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**ACCOUNTING FOR SUSTAINABILITY  
AND SOCIAL RESPONSIBILITY**

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**RACHUNKOWOŚĆ DLA ZRÓWNOWAŻONEGO  
ROZWOJU I SPOŁECZNEJ ODPOWIEDZIALNOŚCI**

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**Summary:** In this paper the issue of environmental and social responsibility is considered. I look into the goals that sustainability reports and social responsibility reports can serve and how they can draw attention to creating shared value. My research areas include the measurement of financial performance and the methodology for the comparability of conclusions from accounting reports. Some questions arise when this is completed with sustainability reports: how can sustainability performance be presented; is there a way to develop a single indicator system for measuring sustainability and social responsibility? As another issue, I also focus on the ethical behaviour of companies and its impacts on profit and profitability.

**Keywords:** sustainability accounting, environmental accounting, CSR, CSV.

**Streszczenie:** W artykule poruszono aspekty odpowiedzialności ekologicznej i społecznej. Wzięto pod uwagę cele, którym mogą służyć sprawozdania na temat zrównoważonego rozwoju i raporty odpowiedzialności społecznej oraz sposób w jaki odzwierciedlają one tworzenie wspólnej wartości. W tym kontekście pojawiają się pytania, jak zaprezentować osiągnięcia w obszarze zrównoważonego rozwoju, czy możliwe jest rozwinięcie jednolitego systemu mierników służących ocenie zrównoważonego rozwoju i społecznej odpowiedzialności. W artykule poruszono również kwestie zachowań etycznych przedsiębiorstw oraz ich wpływu na wyniki.

**Słowa kluczowe:** rachunkowość zrównoważona, rachunkowość środowiskowa, CSR, CSV.

## 1. Introduction

“We do not inherit the Earth from our ancestors, we borrow it from our children”, as the saying goes from the renowned environmental activist David Brower. Brower always tried to point out that the exploitation of our natural values is not a sustainable process, as we must also consider the interests of the future generations. He warns us,

saying that enterprises, business organizations or even private persons and, actually, the whole society would be interested, instead of the self-serving and gut-twisting use of natural resources, in increasingly focusing on environmental awareness targeted at preserving our natural values. In my thesis I primarily try to find an answer to whether business organizations supply any information and take responsibility in case they damage the environment during their activities. Secondly, what responsibility do they additionally take?

Social responsibility is a philosophical issue in economics: in addition to the profit expected by the owners and alongside its other functions, principles and operation, a business organization is also aware of its responsibility for the society and will adjust its behaviour, activities and policy accordingly.

Social responsibility has a wide-ranging meaning: social sensitivity, environmental awareness, ethical behaviour, observance of fair competition, equal opportunities, transparency.

To foster communication about the above, enterprises can publish sustainability reports and social responsibility reports, and we are all jointly interested in standardizing them and authenticating the information therein. These reports complete financial reports and provide a fair and true view of the enterprise in unity with them.

## **2. Sustainability accounting**

Recent years and decades highlighted that traditional accounting needs to be developed, considering that financial accounting focuses on the economic situation only, so the information deriving from that tends to be less and less satisfactory and an ever wider group of stakeholders is in need of information concerning the sustainability of the enterprise.

If we disregard company directors' internal motivation, a company will still have at least six reasons for developing its system of sustainability accounting [Schaltegger, Burritt 2010].

1. Greenwashing: one of the reasons for applying sustainability accounting derives from the motivation of the management to collect data for communication and reporting purposes.

2. Take-over of industrial examples: the management cannot afford not to follow the socially accepted and expected good practices; this can be a reason for the emulation of methods.

3. Legislative compliance, licensed activity: in specific cases, the activity may only be continued if the enterprise observes the reporting and legislative requirements. This compliance might require the introduction and application of sustainability accounting.

4. Self-regulation: voluntary commitment to restrain the activity of a company or industrial sector and to comply with certain limits. The company or industry intends to improve its performance voluntarily, which can enhance its reputation and social

acceptance. Self-regulation frequently serves the goal of having no governmental regulation or intervention.

5. Corporate responsibility and ethical behaviour: the recognition of responsibility starts from observing the phenomena caused by the process or activity. Only after the relevant survey will the ethically significant factors (e.g. impact on others, harm) follow. If the company has an imperfect information system, if relevance or the option of comparing the individual alternatives are missing, it may prevent responsible decision-making.

