optimal use of resources; achievement of goals; quality of performance and results.

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[24] Alsyouf, I. *The role of maintenance in improving companies' productivity and profitability*. International Journal of Production Economics. 2007, Vol. 105 (1): p. 70-78.
[25] Bottazzi, G., Secchi, A., Tamagni, F. *Productivity, profitability and financial performance*. Industrial and Corporate Change. 2008, Vol. 17 (4): p. 707-751
[26] Meehan, J. *Pricing and Profitability Management*. London: Wiley, 2011
[27] Dahlgaard, J., Khanji, G., Kristensen, K. *Fundamentals of Total Quality Management*. London: Routledge, 2008. p. 42-46.

### 1.3.1 Enterprise efficiency and CSR

As it was analysed, it can be stated that the simplest definition of efficiency concept is the relation between resources used to achieve results and desirable enterprise's performance. By analysing this viewpoint, the company is understood as the unit mostly in seeking to benefit itself and concentrating on its internal processes, their improvement, and productivity. Efficiency is very important and it leads the company to be successful. It means that the company is capable to learn, able to sustain growth or maintain financial stability.. However, the Company can be also viewed and evaluated not just as a separate unit, but also as a member of the economy and society. Enterprises can have positive or negative impact to it. By analysing the efficiency of a company in the broadest sense, it becomes even more understandable how important it is for the companies to purposefully pursue their business efficiency. This will be dealt with more closely in this chapter.[28]

According to R. Kovaliov, V. Snieška, A. Simanavičius corporate social responsibility is inevitable today's necessity [29].There are no common definition, which explains what the social responsibility is, but in the broad sense it is the responsibility of the company for the impact its activities have on the environment and society. A socially responsible company strives for the goals of the company, considering and respecting the needs of shareholders, but also other interested parties - customers, suppliers, employees, community - voluntarily addressing environmental and public welfare problems[30].

A study made by McKinsey illustrated that a majority of managers consider sustainability to be significant, but far from all of them invest in CSR linked activities. One reason mentioned in that work was lack of a clear definition of CSR among investors and consumers. In fact, the study showed that over 20 percent of companies do not have a clear definition of CSR and definitions differ across companies. However, most executives agreed on the value of it. 76 percent claimed that CSR have positive effect to shareholder value in the long run, since it is considered to improve both: the reputation and the brand of companies [31].

It is important to understand that the socially responsible behaviour of a company is not to give part of companies profit for charity, but it is how ethically this profit is earned. Meaning that the company's

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[28] Virgin.com Limited. Virgin Management Limited "What impact do entrepreneurs have on society?"
Access on the Internet: https://www.virgin.com/entrepreneur/what-impact-do-entrepreneurs-have-society [viewed on 30-09-2018]

[29] Kovaliov, R. Snieška, V., Simanavičius, A. *Lietuvos autoverslo įmonių požiūrio į ĮSA vertinimas* // Ekonomika ir vadyba. – Kaunas. Technologija. 2009 Nr. 14.

[30] UAB "BNS". sc.bns.lt. "Įmonių socialinė atsakomybė: kodėl gerumas turi „prabusti" ne tik prieš šventes" Kauno technologijos universitetas. Access on the Internet: https://sc.bns.lt/view/item/217335 [viewed on 12-10-2018]

[31] McKinsey & Company 1996-2018. McKinsey. *How Companies Manage Sustainability*. [Electronic] 2010.
Access on the Internet: https://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/%20how-companies-manage-sustainability-mckinsey-global-survey-results [viewed on 20-10-2018]

core business is contributing to the creation of a society's prosperity, where the workers are guaranteed safe working conditions and decent wages, or customers offered quality services and products, where the community is being created jobs, taxes are paid. The measures are taken for environmental protection and pollution reduction.

Many scientists prove that Corporate social responsibility (CSB) benefits society and business. Pros for company is that if the company implements socially responsible solutions, they receive numerous positive after-effects. When company is seen as having more social face of a corporation, it has a positive image and also distinguishes company from others and those ethical values of business can attract wealthy investors who would like to contribute into business success. Gołaszewska-Kaczan states that implemented corporate social responsibility into the enterprise, motivates employees and inspires their loyalty, so they work more efficiently. Mullerat supplements Gołaszewska-Kaczan's statement and predicates that such companies attracts new talents and good workers, since employees seek to work in a company with a good reputation[32]. As it is known – qualified, good employees are relevant for company's productivity, efficiency

Most authors spotlight advantages of social responsibility to companies, why it is good to implement it, but not so many authors write about gains of society. Apart from benefits for enterprises, corporate social responsibility also benefits the wellbeing of society, so it looks as important area to make more deep analysis. Having analysed opinions of different authors the main benefits for the society can be drawn. Social responsibility of companies leads to improved quality of products or services, higher standard of living. People can get better employment opportunities, sense of security and increased health if the company is lessening air pollution. Corporate social responsibility motivates companies to develop technologies, infrastructure and innovations, which can be used by every member of society.

Nevertheless, there are some criticizing opinions about CSR. Banerjee notes that the researchers praises the benefits of CSR, the researchers praise the benefits of CSR focusing on it as a way to improve long term financial results. He says that these actions are not really "social". According to him, the CSR serves organizing social behaviour in order to make a profit. At the same time, these companies create an illusion of compliance with social responsibility rules. In fact, they simply develop their society relationship campaigns, abusing situations. Sometimes it causes their release. On more distinguished

[32] Księżak, P. *The Benefits from CSR for a Company and Society.* Journal of Corporate Responsibility and Leadership. Access on the Internet: http://jcrl.umk.pl/files/7815/0102/1176/ksiezak.pdf [viewed on 20-10-2018]

critic opinion to corporate social responsibility that some companies are trying to acquire a community good will with CSR, forgetting that the first important thing should be public welfare[33].

Karaibrahimoğlu studied the financial results of 100 enterprises which had CSR implemented before the crisis and when the crisis began, respectively in 2007 and 2008. The results showed a significant decline in CSR projects during the financial crisis while other companies reduced their costs by looking at CSR projects that had to start. Companies that have followed and implemented CSR principles had positive link between CSR practices and financial performance. However, Arevalo & Aravind analysed the impact of the financial crisis on CSR and stated that companies, which implemented CSR principles as a fashion, would be more affected by a financial downturn or any shock than other companies, which implemented it in company's strategy in a responsible way[34].

It can be argued that corporate social responsibility has a positive impact on business efficiency and profitability, and adds value to the public, but only in cases where social responsibility is integrated into the company's strategy and is consistently implemented. If the company does not integrate social responsibility in its activities consistently, but more so only for "fashion", it can be just a loss for the company and have a negative impact on the efficiency.

### 1.3.2 The pyramid of CSR

In this section, CSR will be described by different authors. These are Archie B. Carroll and others who have made a significant research. These are Archie B. Carroll and others who have made a significant research on the topic. The reason for the choice of these particular authors is to get a clearer picture of what CSR is and its importance to the companies, also for how their views of CSR are different.

Archie B. Carroll believes that CSR is not a new phenomenon, but it has been seen that companies have developed this for hundreds of years. It was not until around the 1950s when the concept of CSR came published in literature on how a company should handle social responsibility[35]. Carroll has also designed a pyramid that contains the four parts of CSR, where the base has the highest priority and top-the least. The basis of this pyramid is economic, legal and ethical responsibility, since the top of

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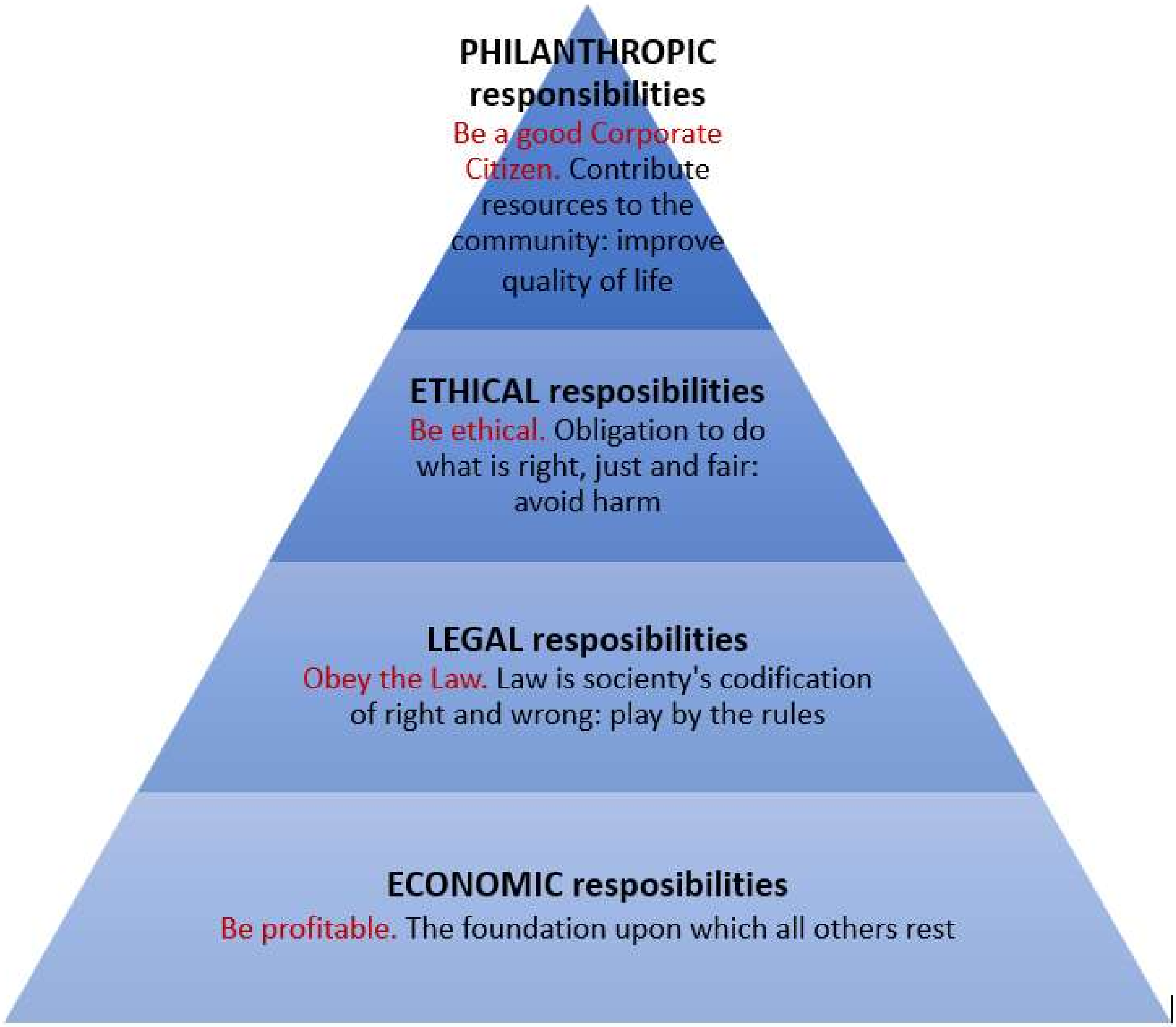
[33] Księżak P. *The Benefits from CSR for a Company and Society.* Journal of Corporate Responsibility and Leadership. Access on the Internet: http://jcrl.umk.pl/files/7815/0102/1176/ksiezak.pdf [viewed on 20-10-2018]

[34] Simionescu, L., Dumitrescu, D. *Corporate social responsibility and financial crisis.* Journal of Public Administration, Finance and Law. Bucharest University of Economic Studies, Bucharest, Romania. 2014.

[35] Carroll, A. B. *Carroll's pyramid of CSR: taking another look.* International Journal of Corporate Social Responsibility 2016 1:3. Access on the Internet: https://jcsr.springeropen.com/articles/10.1186/s40991-016-0004-6#Sec8 [viewed on 15-10-2018]

philanthropic responsibility. Carroll believes that CSR is about four different responsibilities, where they link each other to have a prosperous company. The reason for a company is to take financial responsibility, with this is meant that their goal is to profit and be profitable. The next step is about legal responsibility that is meant to comply with the law. After that, there is ethical responsibility. This step means that the company should have good morals against the individuals and the standards that exist in society. The last responsibility is philanthropic responsibility, being a good citizen of the community, share resources to society and improve the quality of life [36].




Source: adapted according to A.Carroll, 1991 p. 39–48

**Fig. 1. The Pyramid of Corporate Social Responsibility**

[36] Carroll, A. B. *The pyramid of corporate social responsibility: toward the moral management of organizational stakeholders*. Business Horizons, 1991. *34*(4), p. 39–48.

Analysed various literature it can be seen that corporate social responsibility is wide-defined concept and interpreted slightly differently by different authors, with no strict definition. In order to understand it better, corporate social responsibility in accordance with form into which enterprises can engage it will be looked into In this section three main forms will be divided, which will be further analysed more closely: ethical, altruistic (philanthropic), which are also categorized in Carroll's pyramid. The author of this work recognizes the importance of Financial (economic) responsibility and it will be analysed more closely in the next section.

The ethical responsibility outlines the idea of avoiding harm. It includes, for example, deforestation, pollution, corporate-inducted diseases[37]. Being ethical is mandatory for any company even if the business cannot earn money from it but, in fact, sometimes happens that companies put society in danger.

As an example of non-ethical behaviour of the company it can be introduced the case of toy company Mattel. This company had a good reputation of moral integrity and commitment and was recognized as socially responsible company, which received a Corporate Responsibility award in 2003. However, the company's afterwards unethical decisions have had a big impact on the company's efficiency. Due to increased demand of their toys, Mattel moved manufacturing to Asia since the labour costs there were lower. In the August of 2007 this company recalled nearly one million of its toys due to high amount of lead based on paint as they were dangerous to children. Mattel has changed the suppliers and started an advertising campaign that they commit to product safety toys, but with new supplier also from China it went even worse and the company had to recall nineteen million toys in total[38].

It can be pointed out tree main problems that arise from the preceding example. The first one, even if companies want to outsource manufacturing to lower their costs of production, they have to ensure that unsafe products would not be provided to consumers, since it's an ethical responsibility of the company to ensure that. The second one, society expect businesses to be a responsible member and they are aware of how goods that they purchase are produced, so if company takes non-ethical decisions it leads to damaged reputation of the company that causes financial loss and directly correlates with company's efficiency. The third problem, which arise from provided example and looks highly important, that even if company is publicly recognized as ethically and socially responsible it does not assure that company will not make any unethical decisions.

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[37] Pantani, D., Peltzer, R., Cremonte, M., Robaina, K., Babor, T., Pinsky, I. *The marketing potential of corporate social responsibility activities: the case of the alcohol industry in Latin America and the Caribbean.* Federal University of São Paulo, Department of Psychiatry, São Paulo, Brazil, The National Center on Addiction and Substance Abuse, New York, NY, USA, National University of Mar del Plata, CONICET, Mar del Plata, Argentina and Department of Community Medicine and Health Care, University of Connecticut Health Center, Farmington, CT, USA. Society for the Study of Addiction. 2016.

[38] McKenna, M. *Mattel: Playing with ethic.* WordPress.com. 2015. Access on the Internet: https://stakeholder13.wordpress.com/2015/03/31/mattel-playing-with-ethics/ [viewed on 16-10-2018]

The altruistic social responsibility involves philanthropic actions and it is one of the oldest forms of corporate social responsibility. It is not necessarily linked to core business of the corporation and it is not limited to reducing the external consequences of companies and preventing harm. However, philanthropic or humanitarian actions are usually not in the corporate scope, as they require many additional resources[39]. In English Oxford dictionary, such altruism definition is presented as follows: "Disinterested and selfless concern for the well-being of others"[40]. In simple terms, altruistic social responsibility can be understood as positive actions for the society that are not directly related to benefits, profits for the company, but this leads to a question then, why companies choose altruistic actions, since company is profit seeking organization. If a company would be looked at as the unit, which only seeks to benefit itself, then a conclusion can be made that altruistic socially responsible actions bring indirect benefits to the company. For example, through a good company's reputation, when consumers trust and respect the company, they will be more willing to have connection with such company.

