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SUSTAINABLE DEVELOPMENT IN COMPANIES: AN INTERNATIONAL SURVEY

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1 INTRODUCTION

Sustainable Development (SD) and related terms such as Corporate Social Responsibility are key words of modern economics respective business science (Baumgartner (2004), Castka et al. (2004)). How SD is used in praxis and whether this new aspect is implemented and performed at the micro-economic level, is objective of this paper. Furthermore, the question is raised whether special regional trends like the focus of one of the three dimensions are recognizable and how Austrian companies operate concerning the implementation of SD in comparison to the global trend.

In the course of an extensive study, 95 companies quoted on stock exchanges and listed in indices such as ATX (Austrian Traded Exchange), Dow Jones, Nikkei and Eurostoxx50 were examined for the implementation of SD and its integration as an aspect of the management by a raster process. The criterion raster covered the ecological and social dimension of SD as well as a super-ordinate "generic" dimension; the companies were evaluated on the basis of nine subcategories and 46 specific criteria.

In this study, homepages and press texts were analysed as well as annual and sustainability reports of the respective companies. Distinct regional differences could be distinguished concerning emphasis being put on the three SD dimensions.

In the USA, the social aspect is focused on, whereas in Japan the ecological dimension appears to be the central point of the SD. In general, the analysis of Europe brings about progressive results. Austria shows some inconsistency in some points but with great potential in SD. However, the fact has to be highlighted that Europe and Austria as part of it are most likely to fulfil SD in its entirety first.

Apart from regional differences also (enormous) industry-typical variations became obvious concerning SD as aspect of the management.

2 COMPOSITION OF THE CRITERION RASTER

In order to analyze the companies, a criterion raster with three dimensions – generic, ecological and social was developed. These three dimensions were divided into nine aspects, from which 46 criteria were deduced. They were formulated as a question which had to be answered by the analyst with “Yes” or “No” according to information from the homepage or the official reports

of the specific company. Moreover, some open questions were included in the criterion raster which provided the opportunity to present the actions taken by the company better.

2.1 Generic Dimension

The aim of the generic analysis is to give an overview of the company’s vision and strategy. Although the generic dimension is not part of the general sustainability model, we can gain a broad picture about the integration of SD into the company and its culture by watching the company and its aims in general.

Vision, Model	<ul style="list-style-type: none"> ▪ Is sustainability implemented into the vision and aims of the company? ▪ Is SD part of the company’s culture? ▪ Does the company participate in the UN Global Compact? ▪ Are stakeholders taken into account? ▪ How are stakeholders taken into account?
Business strategy	<ul style="list-style-type: none"> ▪ Are there systems and guidelines for the implementation of SD into the company? ▪ Is SD treated as own chapter in the annual report or is there a specific sustainability report of the company? ▪ Does the company participate in specific corporate governance programs? ▪ Is the top management responsible for SD? ▪ Is the company listed in a Sustainability Index? (Dow Jones Sustainability Group Index, FTSE 4 Good Index)

Table 2-1: Criteria of the generic dimension.

Since sustainability has become more and more interesting, sustainability indices were created as a tool for socially responsible investors (SRI) which present a pool of companies who work and behave in a sustainable way. For this survey, the DJSI World and DJSI Europe and on the other hand the FTSE 4 Good World and FTSE 4 Good Europe have been selected (DJSI (2005), FTSE (2005)).

2.2 Ecological Dimension

When talking about SD, the ecological dimension is emphasized mostly. Its aim is to integrate environmental management systems into the organization and to be aware of consequences resulting from the company’s behaviour to the environment. Possibilities to maintain life sustaining systems and to prevent environmental destruction are discussed within the ecological dimension. In this survey, the ecological dimension is divided into four categories. At first, information about the environmental politics and strategy of the company is analysed, followed by the question about the existence of environmental management systems within the company. Whether the enterprise behaves ecologically well is part of the third category. This category consists of questions concerning the production process in the company. Some criteria concerning the reporting of the ecological dimension mark the end of the second sustainability

pillar. Different aspects are similar to the indicators shown above in the generic dimension but are adapted to the needs of analysing the ecological pillar.

