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PII: S1544-6123(19)30172-2  
DOI: <https://doi.org/10.1016/j.frl.2020.101476>  
Reference: FRL 101476



To appear in: *Finance Research Letters*

Received date: 20 February 2019  
Revised date: 21 January 2020  
Accepted date: 16 February 2020

Please cite this article as: Pi-Hui Ting, Do large firms just talk corporate social responsibility? - The evidence from CSR report disclosure, *Finance Research Letters* (2020), doi: <https://doi.org/10.1016/j.frl.2020.101476>

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Highlights

- Large firms with more employees are more likely to disclose their CSR practices.
- Firm size mitigates the positive impact of CSR disclosure on firm performance.
- For small firms with less employees, CSR disclosures improve financial performance.
- Large firms just talk CSR and their CSR disclosures have no impact on performance.

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# Do large firms just talk corporate social responsibility? - The evidence from CSR report disclosure

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Using a sample of Taiwanese listed companies during 2010-2016, this paper examines how firm size affects corporate social responsibility (CSR) report disclosure and the moderating effect of firm size in the relationship of CSR disclosure and firm financial performance. The results show that firm size positively affects firms' CSR disclosure. Moreover, CSR disclosure has a positive impact on firm financial performance, and the positive effect is stronger for small firms that have less employees. For small firms, CSR disclosure does improve financial performance. However, large firms just talk CSR, and thus the CSR disclosures of large firms have no impact on firm performance.

JEL classification: G32 G34 L25 M14

Keywords: Corporate social responsibility, Financial performance, CSR disclosure, Firm size

## 1. Introduction

Corporate social responsibility activities (CSR ) have gained much attention among scholars and practitioners in recent years. However, the issue regarding whether CSR activities are positively rewarded is still inconclusive (Grewatsch and Kleindienst, 2017).

CSR activities can be categorized as symbolic (talking) and substantive (walking) actions (Baumann-Pauly et al., 2013; Schons and Steinmeier, 2016). Symbolic actions do not require changes of the business process, and usually include various external communication instruments arranged by firms to communicate with stakeholders. (Balmer and Greyser, 2006; Wickert et al., 2016). The externally facing documentation of CSR engagements, such as corporate websites, advertising and CSR reports are typical examples (Du et al., 2010). Substantive actions involve the actual changes of structures, procedures and strategies in primary business processes, and are also costly (Schons and Steinmeier, 2016). Firms often cannot walk the talk (Delmas et al., 2013; Lyon and Montgomery, 2015), thus symbolic CSR actions cannot always enhance firm performance (Walker and Wan, 2012; Schons and Steinmeier, 2016). The inconsistent results about the financial reward of CSR activities in prevailing research may be due to the inadequacy of many CSR rankings to distinguish symbolic from substantive actions (Schons and Steinmeier, 2016).

The disclosure of CSR report is a typical symbolic CSR activity. Several studies claimed that CSR reporting can help firms evaluate its weakness and continue improving its CSR practices, and thus has positive impact on firms' financial performance (FP) (Gond and Herrbach, 2006; Swarnapali and Le, 2018). The other conflicting views propose that CSR reports may be used as impression management strategies to create a symbolic image of social responsibility without substantial implementation in CSR practices (Cho et al., 2010; Behnam and MacLean, 2011). Some recent studies do show that CSR reporting does not necessarily improve firm performance (Wu et al., 2010; Fatemi et al., 2017). The conceptual model, proposed by Baumann-Pauly et al. (2013) and Wickert et al. (2016), claimed

that firm size (seen as the number of employees) generally matters for the actual implementation status of CSR. For large firms, embedding CSR-related practices in all operational process is a costly task, while associated costs of preparing CSR reports can be rather low. In contrast, small firms have a small number of employees and are less bureaucracy, thus have cost advantages to integrate organizational CSR practices, but reporting their CSR engagement publicly is more costly since they are likely to employ informal communication channels to interact with their stakeholders (Fassin, 2008). Based on the above arguments, Baumann-Pauly et al. (2013) and Wickert et al. (2016) argue that larger firms have a CSR implementation gap and small firms have a communication gap. In other words, large firms tend to participate in symbolic CSR activities and do not “walk the talk”, and thus these CSR talk cannot improve FP. But, small firms prefer walking to talking CSR, and it is unlikely that CSR report is used as an impression management tactics without improving CSR practices.

