

Sustainability Reports and Its Effect on Firm Value in Thailand

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The publication of sustainability reports (SRs) has increased significantly in Thailand in recent years. As SRs cover a variety of aspects which differ greatly among firms, we aim to verify whether firms with higher SR disclosure enjoy significantly higher firm value. This empirical analysis uses panel data for 425 listed Thai firms over the period 2012-2014. In this paper we focus on two techniques use to analyze panel data: Fixed-effects (FE) and Random-effects (RE). The results reveal negative relationship between the full disclosure and the firm value. Our results are contrast with information asymmetry concept. However, the negative firm value could be due mainly to specific falling oil price phenomenon during the period of study, not the disclosure itself.

Keywords: sustainability reports, firm value, information asymmetry

Track: Accounting

1. Introduction

With the rise of the concept of the sustainable development internationally, there is growing concern about the social and environmental impact of organizational activities. Sustainability is not just about the efficient allocation of resources over time, but also the fair distribution of resources and opportunities between the current generation and future generations (Hackston and Milne, 1996; Gray and Milne, 2002). In recent years there has been an increase in reporting on the social and environmental (SE) aspects of sustainable development as the result of efforts to meet the demands of stakeholders. Indeed, companies have made greater efforts to increase their SE reporting in the financial reports.

As the traditional financial accounting report does not facilitate the measurement of social and environmental impacts, to evaluate the overall impact of the firm's activity it is necessary that a supplementary document, referred to as the sustainability report (SR), be devised. The sustainability report represents the instrument for monitoring, financial accounts preparation and communication regarding the responsible management approach to achieve sustainable growth that respects the shared values of the context in which the firm operates. Following the finding of Farneti and Rammal (2013) that firms are under pressure to publish SRs, the internal push for reporting comes from individual managers who see the preparation of the SR as a way to bring about change in the firms. Also, external pressure for reporting comes from stakeholders, whose interests lie in social and environmental issues. The SR is a tool

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that firms use as dialogue with each group of stakeholders, for example, labor practices, consumer protection, support of the community, corporate governance, human rights and environmental protection. The SR represents the impact of corporate sustainability on corporate processes and corporate performance; thus, investors and other stakeholders increasingly rely on non-financial data to make investment, credit, and other decisions.

However, there still exists debate surrounding the worthwhileness of the SR. Jovanovic (1982) mentioned the cost factor associated with disclosure, such as the collection of data, process, compilation of information, analysis and the writing and publication of the report. When an investor does not appreciate the substantial added value to the publication of a SR report, the whole process can be seen as costly and irrelevant by investors, thereby producing a negative valuation effect. As pointed out by Ingram and Frazier (1980), there is a common concern regarding the usefulness of this type of disclosure due to potential credibility and comparability issues. Moreover, previous research on ascertaining whether the disclosure would affect firm value does not provide one conclusive answer to the issue and this research hopes to add to this discussion. As the SR is a fairly new practice in the voluntary disclosure field, not all listed companies in Thailand fully comply. Hence, this study aims to investigate the SR and focus on the practices of Thailand listed firms by studying the association between SR and firm value.

The remainder of the paper is organized as follows: literature review, research methodology and empirical model, discussion and conclusion.

2. Literature Review

2.1 Stakeholder Theory

One of the themes in sustainability debates is whether investors pay attention to companies' sustainability performance. In this context, sustainable development through social and environmental concerns is viewed as the result of a strategy for dealing with stakeholder demands. According to Freeman (2010), external stakeholders are defined as "any group or individual (in the company's environment) who can affect or are affected by the achievement of the firm's objectives", and he suggests that there is a need for integrated approaches for dealing with multiple stakeholders on multiple issues. In recent years, stakeholder theory has developed a focus on the importance of engaging stakeholders in long-term value creation and creating the foundation for transparency and accountability (Andriof et al. 2002). While disclosure and reporting are the tools, agreement and consensus are the solutions on which to base further decisions and action, and hence to continue collaboration. This has seen an increase in the development of communication processes whereby companies convey messages about their environmental and social responsibility to build and maintain positive stakeholder support. In reality it represents an external demand and either a supporting strategy connected with social performance, an alternative strategy for managing stakeholder relations (Ullmann, 1985). Therefore, it is clear that the stakeholder theory provides an explanation or incentive for companies to issue a SR.

