ANALYTICAL CAPABILITIES OF INTEGRATED CORPORATE REPORTING

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Abstract. The analysis of integrated corporate reporting relevance, the usefulness of disclosing financial and non-financial indicators, that are essential in the reporting to assess business performance and create a value chain, is the subject of study. The authors found that the leading indicators of economic activity of interest to external and internal users of the reporting information are related to the investment attractiveness of the company, its sustainable development, efficiency, and profitability. Therefore, to analyze value creation efficiency, it is necessary to expand the range of assessment with the following cost factors: organization, customers, society, natural environment, innovation, risks, and corporate management. should be classified into the following groups related to the company’s performance: income-generating (possibility of growth, competitiveness, cost of capital, risks) and expense-generating (labor costs, transaction losses, cost of capital, risk management). In this paper, the authors suggest a model for an objective assessment of the company’s ability to create added value, given the management segments (economic, environmental, social) and various forms of capital, which allows determining the company’s business advantages, directions for maximizing opportunities and minimizing risks for each capital used and reducing the information gap between financial and non-financial information, as well as improving business transparency.

Keywords: integrated corporate reporting; information; interested users; analytical capabilities; model


JEL Classifications: M21, M40, G32

Additional disciplines Financial economics

1. Introduction

The complex, diverse, multidirectional institutional processes happening around the world have resulted in a fundamental change in ideas on how, to what extent, based on which methodological platform, should the information on the activities of the reporting entity be disclosed to the stakeholders. The answer is greatly determined by the fact that the traditional concept of capita today has undergone a significant transformation. The capital involved in the creation of added value, which the investors consider as the main guarantee of positive results and return on investment, today has acquired a complex, integrated character and can no longer be reduced to financial or material flows.
Consequently, the return on investment, the growth of business value, the development perspective are assessed not only in relation to the funding levels and the real availability of material assets but also by considering intangible components, such as economic relations, network interactions, the use of modern communication technologies, market segmentation, the active use of intellectual property, environmentally oriented business solutions, etc (Mullakhmetov et al., 2019).

Under these conditions, the accounting (financial) statement remains the essential foundation for making investment and financial decisions. It ceases to be the only source of information about the property status and financial capacity and can no longer satisfy the increased diversity of information requests from various users (Korableva et al., 2019).

The preparation of integrated corporate reporting is becoming a priority in the presentation of corporate information. It is increasingly regarded as a modern effective enterprise management tool providing the necessary information connectivity and completeness of the disclosed information on sustainable business development (Arbidane, Mietule, 2018; Subačienė et al., 2018; Vegera et al., 2018a; Vegera et al., 2018b; Ivanova et al., 2019; Stazić et al., 2019; Hijazi and Mahboub, 2019; Saenko et al., 2019; Miguélez et al., 2019; Voronkova et al., 2019; Nadhir, Wardhani, 2019; Puryaev, Puryaev, 2019).

The International Integrated Reporting Council describes it as “a comprehensive compact message to all interested parties about how the organization’s strategy, management, activities, and plans for the future, taking into account the external environment, lead to short, medium and long-term creation of additional value” (International Integrated Reporting Council (“the IIRC”), 2013). It is considered as a modern, actively used channel of information interaction to meet the interests of a wide range of stakeholders, including employers, customers, suppliers, business partners, local communities, regulatory institutions, and public authorities.

2. Literature review

The theory and practice of financial and non-financial reporting have been studied by numerous the following scientists. The problem of corporate social responsibility, environmental orientation and sustainable business development, including issues of non-financial information disclosure, were examined in numerous works (e.g. Energy Transformation towards Sustainability, 2020; Razminienė, Tvaronavičienė, 2018; Černevičiūtė et al., 2019 etc.)

The need for an effective and broad combination of heterogeneous information elements is indicated in the works of a famous Western scientist, one of the main ideologists of integrated reporting, R.J. Eccles (Eccles, 2010). He was one of the first to note the importance of correct connection and integration of financial data with a wide range of non-financial indicators containing information on intangible assets, key performance indicators, corporate governance, etc (Hilkevics and Semakina, 2019; Paptsov et al., 2019; Titova et al., 2019; Lateef et al., 2019; Dyussembekova et al., 2019).

The issues of increasing the effectiveness of business relationships with various groups of stakeholders for sustainable development and providing them with the necessary information were considered in many works (e.g. Cardoso et al., 2018). M.A. Vakhrushina, believes that “the integrated reporting will significantly increase the company investment attractiveness, provide potential investors with transparent information revealing the current and future risks not only in financial but also in social and environmental spheres” (Vakhrushina, 2014).