6. Measuring the financial consequence of sustainability: a key reason for the introduction of sustainability accounting is to measure and compare the production costs and proceeds of voluntary social and environmental activity. The motivation for introduction will be even stronger if any business profit can be generated from it.

Evidently, whichever of the above six reasons prevails can directly result in the development of sustainability accounting-related registration and system.

Risk management is a frequently underestimated element of the business approach to corporate responsibility. The control of financial, social and environmental risks can all influence corporate success, shareholder value and the validity of the operating licence of the company [Schaltegger, Figge 1997]. The accounting system to take precedence should inform decision-makers about the relevant risks and supply information about the environmental and social impacts of corporate activities. In addition to risks, the ever increasing globalization of markets and the standardization of products enables the companies to discriminate themselves in terms of sustainability. This can, in particular, create an essential momentum for medium enterprises but also for corporations willing to understand the potentials of their products and production systems. The motives to create sustainability accounting include the reduction of costs, entry on the market, reduction of expenditures, contributions, prices, sales, innovation, corporate reputation or intangible values (e.g. increasing the brand value) (see e.g. [Schaltegger, Hasenmußler 2006; Steger 2004]; see also [Schaltegger, Burritt 2006]).

### **3. Sustainability accounting – the necessary tool**

Sustainability accounting, just as sustainable development, has several definitions. In conclusion, sustainability accounting is a part of accounting that comprises activities, methods and systems that help register, analyse and report on the following existing relations between the company and sustainability:

- 1) environmentally and socially induced financial impacts;
- 2) impacts of corporate activities on environment and society;
- 3) perhaps most important: interactions and linkages between economic, social and environmental issues constituting the three dimensions of sustainability [Schaltegger, Burritt 2010, p. 377].

As demonstrated in Figure 1, sustainability accounting has a much broader interpretation than environmental accounting, given that while the latter considers

environmental and economic aspects only, the former rests on the above-mentioned triple bottom line, meaning that environmental, economic and social interactions take effect simultaneously.

But a question arises then: should sustainability accounting represent a separate system or should it rather be considered a part of traditional accounting? In theory, the former would be more appropriate because the triple bottom line approach could prevail then, however, sustainability accounting is construed with the latter approach in practical life, claiming that an existing system can be easier modified than developing a wholly separate system.

The linkage between environmental, social and sustainability accounting is shown in Figure 1.



**Figure 1.** Linkage between environmental, social and sustainability accounting

Source: own presentation.

Environmental accounting and environmental controlling are defined as a stand-alone branch in accounting, which will be evidenced later on. But what does social, sustainability accounting mean? Can it be developed by an organization on its own?

Individuals, the individual stakeholders in society, which consequently includes companies, all have to act for global sustainability. When micro level responsibility is defined, the starting point should be the macro level, considering that this can help the totality of individual efforts achieve global sustainability. For companies, the sustainability criteria to define should create an economically, environmentally and socially sustainable system at the macro level.

The objective for social and sustainability accounting is to adapt the efforts of the companies, all implemented at the micro level, in a way as to support global sustainability; and the impacts, including the prioritized financial and economic impacts, are then summarized in reports and interpreted to the stakeholders.

Several concepts intend to define the role and responsibility of companies. Among them, the one known and applied in the broadest circles is Corporate Social Responsibility (CSR), i.e., the social responsibility of companies. One of the most comprehensive definitions is undoubtedly the CSR definition of ISO 26000:

“responsibility of an organization for the impacts of its decisions and activities on society and the environment, through transparent and ethical behaviour that contributes to sustainable development, including health and the welfare of society, takes into account the expectations of stakeholders, is in compliance with applicable law and consistent with international norms of behaviour, and is integrated throughout the organization and practised in its relationships” [ISO 2010].

## 4. Environmental accounting

Environmental accounting is closely correlated with corporate environmental responsibility which appeared in the 1980s. That was the time of starting to emphasize that, in addition to maximizing their profit, companies should also care for their environment and, for instance, reduce the emission of pollutants and the irrational use of resources. Besides, companies must pay particular attention to preventing environmental pollution. Alongside the tragedies related to global environmental pollution, legislative changes also obliged the companies to raise awareness.

