DETERMINANTS OF CORPORATE SOCIAL RESPONSIBILITY DISCLOSURE: AN EMPIRICAL STUDY ON JORDANIAN FIRMS LISTED ON AMMAN STOCK EXCHANGE

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ABSTRACT

This research aims to examine the determinants of corporate social responsibility (CSR) disclosure level in the Jordanian firms. The sample consists of (36) industrial firms and (32) service firms listed on Amman Stock Exchange (ASE) during the period (2014-2018). Study data is mainly gathered from the published annual reports of the firms. The data is analyzed by regression using the Statistical Package for Social Sciences. The effects of four corporate characteristics: Visibility, profitability, ownership structure, and company's foreign ownership, and two control variables (firm size and industry type), are examined on CSR disclosure level. The results, at the overall sample level, showed a significant negative effect of firm's visibility, and a significant positive effect of firm's foreign ownership and size on corporate social responsibility (CSR) disclosure level, and no impact of firms' return on invested capital. The study main recommendation is to increase the research related to identifying the determinants of CSR disclosure in developing nations, especially in Jordan, since the studies about this field of research in developing countries are limited compared with those in developed countries. Furthermore, the study recommends further research on the development of CSR disclosure index appropriate to Jordanian firms and its activities, to be used as guidance by Jordanian companies in reporting their social responsibility activities.

Keywords: Corporate Social Responsibility Disclosure (CSRD), Visibility, Profitability, Institutional Ownership, Foreign Ownership, CSRD Dimensions.

INTRODUCTION

Assessing the firm performance is no longer only based on profitability or building good reputation, but also based on a new concept that emphasizes the creation of a working environment which is capable of corporate development in all aspects. The concept of corporate scial responsibility (CSR) has become an important issue and effectively spread among companies (Giannarakis, 2013).

There is no universally acceptable explanation of CSR disclosure, as its definitions multiply and evolve over time. There are many areas of CSR disclosure, as well as activities related to them, the most prominent of which are activities towards the community and the environment through time (Al-Shannag et al., 2016), these activities have been expanded and adjusted to involve a broad scope of activities. This study examines the most common elements of corporate social responsibility disclosure which relates to environment, human resources, product and consumer, community involvement, and energy, as many conducted research has depended on these common aspects of CSR disclosure.

Nowadays, it's commonly agreed upon by researchers that firms which can be considered as socially responsible so as to contribute morally and economically to the

society, are in a better situation to gain more revenues and better reputation among the competitors (Drobetz et al., 2014).

With growing public awareness in community and environmental issues, and more press coverage, institutions face pressure (from shareholders, customers, suppliers, employees, government, active groups, and communities) to disclose their economic, environment, and other CSR related information in annual reports.

Under economic perspective, when companies disclose information related to their environmental and community activities, it help them to reduce the potential costs and enhance benefits (Gamerschlag, 2011), in fact, disclosure of CSR is determined by several firm's characteristics. According to the researchers' knowledge, in Jordan as one of the developing countries, the implementation of CSR disclosure is still in the essential stage. Therefore, the study objective is to answer the question of: What are the determinants of CSR disclosure level in Jordan?

Based on the above, this study investigates the determinants that influence the CSR disclosure level of Jordanian firms listed on Amman Stock Exchange (ASE).

Study Problem and Questions

There are several empirical studies on the reporting of CSR and its determinants in developed nations, but these determinants and their effects have not been studied deeply in developing nations such as Jordan. The number of studies on social responsibility in developing countries is low compared to developed countries (Ali et al., 2018) due to the potential obstacles that may prevent CSR's implementation (Barakat et al., 2015). This study aims at answering the following main and sub questions which are:

The main question: What are the determinants of CSR disclosure in Jordan? Furthermore, the sub questions of the study are:

1. What is the effect of firm's visibility on CSR disclosure of industrial and services Jordanian firms listed on ASE?
2. What is the effect of firm's profitability on CSR disclosure of industrial and services Jordanian firms listed on ASE?
3. What is the effect of firm's ownership structure on CSR disclosure of industrial and services Jordanian firms listed on ASE?
4. What is the effect of firm's relationship with foreign stakeholders on CSR disclosure of industrial and services Jordanian firms listed on ASE?

Study Objectives

The main purpose of this study is to identify and expand potentially significant factors affecting the CSR disclosure level, by determining how CSR disclosure is affected by determinants such as: firm's visibility, profitability, ownership structure, and relationship with foreign stakeholders, using the data disclosed annually by sampled firms over the years 2014-2018. The sub objectives of this study are:

1. Providing evidence on the current CSR disclosure level of Jordanian industrial and services firms listed on ASE.
2. Providing evidence on the effect of different proxies of corporate characteristics on the CSR disclosure of Jordanian firms selected from industrial sector that are listed on ASE.
3. Providing evidence on the effect of different proxies of corporate characteristics on the CSR disclosure of Jordanian firms selected from service sector that are listed on ASE.

Study Importance

The importance of the study arises from being an attempt to contribute to the previous studies that clear up the nature of CSR disclosure and its determinants, as studies related to disclosure of CSR and its several measures are limited in the developing economics in general, and in the Jordanian context in particular (Jamali 2007; Abu Farha & AL-Khalayleh, 2016). The specific goal of this study is to understand the determinants of CSR that encourage Jordanian firms to disclose more social responsibility information. Moreover, this research is important to encourage and motivate Jordanian companies to pay more attention regarding the disclosure of social responsibility activities.

