Methods of forming a balance in the integrated reporting of economic entities

Larisa Gerasimova

1Moscow State University of Civil Engineering (National Research University) (MGSU), 26, Yaroslavskoye sh., 129337, Moscow, Russia

E-mail: 22969@mail.ru

Abstract. The article proposes a specially designed balance sheet for presenting information to owners and shareholders on the amount of capital used in the formation of integrated reporting organizations of the metallurgical industry based on structured accounting data on economic, social and environmental projects and programs in the direction of sustainability and development.

1. Introduction
The need to bridge the gap in reporting between developed European countries and the United States, between the metallurgical industry organizations in the private sector, the development of new approaches to management information systems, and the increased role of metallurgical industry organizations in the country's economy led to the development of an integrated reporting concept in these organizations.

The goal of developing integrated reporting in the metallurgical industry organizations is to increase the level of information transparency:
- as a mechanism for monitoring the implementation of concept of sustainable development by organizations of the metallurgical industry;
- as an information support tool for the implementation of state functions;
- as a mechanism for reducing the information asymmetry inherent in organizations of the metallurgical industry, leading to the emergence of agency relations and inefficient distribution and use of resources;
- to demonstrate the social responsibility of metallurgical industry organizations to owners, shareholders;
- for a better understanding by the founders of various types of resources available to the company in order to assist in their better management;
- as a mechanism for the formation of a new social culture.

One of the major problems in developing the concept of compiling integrated reporting for the metallurgical industry organizations is determining the range of reporting entities to whom the concept is addressed.

2. Methods, materials
The dialectical method, which is proposed as a general approach to the knowledge of subject in question, serves as the methodological basis. As a result of this study, the scientific apparatus of
management accounting, standard methods of analysis and evaluation of various data were applied. General scientific methods of knowledge were also used, such as: logical generalization, systems approach, economic and legal analysis, and various hypotheses.

3. Results
The International Standard for Integrated Reporting to the metallurgical industry organizations is recommended to reflect six types of capital: financial, industrial, intellectual, human, social, reputational and natural. Consequently, the format of reporting information on the size and modifications of capital used is important. In addition to indicating the need for detailed information on the size and modifications of various types of capital, the International Standard doesn’t regulate how to structure the reporting information.

Meanwhile, this organizational and methodological issue is important to ensure a wide range of interested users with concentrated information on the areas of economic, environmental and social development of company [1; 2].

The purpose of study is to determine the appropriate grouping of capital information in the integrated reporting of metallurgical industry organizations.

For the formation of integrated reporting, it is advisable to group resources with an emphasis on sustainability and development in accordance with strategic objectives (Figure 1).

| Assets in financial reporting | Assets in integrated reporting |
|-----------------------------|--------------------------------|
| 1. Fixed assets             | 1. Resilience resources (supporting competitiveness) |
| 2. Current assets – total, including: | 2. Development / degradation resources (+ / -) - total, including: |
| 2.1. Reserves               | 2.1. Resources to meet the needs of population products, works and services of domestic production |
| 2.2. Accounts receivable    | 2.2. Resources to improve the organization’s industrial competitiveness |
| 2.3. Funds and their equivalents | 2.3. Resources for deep processing of raw materials |
| Total assets                | 2.4. Resources for improving, restoring and increasing the productivity of land and other natural resources used in production |
|                             | 2.5. Resources for recycling and ecosystem restoration |
|                             | 2.6. Resources for sustainable development of territories and raising the standard of living of the population |
|                             | 2.7. Degradation resources |
|                             | Total resources |

Figure 1. Proposed regrouping of resources in the asset balance

Then the selected values will determine the system of semantic axes of activity of the economic subject; they can be divided into intellectual, industrial, biological, environmental, social, financial values by economic activity in the aspects of sustainability, development (acceptance of opportunities) or degradation (threat perception), which requires appropriate presentation of information on significant projects and programs that affect the economic, environmental and social performance of activities, identification of opportunities provided and protection from threats of risks in value increment.
To recognize the various elements of reporting they need to be included in the reporting forms. The balance sheet as a form of reporting organizations traditionally plays the role of focusing users on data on resources and sources of their formation, the capital of economic entity [8; 9; 12].

Therefore, the formation of balance in the integrated reporting organization will be able to provide a wide circle of interested users with a sufficient amount of information in a concentrated form about the resources in the grouping of strategic goals of activity and the sources of their formation (Table 1).

**Table 1. Proposed balance structure in the integrated reporting.**

| Asset                                                                 | Liabilities                                                                 |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------|
| **I. Resilience resources - total, including:**                      | I. Commitments and interactions on economic projects and programs – total, including: |
| 1.1. Industrial-production, biological and natural and environmental resources - total, including: | Calculations and interactions with suppliers of financial, industrial, production, biological, intellectual and human capital |
| - buildings, structures, machinery, equipment, etc.;                |                                                                             |
| - biological assets;                                                |                                                                             |
| - land assets                                                       |                                                                             |
| 1.2. Intellectual and human resources                              | Intellectual and human resources                                            |
| 1.3. Financial resources                                            | Financial capital                                                           |
| 1.4. Resources in social sphere                                     | Industrial and production capital                                           |
| 1.5. Resources in natural and environmental sphere                  | Biological capital                                                          |
| **II. Resources of innovative development / degradation – total, including:** | II. Commitments and interactions on social projects and programs – total, including: |
| 2.1. Resources to meet the needs of population products, works and services of domestic production | Calculations with the budget for social interactions - total, including:       |
| 2.2. Resources to improve the organization’s production competitiveness | Payments for taxes and fees                                                 |
| 2.3. Resources for deep processing of raw materials                 | Settlements with other counterparties on social interactions                 |
| 2.4. Resources for improving, restoring and increasing the productivity of land and other natural resources used in agricultural production | Social capital                                                              |
| 2.5. Resources for recycling and ecosystem restoration             | III. Commitments and interactions on environmental projects and programs – total, including: |
| 2.6. Resources for sustainable development of territories and raising the standard of living of the population | Calculations with the budget for environmental interactions                 |
| 2.7. Resources of degradation                                       | Calculations with counterparties on environmental interactions              |
| **III. Identified risks**                                           |                                                                             |
| **Balance**                                                        | IV. Obligations and risk diversification interactions – total, including:    |
| **Balance**                                                        | Accepted business development opportunities                                  |

