

Slovenian SMEs: From the Environmental Responsibility to Corporate Social Responsibility

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Abstract: Environmental and societal issues are emphasising the social role of enterprises, including all size classes, even the smallest ones, so-called micro enterprises. This paper reflects on Slovenian SMEs. These enterprises are confronting ever increasing and changing expectations, demands and claims for accountability not concerning only economic, but also environmental and social performance. Environmental responsibility is one of three dimensions of the concept of Corporate Social Responsibility (CSR) promoted also by the EU. A range of motives and many barriers are decisive for proactive or reactive environmental activities of SMEs. For determining as to how much environmentally responsible Slovenian SMEs are in the period just before joining the EU (May 2004), some aspects in context of environmental management system (including environmental standards and indicators) are investigated here.

JEL Classification: L2, Q5

Key words: accountability, environmental indicators, environmental management system, environmental responsibility, sustainability

Introduction

Severe problems of environmental degradation and others social issues emphasise the social role of enterprises, belonging to all kinds of business activities and being of all size and classes. The environmental vulnerability of enterprises is increasing, endangering their viability. But besides being affected by environmental and social policy, enterprises are challenged by several environmental and social issues, too. By participation in different socially responsible activities (including environmental) they care about the quality of life in their internal and external communal environment.

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SMEs are confronted with increasing demands and expectations of different stakeholders; their claims for accountability regarding environmental and social performance are on increase. Based on theoretical foundation (environmental economics, theory of CSR and of a contemporary theory of a firm) and on the research findings this paper focuses on:

- Environmental responsibility as a dimension of CSR (motives, internal and external barriers of environmentally responsible behaviour),
- Environmental management system (environmental standards and other environmental indicators, strategic orientation),
- Plans regarding environmental care in the next three years (related to the core business strategy).

Pluralistic theoretical foundation follows recent trends in the environmental economics, theory of a firm, the concept of sustainable development, evolving management concepts and system thinking. As a rule the new theoretical concepts evolve as a critique concerning shortcomings of the already established theories. Systems theory presents the essential theoretical basis because of its interdisciplinary and holism. In context of a firm as an adaptive rational system distinguishing between long-term and short-term consequences (outcomes) it is especially relevant (Cyert, March, 1992). Through system thinking all the relevant viewpoints can be investigated and assessed in their mutual interdependencies (Dyck, Mulej et al., 1998, Mulej, 1999).

Opportunistic behaviour, which is especially emphasised by transaction cost theory, raises the need for a careful consideration of role of a certain business partner or stakeholder. Opportunistic acting arises particularly when information and knowledge are asymmetrically distributed among several stakeholders. It is supposed that in such circumstances the economic subjects attempt to attain their own interests at other's costs and under disobedience of social norms (Wigand et al., 1997).

The concept of sustainable development rests upon assumptions and beliefs of conventional economics. Environmental awareness, environmental care and environmental performance are becoming critical for future success of an enterprise, for being accepted in the society. In this context, Elkington (1997) has developed the idea of TBL (Triple Bottom Line) that links three kinds of performance: economic, environmental and social. While the economic bottom line refers predominantly to the financial performance, the environmental bottom line focuses at environmental efficiency, and the social bottom line at health, education, social justice, and generational equity. It could be understood also as a way to measure and report corporate performance using economic, social and environmental parameters. The

aim of TBL is to minimise harm resulting from the activities and to create economic, social and environmental value (UNEP Industry and Environment, 2002).

Trends in management science are another important theoretical foundation. Besides fundamental strategic management there are several especially relevant concepts. Wheelen and Hunger (1995) have seen strategic management as a set of managerial decisions and actions that determines a long-run performance of a corporation. It is concerned with the character and direction of the enterprise as a whole, and with the anticipation of its future. Management change can be understood as response to changes, both internal and external triggered by events originating outside the organisation, from environment (Nickols, 2000).

In our analysis environmental performance has been judged in regard to principles of environmental economics and environmental management. Stakeholders' perspective emphasises relations with a range of stakeholders among which the nature has specific role.

The statistical data refers to 672 Slovenian SMEs. We used stratified disproportional random sampling. Stratification was based on class size depending on number of employees. The query was conducted in the fall 2003.