Though firm size is a possible moderator which can explain the inconsistent conclusions about the impact of CSR reporting on firm performance, the existing studies only consider firm size as a control variable (Wickert et al., 2016). Thus, this paper examines how firm size affects firm’s incentive to report its CSR practices, and the moderating role of firm size in the relationship of CSR disclosure and FP.

Using a sample of Taiwanese listed companies during 2010-2016, this paper finds that firm size has a positive impact on firms’ CSR disclosure. Moreover, CSR report disclosure also positively affects FP, and the positive effect is stronger for small firms that have less employees. Finally, only CSR disclosure of small firms can improve FP.

## 2. Hypothesis Development

Because of larger resource availability and lesser relative costs, the existing studies argued that larger firms can more easily afford CSR disclosures (Brammer and Millington, 2006; Udayasankar, 2008). Using extensive empirical data, Brown et al. (2009) showed that only few small firms disclose CSR reports according to the Global Reporting Initiative (GRI) standard. Based on the empirical evidence of a qualitative study of corporate social responsibility, Baumann-Pauly et al. (2013) found that large firms tend to effectively communicate their commitments to CSR by reporting their CSR activities, but small firms put little emphasis on communicating their CSR activities to external shareholders. Wickert et al. (2016) also pointed out that large firms can easily set up a CSR department to be responsible for preparing formal CSR reports. In contrast, for smaller firms, the public communication of their CSR activities is rather costly. The aforementioned arguments lead to Hypothesis 1:

**Hypothesis 1.** Larger firms which have more employees are more likely to disclose their CSR reports.

Reporting the CSR practices can enhance FP through various strategic benefits. First, CSR reporting can help firms evaluate its weakness and continue improving its CSR practices, and thus has positive impact on firms' FP (Gond and Herrbach, 2006). Second, CSR disclosures could help firms to create a new image defined by legitimate behaviors, gain credibility and attract new investors (Khavesh et al., 2016). Moreover, the disclosure of CSR activities can reduce information asymmetry between managers and investors (Cho et al., 2013), resulting in a lower risk perceived by investors. Finally, Dhaliwal et al. (2011) claimed that CSR disclosures reduces firms' cost of capital. Numerous literatures also show that

the disclosure of CSR report has positive impact on FP (Loh et al. 2017; Swarnapali and Le, 2018).

Thus, the following hypothesis can be developed:

**Hypothesis 2:** The disclosure of CSR report has a positive impact on FP.

In contrast to the previous empirical finding that a firm with CSR report disclosure has better FP, some scholars proposed that the firms can use CSR report as a window dressing act or symbolic management strategies to publicize their commitments to CSR and gain legitimacy without improving its CSR practices (Cho et al., 2010; Behnam and MacLean, 2011). Symbolic management of reporting can be regarded as a firm's greenwashing behavior, and does not necessarily improve firms' FP (Perez-Batres et al., 2012). Large firms are more likely to engage in greenwashing because they face greater levels of investor pressure than smaller firms (Delmas and Burbano, 2011). Wickert et al. (2016) also proposed that, comparing to relatively less costly outbound public communication and symbolic impression management of CSR, larger firms must spend more cost to implement CSR practices and procedures into primary business operations, and thus have a CSR implementation gap. Moreover, Wickert et al. (2016) argued that the CSR implementation gap becomes larger as the growth of firm size. Based on the above discussion, the third hypothesis is derived:

**Hypothesis 3:** When the firm's size is larger, the positive impact of CSR reporting on FP will decrease.

### **3. Sample and Methodology**

#### *3.1. Sample selection*

Taiwan Economic Journal (TEJ) database provides the statistical data of firms' CSR reports since 2010. Thus, the sample includes firms publicly listed in Taiwan during 2010 to 2016. In 2015, the

government of Taiwan requires that a listed firm which meets specific conditions shall prepare a CSR report for the preceding year. Thus, some firms are forced to disclose CSR report since 2014. In order to remove the impact of mandatory CSR report disclosure, the observations with mandatory disclosures are excluded. However, for firms that have disclosed CSR reports before 2014, they are classified as voluntary disclosures, hence included in the sample. Consequently, the final sample contains 10768 firm-year observations after excluding observations that had missing data. The composition of the sample by industry and firm size is shown in Table 1.

