

CONSTRUCTION OF CORPORATE SOCIAL PERFORMANCE INDICATORS FOR CZECH MANUFACTURING INDUSTRY

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Abstract

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This article aims to map out the level of social performance measurement of Czech companies, i.e. what social performance indicators companies monitor and what information they provide to their stakeholders and to construct alternative corporate social performance indicators. Based on an analysis of 24 corporate voluntary reports and results of an empirical research performed among 79 large companies operating in the manufacturing industry, it was found that companies partially monitor their social performance, but from the perspective of international standards (e.g. Global Reporting Initiative, International Federation of Accountants) it is still insufficient. Czech companies usually provide only absolute numbers which disguise real trends and do not allow year on year comparison or comparison with other companies. Czech companies should provide a comprehensive picture of their overall performance, they should not focus only on financial indicators based on accounting data, since it is known that the performance measurement based only on financial and economic performance does not lead to long-term success and sustainability of organizations. Companies should monitor more their impact on society within which they operate. Proposed corporate social performance indicators in a measurable and thus manageable way express social issues.

corporate social performance, key performance indicators, corporate performance, sustainability, processing industry, Czech Republic, empirical research

This paper was written as a part of a project solution GACR P403/11/2085 *Construction of Methods for Multifactorial Assessment of Company Complex Performance in Selected Sectors*. The aim of the project is to design methods for measuring complex corporate performance in selected sectors. Complex corporate performance consists of economic, environmental and social performance and Corporate Governance performance (see e.g. Hřebíček, Soukupová, 2008; Hřebíček, Soukupová, Štencl, Trenz, 2011, 2011a; Hřebíček, Popelka, Štencl, Trenz, 2012; Hřebíček, Hodinka, Motyčka, Popelka, Trenz, 2012; Hodinka, Štencl, Hřebíček, Trenz, 2012; Chvátalová, Kocmanová, Dočekalová, 2011; Kocmanová, Dočekalová, Němeček, Šimberová, 2011; Kocmanová, Dočekalová, 2011, 2012).

The first step in creating an alternative system for measuring corporate performance is to determine relevant key performance indicators (KPIs). The aim of this paper is to determine the KPIs for social area. Creating social KPIs is complicated, as they are often non-financial metrics (Ilinitich, Soderstrom, Thomas, 1998; Bassen, Kovács, 2008; Kruse, Lundbergh, 2010) and are criticized as too vague and general.

Many international institutions deal with integration of sustainability and social aspects into corporate performance evaluation, investors' decision making, etc. Organizations that are engaged in developing social KPIs are e.g. Global Reporting Initiative (GRI), International Federation of Accountants (IFAC), Society of Investment

Professionals in Germany (Deutsche Vereinigung für Finanzanalyse und Asset Management, DVFA), United Nations Conference on Trade and Development (UNCTAD) and European Academy of Business in Society (EABIS).

1 THEORETICAL APPROACH TO CORPORATE SOCIAL PERFORMANCE

Social performance is defined as the social impacts on stakeholders, as stakeholders are the source of expectations about what constitutes desirable and undesirable corporate performance (Wood, Jones, 1995; Spirig, 2006). Companies that manage their social performance achieve better financial performance and create more value for their shareholders. This happens, for example, by attracting and retaining committed employees and have more loyal customers. Incorporation of sustainability is the key to value creation for shareholders and other stakeholders in the long term (Eccles, Ioannou, Serafeim, 2012). Concept which emphasizes the integration of social responsibility into business is Corporate Social Responsibility or Sustainable Corporate Performance (Fauzi, Svensson, Rahman, 2010).

Relation of social and financial (economic) performance has been the subject of many empirical studies. However, result are ambiguous (see e.g. Tsoutsoura, 2004; Orlitzky, Schmidt, Rynes, 2008). Nevertheless, companies should focus on the management of social aspects of corporate performance. In a short time period, these activities may represent expenditures and investments without short-term return, which may affect a competitiveness of a company, but in the long-term can have a potentially positive impact on the financial and overall corporate performance (see e.g. Schaltegger, Wagner, 2006).