Politics	<ul style="list-style-type: none"> ▪ Vision: Is there an ecological policy and strategy? ▪ Is the top management responsible for ecological sustainability? ▪ Are the stakeholders taken into account? ▪ Are ecological aspects taken into account (in R&D)? ▪ Are there ecological standards for all affiliations of the company?
Management systems	<ul style="list-style-type: none"> ▪ Is there an environmental management system (EMS) implemented? ▪ Are employees trained and educated concerning ecological aspects? ▪ How are stakeholders taken into account concerning ecological aspects?
Eco-efficiency and eco-effectiveness	<ul style="list-style-type: none"> ▪ Is there ecological purchase? ▪ Is there an ecological optimisation of the production? ▪ Is there an eco-oriented product development? ▪ Is there an eco-oriented marketing? ▪ Are the resources in the company used and recycled in an ecological way?
Reporting	<ul style="list-style-type: none"> ▪ Are there environmental reports? ▪ Are the most relevant aspects of the actions described in the reports? ▪ Is there quantitative data in the reports? ▪ Are the ecological aims described in the reports? ▪ Are there external standards of reporting? ▪ Are there external inspections/audits of the reports?

Table 2-2: Criteria of the ecological dimension.

2.3 Social Dimension

The main focus within social dimension is the human being. In sustainable companies, programs should be started to guarantee the meeting of the employees’ needs and the society – the needs of the stakeholders. Similar as for the ecological dimension, the categories are politics, management systems and reporting.

Politics	<ul style="list-style-type: none"> ▪ Is there a social vision model/politics? ▪ Are the stakeholders taken into account? ▪ Are there social standards for the whole company and worldwide?
Management systems	<ul style="list-style-type: none"> ▪ Is there a social management system implemented? ▪ Is the employee’s satisfaction ascertained? ▪ Are there any internal ethical and social standards? ▪ Is the number of industrial accidents published? ▪ Are there programs to decrease accidents at work? ▪ How are stakeholders taken into account concerning social aspects? ▪ Are there activities in developing countries concerning social aspects or human rights? ▪ Are social projects sponsored by the company?
Reporting	<ul style="list-style-type: none"> ▪ Are there any social reports? ▪ Are the most relevant aspects of the actions described in the reports? ▪ Is there quantitative data in the reports? ▪ Are the social aims described in the reports? ▪ Are there external standards of reporting? ▪ Are there external inspections/audits of the reports?

Table 2-3: Criteria of the social dimension.

3 RESULTS

The results of the analysis are presented for each single index, for each industry and for each dimension to give an overview about the relevance and implementation of SD into companies quoted on stock exchanges. All results are shown as relative numbers.

For the analysis, three answers were possible. “Yes” and ”No” signal whether the company fulfils the criterion, if there was no related information on SD available on homepage or annual report, it was answered by “not apparent”. The third answer is eliminated of the following tables and figures, but it presents the gap between yes and no.

3.1 Results for each Index

Four indices representing industrialized companies and regions were analysed in this survey. The Dow Jones Industrials Average Index (DJIA) is considered to be the best known index of the US market and represents the 30 American companies with the highest market capitalization. The Nikkei Stock 225 Average Index represents the stock exchange index of the Japanese market since 1950, 225 companies are listed in this index. For this survey, the 20 companies with the highest market capitalization were taken into account the analysts ranked the companies by their market capitalization. The Eurostoxx 50, representing the third analysed index, consists of 50 European companies which are situated in the monetary union and present the highest market capitalization. For this analysis, the best 25 companies (according to market capitalization) are taken into account. As the analysts are Austrians, special regard is given on the analysis of the 20 companies listed in the Austrian Traded Exchange (ATX) concerning SD.

GENERIC DIMENSION	Dow Jones Industrials Average		Nikkei Stock 225 Average		Dow Jones Eurostoxx 50		Austrian Traded Exchange	
	Yes	No	Yes	No	Yes	No	Yes	No
Number of companies	30		20		25		20	
SD part of the vision?	37%	63%	50%	50%	56%	44%	35%	55%
SD part of the organizational culture?	50%	50%	70%	25%	76%	24%	45%	40%
Participation at the UN Global Compact?	7%	93%	10%	90%	96%	4%	15%	85%
Consideration of the stakeholder?	77%	17%	85%	10%	92%	8%	50%	35%
Guidelines to implement SD?	50%	50%	50%	40%	84%	16%	40%	55%
SD own chapter in the annual report?	63%	30%	100%	0%	88%	12%	55%	40%
Participation at a Corporate Governance Codex?	97%	0%	65%	0%	96%	0%	85%	0%
Responsibility for SD at the top management?	30%	57%	35%	40%	20%	76%	25%	55%
Listed in sustainability indices?	63%	37%	65%	35%	88%	12%	30%	70%

Table 3-1: Results of the generic dimension.