Table 1 Sample composition by industry and firm size

Panel A: Composition by industry

Industry	No. of sample	CSR disclosure	Ratio of disclosure
Cement	46	14	30.43%
food	122	8	6.56%
Plastic	182	27	14.84%
Textiles	379	7	1.85%
Electric Machinery	672	36	5.36%
Chemical	215	9	4.19%
Biotechnology and Medical Care	828	50	6.04%
Paper	43	7	16.28%
Iron and Steel	309	36	11.65%
Rubber	83	6	7.23%
Automobile	41	11	26.83%
Semiconductors	1137	87	7.65%
Computer and Peripheral Equipment	770	85	11.04%
Optoelectronics	1090	49	4.50%
Communications and Internet	623	55	8.83%
Electronic Parts/Components	1550	93	6.00%
Electronic Products Distribution	288	2	0.69%
Information Service	255	14	5.49%
Other Electronics	586	29	4.95%
Shipping and Transportation	189	33	17.46%
Tourism	222	10	4.50%
financial and insurance	266	87	32.71%
Trade department store	203	15	7.39%
Others	669	72	10.76%
Total	10768	842	7.82%

Panel B: Composition by size

Firm size	No. of sample	CSR disclosure	Ratio of disclosure
large	5326	694	13.03%
small	5442	148	2.72%
Total	10768	842	7.82%

Firms are divided into large and small firms based on the median value of all firms' numbers of employees.

### 3.2 Methodology

To examine how firm size affects firm's incentive to report its CSR practices and the moderating role of firm size in the relationship of CSR disclosure and FP, the empirical model is as follows:

$$\text{CSRREP}_{i,t} = \alpha_0 + \alpha_1 \text{EMNO}_{i,t} + \gamma \text{W}_{i,t} + \text{year dummies} + \text{industry dummies} + \varepsilon_{i,t} \quad (1)$$



$$FP_{i,t+1}$$

$$= \beta_0 + \beta_1 CSRREP_{i,t} + \beta_2 EMNO_{i,t} \times CSRREP_{i,t} + \delta Z_{i,t} + \text{year dummies} + \text{industry dummies} + \varepsilon_{i,t} \quad (2)$$

Equation 1 tests the relationship between CSR disclosure and firm size. CSRREP is a dummy variable which takes the value of 1 if a firm discloses its CSR practices and 0 if otherwise. Following the conceptual model developed by Wickert et al. (2016), firm size is defined as “the number of individuals participating in the activity of the firm” (Wickert et al., 2016, p. 1171). Thus, EMNO is measured by the natural logarithm of the numbers of employees working within the firm to proxy for firm size (Su, 2017).

Based on the previous studies (Khan et al., 2013; Fatemi et al., 2017), we are several control variables including DEBT, the ratio of debt to assets; AGE, the natural logarithm of the number of year since the firm’s inception; ROA, the ratio of earnings before interests and taxes to total assets; FOWN, LOWN and INST, percentage of shares owned by the foreign investors, the largest shareholder and institutions.

Equation 2 tests the relationship between CSR disclosure and firm performance. FP is the financial performance of a firm. Following existing literature, this study uses ROA and Tobin’s Q to measure FP (Jo and Harjoto, 2012; Yang and Baasandorj, 2017). Tobin’s Q is measured as the market value of common stock plus the book value of the preferred stocks and total liabilities deflated by the book value of the total assets. Besides, **industry-adjusted Tobin's q (ROA) is defined by subtracting the industry mean Tobin's q (ROA) from the firm's Tobin's q (ROA) and** is used to remove unobserved industry heterogeneity. Z are several control variables including ASSET, DEBT, CAPSR, capital expenditures divided by total sales; SALESGR, Sales growth rate from  $t - 1$  to  $t$  (Jo and Harjoto, 2012). Return on equity (ROE) is also included as a control variable when FP is measured by Tobin’s Q. **Finally, we also**

control for industry sectors and the year effects. All the variables are collected from the Taiwan Economic Journal (TEJ) database. But, firms are allowed to select whether to disclose their CSR report and thus there could be a self-selection issue. In order to correct the endogeneity problem of CSR disclosure, we use Heckman's two-stage estimation (Heckman, 1979). Equation 1 is used as the first stage probit model. All t-values are estimated based on standard errors adjusted for heteroskedasticity.