Theoretical Framework & Literature Review

This section presents simple theoretical framework on CSR disclosure and its determinants, and review previous relevant literature, concentrating on studies that have addressed the determinants of CSR disclosure.

Definitions of Corporate Social Responsibility (CSR)

The concept of CSR has a long and varied history; there is a lack of certainty about how corporate social responsibility (CSR) must be defined, although it is important to define it accurately and to examine its determinants. The concept of CSR is about the responsibility of companies for its stakeholders (Uwuigbe et al., 2011). It refers to long term plans and programs that revolves around giving to achieve sustainable development that leave clear positive impact on the life of the individuals and society in general (Radaideh & Al Azam, 2015).

It is clear from the previous definitions of CSR that firms should be active in practicing its social responsibility toward community by integrating social, ethical, environmental, and economic interests into their daily operations and strategic decisions to be part of their policies and culture (Barakat et al., 2015). There are many theories that have been adopted by researchers, in order to provide different perspective on CSR disclosure in developed as well as developing countries. These theories are: Legitimacy theory, Stakeholder theory, Agency theory, and Political theory.

Corporate Social Responsibility Disclosure (CSRD)

Definitions of CSR disclosure are numerous, they evolved over time. According to (O'Dwyer, 2002) the CSR disclosure is a process of voluntary reporting of information about corporation's interaction with its surrounding and social environment. The main purpose of such disclosure is to hold firms responsible to their society and to encourage their positive impact on all related parties (Ghabayen et al., 2016).

The information published by corporations about their social responsibility activities will help reduce information asymmetry, which result from the gap between managers and stakeholders (Al-kayed, 2018). In this research, the spotlight is focused on five dimensions of CSR disclosure: Environment, human resources, products and consumer, community involvement, and energy. These dimensions of CSR disclosure are briefly explained in the following paragraphs:

Environment

This dimension is regarded as the main type of disclosure (Alkayed, 2018); due to the damage it causes to the environment such as air, water, soil, and noise pollution. It includes a group of social activities that help to reduce the negative effects caused by the company's practice of its activities which affect the environment.

Human Resources

This group focuses on activities that improve the situation of employees in general, such as providing free of charge treatment, improving working conditions, job satisfaction, and employees' appreciation.

Products and Consumers

The items of this dimension focus on identifying the extent to which the firm disclosed information about products and consumers and its relation to the company's activities. The items of this dimension include product safety, product quality, consumer satisfaction, product development, and improvement of customer services.

Community Involvement

The community dimension focus on activities that aim to benefit the public in general, including items such as medical establishment, supporting disable people, support for art and culture, social welfare, and support for public health.

Energy

This category is concerned with how to present accurate measurement of the level of information disclosed by the firm about energy issues and its relation to the company's activities, and the effect of such activities. This dimension includes items such as energy saving policy, energy efficiency of products, and examination of the firm's efforts to minimize the consumption of energy.

Determinants of Corporate Social Responsibility Disclosure (CSRD)

There is still uncertainty as to which determinants that may affect negatively or positively the corporate decision regarding CSR disclosure level. A considerable amount of literature suggested that characteristics of the firm are major determinants of disclosure activities. (e.g., Joshi & Hyderabad, 2019; Alkayed, 2018; Barakat et al., 2015; Gamerschlag et al., 2011).

In this study a set of CSR disclosure determinants will be examined: Namely, company's visibility, profitability, ownership structure, and its relationship with foreign stakeholders (or foreign ownership), in addition to the appropriate control variables.

Company Visibility

Company visibility is the extent to which the company is known and visible to the society, stakeholders, media, and the general public (Reverte, 2009). Visible companies gain attention of media and thus they are reported in the newspapers, therefore these visible firms are more likely to be subject to stakeholders pressures (Lucchini & Moisello, 2017).

Company Profitability

Many prior studies used profitability variable to measure its association with CSR disclosure, one of the essential determinants of CSR disclosure in a lot of empirical studies is the economic performance of companies. Depending on Bewley & Li (2000) study, profitable firms are subject to higher political pressure than less profitable firms, and therefore these profitable firms disclose more detailed information about CSR.

Company Ownership Structure

Roberts, (1992) suggest that disclosure policy of any company is affected by the degree of company's stock ownership. The disclosure on social activities, in a voluntary way, is greater in organizations with many owners, in order to reduce asymmetries of information between the organization and its shareholders (Prencipe, 2004).

Company Relationship with Foreign Stakeholders

Usually, a firm listed on a foreign exchange discloses more information about its social responsibility activities because it may attract more investors and analysts coverage (Cooke, 1989). According to Cormier et al., (2005), companies which have relationships with foreign stakeholders (shareholders) disclose information about its social responsibility voluntarily, this indicates that foreign stakeholders influence the practices of company's reporting in a positive way (Barako et al., 2006).

LITERATURE REVIEW

This part of the study reviews recent empirical studies that investigate the CSR disclosure level and its determinants in both developed and developing countries. Pradhan & Nibedita, (2019) investigated the determinants of CSR activities in India. They revealed a significant positive association between firm's participation in CSR activities and company size, profitability and assets' tangibility, and significant negative association with company leverage and systematic risk.