O.B. Fomina and M.V. Fomin define integrated reporting as “a new direction in the development of corporate reporting, which aims to provide various stakeholders with information about the key factors of the present and future value creation by the company...” (Fomina, 2014). The researchers claim that such reporting should provide an integrated overview of value generated by the strategy, management efficiency, and company capabilities in the long term. N.V. Malinovskaya considers integrated reporting as an element of managing an
economic entity. According to her, the integrated reporting is a “systematic factual and forecast financial and non-financial information of the reporting entity about the ability to create value for the organization and its stakeholders in the short, medium and long term, and its business model, formed in accordance with the national or internationally recognized standards and intended to satisfy public interests of the interested users” (Malinovskaya, 2018).

The issues of integrated corporate reporting are becoming increasingly popular in the scientific community. However, several problem areas and numerous issues remain the topic of discussion. This indicates the importance and necessity for further deep and informative research on non-financial corporate reporting, along with the development of methods of its preparation under the impact of various types of capital on ensuring business sustainability.

3. Materials and Methods

The laws and regulations of the Russian Federation in the field of corporate governance, accounting (financial) and non-financial reporting; information and analytical materials of consulting companies and international organizations involved in research and implementation of integrated corporate reporting; integrated reporting and other non-financial reports of Russian organizations registered in the National Register of non-financial reports; as well as results of the author’s research of non-financial reporting of Russian and foreign companies served as the information base for this study.

The research tools used in this research involved systematic analysis, empirical research, the principles of formal logic, synthesis and analysis of theoretical and practical data.

4. Results

One of the key elements of the concept of integrated reporting is the active use of the category “integration” in relation to business goals and objectives considered in the context of the so-called integrative thinking. At the same time, the traditional model of accounting and financial reporting is based on the need to present information from a financial perspective, which today is considered as the principal perspective. A comparison of the accounting and financial reporting indicators of different countries leads to the conclusion that, in general, the composition of forms and key articles evaluated by different users is identical. Table 1 summarizes the leading indicators of interest to users of the reporting information in several countries.

<table>
<thead>
<tr>
<th>Country</th>
<th>Leading indicators</th>
<th>Information users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>Indicators of liquidity, solvency, sustainable development, profitability, efficiency of financial and economic activities</td>
<td>Shareholders, owners, controlling state bodies, investors, creditors, suppliers, customers</td>
</tr>
<tr>
<td>Belarus</td>
<td>Indicators of liquidity, solvency, sustainable development, profitability, efficiency of financial and economic activities</td>
<td>Shareholders, owners, controlling state bodies, investors, creditors, suppliers, customers</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>Indicators of liquidity, solvency, sustainable development, profitability.</td>
<td>Shareholders, owners, controlling state bodies, investors, creditors, suppliers, customers</td>
</tr>
<tr>
<td>Great Britain</td>
<td>ROM, ROFA, ROS, ROL, BER, ROA, ROE, ROIC, ROCE, ROTA, ROBA, RONA, OPR, NSAL, GM, EBIT, SAL, NINC, VCOST</td>
<td>Shareholders, owners, controlling state bodies, investors, creditors, suppliers, customers</td>
</tr>
<tr>
<td>China</td>
<td>ROM, ROFA, ROS, ROL, BER, ROA, ROE, ROIC, ROCE, ROTA, ROBA, RONA, OPR, NSAL, GM, EBIT, SAL, NINC, VCOST</td>
<td>Shareholders, owners, controlling state bodies, investors, creditors, suppliers, customers</td>
</tr>
<tr>
<td>France</td>
<td>ROM, ROFA, ROS, ROL, BER, ROA, ROE, ROIC, ROCE, ROTA, ROBA, RONA, OPR, NSAL, GM, EBIT, SAL, NINC, VCOST</td>
<td>Shareholders, owners, controlling state bodies, investors, creditors, suppliers, customers</td>
</tr>
</tbody>
</table>

Source: Compiled by the authors

The analysis of table 1 allows concluding that the interests of external and internal users of reporting in various countries are limited mainly to information on investment attractiveness, sustainable development, efficiency and profitability of the economic entity.
V. V. Berdnikov (2012) notes that “in addition to traditional indicators (business activity, asset coverage ratio, cash flow profitability, discounted payback period and added value), in selecting and subsequent monitoring of the investment projects implementation it is necessary to use indicators assessing the project’s risk potential for investors and future benefits from participation in the company’s project:

- investment indicators (NPV; IRR; MIRR);
- NPV, IRR, and MIRR investment indicators adjusted to the value of options;
- growth indicators (sales revenue; sales profit; asset value);
- performance indicators (gross margin; EBITDA return on assets; return on invested capital (ROIC));
- solvency ratios (interest coverage ratio, TIE; EBITDA/TD ratio);
- cost indicator (MVA value added);
- risk indicators (cash flow volatility δ2(DCF);
- risk/return indicators (VaR/NPV; NPV/volatility; RAROC (return on assets adjusted for risk));
- specialized option pricing indicators with the probability of each option – Po.