The researchers who have analysed in their research work the marketing potential of CSR activities of the alcohol industry in Latin America and the Caribbean have categorized the strategic form of corporate social responsibility. They argue that strategic responsibility aligns philanthropy with profit and companies engage to CSR having a clear strategy. Their study has raised the issue that alcohol companies have been claiming to undertake CSR strategies, but more than fifty percent of actions had the potential to promote brand or sell alcohol. They stated that 'Because these marketing activities are embedded in CSR actions, the public may not perceive them as advertising and, as a result, may not be aware of their ability to promote products.'[41]

Therefore, strategic form of corporate social responsibility can be understood as strategic action of the business to maximize profit by implementing CSR. According to the example presented in paragraph above, it can be seen that there are a blurred line between CSR and marketing of the enterprise. The CSR can be used as a good marketing for the company, but at the same time as unacceptable marketing according to the principles of CSR. Some companies, which have unacceptable egoistic intentions can take advantage of the CSR not in a good way, can deceive the society and at the same time keep up the confidence of the society, since all activities are included in CSR actions.

Summing up analysed ethical, altruistic and strategic forms by which enterprises can engage corporate social responsibility the following main conclusions can be made. Firstly, announcing that company had implemented and doing business in accordance to CSR, but, in fact, not doing that in a

[39] Pantani, D., Peltzer, R., Cremonte, M., Robaina, K., Babor, T., Pinsky, I. *supra* note 37.
[40] "Altruism". 2018 Oxford University Press. OxfordDictionaries.com
Access on the Internet: https://en.oxforddictionaries.com/definition/altruism [viewed on 16-10-2018]
[41] Pantani D., Peltzer R., Cremonte M., Robaina K., Babor T., Pinsky, I. *supra* note 37.

right way, it will affect company's reputation negatively and its efficiency. Secondly, enterprises may use CSR to maximize their profit. The third conclusion is the claim that company works according to CSR principles does not guarantee that they actually do that. It refers to the conclusion that might be the control of how CSR is implemented into company is weak. The final conclusion, sometimes CSR behaviour can be used just as marketing means by hiding wrong actions of the company.

### 1.3.3 CSR in practice

Carroll's research in CSR can be seen in part as a previous researches, because it is more designed as a model for *how business is going to be* compared to Grankvist's idea of CSR, which is more a theory of *how business is going to happen*. There is also some criticism about corporate social responsibility described at the end of this section.


Source: compiled according to Grankvist P. 2012

**Fig. 2. The dimensions of CSR**

The figure above illustrates dimensions of CSR according to Grankvist[42]. According to him, CSR can be divided into three areas: financial (economic) responsibility, environmental responsibility and social responsibility.

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[42] Grankvist, P. *CSR i praktiken. Hur företag jobbar med hållbarhet för att tjäna pengar.* Sweden: Liber AB. 2012. p 27-32.

- **Financial responsibility**: going for as much profit as possible and thus taking responsibility for its shareholders, aiming to secure the company's financial position and give shareholders a return for their inventories.
- **Environmental responsibility**: runs a business that is responsible environment, reduce the negative effects for the future and sustainable products.
- **Social responsibility**: assumes that the company is taking social responsibility for the people health, well-being and good working conditions, also good conditions for society and consumers[43].

The **Economic responsibility** over the last few decades, the view on the economic aspect of a company has changed a lot. For example, in recent decades, the issue of economic growth has been felt changed from something offensive and greedy to the main driving force. The reason for this was considering that sustainability had as strong a link to economic growth as morality, because companies need a capital to run business and to strive for one more sustainable development. This changes vision and more companies overcome their fear of growing economical if they did this with good care. According to Grankvist, this was due to the fact that it began to model about its operations so that it was run in a more efficient manner, this can be about taking care of raw materials, time, capital and people. If resources are used more efficiently, companies can save more on their costs and may allow it to grow while changing to a more sustainable way[44].

Regarding the **Environmental responsibility**, Grankvist thinks there were three main waves. The first wave came in the 1970s when it became more conscious of its own influence and discussing it capitalist system's impact on the earth. The second wave then came in the 1990s and it was more about reducing the negative impact on the environment by reducing the use of fertilizers and toxins, as well as recycling products. This also opened the door for the creation of products, brands that had a smaller footprint on the environment. Even more requirements were then imposed on companies to choose a more sustainable way in order not to risk losing their customers. The third wave is the one we live at right now, which, according to Grankvist, really accelerates. It is more about reducing the emission of greenhouse gases that affect the whole societies[45].

In short terms, Grankvist explains that the **Social responsibility** is what the extra company gives to society in its entirety than just paying taxes and giving work. This can be as small as making such employees feel safe in the workplace and live a good life outside the workplace, to make the production more efficient, because of more satisfied workers. To greater responsibility to donate money to needy

[43] Grankvist, P. *supra* note 42, p 27-32.
[44] *Ibid.*
[45] *Ibid.,* p. 41-42.

or inventory in society. Two examples of this are Jamsetji Tata and Gustaf Dalén, as early as the beginning of the 20th century, saw that the company was more profitable if the employees had better conditions. Both the Tata and Dalén communities were close to the factories for their employees and they have arranged easy transport for them to the workplace. Both realized that if their employees could live as well and comfortably as possible, they also could yield results and their profitability at work. Tata and Dalén realized that their work with social responsibility not only gave better benefits to its employees, but also led to economic growth[46].

Grankvist believes that these three areas live in symbiosis with each other, they balance with each other to keep a company at a healthy level for long-term goals. Hence, it's not possible to focus only on one or two of them without the last one. For example, they focus on sustainability or social responsibility, but not on financial gain, this can lead to do not go forward, because they do not have the capital to continue their work. Or just focus on the economic gain, but not the other two areas, which can lead to negative reputation, because they can only be seen as greedy[47].

With this, Grankvist states that it does not matter how much responsibility a company takes, because if they only focus on this responsibility without gaining profit, they cannot take responsibility. Same applies even contrary to the fact that if company only focus on gaining profit without taking responsibility, it will also to strike back by the outside world feeling that the company is just greedy and not thinking about society. The balance between these areas is critical to the well-being of a company[48].

The author of this work agrees with Grankvist statements and accepts that social responsibility is in interdependence with economic and environmental responsibilities. In this work, social responsibility is viewed as a symbiosis with economic responsibility and the problem occur of how much one has to do with each other and is interdependent and what is the impact of social responsibility on the efficiency of the company, or the efficiency of the company has a greater impact to social responsibility.

Tom Borglund describes CSR on a similar set as Granqvist, that it is a tool like leads to better working conditions, safer products, reduced emissions, increased diversity and equality. To achieve this, it is a matter of the company taking responsibility for the trust issues, which concerns the company's most important stakeholders. These include customers, employees, suppliers and so on. According him, companies with stakeholders involved, must identify the issues related with the responsibility and act for a change. Borglund believes that this action based on CSR is not just a tool, that helps ones at the moment, but it should be in the frame of the company's value base and ethics. That is also about how the

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[46] Grankvist, P. *supra* note 42, p 91-95.
[47] *Ibid.*
[48] *Ibid., p. 17-18.*

employees behave against each other, management of the position, the internal rules that exist. In case CSR is not found in the value base, but only used as a facade outward, company risks to getting lost and being criticized for hypocrisy[49].

The criticism Borglund takes up is a lot about what Milton Friedman was talking about already in the 1970s, the company's main goal is to profit and benefit shareholders. Social responsibility and environmental responsibility is one that the politicians should engage in and not management. That's not why shareholders have invested their money in the company. Friedman's view of this is that this is something that the shareholders or business owners can do themselves with their private money. As Friedman wrote in the New York Times in 1970, "The business of business is business" Companies should be effective and maximize profits for their owners and create resources for society. A company must still comply with the laws and ethical rules that exist and do not deviate from maximizing profits. It is not only Friedman who has a negative view on CSR, even Jan Tullberg who is Business Ethics Researcher and David Henderson, Economist. Tullberg believes that CSR risks becoming a trend that companies feel they must follow because society demands this and not in order to be a better company. Henderson's view is more about how Friedman argues and believes that CSR has a negative impact on businesses and the economy that this increases costs for businesses and lowering profitability. The economy gets higher regulations of CSR which, according to Henderson influences growth, competition and welfare[50].

In addition to this criticism of the financial situation within a company, Borglund believes that CSR has criticism when it is about decision-making. What should be considered more important and worth more spend resources on to satisfy stakeholders? This can also change from time to time. If they put down time on everything within CSR to make all stakeholders satisfied, there is the risk that as previously stated, it recalls that economic growth is continuing, which in turn gives dissatisfied shareholders. The only goal that is reasonable to strive for economic growth, which can also be linked to Carroll's pyramid where economic growth is the basis of one prosperous business, without growth there is no capital to put on social responsibility within CSR[51].

The author of this work partly agrees with Borglund's statements that one of main goal of the company should be economic growth but contradicts to Friedman's view that CSR decreases profitability of a company and just increases costs. Yes, it can increase costs in a short term, but, according to analysed scientific literature, corporate social responsibility has a positive impact to profitability in a

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[49] De Geer, H., Borglund, T. and Frostenson, M. *Reconciling CSR with the Role of the Corporation in Welfare States – the Problematic Swedish Example*, Journal of Business Ethics. 2010. De George, R. T.:, Business Ethics. 1982
[50] *Ibid.*
[51] *Ibid.*

long term and, even more, it became today's necessity to run business in ethical, socially responsible way, which shapes positive attitudes towards the company, attracts investors, partners, qualified and good employees since employees seek to work in a company with good reputation.

# 2. METHODOLOGY OF EVALUATING ENTERPRISE EFFICIENCY

Many companies find it difficult to assess the impact of corporate social responsibility (CSR) initiatives. Some of the benefits, such as customer loyalty and better reputation, are difficult to quantify and it is difficult to assess the value of this activity. However, measurement is very important as it allows disclosing the importance of the company's activities to stakeholders, improving the decision-making process by having or implementing a social responsibility program, align business activities with business goals. In the economic theory it can be divided into positive and normative directions which presents different viewpoints to analysis and the measurement.

Positive economy is an analysis of real economic phenomena, their interpretation and description, based on factual material. Its purpose is to investigate and explain the economic activity, analyse economic phenomena, determine factors and evaluate their influence, present calculations and comparisons. The predictive role of a positive economy is very important.

However, the positive direction of the economy is conducting an impartial economic phenomenon analyses and presents objective results but does not take into account whether these results are good, useful and what should be done to improve the situation. This is done by representatives of the normative economy. Often a normative economy, based on the positive economy set facts, appreciates and recommends various economic decisions.

The positive economy answers the question of "what will happen if ...?" and normative – " what is better or what it is to be?". Positive economy - involves the scientific side of the economy. Most positive economic statements are evident, based on facts that can be easily verified. Normative economics - its theory offers results that are based on subjective views and evaluations and more closely related to economic policy[52].

Analysed different opinions of economists regarding positive and normative justification whereas some authors suggest to apply both of them to analysis, since positive economic analysis and statements can be more widely supplemented with normative statements. Since there are no main instruments to measure efficiency of a company linked to CSR, in this chapter will be analysed possible analyses in normative and positive viewpoints.

For this purpose, financial ratios such as profitability and efficiency can be used. Authors S. Zujus and D. Pilinkus pointed out that as business activities become increasingly complex, with

[52] Hammitt, J. K. *Review of Environmental Economics and Policy*, *Positive versus Normative Justifications for Benefit-Cost Analysis: Implications for Interpretation and Policy*. Oxford University Press, Volume 7, Issue 2, 1. 2013, p. 199–218

increasing competition and increasing demand for change, financial indicators alone can not reveal the actual situation in the company, therefore, it is necessary for the company's executives to look for more effective business management measures[53]. One such measure is balanced scorecard.

By applying a system of balanced indicators, causal relationships can be identified, action programs can be set up to optimize the most problematic business processes, and an effective control mechanism can be created to help monitor the progress of the ongoing operational program. Adapting the system of balanced indicators to the enterprise eliminates the gap between strategic goals and day-to-day activities, helps to assess and respond appropriately to the needs and expectations of stakeholder groups. It is also possible to evaluate the expediency of a specific project and evaluate the strategy and make the necessary adjustments, optimize internal processes.

A system of balanced indicators can help control the implementation of company strategy in day-to-day processes, provide the company with a comprehensive assessment of how the company is progressing towards strategic goals and contributing to better corporate governance. This can increase the company's productivity and efficiency; therefore, financial and balanced scorecard analysis will be more deeply analysed in this chapter.

## 2.1 Defining types of financial analysis

In most cases, the activities of companies are valued according to how and in what way they reach the main goal - profit and its growth. A profitable company has good opportunities to stay in a competitive environment. According to J. Lazauskas, economic analysis has a key role to play in abstract and logical thinking, economical-mathematical modelling and comparison. It uses a wide range of financial performance indicators. The main criterion for performance evaluation is the efficiency principle, which reflects in the analysis of company's performance indicators[54]. Foreign authors usually list three types of financial analysis (horizontal analysis, vertical analysis, relative indicators analysis), which are investigated more deeply in this section.

[53] Zujus, S., Pilinkus, D. *Subalansuotų rodiklių sistemos privalumai ir trūkumai: Lietuvos įmonių patirtis* // Jaunasis mokslininkas 2013: studentų mokslinės konferencijos straipsnių rinkinys [2013 m. balandžio 18 d.]. Akademija: Aleksandro Stulginskio universitetas, 2013, p. 42 – 48 – ISSN 1822 – 9913

[54] Lazauskas, J. *Įmonių ūkinės ir komercinės veiklos ekonominė analizė.* Mokomoji knyga. Vilnius: Technika 2005 p. 116-127.

### 2.1.1 Financial ratio (relative indicators) analysis

Ratio according to Garbutt is one number expressed in terms of another[55]. It is defined in the Cambridge Dictionary as the relation between two amounts or groups, represented by two percentage or two numbers that expresses how much bigger one is than the other. In Mathematical terms, it is a comparison of two figures calculated by dividing.[56] Therefore, from general definitions we can summarize that ratio establishes the relationship between two or more variables.

There is not a lot discussion about financial ratios definition or disagreements with statement. In scientific literature, many definitions were found. They slightly differ, but main concept and idea is the same that financial ratios are used to identify the company's health and stability by using balance sheets, which provides the sustainable data of what the company is owed or owns and what it owes[57]. Investors and managers are two primary users of financial ratios. Investors use financial ratios for investment purpose and management for tracking the company's performance in order to find out where can be made improvements. [58]

In pursuance to define the early stage of financial ratio analysis development can be stated that the primary evolution of ratio analysis in general was started in about 300 B.C. The strict analysis of the properties of ratios was in Euclid's Book V of his Elements, but development of ratios as a tool used for financial statements analysis can be traced back in the last half of Nineteenth Century in America. The main cause was the changes of enterprises in the various industrial sectors. Management was transferred from capitalists to the professional managers and as a result, financial sector became more prevail force in the economy. The power of financial institution was shift and it increased the importance of financial statements and analysis of it. Likewise, increased demand for financial statements had the impact on The first Federal income tax code and the establishment of Federal Reserve system in 1914.

Alexander Wall made the significant developments of ratio analyses when he has published report in 1919 of "Study of Credit Barometrics". In that study, there were formed seven different ratios of 981 firms squeezed by geographical location and industry, but unspecified by time. Even if his study can be criticized by later developers of financial ratio analysis due to not subjecting this data to any

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[55] Adedeji, E. A. *A Tool for Measuring Organization Performance using Ratio Analysis*. Academic Hosting & Event Management Solutions. Research Journal of Finance and Accounting. Vol.5, No.19, 2014. ISSN 2222-1697

[56] "Ratio" Cambridge Business English Dictionary. Cambridge University Press 2018. Access on the Internet: https://dictionary.cambridge.org/us/dictionary/english/ratio [viewed on 20-10-2018]

[57] BDC.CA. Money and finance. *4 ways to assess your business performance using financial ratios.* Access on the Internet: https://www.bdc.ca/en/articles-tools/money-finance/manage-finances/pages/financial-ratios-4-ways-assess-business.aspx [viewed on 21-10-2018]

[58] McBride, C. *The Purpose of Financial Ratios* last modified September 26, 2017. Access on the Internet: https://bizfluent.com/about-6195930-purpose-financial-ratios.html [viewed on 21-10-2018]

further analysis, Wall had a significant impact to popularize the ideas to use empirically criteria of relative ratio.