Lyubenova, (2019) investigated the effect of several factors such as: company size, company visibility, leverage, company profitability, and foreign ownership on the CSR disclosure of firms listed on Bulgarian Stock Exchange. The results concluded that profitability, leverage, company size, and foreign ownership are significantly affecting the disclosure of selected companies in a positive way, while the company visibility has no significant effect on the CSR disclosure.

Alkayed, (2018) investigated the effect of several factors on CSR disclosure in term of disclosure level and quality in the Jordanian market including corporate features, organization governance and firm's ownership. Al-kayed reported that there are multiple factors significantly affect the extent and quality of disclosure, namely: Firm age, non-executive directors, foreign members on the board, the presence of audit committee, Big Four audit firms, corporate size, industry membership, and government ownership. Additionally, the researcher evaluated the disclosure consequences and revealed that CSR disclosure has a positive impact on company's performance and Market Value.

Ali et al. (2017) examined the elements that may have an impact on CSR disclosure in selected companies from developed & developing countries, based on comparing the firms' elements which have effect on the CSR disclosure in both types of countries. The researchers revealed that firms in developed countries face pressure of groups such as: investors, shareholders, regulators, and the media that significantly affect (CSR) disclosure, while the

factors that have an impact on disclosure of CSR in developing nations include: international media and foreign investors. That is, unlike developed countries, developing countries face little pressures to disclose CSR.

Barakat et al. (2015) studied the situation of CSR disclosure and many factors that may determine its level in Jordan and Palestine. Based on the results, it was clear that the disclosure level of CSR in Palestine was lower than in Jordan in all aspects. Generally, in term of the characteristics that have an impact on the disclosure level of CSR in both countries, the researchers concluded that the formal institutional variables (legal system and external audit firms) were positively influencing the disclosure level of CSR. Also, the disclosure extent of CSR was affected by the board size and firm's profitability in a positive way, while there was no association between the level of disclosure and both the firm age and industry.

Giannarakis, (2013) inspected the effect of different firms' characteristics on the level of disclosure of CSR. The results reached that the disclosure level of CSR has a strong positive association with 3 factors namely; Return on equity, Return on sales, and company size, while leverage is negatively related to disclosure level of CSR.

AL- Shubiri et al. (2012) studied the determinants of corporate social responsibility in Jordan. The researchers concluded that companies with large size, firm age, maintaining growth with a highly leverage disclose more about their CSR in a voluntary way. On the other hand, the finding revealed that the level of corporate CSR disclosure was negatively affected by dividend payout ratio, individual and majority shareholders.

Study Methodology

This section illustrates the targeted population and sample, study model, sources of the data, variables measurements and study hypotheses.

Population and Sample

The targeted population of study is the Jordanian firms listed on Amman stock Exchange (ASE) during the period (2014-2018), while the sample consists of all industrial and service firms with available data. This process identified 68 firms (35 industrial and 33 service), giving a total of 340 annual observations. The sample firm names is shown in Appendix A

Data Sources

The study uses a quantitative data in order to obtain valid measurement of study variables; such data is taken from the financial annual reports of the sampled firms. Beside the firms' annual reports, the study used a secondary source which is firm's websites.

Study Model & Variables Measurement

The study model, including common control variables (namely, firm size and industry type) can be expressed in the form of equation as follows:

$$CSRDI_{it} = \beta0_{it} + \beta1*CV_{it} + \beta2*ROICi_{it} + \beta3*COS_{it} + \beta4*CRS_{it} + \beta5*CS_{it} + \beta6*IND_{it} + E_{it}$$
……………….. (1)

The following table shows a summary of variables measurement.

Table 1 SUMMARY OF VARIABLES MEASUREMENT		
Variables	**Symbol**	**Measurement**
Corporate Social Responsibility Disclosure Index	**CSRDI$_{it}$**	Measured via index focusing on five dimensions: Environment, Human resources, Product and consumer, Community involvement, and Energy, under each dimension there are a list of several items. To see the detailed dimensions and items refer to **Appendix B** at the end of the study. If the company discloses the index item, it receives a score of 1; otherwise 0. The index is calculated by dividing the number of disclosed items over the maximum number of items.
Company Visibility	**CV$_{it}$**	Measured by firm's share transaction volume (number of shares traded a year divided by total shares outstanding). Some studies such as: (Branco *et al*, 2008, Reverte, 2009, Mahadeo *et al*, 2011, Ali et al, 2018) have relied on the size of the company as a proxy of the visibility, and others (Gamerschlag*et al*, 2011) measured visibility variable depending on counting the number of hits while looking for the organizations' names on the newspaper's website, or through firm age, media exposure, and media pressure as visibility proxies as adopted by Lucchini *et al*, (2017). However, because the firm size is used as a control variable in the study, it is believed that the percentage of share volume traded of outstanding shares may be a reasonable measure of firm's visibility.
Company Return On Invested Capital	**ROIC$_{it}$**	Measured by company Net Operating Profit after Tax divided by Total Invested Capital (Gamerschlag *et al.*, 2011). Invested capital consists of ………
Company Ownership Structure	**COS$_{it}$**	Measured by Institutional Ownership percentage. (institutional shareholders of ownership of 5% or more in company's capital), (Boone & White, 2015).
Company's Foreign Stakeholders	**CRFS$_{it}$**	Measured by Foreign Ownership percentage of company's capital.
Company Size	**CS$_{it}$**	Measured by the Log of company's total assets (Al-Kayed, 2018).
Firm industry (A Dummy Variable of Industry Membership)	**IND$_{it}$**	Indicator variable which represents the type of sector, it is 1 for industrial company, and 0 for service company.