#### 4. Empirical results

Table 2 shows the statistics for key variables in our sample. In contrast to firms which do not disclose their CSR reports, the CSR reporting firms have more employees. Moreover, the CSR reporting group is, on average, more common among older firms, firms with more assets, more profitable firms, highly leveraged firms, firms with a higher Tobin's Q and higher foreign and institution ownership. Though, the mean ownership of the largest shareholder is less than that of non-reporting firms. Table 3 presents the Pearson correlation matrix of all the variables.

Table 2 Descriptive statistics

Variable	Numbers of observations	All sample	CSR report		T-stat
			NO	YES	
ADJTOBIN's Q	10768	-0.136	-0.158	0.170	-5.025***
ADJROA(%)	10768	0.179	0.057	1.610	-4.531***
EMNO	10768	6.492	6.368	7.945	-29.497***
ASSET	10768	15.164	14.989	17.199	-41.323***
DEBT(%)	10768	41.063	40.370	48.725	-12.283***
CAP(%)	10768	0.088	0.089	0.075	1.895*
SALESGR(%)	10768	9.016	9.517	3.328	4.269***
AGE	10768	3.026	3.012	3.174	-6.703***
FOWN(%)	10768	10.340	9.555	19.689	-17.289***
LOWN(%)	10768	24.422	24.883	18.636	9.399***
INST(%)	10768	39.537	38.128	56.601	-22.446***
ROE(%)	10768	3.466	3.025	8.510	-8.090***

This table displays descriptive statistics for key variables. ADJTOBIN's Q is industry-adjusted Tobin's Q and Tobin's Q is the market value of common stock plus the book value of the preferred stocks and total liabilities deflated by book value of the total assets. ADJROA industry-adjusted ROA and ROA is the ratio of earnings before interests and taxes to total assets. EMNO is measured by the natural logarithm of the numbers of employees working within the firm. ASSET is measured by the natural logarithm of total assets. DEBT is the ratio of debt to assets. CAPSR is capital expenditures divided by total sales, and SALESGR is Sales growth rate from t - 1 to t. AGE is the natural logarithm of the number of year since the firm's inception, FOWN, LOWN and INST is calculated as percentage of shares owned by the foreign investors, the largest shareholder and institutions, and ROE is return on equity.

Table 4 presents the result for the effect of firm size on CSR report disclosure. The significantly positive coefficients for EMNO suggest firms with more employees are more likely to disclose their CSR practices. The results are consistent with our Hypothesis 1 that firm size measured by the numbers of employees influences firm's CSR disclosure. Table 5 shows the impact of CSR disclosure on FP. The coefficients for CSRREP regarding industry-adjusted Tobin's Q and ROA are significant positive, thus the evidence supports Hypothesis 2 that CSR report disclosure positively affects FP. Besides, all the coefficients for the interactions between CSRREP and EMNO are significantly negative. Consistent with hypothesis 3, the results verify that the firm size weakens the positive relationship between CSR report disclosure and FP.

Table 3 Pearson correlations

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
AGE	1.000													
CAP	-0.113	1.000												
DEBT	0.127	-0.064	1.000											
EMNO	0.185	-0.102	0.360	1.000										
CSRREP	0.081	-0.018	0.117	0.273	1.000									
ADJROA	-0.016	-0.119	-0.099	0.108	0.043	1.000								
ROE	0.058	-0.140	-0.063	0.168	0.077	0.867	1.000							
SALESGR	-0.115	0.112	0.015	-0.065	-0.041	0.121	0.103	1.000						
IND	0.044	-0.004	0.215	-0.019	0.065	-0.041	0.052	-0.006	1.000					
ASSET	0.252	-0.016	0.419	0.761	0.370	0.114	0.185	-0.025	0.169	1.000				
ADJTOBIN's Q	-0.103	0.018	-0.193	0.046	0.049	0.381	0.333	0.116	-0.002	0.069	1.000			
FOWN	-0.161	0.032	0.034	0.307	0.164	0.109	0.120	0.039	0.036	0.332	0.194	1.000		
INST	-0.100	0.075	0.106	0.216	0.212	0.108	0.126	0.078	0.134	0.347	0.193	0.477	1.000	
LOWN	0.126	-0.024	0.034	-0.109	-0.090	0.049	0.073	0.011	0.101	-0.126	0.030	0.024	0.146	1.000

