Procedia
Environmental Science,
Engineering and Management
http://www.procedia-esem.eu

Procedia Environmental Science, Engineering and Management **7** (2020) (3) 367-373

International Conference on Agriculture, Environment and Allied Sciences (AEAS),
December 24th-25th, 2020, Istanbul, Turkey

BUSINESS MODEL AS A TOOL FOR INCREASING THE MARKET CAPITALIZATION AND REDUCING ENVIRONMENTAL IMPACT OF THE COMPANY *

Akhmetshina A.[1], Kaspina R.[1], Vagizova V.[1], Ivanov S.[2]**

[1]*Kazan Federal University*
[2] *PricewaterhouseCoopers Audit Corporation*

Abstract

Annually, the world generates 1.3 billion tons of solid waste. This is expected to go up to 2.2 billion by 2025. Therefore, as consumers, we are very wasteful. The OECD countries are responsible for 44% of waste, and in the U.S. alone, the average person throws away their body weight in rubbish every month. This article describes the actual problems of environmental issues and information disclosure in Integrated Reporting, which could best explain to users of financial statements the influence of factors of a company's activity on its market value. As an example of the use of the "Integrated" principle of disclosure of information in the reporting, the authors propose the reporting of the Russian vertically integrated oil company Tatneft. In particular, the authors propose a new format for disclosing information about the assets and profits of the Tatneft Group, taking into account the impact of non-financial capital.

Keywords: business model, environmental impact, integrated reporting, market capitalization, value creation

1. Introduction

Conventional wisdom would seem to suggest that companies have no incentive to lengthen the life cycle of their products and reduce the revenue they would get from selling new goods. Yet, more and more businesses are thinking about how to reduce consumer waste.

*Selection and peer-review under responsibility of the AEAS Conference

**Author to whom all correspondence should be addressed: shamil-ivanov@yandex.ru

This is partly driven by the rising price of raw materials and metals, and partly due to both consumers and companies becoming more aware of the need to protect our environment.

In accordance with the International Integrated Reporting Standard, the business model is a necessary element of the Integrated Report and represents a system for transforming the Company's resources through its commercial activities into products and results aimed at achieving the organization's strategic goals and creating value over the short, medium and long term periods.

An integrated report should describe a business model that includes the key ones (Andronova et al., 2014):

- resources
- commercial activity
- products,
- results

The organization, interacting with the external environment, uses various types of capital, which consolidating and represent the organization's resources. Passing through the organization's business model, these resources create new value and again, in influencing various capitals, and in cooperation with society, create the value of the Company.

Analysis of the best practices of presenting a business model in the annual reports of pioneering companies in the field of Integrated Reporting showed that the structure of business model formation in the annual report of Tatneft Group for 2017 generally satisfies to that proposed by the International Integrated Reporting standard. However, there is a need to transform non-financial and financial indicators into information blocks in order to establish the relationship between the factors relevant to the company's operations and its market value.

2. Methods

In the article on the basis of the application of empirical method of analyses and synthesis of integrated annual report data of large oil companies, through the use of induction and deduction methods, interconnections and dependencies of functioning business models have been revealed, a logical business model of the oil company in terms of types of capital has been developed, which allows to estimate the dynamics of the chain of creation and increase in the value of capital.

3. Results and discussion

To form a practical, informative and useful for users business model reflected in the Integrated report of Tatneft Group, it is necessary to analyze the current practice of disclosing such information blocks in Reports published by companies that have succeeded in this area.

The adoption of Integrated Reporting and sustainability indicators, both in the practice of Western countries and in Russia, is usually delayed. Nevertheless, in recent years, non-financial information in Russia has received much more attention than before, since in modern conditions disclosure in companies 'reports of this information is one of the important factors of socio-economic development (Kaspina and Khapugina, 2017). Unlike American companies, Japanese companies pioneered the adoption of non-financial indicators. In Japan, disclosure of environmental impact, social responsibility and corporate governance (ESG); Corporate Social Responsibility (CSR); and, in general, non-financial reporting is now on the rise. Traditionally, Japanese corporate managers tend to promote intangible assets of their companies, such as human resources and social contributions, more than financial indicators, such as earnings per share (EPS) and return on equity (ROE) (Yanagi and Yoshino, 2017).

However, for a long time, the problem of Japanese companies was that the market / book value (P/B) ratio, or the ratio of market value to book value of capital, was stagnant and was close to 1, that is, without added market value (MVA), which is equal to the difference between market capitalization and the carrying value of capital. If we assume that the company's financial capital is related to market capitalization and corresponds to the book value of net assets, and other types of company capital, which will be discussed further in this paper, correspond to the market value added in the PBR equation, then we can assume that the company's focus non-financial indicators will lead to an increase in MVA and PBR significantly higher than 1.