Class size (Number of employees)	Number of enterprises	Share of enterprises in population -weights
Micro (0-9)	224	0.9375
Small (10-49)	302	0.0497
Middle (50-249)	146	0.0128

We have considered the 95% confidential interval and 5% significance level. For that purpose data obtained by questionnaire survey was tested using statistical techniques (t and F tests).

Environmental Responsibility as a Dimension of Corporate Social Responsibility

For several decades the idea of Corporate Social Responsibility (in short CSR) has been considered predominantly as a charitable activity helping the poor. The concept of sustainable development gave it much broader understanding. According to Green paper on promoting European framework for Corporate Social Responsibility (The Commission of the European Communities, 2001), CSR is understood as 'a concept whereby companies integrate social and environmental concerns in their business operations and in their interactions with their stakeholders on voluntary basis'. There are many other definitions of the CSR circulating and evolving at the same time,

which is explicitly, and implicitly involving a range of stakeholders (internal, external, active and silent ones), different activities (not only of charitable nature) and aims. For that reason the nature as an important stakeholder, different forms of environmental responsibly activities and specific environmental goals are gaining increasing attention.

The attitude towards natural environment was mainly manifested by reactive environmental care, as a form of following the legislation or incentives and even pressure of other stakeholders (e. g. customers, investors, civil groups, etc.). Nowadays understanding of the environmental responsibility is much more complex, comprising business cycles and operations, products and services, investment, innovations, etc. By environmentally responsible behaviour enterprises are contributing to the higher quality of natural environment and thus to the sustainable society. To this commonly declared aim (e.g. also of the EU) enterprises are approaching from all three basic dimensions of CSR, besides the environmental one, also from the economic and the broader social dimension.

There is widely spread impression that small and medium enterprises are more harmful polluters in comparison with larger enterprises. For this reason relatively less attention has been paid to the environmental policy and strategies of SMEs, which are, at the same time, in general much more environmentally vulnerable and less capable to prevent from unfavourable environmental impacts. Especially the idea of sustainable development implemented on micro economic level tackles enterprises of all size classes (Knez-Riedl, 1997), even the micro ones (having less than 10 employees). Environmentally responsible enterprises are sensitive to demands of different stakeholders (including nature); they are willing to take the initiative and to engage themselves in solving of several environmental issues.

Which are the motives for environmental responsible behaviour of Slovenian SMEs? For 65% of respondents the most important motive presents the care for healthy environment and the health of people. It could be described as a typical proactive motive. Legislation compliance (more than 40%) is of rather reactive nature. In nearly a third of respondent enterprises environmental responsibility is motivated by business image and by business (economic) success (in 26%). SMEs are concerned more about their reputation than about economic success. The importance of the next reason for environmental responsibility is growing with the enterprise size. On average the pressure of stakeholders (15%) is not so heavy; it is more evident in small and middle enterprises.

Table 1.: Motives/Reasons for Environmentally Responsible Activities (percentage of respondents)

Class size of enterprise	Average (weighted)	Micro	Small	Middle
Motive/Reason	%	%	%	%
Legislation	41.4	40.6	49.7	65.7
Pressure from stakeholders	15.2	14.7	21.2	23.3
Better image	32.0	31.2	40.1	47.3
Economic success	26.4	25.9	31.8	40.4
Care for healthy environment and the health of people	65.4	65.2	67.2	70.6

Source: Data, collected for the Slovenian Entrepreneurship Observatory (2003)

Testing of data collected confirmed the statistical significance ($p < 0.05$)¹ for

- the second motive (compliance with legislation),
- better image, in the case of comparing micro with small and micro with middle enterprises,
- economic success, in the case of comparing micro with middle enterprises, and
- pressure from stakeholders, in the case of comparing micro with middle enterprises.