Study Main and Sub Hypotheses

Depending on prior literature, study questions and objectives and study model, the following hypotheses are produced to investigate the effect of different corporate characteristics on CSR disclosure index for industrial and service companies listed on ASE. The main hypotheses are as follows:

HO1: Firm's visibility has no effect on the CSR disclosure index in Jordanian listed industrial and service firms. The sub hypotheses are:

H01-a: Firm's visibility has no effect on the CSR disclosure index in Jordanian listed industrial firms.

H01-b: Firm's visibility has no effect on the CSR disclosure index in Jordanian listed service firms.

H02*: Firm's profitability has no effect on the CSR disclosure index in Jordanian listed industrial and service firms. The sub hypotheses are:*

H02-a*: Firm's profitability has no effect on the CSR disclosure index in Jordanian listed industrial firms.*

H02-b*: Firm's profitability has no effect on the CSR disclosure index in Jordanian listed service firms.*

H03*: Firm ownership structure has no effect on the CSR disclosure index in Jordanian listed industrial and service firms. The sub hypotheses are:*

H03-a*: Firm ownership structure has no effect on the CSR disclosure index in Jordanian listed industrial firms.*

H03-b*: Firm ownership structure has no effect on the CSR disclosure index in Jordanian listed service firms.*

H04*: Firm's foreign ownership has no effect on the CSR disclosure index in Jordanian listed industrial and service firms. The sub hypotheses are:*

H04-a*: Firm's foreign ownership has no effect on the CSR disclosure index in Jordanian listed industrial firms.*

H04-b*: Firm's foreign ownership has no effect on the CSR disclosure index in Jordanian listed service firms.*

STUDY RESULTS

Descriptive Statistics

Tables 2 (panels A and B) provide the descriptive statistics of the study variables for industrial sub-sample and service sub-sample respectively.

Table 2
DESCRIPTIVE STATISTICS FOR INDUSTRIAL AND SERVICE FIRMS SUB-SAMPLES PANEL A: STATISTICS FOR THE INDUSTRIAL FIRMS' SUB-SAMPLE

Variables	N	Mean	Min	Max	Std. Deviation	Skewness	Kurtosis	Mean of the overall sample
CSRDI	173	0.385	0.039	0.922	0.189	0.892	0.806	0.441
Firm Visibility	173	0.408	0.000	6.696	0.879	4.125	21.388	0.323
Firm ROIC	173	0.033	-3.179	5.480	0.673	5.438	48.921	0.041
Firm Ownership Structure	173	0.624	0.000	0.987	0.248	-0.783	-0.214	0.618
Firm Foreign Ownership	173	0.181	0.000	0.987	0.262	1.575	1.698	0.139
Firm Size	173	16.847	12.677	20.915	1.480	0.641	1.567	17.095

Table 2
PANEL B: STATISTICS FOR THE SERVICE FIRMS' SUB-SAMPLE

Variables	N	Mean	Min	Max	Std. Deviation	Skewness	Kurtosis	Mean of the overall sample
CSRDI	165	0.501	0.020	0.922	0.230	-0.333	-0.414	0.441
Firm Visibility	165	0.233	0.000	4.897	0.619	4.992	28.586	0.323

Firm ROIC	165	0.048	-1.124	1.795	0.254	2.155	25.314	0.041
Firm Ownership Structure	165	0.611	0.191	0.899	0.188	-0.642	-0.334	0.618
Firm Foreign Ownership	165	0.095	0.000	0.698	0.181	2.097	3.267	0.139
Firm Size	165	17.355	12.925	21.310	1.655	-0.174	0.997	17.095

N: Number of observations. Variables are as defined earlier in Table 1.

As shown in table 2 panel A, the CSRDI has a Mean equal to 0.385 for industrial firms with standard deviation equal 0.189 while for service firms (in panel B) a mean equal 0.501 with standard deviation equal to 0.230. This implies that firms from the service sector disclose more information about their social activities compared to industrial firms.

The firm visibility variable has a mean equal to 0.408 for industrial firms versus 0.233 for services firms, which indicate that the industrial firms are more visible than service firms. For ROIC, industrial companies achieve less profitability than service companies. Depending on stakeholder theory; firms that are less profitable would have less motivation to disclose information on CSR (Islam and Deegan, 2010).

In term of foreign ownership, the mean for industrial firms of 0.181 is higher than the mean of service firms of 0.09. That is, industrial firms are more attractive to foreign investors than service firms. For company ownership structure, the industrial and service firms have close values of mean (0.624 and 0.611 respectively).

Based on skewness and kurtosis statistics, the results demonstrate that all study variables are normally distributed comparing the results to the accepted cut-offs of the two tests except firm visibility and ROIC variables, although data entry is edited and there are no outliers in the data.

