ANALYSIS AND IDENTIFICATION OF JOINT PERFORMANCE MEASUREMENT INDICATORS: SOCIAL AND CORPORATE GOVERNANCE ISSUES

Z. Chvátalová, I. Šimberová

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Abstract


This article presents selected initial results from the project ‘Construction of Methods for Multifactorial Assessment of Company Complex Performance in Selected Sectors’ carried out by a research team from the Faculty of Business and Management of Brno University Technology and Faculty of Business and Economics of Mendel University in Brno in 2011. The research focus is on the identification of joint areas of influence of social and corporate governance indicators. The authors consider such an approach is essential for the construction of tools for measuring corporate performance in selected sectors of CZ-NACE. It is argued that indicators should meet certain criteria such as relevance, accuracy, representativeness, measurability, usability, transparency, etc. The results presented in this article are from the first phase of the project which forms the basis for further investigation within subsequent phases of the project.

social indicators, corporate governance indicators, key performance indicators, jointed indicators, research, ISO 26000, IFAC, GRI

The consequences of contemporary trends in the Czech Republic and internationally, for example environmental degradation, complex economic problems, political instability and frequent social changes create the need for increasingly complex operational solutions of problems. It is therefore necessary to create new sophisticated methods, to use modern information and technological means and also access information through the innovative use of computer networks, for instance. Corporate performance in economic activities can be seen in the context of an integrated achievement of environmental, social and corporate governance (ESG) performance measures. The sustainability performance is, however, often understood as performance in environmental, social and economic/financial terms, thus excluding governance performance (Schaltegger & Wagner, 2006; Hřebíček et al., 2012). The research team deals with this problem in the project No. P403/11/2085 Construction of Methods for Multifactorial Assessment of Company Complex Performance in Selected Sectors funded by the Czech Science Foundation (GACR) which commenced in January 2011. The research will be conducted over a period of three years. During the project investigation1 in the first year (2011) the main emphasis was on the initial analysis of the problem. It was mainly concerned with surveying the relevant literature and deriving potential measures. Subsequently, appropriate economic activities of CZ-NACE were chosen with regard to sustainability

1 http://www.fbm.vutbr.cz/gacr/cs/project-solution
reporting. In this initial phase the research team focused on manufacturing and construction industries, especially on companies with ISO 9000, ISO 14000 and EMAS certificates. These companies are appropriate subjects for evaluating the performance of the business/company (their size and quality criteria). We conducted a questionnaire survey to obtain data from selected organizations. Current research indicates that the requirements of the environment is now at the center of company performance monitoring and therefore it is necessary to establish key indicators of Corporate Governance (Kocmanová, Němeček, 2009; Kocmanová, Hornugová, Klimková, 2010; Hřebíček, Soukopová, Stencil, Trenz, 2011; Chvátalová, Kocmanová, Dočekalová, 2011; Kocmanová, Dočekalová, Němeček, Šimberová, 2011; Kocmanová, Dočekalová, 2012). Such indicators would be components of ESG key performance indicators and would incorporate aspects of the global environmental, social and governance (Corporate Governance) issues that investors are considering in the context of corporate behavior. The determination of an appropriate set of indicators (environmental, economic, social and corporate governance) with respect to the sustainable development is the basis of the project.

MATERIALS AND METHODS

Outputs of the first phase (2011) became the basis for the project investigation in the second phase (2012), when the main goal is specified by two project's partial targets:

- Specification of possibilities for overall company performance measurements in economic activities chosen based on previous analyses of findings.
- Construction of methods of measurement of multifactor complex overall company performance in chosen economic activities through advanced quantitative and qualitative methods.

Therefore the methodology used in this paper was based mainly on a critical review of the literature, a combination of content and comparative analyzes and syntheses focused on corporate governance and social indicators to determine the design of methods for multifactorial assessment of company performance in selected sectors and selected companies. We envisage that for the final construction of multiple-criteria methods, advanced quantitative methods and soft computing will be utilized.