The latest trends in the Reporting of public companies in Russia indicate that the management had an understanding of the need to publish annual reports that combine the elements of an Integrated Report. The same example was followed by Tatneft Group, which for the first time presented the business model separately in its annual report for 2014. An analysis of the company's market value to the book value of its net assets over the past 6 years (Fig. 1) has clarified a number of facts in dynamics. Until 2015, the company's market value fluctuated at the level of the book value of its net assets. Since 2016, there has been a significant excess of its market value over the value of net assets. As of June 30, 2017, based on the data of the condensed consolidated IFRS report for the three and six months ended June 30, 2017, the Group's net assets amounted to $ 12,442 million. Market value according to Moscow Exchange data as of June 29, 2018 was $ 24,091 million. Thus, the difference between market capitalization and the carrying value of net assets, i.e. The Group's market value added (MVA) at the end of the first half of 2018 was 11,649 million US dollars.

According to one of the theories of corporate finance (Brealey et al., 2014), the amount of dividends paid for the year may be a determining factor in the market value of a company's shares, since profitability is a key criterion for shareholders. Below is the dynamics of the yield per share of PJSC Tatneft. As we see in the chart, PJSC Tatneft has significantly increased dividend payments over the past year and a half (Fig. 2).

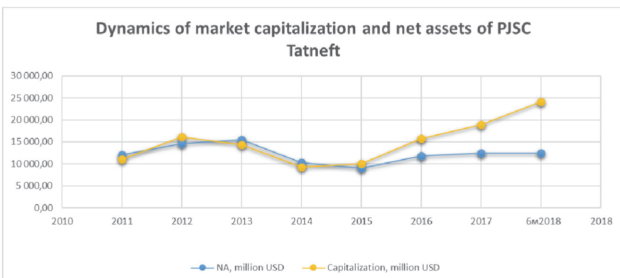

Fig. 1. Dynamics of market capitalization and net assets of PJSC Tatneft

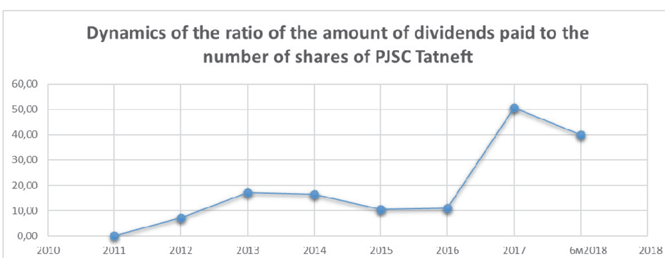

Fig. 2. Dynamics of the ratio of the amount of dividends paid to the number of shares of PJSC Tatneft

The presented dynamics corresponds to the general trend in the studied industry and is partially explained by the intention and relevant policy of the Russian government to increase the budget revenues due to dividend income from companies with a high share of government participation. In order to confirm this theory for the purpose of research and to determine additional factors affecting the change in the market value (capitalization) of a company, the corresponding dynamics of the largest representatives of the industry, vertically integrated oil companies of the Russian Federation were further analyzed:

- PJSC «OC «Rosneft»,
- PJSCJSOC «Bashneft»,
- PJSC «Gazprom Neft».

The results of the analysis are presented below (Fig. 3):

The dynamics of Bashneft in 2016–2018 is explained by the factors listed above in view of joining the Rosneft Group of Companies. The significant difference between the market capitalization and the value of net assets in the period up to 2014 is due to:

- high dividends,
- control by a private company and a positive attitude towards this of the stakeholders,
- high competitive advantages (including a wide range of products sold) among competitors in the Russian Federation (Fig. 5).

The presented dynamics for PJSC «OC «Rosneft» differs from the previously mentioned and requires additional interpretation (Fig. 4).