Correlation Matrix

Tables 3 and 4 present the correlation analyses for the industrial sub-sample and service sub-sample respectively. This analysis is essential to measures the strength of association between study variables and the direction of the association. This analysis is also important to check multicollinearity between study variables.

Table 3 presents the Pearson correlation for industrial firms' sub-sample. The results show that CSRDI is significantly positively related to ownership structure, foreign ownership and size with coefficients equal to (0.301, 0.684 and 0.716) respectively. The visibility is negatively related to ownership structure. Also, the ownership structure has a positive significant relationship with foreign ownership with coefficient equals (0.424).
Additionally, firm size is positively associated with foreign ownership with coefficient equal to (0.406).

Table 3 PEARSON CORRELATION MATRIX OF THE VARIABLES FOR THE INDUSTRIAL FIRMS' SUB-SAMPLE						
Variable	**CSRD**	**Firm Visibility**	**Firm ROIC**	**Firm Ownership Structure**	**Firm Foreign Ownership**	**Firm Size**
CSRDI	1					
Firm Visibility	-0.126	1				
Firm ROIC	0.03	-0.048	1			
Firm Ownership Structure	0.301**	-0.395**	0.7	1		
Foreign Ownership	0.684**	-0.116	-0.01	0.424**	1	

Firm Size	0.716**	-0.097	0.027	0.117	0.406**	1
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

Table 7 shows the correlation analysis results for service firms' sub-sample. The findings revealed that the CSRDI variable is positively correlated with ROIC, foreign ownership and size with coefficient equals (0.188, 0.354 and 0.843) respectively.

While the CSRDI has a significant negative association with both visibility and ownership structure with coefficient equal to (-0.278, -0.309) respectively. This result is consistent with AL-Nashef & Saaydah (2021) who detected a significant negative impact of institutional ownership on CSR disclosure level.

The firm size has a significant negative relationship with ownership structure, while it is significantly positively correlated with ROIC and foreign ownership with coefficient equal to (0.167, and 0.248) respectively.

Table 4 PEARSON CORRELATION MATRIX OF THE VARIABLES FOR THE SERVICE FIRMS' SUB-SAMPLE						
Variable	**CSRD**	**Firm Visibility**	**Firm ROIC**	**Firm Ownership Structure**	**Foreign Ownership**	**Firm Size**
CSRDI	1					
Firm Visibility	-0.278**	1				
Firm ROIC	0.188**	-0.059	1			
Firm Ownership Structure	-0.309**	-0.298**	-0.089	1		
Firm Foreign Ownership	0.354**	-0.096	-0.026	0.138	1	
Firm size	0.843**	-0.153	0.167*	-0.338**	0.248**	1
**. Correlation is significant at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

Empirical Results

This part of the study examines the regression analyses and its results to test hypotheses of the research. The regression results are shown below for the overall sample, industrial sub-sample and service firms' sub-sample, respectively.

Regression Analysis for the Overall Sample

Table 5, shows the results of regression test for the whole sample.

Table 5 MULTIPLE REGRESSION ANALYSIS FOR THE OVERALL SAMPLE						
					Collinearity Statistics	
Coefficients	**B**	**Std. Error**	**t**	**Sig.**	**Tolerance**	**VIF**
Constant	-1.03	0.084	-12.209	0.000		
Firm Visibility	-0.027	0.009	-2.994	0.003	0.83	1.205
Firm ROIC	0.012	0.012	0.984	0.326	0.991	1.009
Firm Ownership Structure	-0.063	0.033	-1.888	0.06	0.728	1.374

Foreign Ownership	0.286	0.032	8.93	0.00	0.73	1.37
Firm Size	0.089	0.004	20.118	0.00	0.798	1.253
R^2	0.724					
Adjusted R^2	0.719					
Durbin Watson	0.47					
ANOVA						
F-Value	144.558					
Sig.	0.00					

Dependent Variable: CSRDI

Based on the above test, the results show that:

1. The values of R^2 and Adjusted R^2 are (0.724) and (0.719) respectively; this implies that 71.9% of the variation in the CSR disclosure Index (CSRDI) is interpreted by the study variables.
2. The collinearity statistics show that the values of tolerance are exceeding (0.1) and the values of variance of inflation (VIF) are less than (10), which means that the model has no multicollinearity problems (Keith, 2014).
3. The ANOVA analysis shows that the model has F-Value equals (144.558) which is significant at (0.000).
4. Firm visibility variable is significantly associated with firm's CSRDI in a negative way, at 0.003 level, while firm foreign ownership and firm size are significantly associated with CSRDI in a positive way, at 0.000 level each. As it can be seen from the results reported in Table 8, the firm ROIC is insignificantly associated with CSRDI. In addition, the outcomes revealed that the B value for the firm visibility is (-0.027), which imply that when the value of the firm visibility increases by one unit, the value of CSRDI decreases by (0.027) unit. This finding is inconsistent with some previous studies (e.g., Chiu & Wang, 2015; Ghamerschlag et al., 2011; Reverte, 2009; Rodrigues & Branco, 2008) which conclude that the CSRDI is positively related to firm visibility. However, this finding is somewhat consistent with that of Lyubenova, (2019) who discovered there is no association between disclosure of CSR and visibility variable.
5. The CSRDI is not affected by ROIC, where the sig value is (0.326). This finding is in line with that of Welbeck *et al*., (2017) and Dissanayake *et al*., (2016) finding who fail to identify any significant association between the both variables. This finding is inconsistent with that of Giannarakis, (2013) and Ghamerschlag *et al*., (2011), who detect a positive link between company's profitability and disclosure index of CSR.
6. The B value for the foreign ownership variable is (0.286), which means that if the foreign ownership value increases by 1 unit, the value of CSRDI will increase by (0.286) of a unit. This outcome is inconsistent with some prior studies (e.g., Lyubenova, 2019; Dyduch and Krasodomska, 2017) and Cormier et al. (2005) which pointed out that CSRDI had no association with foreign ownership.
7. The firm size is related positively to CSRDI and is significant at (0.000). This result is in line with some previous studies like; (Baladini et al., 2018; Joshi & Hyderabad, 2018; Lucchini & Moisello, 2017; Khan, 2010; Saaydah, 2005). Which implies that the larger the firm the higher the CSRDI.