The concept of environmental accounting as a tool of sustainable development took priority in the UN world conference in 1992.

According to S. Schaltegger’s interpretation, environmental accounting “is a subset of accounting which deals with activities, methods and systems that register, analyse and report on the environmental issues of a specific economic system or the economic impacts of an environmental activity” [Schaltegger, Burritt 2010].

### 4.1. Environmental financial and environmental management accounting

Accounting can be split into two parts: financial and management accounting. Financial accounting is mainly made for external stakeholders; it contains past-

**Table 1.** Subsystems of environmental accounting

	Financial impacts induced by environment protection		Environmental impacts of the company’s economic activities	
	Internal	External	Internal	External
Registration	Environmental management accounting (environmental controlling)	Environmental financial accounting	Internal ecological accounting	External ecological accounting
Analysis				
Reports				

Source: own presentation.

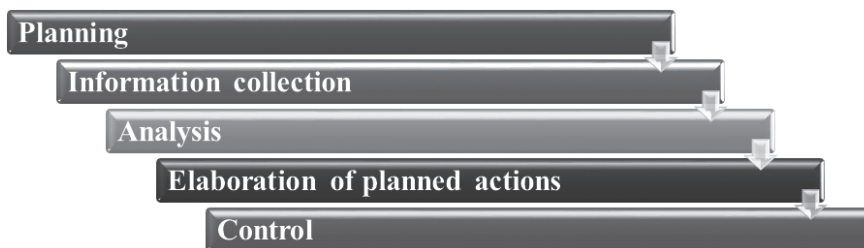
oriented monetary data that enterprises are bound to compile. To the contrary, management accounting is mainly made for internal stakeholders, managers; each of the three time horizons are integrated (analyses are past-oriented, decisions are present and future-oriented), the monetary data are completed with non-monetary data and the type of information supply is adapted to the specific enterprise.

The above grouping also applies in environmental accounting, so we can draw a distinction between environmental financial and environmental management accounting.

Environmental management accounting focuses, among others, on the identification of environmental costs, whereas environmental financial accounting primarily specializes on reporting. The subsystems of environmental accounting are outlined in Table 1.

#### 4.2. Environmental controlling

“Environmental controlling represents a subsystem in environmental accounting. It focuses on the financial impacts of environmental operation and is targeted at supporting management decisions through the assessment of products and projects” [Csutora, Kerekes 2004]. Hence, the common link with environmental management accounting is that they concord in their key objective (supporting management decision-making). The functions of environmental controlling are demonstrated in Figure 2.



**Figure 2.** Functions of environmental controlling

Source: own presentation.

Planning essentially means preparation for the future which can be achieved through clearly defined objectives.

The planning phase is followed by information collection: all the internal and external information that has an impact on environment during the operation of the company needs to be collected in this phase. Collection is not satisfactory on its own, as this information needs to be systematized. The database is the environmental information system.

The next step is analysis. There the biggest challenge is that there is no unit of measurement to quantify the size of impact (of the individual events) on environment.

Additionally, the statement of environmental costs poses an issue for companies, as these costs are frequently not quantified or are handled together with general costs, for the sake of simplicity.

After analysis, some actions that can help achieve the objectives set out in the planning phase should inevitably be elaborated.

Finally, we end up in control which I think should rather be continuous, considering that the achievement of the pre-set objectives, the fulfilment of the tasks, the development of adequate actions must be strictly tracked during each phase. In consequence, control is also a feedback point.

The scope of environmental controlling can be summarized as follows:

- analysing and assessing annual environmental costs and expenditures;
- product pricing, prime cost calculation;
- making an annual budget;
- assessing investments;
- identifying the costs of and savings in environmental projects;
- operating an environment-oriented management system;
- environmental performance assessment, benchmark;
- lifecycle cost analysis;
- supporting cleaner production projects;
- environment-friendly product and process planning;
- stating environmental costs and revenues in the annual report;
- writing environmental and sustainability reports;
- supplying the authorities, parent company and other stakeholders with environmental information for statistical purposes;
- risk management.

The fundamental methodology of planning and analysis is based on indices.