2.2 Information Asymmetry

An important concept of economic theory, specification contract theory, is the concept of information asymmetry. Information asymmetry deals with transactions in which one party is better informed than another party. This concept leads to agency problem. The owner, or stockholder of the firm, hires managers, to act in the principal interest in maximizing firm value. Under information asymmetry, company owners do not have full information concerning the firm at their disposal. However, the managers of firms do, hence the term information asymmetry. Disclosure studies assume that, even under perfect market conditions, information asymmetry exists between investors and management where management possesses superior information. A number of notable past research studies deal with the notion that the party with the most information will disclose information when economic benefit can be achieved by doing so (Akerlof, 2001). By assuming the worst about the unreleased information, firms not disclosing a SR might unintentionally send out a negative signal concerning their performance on SR factors. Investors will assume the worst, which will result in a negative valuation effect on the stock price. The concept of management choices and incentive to disclose, not by regulatory requirement, information is referred to as the quintessential accounting problem (Verrecchia, 1990). By disclosing more information, management signals become more transparent and this reduces information asymmetry.

Based on the efficient market hypothesis, social disclosures are reflected in stock price, provided they have informational value. Alternatively, "ethical" investors may be willing to pay premium price for a socially responsive firm. Social disclosures also may improve the security risk associated with expensive social performance improvement programs, potential fines, or social sanctions (Ullmann, 1985). Moreover, Richardson and Welker (2001) argue that there are at least three reasons to expect a social disclosure can improve firm value. These reasons are related to either investor preference effects, reduced information asymmetry or risk estimation. In conclusion, an increasing amount of the provided information is negatively associated with the existing information asymmetry, and decreasing information asymmetry will lead to a positive valuation of the firm.

Although theory predicts that this information is to be fully disclosed, in practice this is not always the case. A possible explanation for this phenomenon is posited by Jovanovic (1982) who assumes that the disclosure of information incurs costs upon the disclosing party. When the cost of disclosing information outweighs the potential benefit, the optimal outcome is not to disclose. The summarized valuation effect can be positive (negative) when the benefits of disclosure (do not) outweigh the costs associated with the disclosure. In light of presenting such theories one can argue that although SR is still voluntary in many countries, an obligation to disclose exists not only from the viewpoint of stakeholder theory, but also from general value maximizing in response to the information asymmetry theorem. However, surrounding the debate on the issue of voluntary disclosure, such arguments are that Friedman-style investors place a negative premium on companies apparently involved in what they consider wasteful voluntary social responsibility activities, and social disclosures could lower the price of the security (Michelon and Parbonetti, 2012). On the other hand, management's objective is to display and advertise managerial excellence across the board in order to maintain their reputation. This rationale manifests itself in good economic performance and in social activities going beyond the legally required or

customarily expected levels of social performance. In terms of any worthwhile social responsibility activity, it has been argued that firms systematically under-report their activities in this area. This is because such activities come at the expense of programs that more obviously further the shareholders' interests, and therefore many managers are thought to deem it unwise to report extensively about sustainability development (Ullmann, 1985). Hughes et al. (2001) suggests not only that the disclosure of the SR has influence on the firm's stock price, but that a message or content is also important. Publication of an SR can lead to a positive, but also a negative effect on market value, depending on the results presented in the disclosure and the corresponding expected future liabilities.

2.3 Empirical Evidence of the Relationship between SR and Firm Value

The results of the empirical studies of the relationship between SR and firm value are mixed and results remain inconclusive. Some identify a positive link between SR and the firm's market value (e.g. Menon and Menon, 1997; Wahba, 2008; Chava 2010; Schadewitz and Niskala, 2010; C. Reverte, 2011). Some evidence also suggests that firms with strong environmental management enjoy better financial performance (ROA, ROE and cash flow) (e.g. Wagner et al., 2002; Margolis and Walsh, 2007; Nakao et al., 2007; Clarkson et al., 2008). On the issue of increasing firm value by reducing the cost of equity capital, several reviews (Plumlee et al., 2008; El Ghouli et al., 2010; Dhaliwal, et al., 2011; C. Reverte, 2011) suggest that SR disclosure by firms with superior sustainability performance leads to the lower cost of equity capital. However, there are also findings to the contrary. One example is Berthelot et al. (2003), who conclude that while capital market responses to the environment and financial statement disclosures are mixed, disclosures regarding accidents, fines, penalties, or other government actions are consistently associated with negative returns. Also, a negative correlation was found between SRs and corporate financial performance (e.g. Richardson and Welker, 2001; Brammer et al., 2006). Furthermore, some studies discovered no impact of SR on firm value (Antonia Garcia-Benau, 2013; Ioannou and Serafeim, 2014). The main conclusion from prior research is that no clear conclusion can be drawn regarding the value relevance of sustainability disclosure as the results are inconclusive. As explained in the introduction, this paper hopes to add to the discussion.