Table 6, summarizes the results of the hypotheses testing for the overall sample as follows.

Table 6 SUMMARY OF THE HYPOTHESES TESTING RESULTS FOR THE OVERALL SAMPLE	
Hypotheses	**Result**
H01: Firm visibility has no effect on the CSR disclosure in Jordanian listed industrial and service firms.	Rejected
H02: Profitability has no effect on the CSR disclosure in Jordanian listed industrial and service firms.	Accepted
H03: Firm ownership structure has no effect on the CSR disclosure in Jordanian listed industrial and service firms.	Accepted
H04: Firm's foreign ownership has no effect on the CSR disclosure in Jordanian listed industrial and service firms.	Rejected

Regression Analysis for Industrial Firms Sub-Sample

This part of the study presents the regression result for the industrial firms sub-sample as shown in the following Table number (7):

1. The values of R^2 and Adjusted R^2 are (0.70) and (0.69) respectively, this implies that 69% of the variation in the CSRDI is interpreted by the study variables.
2. The collinearity statistics show that the values of tolerance are exceeding (0.1) and values of variance of inflation (VIF) are less than (10), which means that the model has no multicollinearity problem (Keith, 2014).
3. The ANOVA analysis shows that the model has F-Value equals (77.699) which is significant at (0.000).
4. Firm foreign ownership and size contribute significantly positively to the determination of the CSRDI with coefficients equal to (0.324, 0.067) respectively. The firm size result is in line with that of Habbash, (2017) and Gunawan & Hermawan, (2012), they both concluded a positive significant relationship between firm size and CSRDI, while the result with regard to foreign ownership is in line with that of Dyduch & Krasodomska (2017) study, who detect that firm foreign ownership is significant positive predictor of CSRDI.

The results also point to insignificant effect of firm visibility, ROIC, and ownership structure on CSRDI.

Model	B	Std. Error	t	Sig.	Collinearity Statistics	
					Tolerance	VIF
C	-0.826	0.103	-7.981	0.000		
Firm Visibility	-0.001	0.010	-0.081	0.936	0.834	1.199
Firm ROIC	0.005	0.012	0.399	0.690	0.991	1.009
Firm Ownership Structure	0.034	0.039	0.888	0.376	0.689	1.451
Foreign Ownership	0.324	0.037	8.775	0.000	0.684	1.463
Firm Size	0.067	0.006	11.271	0.000	0.824	1.213
R^2	0.70					
Adjusted R^2	0.69					
Durbin Watson	0.516					
ANOVA						
F-Value	77.699					
Sig.	0.000					

Table 7
MULTIPLE REGRESSION ANALYSIS FOR THE INDUSTRIAL FIRMS' SUB-SAMPLE

Dependent Variable: CSRDI

Table 8 summarizes the hypotheses testing results for the industrial firms' sub-sample

Table 8
SUMMARY OF THE HYPOTHESES TESTING RESULTS FOR THE INDUSTRIAL FIRMS' SUB-SAMPLE

Hypotheses	Result
H01-a: Firm visibility has no effect on the CSR disclosure in Jordanian listed industrial firms.	Accepted
H02-a: Profitability has no effect on the CSR disclosure in Jordanian listed industrial firms.	Accepted
H03-a: Firm ownership structure has no effect on the CSR disclosure in Jordanian listed industrial firms.	Accepted
H04-a: Firm's foreign ownership has no effect on the CSR disclosure in Jordanian listed industrial firms.	Rejected

Regression Analysis for Service Firms' Sub- Sample

This part of research deals with regression results for service firms as shown in table 9 below:

The table shows that CSRDI is significantly negatively affected by firm visibility and ownership structure, while it is significantly positively affected by firm foreign ownership and size. These results are in line with that of (Dyduch & Krasodomska, 2017; Chiu & Wang, 2015; Yao et al., 2011; Gamerschlag et al., 2011). Table 10 also indicates no effect of firm ROIC on firm CSRDI, which is in line with the results of (Welbeck et al., 2017; Juhmani, 2014).