The analysis of the generic dimension for each single index shows an interesting result. Whereas only a third of the American companies implements SD into their strategy, half or more of the Japanese and European companies set SD goals. Interesting is that a significant

number of corporations indicate on their homepages to believe in SD and that it was part of the organizational culture, although it is not articulated in their business strategy. The consideration of stakeholders, the participation at a Corporate Governance Codex and the integration of SD into the annual report or the publication of an own SD report are fulfilled by the majority of companies. Corporations from the Dow Jones Index show a slightly more positive result than Austrian companies. All of the analysed Japanese companies have published a SD report. The best results concerning generic dimension present corporations listed in Eurostoxx 50. A fact that has to be mentioned is the high number of European participation in the UN Global Compact.

ECOLOGICAL DIMENSION	Dow Jones Industrials Average		Nikkei Stock 225 Average		Dow Jones Eurostoxx 50		Austrian Traded Exchange	
	Yes	No	Yes	No	Yes	No	Yes	No
Number of companies	30		20		25		20	
Environmental strategy?	83%	17%	100%	0%	84%	16%	55%	35%
Responsibility at the top management?	33%	57%	40%	45%	20%	76%	15%	55%
Consideration of the stakeholder?	63%	30%	80%	15%	80%	16%	35%	40%
Consideration of ecological aspects?	80%	20%	95%	5%	96%	4%	50%	35%
Are the standards valid for all affiliations?	80%	20%	95%	5%	84%	4%	60%	35%
Implementation of an EMS?	70%	30%	85%	15%	60%	24%	40%	50%
Training on environmental issues for the employees?	47%	23%	50%	10%	36%	40%	15%	30%
Purchase?	50%	17%	60%	10%	24%	40%	15%	35%
Ecological optimization of the production?	73%	20%	85%	5%	56%	36%	45%	35%
Environmental orientation during product development?	63%	23%	75%	15%	72%	20%	50%	30%
Eco-Marketing?	10%	30%	15%	30%	4%	68%	25%	35%
Use and Recycling of the resources?	87%	13%	100%	0%	96%	0%	60%	30%
Environmental Reporting?	57%	43%	85%	15%	68%	32%	30%	60%
Description of the relevant aspects of the activities?	73%	23%	100%	0%	72%	28%	45%	45%
Presentation of quantitative data?	57%	40%	90%	10%	80%	20%	30%	60%
Description of the aims and its achievements?	53%	43%	85%	15%	56%	44%	35%	55%
External standards for reporting?	27%	60%	50%	20%	52%	40%	20%	70%
External check of the reports?	13%	63%	15%	35%	28%	64%	20%	70%

Table 3-2: Results of the ecological dimension.

The results of the ecological dimension can be seen in the very positive commitment of Japanese companies to environmental protection. Only some criteria are significantly below 50 percent, such as responsibility at the top management, eco-marketing and the external check of the environmental reports. In comparison, the other indices show worse results, except the criteria “external check of the reports” and “Eco Marketing”. Some indicators seem to be already fulfilled when analysing the homepages of the companies, whereas others are not important at the moment. However, about 85 percent of the corporations (excluding Austrian companies with 55 percent) indicate to have a proper environmental strategy which demands to consider ecological aspects. In average, two thirds of the companies have implemented an EMS which should guarantee a careful acquaintance with ecological related topics. In product development and the production process, a lot of actions and measures seem to be already set

by the companies. The efficient use of materials and other resources plays an important issue, whereas eco-marketing has not been known or implemented into practice yet. American, Japanese and European companies present quite positive results, Austria seems to be at the stage of beginning concerning environmental aspects or concerning communicating their environmental commitment to the public: a lot of required information cannot be found on the homepage or in official reports.

