

## **Social and Environmental Disclosure in the Annual Reports of Jordanian Companies**

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### **Abstract**

Recently, much attention has been devoted by researchers to study social and environmental disclosure among corporations. Most of the studies were conducted in developed countries, with only a handful being undertaken in developing countries. This study aims to investigate the extent of social and environmental disclosure in the annual reports of Jordanian companies and examine if the level of disclosure is influenced by size of firm, government ownership and industry. In particular, disclosure with regard to environmental issues, community involvement and human resource are examined. Using a sample of 60 companies in the manufacturing and service sectors, content analysis is used to measure the level of disclosure. The findings indicate that 85% of the companies somehow disclose social and environmental information. Human resource is the most disclosed theme while the environmental issue had the lowest disclosure among the companies. In addition, a significant positive association is found between company size and social and environmental disclosure, and companies with high government ownership tend to have a lower level of disclosure compared to companies with low government ownership. On the overall, no significant relationship was found between industry type and the level of social and environmental disclosure. However, when only environmental issues are examined, manufacturing companies tend to disclose more of the items compared to service companies.

**Keywords:** *social and environmental disclosure, social reporting, environmental reporting, annual reports.*

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### **Introduction**

Companies are now becoming more sensitive and aware of their roles and responsibilities towards the society and environment, resulting in a growing

trend in social and environmental reporting. Subsequently, researchers have begun to examine the extent of disclosures, including types and nature, form, quality and quantity of information disclosed. Most of these studies

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were carried out in the context of developed countries (see Adams et al., 1998; Brown and Deegan, 1998), while only a handful were conducted in developing countries.

Corporate social and environmental disclosure (CSED) is a process of communicating the social and environmental effects of organizations' economic actions to the society (Gray et al. 1987). In the case of Jordan, like any other developing country, there is a lack of studies on CSED (see for example Abu-Baker and Naser, 2000; Al-Khadash, 2003; Jahamani, 2003). A low level of disclosure was found by these studies, despite the laws and regulations that mandate the Jordanian organizations to disclose social and environmental reporting in their annual reports, such as the Law of Environmental Protection 1995, and the Securities Commission Law of 1998 (Al-Khadash, 2003).

Over the past several years, the Jordanian economy has improved, with the GDP growing at a rate of 6.2% in 2006 (Jordan Economic Reports, 2006). In 2006, the Jordanian government has taken a positive economic measure by significantly reducing its debt-to-GDP ratio (The 2008 World Fact Book). Coupled with increased political stability, this measure would help Jordan become more attractive to foreign investors. Consequently, we expect that there will be an increased quality of corporate annual reports and thus social and environmental reporting reported in the annual reports.

Accordingly, this study examines the current practice of social and environmental reporting in Jordan. In particular, this study measures the extent of CSED

among Jordanian listed companies and examine if company characteristics (namely firm size, industry type and government ownership) influence the amount of disclosure.

This study is important because it will also include companies in the service sector, which previous studies tend to ignore. Previously, CSED studies tend to focus on the manufacturing sector. The service sector also plays a significant role in the Jordanian economy, and constitutes 66 percent of the country's GDP (Jordan economic reports 2006). In addition, only a few studies were carried out in Jordan that investigate the role of ownership structure in influencing the level of disclosure, despite the fact that the Jordanian government holds a majority of companies' shares in most big companies (Naser (1998) cited in Naser et al. (2002)). In a developing country like Jordan, government ownership of companies is viewed as a supervising mechanism that may influence the quality of information disclosed (Nasser et al., 2002).

The remaining of this paper is organized as follows. In the next section, this paper provides a review of literature. Next, we present the research methods and hypothesis development. The findings of the study will be presented next. Finally, we will provide the conclusions.

## Literature Review

The term corporate social reporting (CSR) or corporate social disclosure as often been used, has a very broad meaning. Guthrie and Mathews (1985) defined corporate social disclosure as the provision of financial and non-financial

information relating to an organization's interaction with its physical and social environment as stated in corporate annual reports or separate social reports. 'Environment' is one of the most common categories of social disclosure; as such, most research has considered environment as a stand-alone category (Tilt, 2000), and some others use the term CSED to highlight such significance.