Table 2.: Main Barriers to Environmental Responsibility of Slovenian SMEs (percentage of respondents)

Class size of enterprises	Average (weighted)	Micro	Small	Middle
Barrier	%	%	%	%
Lack of time	36.6	36.6	37.4	23.3
Too high costs	28.1	27.7	31.5	44.5
Mentality	2.1	1.8	5.6	14.4
Other	28.9	29.5	22.2	14.4

Source: Data, collected for the Slovenian Entrepreneurship Observatory (2003)

Statistically significant ($p < 0.05$) are results

- for middle sized enterprises in comparison with small and micro enterprises – regarding lack of time and costs,
- for all size classes regarding mentality and
- for micro enterprises compared with middle enterprises regarding other barriers.

There are various barriers discouraging environmentally responsible behaviour of Slovenian SMEs. Among them the lack of time (37% of respondents) is especially emphasised. Costs and other barriers are of similar importance (28%). The mentality (underestimation, scepticism, opportunism, etc.), on the contrary, seems less discouraging. Time pressure is very often mentioned as an excuse for indifference regarding social issues in general and also in the case of environmental issues. It is evident that lack of time is more critical in smaller enterprises. On the contrary, middle-sized enterprises emphasise too high costs. These enterprises have more experiences with environmental obligations and therefore can assess the costs better. Especially in short-term orientation the costs of compliance with environmental law and regulations (local, industrial) are seen as a burden more than investment into future.

Especially the indifference, lack of knowledge, the information gaps regarding environmental risks and possible damages, short-term profit as predominant financial goal, but also not transparent financial possibilities or lack of educational possibilities could be mentioned among so-called other barriers. Many authors agree upon that main barriers are attitudinal but accompanied by operational barriers, as well (Welford, 1995).

Environmental Management System (EMS)

Caused by increasing environmental risk exposure rather than encouraged by environmental opportunities, the environmental awareness of enterprises is growing. The level of awareness and of environmental consciousness is dependent among other factors essentially on managers (their values, knowledge, attitude to problem solving, etc.). They are obliged and occupied primarily by economic goals and economic performance (especially by financial results), but they are forced (especially by external stakeholders) to pay attention to the environmental performance, too. Because of developing environmental legislation all over the world the attitude towards natural environment as well as related actions are both of reactive but at the same time, of proactive nature. Enterprises should consider a range of environmental risks, and obligations. As environmental risks cover nearly all aspects of operations (Collier, 1995) the environmental management system is needed, even in the enterprises of smaller size. The environmental system is leaned upon environmental standards, which come into force after a number of pilot-projects, and even afterward the revisions of standards are usually made. Implementation of environmental standards needs environmental policy emphasising environmental objectives and the ways to achieve them.

Adoption of environmental standards certainly is indicative for the development of formal environmental management system. We were interested in, which environmental standards have been already adopted (ISO 14001 and others) in Slovenian SMEs.

Table 3.: Environmental Standards Adopted by Slovenian SMEs (percentage of respondents)

Class size of enterprises	Average (weighted)	Micro	Small	Middle
Environmental standards	%	%	%	%
ISO 14001	2.1	1.9	3.5	10.8
Other environmental standards and certificates	5.6	5.2	10.2	18.0
No environmental standards	85.2	85.7	80.3	63.3
Do not know	7.0	7.1	5.0	8.0

Source: Data, collected for the Slovenian Entrepreneurship Observatory (2003)

Slovenian SMEs are mainly coping with environmental problems without support of environmental standards (85% of respondents). There are some other standards and certificates like OHSAS 18001 or even broader one SA 8000 adopted besides ISO 14001. The percentage of respondents with ISO 14001 is even smaller than percentage of those having some other standards and certificates. The standards mentioned are widely accepted among larger enterprises. From May 2004 for Slovenian enterprises it will be possible to register, as an EU member, in EMAS, of course on voluntary basis. Besides larger enterprises, which are supposed to be larger polluters, the possibility to adopt EMAS exists also for SMEs.

Statistically significant ($p < 0.05$) are differences

- among micro and middle and among small and middle enterprises having no environmental standards,
- among all kinds of enterprises having so-called other standards and certificates,
- among micro and middle sized enterprises adopting ISO 14001.

According to the e-catalogue of Slovenian Chamber of Commerce (2004) ISO 14001 is adopted mainly by larger enterprise, but in spite of this fact, some smaller firms achieved it, as well.