SOCIAL DIMENSION	Dow Jones Industrials Average		Nikkei Stock 225 Average		Dow Jones Eurostoxx 50		Austrian Traded Exchange	
	Yes	No	Yes	No	Yes	No	Yes	No
Number of companies	30		20		25		20	
Social plan/strategy?	77%	20%	70%	5%	88%	8%	50%	30%
Consideration of the stakeholder?	73%	23%	60%	5%	92%	8%	50%	25%
Are the standards valid for all affiliations?	87%	13%	65%	5%	88%	8%	60%	15%
Implementation of an SMS?	53%	43%	15%	30%	32%	28%	20%	55%
Evaluation of the employee's satisfaction?	7%	13%	0%	30%	16%	80%	35%	15%
Internal ethical and social standards?	80%	3%	50%	10%	88%	0%	70%	15%
Publication of the number of accidents at work?	37%	40%	30%	35%	36%	56%	30%	35%
Programs to reduce industrial injuries?	47%	30%	25%	35%	32%	60%	30%	30%
Activities in developing countries?	30%	17%	5%	20%	32%	24%	15%	35%
Social sponsoring?	67%	10%	80%	0%	88%	4%	50%	30%
Social Responsibility Reporting?	50%	47%	45%	35%	68%	32%	20%	65%
Description of the relevant aspects of the activities?	63%	33%	40%	35%	76%	24%	20%	65%
Presentation of quantitative data?	37%	60%	25%	45%	60%	36%	20%	65%
Description of the aims and its achievements?	47%	50%	20%	50%	52%	40%	25%	60%
External standards for reporting?	23%	63%	25%	35%	52%	40%	20%	65%
External check of the reports?	7%	67%	5%	55%	32%	60%	15%	70%

Table 3-3: Results of the social dimension.

Some concurring results occur when analysing the social dimension: On average, two thirds of the companies indicate to have a social plan and a social strategy. Only a third of the companies mentions to have implemented a social management system (SMS) to ascertain social commitment. Due to the analysis of the homepages and official reports, the US homepages are often geared towards CSR. Furthermore, there are CR reports in which all dimensions are described but especially the social aspect highlighted. The Dow Jones index provides the best results in regard of the implementation of a SMS or programs to reduce accidents at work. The gap between social plan and the implementation of a SMS is, except for Dow Jones, rather high. None of the analysed Japanese companies elevate the employees' satisfaction and only a small number describes aims and achievements for the social aspect. Europe presents as good results as in the other dimensions, whereas the number of companies describing relevant social activities and following external standards for reporting should be underlined. The results of Austrian companies are quite positive as well. Especially the high percentage of the evaluation of employees' satisfaction (35 percent) ,which shows the respect to the employees, has to be mentioned.

3.2 Results for each Industry

In a second step, the results were divided into industries in order to give a worldwide overview about the willingness of industries to accept and integrate SD as aspects of business management. There are several approaches to divide the economy into different branches of industry and to assign the subcategories to the main industries. For this survey, the classification according to the MSCI is used to identify the specific industries (MSCI (2005)). Following tables show the results of the industries for each dimension.

GENERIC DIMENSION	Consumer Discretionary	Consumer staples	Energy	Financials	Health Care	Industrials	Information Technology	Materials	Telecommunication Services	Utilities
Number of companies	13	10	11	20	4	8	11	7	8	2
SD part of the vision?	54%	30%	55%	35%	50%	38%	36%	43%	50%	100%
SD part of the organizational culture?	62%	70%	73%	50%	50%	50%	55%	71%	63%	50%
Participation at the UN Global Compact?	8%	10%	36%	15%	25%	13%	18%	0%	38%	0%
Consideration of the stakeholder?	69%	90%	82%	60%	100%	88%	91%	57%	88%	50%
Guidelines to implement SD?	69%	60%	73%	40%	50%	38%	64%	57%	63%	50%
SD own chapter in the annual report?	85%	80%	73%	65%	50%	50%	100%	71%	88%	100%
Participation at a Corporate Governance Codex?	77%	100%	91%	85%	75%	100%	100%	86%	75%	100%
Responsibility for SD at the top management?	46%	10%	36%	10%	25%	13%	27%	57%	25%	50%
Listed in sustainability indices?	62%	50%	55%	65%	50%	50%	91%	29%	100%	50%

Table 3-4: Results of the industries for the generic dimension.

Approximately 50 percent of companies in industries like Consumer Discretionary, Energy, Telecommunication Services and Health Care have implemented SD into their vision. However, sustainability in the vision seems not to be common in the information technology. The best three industries, which have integrated the sustainability aspect into the organizational culture, reach an amount of more than 70 percent. The criterion whether the responsibility of SD lies in the hand of a top manager varies extremely. But especially the question whether the company is listed in an Sustainability Index turns out to be interesting. Energy is one of the industries which shows a great commitment to SD in general, but the result of this sector concerning the admission in Sustainability indices is not better than the average. To be listed in a Sustainability Index such as FTSE 4 Good or the Dow Jones Sustainability index reflects the real commitment to sustainability of the company. Why Energy is not often listed is discussed in the interpretation.