### **CSED in Developed Countries**

Corporate social and environmental reporting issues have received growing attention, particularly from researchers in developed countries (see for example, Ernst and Ernst, 1978; Patten, 1992; Guthrie and Parker, 1990; Adams et al., 1998, Gray, 2001; and Araya, 2006). These studies review the social and environmental disclosure policies of entities around the world. They provide evidence that there has been an improved corporate social reporting over the years. Adams et al. (1998) for example examined the annual reports of six European countries (namely the UK, Germany, France, Netherlands, Sweden, and Switzerland) and found that there was an increased amount of disclosure among all countries especially in the UK and Germany.

Prior studies also suggest that information related to human resource, as compared to that of community involvement and environment issues, was the most common information provided in the annual reports (see for example, Guthrie and Parker, 1990; Roberts, 1990; and Adams et al., 1998) although there is an increasing awareness among companies to disclose environmental

information in their annual reports (Gray, 2001). Countries vary in the types of human resource information they disclose. Roberts (1990) concludes that European, South African and Australian companies are more likely than companies in other parts of the world to disclose employment policies, health and safety information, or have separate sections on employment data. There is also evidence to suggest that companies domiciled in a more developed nation is likely to report more extensively in the developed nation than it is to report in the lesser developed countries in which it operates (see, for example, United Nations, 1992).

Environmental reporting has a long history. However, only during the late 1980s and early 1990s did it become widespread in Western Europe (Gray et al. 1996). Roberts (1991) provides evidence that the disclosure level for environmental information in Germany is higher than in any other European country, in which more than 80 percent of German companies provided at least one item of environmental information in their annual reports. According to Araya (2006), multinational enterprises from developed countries are the leading producers of environmental reports. During the period from 1990 to 2003, 58 percent of all separate environmental reports published around the world came from Europe, 20 percent from the Americas (two thirds from the US and one third from Canada and Brazil), 20 percent from Asia (mainly Japan) and Australasia, and only 2 percent from Africa and the Middle East.

### **CSED in Developing Countries**

Little attention has been given to

CSR issues in developing countries (Al-Khater and Naser, 2003). Lack of regulation was one of the most common problems that authorities in these countries faced in their efforts to encourage corporations to disclose their environmental and social reports (Abu Shiraz, 1998). Abu Shiraz also argued that the shortage of qualified accountants in developing countries is part of the problem because introducing social and environmental issues into the reporting system requires a combination of expertise in various fields including law, engineering, and sociology. In addition, reporting on social and environmental issues presents additional costs (Al-Khater and Naser, 2003). Although evidence shows that the volume of CSED in developing countries increases (Tsang, 1998 and Al-Khater and Naser, 2003), the volume is still low despite the increasing awareness of companies towards the social and environmental issues (see Imam, 1999). Like in developed countries, disclosure is mainly on human resource (see for example Thompson and Zakaria, 2004). Environmental information is least likely to be reported (Rahman and Muttakin, 2005).

Within the Arab world, Al-Khater and Naser (2003) investigated the perceptions of various user groups of Qatar's corporate reports about different aspects of corporate social responsibility disclosure. The findings show that respondents support the idea that companies should report some kind of CSR to justify their existence within the society. They felt that the inclusion of CSED in annual reports would reflect social responsibility to the public. Another study of CSED in the Arab world

is by Jahamani (2003), which examined the extent of environmental reporting for United Arab Emirate companies in 1998. The results show that only 12 percent of the companies in the UAE issued environmental reports.

In Jordan, research on social and environmental disclosure was limited (Al-Khadash, 2003) and is still in the early stage (Jahamani, 2003). One of the studies is by Abu-Baker (2000), who examined the extent of CSED of Jordanian listed companies in 1997. Using a sample of 143 companies chosen from three different industry groups (manufacturing, insurance, and banking), he concluded that all companies made some kind of CSR in their annual reports. On average, about half of a page in the annual report is devoted to social disclosure. He also found that environmental, product and energy reporting need a lot of attention and concentration by Jordanian companies. On the other hand, human resources and community involvement were the most themes commonly disclosed across the Jordanian shareholding companies. In another study, Al-Khadash (2003), examined the level of social and environmental disclosure in the annual reports of the Industrial Jordanian Shareholding Companies (IJSs) over the period 1998 to 2000. He found that 26 percent of the IJSs did not have social and environmental disclosure in the annual reports, and the level of social and environmental disclosure in the IJSs has increased over the period of 1998 to 2000. In addition, the findings showed significant relationships between the company's size and management risk with the level of social and environmental disclosure. On the other hand, the study did not support any significant relationship between financial

performance and the level of social and environmental disclosure. Jahamani (2003) who examined the extent, awareness and level of environmental responsibility of Jordanian companies found that only 10 percent of the companies issued environmental reports as part of their annual reports. The amount of information varied from nine pages to a few paragraphs. The study concluded that the environmental, product and energy reporting need a lot of attention and concentration by Jordanian companies.