Their selection is customized to each option type based on simulation” (Berdnikov, 2012).

Even though some companies develop innovative approaches to strengthening the accounting for various types of capital, investors demand more objective and unambiguous data. Therefore, disclosure of non-financial indicators helps to establish a firmer relationship with investors. Given the absence of generally accepted models for assessing and measuring the effectiveness of information in integrated corporate reporting, it seems important to define the suggested criteria and indicators for integrated reporting.

The authors believe that a reliable assessment of the company’s ability to create added value involves considering four groups of criteria that need to be reflected in corporate integrated reporting. These criteria ensure a reliable objective assessment of the company’s ability to create added value with minimal costs:

- integrated value-creating structure (value chain);
- management and strategy (internal processes);
- intellectual capital management (innovation and knowledge);
- competitiveness and best practices.

In this context, key performance indicators (KPIs) are characterized as an important element of integrated corporate reporting. They contribute to a comprehensive assessment of financial and non-financial factors affecting business performance. While managers and financial analysts have long used key performance indicators, their presentation in the corporate integrated reporting allows other categories of stakeholders to widely use their possibilities. In this context, key performance indicators (KPIs) are characterized as an important element of integrated corporate reporting. At the initial stage, it is necessary to determine the strategic goals of the company, considering both material and non-material aspects, financial and non-financial criteria. Strategic goals must relate to the expectations of each category of information users.

An integrated report should indicate the quality of the company’s relations with stakeholders; that is, how and to what extent, the organization understands, recognizes and responds to their legal needs and information requests.

In fact, understanding the needs of external users of the reporting information is crucial not only to ensure their effective capital participation but also to correctly determine the overall business performance. In the absence of understanding with stakeholders, the company management may decide that they determined the value correctly which is far from reality. To prevent this, it is necessary to establish a direct dialogue between the parties to ensure maximum trust and interaction. Once specified the strategic goals should be adjusted.

Identifying the expected result for each action allows managers to achieve specific goals and planned results. An
integrated report should explain the revenue estimation, i.e. KPIs allow quantifying the ability of management to achieve strategic goals. While the leading indicators presented independently of value-added strategies and processes can complicate business reporting, a comprehensive set of indicators related to the strategy and the supported context will be a useful way to improve the business model.

KPIs should cover short-term, medium-term and long-term periods, including differentiated forecasts and targets. A comparison of the calculated data with actual performance and demonstration of the forecast management accuracy is of great importance to shareholders. Such comparison allows converting elements of integrated corporate reporting into revenue forecasts and management effectiveness, which, as a rule, are considered important for making investment decisions in the financial markets.

Accurate forecasts are an effective element of business success, as they provide a certain guarantee for investors. At the same time, investors themselves often do not have professional skills in checking managers’ forecasts, identifying errors in forward-looking calculations and results when analyzing integrated corporate reporting, etc. This results in a noticeable decrease in information stability in the financial market and affects the quality and completeness of the data presented.

To be useful, key performance indicators must have some important characteristics. First, they can be incorporated into performance measurement systems designed for internal purposes. According to international rules, the reporting package should clearly distinguish between external information and information communicated to senior management for decision-making purposes (Arniati et al., 2019; Vokshi, 2018; Goryushkina et al., 2019; Kolupaev et al., 2019). This means that most of the information used by managers to conduct business and evaluate the company’s achievements coincide with the requirements of investors and other interested parties in decision-making.

Secondly, key performance indicators should be clear and understandable. Thus, integrated corporate reporting will be able to provide any information that allows stakeholders to clearly understand each performance indicator. Therefore, it is necessary to provide for the following actions for each key indicator: defining the content and calculation methodology, determining the purpose and justifying it to be the “key” and source of initial data and any assumptions.

Third, key performance indicators for certain time limits must be comparable between different organizations (at least within the same industry). Such comparability is provided at two different levels:

1) intercompany comparability;
2) comparability over a certain period.

The combination of the above groups of elements allows developing a working structure for an objective assessment model of the company’s ability to create added value based on balanced indicators of business efficiency and sustainability (Figure 1).
While the economic entities can adopt this framework to manage goals and determine strategies and behaviors, investors and other interested parties will be able to assess the quality of management and the company’s ability to create value.

Each group of criteria should be analyzed in three perspectives: economic, environmental and social. This provides the necessary integration of financial and non-financial information. Moreover, each aspect must be evaluated through various forms of capital (human, social, natural, intellectual, industrial and financial). At the same time, maximizing opportunities and minimizing risks ensure competitive business advantages. Therefore, for each of the used capitals, one must consider the main risks and opportunities.