Table 9 MULTIPLE REGRESSION ANALYSIS FOR THE SERVICE FIRMS' SUB-SAMPLE						
Model		Std. Error	t	Sig.	Collinearity Statistics	
	B				Tolerance	VIF
C	-1.111	0.126	-8.817	0.000		
Firm Visibility	-0.072	0.015	-4.663	0.000	0.836	1.197
Company ROIC	0.045	0.035	1.282	0.202	0.965	1.037
Firm Ownership Structure	-0.180	0.055	-3.274	0.001	0.716	1.396
Foreign Ownership	0.230	0.052	4.465	0.000	0.878	1.139
Firm Size	0.099	0.006	15.909	0.000	0.721	1.387
R^2	0.77					
Adjusted R^2	0.76					
Durbin Watson	0.483					
ANOVA						
F-Value	107.242					
Sig.	0.000					

Dependent Variable: CSRDI

The following table number 10, summarizes the hypotheses testing results for service firms sub-sample.

Table 10 SUMMARY OF THE HYPOTHESES TESTING FOR THE SERVICE FIRMS	
Hypotheses	Result
H01-b: Firm visibility has no effect on the CSR disclosure in Jordanian listed services firms.	**Rejected**
H02-b: Firm profitability has no effect on the CSR disclosure in Jordanian listed services firms.	**Accepted**
H03-b: Firm ownership structure has no effect on the CSR disclosure in Jordanian listed services firms.	**Rejected**
H04-b: Firm's foreign ownership has no effect on the CSR disclosure in Jordanian listed services firms.	**Rejected**

CONCLUSIONS

Corporate Social Responsibility concept has gained an additional importance and attracted observed attention over the last years, where a great number of academics and researchers are making a great effort to understand it and identified its causes.

This study is concerned with the determinants of CSR disclosure index or level (CSRDI) of Jordanian industrial and services firms. It focused on four major determinants of CSRDI; Firm visibility, firm profitability, firm ownership structure, and firm's relationship with foreign stakeholders, the study period included five years (2014-2018).

The study findings at the overall sample level show that disclosure of CSRDI is positively related to firm's foreign ownership, and size, and negatively related to firm visibility, and has no relationship with firm profitability (ROIC).

The study finding for the industrial firms' subsample show that CSRDI is only positively affected by firm's foreign ownership and size, while the finding at the service firms' sub-sample indicate positive significant effect of both firm foreign ownership and size and significant negative effect of both firm visibility and ownership structure on CSRDI.

This study contributes to the prior literatures on CSR disclosure level by extending the understanding of the impact of firms' characteristics on CSR disclosure level in Jordan. The overall and sub-samples results of the study revealed that firms size is a significant driver for CSR disclosure level. In addition, some support is found for the significant positive impact of foreign ownership on disclosure level of CSR. To summarize, it is clear from the study results that firm size and foreign ownership mostly determine the firm CSR disclosure level in Jordan.

Limitations

Like every study, this study suffers from a number of limitations. First, the study sample covers all companies from two main sectors; the industrial and services sectors, It ignores the financial sector since it has its own laws and disclosure regulations by the central bank of Jordan. Second, the study relied only on companies' annual reports and their websites to collect the required data, which limit the communication and interaction with companies' management to understand better CSR disclosure level and drivers. Finally, the lack of national framework to guide corporations in CSR disclosure process, which creates limitations revealed in the items used on disclosure index.

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Appendix

Appendix A INDUSTRIAL AND SERVICES COMPANIES LISTED ON AMMAN STOCK EXCHANGE	
Firms' Name	Type of Firm
Industrial Firms	
THE INDUSTRIAL COMMERCIAL & AGRICULTURAL	Chemical
THE ARAB PESTICIDES & VETERINARY DRUGS MFG.	Chemical
JORDAN CHEMICAL INDUSTRIES	Chemical
NATIONAL CHLORINE INDUSTRIES	Chemical
NATIONAL CABLE & WIRE MANUFACTURING	Electrical
ARAB ELECTRICAL INDUSTRIES	Electrical
THE JORDAN PIPES MANUFACTURING	Engineering
JORDAN WOOD INDUSTRIES / JWICO	Engineering
READY MIX CONCRTE AND CONSTRUCTION SUPPLIES	Engineering
ARABIAN STEEL PIPES MANUFACTURING	Engineering
AL-QUDS READY MIX	Engineering
JORDAN DAIRY	Food &Beverage
GENERAL INVESTMENT	Food &Beverage
UNIVERSAL MODERN INDUSTRIES	Food &Beverage
NATIONAL POULTRY	Food &Beverage
NUTRI DAR	Food &Beverage
JORDAN VEGETABLE OIL INDUSTRIES	Food &Beverage
THE PUBLIC MINING	Mining & Extraction
ARAB ALUMINIUM INDUSTRY /ARAL	Mining &Extraction
JORDAN PHOSPHATE MINES	Mining &Extraction
THE JORDAN CEMENT FACTORIES	Mining &Extraction
THE ARAB POTASH	Mining & Extraction
JORDAN STEEL	Mining & Extraction
NATIONAL ALUMINIUM INDUSTRIAL	Mining & Extraction
TRAVERTINE COMPANY	Mining & Extraction
ARAB COMPANY FOR INVESTMENT PROJECTS	Paper &Cartoon
JORDAN PAPER & CARDBOARD FACTORIES	Paper &Cartoon
PEARL- SANITARY PAPER CONVERTING	Paper &Cartoon
DAR AL DAWA DEVELOPMENT & INVESTMENT	Pharmaceutical &Medical
ARAB CENTER FOR PHARM.& CHEMICALS	Pharmaceutical &Medical
MIDDLE EAST PHARMA. & CHMICAL IND. & MEDICAL APPLIANCES	Pharmaceutical &Medical
THE JORDANIAN PHARMACEUTICAL MANUFACTURING	Pharmaceutical & Medical