This table shows the Pearson correlation matrix of key variables. ADJTOBIN's Q is industry-adjusted Tobin's Q and Tobin's Q is the market value of common stock plus the book value of the preferred stocks and total liabilities deflated by book value of the total assets. ADJROA industry-adjusted ROA and ROA is the ratio of earnings before interests and taxes to total assets. EMNO is measured by the natural logarithm of the numbers of employees working within the firm. ASSET is measured by the natural logarithm of total assets. DEBT is the ratio of debt to assets. CAPSR is capital expenditures divided by total sales, and SALESGR is Sales growth rate from  $t-1$  to  $t$ . AGE is the natural logarithm of the number of year since the firm's inception, FOWN, LOWN and INST is calculated as percentage of shares owned by the foreign investors, the largest shareholder and institutions, and ROE is return on equity. CSRREP is a dummy variable which takes the value of 1 if the firm discloses its CSR practices, and 0 otherwise.

In order to further examining the moderating effect of firm size, we also divide the full sample into two subgroups based on the median value of all firms' numbers of employees. The empirical results of Table 6 show that, for small firms with less employees, both the two coefficients on CSRREP regarding industry-adjusted Tobin's Q and ROA are significantly positive. However, for large firms with more employees, both the two coefficients on CSRREP are insignificant. These findings seem to provide

evidence that large firms tend to engage in symbolic CSR activities and do not “walk the talk”, and thus these CSR talk cannot improve FP.

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Table 4 The impact of firm size on CSR disclosure

Dependent variable	CSR disclosure
Intercept	-6.667 (0.319)***
EMNO	0.399 (0.021)***
DEBT	-0.002 (0.002)
AGE	0.005 (0.002)**
ROA	0.008 (0.003)**
FOWN	-0.005 (0.002)***
LOWN	-0.015 (0.001)***
INST	0.015 (0.001)***
Year dummies	yes
Industry dummies	yes
q2	0.382
Log likelihood	-1823.417

EMNO is measured by the natural logarithm of the numbers of employees working within the firm. ASSET is measured by the natural logarithm of total assets. DEBT is the ratio of debt to assets. AGE is the natural logarithm of the number of year since the firm's inception, ROA is the ratio of earnings before interests and taxes to total assets, FOWN, LOWN and INST is calculated as percentage of shares owned by the foreign investors, the largest shareholder and institutions.

\*\*\*, \*\*, and \* represent significance at the 1, 5, and 10 % levels respectively, the heteroscedasticity-robust errors are reported in parentheses. q2 Measures the explanatory power of the newly added variables in the regression models, with a higher q2 indicating a better model fit.

Table 5 CSR disclosure and firms' financial performance

Dependent variable	Industry-adjusted Tobin's Q	Industry-adjusted ROA
Intercept	1.721 (0.418)***	1.889 (2.284)
CSRREP	0.480 (0.126)***	0.862 (0.467)*
CSRREP*EMNO	-0.161 (0.055)***	-1.018 (0.212)***
ASSET	-0.011 (0.020)	0.681 (0.109)***
DEBT	-0.026 (0.001)***	-0.085 (0.006)***
CAP	0.729 (0.157)***	-7.587 (0.702)***
SALESGR	0.005 (0.001)***	0.035 (0.004)***
ROE	0.027 (0.001)***	
LAMBDA (inverse Mills' ratio)	1.721 (0.418)***	-2.216 (0.206)***
Year dummies	yes	yes
Industry dummies	yes	yes
Adjusted R-squared	0.208	0.114
observations	10768	10768