## **Hypothesis**

### ***Firm Size***

In general, large companies have more stakeholders and are thus more visible to the public than smaller companies. Firth (1979) suggests that firms which are more visible to the public are more likely to disclose information to enhance their corporate reputation and to reduce political costs. It is also argued that revealing more information allows large firms to obtain new funds at lower costs. Large firms often possess sufficient resources for collecting, analyzing, and presenting extensive amounts of data at minimal cost. Although evidence on the association between size and CSED is mixed, expectedly, numerous studies found the association to be positive (see for example, Andrew et al., 1989; Adams, 1998; Hackston and Milne 1998; Al-Khadash, 2003 and Alsaeed, 2006;).

Based on the above arguments and prior findings, the following hypothesis is tested:

H<sub>1</sub>: There is a positive association between firm size and the level of social and environmental disclosure.

### ***Industry Type***

It is argued that industry may have an influence on the amount of disclosure. Patten (1991) suggests that the nature of the industry is a more important factor on social responsibility disclosure. In this study, companies are classified into either manufacturing or services following the Amman Stock Exchange (ASE) classification. It is expected that manufacturing companies are more likely to provide more disclosure. This is because they have greater environmental impacts on the society than other companies. Manufacturers are known to be greater polluters and more visible to the society. Furthermore, they are expected to influence political visibility (Hackston and Milne, 1998). Thus, manufacturing companies would disclose more to reduce political costs and the pressure from social activists.

Evidence of the association between industry type and the level of CSED is provided for example by Halme and Huse (1997) and Hackston and Milne (1998). The latter found that manufacturing companies with high profit disclose more CSED than non-manufacturing companies. Abu-Baker (2000) found that manufacturing sectors are more likely to disclose information than other sectors (for e.g. service, banking, and insurance).

This leads us to the second hypothesis as follows:

H<sub>2</sub>: Manufacturing companies disclose more social and environmental information than service companies.

### ***Government Ownership***

In general, a wider spread in share ownership is argued to have a positive impact on the depth of information dis-

closed in the annual reports of listed companies (Fama and Jensen, 1983). In the case of Jordan, the government holds a significant number of shares in most companies (Naser et al., 2002). Huafang and Jiangu (2007) argued that enhancing shareholder value may not be the primary objective of government ownership. In addition, the government would also be able to obtain information from other sources and be more likely to gain easier access to different channels of financing than non-government firms (Eng and Mak, 2003). Consequently, we hypothesize the following:

H<sub>3</sub>: Companies with high government ownership tend to disclose less information than those with a low government ownership.

## Research Methods

This study examines the level of CSED in annual reports of Jordanian companies for the year 2006. There were 240 companies listed on the Amman Stock Exchange (ASE) as of December 2006 (112 and 128 companies are listed on the main board and the second board, respectively). The companies are classified into four major sectors – banking, insurance, manufacturing and services companies. The focus of this study is on manufacturing and service companies listed on the main board. There were 44 service and 41 manufacturing companies on the main board. However, only 30 companies from each of the manufacturing and service sectors are randomly selected and examined. Companies in the banking and insurance sectors (14 and 13, respectively) are excluded. This is because the accounting and disclosure requirements for the sectors in some

ways are different from those of the manufacturing and service sectors.

This study uses ordinary least square (OLS) regression model to examine the influence of the selected firm characteristics on CSED. The following model is estimated:

$$\text{CSED} = \alpha + b_1 \text{SIZE} + b_2 \text{INDUSTRY} + b_3 \text{OWNERSHIP} + \varepsilon$$

Where:

CSED = the level of CSED disclosure measured by the number of sentences used,

SIZE = size of a company measured by total assets,

INDUSTRY = “1” if it is a manufacturing company, and “0” if a service company,

OWNERSHIP = percentage of government ownership in a company, and

$\varepsilon$  = the error term.