Indicators of Environmental Responsibility of Slovenian SMEs

To determine the environmental responsibility of Slovenian SMEs we expose first the environmental indicators of more traditional and, at the same time, of more explicit character (indicators regarding usage of material, soundness of technology, energy consumption, packaging, quantities and nature of the waste, ways of waste disposal, and environmental investment). There are different classifications of environmental indicators existing and evolving (e. g. Welford, 1995, Kolk, 2000). The indicators we chose first could be described as basic ones. Additionally we chose some indicators that reflect environmental responsibility of an enterprise rather indirectly or in a broader context. They refer to the environmental accounting, environmental reporting (DiPiazza, Eccles, 2002) environmental education, environmental benchmarking (Knez-Riedl, 2001) and participating in other environmental projects.

Table 4.: Basic Indicators of Environmental Responsibility of Slovenian SMEs (percentage of respondents)

Class size of enterprises	Average (weighted)	Micro	Small	Middle
Basic environmental indicators	%	%	%	%
Material	42.6	42.0	50.0	61.0
Technology & energy	31.4	30.8	36.1	60.0
Packaging & waste	45.4	45.1	47.4	63.7
Investments	10.0	9.4	17.6	21.2

Source: Data, collected for the Slovenian Entrepreneurship Observatory (2003)

In Slovenian SMEs the care for environmentally responsible treatment of packaging and waste is evident. It is followed by the care for material, for clean technology and energy. Obviously less attention is paid to the environmental investments (especially in micro enterprises). As a matter of fact, there are endeavours to encourage such investments among smaller firms, e.g. Small Environmental Investments in the frame of Phare programme (EPBDR, 2000).

Statistically significance ($p < 0.05$) can be found in the case of the attitude to the material consumption, technology and energy, packaging and waste – for micro enterprises compared with middle-sized enterprises and for small enterprises compared again with middle-sized enterprises.

As mentioned before we were interested also in the additional environmental indicators demonstrating how enterprises make records of environmental performance (e.g. eco-balance), about the environmental reports, if they are involved

into environmental training and courses or in benchmarking projects or in some other environmental projects.

Table 5.: Additional Indicators of Environmental Performance (percentage of respondents)

Class size of enterprises	Average (weighted)	Micro	Small	Middle
Additional environmental indicators	%	%	%	%
Eco-balance	4.1	4.0	4.0	12.3
Environmental reporting	7.4	6.2	18.5	42.5
Environmental education	20.0	19.2	27.1	42.5
Environmental benchmarking	0.6	0.4	1.7	4.1
Other environmental projects	17.3	16.5	26.5	29.4

Source: Data, collected for the Slovenian Entrepreneurship Observatory (2003)

Eco-balancing is not widely practised; there are only some middle-sized enterprises making eco-balance, which is an important environmental management tool and, at the same time, linkage to the environmental accountancy. A bit better is the environmental reporting practice. One can find environmental reports published also in the on-line version or as a part of corporate annual reports. Participation of respondents in environmental benchmarking projects is very modest, even more than in other environmental projects (e.g. Eco-profit concept was originally developed in Austria in the early 1990s).

Statistically significant differences indicate that eco-balance is more developed and the environmental reporting is gaining more attention among the middle-sized firms. They are also more engaged in benchmarking projects than micro enterprises. Differences about the engagement in other environmental project are statistically significant, too. The participation of micro enterprises in these projects is lower in comparison with small and middle enterprises.

The relatedness of environmental activities to the business strategy was the next question addressed to Slovenian SMEs. More than a half of respondents (belonging to the middle-sized enterprises) integrate their environmental activities into their business strategies. That is not the same case in micro enterprises participating in the query.

Statistically significant are results for micro and small enterprises, where the percentage of the answer »do not know« was the highest.

Plans Regarding Environmental Care of Slovenian SMEs

Similar results as gained about strategic orientation of environmentally responsible activities of Slovenian SMEs were obtained regarding the future plans on the field of environmental care. We asked respondents if they would start or continue with environmentally responsible activities for next three years. We supposed that some of them could answer »do not know« also in this case. As it can be seen from the next table the average percentage is rather equal regarding all three possibilities (ca. a third for each possible answer). Respondents of small and middle size enterprises are more proactive, while micro enterprises still stay aside, without clear vision about this question.