**Integrated value creation structure (value chain).** The main focus is on the creation of economic, social and environmental value chain, as well as the assessment of its individual links such as “Consumers and custom-
ers” and “Supply and logistics”. This allows understanding the basics of business development, the principles of added value distribution; the opportunities for expanding cooperation within the value chain, as well as for protecting and strengthening relationships with customers and suppliers; the potential to reduce adverse environmental impacts through the value chain; the opportunities to contribute to the company development in specific geographical areas (districts, areas of low social level, developing countries) or with special social significance, etc.

Consumers and customers. The supply of products and services complying with customer requirements is a key aspect in competitive markets. Thus, determining the most appropriate attribute value from a client’s perspective becomes essential. Subsequently, in terms of parameters and key performance indicators they can be considered as the leading indicators of a company’s ability to create value by increasing its capital through attracting customers; by providing products and services meeting customer expectations; by achieving an acceptable level of customer profitability; by controlling the risk of non-fulfillment of the customer’s financial obligations; by creating and protecting corporate brand; by establishing closer and synergetic relationships with customers, etc.

Supply and logistics. Reliable supply is an important factor in competitive advantage and sustainable performance. This aspect is indicative of the company’s performance; the cost of the procurement process in terms of the total cost of ownership, which, in addition to the cost of buying materials, involves paying for expenditure activities (issuing orders, receiving goods, inspection of goods, etc.), maintaining inventory (physical space, cost of capital, inspection, etc.) and other qualitative aspects (such as waste, alteration, return of the goods); stability of relations with suppliers, etc.

Management and strategy (internal processes). When constructing the KPI system for this criterion group, it is possible to identify two objectives. The first objective relates to the assessment of internal processes in terms of their effectiveness and affects various forms of capital available to the organization. In this case, the efficiency of internal processes can be determined by assessing:

- performance of internal processes;
- transaction costs;
- environmental impacts of the technologies used, in terms of pollution, energy consumption, emissions, recycling, etc.;
- possibility of creating new jobs;
- compliance with legislative and regulatory requirements related to life safety, etc.

The second objective is to evaluate the content of the cost of company performance. The leading performance indicators associated with this aspect may meet the following criteria:

- setting the maximum allowable amount and value of unsuitable waste;
- waste reduction options;
- the possibility of reducing fines and litigation costs.

Intellectual capital management (innovation and knowledge). Innovation and knowledge are the core values of any organization. Particular attention should be paid to this aspect from the point of identifying useful elements for assessing the current and future competitive advantages of the company and increasing the business model sustainability.

The leading indicators can measure the innovative potential of a company in terms of the following criteria:

- new products/services developed during the reporting period;
- new technologies/processes/materials introduced in the reporting period;
- company’s ability to protect innovations through patents and trademarks;
- innovation process efficiency;
- efforts aimed at implementing innovations (investments, expenses, etc.), etc.
This aspect also relates to the management of knowledge and human resources and determining their impact on employee satisfaction and productivity, their loyalty, increasing motivation, retaining experienced personnel and attracting highly qualified specialists, providing opportunities for staff development, organizational climate, safety in the workplace, respect for human rights and equal opportunities, etc.

**Competitors and best practices.** This aspect is designed to monitor competitors and their performance and allows for a comparative analysis of business processes, thereby achieving intercompany comparability.

Company performance can be better measured compared with the economic, environmental and social results of specific competitors or industry as a whole. Accordingly, the leading indicators in this group of criteria should emphasize the strengths and weaknesses of the business:

- profitability and growth of comparable competitor groups;
- various cost structures reflecting alternative process configurations, technologies, customer goals, etc.;
- alternative strategies and their social and environmental impact.

**Discussion and conclusion**

The preparation of integrated reporting is an important step towards the implementation of major changes, both in the reporting organizations themselves and in their business environment. Such changes affect the strategically important issues, particularly related to the efficiency of corporate objectives implementation and the formation of value chains.

The research allows distinguishing four criteria aspects of value creation: an integrated structure of value creation (value chain); management and strategy (internal processes); intellectual capital management (innovation and knowledge); competitiveness and best practices.

Accordingly, the authors identify four criteria characteristics in an integrated system for assessing business performance, based on which they recommend assessing an organization’s capacity to create value. It is these four characteristics that allow providing a reliable objective assessment of the company’s ability to create added value with minimal costs. Each criteria group should be considered from three perspectives: economic, environmental and social, which provides the necessary integration of financial and non-financial information. Moreover, each aspect of the model must be considered in relation to various forms of capital (human, social, natural, intellectual, production and financial). The analysis of business performance allows determining business advantages of the company, developing measures for decision-making on maximizing opportunities and minimizing risks. Thus, for each of the capitals used, it is necessary to consider the key risks and opportunities.

The authors’ assessment model allows determining the business advantages for the company and areas of maximizing opportunities and minimizing risks for each of the used capital, reducing the existing information gap between financial and non-financial information, and increasing business transparency.

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