Conceptual principles

Usually, environmental, economical, and social corporate data and information are monitored, codified, registered and aggregated into Key Performance Indicators (KPIs) (Bassen, Kovacs, 2008), (DVFA, 2008; Garz, Schnella, Frank, 2010; Hřebíček, Soukopová, Kutová, 2010; Hřebíček et al., 2011). This fact indirectly indicates that in the case of such needs, organizations are able to aggregate these data and incorporate them into corporate sustainability or environmental reports, (Carroll, 1999), (Ritschelová et al., 2009), (Hodinka et al., 2012), (Hřebíček, 2012). Many organizations, initiatives, projects, public forums and conferences worldwide deal with the appropriate selection and development of a set of KPIs for ESG performance, their measurement, evaluation and meaningful applications in relation to corporate performance, and especially in sustainable development. In our research, we have examined a number of theoretical approaches, reports, statistics and concepts of many of sources and organizations and we also address the outputs of our preliminary research. It is suggested that the social area and corporate governance play a significant role, for example a discussion at RIO 20. The indication of social indicators is complex. On the one hand, the indicator base construction should respect globalization trends; it should have a transnational comparative ability and also reflect national specificities. Very broad-spectrum factors in context should therefore be derived. It depends on the target, the possibilities of their monitoring and evaluation, interpretation, etc. Selection of indicators can change over time because the priorities of different areas of social reality can themselves change. Social monitoring also depends on whether it serves the national and transnational whole. Similarly, it is valid for corporate governance indicators. This was a very important impetus for the consideration of joint operation indicators of different areas. Due to the construction of measurement methods construction we analyzed several sources.

Briefly, below we choose:

- The European Union (EU) in the context of globalization tends to strengthen its competitiveness and be economically prosperous. In relation to it the EU deals with the European social monitoring (the setting of initial concepts).

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2 http://www.fbm.vutbr.cz/gacr/project-aims
3 According to http://www.un.org/en/sustainablefuture/about.shtml: “Rio 20” is the short name for the United Nations Conference on Sustainable Development which took place in Rio de Janeiro, Brazil in June 2012 – twenty years after the landmark 1992 Earth Summit in Rio. At the Rio 20 Conference, world leaders, along with thousands of participants from the private sector, NGOs and other groups, came together to shape how we can reduce poverty, advance social equity and ensure environmental protection on an ever more crowded planet. The official discussions focused on two main themes: how to build a green economy to achieve sustainable development and lift people out of poverty; and how to improve international coordination for sustainable development like United Nations.
Analysis and identification of joint performance measurement indicators: social and corporate governance 129

- Eurostat⁴ (the statistical office of the European Union) provides high quality statistics on Europe, etc.
- Corporate social responsibility (CSR) – European Commission, in a so-called Green Paper, issued in 2001, defines CSR as voluntary integration of social and environmental concerns into entrepreneurial activities of firms, and that in cooperation with interested parties of enterprise or stakeholders.
- Czech Statistical Office⁵ (CZSO) in the conceptualization and measurement of sustainable development (2007) CZSO presents a report integrated approach to monitoring and analysis of sustainable development and a set of themes for the set of social indicators which must meet the criteria of sustainable development such as: health and quality of life, social capital, human capital, legislation, activities of NGOs, labor market, social cohesion, unemployment, poverty, balance of social and economic development, inter-generational differences, etc. (more http://www.czso.cz/csu/2007edicniplan.nsf/s/2007-1).
- Organization for Economic Co-operation and Development⁶ (OECD) promotes policies that will improve the economic and social well-being of people around the world. The concept applied in the OECD set of indicators separates into two different categories: indicators of resources (environmental assets, economic assets, human assets) and indicators of the standard of living.
- The concept of the World Bank⁷ is aimed at assessing the wealth of nations, respectively the measurement of capital in the 21st century in the context of sustainable development.

The following three sources were also chosen.
- The Global Reporting Initiative⁸ (GRI) has pioneered and developed a comprehensive Sustainability Reporting Framework that is widely used around the world. The framework enables organizations to measure and report their economic, environmental, social and governance performance – the four key areas of sustainability.
- International Federation of Accountants⁹ (IFAC) is the global organization for the accountancy profession dedicated to serving the public interest by strengthening the profession and contributing to the development of strong international economies. IFAC works approximately with two and a half million accountants in public practice, education, government service, industry, and commerce.
- International Organization for Standardization¹⁰ (ISO) is the world’s largest developer of voluntary International Standards. International Standards give state of the art specifications for products, services and good practice, helping to make industry more efficient and effective ISO 26000¹¹ is a guide that sets out an outline on Social Responsibility (SR). This is a type of “standard guide” essentially different from ISO standards since it contains no requirements and therefore cannot be basis for certification, measurement or conformity assessment.