2 MATERIALS AND METHODS

To meet the objective of the paper, i.e. construction of relevant corporate social performance indicators following steps were taken:

- analysis of the approach of international organizations to social performance indicators design,
- analysis of voluntary reporting of Czech manufacturing companies,
- empirical research through questionnaire survey,
- knowledge synthesis and construction of social performance indicators.

The research was focused on manufacturing companies (C according to CZ-NACE) and it was because of that in this type of economic activities are social impacts significant and it is the traditional industrial sector creating one third of the gross domestic product of the Czech Republic.

Second step was to analyse voluntary corporate reporting. Selected sample included 24 companies

that publish voluntary reports (mostly corporate sustainability reports). Sample is described in Tab. I.

I: *Sample of analysed companies that publish voluntary reports*

Criterion	N	%
Size		
up to 250 employees (small and medium enterprises)	11	45.8
above 250 employees (large enterprises)	13	54.2
Sector (as consistent with CZ-NACE)		
C – Manufacturing	24	100.0
Legal form		
Joint-stock company	16	66.7
Limited company	8	33.3

After analysis of corporate voluntary reporting the research followed in empirical research. Data were obtained through questionnaire survey during the year 2011. This time the research was focused only on large manufacturing enterprises. Respondents were managers of companies (mostly CEOs). For scaling responses five-point Likert scale was used. Sample is described in Tab. II.

II: *Sample of companies included into questionnaire survey*

Criterion	N	%
Size		
above 250 employees (large enterprises))	79	100.0
Sector (as consistent with CZ-NACE)		
C – Manufacturing	79	100.0
Type of ownership		
Domestic entity	44	55.7
Foreign entity	35	44.3
Legal form		
Joint-stock company	41	51.9
Limited company	38	48.1

3 RESULTS AND DISCUSSION

3.1 Approaches of international organizations to corporate social performance measurement

Tab. III presents a comparison of approaches of international organizations in various areas of social performance. The analysis showed that the area of social performance is not clearly defined. Social area is mostly intertwined with Corporate Governance. This ambiguity is most evident on the issue of corruption. For the purposes of this paper, corruption is understood as an issue of Corporate Governance.

III: *Corporate social indicators*

	IFAC	DVFA	EABIS	UNCTAD	GRI
Health & safety of employees (e.g. injury rate, absence rate)	x	x	x	x	x
Staff turnover	x	x	x	x	x
Education and training	x	x	x	x	x
Labor relations	x			x	x
Equality	x	x	x	x	x
Human rights	x	x	x	x	x
Customer satisfaction			x		x
Corruption					x
Compliance		x	x	x	x
Community			x	x	x
Product responsibility		x			x

Source: IFAC, 2012; DVFA, 2007; Cranfield School of Management, 2009; UNCTAD, 2008, GRI, 2006, 2006a, 2006b, 2006c

3.2 Analysis of corporate voluntary reporting

The results of the analysis showed that companies (sample described in Tab. I):

- report mainly absolute indicators which hide real trends and make comparison (benchmarking) with other companies impossible,
- use so-called lagging indicators which express achieved state, thus reflecting the past, instead of leading indicators that predict the future and are crucial for the success of a company (see Kaplan, Norton, 1996),
- focus reports on employee care, health and safety at work and corporate philanthropy,
- some indicators recommended by GRI companies do not report at all, e.g. discrimination, product responsibility etc.

IV: *Corporate social performance indicators used in voluntary reporting of Czech manufacturing companies*

Social indicators	N	%
Total workforce	24	100.00
Total number of workforce accidents	20	83.33
Employee wages and benefits	20	83.33
Employee turnover	15	62.50
Donations	15	62.50
Total number of workforce fatalities	10	41.66
Expenditure on employee training	10	41.66
Average number of hours of employee training	9	37.50
Hours of volunteering	5	20.83
Health and safety of products	5	20.83
Other indicators	28	

3.3 Empirical research

To determine the corporate social performance indicators in the manufacturing industry, selected companies (sample described in Tab. II) were asked two questions. The first question was: "How do you adopt socially responsible behaviour?" In order

to strengthen the socially responsible behaviour companies do following activities:

- 80.8% of companies have defined corporate values and code of conduct,
- 77.2% of companies take care of feedback from customers and suppliers,
- 64.9% of companies provides financial support for public activities and projects,
- 59.0% of companies inform and train employees about corporate values and code of conduct,
- 57.0% of companies take account of unwritten employee rights,
- at 51.4% of companies there is a process that prevents discrimination at work,
- 33.8% of companies hold a dialog with a region,
- 32.5% of companies consult important issues with employees,
- 20.8% of companies encourage employees to participate in beneficial activities and projects.