HAYAT PHARMACEUTICAL INDUSTRIES	Pharmaceutical &Medical
AL-EKBAL PRINTING AND PACKAGING	Printing &Packaging
EL-ZAY READY WEAR MANUFACTURING	Textile, Leather &Clothing
UNION TOBACCO & CIGARETTE INDUSTRIES	Tobaco & Cigarettes
Services Firms	
JORDANIAN DUTY FREE SHOPS	Commercial Services
JORDAN INTERNATIONAL TRADING CENTER	Commercial Services
SPECIALIZED TRADING & INVESTMENT	Commercial Services
NOPAR FOR TRADING AND INVESTMEN	Commercial Services
AL-ZARQA EDUCATIONAL & INVESTMENT	Educational Services
THE ARAB INTERNATIONL FOR EDUCATION & INVESTMENT	Educational Services
ITTIHAD SCHOOLS	Educational Services
PETRA EDUCATION	Educational Services
PHILADELPHIA INTERNATIONAL EDUCATIONAL INVESTMENT	Educational Services
AL-BILAD MEDICAL SERVICES	Health Care Services
THE CONSULTANT & INVESTMENT GROUP	Health Care Services
INTERNATIONAL FOR MEDICAL INVESTMENT	Health Care Services
JORDAN HOTELS & TOURISM	Hotels &Tourism
ARAB INTERNATIONAL HOTELS	Hotels &Tourism
MEDITERRANEAN TOURISM INVESTMENT	Hotels &Tourism
AL-DAWLIYAH FOR HOTELS & MALLS	Hotels &Tourism
JORDAN PROJECTS FOR TOURISM DEVELOPMENT	Hotels &Tourism
JORDAN PRESS FOUNDATION/AL-RA'I	Media
JORDAN PRESS & PUBLISHING/(AD-DUSTOUR)	Media
JORDAN TELECOM	Technology & Communication
AL-FARIS NATIONAL COMPANY FOR INVESTMENT & EXPORT	Technology & Communication
JORDAN NATIONAL SHIPPING LINES	Transportation
SALAM INTERNATIONL TRANSPORT & TRADING	Transportation
TRUST INTERNATIONAL TRANSPORT	Transportation
JORDAN EXPRESS TOURIST TRANSPORT	Transportation
JORDAN INVESTMENT & TOURISM TRANSPORT(ALFA)	Transportation
RUM GROUP FOR TRANSPORTATION & TOURISM INVESTMENT	Transportation
JORDAN ELECTRIC POWER	Utilities & Energy
IRBID DISTRICT ELECTRICITY	Utilities & Energy
JORDAN PETROLEUM REFINERY	Utilities & Energy
AL-ISRA FOR EDUCATION AND INVESTMENT	Educational Services
MASAFAT FOR SPECIALISED TRANSPORT	Transportation

Appendix B
CORPORATE SOCIAL RESPONSIBILITY INDEX ADOPTED FROM BARAKAT ET AL, (2015) AND GHABAYEN ET AL, (2016)
Environmental disclosure
1. Environmental management system
2. Conservation of natural resources
3. Water discharge information
4. Prevention or repair of damage to the environment
5. ISO 14001
6. Air emission information
7. Recycling plant of waste products
8. Support for public or private action designed to protect the environment
9. Environmental policies or company concern for the environment
10. Supporting Green Banking
11. Cleaning public places

12. Supporting environmental institutions/activities
Human resources disclosure
13. Number of employees
14. Employees health and safety
15. Employees satisfaction
16. Employment opportunities
17. Educational and training
18. Employee moral
19. Sponsoring educational conferences, seminars or art exhibitions
20. providing information on the stability of the workers' job and firm's future
21. Employee's' salary
22. accident at workplace
23. Employees' reward System
24. Employees' Appreciation
Product and consumer disclosure
25. Product safety
26. Product quality
27. Product development
28. Disclosing of consumer safety practices
29. Consumer complaints/satisfaction
30. Improvement in customer services
31. Information in research projects set up by the company to improve its product
32. Customers' privacy
33. Improvement of customer services
34. Prizes to Customers
Community involvement disclosure
35. Charitable donations and activities
36. Establishment of educational institutions
37. Support for art and culture
38. Park and gardens
39. Social welfare
40. Relations with the local population
41. Support for public health
42. Medical establishment
43. Seminars and conferences
44. Supporting disabled people
44. Anti-corruption policy
45. Encouragement the employees to participate in CSR
Energy disclosure
46. Conservation of energy in the conduct of business operations
47. Discussion of the company's efforts to reduce energy consumption
48. Utilisation of waste materials for energy conservation
49. Energy Saving policy
50. Energy efficiency of products.