The traditional and generally applied indices showing the financial performance of companies are the corporate financial indices. These indices create a system and, from a financial point of view, they provide an almost comprehensive picture on the economic and financial efficiency of the company. The indices can be calculated from the accounting reports and financial statements of the company. The International Financial Reporting Standards (IFRS), i.e. the calculation of corporate financial indices based on a single methodology ensures comparability. Corporate indices are generally divided into five groups: 1) profitability; 2) efficiency; 3) liquidity; 4) indebtedness (leverage); 5) market value.

Corporate performances can become comparable at the international, national and sectorial level if certain requirements are observed.

Several indicator systems are intended to support the measurement and reliable comparability of environmental, social and sustainability performances.

Alongside measurement, comparison in time and cross sections is also naturally reasonable. Rajesh and co-authors describe over three dozens of indicators in their study [Singh et al. 2009] which concludes not only the importance of the topic but

the option of multiple approach to it. The development of “micro”, i.e. corporate indices used parallel with sustainability “macro” indices (HDI, EF, HPI, EPI) poses a serious professional challenge and is also a success. Professional challenge because the methodology of indexation (objectivity, transparency, simplicity) needs to be prevailing. Success because their acceptance and application are gaining importance in the judgement and assessment of companies. Four of the corporate indices and reports are highlighted here: Dow Jones Sustainability Index, FTSE4 Good Index, Global Reporting Initiative and ISO 26000. The basic characteristics of the indices and reports reveal that these indices and reports, in their current form, can only be applied correctly after considerable preparations.

## **5. CSV – Creating Shared Value: The new competitive advantage**

Creating shared value, instead of responsibility – this is the brief description of the most recent principle of sustainable corporate operation.

According to the CSV (Creating Shared Value) concept, a company can fundamentally be long-term successful only if it creates value not only for its shareholders and stakeholders but also for the society. CSV is not a program but a business concept. A management strategy that creates measurable business value by identifying and handling social issues linked to the activity of the company. It enables society to use market competition to solve the problems. The concept was introduced by M.E. Porter and M.R. Kramer [2002], in their joint article published in Harvard Business Review. According to the theory, the competitiveness of a company and the health status of the community around it are interdependent. The recognition and exploitation of the above can launch a new wave of global growth and capitalism.

### **5.1. Option, instead of cost**

Some CSR (Corporate Social Responsibility) concepts oppose business to society, emphasizing the costs of compliance with external social and environmental standards and the limitations in the financial sustainability of programs. However, CSV is a driving force for corporate competitiveness and profitability. It uses their unique resources and expertise and so it creates community value. Evidently, compromise must also be reached between environmental goals and short-term profit interests, though competitive advantage can definitely be gained by building social values in business strategy.

### **5.2. Profitable ethics**

Company directors can still easily be apprehensive of ethical operation, although it does not at all contradict profitability. However, for a real change to occur, profit must not overwrite responsible business practice.



Some critics say, CSV is simply the old economic truth: no company can function regardless of the world around it. Even if so, certainly, no one has pointed out in recent decades that for the companies to survive and develop, they need operating infrastructure, reliable and predictable suppliers, qualified and talented employees hired as the next generation and a stable legal environment. In other words, they need a vital and functioning society and environment around themselves that they can also do a lot about.

### **5.3. Linkage keeps companies going**

Nowadays a substantial part of companies tries to manage several sustainability issues (from saving polar bears to sick children) which distracts them from concentrating on the areas where they could do the most from a business and social perspective.

CSR programs have in many cases been targeted at gaining reputation, supporting easy-to-communicate “loveable” programs and have only marginally (or not even so) been linked with the activity of the specific company. Naturally, this is not a basic expectation, but linkage makes the programs reasonable for the organizations, which plays a vital role in their long-term subsistence.

CSV can enable the companies to direct their investments at their own community and create the linkages where business interest and social responsibility can be in direct interaction. Through that, companies can become more successful while they can have a considerably bigger effect than with mere charity.

There are some international recommendations and concepts that, instead of a short definition, give a lengthy explanation of what areas the company should manage and improve, and how, to behave with more and more responsibility, meeting also the requirements of sustainability. From among them, GRI (Global Reporting Initiative) is one of the most outstanding.