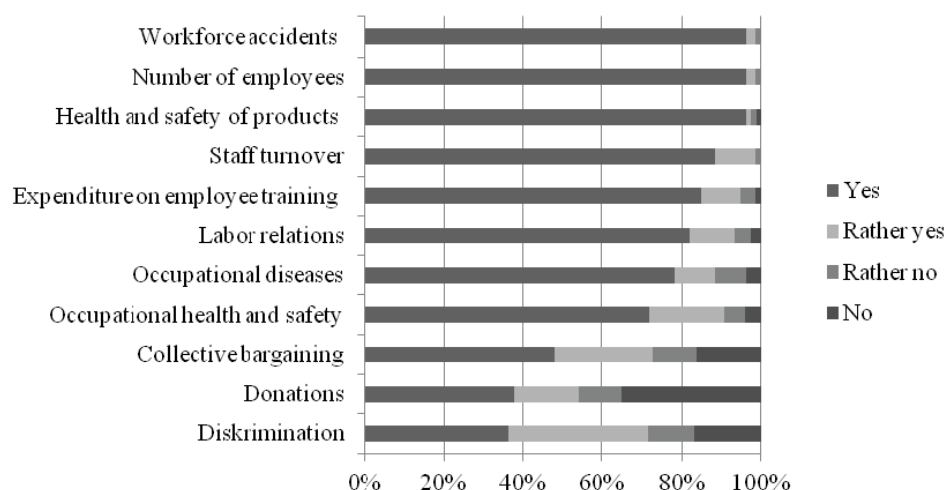
To determine which indicators manufacturing companies actually monitor, companies were asked: "Which social indicators are monitored?" Valid frequencies are presented in Fig. 1.

3.4 Construction of corporate social performance indicators

Based on the results of previous research following set of social indicators has been created:

- SI1 – Relations with community
- SI2 – Human rights
- SI3 – Equality and non-discrimination
- SI4 – Expenditure on employee training
- SI5 – Employee turnover
- SI6 – Collective bargaining
- SI7 – Labor relations
- SI8 – Workforce accidents
- SI9 – Health and safety of customers
- SI10 – Customer satisfaction.

Created basic set of indicators was presented to a group of seven experts from manufacturing companies in order to determine how these



1: Corporate social performance indicators monitored in the manufacturing industry (%)

V: Corporate Social Performance Indicators

Indicator	KPI	Unit	Calculation
SI1 - Relations with community	Number of complaints received from the community	number	total number of complaints received from the neighbouring community (by any means) for a given period (year)
	Donations	%	[total annual amount of donations/total annual gross value added] × 100
SI2 - Equality and non-discrimination	Discrimination rate	%	[number of discrimination cases in a given period (year)/average number of employees in a given period (year)] × 100
	Equal pay	%	[average wage of women/average wage of men] × 100
SI4 - Expenditure on employee training	Expenditure on education and training	%	[total annual expenditure on education and training/total annual gross value added] × 100
SI5 - Employee turnover	Employee turnover	%	[total number of employee separations in a given period (year)/average number of employees in a given period (year)] × 100
SI6 - Collective bargaining	Percentage of employees covered by collective bargaining agreement	%	[total number of employees covered by collective bargaining agreement in a given period (year)/average number of employees in a given period (year)] × 100
SI7 - Labor relations	Percentage of complaints relating to workplace relations	%	[number of complaints relating to the relations in the workplace (e.g. mobbing, bossing, bullying) in a given period (year)/average number of employees in a given period (year)] × 100
SI8 - Workforce accidents	Total injury rate	%	[number of injuries in a given period (year)/average number of employees in a given period (year)] × 100
	Injury rate–fatalities	%	[number of fatalities in a given period (year)/average number of employees in a given period (year)] × 100
	Occupational diseases	%	[number of reported occupational diseases in a given period (year)/average number of employees in a given period (year)] × 100
	Absence rate	%	[working time lost in a given period (year)/working time available in a given period (year)] × 100
SI9 - Health and safety of customers	Percentage of products and services, which are during their life cycle assessed for health and safety impacts	%	[number of products and services, which are during their life cycle assessed for health and safety impacts/total number of products (services) produced (offered)] × 100
SI10 - Customer satisfaction	Expenditure on identifying and ensuring customers satisfaction	%	[expenditure on investigation and activities associated with an increase in customer satisfaction/total annual gross value added] × 100