ADJTQ is industry-adjusted Tobin's Q and Tobin's Q is the market value of common stock plus the book value of the preferred stocks and total liabilities deflated by book value of the total assets. ADJROA industry-adjusted ROA and ROA is the ratio of earnings before interests and taxes to total assets. EMNO is measured by the natural logarithm of the numbers of employees working within the firm. ASSET is measured by the natural logarithm of total assets. DEBT is the ratio of debt to assets. CAPSR is capital expenditures divided by total sales, and SALESGR is Sales growth rate from t - 1 to t, and ROE is return on equity. CSRREP is a dummy variable which takes the value of 1 if the firm discloses its CSR practices, and 0 otherwise.

\*\*\*, \*\*, and \* represent significance at the 1, 5, and 10 % levels respectively, the heteroscedasticity-robust errors are reported in parentheses.

Table 6 CSR disclosure and firms' financial performance-the effect of firm size

Dependent variable	Industry-adjusted Tobin's Q		Industry-adjusted ROA	
	Small firm	Large firms	Small firm	Large firms
Intercept	0.294 (0.690)	2.628 (0.468)***	-18.756 (3.859)***	17.040 (2.552)***
CSRREP	0.857 (0.242)***	0.088 (0.074)	1.608 (0.883)*	-0.237 (0.286)
ASSET	0.068 (0.036)*	-0.019 (0.023)	2.425 (0.206)***	-0.158 (0.121)
DEBT	-0.023 (0.002)***	-0.027 (0.001)***	-0.074 (0.009)***	-0.088 (0.007)***
CAP	0.785 (0.186)***	0.368 (0.140)***	-7.975 (0.803)***	-4.928 (1.040)***
SALESGR	0.005 (0.001)***	0.004 (0.001)***	0.029 (0.004)***	0.048 (0.006)***
ROE	0.023 (0.002)***	0.036 (0.002)***		
LAMBDA (inverse Mills' ratio)	-0.181 (0.063)***	-0.410 (0.048)***	-3.137 (0.364)***	-2.868 (0.249)***
Year dummies	yes	yes	yes	yes
Industry dummies	yes	yes	yes	yes
Adjusted R-squared	0.183	0.303	0.133	0.178
observations	5442	5326	5442	5326

ADJTObin's Q is industry-adjusted Tobin's Q and Tobin's Q is the market value of common stock plus the book value of the preferred stocks and total liabilities deflated by book value of the total assets. ADJROA industry-adjusted ROA and ROA is the ratio of earnings before interests and taxes to total assets. EMNO is measured by the natural logarithm of the numbers of employees working within the firm. ASSET is measured by the natural logarithm of total assets. DEBT is the ratio of debt to assets. CAPSR is capital expenditures divided by total sales, and SALESGR is Sales growth rate from t - 1 to t, and ROE is return on equity. CSRREP is a dummy variable which takes the value of 1 if the firm discloses its CSR practices, and 0 otherwise. Firms are divided into large and small firms based on the median value of all firms' numbers of employees.

\*\*\*, \*\*, and \* represent significance at the 1, 5, and 10 % levels respectively, the heteroscedasticity-robust errors are reported in parentheses.

Except Heckman's two-stage estimation, another approach to adequately address endogeneity concerns is to use the instrumental variable (IV) method. Thus, the IV method proposed by Wooldridge (2002) is also employed as a robustness check. Based on the existing studies, four instrumental variables are used: ownership of the largest shareholder (LOWN), institutions ownership (INST), the average level of disclosure for firms in the same industry (Fatemi et al., 2017) and firm age (Jo and Harjoto, 2012). The results of Table 7 also show that all the coefficients for the interactions between CSRREP and EMNO are significantly negative, consistent with the results in Table 5.