Moreover, there it should be mentioned much more analysts which had the significant impact in developing financial ratio analysis from around 1920 until 1950 such as: James H. Bliss, Stephen Gilman, Ray A. Foulke, Raymond F. Smith and Arthur H. Winakor, Paul J. Fitzpatrick, Charles L. Merwin, William H. Beaver, George Sorter and Selwyn. All these analysts influenced development of financial ratios analysis, but there were some critics that the ratio analysis literature consisted of instructions how to calculate ratios, but explicit theoretical structure was missing. It means that the user of ratio had to rely on author's experience. Aside the critics, an assistant Professor of Business Administration at the University of New Hampshire James 0. Horrigan summarised that all those early stage studies were the basis of the analysis of financial ratio rise and gave the understanding that ratios have predictive value [59].

The financial ratios analysis is very widespread in inter-institutional and on certain period analysis. By using relative indicators, it can be compared the financial statements of different companies, as well as the financial statements of a certain enterprise for a certain period. Regardless of the scope of use, relative indicators in themselves are much more superior in most cases than absolute indicators. In order to give meaning to the number and to assess the state of the company's economic activity, it is needed to compare one with another. Thus, the relative size obtained by comparing the two numbers is much more obvious than the absolute size[60].

In this work, in order to analyse the problems raised in the first chapter and to evaluate the efficiency of the company, the relative indicators are more applicable than absolute ones, since the analysis of different literature shows their greater benefits and significance. Relative indicators can be compared at different periods of the same company and can be seen tendencies or absence of them. Since there are many definitions of relative indicators that are interpreted a bit differently, it is important to analyse their classification and to outline which ones are the most suitable for use in this work in accordance with the objectives of this work.

[59] Horrigan, J. O. *A Short History of Financial Ratio Analysis.* American Accounting Association. The Accounting Review, Vol. 43, No. 2. 1968.
[60] Sakalas, A., Vanagas, P., Martinkus, B., Neverauskas, B., Prokopčiukas, B., Venskus, R., Viršilaitė, R., Ivaškienė, A. *Pramonės įmonių vadyba*. Kaunas: Kauno technologijos universitetas. 2000.

Financial ratios are the parameters, which provide the economic overview of the business and commonly used financial ratios can by classified on the following basis:

- Function
- Importance
- Financial statements

Classifying according to **financial statements** three main categories can be separated. The first one, Income statement/profit and loss ratios there are using gross profit ratio, net profit ratio, times interest earned ratio, operating ratio and etc. The second, balance sheet ratios (for example current ratio, debt to equity ratio, liquid ratio) which are calculated just using data from Balance sheet. The essential aspect is that figures must be of the same period. The third - the ratios, calculated by using Income statement and balance sheet of the same period, named composite ratios. They also can be called as inter-statement ratios (e.g. receivables turnover ratio, working capital turnover ratio, inventory turnover ratio, accounts payable turnover ratio and etc.).

Following the basis of importance, the classification depends on industry in which the company is and more useful for inter-company comparisons. According to this particular classification primary and secondary ratios can be defined. Secondary ratios usually explain more important primary ratios[61].

The most common classification is on bases of **function**. As it is quite impossible to calculate a lot of relative financial statements indicators, it is advisable to systematize them and group into certain groups. Combining variables into homogeneous groups makes it easier for analysts and auditors to work, and it is easier for users to choose which indicators are more relevant. Authors categorize financial ratios into group systems in various ways.

A.L. Bernstein distinguishes the following groups: Liquidity, Capital structures and long-term Solvency, Return on investment, Activities, Sales revenue and asset ratio, Market valuation[62]. However, P. Wilson distinguishes only 4 groups: Liquidity Activity, Profitability, Indebtedness[63]. V. Bagdžiūnienė distinguishes into 3 groups: Turnover, Solvency and Stability, Profitability[64]. V.Rutkauskas and P.Stankevičius write that there are indicator's groups of Profitability, Liquidity, long-term Solvency

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[61] Accounting For Management. Org. Financial statement analysis (explanations). *Classification of financial ratios.* Access on the Internet: https://www.accountingformanagement.org/classification-of-financial-ratios/ [viewed on 22-10-2018]
[62] Robert, N. A., Willard J. G., *Financial Statement Analysis: Theory, Application, and Interpretation.* Irwin, 4th edition. 2000. p. 618-631
[63] Wilson, P. *Mažos įmonės finansinis valdymas*. Vilnius: Alma littera 1997.
[64] Bagdžiūnienė, V. *Finansinių ataskaitų analizė. Esmė ir verslo situacijos*. Vilnius: Conto litera 2013. p. 106-115

(financial structure indicators), Efficiency indicators[65], but according to J. Lazauskas liquidity (solvency) and profitability, groups are all recognized[66].

After analysed various scientific literature it can be stated that there are differ in the names of the relative financial indicators of the groups, even if authors write about the same things; inconsistent order of grouping can have a negative impact on interpretations of indicators; the number of relative financial indicator groups and number of indicators in the groups are different. Therefore, it can be stated that until now there is no general classification system for the relative financial indicators. So before choosing relative indicators for an enterprise to be evaluated, it is necessary to determine the objectives of the analysis and the desired prospects for the development of the company. The basis for any activity, including analysis, is the setting of specific goals. It is therefore necessary to determine whether the aim is to carry out a complex analysis of the company's activities, to assess its profitability, or the ability to meet its financial obligations.

As it was discussed in the first chapter of this paper, efficiency and profitability are understood as inextricably linked to each other and are significant indicators for the investigation of corporate social responsibility impact, so it is important to analyse profitability and efficiency indicators more closely.

Profitability factors are considered as the most important, because they show how much profit returned to the most risk takers (business owners) for their placement money and therefore possible changes to this return. Profitability indicators are usually compared to previous year data, industry average, with other, alternative investment methods, profitability and estimates.

Key Profitability Indicators:

- The gross profit margin shows the share of gross profit attributed to one part of the income. According to it, it is possible to judge company’s financial health and business model by revealing the proportion of money left over from revenues after accounting for the cost of goods and/or services sold. One can calculate gross profit margin, also known as gross margin, by dividing gross profit by revenues. If an enterprise has a higher gross profit margin than is typical of its industry, it likely holds a competitive advantage in perception, quality or branding, allowing the firm to charge more for its services or products. Alternatively, the firm may also hold a competitive advantage in product, services costs due to efficient production techniques or economies of scale.

$$\text{Gross Profit Margin} = \text{Gross Profit} / \text{Revenue} \times 100$$

[65] Rutkauskas, V., Stankevičius, P. *Finansų analizė, valdymas ir prognozavimas*. Vilnius: VPU leidykla; 2004

[66] Lazauskas, J. *supra* note 55.

- Net profit indicates the effectiveness of the company's operations, in other words, it can be found out, how much one Euro of sales earns on average net profit (compares a company's net income to its net revenue). The higher the value of the indicator indicates higher profitability of the company, as well as greater financial gain volume of resources. It measures a company's ability to covert sales into earnings for shareholders.

Net profit ratio = Net profit after tax / Net sales

- The return on assets (ROA) shows how company executives can use assets and receive profit, depending on whether the property is a creditor or owner. To some extent, it shows resources efficiency of use. Return on assets is calculated as net income divided by total assets. A high ratio means that the firm is able to efficiently generate earnings using its assets. As a variation, some analysts calculate return on assets from pre-tax and pre-interest earnings using EBIT divided by total assets[67].

Return on Assets Ratio = Net Income / Average Total Assets

- The Return on Equity (ROE) indicator is popular and easy to understand and calculate. It shows how efficiently the equity of the company is used (the money and assets invested by the owners of the company). It is considered that return on equity ratio of 15-20% generally considered as good[68].

ROE = Net Income / Average Shareholder Equity

- The return on capital employed (ROCE) is measured by the capital used for efficient returns, which the owners invested in the company. It shows how fast invested capital pays off. Also allows to evaluate the quality of leadership. Comparing the return on capital employed used numbers have to be from the same period of time and a company

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[67] Joe Lan, Chartered Financial Analyst, AAII American Association of Individual Investors. *16 Financial Ratios for Analyzing a Company's Strengths and Weaknesses.* 2012 Access on the Internet: https://www.aaii.com/journal/article/16-financial-ratios-for-analyzing-a-companys-strengths-and-weaknesses.touch [viewed on 24-10-2018]
[68] Mackevičius, J., Giriūnas, L., Valkauskas, R. *Finansinė analizė* Vilnius: Vilniaus universiteto leidykla, 2014, p. 363-379. ISBN 978-609-459-369-7.

from the same industry, otherwise the analysis is invaluable. The comparison with a benchmark of the industry is also important[69].

Return on Capital Employed = Net Operating Profit/ Total Assets-Current Liabilities

- The expense ratio calculates management expenses as a percentage of total funds invested in a mutual fund. In other words, measures the percentage of company's investment in the fund that goes to paying management fees by comparing the mutual fund management fees with company's total assets in the fund. A professional manager must research new investments, actively monitor the invested assets and make sure the fund is investing according to its goals. So, this formula measures how efficiently a fund is managed. A lower ratio indicates that fewer expenses are needed to manage the same amount of assets. Accordingly a higher ratio indicates that more expenses are incurred. In other words, this ratio shows whether or not the management is doing an efficient job at operating the fund[70].

Expense Ratio = Operating Expenses / Average Value of Fund Assets

The success of an enterprise is characterized by its profitability, which depends on the number of employees, capital used, sales volumes, etc. One company profitability should be compared with the profitability indicators of analogous enterprises or compared at different periods of the same company[71].

Key Efficiency indicators:

- Accounts payables turnover ratio measures how a company manages its own bills. It's more liabilities rather than assets and their trends, which represent important source of finance for operating activities and affects operating efficiency. A high ratio indicates that company is not managing its bills very well and low ratio means that it is done better.

Accounts Payables Turnover = Total Purchases / Average Accounts Payables

[69] Corporate Finance Institute (CFI). Return on Capital Employed (ROCE), A measure of how efficiently a company uses its capital. 2018 Access on the Internet: https://corporatefinanceinstitute.com/resources/knowledge/finance/return-on-capital-employed-roce/ [viewed on 25-10-2018]
[70] Shaun, CPA, MyAccountingCourse.com. Financial Ratio Analysis // Expense Ratio. What is an Expense Ratio? Access on the Internet: https://www.myaccountingcourse.com/financial-ratios/expense-ratio [viewed on 26-10-2018]
[71] Borad, S. eFinanceManagement. Financial Analysis // *Profitability Ratios* 2018 Access on the Internet: https://efinancemanagement.com/financial-analysis/profitability-ratios [viewed on 26-10-2018]

- The working capital turnover ratio shows the amount of operating capital needed to maintain a given level of sales. A higher working capital indicates that a company is using its working capital very efficiently.

Working Capital Turnover = Sales / Average Working Capital

- The fixed assets turnover ratio measures the efficiency of long-term capital investments. This ratio is tricky because it is affected by many circumstances such as initial plant capacity and relative sales, life cycle of a product, company.

Fixed Asset Turnover = Sales / Average Fixed Assets

- Total asset turnover measures the overall investment efficiency by totaling the combined impact of long-term and short-term assets. A higher asset turnover is better as it indicates how effectively entire funds of a company are used

Total Assets Turnover = Sales / Average Total Assets

- The accounts receivables turnover ratio represents how quickly company collects bills from its customers and this indicator shows how efficient a company's credit policies are and specifies the level of investment in receivables needed to keep company's sales level.

Accounts Receivables Turnover = Revenue / Average Accounts Receivable

- The inventory turnover ratio measures how efficiently a business manages its inventory. A higher ratio indicates a better inventory management[72].

Inventory Turnover = Cost of Goods Sold / Average Inventory

[72] Basu C. *Four Basic Types of Financial Ratios Used to Measure a Company's Performance* 2018
Access on the Internet: http://smallbusiness.chron.com/four-basic-types-financial-ratios-used-measure-companys-performance-25299.html [viewed on 28-10-2018]

### 2.1.2 Horizontal and Vertical analysis

To obtain a general understanding of financial changes in the company and their trends, the data from the balance sheet and profit/loss statement can be used. In order to effectively manage the company, managers need to orientate not only in individual areas of activity, but also in its entirety. This requires not only to know, but also understand the information that covers the entire subject activities. It is the financial statements data that allows to analyse the activities of the entity and its financial status in various aspects. The variety of methods for analysing financial statements is wide, but usually vertical and horizontal analysis methods are used.

Structural (vertical) financial statement analysis helps to assess the company's finances structure and its changes in the company. Vertical analysis can be used to measure company assets structure to make sure it has enough assets to be able to get credit[73]. The vertical analysis of the analysed object is performed for each indicator in comparison to the general base indicator and received size - comparative weight - expressed as a percentage. A common baseline can be, for example, the number of employees of the company, the amount of sales revenue. For several years of analysis of indicators, it is possible to determine the reasons for the change in indicators[74]. This analysis allows to evaluate the source of assets and financing structure of the company. Using this method of analysis and monitoring the dynamics of the indicators it can be evaluated as changes in the structure of assets and financing sources[75]. This change allows to provisionally predict what direction the business entity is working.

Structural analysis is performed for each indicator of the financial report in comparison with the general one the base indicator for that report, and the resulting amount is expressed as a percentage. Total baseline can be the company's balance sheet assets, liabilities, profit, expenses, sales, etc. For several years the financial analysis of the financial indicators can determine the causes of the changes in the indicators[76]. Vertical the analysis can be termed as "comparative weights of indicators". Such information is very valuable in making decisions in all management activity levels, in all planning, design, forecasting, new product development and other stages [77]. A well-executed vertical analysis shows not only the position of certain indicators in their common one's system, but also describes the company's economic and financial situation.

The essence of the structural analysis is that the individual articles of the report are expressed as a percentage of them as the key indicator. In the analysis of the profit (loss) report all its articles are

[73] Juozaitienė, L. *Įmonės finansai: analizė ir valdymas.* Šiauliai: Šiaulių universiteto leidykla 2008. p. 70-78.
[74] Bagdžiūnienė, V. *supra* note. p. 13-17
[75] Buškevičiūtė, E., Mačerinskienė, I. *Finansų analizė.* Kauno technologijos universiteto leidykla 1999. p. 14-15
[76] Šlekienė, D. *Įmonės veiklos finansinis įvertinimas*. Kauno technologijos universiteto leidykla 2000. p. 146.
[77] Mackevičius, J., Poškaitė, D. *Finansinė analizė*. Vilnius. Mykolo Romerio universitetas. 2011. p. 57-59

compared with the income statement - the first indicator of the profit (loss) report, and in the balance sheet analysis - with the general balance sheet amount, so all assets and all property, and these indicators in the vertical analysis are equated 100 percent. The received percentage ratios in the profit and loss account show the portion of income compiles other articles in the report. Vertical balance analysis allows to see what assets and assets ownership structure is[78].

The analysis of the dynamics (horizontal) financial statements helps to assess what in absolute terms and in percentages, the company's financial data has changed through the period of analysis [79]. According to Mackevičius J., Poškaitė D., the horizontal analysis is two or more indicators comparison for more than one year of the financial statements. This analysis helps determine the dynamics of the relevant indicators [80]. Dynamic analysis is performed on the financial statements as compared to the previous period or task data, and the deviation is expressed in absolute or relative terms. This analysis shows the dynamics of financial indicators but does not highlight the reasons for which indicators have occurred, changed. It is often used for analysing the company's balance sheet, profit and loss statement data [81].