	Consumer Discretionary	Consumer staples	Energy	Financials	Health Care	Industrials	Information Technology	Materials	Telecommunication Services	Utilities
ECOLOGICAL DIMENSION										
Number of companies	13	10	11	20	4	8	11	7	8	2
Environmental strategy?	77%	100%	100%	65%	100%	63%	91%	57%	88%	100%
Responsibility at the top management?	46%	10%	27%	15%	50%	13%	36%	43%	25%	0%
Consideration of the stakeholder?	69%	100%	82%	45%	75%	38%	64%	43%	88%	50%
Consideration of ecological aspects?	85%	100%	100%	70%	100%	50%	82%	57%	88%	100%
Are the standards valid for all affiliations?	85%	100%	100%	55%	100%	63%	91%	71%	75%	100%
Implementation of an EMS?	62%	70%	82%	30%	75%	63%	73%	71%	88%	100%
Training on environmental issues for the employees?	38%	50%	45%	25%	50%	38%	45%	43%	25%	0%
Purchase?	46%	60%	45%	15%	0%	25%	73%	14%	50%	50%
Ecological optimization of the production?	77%	70%	100%	15%	75%	63%	82%	71%	88%	50%
Environmental orientation during product development?	69%	70%	91%	40%	50%	75%	82%	43%	75%	50%
Eco-Marketing?	15%	20%	27%	0%	0%	13%	0%	14%	13%	100%
Use and Recycling of the resources?	85%	100%	100%	70%	100%	75%	100%	71%	88%	100%
Environmental Reporting?	69%	80%	82%	40%	25%	38%	73%	29%	88%	50%
Description of the relevant aspects of the activities?	77%	90%	91%	55%	100%	50%	73%	57%	75%	100%
Presentation of quantitative data?	85%	80%	91%	45%	75%	38%	64%	29%	75%	50%
Description of the aims and its achievements?	77%	80%	82%	25%	75%	38%	64%	43%	50%	50%
External standards for reporting?	31%	70%	45%	30%	0%	25%	36%	29%	38%	50%
External check of the reports?	8%	40%	64%	5%	0%	13%	9%	0%	38%	0%

Table 3-5: Results of the industries for the ecological dimension.

The majority of the industries has established a specific environmental strategy and in the industries of Consumer Discretionary and Health Care, half of the companies have a top manager who is responsible for the environmental sustainability. The implementation of an EMS is an important step towards sustainability. In average, two thirds of companies of all industries indicate to use an EMS to achieve environmental goals and standards. The worst result is to be found in the sector of Financials where SD does not seem to be an important issue. Half of the companies of Consumer Staples, Health Care and the IT sector educate their employees on environmental issues. When talking about the purchase of “green products”, companies from IT and Consumer Staples declare to be seriously concerned about the quality and the trader they buy the materials from. However, no corporation of the Health Care sector indicates to be concerned about the purchase. Ecological optimisation of the products and the development of environmentally friendly products play a main role in IT, Energy and Telecommunication Services. Environmental Reporting varies between 88 percent (Telecommunication Services) and 25 percent (Financials).

SOCIAL DIMENSION	Consumer Discretionary	Consumer staples	Energy	Financials	Health Care	Industrials	Information Technology	Materials	Telecommunication Services	Utilities
Number of companies	13	10	11	20	4	8	11	7	8	2
Social plan/strategy?	69%	90%	82%	55%	100%	63%	91%	57%	88%	0%
Consideration of the stakeholder?	69%	90%	82%	55%	100%	63%	73%	71%	88%	0%
Are the standards valid for all affiliations?	77%	90%	82%	65%	100%	75%	91%	86%	75%	0%
Implementation of an SMS?	31%	40%	55%	5%	50%	63%	55%	29%	13%	0%
Evaluation of the employee's satisfaction?	15%	10%	27%	15%	0%	0%	9%	29%	13%	0%
Internal ethical and social standards?	77%	60%	82%	70%	75%	75%	73%	86%	88%	0%
Publication of the number of accidents at work?	62%	10%	73%	5%	0%	13%	55%	43%	38%	0%
Programs to reduce industrial injuries?	62%	20%	55%	10%	50%	25%	55%	43%	25%	0%
Activities in developing countries?	15%	30%	18%	5%	25%	38%	36%	29%	38%	0%
Social sponsoring?	62%	100%	73%	80%	100%	38%	73%	43%	88%	0%
Social Responsibility Reporting?	54%	50%	64%	40%	25%	38%	64%	29%	50%	0%
Description of the relevant aspects of the activities?	62%	50%	73%	40%	75%	38%	73%	29%	50%	0%
Presentation of quantitative data?	62%	50%	55%	10%	25%	13%	55%	14%	50%	0%
Description of the aims and its achievements?	46%	50%	64%	15%	25%	25%	64%	14%	38%	0%
External standards for reporting?	31%	40%	45%	30%	0%	13%	27%	29%	38%	0%
External check of the reports?	8%	20%	55%	5%	25%	13%	0%	0%	25%	0%

Table 3-6: Results of the industries for the social dimension.