3. The Methodology and Model

3.1 Sample and Sources of Data

To investigate the relationships between the SR and firm value, the financial data for the firms in our sample were taken from the SETSMART financials data base provided by the Stock Exchange of Thailand. This comprised 517 listed companies. Due to missing data and listed companies which could possibly be delisted, our initial sample covered 425 firms, 1275 firm-year data collected between the years 2012-2014. The sustainability disclosure was available from the company website when a firm discloses a separate SR, or sustainability information paragraph in the annual financial report.

3.2 Empirical Models

The empirical regression model for this study is as follows;

$$\text{Tobin's } q = \alpha_0 + \alpha_1 SR + \sum \alpha x + \varepsilon$$

Where Tobin's q is the measure of *firm value* and x is a vector of other explanatory variables. We use a dummy variable indicating the practice or format of disclosure as measures of SR .

3.3 Methodology

While most research employs Ordinary Least Squares (OLS) for estimating the parameters in a regression model, our research uses panel data analysis. Panel data allows the researchers to control for variables which differences in business practices across firms or variables that change over time but not across entities. In this paper, the focus is on two techniques used to analyze panel data: fixed-effects (FE) and random-effects (RE). FE assumes that these time-invariant characteristics are unique to the individual and should not correlate with other individual characteristics. RE assumes that the entity's error term does not correlate with the predictors which allows for time-invariant variables to play a role as explanatory variables. In the first step, OLS is employed and in the next RE and FE are added to the model to compare firm value for different SR formats. In the final step, we fitted the model with all the variables that we have discussed. For each panel model, we used the Hausman test to choose between the random effect regression and the fixed effect. The results from the regressions are in the next section.

3.4 Variable

Dependent Variable: Tobin's q

This study used Tobin's q to measure firm value following on from previous SR studies (e.g. Dhaliwal and Yang, 2011; Chung et al., 2015). We used a modified Tobin's q introduced by Chung and Pruitt (1994), used widely in financial papers. Tobin's q (Chung and Pruitt, 1994) is calculated as:

$$\text{Tobin's } q = \frac{\left\{ \begin{array}{l} (\text{share price} \times \text{number of common stock outstanding}) + \\ \text{Liquidating value of the firm's preferred stock} + (\text{short-term} \\ \text{Liabilities} - \text{short-term assets}) + \text{book value of long-term debt} \end{array} \right\}}{\text{book value of total assets}}$$

Independent Variable: Sustainability Reporting (SR)

In order to evaluate the overall impact of the firm's activity on the collective data it is necessary to come up with a document that supplements traditional corporate reporting called the sustainability report (SR). That is, the inclusion of social, environmental and economic information (GRI, 2002, p. 9). The term is also used synonymously with citizenship reporting, corporate social responsibility reporting, triple bottom line reporting and other terms that encompass the economic, environmental and social aspects of a firm's performance (GRI, 2005, p. 16). Also, in recent years in the area of sustainability, the Thai government and the Stock Exchange

of Thailand have continuously promoted sustainable development. Examples include the development of tools to promote understanding of sustainable development, the support of potential to be ready for participation in sustainability assessment, annual awards and encouragement of listed companies to disclose and communicate their sustainable information via sustainability reporting. As the definition of SR is fairly ambiguous, the variety of aspects reported differs greatly between firms. In this study, we divided the SR groups into 4 categories, adapted from Prado et al., (2004) and Frias-Aceituno et al., (2013).

We opted for classifying practices in SR by taking into consideration: 1) *Non – Disclosure* about CSR or sustainability information is a dummy variable; the value is '1' if sustainability information is undisclosed, and '0' otherwise; 2) *Integrated Framework* whether the firm makes any disclosures economic, social and environmental aspects on the part of the annual report is a dummy variable; the value is '1' if economic, social, and environmental information is integrated and disclosed in the annual report, and '0' otherwise; 3) *Separate report* whether the information is presented in an information format or the contents are adapted to the standard of the most widespread international model is a dummy variable; the value is '1' if the contents are adapted to a standard SR and the report is separate from annual report, and '0' otherwise; 4) *GRI certificate* whether the organization responsible is in compliance with the demands of the GRI is a dummy variable; the value is '1' if compliance with the demands of the GRI has been certified, and '0' otherwise. We use GRI the criteria because these formats of disclosure differ in their depth and breadth of sustainability coverage.

Control Variable

The control variables were derived from prior research. We controlled for firm size (*Total asset*) as the natural logarithm of the book value of total assets (Prado et al. 2009; Dhaliwal, et al., 2011; Jo and Harjoto, 2011) and controlled for the debt to equity ratio (*DE*) by assessing the ratio of the amount of total debt divided by equity (Prado et al, 1999). Also, we controlled for industry type (*industry type*) (Wiwattanakantang, 2001) with the groupings following the classification of the Stock Exchange of Thailand. This is a dummy variable.