A variation of horizontal analysis is otherwise called as Trend analysis: analysing several years of financial statements data, and the changes in indicators are calculated over several periods and in this way the trends of the financial results of economic entities, regularities are revealed. According to L. Juozaitienė, the horizontal analysis is performed by comparing the financial and the past annual data for the calculation of their absolute changes. The analyst chooses the scope and accuracy of the calculations. This analysis helps to measure the value of assets and changes in liabilities dynamics and predict possible trends of these changes. When inflation rate is high, the significance of horizontal analysis decreases, but when the country's economic situation is relatively stable then information on changes in the absolute size of the company's assets and liabilities is objective.

In summary, it can be argued that a vertical analysis is performed to determine the financial structure of the reporting articles and refers to individual financial statements for a particular period analysis of absolute and relative indicators. After analysing the opinion of various authors on vertical analysis, the main disadvantage is that the data obtained during analysis is static, i.e. they cover only one period data. It can be concluded that this is a fundamental weakness of the vertical analysis. The purpose of horizontal analysis is to identify trends in the financial position and understand the dynamics of indicators. So horizontal and vertical analysis of the indicators are important in assessing the company's

[78] Mackevičius J., Poškaitė D. supra note 78. p. 57-66
[79] Buškevičiūtė E., Mačerinskienė I. supra note 76. p. 14-16
[80] Mackevičius J., Poškaitė D. supra note 78. 57-66
[81] Bagdžiūnienė, V. supra note 75. p. 13-17

performance results, but the type of analysis should be chosen depending on research purposes and the wanted results.

### 2.2.1 Defining the Balanced Scorecard Analysis

Currently there are ongoing business changes that have a significant impact on competitiveness, efficiency, growth and survival of enterprises. Business entities must respond to the changing market situation and be able to adapt professionally to these changes. It is important that growth of enterprises would be sustainable, so business entities have to focus also on innovation, development, ability to learn and not only on financial aspects[82].

There are ongoing discussions by experts how to measure and manage performance of enterprises. Most of them have the main aim- to create a management tool that would evaluate and improve the performance of processes. Different views of authors how business should run have an impact on business performance measurement. Having analysed various authors' literature, the two basic views can be presented. The first one focuses on the financial side (financial ratio, horizontal, vertical analysis) and the second one – considers the company as social and economic system (complex internal and external network relationships that need to be carefully coordinated)[83]. The Balanced Scorecard (BSC) method is also reasoned on this point of view.

According to the Balanced Scorecard Institute, in the simplified description "BSC is a strategic planning and management system"[84]. Robert S. Kaplan and David P. Norton were the firsts who introduced the Balanced scorecard concept in the Harward Business Review article "The Balanced Scorecard-Measures that Drive Performance"[85]. The reason for the development was a research project that was done in cooperation with about ten companies in the United States. Kaplan and Norton identified the problem that most of the companies were managed by using only financial measures. They appended the traditional financial metrics to strategic nonfinancial performance measures in purpose to give executives and managers a clear, holistic view of organizational performance, since using financial measures worked well in the past, but more comprehensive instruments for measuring a company's

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82 Dobrovič, J. & Timková, V. *Examination of factors affecting the implementation of organizational changes.* Journal of Competitiveness, 9 (4), 2017. p. 5–17.
83 Dobrovic,, J., Lambovska M., Gallo, P., Timkova, V. *Non-financial indicators and their importance in small and medium-sized enterprises.* Czech: Tomas Bata University in Zlín (TBU), Faculty of Management & Economics. 2018
84 Balanced Scorecard Institute, a Strategy Management Group company. *Balanced Scorecard Basics* Access on the Internet: https://www.balancedscorecard.org/BSC-Basics/About-the-Balanced-Scorecard [viewed on 01-11-2018]
85 Kaplan, R. S., & Norton, D. P. *The balanced scorecard-measures that drive performance*. Harvard Business Review, 70(1), 1992. p. 71–79.

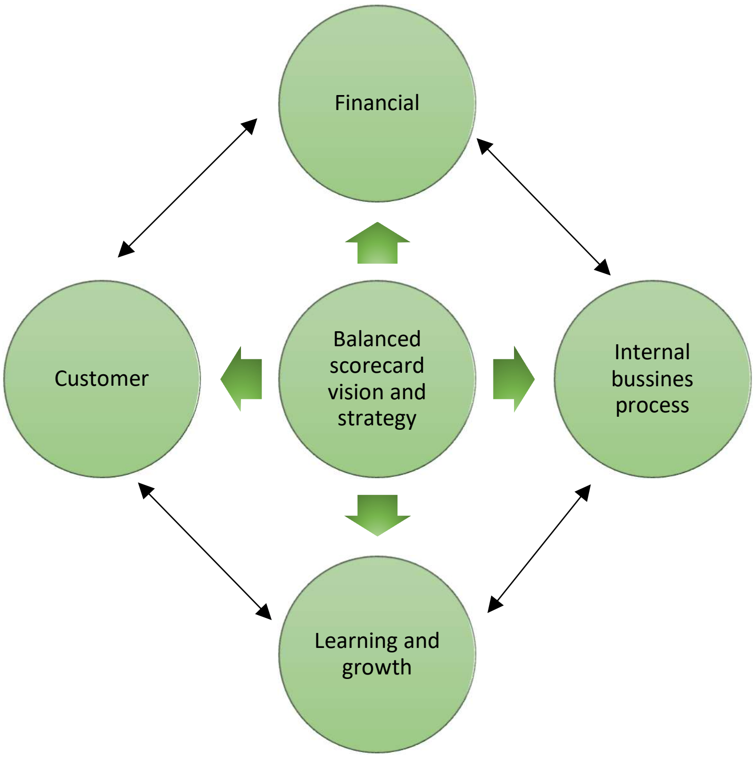
results and be able to plan, develop in longer term were needed. This performance measurement framework has progressed from a simple framework to a complete strategic planning and management system[86].

The balanced scorecard translates the organization's vision, business idea and strategy into control numbers that are easy to understand and which form a structure for a strategic measurement and management systems. The BSC gives formalized instrument to balance nonfinancial and financial results in the long and short term. Four different perspectives are suggested through which company's performance can be evaluated and the main business questions answered:

- Financial perspective (What do our financial stakeholders expect or demand? How business should look like to company's shareholders that it would bring financial success?)
- Customer perspective (In order to reach company's vision, how company should look like to the customers? Who are the target customers? What are their expectations and what is company's value proposition in serving them?)
- Internal business process perspective (To satisfy clients and shareholders of the organisation, on which business processes the company should be the best?)
- Learning and growth perspective (How company can bring into line its intangible assets to improve company's ability to support its strategy? How to strengthen skills and competences to meet the ever-changing external requirements?)[87].

The Balanced scorecard gives the organization the tools needed to control business towards a better result in the future. Today it is important for organizations to understand their goals and make use of new and effective methods to achieve better results and to be competitive. Leaders in companies can, with the method, measure how their organization gets added value to its current customers, prospective customers and how they need to improve their performance in the future. By formulating the results as the organization strives for, the company's leadership hopes to be able to focus on energy and the skills of all four perspectives in the track card[88].

[86] Kaplan, R. S., & Norton, D. P. *On balance.* CFO Magazine, Lori Calabro 2001, New York. Access on the Internet: http://ww2.cfo.com/strategy/2001/02/on-balance/ [viewed on 02-11-2018]
[87] Schobel, K., Scholey, C. *Balanced Scorecards in education: focusing on financial strategies // Measuring business excellence*. Emerald Group Publishing Limited, 2012, Vol. 16, No. 3, p. 17-28 – ISSN 1368-3047
[88] Kaplan, R. S., Norton, D. P. *Transforming the Balanced Scorecard from Performance Measurement to Strategic Management: Part II.* Commentary, Harvard University, Balanced Scorecard Collaborative in Lincoln, Massachusetts: American Accounting Association Accounting Horizons Vol. 15 No. 2. 2001. p. 147–160.




Source: compiled according to Balaji M. et al., 2018 p. 39[89]

**Fig. 3. Perspectives of BSC**

The Balanced scorecard have left the traditional financial rulers, but they speak only historical events. It is not enough for an organization to be able to control and follow up on their business and to achieve better results in the future through customer investments, suppliers, employees, technology and innovations. The scorecard complements the financial ruling talks with non-financial rulers that affect earnings in future. The organization's vision and strategy form the basis for the method's goal and the four perspectives provide the framework for the method[90].

Many companies already use methods and systems for measuring results that contain both financial and non-financial measures, but many use the non-financial measures only for point enhancements of customer contacts. Balanced scorecards must include financial and non-financial measures in information systems at all levels of the organization. The staff must understand the financial

[89] Balaji, M., Dinesh S.N., Parthiban, V. P. *Applying balanced scorecards to supply chain performance, More enterprises in developing countries should adopt Kaplan and Norton innovation*, 2018 | ISE Magazine. p.42-47, Access on the Internet: www.iise.org/ISEmagazine. [viewed on 02-11-2018]

[90] Steen Nielsen and Erland H. Nielsen *Research Article The Balanced Scorecard and the Strategic Learning Process: A System Dynamics Modeling Approach*. Denmark: Department of Economics and Business Economics, Faculty of Business and Social Sciences, Aarhus UniversityVolume 2015, Access on the Internet http://dx.doi.org/10.1155/2015/213758 [viewed on 02-11-2018]

consequences of their decisions and actions. The method is addressed to the very first at the highest level and then works downwards to implement and introduce the method at employee level.[91]

The four perspectives may be different in different companies and the choice of perspective depends on the content of a company's strategy. Perspectives may also be more than four in number. Companies work with different strategies and will therefore need different numbers and different types of perspective. Other perspectives may also be useful, such as environmental and supplier perspectives[92].

The method can be used in both large and small companies. The most important, independent of the size of the company is that employees / individuals work according to strategic processes. Both large and small companies benefit from all employees understanding the strategy and realizing it in daily work. Balanced scorecards are also a good information tool and are guidance in employing new staff and a tool that supports rapid development[93].

The different perspectives must be measured, analysed and improved continuously for the company shall have the opportunity to develop and be in balance. A regularity and follow-up are needed when working with the method. Business executives make use of key languages to make important decisions and to determine the company's financial status.

It is necessary to know where the money comes from, how much of it comes in and how to place them. However, the problem in many companies is that they focus too much on the financial perspective and not enough or not at all in the three other perspectives in balanced scorecard[94]. Financial guidance is not enough to guide and evaluate corporate performance in competitive environments. Financial leaders tell a lot but not everything about what has been done and the leaders do not tell what to do today and tomorrow to get the company to be profitable in the future. The financial objectives should be linked to the company's strategy and serve as a guiding principle for the goals and objectives the ruling speech in all the other perspectives. Each control number must be part of a causal chain, which one leads to a better financial result.

Many companies have realized the importance of increasing customer focus and customer satisfaction. This is important with satisfied and unsatisfied customers, because if they are not satisfied, the other companies find which can better satisfy their needs. It is very important that the company comes into contact with customers and finds out what needed to keep them satisfied and motivate them

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[91] Kaplan, R. S., Norton, D. P. *supra* note 89. p. 148–160.

[92] Beard, D. F., Humphrey, R. L. *Alignment of University Information Technology Resources With the Malcolm Baldrige Results Criteria for Performance Excellence in Education: A Balanced Scorecard Approac*. USA, Missouri: Southeast Missouri State University, Cape Girardea, Taylor & Francis Group, LLC. 2014.

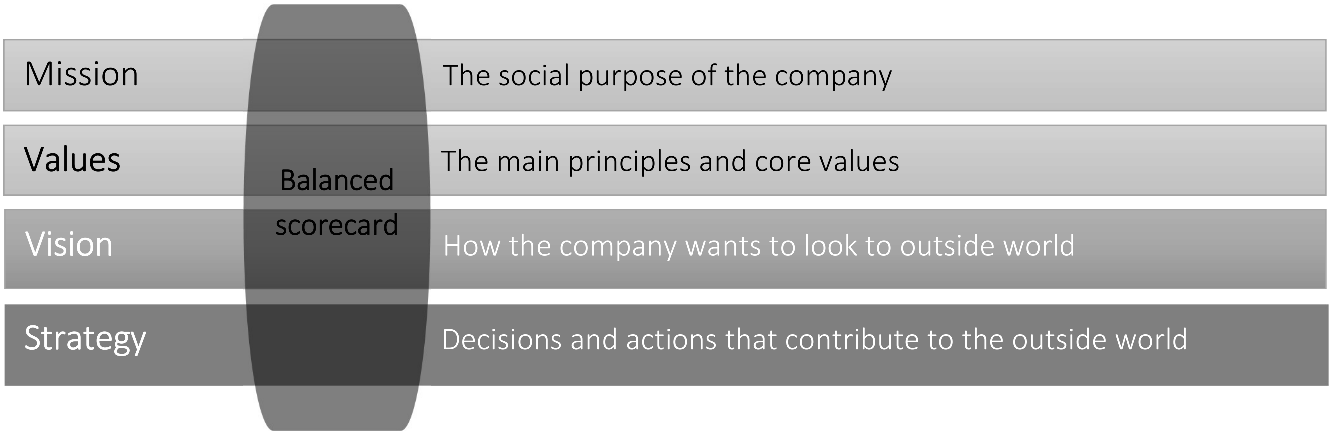
[93] Kaplan, R. S., Norton, D. P. *The Strategy-Focused Organization.* Boston: Harvard Business School Press, 2002. p. 387.

[94] Kalender, Z. T., Vayvay, Ö. *The Fifth Pillar of the Balanced Scorecard: Sustainability.* Turkey, Antalya: 12th International Strategic Management Conference, ISMC. 2016.

to buy the company products and service time after time[95]. In addition to keep customer satisfaction, management has to transform visions, business ideas and strategies into concrete goals that are customer and market-based. The market segments must be identified in both - new customer groups and old customer groups[96]. The customer perspective determines what the company offers its customers. This includes customer relations, product price, quality and functionality as well as brand. The company finds out on how they differ from their competitors when it comes to getting new customers and at the same time retain their old customers[97].

### 2.2.2 Implementation of the Balanced scorecard

Before implementing the company's strategy or even before formulating it, the company must set its mission, values and vision. These points are the foundation of each effective business. All this is reflected in the system of balanced scorecard, in which at the initial stage of implementation the company's mission, vision and values are formulated, and then the general (main) strategy of the company is created.




Source: compiled according to Niven 2003[98].

**Fig. 4. The fundamental principle of the balanced scorecard**

Setting goals is one of the key stages of developing a sustainable system of indicators. Strategic goals are the core tasks - what and when to do - to implement the core strategy. Indicators are a strategy transformed into numbers.

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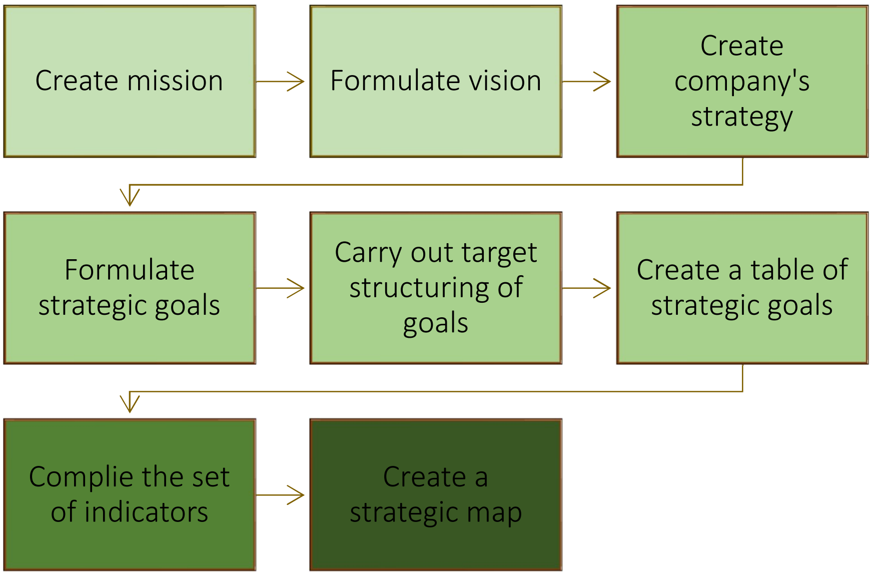
[95] Kalender, Z. T., Vayvay, Ö. *supra* note 94.
[96] Kaplan, R. S., Norton, D. P. *supra* note 89. p. 151–160.
[97] Beard, D. F., Humphrey, R. L. *supra* note 89.
[98] Niven P. R. *Balanced Scorecard: step-by-step for government and nonprofit agencies.* Hoboken New Jersey: John Wiley & Sons, Inc., 2003. p. 305 – ISBN 0-471-42328-9




Source: compiled according to Svaravičius A.[99].