A social vision in which the human being is focused on is created at least in half of the companies of each industry but especially in Health Care and Consumer Staples companies. Although a social vision seems unusual, the implementation of a social management system is not common. Only the sectors of Industrials, Energy and IT show a result higher than 50 percent. The amount of companies which evaluates the employees' satisfaction is not high at all, only in some industries (Energy, Materials) the satisfaction of the collaborates is taken into account. Whereas some industries seem to integrate SD in their daily business and follow the above mentioned social sustainability standards by publishing quantitative data and programs to reduce the number of industrials accidents, other sectors such as Financials, Industrials and Materials do not make SD to a very important issue of the company.

3.3 Results for each Dimension

The international survey discussed in this paper covered 95 companies from different countries and continents. By putting all companies together, an overall view about the dimensions can be achieved. This overall view highlights the progress of SD as aspect of business management in general.

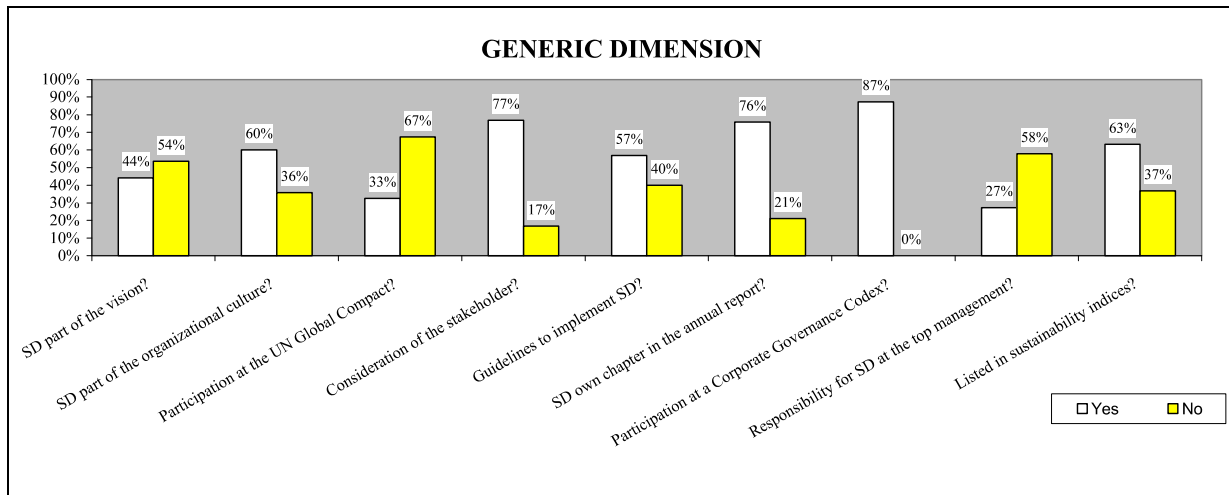


Fig. 3-1: Results of the generic dimension.

The result of the generic dimension shows that 44% of the 95 companies indicate to have integrated SD into their vision, whereas slightly more than the majority has not done this so far. By analysing the homepages and official reports of the companies, it seems that 60% have implemented a mentality of sustainability into the organizational culture, a third takes part in the UN Global Compact and more than three quarters consider their stakeholder as an important part of their business. Although more than half of the companies have implemented systems and guidelines for a better SD into their organization, only 27% of the companies consign a top manager of the firm to be responsible for the company's sustainability. Nevertheless, more than 60% are listed in a sustainability index.