Table 7 CSR disclosure and firms' financial performance –robust test using IV method

Dependent variable	Industry-adjusted Tobin's Q	Industry-adjusted ROA
Intercept	1.061 (0.270)***	-20.717 (1.711)***
CSRREP	2.464 (0.362)***	0.444 (1.336)
CSRREP*EMNO	-0.562 (0.105)***	-1.593 (0.355)***
ASSET	-0.031 (0.019)*	1.582 (0.113)***
DEBT	-0.025 (0.001)***	-0.089 (0.006)***
CAP	0.763 (0.159)***	-7.961 (0.695)***
SALESGR	0.005 (0.001)***	0.035 (0.004)***
ROE	0.027 (0.001)***	
Year dummies	yes	yes
industry dummies	yes	yes
observations	10768	10768
Adjusted R-squared	0.160	0.104

ADJTOBIN's Q is industry-adjusted Tobin's Q and Tobin's Q is the market value of common stock plus the book value of the preferred stocks and total liabilities deflated by book value of the total assets. ADJROA industry-adjusted ROA and ROA is the ratio of earnings before interests and taxes to total assets. EMNO is measured by the natural logarithm of the numbers of employees working within the firm. ASSET is measured by the natural logarithm of total assets. DEBT is the ratio of debt to assets. CAPSR is capital expenditures divided by total sales, and SALESGR is Sales growth rate from  $t-1$  to  $t$ , and ROE is return on equity. CSRREP is a dummy variable which takes the value of 1 if the firm discloses its CSR practices, and 0 otherwise. .\*\*\*, \*\*, and \* represent significance at the 1, 5, and 10 % levels respectively, the heteroscedasticity-robust errors are reported in parentheses.

## 5. Conclusion

This paper examines how firm size affects CSR report disclosure and the moderating effect of firm size in the relationship of CSR disclosure and FP. Using a sample of Taiwanese listed companies during 2010-2016, the empirical results show that large firms with more employees are more likely to disclose their CSR practices. In addition, CSR report disclosure has a positive impact on FP, and firm size negatively affects the relationship between CSR disclosure and FP. For small firms with less employees, CSR disclosures do improve FP. However, the CSR disclosures of large firms have no impact on firm performance. The empirical evidence suggests that firm size is an important factor which distinguishes CSR talk and CSR walk, and only CSR walk positively affects FP.

We contribute to the CSR debate in multiple ways. First, the study provide empirical evidence for

the notation, proposed by Wickert et al. (2016), that large firms with more employees are inclined to invest in CSR talk by disclosing their CSR report. Second, the paper finds that there does exist large firm implementation gap. Large firms communicate their commitments to CSR by reporting their CSR activities but do less to implement it. Thus, firm size mitigates the positive impact of CSR disclosure on firm performance. Third, firm size is an important consideration when determining whether CSR report just is used as an impression management strategy. Only small firms walk their CSR talk, so their CSR disclosure can lead to a positive impact on FP.

### Credit Author Statement

Pi-Hui Ting: Conceptualization, Methodology, Software, Data curation,

Writing- Original draft preparation.

### References

- Balmer, J., Greyser, S., 2006. 'Corporate marketing – Integrating corporate identity, corporate branding, corporate communications, corporate image and corporate reputation'. *Eur. J. Mark.* 40, 730–41.
- Baumann-Pauly, D., Wickert, C., Spence, L.J., Scherer, A. G., 2013. Organizing corporate social responsibility in small and large Firms: Size Matters. *J. Bus. Ethics.* 115 (4), 693–709 .
- Behnam, M., MacLean, T.L., 2011. Where is the accountability in international accountability standards? A decoupling perspective. *Bus. Ethics Q.* 21(1), 45–72.
- Brammer, S., Millington, A., 2006. 'Firm size, organizational visibility and corporate philanthropy: an empirical analysis'. *Bus. Ethics Euro. Rev.* 15, 6–18.
- Brown, H., de Jong, M., Levy, D., 2009. 'Building institutions based on information disclosure: lessons from GRI's sustainability reporting'. *J. Clean. Prod.* 17, 571–80.
- Cho, C. H., Roberts, R. W., Patten, D. M., 2010. The language of US corporate environmental disclosure. *Account. Organ. Soc.* 35, 431–443.
- Cho, S. Y., Lee, C., Pfeiffer Jr, R. J., 2013. Corporate social responsibility performance and information asymmetry. *J. Account. Public Policy* 32(1), 71-83.