**Fig. 5. Balanced scorecard creation steps**

In order to create a system of balanced scorecard, the company's mission is formulated. It is a social wording for a company that reveals what needs to be met by the company.

The following vision is formulated, which is a wording describing the long-term goals of the company. The vision clearly answers the question of how the company wants to look to the outside world, as it seeks out by the outside world. It is formulated in 1-3 with easy-to-remember sentences.

Formulating a mission and vision enables the company to formulate a strategy. It must outline the most appropriate way to help the company achieve the desired results and help set up a list of strategic goals that will be needed to create a system of balanced indicators. Setting goals is one of the key steps in the business planning process. Strategic goals are the main tasks that need to be fulfilled in order to implement the strategy. A set list of strategic goals shows what and when to do to realize a vision and strategy.

A. Svaravičius suggests that in this step the SWOT analysis can be used, since to achieve the goals should be known the company's strengths, weaknesses, opportunities and risks. An external factor analysis helps determine the company's opportunities and risks. An analysis of internal information helps determine the company's benefits and disadvantages.

[99] Svaravičius, A. *Kaip sukurti subalansuotų rodiklių sistemą. www.estrategija.lt*
Access on the Internet: http://estrategija.lt/46Proceduros2/102.BSC_diegimas_imoneje.htm [viewed on 10-11-2018]

Then target structuring is carried out by dividing the strategic goals into four groups, called perspectives (see Fig. 5). The perspectives are combined with a corporate strategy.

The strategic objectives table is the basis for compiling a set of indicators. Each perspective is assigned from 1 to 5 goals. For each purpose, a measurement indicator is established that reflects progress towards the goal. The sizes and units of measure for each indicator are determined. Indicator sizes are a quantitative expression for each goal. For each purpose, 1 to 5 indicators are chosen. The Strategic Objective indicators comprise a set of indicators, called the indicator cluster. It is a company-wide goal. Each indicator has a quantitative meaning and indicates what action is necessary to achieve the goal.

A Strategic map is created. The Strategic map - Implementing Company Strategies ways of representing, causal links. It shows how the goals are aligned in four perspectives. Causal relations are the links between strategic goals, determined by the principle of "what if-. The strategic map illustrates how the company hopes to implement a common strategy and it is a visual simplification of the strategic plan[100].

To sum up, the established balanced scorecard can help to control the implementation of the company strategy in everyday processes, provide the company management with a comprehensive assessment of how the company progresses towards strategic goals and will contribute to better corporate governance.

As it was more deeply discussed in the theoretical part of this work, The Corporate Social responsibility should be implemented in the company's strategy and its goals, so balanced scorecard method looks the most appropriate method to use. According to A. Carroll's pyramid there are four main responsibilities: economic, legal and ethical and philanthropic. It means that company should take into consideration not just financial responsibility which means to have the main goal – gain profit and be profitable, efficiently but implement all the complex of responsibilities - the Corporate social responsibility framework. Financial ratio analysis is useful instrument to measure company's efficiency and profitability, but the author of this work thinks that financial ratio analysis supplemented with balanced scorecard method can give significant measurement system linked to Corporate social responsibility.

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[100] Svaravičius, A. *Kas svarbiau: sukurti strategiją ar ją įgyvendinti?* Vakarai LT 2006m. Nr. 2.
Access on the Internet: http://www.vakarai.lt/article.php?id=50 [viewed on 10-11-2018]

### 2.2.3 CSR checklist

In order to create a good organizational strategy, significant measurement system linked to the Corporate social responsibility, it is necessary to examine the current status in the company. There are many techniques and tools to identify it and one of them is checklist analysis which helps in simple and quick way to identify that.[101]

The Canadian Business for Social Responsibility created a CSR Governance Guidelines (Guidelines), which can be used to identify gaps in current CSR performance and prioritize actions. Questions in the guidelines are divided into five main categories:

- Vision and Strategy
- Oversight and accountability
- Risk identification and management
- Board composition and expertise
- External disclosure.

In the Guidelines each category has different quantity of questions, but in total there are thirty-two questions[102].

Much bigger guidelines and handbook for companies have been created as a result during project "Enhancing Transparency and Credibility of CSR Practices through Establishment of CSR Performance Assessment and Monitoring Systems in New EU Member States" in 2010. The main aims of "CSR Self-Assessment Handbook for Companies" were to assist companies to review their CSR policy and reporting, measure the performance of CSR in large, small or individual companies, and compare their performance over time and against peers.

In the handbook questions are grouped under five categories:

- Governance
- Environment
- Labour relations
- Community relations
- Business Environment[103].

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[101] Alby T. *Checklist Analysis* Project Management Knowledge, Simply explained by a PMI-certified Project Manager Access on the Internet: https://project-management-knowledge.com/definitions/c/checklist-analysis/ [viewed on 11-11-2018]

[102] Canadian Business for Social Responsibility (CBSR) *Corporate social responsibility assessmen checklist.* Access on the Internet: http://2b79m75xexlhhf7411otxg15-wpengine.netdna-ssl.com/wp-content/uploads/2013/01/corporate-social-responsibility-assessment-checklist.pdf [viewed on 12-11-2018]

[103] De Graaf, P. Toennesen, C., Barakova, E., Matolay, R., Alijošiutė, A., Dymowski, J., Kissa, M. *CSR Self-Assessment Handbook for Companies.* UAB "Baltijos kopija" 2010. Access on the Internet: https://www.spcc.pl/images/file/forums_workhops/csr_self_assesment_undp.pdf [viewed on 12-11-2018]

There are 5 questions to each category. Some of them are the same as used in the CSR Governance Guidelines presented by The Canadian Business for Social Responsibility, but this one suggests ranking system to each checklist's answer with numbers and as a result the score value of implemented CSR can be presented. Both checklists are considered to be useful, but can be chosen depending on what result is needed to the researcher. So, after analysed different checklist's tools to measure CSR status in the company and identified their main differences and advantages, the author of this work suggests the following short CSR assessment checklist as the first step in company's CSR evaluation process (see p.44).

**Table 1. CSR checklist**

| ELEMENTS | GUIDANCE | ASSESSMENT | | | | | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | Yes | No | Partial | In Progress | Do not know | |
| VISION AND STRATEGY. Leading boards demostrate their commitment to CSR and ensure it is incorporated into the company's vision and strategy. | Is CSR principles are set on company's strategy? | | | | | | |
| | Is CSR incorporated into the company's mission, vision and values? | | | | | | |
| | Is company share common definition of CSR as it relates to the company, its sector and broader social trends? | | | | | | |
| | Have board and management developed a CSR vision for the company? | | | | | | |
| | Does the company Code of Conduct/ Ethics incorporate CSR? | | | | | | |
| EXTERNAL DISCLOSURE | Does leading boards regulary disclosure information about the company's CSR performance? | | | | | | |
| | Does the board provide input into management's assessment of material CSR issues to include in the company's external reporting? | | | | | | |
| | Does the board review and approve external reporting of CSR issues in compliance with mandatory dsclosure requirements? | | | | | | |
| | Does the company maintain a monitoring system, measuring the main environmental impacts, especially resource usage and carbon emissions? | | | | | | |
| | Does the company have a recycling programme? | | | | | | |

Source: prepared by the author.

The short checklist presented above is divided into two categories: Vision and strategy, External disclosure. There are five assessment option fields and one for comments, which can lead to deeper analysis of the answers to questions. Each category has five questions which are the most important at the primary level of evaluation process before setting the main strategic objectives to the balanced scorecard analysis.

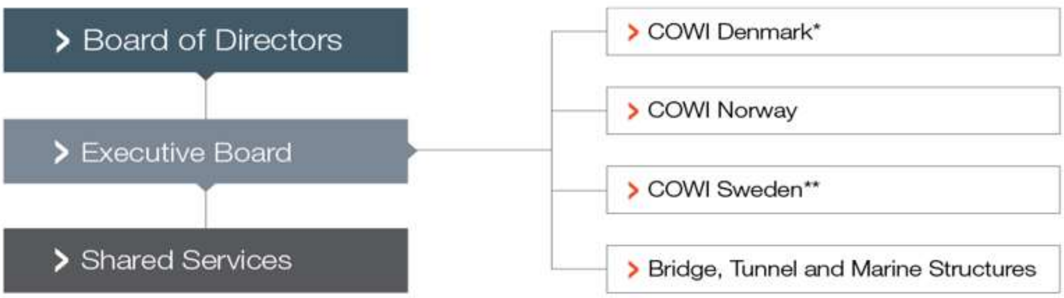
# 3. COWI PERFORMANCE EVALUATION BY FINANCIAL RATIOS AND BALANCED SCORECARD ANALYSIS

The practical part of this master's thesis briefly describes the activities of COWI Group (COWI), the reason why especially this company have been chosen to the practical part of this work, analyses the current situation of this company, status of implemented CSR, its specific activities. The financial ratio analysis is also conducted, and a balanced scorecard linked to Corporate Social Responsibility is created.

## 3.1 COWI activities and CSR

The COWI was founded in 1930 in Denmark. It is international consulting group leading in Northern Europe and parts of Central and Eastern Europe, based on competencies within engineering, environmental science and economics. At any given moment this company is involved in more than 12.000 projects across the globe. COWI is one of the leaders in this field since there are working more than 6.600 employees

The COWI Group is organised into four business lines - Denmark, Norway, Sweden and Bridge, Tunnel and Marine Structures. COWI Denmark includes subsidiaries in Belgium, India, Poland, United Kingdom and Africa. COWI Sweden includes a subsidiary in Lithuania. Bridge, Tunnel and Marine Structures (BTM) includes subsidiaries in Germany, Hong Kong, India, Korea, North America, Norway, Qatar, United Arab Emirates and United Kingdom. So, it can be seen, this company's activities are widely spread through different countries.




Source: COWI Group

**Fig. 6. The COWI organisational structure and ownership[104].**

[104] The COWI Group. *Organisation and ownership*. Denmark.

This company has been chosen to practical part of this work due to its specific engineering consulting activities. This company's activities are very closely connected with the society, its work results are often used of many people or impact their daily life, for example, bridges, tunnels, green spaces, buildings, metro and other. Therefore, it is an important industry where sustainable, socially responsible decisions should be made and has much higher impacts, since this company's main activities are directly related with society. The second reason why COWI have been chosen for the practical part of this work, cause the author of this Master thesis is taking part in this company's activities as an employee of this organisation.

COWI is committed to universal sustainability principles and United Nations (UN) goals. In order to investigate the current CSR situation in COWI, have been used publicly available resource – internet COWI portal. There it can be found separate section with information regarding CSR and compliance. The progress of CSR is reported under the UN Global Compact's reporting framework.

UN Global compact annual reports are prepared in COWI from 2012.So, reports have been reviewed from 2012 until 2017 except report from 2013, since it was technically unavailable in the portal. Each report has 8 chapters: Comments from CEO, Sustainability and CSR in COWI, Human rights, Labour rights, Environment, Green accounts, Anti-corruption, About Global Compact.

As it was discussed in the first part of this work, corporate social responsibility has a positive impact on business efficiency and profitability, and adds value to the public, but only in cases where social responsibility is integrated into the company's strategy. This requires reviewing the company's set mission, vision and goals.

COWI clearly presents its mission vision and values. Values are divided into five categories: Integrity ( act with creditability and integrity in all respects), Respect (with those COWI works with, nature, society), Independence ( attach high importance to financial independent and freedom it enables in its work), Professional capability (encourage professional courage and innovation whenever it creates value for customers), Freedom (in thinking and the good dialogue).

COWI vision is to create coherence in tomorrow's sustainable societies and want to be recognized as an industry top player, the customers first choice, have people with the highest level of competencies and knowledge, be a leading brand, be recognized as world-class international specialist in international business lines and excellent operations by continuous improvement.

COWI mission is to create significant value for customers, people and society by involving customers and stakeholders in co-creating optimum solutions; by creating opportunities and prosperity

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Access on the Internet: https://www.cowi.com/about/organisation-and-ownership [viewed on 15-11-2018] for employees, customers, shareholders; by applying world-class knowledge, experience locally and globally.

After reviewed COWI mission and vision further investigation need to be made and analysed how much the organisation's goals and vision meet the CSR principles. In order to investigate it, the short CSR checklist prepared by this author in methodological part of this work was used.

**Table 2. CSR checklist of COWI**

| ELEMENTS | GUIDANCE | ASSESSMENT | | | | | COMMENTS |
|---|---|---|---|---|---|---|---|
| | | Yes | No | Partial | In Progress | Do not know | |
| VISION AND STRATEGY. Leading boards demonstrate their commitment to CSR and ensure it is incorporated into the company's vision and strategy. | Is CSR principles are set on company's strategy? | + | | | | | |
| | Is CSR incorporated into the company's mission, vision and values? | | | + | | | |
| | Is company share common definition of CSR as it relates to the company, its sector and broader social trends? | + | | | | | |
| | Have board and management developed a CSR vision for the company? | + | | | | | 'COWI's vision is to create coherence in tomorrow's sustainable societies. Our vision frames our approach to corporate social responsibility (CSR) and sustainability, which is to create value for our customers, key stakeholders, COWI and society. We create value for our customers by enabling them to meet their sustainability goals and thus make the societies in which we operate more sustainable." - comment from 2017 UN Global Compact report |
| | Does the company Code of Conduct/ Ethics incorporate CSR? | + | | | | | |
| EXTERNAL DISCLOSURE | Does leading boards regulary disclosure information about the company's CSR performance? | + | | | | | Once per year from 2012 according to UN Global Compact framework |
| | Does the board provide input into management's assessment of material CSR issues to include in the company's external reporting? | | | + | | | |
| | Does the board review and approve external reporting of CSR issues in compliance with mandatory dsclosure requirements? | + | | | | | |
| | Does the company maintain a monitoring system, measuring the main environmental impacts, especially resource usage and carbon emissions? | | | + | | | Data covers activities in Denmark, including corporate functions and the Danish part of its major business line, Bridge, Tunnels and Marine Structures (BTM). There are missing data about carbon emissions for Norway and Sweden business lines, also for all subsidiaries in all bussines lines. |
| | Does the company have a recycling programme? | | | + | | | From the annual UN Global report is unclear do company has a recycling program just in Denmark and BTM business lines or have in other business lines also. |

Source: prepared by the author.

After a short checklist, it can be seen that CSR principles are well-integrated into COWI's strategy and mission, so it can be stated that COWI have made a big input on it. In the External disclosure category there are some areas where COWI still can improve. The first one, environmental impacts, especially, carbon emission measurement. The second one, recycling programme. In the reports can be found the data just for Denmark and BTM business line and there are missing data for Norway, Sweden business lines and for all other the subsidiaries. Even if COWI is international consulting group with offices through different countries, the same principles should be set in all its business lines.

This short checklist does not reflect the whole status how CSR is implemented into COWI, but it helps to make a primary view of company's strategy direction, gives deeper understanding how it's mission and vision is linked to CSR. It is useful for further the Balanced scorecard analysis.

## 3.2 COWI Balanced scorecard

Since COWI mission and vision are already created and in previous analysis have been concluded that they meet CSR principles, the first two Balanced scorecard creation steps are skipped and started from the 3rd step – to create company's strategy.