indicators reflect the critical success factors in the social area. A rating method was used. The experts expressed their opinion on the basis of a predetermined scale <0; 100>. Based on the results, SI2 was excluded (scored 10 points on average) as respect for human rights (e.g. prohibition of child labour, etc.) are commonplace in the Czech Republic and thus it is irrelevant success factor.

In order to perform intercompany comparisons and benchmarking, but also to enable companies to assess trends in the social area, it is necessary to construct indicators as relative indicators instead of absolute ones. To relativize indicators an average number of employees, or where appropriate, gross value added is used. Gross value added is the difference between the total production of goods and services and consumption (value of goods and services consumed in production). It is the basis for the calculation of VAT (CENIA, 2011).

CONCLUSIONS

Based on the results of above described research, it was found that companies partially monitor their social performance, but in terms

of international standards it is still insufficient. Companies should adopt a portfolio of social indicators that would express their goals in this area. Analysis of critical success factors specific for particular company should precede construction of indicators. Such indicators should become a part of one complex performance measurement system, i.e. a system that monitors not only the economic and financial performance, but also social and environmental performance and performance of Corporate Governance. Indicators proposed in this paper meet basic criteria such as objectivity, relevance, transparency, clarity and comparability. Contribution of proposed corporate social performance indicators is that they express critical success factors in a measurable way and they compress large social data into a manageable number of key information. It is necessary to social indicators become part of Corporate Sustainability Reporting and marketing communications aimed at stakeholders. By these means, the social performance becomes part of the value of products and services; it will be transformed into a competitive advantage, increased profits and economic success of the company.

SUMMARY

Aim of this article is to map out the level of social performance measurement of Czech companies and to construct alternative corporate social performance indicators. To meet this aim sequence of steps was taken. Initially, a corporate social performance as a multidimensional concept was defined. Secondly, approach of international organizations (Global Reporting Initiative, International Federation of Accountants, Society of Investment Professionals in Germany, United Nations Conference on Trade and Development and European Academy of Business in Society) to social performance indicators design was examined. After that, voluntary reporting of 24 Czech manufacturing companies was analysed and questionnaire survey among 79 Czech manufacturing companies was performed. It was found that companies report mainly absolute indicators which hide real trends and make comparison with other companies impossible, use so-called lagging indicators which reflect past, instead of leading indicators that predict the future. Companies perceive social performance mainly as an influence on employees as the most frequently used social indicators are: Number of employees, Workforce accidents, Staff turnover, Expenditure on employee training, Labor relations, Occupational diseases and Health and safety of products. Based on the research results, a set of social indicators has been created: Relations with community, Human rights, Equality and non-discrimination, Expenditure on employee training, Employee turnover, Collective bargaining, Labor relations, Workforce accidents, Health and safety of customers and Customer satisfaction. The set of indicators was presented to a group of seven experts and they excluded "Human rights" as respect for human rights is commonplace in the Czech Republic and thus it is irrelevant success factor. The final set of indicators includes 14 KPIs. Social performance indicators are constructed as relative ones and thus comparable ones. Czech companies should incorporate proposed alternative social performance indicators into their measurement systems that would include sustainability and the ability to manage the social aspects. These indicators would express that they positively contribute to the overall social welfare and sustainability.