Social

Nowadays, the integration of social performance becomes an issue of corporate performance and sustainable development. Approaches to defining appropriate social indicators are difficult, ambiguous and relevant areas of interests are very wide. It depends on the target and possibilities of monitoring, evaluation and measurement, interpretation, etc. The choice of indicators may change over time and in different demographic conditions and when the priorities of the various areas of social reality may be different. Social monitoring also depends on the fact whether it may be relevant to national and transnational units. A basic set of social factors was created with respect to the selected sectors and suitable companies and to the fulfillment of the main objectives of the study. For reasons of clarity and efficiency and exclusion of joint indicators in this post we have preserved the basic classification according to the GRI classification (areas: Society, Product Responsibility, Labor Practices & Decent Work, Human Rights).

The results of the current monitoring of the social indicators can see in the Table I. Two last columns to the right we have presented the ISO26000 and IFAC data such that some of the indicators correspond to the GRI indicators. ISO 26000 addresses seven core subjects: Organizational Governance; Human Rights; Labor Practices; The Environment; Fair Operating Practices, Consumer Issues; Community Involvement and Development. From IFAC we used these core subjects: Workplace Health and Safety; Human Capital Development: Training and Qualification; Human Capital Management: Staff Turnover, Maturity and Diversity, Absenteeism; Governance. Next comments (Table I) in Discussion.