Source: prepared by the author.

**Fig. 7. The first three steps of Balanced scorecard creation (see Fig. 5)**

Two key strategies were developed. The first one is linked to Corporate social responsibility - to *Generate growth through environment and social responsibility*. It was analysed in the first chapter of this work and concluded that CSR became today's necessity and good implementation of CSR principles has a positive impact to profitability in a long term and run business in ethical, socially responsible way shapes positive attitudes towards the company, attracts investors, partners, qualified and good employees, since employees seek to work in a company with good reputation[105].

[105] This thesis p. 21

The second strategy is linked to efficiency. As it was concluded in the theoretical part of this work, there are different interpretations of efficiency, but the most commonly efficiency is understood as the best result achievement at the lowest cost. The most common aspects are: optimal use of resources; achievement of goals; quality of performance and results. To reach efficiency it is highly important to implement innovations, technologies, have a good management and human recourses in the company and all this is inseparable from the strategy and values of the company[106]. According to this statement of efficiency and COWI's vision to be recognized as an industry top player, the customers first choice, be a leading brand and recognized as world-class international specialist in international business lines, have been set the strategic goal to C*reate broader consultancy service through close customer relationships.*

These two strategies are a series of hypotheses about cause and effect and so, there are determined the critical success factors for each strategy and explained the causal and impact relationships that describe value creation process.

Hypotheses to strategy *Generate growth through environment and social responsibility.* If COWI focuses on that then it can become the leading consultant through developing sustainable and environmentally friendly solutions. Based on the internal process perspective, it is expected that customers feel that they get a better advisory benefit, because more emphasis is placed on sustainability and solutions. This means that the customer will feel closer linked to COWI and expressed through stronger customer relations. The effect of stronger customer relations will lead to revenue growth in the financial perspective. Implemented this strategy can create stronger customer relations and improve thinking of new and better solutions to increase customer value. To ensure this faster development depends on the quality of the engineers and their knowledge in the field. This is ensured in learning and growth perspective through optimal systems, employee skills and employee motivation and readiness.

Hypothesis to strategy C*reate broader consultancy service through close customer relationships.* The value can come from cross-selling consultancy services by offering complex and holistic solutions in all COWI regions. By being aware and offering holistic solutions are expected to increase customer confidence to the breadth of consultancy services. That reinforce a wider offering customer and is expected that increase sales and earnings in the financial perspective. The key process is to cross-sell consultancy services and create value through selling whole solutions. That means employees must have the ability to capture the customer wishes and needs that require extensive experience, customer-related competencies and effective customer management systems as well as readiness and motivation for employees to think more customer-oriented. All this affect COWI's efficiency and profitability.

[106] This thesis p. 8-10

Based on the two strategies, COWI's strategy chart have been developed, which shows the overall construction of the strategic goal statements which accordingly are divided into the following perspectives: financial, customer, internal business process and learning and growth.

**Table 3. COWI's balanced scorecard strategic goals**

| | Generate growth through environment and social responsibility | Create broader consultancy service through close customer relationships |
|---|---|---|
| | Strategic goal | |
| Financial perspective | Create revenue growth on sustainable solutions | |
| Customer perspective | Stronger customer relations through sustainable solutions | Increase customer confidence in the wide range of consultancy services |
| Internal business process perspective | Development of sustainable and environmentally friendly solutions | Cross-divisions consultancy services |
| Learning and growth perspective | Retention of employee's skills | |
| | Strategic systems | |

Source: prepared by the author.

The next step in the strategic planning process involves converting strategic goal statements into indicators and setting measurement points and targets for each of the goal, that would be linked to the management system. The target setting is based on a vision of strategic statements and overall COWI's goals. The goals and targets create a value gap between COWI's current situation and the desired situation. The goals scored in the scorecard for the individual strategy must be available and realistic figures for the description of the value gap. In the scorecard there will be some goals undetermined, because it has not been possible to calculate a realistic target with the available information.

The determination should preferably take place in the short and the long term or periodically, that COWI would be able continually use 10 indicators and check the performance targets which indicates the expectations for the future. So, developed the two COWI's strategies and presented strategy chart, each perspective with its goals and targets will be presented more closely in the following sections.

### 3.2.1 Financial perspective

Relevant measurements for COWI measures in the financial perspective are not only important because they include key goals such as productivity, efficiency and growth, but also because of all the other goals in the other perspectives must be seen in relation to these goals based on the causal impact.

In the financial perspective, based on the two strategies: to *Generate growth through environment and social responsibility* and to *Create broader consultancy service through close customer relationships,* the following measurement indicators and targets have been chosen:

**Table 4. Financial perspective of COWI balanced scorecard**

| | 1. Generate growth through environment and social responsibility<br>2. Create broader consultancy service through close customer relationships | | |
|---|---|---|---|
| | Strategic goal | Indicator | Target |
| Financial perspective | Create revenue growth on sustainable solutions | 1. Revenue and profit | 1. Increase |

Source: prepared by the author.

COWI creates sustainable competitive advantages by creating growth on more innovative and sustainable solutions. In the global community there is a great focus on climate change and environmentally friendly solutions and it has a high growth potential. Two measurement points have been selected, which are revenue and profit. It is an important overall measurement points in the growth strategy and the target is to increase them. However, the success of the strategic goal must be assessed not only from measuring points, but the elements that have an influence into target must be considered.

Based on strategy to *Create broader consultancy service through close customer relationships* the aim is to increase the number of new customers. COWI already have a substantial pool of them, but it must be possible to offer a larger and more complete consultancy package, so clients should contact suppliers less.

### 3.2.2 Customer perspective

In order to increase revenue and earnings in COWI, it is necessary to focus on the right customers and to offer them exactly the advice they demand. As the starting point it is based on market segmentation, as well as selection and understanding of the parameters that determine the purchasing behaviour. COWI carries out activities in different markets, represents many different customers with very different preferences that is why no analysis of it has been made. If BSC would be implemented in COWI, it would be necessary for the support features and regions to identify their own customers and markets in the effort to know the behaviour of their customers and create them necessary customer relations.

Out of the two strategies, COWI is primarily based on the complete solution strategy through the close and long-term customer relationships. The goal is for customers to feel that COWI understands their business and trust in COWI that this company will develop solutions that match their needs. COWI competes based on the understanding of customer situation and must also provide a high level of service.

In general, COWI refers to customers in all markets, either public, semi-public institutions or private companies, but it is difficult to determine specific measurements in customer perspective, which closely follows the value offerings, but it will be seen later in the internal process perspective, focusing on the conditions that COWI should be good at, in order to realize its value offerings.

In the customer perspective based on strategy to G*enerating growth through environment and social responsibility* the measurement indicators and targets have been chosen and presented in the next page.

There is a relevant measure expressed in percentage of the customer's purchase of environmental solutions to get an indication of which customers and in which markets mainly choose environmental solutions. The advantage by this measurement is that it provides a knowledge of the customer's buying behaviour that can be used in COWI's market positioning. But the measurement point is quite narrow and does not give one overall picture of the customers but must be seen in relation to the strategy. The goal is to increase this by 10% of the customer's total purchase.

**Table 5. Customers perspective of COWI balanced scorecard (1)**

| | Generate growth through environment and social responsibility | | |
|---|---|---|---|
| | Strategic goal | Indicator | Target |
| Customer perspective | Stronger customer relations through sustainable solutions | 1. Sustainable consulting<br>2. Customer Retention | 1. Increase by 10% of the customer's total purchase<br>2. Increase by 5% |

Source: prepared by the author.

The measurement point of customer retention is customer loyalty to COWI. There are many uncertainties associated with this measurement point as there it might be many reasons why the customer remains attached to the company. Therefore, loyalty can not only be attributed to the sustainable solutions and therefore does not make the measurement point unique, but all measurement points for this strategy should indicate that COWI is on the right way. The goal is to increase customer retention by 5%.

In the customer perspective based on strategy to *Create broader consultancy service through close customer relationships* the measurement indicators and targets have been chosen and presented in next page.

COWI offers many special services across the regions, giving an obvious basis for create sustained competitive advantages and here the measuring point will be the proportion of customer transactions and is the proportion of customer total consumption for consultancy services in the COWI segments cover. This measurement can provide a clear identification of how high degree COWI manages to sell its services and focus on optimizing this measurement point. The goal is to increase customer transactions by 8 %.

Customer retention and customer access are triggered by meeting customer needs. There may be other reasons why the customer access has increased in COWI and the measurement point provides whether the breadth of consultancy services has the decisive effect on the access of customers. The goal is to increase customer access by 7%. To assess the success of the strategy it is advisable to weigh the two measuring points in order to make a real conclusion.

**Table 6. Customers perspective of COWI balanced scorecard (2)**

| | Create broader consultancy service through close customer relationships | | |
|---|---|---|---|
| | Strategic goal | Indicator | Target |
| Customer perspective | Increase customer confidence in the wide range of consultancy services | 1. Share of customer transactions<br>2. New customers | 1. Increase by 8%<br>2. Increase by 7% |

Source: prepared by the author.

### 3.2.3 Internal business process perspective

The strategic goals in this perspective are linked to the COWI's internal processes and improvement of customer results. It is the value offer that is delivered to the customers. In the internal process perspective, the focus is on the customer perspective. These basic strategic goals are chosen because COWI has chosen to focus on this through its strategy formulation.

The value offer describes the unique composition of product, price, service, relationships and image delivered to the customer. The internal processes are crucial in two points: 1) produce and deliver the selected value offerings to the customers; 2) improve productivity processes and thereby reduce costs. Regarding company's environment and social responsibility, the employees should be well-developed both nationally and globally. Through the strategy, COWI aims to focus on critical success factors in relation not only to comply with statutory requirements but also to proactively relate to social issues. This form of social status provides image that COWI creates value and helps create lasting competitive advantages.

Based on strategy to G*enerating growth through environment and social responsibility* the following measurement indicators and targets have been chosen:

**Table 7. Internal business process perspective of COWI balanced scorecard (1)**

| | Generate growth through environment and social responsibility | | |
|---|---|---|---|
| | Strategic goal | Indicator | Target |
| Internal business process perspective | Development of sustainable and environmentally friendly solutions | 1. A share of introductions of sustainable solutions<br>2. Hours consumed for the development of sustainable solutions | 1. Increase by 10%<br>2. Increase by 5% |

Source: prepared by the author.

Was set the strategy goal to create sustained competitive advantages through the development of sustainable solutions that contribute to a better solution for the customer. The chosen measuring indicator is a share of introductions of sustainable solutions, compared to competitors. The measurement point is chosen to get the engineers to focus on the development of sustainable solutions and compare it with competitors, so that it is possible to identify how intensive COWI is to offer customers these solutions. However, comparing these can be difficult solutions across competitors, because the solutions are often very individual and customized to the individual customer. The measurement point will therefore not be the ultimate truth but should be seen together with the other measurement points related to the developed strategies. So the goal is to increase a share of introductions of sustainable solutions by 10%.

Likewise, the measurement indicator of hours consumed in the development of sustainable solutions, will be important to control it after. It is about time it to be used effectively as possible, so that the development of sustainable services will also be presented to the customer within a certain time frame in the attempt to offer the customer the solution first. At the same time, a management of time also makes the service cheaper for customers, which contributes to a more satisfied customer. The measurement point must be adapted according to the experience company does have with time registration. The goal is to increase spent time on developing environmentally friendly solutions by 5%.

In the internal business process perspective based on strategy to *Create broader consultancy service through close customer relationships* the following measurement indicators and targets have been chosen:

**Table 8. Internal business process perspective of COWI balanced scorecard (2)**

| | Create broader consultancy service through close customer relationships | | |
|---|---|---|---|
| | Strategic goal | Indicator | Target |
| Internal business process perspective | Cross-divisions consultancy services | 1. Proportion of specialist services obtained from other regions | 1. Increase by 7% |

Source: prepared by the author.

Was set the strategic goal to increase cross-divisions consultancy services. The measurement indicator is the proportion of specialist services obtained from other regions, gives a more nuanced measurement, emphasizing the importance of selling services across the strategy regions. This measurement will indicate the importance and COWI's focus on optimizing cross sales and lowering its costs with cheaper working force, but with the same quality. The goal is that there would be increased by 7% specialist services from other regions.

### 3.2.4 Learning and growth perspective

In the learning and growth perspective, is company's ability now and in the future to launch new products and solutions, add customers value and increase efficiency through innovation, learning. Although financial perspectives are generally superior to the other perspectives, such as learning and growth perspective. Generally, it is the crucial perspective for achieving financial results, especially in the long term. While this perspective has potentially the greatest importance to the company's future development, it is also quite difficult to measure the performance, so the target was set to make improvement form current status.

Based on both strategies the following strategic goals and measurement indicators have been chosen:

**Table 9. Learning and growth perspective of COWI balanced scorecard**

| | 1. Generate growth through environment and social responsibility<br>2. Create broader consultancy service through close customer relationships | | |
|---|---|---|---|
| | Strategic goal | Indicator | Target |
| Learning and growth perspective | Retention of employee's skills | 1. Specialized skills and customer oriented competencies | Improve |
| | Strategic systems | 1. Retention of key employees | |

Source: prepared by the author.

Here should be created continuous competitive advantages through employee competencies, measured at employee retention. Generally, COWI's competencies and knowledge areas are based on complex, professional experience and social skills, carried by individual employees and the company's culture. COWI attracts long-term employees. To measure the ability to apply and utilize the employee's skills in relation to it COWI requires through the strategies, this can be done through "skill gap" analyses, which is a mapping of the "gap" that may be between the current level of competence of the employees and COWI's real competence needs.

It is important to give employees the correct upgrade and retraining of their skills. In connection with the skill gap analysis, adjustments must be made continuing education, as COWI's current continuing education activities.

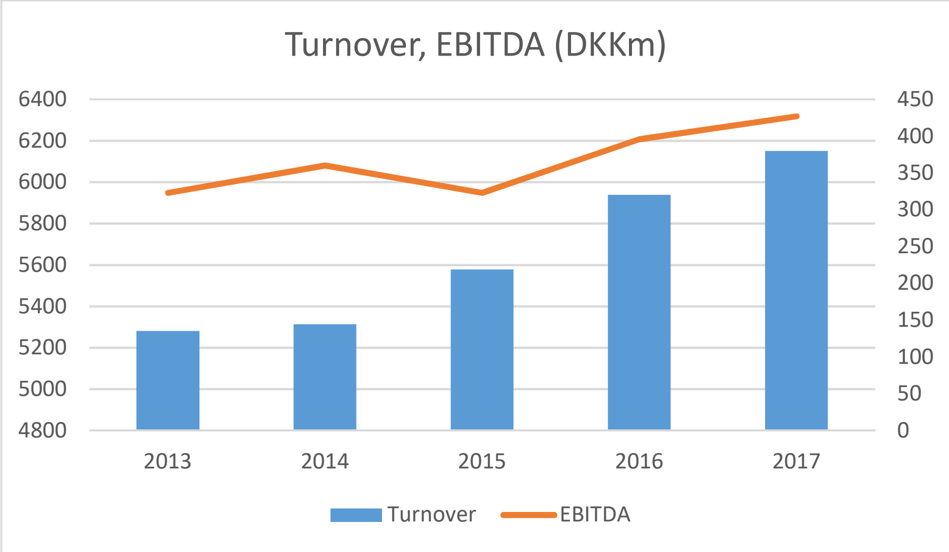
Here it must be created continuing competitive advantages through increased customer-related employee skills measured on employee satisfaction. It can be reassigned with the "skill gap" analysis, which can identify whether the individual employee needs customer-related retraining. Highly skilled engineers who develop holistic solutions must at the same time have great insight into customer service to "sell" the solutions properly to customers. The gap must be covered by giving employees the necessary retraining. The core measurement is employee satisfaction and is recognized through employee morale and overall job satisfaction. Satisfied employees are a prerequisite for increasing productivity, flexibility, quality and good service. It can be made by satisfaction surveys, whereby managers could have a regular opportunity to determine satisfaction, respectively, for regions, divisions / markets and departments. It is important to use the same technology in the questions if the studies are to be compared to previous studies.