Content analysis is used to analyze social and environmental reporting in the annual reports. Number of sentences (instead of number of words or number of pages) was used to measure the level of CSED. This is because the number of sentences may be counted with less use of judgment. Moreover, the counting of sentences has been associated with fewer errors compared to the counting of words (Unerman, 2000, cited by Nik Ahmad and Sulaiman, 2004)..

Based on the works of Abu-Baker (2000) and Al-Khadash (2003), the social and environmental information is classified into three themes - human resource, community involvement, and environmental issues. In addition, these themes are further broken down into thirteen items of information.

## Findings and Discussion

On the overall, 51 out of the 60 companies (or 85 percent) provide some kind of information regarding CSED. Nine other companies provide no disclosure. This is an improvement if compared to Al-Khadash (2003) who found that 26 percent of the sampled companies did

not have social and environmental disclosure in the annual reports. The mean number of sentences used to disclose social and environmental is 22, the maximum being 94 sentences. Table 1 summarizes the information provided by companies according to individual items as well as themes.

**Table 1**  
**Summary of CSED in Jordanian Companies' Annual Reports**

Theme	Disclosure by companies		Disclosure by sentences	
	Number of companies	Percent	Number of Sentences	Percent
<b>Human resources</b>				
Health & safety	27	45.0	87	6.7
Number of employees	51	85.0	197	15.2
Employee training	39	65.0	196	15.1
Incentives level	34	56.7	154	11.8
Employment of disabled	11	18.3	27	2.1
Other services to employees	21	35.0	124	9.5
<b>Sub-total</b>			<b>785</b>	<b>60.4</b>
<b>Community involvement</b>				
Donations to community	41	68.3	233	17.9
Public welfare	14	23.3	72	5.5
Other activities	16	26.7	94	7.2
<b>Sub-total</b>			<b>399</b>	<b>30.6</b>
<b>Environmental issues</b>				
Environment expenditure	13	21.7	42	3.2
Pollution abatement	5	8.3	14	1.1
Environment preservation	10	16.7	52	4.0
Recycling programs	3	5.0	9	0.7
<b>Sub-total</b>			<b>117</b>	<b>9.0</b>
<b>Grand total</b>			<b>1301</b>	<b>100</b>

Table 2 provides the descriptive statistics of the variables. In terms of firm size, total assets range from 1.8 million to 597 million Jordanian Dinars with a

mean of 61 million Dinars. With respect to ownership structure, the government owns between zero to 43.1 percent, with a mean of 5.34 percent.

**Table 2**  
**Descriptive Statistics**

	N	Min.	Max.	Mean	Std. Deviation
CSED (number of sentences)	60	0	94.00	21.68	20.657
SIZE (Total assets in million Jordanian Dinars)	60	1.8	597	61	110
INDUSTRY	60	.00	1.00	.5000	.504
OWNERSHIP	60	.00	43.10%	5.34%	10.34

Table 3 shows the results of Pearson Correlation between the independent variables. It provides evidence that there

is no multicollinearity problem in the model.

**Table 3**  
**Pearson Correlation Coefficients**

	INDUSTRY	OWNERSHIP
SIZE	-.051 (.699)	-.060 (.650)
INDUSTRY		.142 (.278)

Results of the OLS regression is exhibited in Table 4. The adjusted R-Square of 0.21 implies that the independent

variables explain 21 percent of the variation in disclosure, and the F-ratio (6.407) shows that the model is significant.

**Table 4**  
**Regression Results - Overall**

F-ratio = 6.407 (Sig. F = 0.001)			Adjusted R <sup>2</sup> = 0.216	
	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	16.054	3.765	4.264	.000
SIZE	7.784E-08	.000	3.592	.001***
INDUSTRY	7.069	4.777	1.480	.145
OWNERSHIP	-.491	.233	-2.109	.039**

\*\*\* Significant at 1 percent

\*\* Significant at 5 percent



There is a significant and positive association between the level of CSED and size of a company, which indicates that larger companies disclose more CSED compared to smaller companies. Therefore, the results support the first hypothesis and is consistent with previous studies (see for example, Andrew et al., 1989; Hackston and Milne, 1998; Adams, 1998; Al-Khadash, 2003; Nik Ahmad and Sulaiman, 2004; Rahman and Muttakin, 2005). As discussed earlier, large firms are closely watched by stakeholders, and they have the ability to absorb extra costs for improved disclosure (Alsaeed, 2006). Moreover, larger companies tend to have more shareholders who might also be concerned with the social and environmental programs undertaken by the company. On the other hand, smaller companies might not receive the **same** level of public pressure. Smaller companies may tend to communicate information about social programs through more informal channels than through the annual reports (Cowen et al., 1987).