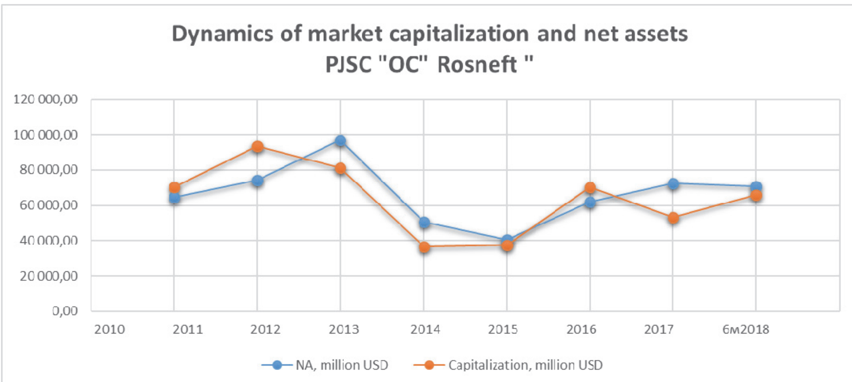

Fig. 3. Dynamics of market capitalization and net assets of PJSC «OC «Rosneft»

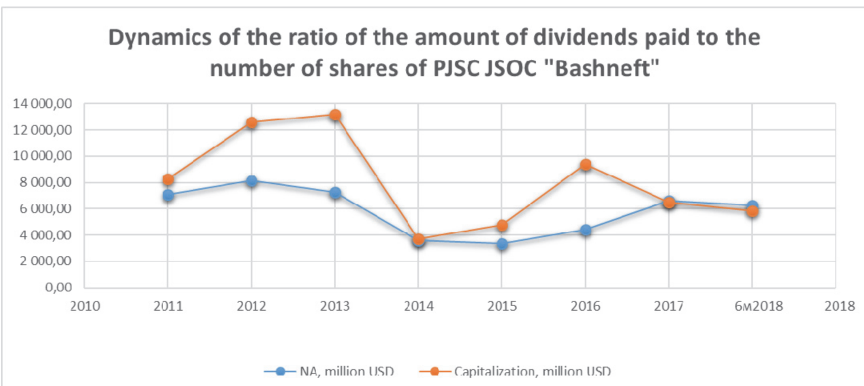

Fig. 4. Dynamics of market capitalization and net assets of PJSCJSOC «Bashneft»

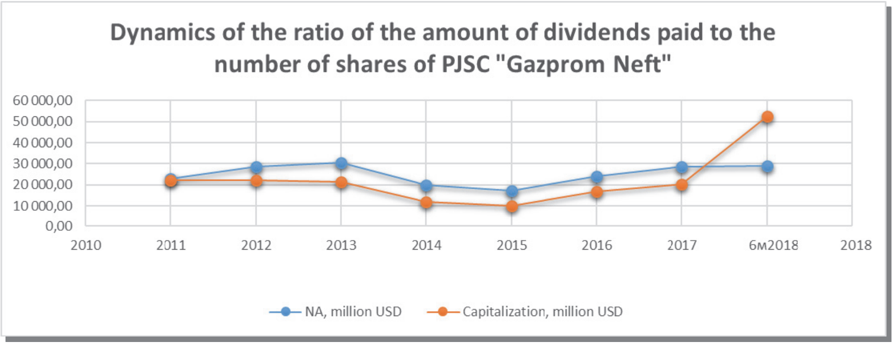

Fig. 5. Dynamics of market capitalization and net assets of PJSC «Gazprom Neft»

PJSC Gazprom Neft is structurally part of the Gazprom Group of Companies, however the parent company PJSC Gazprom assumes most of the geopolitical risks, which allows Gazprom Neft to avoid significant fluctuations in net asset levels and market capitalization. Until 2017, there is a compliance with these levels, but in 2018 the market capitalization significantly exceeds the level of net assets for the following reasons:

- update of the historical maximum for dividend payments - 15 rubles each per share on the results of activities for 2017,
- Gazprom Neft PJSC was recognized as winner of Rosnedra auctions for the right to explore and produce hydrocarbons in six license areas of the Karabash zone in the Khanty-Mansi Autonomous District,
- net profit growth in Q1 by 12% compared with 2017,
- expectation of high profitability against the background of the growth of profitability of other companies in the industry, including due to rising oil prices.

Thus, we have clearly seen that the original theory of the dominant influence of dividend stock returns on their market value was only partially justified. The need to search, analyze and quantify the non-financial indicators of the company, which significantly affect the market value, has gained obvious relevance for reporting users who do not have significant information and time resources.

For intangible assets, there are several aspects that are part of the difference in value. The international standards of integrated reporting define six types of capital that make up the resources that an organization uses to build its business model: traditional financial and production capital, human, social capital, intellectual and natural capital. The ultimate goal of the conceptual framework of the standard was a combination of traditional financial statements and non-financial reports, as well as a quantitative definition of various capitals that make up the missing market value. Balance assets plus intangible assets together provide for domestic production potential and the ability to use competitive advantages.