To summing up all the analyses, the COWI balanced scorecard was developed under two strategies: Generate Growth through environmental and social responsibility, Create broader consultancy service through close customer relationships. Then COWI's scorecard has been developed through a description of the four perspectives; objectives have been defined and their ability through a discussion of possible uncertainties. In addition, it is pointed out that not all goals are set in COWI's scorecard, but it is the most realistic goals according to COWI's vision, mission and goals. The measurement targets are more hypothetical and used as an examples, so before implementing this scorecard to COWI, all internal company's information should be reviewed, which is not available to external units.

## 3.3 Financial ratio analysis of COWI

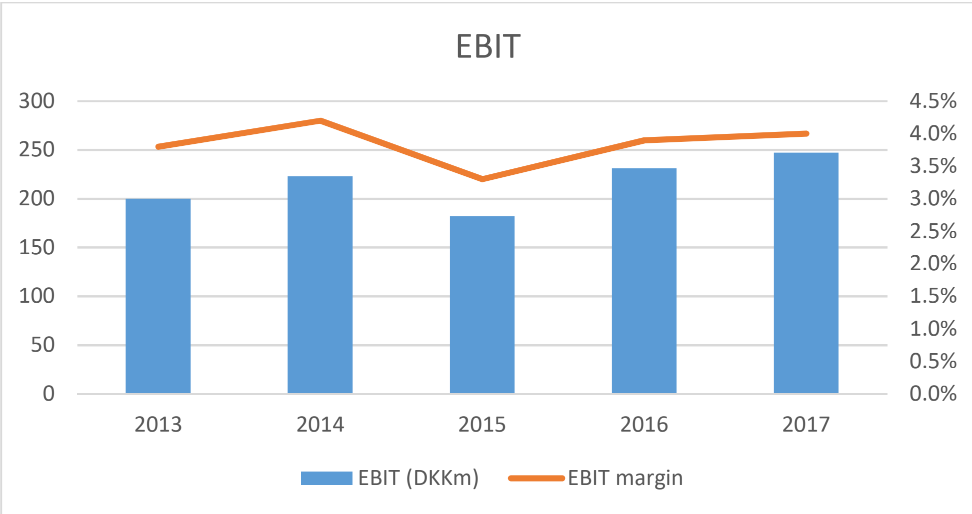
The non-financial indicator analysis was presented at the section above and the balanced scorecard to COWI was created. This is management tool that can evaluate and improve the performance of processes. However, as it was concluded in the methodological part of this paper, to evaluate the performance of the company and its efficiency, profitability it is recommended to use non-financial analysis together with financial analysis, that it would demonstrate a broader picture of company's performance. So, in this purpose, this section briefly presents financial analysis of COWI by using financial ratio analysis. There have been analysed data from COWI's annual financial statements from 2013 to 2017.

As it can be seen from chart in next page (Fig. 8.), the turnover is increasing every year and has reached its maximum in 2017 to DKK 6.151 million. The turnover from 2013 to 2014 has increased by 1% and from 2014 till 2017 is increasing by 4% every year. It shows that COWI's sales are growing in the last 3 years uniformly and increases its market dominance. The Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) shows how quickly the company is growing from product/ service sales perspective. It can be seen from chart that EBITDA corelates with turnover from 2015 and is increasing prospectively.




Source: prepared by the author, based on COWI annual financial reports

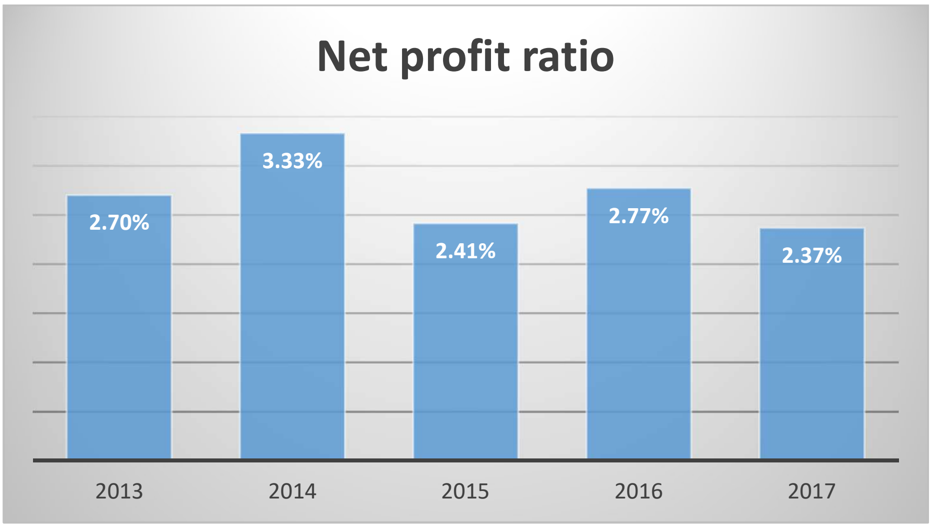
**Fig. 8. COWI turnover, EBITDA ratio (2013-2017)**




Source: prepared by the author, based on COWI annual financial reports

**Fig. 9. COWI EBIT (2013-2017)**

In the chart above (Fig.9.) is presented COWI's earnings before interest and taxes (EBIT) and EBIT margin. These indicators mainly give information about COWI's earnings ability and how good costs and productivity are controlled. From 2013 to 2014 EBIT increased by 11% and totalled in 2014 DKK 223 million. In 2015 there was a decrease in EBIT by 18%. In 2014 result was positively affected by the Norwegian business line's termination of a defined pension plan. So, disregarding one-time effect from the pension restructuring, the overall performance in 2015 was at the similar level as in 2014. In 2016 COWI has highly increased EBIT and even reached a bit higher level than in 2014. In 2017 this indicator also increased and totalled DKK 247 million. EBIT margin evenly correlates with EBIT.

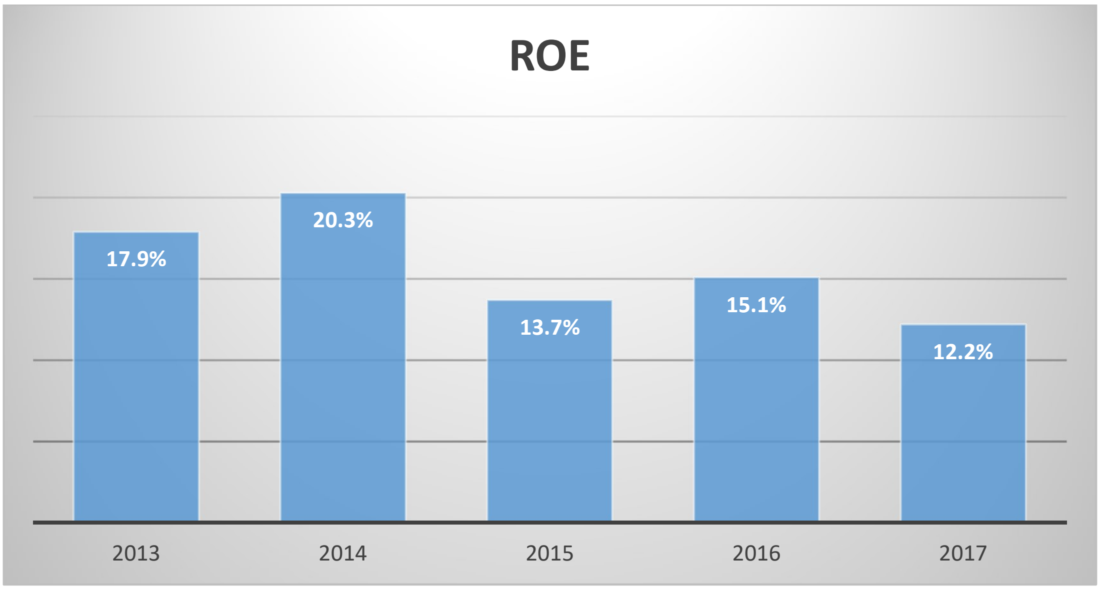



Source: prepared by the author, based on COWI annual financial reports

**Fig. 10. COWI's net profit ratio (2013-2017)**

In general, the net profit ratio indicates the effectiveness of the company's operations. As it can be seen from chart above, COWI's net profit ratio fluctuates during 2013- 2017. The higher the value of the indicator indicates higher profitability of the company, as well as greater financial gain volume of resources. The lowest COWI's indicator of net profit ratio is 2.37% in 2017 and the highest in 2014 of 3.33%. As it was presented in the annual COWI's report, the result for the 2017 was negatively affected by an arbitration case in Oman and disappointing results of Sweden and Norway business lines.

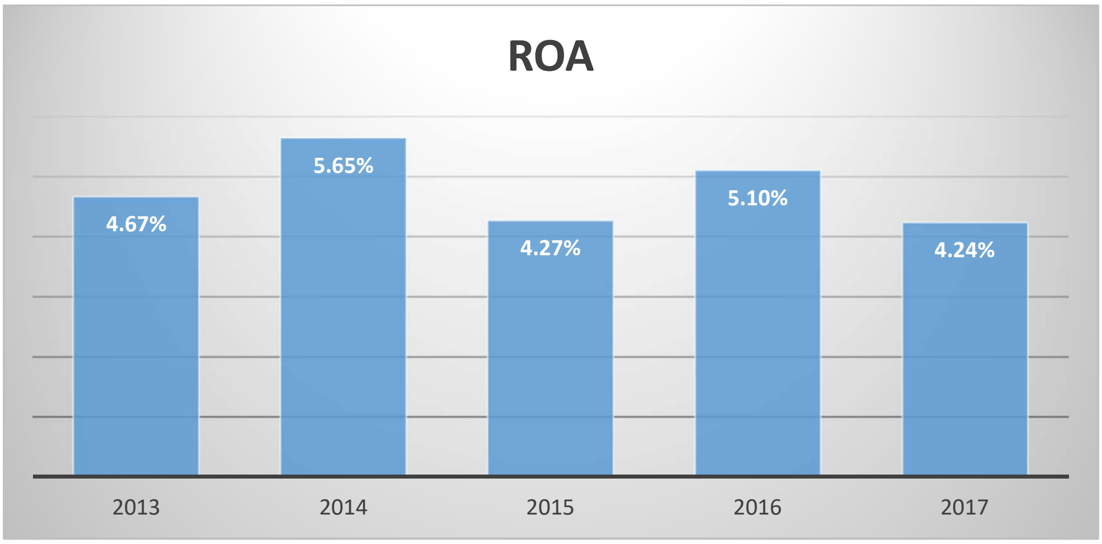
The chart in the next page (Fig.11.) presents COWI's return on equity ratio. COWI's ROE ratio fluctuates from 12.2 % till 20.3 %. The lowest indicator was in 2017. As it was stated in the methodological part of this work, ratio of 15-20% is generally considered as good, so according this target COWI in 2015 and 2017 has not reached it. So, it can be assumed that it might be that management efficiency is decreasing.




Source: prepared by the author, based on COWI annual financial reports

**Fig. 11. COWI's return on equity ratio (2013-2017)**

Also return on assets ratio has been calculated (Fig. 12.). The ROA indicator is one of the most commonly used indicators for assessing how useful the company's assets are, and at the same time it is one of the common indicators that allows to evaluate the efficiency of the company's management.

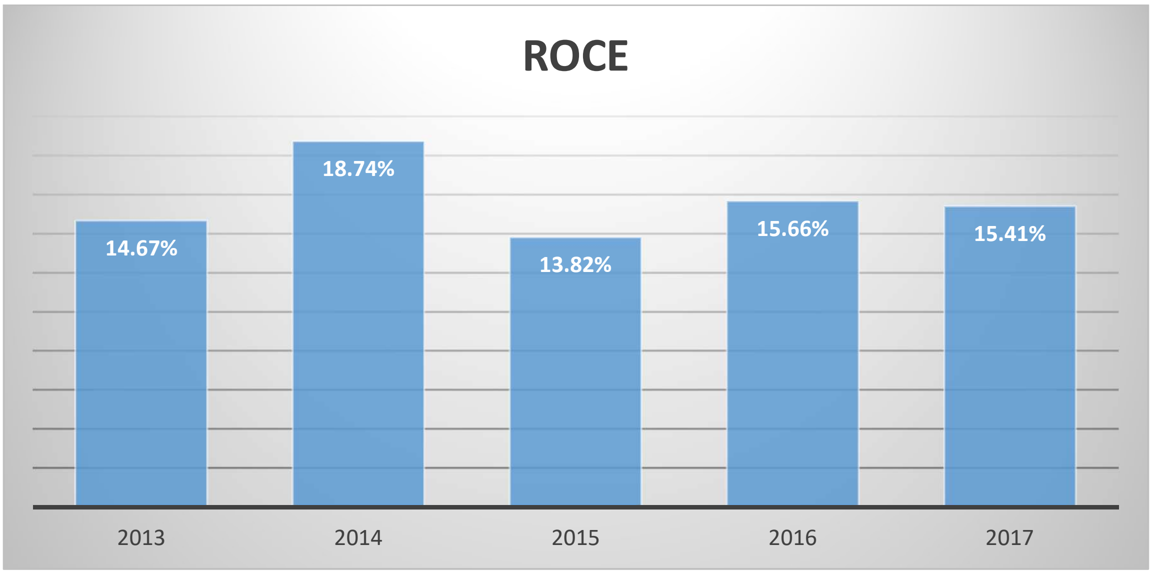



Source: prepared by the author, based on COWI annual financial reports

**Fig. 12. COWI's return on assets ratio (2013-2017)**

The chart shows ROA indicator fluctuates from lowest result of 4.24% in 2017 to the highest result of 5.65% in 2014. It can be assumed that might in COWI there is some management issues that affects efficiency since the same tendency is also on ROA.

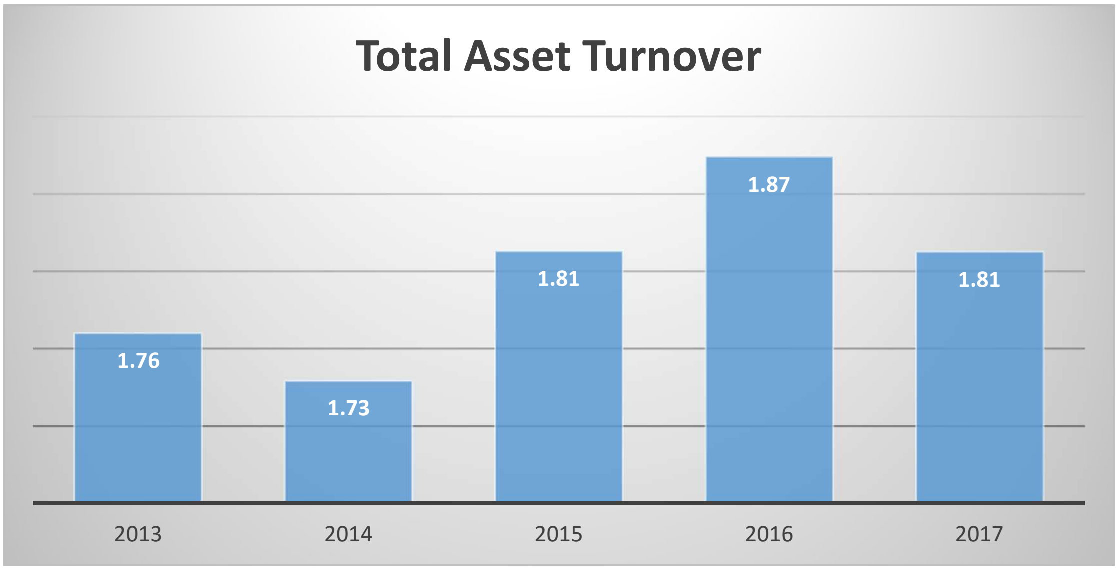
The following figure presents the return on capital employed:




Source: prepared by the author, based on COWI annual financial reports

**Fig. 13. COWI's return on capital employed ratio (2013-2017)**

The return on capital employed fluctuates from 13.82% to 18.74%. It is the same tendency as with ROE and ROA indicators that the highest percentage is in 2014 and this was not reached in all five years. The ROCE indicator measures the capital used for efficient returns, which the owners invested in the company and COWI's ROCE indicators shows that it became more stable in 2016-2017.