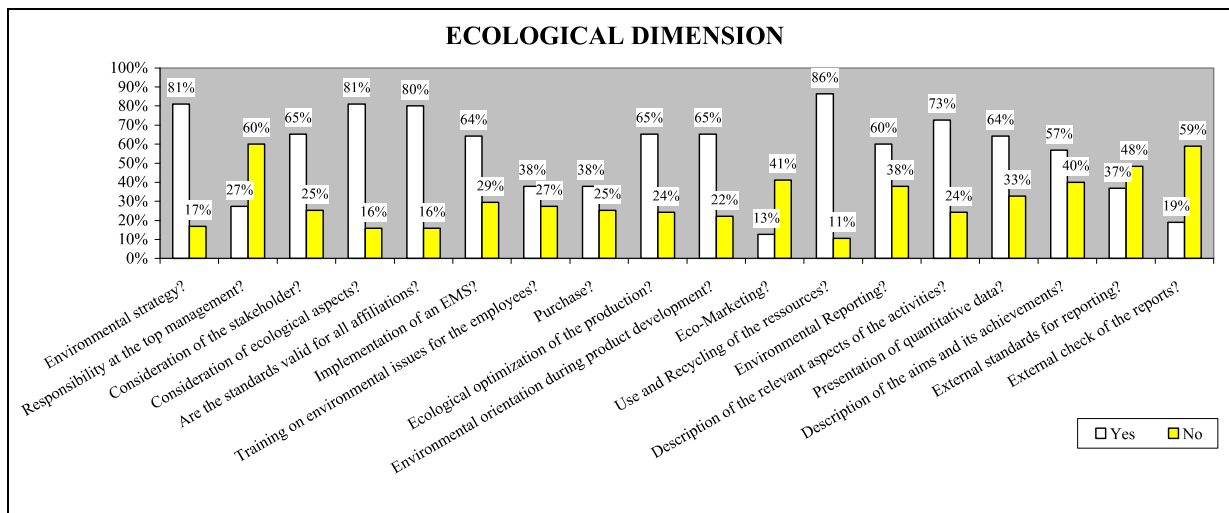


Fig. 3-2: Results of the ecological dimension.

The result of all companies concerning ecological aspects is interesting. Many indicators are fulfilled satisfyingly by the companies, in two thirds of the companies an environmental management system guarantee a focused view on environmental aspects. (In general,) More training on environmental issues for the employees is required. In the purchase and in the marketing process more could be done, whereas nearly all of the companies indicate to have

implemented waste management which obeys the use and recycling of the resources. Eco-Reporting seems to be common (60%), whereas only a minority of the companies use external standards or mandate an external auditor for a validity check of the quantitative data.

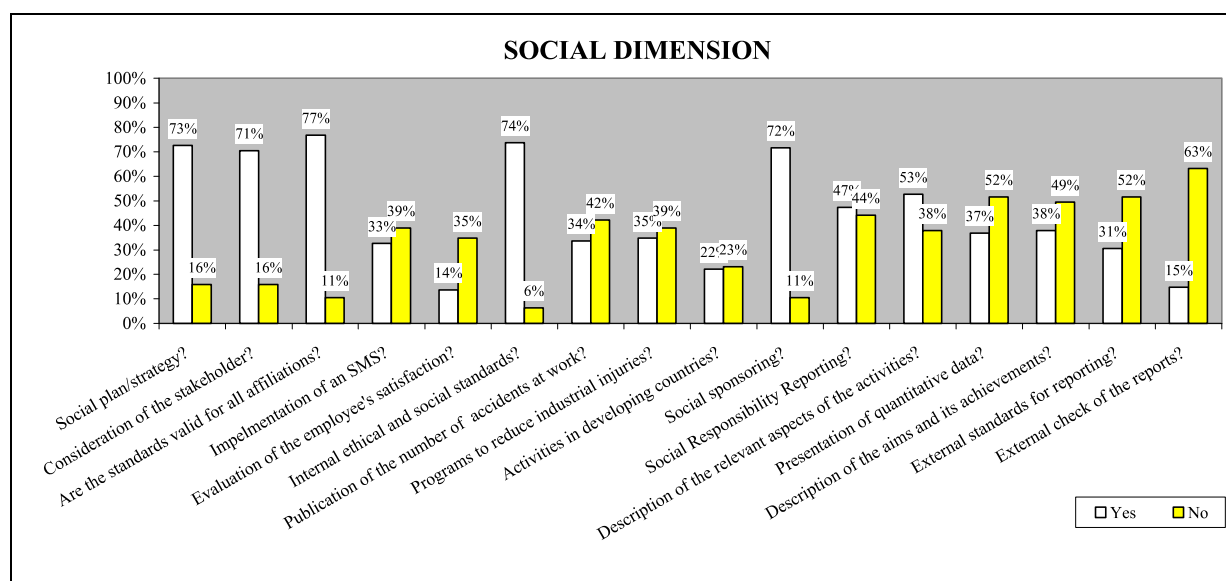


Fig. 3-3: Results of the social dimension.