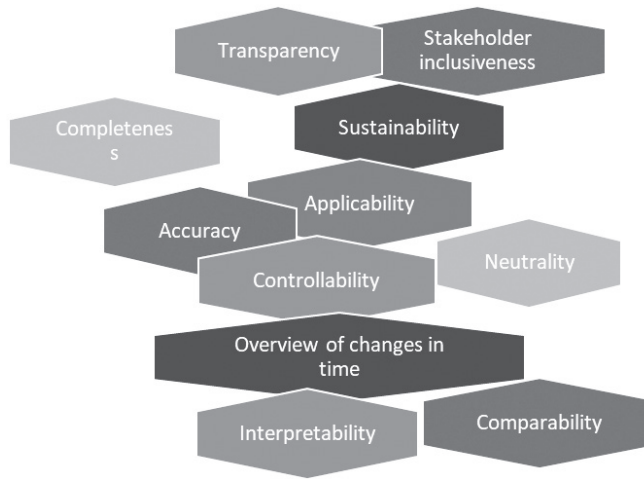
The Initiative was founded in 1997 with the aim of providing a uniform frame for sustainability reports. G3, the third generation of the guidelines was published in 2006 [GRI 2006]. The reporting guideline contains general principles and specific indicator protocols. The principles that make the reports truly useful and practicable are demonstrated in Figure 3.

The indicator protocols define the topics and fields to be considered: economy, environment, labour issues, human rights, society and product responsibility.

The new generation of reports (G4) is built on former experiences and takes sector-specific characteristics much more into account (Global Reporting Initiative G4).

The Dow Jones Sustainability Index goes so far as to define not CSR but so-called corporate sustainability which is a “business approach increasing the shareholder value by exploiting possibilities and managing risks inherent in economic, social and environmental development” [Vogel 2006, p. 11].

ISO 26000 identifies seven key factors that socially responsible companies should care about. The companies intending to use the standard are expected to assess their



**Figure 3.** The GRI reporting principles

Source: own presentation.

activities in all areas and define the areas to develop. The key factors are as follows: organizational governance, human rights, labour practices, environment, fair operating practices, consumer issues, community involvement and development.

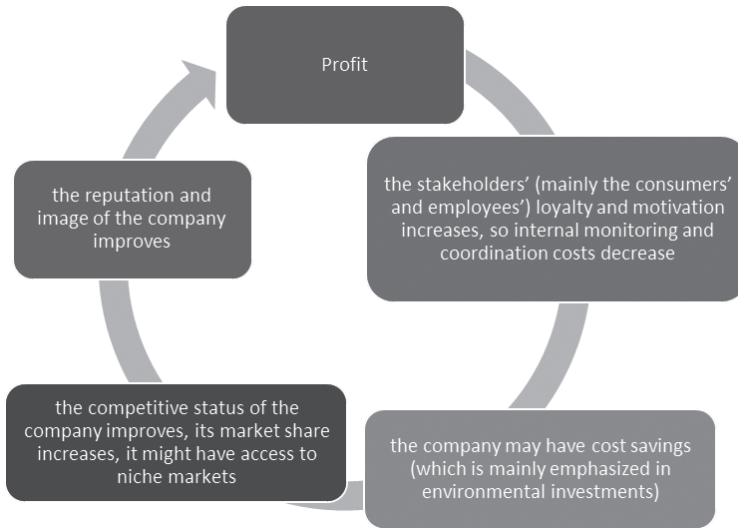
The standard comes with an accurate description on making progress reports, on the stakeholders, and it also takes sector-specific characteristics into account.

## 6. Conclusions

In the US, regarding relationship between business and ethics, the prevailing approach in CSR states that ethics pays off, and the EU also tries to take over this approach to give an incentive for companies [Paine 2000]. Company directors also like to hear that there is a possibility to link the good and the profitable, as it can help improve their personal reputation, furthermore, their conscience can also be easier. As a matter of fact, an important factor in the expansion of CSR is the company directors' personal commitment, namely that they simply like to feel their good deed and that they have an impact on how the things of the world develop (this is proven by participation in international initiatives like Global Compact or WBCSD etc.). Nevertheless, if you ask them why they take responsibility, they will mostly refer to business benefits, rarely to their personal commitment and even rarer to moral obligation [Paine 2000].

Taking responsibility leads to higher corporate profit as shown in Figure 4.

As Sen's recommendation goes, we must know that business interest is one of the reasons for responsible behaviour. But we must bear in mind that this is not at all the only reason. Other reasons are the following (see e.g. [Cohen, Warwick 2006; Doane 2005; Vogel 2006, Holliday et al., 2002, Paine 2000]).