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REFERENCES

- BASSEN, A. and KOVÁCS, A., 2008: Environmental, Social and Governance Key Performance Indicators from a Capital Market Perspective. *Zeitschrift für Wirtschafts- und Unternehmensethik*, 2, 9: 182–192. ISSN 1439-880X.
- CENIA, 2011: EMAS – vykazování klíčových indikátorů: Výklad k ustanovením nařízení (ES) č. 1221/2009 [cit. 2013-01-05]. Available: <http://www.cenia.cz/upload/emas/emas_vykazovani_klicovych_indikatoru.pdf>.
- CRANFIELD SCHOOL OF MANAGEMENT, 2009: Sustainable Value EABIS Research Project: Corporate Responsibility, Market Valuation and Measuring the Financial and Non-Financial Performance of the Firm. [online]. © 2009 [cit. 2012-09-15]. Available: <<http://investorvalue.org/docs/EabisProjectFinal.pdf>>.
- DEUTSCHE VEREINIGUNG FÜR FINANZANALYSE UND ASSET MANAGEMENT, 2007: Key Performance Indicators (KPIs) for Extra-/Non-Financial Reporting. [online]. © 2007 [cit. 2012-09-15]. Available: <http://www.accreditedresearch.com/files/dvfa/kommissionen/non_financials/application/pdf/KPIs_Schriftenreihe_Final.pdf>.
- ECCLES, R., IOANNOU, I. and SERAFEIM, G., 2012: Is sustainability now the key to corporate success? *The Guardian*. [online]. © 2012 [cit. 2012-10-15]. Available: <<http://www.guardian.co.uk/sustainable-business/sustainability-key-corporate-success>>.
- FAUZI, H., SVENSSON, G. and RAHMAN, A. A., 2010: „Triple Bottom Line” as “Sustainable Corporate Performance”: A Proposition for the Future. *Sustainability*, 2, 1345–1360. ISSN 2071-1050.
- GRI, 2006: Definice indikátorů Lidská práva (HR) [online]. © 2000–2006 [cit. 2012-06-10]. Available: <<https://www.globalreporting.org/resource-library/Czech-G3-Human-Rights-Indicator-Protocols.pdf>>.
- GRI, 2006a: Definice indikátorů Pracovně právní vztahy a důstojné pracovní podmínky (LA) [online]. © 2000–2006 [cit. 2012-06-10]. Dostupné z: <<https://www.globalreporting.org/resource-library/Czech-G3-Product-Responsibility-Protocols.pdf>>.
- GRI, 2006b: Definice indikátorů Odpovědnost za produkty (PR) [online]. © 2000–2006 [cit. 2012-06-10]. Dostupné z: <<https://www.globalreporting.org/resource-library/Czech-G3-Product-Responsibility-Protocols.pdf>>.
- GRI, 2006c: Definice indikátorů Společnost Society (SO) [online]. © 2000–2006 [cit. 2012-06-10]. Dostupné z: <<https://www.globalreporting.org/resource-library/Czech-G3-Society-Indicator-Protocols.pdf>>.
- HŘEBÍČEK, J., HODINKA, M., MOTYČKA, A., POPELKA, O. and TRENZ, O., 2012: Environmental and Sustainability Indicators: Case Study for Agriculture and Food Processing Sector. In: ARNDT, K., KNETSCH, G. and PILLMANN, W. (Eds.). *26th International Conference on Informatics for Environmental Protection (EnviroInfo 2012)*. Aachen: Shaker Verlag, 83–93. ISBN 978-3-8440-1248-4.
- HŘEBÍČEK, J., POPELKA, O., ŠTENCL, M. and TRENZ, O., 2012: Corporate performance indicators for agriculture and food processing sector. *Acta universitatis agriculturae et silviculturae Mendelianae Brunensis*, 60, 4: 121–132. ISSN 1211-8516.
- HŘEBÍČEK, J. and SOUKOPOVÁ, J., 2008: *Voluntary Company Assessment Report on the linkages between environment, economy and society*. Praha: Ministry of Environment of the Czech Republic, 61s. ISBN 978-80-7212-495-4.
- HŘEBÍČEK, J., SOUKOPOVÁ, J., ŠTENCL, M. and TRENZ, O. 2011: Corporate Key Performance Indicators for Environmental Management and Reporting. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 59, 2: 99–108. ISSN 1211-8516.
- HŘEBÍČEK, J., SOUKOPOVÁ, J., ŠTENCL, M. and TRENZ, O. 2011a: Integration of Economic, Environmental, Social and Corporate Governance Performance and Reporting in Enterprises. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 59, 7: 157–177. ISSN 1211-8516.
- HODINKA, M., ŠTENCL, M., HŘEBÍČEK, J. and TRENZ, O., 2012: Current trends of corporate performance reporting tools and methodology design of multifactor measurement of company overall performance. *Acta universitatis agriculturae et silviculturae Mendelianae Brunensis*, 60, 2: 85–90. ISSN 1211-8516.
- CHVÁTALOVÁ, Z., KOCMANOVÁ, A. and DOČEKALOVÁ, M., 2011: Corporate Sustainability Reporting and Measuring Corporate Performance, In: *Environmental Software Systems. Frameworks of eEnvironment*. 9th IFIP WG 5.11 International Symposium. ISESS 2011. Heidelberg: Springer, 398–406. ISBN 978-3-642-22284-9.
- IFAC, 2012: *Investor demand for environmental, social and governance disclosures: Implications for professional accountants in business*. [online]. [cit. 2012-06-01]. Available: <<http://viewer.zmags.com/publication/15a83b62#/15a83b62/22>>.
- ILINITCH, A. Y., SODERSTROM, N. S. E. and THOMAS, T., 1998: Measuring corporate environmental performance. *Journal of Accounting and Public Policy*, 17, 4–5: 383–408. ISSN 0278-4254.
- KAPLAN, R. S. and NORTON, D. P., 1996: *Balanced Scorecard: Translating Strategy into Action*. Boston: Harvard Business School Press, 322 s. ISBN 0-87584-651-3.
- KOCMANOVÁ, A. and DOČEKALOVÁ, M., 2011: Corporate sustainability: Environmental, Social and Corporate performance. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 59, 7: 203–209. ISSN 1211-8516.
- KOCMANOVÁ, A. and DOČEKALOVÁ, M., 2012: Construction of the economic indicators of performance in relation to environmental, social