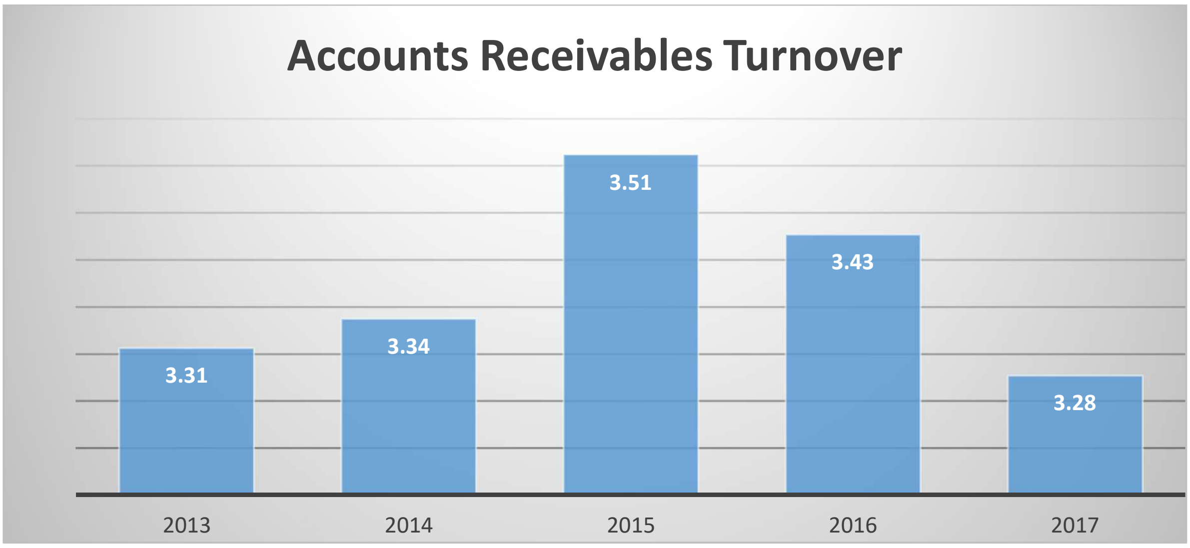



Source: prepared by the author, based on COWI annual financial reports

**Fig. 14. COWI's total asset turnover ratio (2013-2017)**

The total asset turnover ratio represents the overall investment efficiency by totalling the combined impact of long-term and short-term assets. COWI's total asset turnover ratio is not high, but quite stable from 2013 to 2017 and can be seen the increase compared to result from 2013.

The accounts receivables turnover ratio represents how efficient are company's credit policies and how quickly COWI collects bills from its customers. The ratio presented in a chart below shows result from 3.28 to 3.51. It can be assumed that the indicator is quite stable in five years period, but is a bit low, so this is the area where COWI could increase their efficiency.




Source: prepared by the author, based on COWI annual financial reports

**Fig. 15. COWI's accounts receivables turnover ratio (2013-2017)**

To summing up financial ratio analysis during 2013-2017 it can be assumed that COWI's turnover is increasing every year by about 4% and has reached its maximum in 2017. EBITDA corelates with turnover and shows that COWI is growing from services sales perspective. EBIT is increasing respectively. However, results of COWI's ROE, ROA and ROCE ratios indicates that capital and assets were managed in less efficient way in 2016 and 2017 than before, so there can be concluded that efficiency of COWI management is decreasing. The net profit ratio indicates the effectiveness of the company's operations that is also slightly decreasing in the last year. COWI's total asset turnover ratio is not high, but quite stable and slightly increasing compared to result from 2013. The accounts receivable turnover ratio is quite stable in five years period, but relatively low, so this is the area, where COWI could also increase its efficiency.

# CONCLUSIONS

1. In scientific literature efficiency concept is treated as the relationship between a desirable company's performance results and recourses used to achieve those results. Usually Allocative, Technological, Dynamic, Economical efficiency share one goal - the best result achievement at the lowest cost. To reach this goal it is highly important to implement innovations, technologies, have a good management of the company and human recourses and all this is inseparable from the strategy and values of the company.
2. There was established that although all economic units seek to work efficiently, but there is no definitive interpretation of the concept of efficiency. The concept is described and interpreted differently by different authors, but it can be stated that these are the most common aspects: optimal use of resources; achievement of goals; quality of performance and results.
3. According to scientific literature review, the corporate social responsibility has a positive impact on business efficiency, profitability, and adds value to the public, but only in cases where social responsibility is integrated into the company's strategy and is consistently implemented. Enterprises may use CSR to maximize their profit, but f the company does not integrate social responsibility in its activities consistently, but more so only for "fashion", it can be just a loss for the company and have a negative impact on the efficiency.
4. Literature analysis has showed that the claim that company works according to CSR principles does not guarantee that they actually do that. It refers to the conclusion that might be the control of how CSR is implemented into company is weak.
5. CSR should be in symbiosis with economic responsibility. It can increase costs in a short term, but, according to analysed scientific literature, corporate social responsibility has a positive impact to profitability in a long term and, even more, it became today's necessity to run business in ethical, socially responsible way, which shapes positive attitudes towards the company, attracts investors, partners, qualified and good employees since employees seek to work in a company with good reputation.
6. Financial indicators analysis alone cannot reveal the actual situation in the company, so companies should use it together with effective business measurement – balanced scorecard. The reason is that positive economic analysis and statements can be more widely supplemented with normative statements.
7. By applying a system of balanced indicators, causal relationships can be identified, action programs can be set up to optimize the most problematic business processes, and an effective control mechanism can be created to help monitor the progress of the ongoing operational program.

8. According to adapted short checklist of CSR, it can be stated that CSR principles are well-integrated into COWI's strategy and mission. However, in the External disclosure category there are some areas where COWI still can improve. The first one, environmental impacts, especially, carbon emission measurement. The second one, recycling programme.  In the reports can be found the data just for Denmark and BTM business line and there are missing data for Norway, Sweden business lines and for all other the subsidiaries.
9. Summing up the balanced scorecard development to COWI, have been raised two main strategies: *Generate growth through environment and social responsibility* and *Create broader consultancy service through close customer relationships.* To achieve these two strategies there were set 7 intermediate strategic goals and divided into four perspectives: financial, customer, internal business process, learning and growth. Not all goals are set in COWI's scorecard, but it is the most realistic goals according to COWI's vision, mission and goals. The measurement targets are more hypothetical and used as examples, so before implementing this scorecard to COWI, all internal company's information should be reviewed, which is not available to external units
10. The financial ratio analysis of COWI in 2013-2017 indicates that efficiency of its performance was decreasing in 2016 and 2017.

After case analysis the following recommendations are concluded:

- Company should regularly and consistently assess financial indicators together with non-financial indicators linked to CSR.
- In order to increase COWI efficiency linked to CSR, it is recommended to use developed balanced scorecard together with financial ratio analysis. Before implementing it, the measurement targets and all internal company's information should be reviewed, which is not available to external units.
- After implemented balanced scorecard measurement tool, follow up the results at least once in a year.

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Matelionytė V. *Assessment of company's performance linked to social responsibility: case study of international consulting group COWI* / Financial markets master thesis. Supervisor prof. dr. A. Vasiliauskaitė. – Vilnius: University of Mykolas Romeris, Faculty of Economics and Business in partnership with Middlesex University, 2018

## ANNOTATION

Master's thesis analyses theoretically based aspects of companies' efficiency, discusses connection between concept of enterprise performance and efficiency, reviews corporate social responsibility concept and its connection with performance and efficiency of the companies. Methodological part of this study presents justification base of the research problem, research methods and the description of the research process. The last part's sections present COWI, its activities and CSR status, develop COWI balanced scorecard linked to CSR and efficiency improvement and presents measured COWI performance efficiency by using financial ratio analysis.

**Key words:** efficiency, CSR, performance evaluation, Balanced Scorecard.

Matelionytė V. *Įmonės veiklos vertinimas per socialinės atsakomybės prizmę: tarptautinės konsultacinės įmonės COWI atvejo analizė* / Finansų rinkų magistro baigiamasis darbas. Vadovė prof. dr. A. Vasiliauskaitė. – Vilnius: Mykolo Romerio universiteto, Ekonomikos ir verslo fakultetas partnerystėje su Middlesex universitetu„ 2018

# ANOTACIJA

Magistro baigiamajame darbe teoriniu aspektu išanalizuojama ir įvertinama efektyvumo koncepcija, nagrinėjamos sąsajos tarp įmonės veiklos ir efektyvumo. Taip pat apžvelgiama įmonių socialinės atsakomybės (ĮSA) koncepcija ir jos ryšys su įmonių veiklos rezultatais ir efektyvumu. Šio darbo metodologinėje dalyje pateikiami įmonių veiklos vertinimo metodai, tyrimo proceso aprašymas. Paskutinėje darbo dalyje pristatoma COWI įmonė, jos vykdoma specifinė veikla ir ĮSA įgyvendinimo padėtis. Taip pat sukuriama COWI subalansuotų rodiklių sistema susieta su ĮSA principais ir efektyvumo didinimu, bei atlikta santykinių rodiklių finansinės veiklos analizė.

**Pagrindiniai žodžiai:** efektyvumas, ĮSA, veikos vertinimas, subalansuotu rodiklių sistema.

Matelionytė V. *Assessment of company's performance linked to social responsibility: case study of international consulting group COWI* / Financial markets master thesis. Supervisor prof. dr. A. Vasiliauskaitė. – Vilnius: University of Mykolas Romeris, Faculty of Economics and Business in partnership with Middlesex University, 2018

## SUMMARY

Financial markets master thesis is important for many contemporary businesses, managers, employees, owners or shareholders. Under the conditions of a market economy, business activity is constantly changing, so the existing financial and economic information of the company must be constantly analysed in order to adapt in changing conditions and increase performance efficiency. Among the other things, Corporate Social Responsibility (CSR) and its principles have an increasing importance in business. It can be seen that CSR implementation has became not only a voluntarily, optional company's choice, but more likely today's necessity, which is inseparable from an efficient, profitable business. However, many analysts do not associate the performance assessment of an entity with social responsibility since it is difficult to measure it, so there is the lack of a deeper analysis in this field. For this reason, the basic *research problem* was raised – what is CSR influence over the company's performance efficiency assessment where main activities are consulting service on the specific engineering sector? *Object of the research* – performance assessment of enterprises efficiency. *Hypothesis of the research* **- e**valuating and increasing efficiency of a company's performance it is appropriate to consider the Corporate Social Responsibility activities. *Aim of the research* is to present theoretically grounded aspects of company's efficiency, its connection with Corporate Social Responsibility and provide a measurement tool of performance evaluation for consulting company which main activities are in specific engineering sector. This study's objectives are to analyse the scientific literature on the topic of company's efficiency; to present scientific literature on topic of Corporate Social Responsibility and its connection with efficiency, carry out the analysis of the main opinions about CSR; also carry out the research by using established or updated measurement tool for consulting company which main activities are in specific engineering sector. In this paper *methods* applies the analysis and systematization of the scientific literature, comparative analysis of authors' opinions.

The hypothesis was confirmed based on analysis of the scientific literature and measurement tools to evaluate company's performance linked to CSR were developed: the CSR checklist which helps to make a primary view of company's strategy direction, gives deeper understanding how company's mission and vision is linked to CSR; COWI's Balanced Scorecard linked to CSR principles and performance efficiency improvement. There was also carried out COWI financial ratios analysis.

At the end of the master thesis conclusions on CSR, efficiency, evaluation of performance were made, which can be significant for COWI and other companies, those main activities are consulting services in the engineering or other similar sector.

Matelionytė V. *Įmonės veiklos vertinimas per socialinės atsakomybės prizmę: tarptautinės konsultacinės įmonės COWI atvejo analizė* / Finansų rinkų magistro baigiamasis darbas. Vadovė prof. dr. A. Vasiliauskaitė. – Vilnius: Mykolo Romerio universiteto, Ekonomikos ir verslo fakultetas partnerystėje su Middlesex universitetu„ 2018

## SANTRAUKA

Finansų rinkų magistro darbas yra svarbus daugeliui šiuolaikinių įmonių, vadovų, darbuotojų, savininkų ar akcininkų. Rinkos ekonomikos sąlygomis verslo veikla nuolat keičiasi, todėl būtina nuosekliai analizuoti esamą įmonės finansinę ir ekonominę padėtį, kad galėtų prisitaikyti prie besikeičiančių sąlygų ir padidinti veiklos efektyvumą. Be kita ko, įmonių socialinė atsakomybė (ĮSA) ir jos principai vis labiau svarbūs verslui. Galima pastebėti, kad ĮSA principų įdiegimas į įmonės veiklą tapo ne tik savanoriškas įmonės pasirinkimas, bet labiau kaip šiandienine būtinybe, kuri yra neatskiriama nuo efektyvaus, pelningo verslo veiklos. Dėja, bet daugelis analitikų įmonės veiklos vertinimo nesieja su socialine atsakomybe, kadangi ją sunku išmatuoti, todėl yra matoma, jog šioje srityje trūksta gilesnės analizės. Dėl šios priežasties buvo iškelta pagrindinė mokslinio tyrimo *problema* - kokia įtaką ĮSA turi įmonės veiklos efektyvumo matavimui ir vertinimui, kai pagrindinė įmonės vykdoma veikla yra konsultavimo paslaugos specifiniame inžinerijos sektoriuje? *Tyrimo objektas* - įmonių veiklos efektyvumo vertinimas. *Tyrimo hipotezė* - įmonės veiklos rezultatų įvertinimui ir jų efektyvumo didinimui yra tikslinga atsižvelgti į įmonių socialinės atsakomybės veiklą. *Tyrimo tikslas* - pristatyti teoriškai pagrįstus įmonės efektyvumo vertinimo aspektus, jų ryšį su įmonių socialine atsakomybe ir pateikti veiklos vertinimo priemonę įmonei, vykdančiai konsultavimo paslaugas specifiniame inžinerijos sektoriuje. Šiam tikslui įgyvendinti iškelti trys *uždaviniai* - išanalizuoti mokslinę literatūrą apie įmonės efektyvumą; pateikti mokslinę literatūrą apie įmonių socialinę atsakomybę ir jos ryšį su veiklos efektyvumu, atlikti pagrindinių nuomonių apie ĮSA analizę; parengti naudojant sukurtą, arba atnaujinti esamą, konsultacinės įmonės veiklos vertinimo priemonę per ĮSA prizmę. Šiame magistro darbe buvo taikomi mokslinės literatūros analizė ir sisteminimas, autorių nuomonės lyginamoji analizė.

Buvo patvirtinta hipotezė, pagrįsta mokslinės literatūros analize ir panaudota vertinimo priemonė, skirta įvertinti įmonės veiklos rezultatus, susijusius su ĮSA. Pirmoji priemonė, tai parengtas trumpas ĮSA kontrolinis sąrašas, kuris padeda suprasti įmonės strategijos kryptis, suteikia gilesnį supratimą kaip įmonės misija ir vizija yra susijusios su ĮSA. Taip pat buvo parengta COWI subalansuotų rodiklių sistema orientuota į ĮSA įdiegtų principų ir veiklos efektyvumo didinimą. Siekiant papildyti šias analizes taip pat buvo atlikta COWI finansinių rodiklių analizė.

Magistro baigiamojo darbo pabaigoje buvo padarytos išvados apie ĮSA, efektyvumą, veiklos rezultatų vertinimą, kurios gali būti reikšmingas COWI ir kitoms įmonėms, kurių pagrindinė veikla yra konsultavimo paslaugos inžinerijos ar kitame panašiajame sektoriuje.