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⁴ http://epp.eurostat.ec.europa.eu/portal/page/portal/about_eurostat/introduction
⁸ https://www.globalreporting.org/information/about-gri/what-is-GRI/Pages/default.aspx
⁹ http://www.ifac.org/about-ifac
¹⁰ http://www.iso.org/iso/about.htm
¹¹ http://blog.boreal-is.com/?p=676
<table>
<thead>
<tr>
<th>Domain</th>
<th>Title (Aspect)</th>
<th>No.GRI</th>
<th>Description GRI</th>
<th>ISO 26000</th>
<th>IFAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Society</td>
<td>Community</td>
<td>SO 1</td>
<td>Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.</td>
<td>Community Involvement and Development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Corruption</td>
<td>SO 2</td>
<td>Percentage and total number of business units analyzed for risks related to corruption.</td>
<td>Fair Operating Practices</td>
<td>Governance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SO 3</td>
<td>Percentage of employees trained in organization's anti-corruption policies and procedures.</td>
<td>Fair Operating Practices</td>
<td>Governance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SO 4</td>
<td>Actions taken in response to incidents of corruption.</td>
<td>Fair Operating Practices</td>
<td>Governance</td>
</tr>
<tr>
<td></td>
<td>Public Policy</td>
<td>SO 5</td>
<td>Public policy positions and participation in public policy development and lobbying.</td>
<td>Fair Operating Practices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anti-Competitive Behavior</td>
<td>SO 7</td>
<td>Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.</td>
<td>Fair Operating Practices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compliance</td>
<td>SO 8</td>
<td>Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.</td>
<td>Fair Operating Practices</td>
<td></td>
</tr>
<tr>
<td>Customer Health and Safety</td>
<td>PR 1</td>
<td>Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.</td>
<td>Consumer Issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PR 2</td>
<td>Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services, by type of outcomes.</td>
<td>Consumer Issues</td>
<td></td>
</tr>
<tr>
<td>Customer Privacy</td>
<td>PR 8</td>
<td>Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.</td>
<td>Consumer Issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compliance</td>
<td>PR 9</td>
<td></td>
<td>Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.</td>
<td>Fair Operating Practices</td>
<td></td>
</tr>
<tr>
<td>Domain</td>
<td>Title (Aspect) GRI</td>
<td>No.GRI</td>
<td>Description GRI</td>
<td>ISO 26 000</td>
<td>IFAC</td>
</tr>
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<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td>LA 1</td>
<td>Total workforce by employment type, employment contract, and region, broken down by gender.</td>
<td>Organizational Governance; Labor Practices</td>
<td>Human Capital, Management: Staff Turnover, Maturity and Diversity, Absenteeism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LA 2</td>
<td>Total number and rate of new employee hires and employee turnover by age group, gender, and region.</td>
<td></td>
<td>Human Capital, Management: Staff Turnover, Maturity and Diversity, Absenteeism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LA 3</td>
<td>Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation.</td>
<td>Community Involvement and Development</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LA 4</td>
<td>Percentage of employees covered by collective bargaining agreements.</td>
<td>Organizational Governance; Labor Practices</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>LA 5</td>
<td>Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.</td>
<td>Organizational Governance; Labor Practices</td>
<td></td>
</tr>
<tr>
<td>Labour/Management Relations Resource Depletion</td>
<td></td>
<td>LA 7</td>
<td>Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender.</td>
<td>Community Involvement and Development</td>
<td>Workplace Health and Safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LA 8</td>
<td>Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.</td>
<td>Labor Practices</td>
<td></td>
</tr>
<tr>
<td>Occupational Health and Safety</td>
<td></td>
<td>LA 10</td>
<td>Average hours of training per year per employee, by gender, and by employee category.</td>
<td>Labor Practices</td>
<td></td>
</tr>
<tr>
<td>Training and Education</td>
<td></td>
<td>LA 12</td>
<td>Percentage of employees receiving regular performance and career development reviews, by gender.</td>
<td>Labor Practices</td>
<td></td>
</tr>
<tr>
<td>Diversity and Equal Opportunity</td>
<td></td>
<td>LA 13</td>
<td>Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.</td>
<td>Organizational Governance; Labor Practices</td>
<td>Human Capital, Management: Staff Turnover, Maturity and Diversity, Absenteeism; Governance</td>
</tr>
<tr>
<td>Equal Remuneration for Women and Men</td>
<td></td>
<td>LA 14</td>
<td>Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.</td>
<td>Labor Practices</td>
<td></td>
</tr>
</tbody>
</table>
The issue of corporate governance (CG) has become an important measure of assessing the performance and competitiveness of business organizations. The field of corporate governance of companies is not only important for the functioning of the economy as a whole, but it touches all interested groups. Currently, the European Union addresses the issue of corporate governance and is governed by a set of principles and rules of corporate governance. It seems to be that good corporate governance should help companies to be sustainable. The rules of corporate governance are derived from both legislation and codes of practice according to the traditions of the relevant countries. Legal base for the corporate governance is created within the framework of following EU directives and rules (Code of the Criminal Responsibility, Code of the Business Activities on the Financial Markets, Commercial Law, Principles of Auditors, and Bank Law) and from others codices (Directive 2004/25/ES about offers undertaking), about the transparency of the listed corporation (Directive 2004/109/ES), right of shareholders (Directive 2007/36/ES), about market exploitation (Directive 2003/6/ES) and about the audit (Directive 2006/43/ES). The aim of these documents are the achievement of transparency of the remuneration and coordination of the internal aims and interests of the stakeholders (employers, managers and members of the Board) with the strategic aims of the corporation. The first four key documents, as specified by Kislingerová and Nový (2005), have their roots in the Great Britain. The last document, so-called OECD Principles, is the result of the effort to introduce an internationally recognized document without an explicitly defined field of action, which the individual states could join voluntarily. The basic documents include (Kislingerová and Nový, 2005): the Cadbury Report, the Greenbury Report, the Hampel Report and Combined Code, the Turnbull Report and the OECD Principles of Corporate Governance.

The establishment of corporate governance performance indicators was based on the empirical analysis of the Code of corporate governance of OECD (2004) and the Czech Republic (2004); also on the „Green Paper“ the EU corporate governance Framework (2011) and International Federation of Accountants (2012) Table II and on other sources, which were analyzed CA, CFA Institute, including discussion of theory (Letza, Sun, Kirkbride, 2004; Murphy, Topyan, 2005; Elkington, J., 2006; Schaltegger, Wagner 2006; Spitzek 2009; Baker, Anderson, 2010).

The results of the current monitoring of the indicators in the area of corporate governance are shown in Table II. In Table II, each indicator is presented with its source.
In presenting the results of the project thus far, the research team have created a set of four basic indicators (economic (briefly ECO), environmental (briefly ENVI), social (briefly SOC) and corporate governance (briefly CG)) by monitoring the theoretical and practical resources. For the purposes of this paper we have presented only SOC and CG.