Table 6.: Plans of Slovenian SMEs Regarding Environmental Care in the Next Three Years (percentage of respondents)

Class size of enterprises	Average (weighted)	Micro	Small	Middle
Plans of environmental care	%	%	%	%
Start/Continuing	33.0	31.5	47.0	74.5
Not planned	32.0	33.0	28.3	10.6
Do not know	34.0	35.0	24.3	14.9

Source: Data, collected for the Slovenian Entrepreneurship Observatory (2003)

All differences are statistically significant and confirm that attitude to the future – from the environmental viewpoint – is clearer in the middle-sized enterprises. In smaller enterprise, especially in the micro ones, such attitude cannot be expected in the near future.

Conclusions

Enterprises of all size classes are gaining important social role. As a sub-system of global environment they should act socially responsible. The concept of corporate social responsibility (CSR) is gaining importance. Common attention is still being paid mainly in larger enterprises and institutions, which are presumed to be e.g. more important sponsors or donators. Regarding environmental responsibility similar presumption can be found, namely, that smaller enterprises are supposed to have a lower impact on the quality of natural environment. But even responsible individual entrepreneurs should be responsible (also) from the environmental aspect and interested into their environmental image, too.

Environmental responsibility is gaining importance as a value of each individual, e.g. on the micro level, but equally on the mezzo and on the macro level. In our paper the environmental responsibility of Slovenian SMEs (presenting a part of population on the mezzo level) was presented. The results confirm that Slovenian SMEs are becoming environmentally aware and active, that environmentally responsible activities in spite of lack of strategic orientation and less transparent support possibilities.

In the enterprises of all sizes special attention should be paid to the harmonisation of all three kinds of enterprise performance (economic, environmental, and social), which enable to approach the balanced CSR. Because of the strategic importance of stakeholders relationships the growing expectation, demands and even pressure of several stakeholders (potential investors, suppliers, local communities, civil groups, etc.) should be taken into account seriously. Repositioning of government activities in form of sharing care not only for environmental but also for broader social issues will emphasise the importance to manage corporate social responsibility (including environmental responsibility) of SMEs.

It is worth mentioning that SMEs have specific problems because of their size. Poor data availability, modest experiences in management at all, and additionally in environmental management, lack of strategic orientation, lack of knowledge about environmental accounting and underdeveloped practice in environmental reporting are especially unfavourable for micro and small enterprises. They are considerably hindering the environmentally responsible activities of middle-sized enterprises, as well.

Environmental responsibility of all enterprises and institutions, including SMEs, should be treated in the wider social context aiming the balanced CSR. Without expert knowledge and support of mutual co-operation (not only between government and enterprises but also in several projects like environmental benchmarking and similar projects like Eco-profit), without education and communication (e. g. in form of environmental reports) it will be very hard to improve environmental responsibility of SMEs. There is still a question how poor environmental performance of SMEs is endangering the sustainable society to which we are at the same time approaching also from the economic and broader social aspect. For Slovenian SMEs it will be an obligation and a challenge to join EU policy and guidelines concerning environmental and broader social responsibility.

There are many problems that should be approached simultaneously: operational problems, financial support of environmental performance (including environmental investments, compliance costs and environmental spending), encouraging of environmental innovations, to mention only some of them. By alliances and networks where common problems could be solved and best practice shared the concept of CSR, including environmental dimension could be realised even in the SMEs. But

they should be willing, able and prepared for disclosing and sharing of environmental information what is the precondition for decreasing of information asymmetry in this field. By further development of environmental and broader social indicators some useful benchmarks could be established and followed. In this way they could lead enterprises of different size classes, including SMEs population, to the sustainability.

We suggest that future research should address environmental and social risk exposure of SMEs from several viewpoints. Among them the aspects of their business activity type and the stage of their life cycle are critical. They present a basis for identification of strategic stakeholder relationships, for determine causal relationships and for rethink the assistance and organisation of establishing an environmental management system as well as integrated CSR management system. It is necessary to meet changing expectations and demands of different stakeholders.

NOTE

¹ Observed significance level (P value)

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