**Figure 4.** Responsibility and profit

Source: own presentation.

- NGOs, the media and the other stakeholders will attack the company to a lesser extent – so risk management;
- the risk of stricter legal regulations is lessened, moreover, in collaboration with the government, the company can even have benefits for itself or, generally, for business life;
- transaction costs reduce, thanks to confidential relationships;
- as governments and international organizations consider CSR an increasingly important topic, the company can get subsidies on account of its responsible behaviour;
- operational efficiency can improve, moreover, CSR (Figure 5).



**Figure 5.** What is CSR good for?

Source: own presentation.

Discourses on Corporate Social Responsibility (CSR) have long ago assumed that a transnational company (TNC) must be “responsible” and “good and act good” [Falck, Heblich 2007]. To help find the adequate tools, TNCs should have a better understanding of their impact on sustainable development, including any direct and indirect impacts. The general truth is “if you can’t measure it, you can’t manage it”. Consequently, it is especially necessary to define how TNCs can expand the existing sustainability measurement and management systems to overcome the impacts manifested in the value chain and occurring in sustainable development at the level of the broad society and the environment.

## References

- Cohen B., Warwick M., 2006, *Values-driven business – How to Change the World, Make Money and Have Fun*, Berrett-Koehler Publishers, San Francisco.
- Csutora M., Kerekes S., 2004, *A környezetbarát vállalatirányítás eszközei*, KJK-KERSZÖV Jogi és Üzleti Kiadó Kft., Budapest.
- Doane D., 2005, *The myth of CSR – the problem with assuming that companies can do well while also doing good is that markets don’t really work that way*, Stanford Social Innovation Review, Autumn.
- Economist, 2008, *Special CSR Report*, ed. Daniel Franklin, January.
- Falck O., Heblich S., 2007, *Corporate social responsibility: Doing well by doing good*, Business Horizons, vol. 50, no. 3, pp. 247–254.
- GRI, 2006, *Útmutató a fenntarthatósági jelentések készítéséhez*, Global Reporting Initiative 2000–2006, <https://www.globalreporting.org/resource/library/GRI-G3-Hungarian-Reporting-Guidelines.pdf>.
- Holliday C.O., Schmidheiny S., Watts P. 2002, *Walking the Talk – The Business Case for Sustainable Development*, Greenleaf Publishing/Berrett-Koehler Publishers, San Francisco.
- ISO, 2010, *ISO 26000 – Social responsibility*, International Organization for Standardization, <https://www.iso.org/iso-26000-social-responsibility.html> (21.02.2018).
- Paine L.S., 2000, *Does ethics pay?*, Business Ethics Quarterly, vol. 10, no. 1, pp. 319–330.
- Porter M.E., Kramer M.R., 2002, *The competitive advantage of corporate philanthropy*, Harvard Business Review, vol. 80, no. 12, pp. 56–69.
- Schaltegger S., Burritt R.L., 2006, *Corporate sustainability accounting*, [in:] Schaltegger S., Bennett M., Burritt R. (eds.), *Sustainability Accounting and Reporting*, Springer Publishing, Dordrecht, pp. 37–59.
- Schaltegger S., Burritt R.L., 2010, *Sustainability accounting for companies: Catchphrase or decision support for business leaders?*, Journal of World Business, vol. 45, pp. 375–384.
- Schaltegger S., Figge F., 1997, *Environmental Shareholder Value*, WWZ & Bank Sarasin, Basel.
- Schaltegger S., Hasenmußler P., 2006, *Sustainability management from the perspective of business sustainability*, [in:] Tiemeyer E., Wilbers K. (eds.), *Berufliche Bildung für nachhaltiges Wirtschaften. Konzepte, Curricula, Methoden, Beispiele*, Bertelsmann, Bielefeld, pp. 71–86.
- Singh R.K., H.R. Murty, Gupta S.K., Dikshit A.K., 2009, *An overview of sustainability assessment methodologies*, Ecological Indicators, vol. 9, no. 2, pp. 189–212.
- Steger U., 2004, *What is the business case for corporate sustainability*, Perspectives for Managers, vol. 109, pp. 1–4.
- Vogel D., 2006, *The Market for Virtue – The Potential and Limits of Corporate Social Responsibility*, Brookings Institution Press, Washington, DC.