- and corporate governance (ESG) factors. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 60, 4: 195–205. ISSN: 1211- 8516.
- KOCMANOVÁ, A., DOČEKALOVÁ, M., NĚMEČEK, P. and ŠIMBEROVÁ, I., 2011: Sustainability: Environmental, Social and Corporate Governance Performance in Czech SMEs. In: *The 15th World Multi-Conference on Systemics, Cybernetics and Informatics*. 2011. IFSR, Orlando, USA: WMSCI 2011, Orlando, USA, 2011. p. 94–99. ISBN 978-1-936338-42-9.
- KRUSE, C. and LUNDBERGH, S., 2010: The Governance of Corporate Sustainability. *Rotman International Journal of Pension Management*, 3, 2: 46–51. ISSN 1916-984.
- ORLITZKY, M., SCHMIDT, F. L. and RYNES, S. L., 2008: Corporate Social and Financial Performance: A Meta-analysis. *Organization Studies*, 24, 3: 403–441. ISSN 0170-8406.
- SCHALTEGGER, S. and WAGNER, M., 2006: *Managing Sustainability Performance Measurement and Reporting in an Integrated Manner; Sustainability Accounting as the Link between the Sustainability Balanced Scorecard and Sustainability Reporting*. Dordrecht: Springer, 681–697. ISBN 101-4020-4973-0.
- SPIRIG, K., 2006: Social Performance and Competitiveness, A Socio-Competitive Framework. In: Schaltegger, S. and Wagner, M. (Eds.) *Managing the Business Case for Sustainability*. Sheffield: Greenleaf Publishing, 82–106. ISBN 1-874719-95-0.
- TSOUTSOURA, M., 2004: *Corporate Social Responsibility and Financial Performance*. Center for Responsible Business, UC Berkeley [online]. [cit. 2012-10-18]. Available: <http://responsiblebusiness.haas.berkeley.edu/documents/FinalPaperonCSR_PDFII.pdf>.
- UNCTAD, 2008: *Guidance on Corporate Responsibility Indicators in Annual Reports*. [online]. © 2008 [cit. 2012-10-18]. ISBN 978-92-1-112740-9. Available: <http://unctad.org/en/docs/itete20076_en.pdf>.
- WOOD, D. J. and JONES, R. E., 1995: Stakeholder Mismatching: A Theoretical Problem In Empirical Research On Corporate Social Performance. *International Journal of Organizational Analysis*, 3, 3: 229–267. ISSN 1934-8835.

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