Some indicators reflect that social sustainability is of importance to the companies, other factors such as the implementation and integration of a SMS or the evaluation of the employee’s satisfaction could be improved. The publication of accidents at work or programs to reduce these industrial injuries should be promoted more than today.

4 INTERPRETATION

The survey concerning SD in business management covers 95 companies situated in industrialized countries which are listed in the specific regional indices such as Dow Jones Industrials Average, Nikkei 225, Eurostoxx 50 and ATX. These companies present the economy, its performance and development of the certain countries. Their commitment to sustainability reflects how the model of SD is developed in the specific geographical regions. Moreover, it shows the deficiencies the companies have concerning SD and presents several differences and methods how companies implement or live SD in the specific countries. Therefore, it is possible to draw several conclusions: about the attitudes towards SD in the countries, about the pressure which is put on the companies by the government and the pressure which is exerted by the stakeholders.

Due to the analysis, American companies show a positive result of integrating sustainability into their business. A high number of indicators of the ecological and social dimension are fulfilled by the American companies. Nevertheless, important indicators from the generic dimension, such as how SD is implemented into the vision or whether SD is an integral part of organizational culture, do not seem to be as much important. Their attitude towards SD is to

promote everything they do which protects the environment as commitment to CSR and SD, however, facts are missing sometimes. It seems to the analysts that pressure is especially exerted by the shareholders in the United States.

The analysed Japanese companies are the leader in environmental sustainability and they show the best results of all indices in the ecological dimension. All of them have special environmental policies and work to decrease their environmental footprint to maintain and protect the environment. However, the results of the social dimension are disappointing in comparison with the very positive ecological results. In Japan, environmental issues play an important role because of the geographical and demographical situation.

The commitment to SD in Europe is quite high, in every dimension the European companies which are listed in the Eurostoxx 50 present very positive results. It seems that the attitude towards SD is elevated and that a generic model which includes all three SD dimension equally is preferred. It seems to the analysts that there is pressure from the governments to implement and integrate SD into daily business, but that the companies are also put under pressure from the stakeholders to work in a sustainable way. The lobbies in Europe, such as shareholders, environmental organizations and social partnerships have a lot of power and may influence the strategy and behaviour of the companies. Although Austria is a part of Europe, its commitment to SD is not as high as estimated at the beginning. Concerning the generic dimension, Austrian companies show similar results as the US companies but the results regarding ecological and social dimension are not as positive. The companies which have implemented SD into business management behave sustainably correct, but SD is not as much promoted on the homepage and in official reports as for example in the United States. Nevertheless, there is potential to increase the acceptance of sustainability and to profit from the positive strive which exists in Euroland.

Industries such as Telecommunication Services, Consumer discretionary, Information Technology and Energy do a lot for implementing and integrating sustainable aspects into their business, whereas other industries such as Financials and Materials are not really committed to SD so far. The percentage of companies listed in a sustainability index show how effective and sincere their commitment to sustainability is in praxis – Telecommunication Services, Information Technologies and Consumer Discretionary show the best results. Especially the Energy sector has to be highlighted. In this analysis, the Energy sector shows very positive results in all dimensions and publishes a lot of data concerning SD and its implementation into the company. Nevertheless, only half of these companies actually is listed in Sustainability Indices. Although they communicate to do a lot for SD, their engagement might be not enough, or other criteria, such as the operation of a nuclear power station or the extraction or processing of uranium exclude the company automatically of being listed in sustainability indices (FTSE (2005)).

If the data of all 95 companies are being put together, all dimensions show positive results. Only some indicators exist which are not fulfilled by the majority of the companies. Potential exists for indicators such as the implementation of SD into the vision - the crucial one - or the

responsibility of SD in the hands of a top manager of the company for the generic dimension. Ecological aspects, such as the education of employees concerning environmental sustainability, eco-marketing or the use of external standards and auditors for the reporting should be discussed further. The social dimension can be ameliorated by increasing the implementation of social management systems into the companies, by evaluating the employee's satisfaction and by inventing programs to reduce the number of accidents at work. The results are not disappointing at all, however, they show that there is still more to do for a better sustainable world and business.

Further research has to be carried out for an in-depth analysis regarding the economic dimension of SD and the role of employee's satisfaction in Japan. Additionally, this survey based on public available data will be combined with internal data resulting from questionnaires and interviews analysing the same group of companies.

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