Graphically, the structure of assets and profits for the Tatneft Group, as for the "Integrated thinking" company, will look as follows (Fig. 6). The influence of non-financial capital is confirmed by other researches, proving that the five non-financial capital identified by the IIRC are related to value added market. One empirical study, "Relation between Human/Intellectual Capitals and Corporate Value (PBR)" (Yanagi, 2018), conducted in 2017, selected Japanese companies from different industries and showed that the more intangible assets of the company were formed from personnel (human capital) and research and development (intellectual capital), the higher the company's market value added. As this study shows, more than 20% of the added market value is explained by investments in the personnel sphere and in the field of research and development.

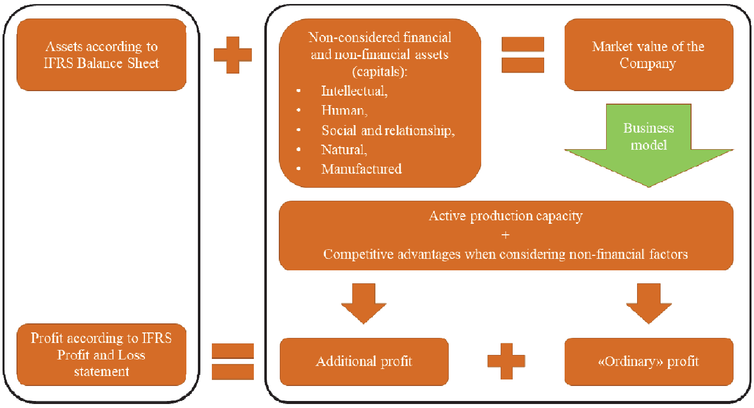

Fig. 6. Integrated structure of Assets and Profits of Tatneft Group

According to the above study, the listed types of capital were ranked by the value of the p-coefficient, which indicates the correlation relationship between the factors. Thus, the greatest impact on the added market value of companies was human capital with a coefficient of 0.708, social capital (0.616), natural capital (0.607) and intellectual capital (0.484). Among non-financial indicators, production capital did not show a significant impact on market value-added, which is explained by the collinearity of the production factor with financial capital, which is the company's book value (http://www.ifrs.org; https://www.bloomberg.com; http://www.globalreporting.org; http://www.tatneft.ru; https://www.moex.com; https://www.rosneft.ru; http://www.bashneft.ru; http://www.gazprom-neft.ru; http://www.sfmagazine.com).

5. Conclusions

Improves calculation of these indicators for Tatneft Group requires separate research and quantitative measurement of factors. At the same time, given the significant deviation of the market value from the accounting and production nature of the activities of the main companies, this ranking may be applicable in the future to build the business model of the Tatneft Group.

Proposed format for the presentation of assets and profits in integrated reporting in combination with other ways of visualizing the interrelation of factors will improve the effectiveness of published information in terms of describing the influence of business factors on the change in the Company's market capitalization.

Acknowledgements
The work is performed according to the Russian Government Program of Competitive Growth of Kazan Federal University.

References

Andronova E.S., Kichenina T.N., Petrova E.A., (2014), *Theoretical and practical aspects of the formation of integrated reporting*, Institute of Economics, Management and Law (Kazan), Kazan: Publishing House “Cognition” of the Institute of Economics, Management and Law, 92.

Brealey A., Myers C., Franklin A., (2014), *Principles of Corporate Finance*, Eleventh Edition, New York: McGraw-Hill/Irwin.

Kaspina R.G.L.S., Khapugina, (2017), *Use of Management Accounting Information for the Formation of the Business Model of a Public Company / New Trends in Finance and Accounting*, Proceedings of the 17th Annual Conference on Finance and Accounting, 581-586.

Yanagi R., Yoshino T., (2017), Relation between human/intellectual capitals and corporate value (PBR), *Gekkan shihon shijo* (*Capital Markets Monthly*), **10**, 4-13.

Yanagi R., Michels-Kim N., (2018), Integrating nonfinancials to create value, *Strategic Finance,* 27-35, https://sfmagazine.com/post-entry/january-2018-integrating-nonfinancials-to-create-value/

Web site:

Official Corporate Reporting website // http://www.globalreporting.org.

Official website of «Tatneft Group» // http://www.tatneft.ru.

Official website of a professional market participant, financial information provider «Bloomberg» // https://www.bloomberg.com/europe.

Official website of the Moscow Exchange// https://www.moex.com.

Official website of the PJSC «Gazprom Neft» // http://www.gazprom-neft.ru.

Official website of the PJSC «OC «Rosneft» // https://www.rosneft.ru.

Official website of the PJSCJSOC «Bashneft» // http://www.bashneft.ru.

Official website on international financial reporting standards // http://www.ifrs.org.

Strategic Finance //http://www.sfmagazine.com.