Liabilities of the balance of organization’s integrated reporting include commitments and interactions that help organizations in their pursuit of sustainable development. Financial capital includes funds of debt and equity financing, grants and funds from production and financial activities that the organization has [8].

Intellectual capital is the competence and loyalty of employees of organization, their abilities and experience, ethical standards and motivation adopted in the organization, that is, incentives that
encourage employees of organization to active productive work. The notion of human capital includes a set of investments in a person (expenses on education, professional skills, consumer spending, medical care, culture, food, clothing, housing). Therefore, it is expedient to consider the listed investments of organizations not as expenses of the current period, but to capitalize.

The growth of qualifications and education of employees of organizations have always been, and for now they remain necessary prerequisite for the growth of production efficiency and labor productivity. If in technological matters organizations can keep up with the times, constantly increasing and modernizing industrial capital, the discrepancy between the speed with which knowledge is accumulated in the modern world and the rigidity of workers’ competences once obtained can deprive an organization of competitive advantages. Human capital is the main factor in the development of industrial economy, at the peak of development of which a theory was proposed that substantiated the concept of human capital [6].

For our part, we note that considering a person as an integral part of an organization’s capital is acceptable in theories of economic growth, which aim at production for the sake of production no matter what. With the emergence of market, at the unsaturated and partially saturated stages of market development, economic theories considered human physical abilities to be the basis for the production of goods (works, services), and with the development of machine production, the consumer attitude to labor resources and the feeling that any qualified work could be done using machines. In the financial statements of organizations in addition to indicators of labor productivity, users were not interested in other characteristics of organization’s employees.

But for organizations that have the intention to be united (integrated) with society, it is advisable to demonstrate a departure from attitudes towards a person as a production unit and a transition to a policy of interactions between people according to the same values. And, since any activity is aimed at meeting those or other human needs, we can talk about intellectual and human capital.

The quality of human life is put at the forefront in the concept of sustainable economic development [4; 5] and therefore it’s necessary to take into account not man for production, but production for man. The key asset of XXI century is the knowledge of people, the organization’s intellectual property, intangible assets at the disposal of organization.

They can include patents, licenses, brand and reputation of organization, know-how and other implied knowledge, systems, procedures, protocols. These resources have come to the fore both for organizations and for the state, the degree of development of which is largely dependent on the results of activities of economic entities.

For a long time, investing in a person was considered a costly, unproductive factor. The impetus to the recognition of intellectual and human capital as the main productive and social factor in the development of modern economy was the growth statistics of economies of developed countries of the world, which exceeded calculations based on the consideration of classical growth factors.

Social capital is the value of alliances with business partners (buyers, suppliers, representatives of local communities and trade unions, legislative and regulatory bodies and individuals) interacting with the reporting organization. Aware of the social responsibility of business in front of society, organizations pay social insurance contributions, as well as provide support to health care facilities, science, culture and sports in the regions of presence.

Natural and environmental capital includes values in renewable and non-renewable natural environmental resources (air, water, land, minerals, forests, biodiversity, ecosystem well-being) as part of a world of particles and sub-particles that are dependent on each other as opposed to the atomistic approach industrial society.

Construction and maintenance of gas dusting plants, the introduction of low-waste and waste-free production, the use of water treatment plants, recycling of production waste, operation of anti-erosion, anti-mud facilities, terracing of steep slopes, land reclamation, improvement of unproductive farmland, reproduction and protection of fish stocks, wild animals, birds and wild animals, wild birds and wild plants, and low-productive agricultural lands, reproduction and protection plants contribute to the protection of atmosphere, soil and water [11].
Industrial and production capital - buildings, structures, equipment available to the organization for production and business activities, investments in which are directed to the creation and reproduction of fixed assets (new construction, expansion, reconstruction and modernization of facilities that lead to increase in the value of objects).

Biological capital - an important category for agricultural producers, includes land, farm animals, agricultural crops. Separately, in the balance of integrated reporting, biological capital is appropriate to distinguish between land, animals and plants in general as part of the natural environment with which organizations of all sectors of economy interact from lands, animals and plants for agricultural purposes intended for agricultural production.

Grouping resources, capital in accordance with the strategic objectives in the balance of integrated reporting allows you to show the organization following the values of development.

4. Conclusion
By forming a balance in integrated reporting, an organization will be able to provide a wide circle of interested users with a sufficient amount of information about the size of capital types used in a concentrated form. It will reflect the necessary elements for strategic areas of development, commitments and interactions for projects and programs that affect economic, environmental and social performance, modification of capital, identification of opportunities provided and protection from threats of risks based on structured accounting information.

Setting the goal of development of reporting - the introduction of integrated reporting - will allow the metallurgical industry organizations to develop both a management accounting system and a general-purpose financial reporting information system in a specific direction - towards integrated reporting, allowing for a more holistic view of all aspects of their activities.

The introduction of integrated reporting in the organizations of metallurgical industry will contribute to increasing the transparency of finances, efficient use of funds, accountability of these organizations, as well as improving Russia's rating in the global competitiveness index.

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