The number of indicators is considered to be too high. In consequence, the model is too complex in...
Chvátalová, Z., Šimberová, I.

its current form and thus unusable. It is therefore necessary to integrate some of these indicators. We will subsequently assign appropriate weightings to composite indicators (on the basis of preliminary and secondary research). Of course, it should be carefully considered which indicators are together in other areas (ECO, ENVI, SOC, and CG). The inclusion of joint indicators in the designed method would increase their actual weight. Mathematically it can be demonstrated by using a Venn diagram for the four sets – here ECO, ENVI, SOC, CG (Figure 1):

The allocation of appropriate indicators in the subsets is complex. Some subsets may also be empty. We will determine relevant factors in a transparent way so that we can assign appropriate weight indicators. Advanced quantitative methods and soft computing will greatly help in this process. However, this is not the aim of this paper. First, we want to find joint effect of indicators in two areas. In this paper we have come to define a set of social and corporate governance indicators. Now we are looking for joint indicators in both areas and we want to exclude these. Graphically, we can express this situation using the Venn diagrams as follows (Figure 2):
We are at the beginning of this complex process and we do not yet know the possible common effect of indicators of the other two areas (ECO and ENVI), de facto we solve the following situation (Figure 3): Comment Table I and Table II. By detailed investigation we decided on the jointed effect of social and corporate governance indicators as follows (in Table I and Table II gray box):

- Corruption: Percentage and total number of business units analyzed for risks related to corruption, Percentage of employees trained in organization's anti-corruption policies and procedures, Actions taken in response to incidents of corruption.
- Diversity and Equal Opportunity and Equal Remuneration for Women and Men: Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity. Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.
- Ownership concentration: Concentration of ownership – right to vote per models, Percentage distribution of the ownership per various categories of the investors.
- Employment: Total workforce by employment type, employment contract, and region, broken down by gender. Total number and rate of new employee hires and employee turnover by age group, gender, and region. Percentage of employees covered by collective bargaining agreements.
- Conduct, litigation risk corruption: Records on the breaching of the regulations and extra costs, Corruption in comparison to the percentage of revenues in the region, Corruption - number of the analyzed business units, Right of vote equality.
- Members of the board: Number of members from the point of the professional competences, Percentage representation from the point of the international representation, Percentage representation of the members from the point of both sexes.

It can be seen that the greater number of joint indicators are related to corruption, discrimination, human rights, diversity, management and risk.

These findings will be further analyzed in detail in the next stage of the project.

SUMMARY

This article is focused on the identification of joint indicators of social and corporate governance. This eliminates the possibility of any double effects within the construction of methods for measuring corporate performance. First, the authors have presented the basic sets of selected social and corporate governance indicators. These sets of indicators form the basis (along with two other sets of economic and environmental indicators that are not the goal of this article) for the derivation of methods for the measurement of corporate performance. The design of this method is the main objective of the project No. P403/11/2085 Construction of Methods for Multifactorial Assessment of Company Complex Performance in Selected Sectors funded by GACR which commenced in January 2011. The research team from FBM BUT and FBE MENDELU are engaged in this project. In this paper, the authors have mapped various sources of information, reports and data to determine two basic sets of indicators. These sources incorporate national and transnational levels. The most used sources (with respect to many others): for the social indicators - GRI, ISO26.000 and IFAC and corporate governance – Corporate Governance and Management Code, IFAC. In terms of social indicators it is the largest number of factors, for example according to GRI classification they can be categorized into the following groups: Society, Labor practices & Decent work, Product responsibility and Human rights. In terms of corporate governance these concepts are ambiguous; they can be categorized into various groups: Management, Ownership concentration, Members of the board, Stakeholder effectiveness, stakeholder engagement, Conduct, corruption litigation risk). In the article social indicators (according to GRI) are also compared in the context of the ISO 26000 and IFAC concepts of social indicators. The graphical visualization of the philosophy of finding the joint effect of indicators is supported by Venn diagrams for four sets (mathematical structure). Corruption and diversity are issues in which exist in many joint social and corporate governance indicators. The authors propose to investigate the “double” effect of these indicators by designing their appropriate composition or exclusion, and assigning appropriate weights. It is envisaged that in the next stage of the project advanced quantitative methods, soft computing and suitable software will be utilized.
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[R]OECD Principles for Corporate Governance and Management (Corporate Governance), Ministry of Foreign Affairs).


Address
RNDr. Zuzana Chvátalová, Ph.D., Ústav informatiky, doc. PhDr. Iveta Šimberová, Ph.D., Ústav managementu, Vysoké učení technické v Brně, Kolejní 2906/4, 612 00 Brno, Česká republika, e-mail: chvatalova@ibm.vutbr.cz; simberova@ibm.vutbr.cz