- Dhaliwal, D. S., Li, O. Z., Tsang, A., Yang, Y. G. 2011. Voluntary non-financial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The Account. Rev.* 86(1), 59-100.
- Delmas, M., Burbano, V., 2011. 'The drivers of greenwashing'. *Calif. Manag. Rev.*, 54, 64–87.
- Du, S., Bhattacharya, S., Sen, S., 2010. 'Maximizing business returns to corporate social responsibility (CSR): the role of CSR communication'. *Int. J. Manag. Rev.* 12, 8–19.
- Fassin, Y., 2008. 'SMEs and the fallacy of formalising CSR'. *Bus. Ethics Eur. Rev.* 17, 364–78.
- Fatemi, A., Glaum, M., Kaiser, S., 2017. ESG performance and firm value: The moderating role of disclosure. *Global Financ. J.*
- Gond, J.P., Herrbach, O., 2006. Social reporting as an organisational learning tool? A theoretical framework. *J. Bus. Ethics* 65(4), 359–371.
- Grewatsch, S., Kleindienst, I., 2017. When does It pay to be good? moderators and mediators in the corporate sustainability–corporate financial performance relationship: a critical review. *J. Bus. Ethics* 145(2), 383-416.
- Gujarati, D. (1995). *Basic econometrics* (3rd ed.). New York: McGraw-Hill.
- Heckman, J., 1979. Sample selection as a specification error. *Econometrica* 47, 153–161.
- Jo, H., Harjoto, M., 2012. The causal effect of corporate governance on corporate social responsibility. *J. Bus. Ethics* 106(1), 53-72.
- Khavesh, A., Nikhasemi, S. R., Haque, A., Yousefi, A. 2012. Voluntary sustainability disclosure, revenue, and shareholders wealth-A perspective from Singaporean companies. *Bus. Manag. Dyn.* 1(9), 6-12.
- Khan, A., Muttakin, M.B., Siddiqui, J., 2013. Corporate governance and corporate social responsibility disclosures: Evidence from an emerging economy. *J. Bus. Ethics* 114(2), 207-223.
- Loh, L., Thomas T., Wang Y., 2017. Sustainability reporting and firm value: evidence from Singapore-listed companies. *Sustainability* 9(11), 2112.
- Lyon, T., Montgomery, A., 2015. 'The means and end of greenwash', *Organ. Environ.* 28, 223–49.
- Perez-Batres, L., Doh, J., Miller, V., Pisani, M., 2012. 'Stakeholder pressures as determinants of CSR strategic choice: why do firms choose symbolic versus substantive self-regulatory codes of conduct?' *J. Bus. Ethics* 110, 157–72.
- Schons, L., Steinmeier, M., 2016. Walk the talk? How symbolic and substantive CSR actions affect firm performance depending on stakeholder proximity. *Corp. Soc. Responsib. Environ. Manag.* 23(6), 358–372.
- Su, W., 2017. Why do firms publish sustainability reports? A nonmarket perspective. *J. Manag. Bus. Res.* 34(3),331-353
- Swarnapali, R.M.N.C., Luo, Le., 2018. Corporate sustainability reporting and firm Value: Evidence from a developing country. *Int. J. Organ. Innov.* 10(4), 69–78.
- Udayasankar, K., 2008. Corporate social responsibility and firm size. *J. Bus. Ethics* 83, 167-175.
- Walker, K., Wan, F., 2012. The harm of symbolic actions and green-washing: corporate actions and communications on environmental performance and their financial implications. *J. Bus. Ethics* 109, 227–239.
- Wickert, C., Scherer, A.G., Spence, L.J., 2016. Walking and talking corporate social responsibility: Implications of firm Size and organizational cost. *J. Manag. Stu.* 53 (7), 1169–1196 .

- Wooldridge, J. M., 2002. *Econometric analysis of cross section and panel data*. Cambridge, Mass.: MIT Press.
- Wu, J., Liu, L., Sulkowski, A., 2010. Environmental disclosure, firm performance, and firm characteristics: An analysis of S&P 100 firms”, *J. Acad. Bus. Econ.* 10(4), 73-83.
- Yang, A.S., Baasandorj, S., 2017. Exploring CSR and financial performance of full-service and low-cost air carriers. *Financ. Res. Lett.* 23, 291–299.

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