In addition, this study provides evidence that government ownership has a negative and significant association with the level of social and environmental disclosure. Companies listed on the Amman Stock Exchange (ASE) with high government ownership tend to disclose less CSED than companies with a low government ownership. Likewise, this is consistent with the study of Huafang and Jiangu (2007) which found a negative association between state ownership and the level of voluntary disclosure in China. However, there is no significant association between industry type and the level of CSED. This result is consistent with Davey (1982) which failed to find an association between industry

type and CSED for New Zealand companies.

Table 5 shows the regression results of the effect of the variables on each of the three disclosure themes. The F-values indicate that the models are significant and the adjusted  $R^2$  values show that the independent variables explain 20 percent, 23 percent and 29 percent of the variations in environmental, community involvement and human resource disclosure, respectively. It is evident from the table that an industry type and size of a company are associated with disclosure of environmental issues (at a 10 percent significant level). Large and manufacturing companies tend to disclose more information on environmental issues than service companies. This is expected as manufacturing companies greatly affect the environment. Dierkes and Preston (1977) contend that companies whose economic activities modify the environment, are more likely to disclose information about their environmental impacts than are companies in other industries. Because these companies are more prone to pollution, environmental information is disclosed to reduce political cost and enhance their image. As for human resource and community involvement, the results resemble the overall results in which size and government ownership influence the level of disclosure in the expected direction.

## Conclusion

The main purpose of this study is to examine the level of social and environmental reporting in Jordanian companies listed on the ASE. In addition, this study determines if firm size, government ownership and industry type influence

**Table 5**  
**Regression Results by Themes**

<b>Environmental Issues</b>				
F-ratio = 4.32 (Sig. F = 0.001)			Adjusted R <sup>2</sup> = 0.20	
	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	.598	.824	.726	.471
SIZE	8.478E-09	.000	1.786	.079*
INDUSTRY	2.023	1.046	1.934	.058*
OWNERSHIP	-.033	.051	-.638	.526
<b>Community Involvement</b>				
F-ratio = 5.24 (Sig. F = 0.001)			Adjusted R <sup>2</sup> = 0.23	
(Constant)	5.729	1.583	3.620	.001
SIZE	2.381E-08	.000	2.613	.012**
INDUSTRY	1.171	2.008	.583	.562
OWNERSHIP	-.207	.098	-2.118	.039**
<b>Human Resource</b>				
F-ratio = 4.32 (Sig. F = 0.001)			Adjusted R <sup>2</sup> = 0.29	
(Constant)	9.726	2.118	4.593	.000
SIZE	4.556E-08	.000	3.737	.000***
INDUSTRY	3.875	2.687	1.442	.155
OWNERSHIP	-.251	.131	-1.919	.060*

Significant at 10%\*, 5 %\*\* and 1%\*\*\*

the extent of CSED. Results show that 85% of companies made some kind of social and environmental disclosure with an average of 22 sentences. This result perhaps is a positive indication of the development of CSED in Jordanian companies. Secondly, the results of the analysis showed that company size and the government ownership are associated with the level of social and environmental disclosure. On the other hand, there is no association between social and environmental disclosure and industry type. One possible explanation for the lack of association may be that it is rather simplistic to use a binary classification for manufacturing and service companies. The specific type of manufacturing industry may be more appropriate than the general measure of manufacturing.

Companies that make social and environmental disclosures are generally characterized by larger size and less government ownership. However, the breakdown analysis provides evidence that manufacturing companies provide more environmental disclosure than service companies do.

This study provides some understanding of Jordanian firms' disclosure strategy, thus enabling the relevant authorities to be in a better position to supervise the disclosure requirement. At the same time, this study may encourage the Jordanian government to reconsider the policy related to social and environmental activities especially in firms with high government ownership that have a lower level of CSED. Future research is necessary for Jordanian researchers to

determine why some companies do not disclose such information in their annual reports. Moreover, future research should also address the environmental issue, which is now a crucial issue facing the Jordanian authorities.

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