4. Empirical Results and Discussion

4.1 Descriptive Statistic

Table 1 presents the descriptive statistics of our data set. A summary of variables for the 1,275 firm-year observation. The mean values of Tobin's q are equal to 1.2282. Similarly, the mean of the total asset and debt to equity ratio are equal to 558.5195 and 1.7355, respectively.

Table 1: Summary of Statistics and Pearson's Correlation Matrix of Model Variables

Variables	No. of firm	n	Mean	SD.	Min	Max
Tobin's q	425	1,275	1.2282	1.2501	0.0118	15.0890
Total assets (Million)	425	1,275	558.5195	2.6540	73.520	2,759,890.14
Debt to equity	425	1,275	1.7355	3.4271	0.0014	58.4930

Table 2 presents the distribution by year of SR and disclosing firms. In 2012, more than half of firms in our sample did not disclose their sustainability information. In 2013 and 2014 most firms turned to integrate the SR disclosure into their annual reports. The separate report nearly doubled from 15 firms in 2012 to 29 firms in 2013 and jumped 51 firms in 2014. It is worth noting that the number of GRI certificate reports increased slightly during the period 2012-2014. Overall, practices and standards of reporting kept evolving and the percentage of reporting firms rising. However, in 2014 7.5% of firms remain in the non-disclosure group.

Table 2: Sustainability disclosure, distribution by year

SR format	2012		2013		2014	
	(n = 425)	%	(n = 425)	%	(n = 425)	%
Non-disclosure	243	57.18	57	13.41	32	7.51
Integrated Framework	148	34.82	309	72.71	308	72.54
Separate Report	15	3.53	29	6.82	51	11.97
GRI certificate	19	4.47	30	7.06	34	7.98

Table 3 presents sustainability disclosure by industry. During the 2012-2014 period, 425 firms issued a total of 943 SRs. The services industry had the largest proportion (19.06%) of firms, while the resources industry had the lowest proportion (6.82%) of firms. However, the research found that the resources industry were at a generally higher level of disclosure with the largest proportion of the GRI having been certified on SRs (28.92%). Consistent with the broad scope of SR disclosure, many pollution-prone industries, including the resource industries, also actively disclose their social performance.

Table 3: Sustainability disclosure by Industry

Industry type	Non-disclosure		Integrated framework	Separated report	GRI certificate	Total	
	n	%	%	%	%	%	
AGRO	117	9.18	16.24	65.81	9.40	8.55	100.00
			5.72	10.07	11.58	12.05	
CONSUMP	105	8.24	25.71	67.62	6.67	0	100.00
			8.13	9.28	7.37	0	
FINCIAL	150	11.76	20.00	64.67	10.00	5.33	100.00
			9.04	12.68	15.79	9.64	
INDUS	231	18.12	29.44	58.87	6.93	4.76	100.00
			20.48	17.78	16.84	13.25	
PROPCON	237	18.59	30.38	62.45	3.38	3.80	100.00
			21.69	19.35	8.42	10.84	
RESOURC	87	6.82	24.14	36.78	11.49	27.59	100.00
			6.33	4.18	10.53	28.92	
SERVICE	243	19.06	28.81	56.79	7.82	6.58	100.00
			21.08	18.04	20.00	19.28	
TECT	105	8.24	23.81	62.86	8.57	4.76	100.00
			7.53	8.63	9.47	6.02	
Total	1,275	100.00	26.02	60.00	7.45	6.51	100.00
			100.00	100.00	100.00	100.00	

Note: The above table presents the frequencies and percentage of industry type distribution by SR format. Industry type is a dummy variable, which is 1 if the firm is in the industry, and '0' otherwise. *AGRO* is the firm's activity belonging to the agro- and food industry. *CONSUMP* is the firm's activity belonging to consumer products. *FINCIAL* is the firm's activity belonging to the financial industry. *INDUS* is the firm's activity belonging to industry. *PROPCON* is the firm's activity belonging to property and construction. *RESOURC* is the firm's activity belonging to resources. *SERVICE* is the firm's activity belonging to services. *TECT* is the firm's activity belonging to technology.

4.2 Multivariate Results

Table 4 shows the estimates of the explanatory variable SR formats and control variables using OLS. Model (1) suggests that the coefficients on Separate Report and *SERVICE* are significantly positive, but Log Asset, *CONSUMP*, *PROPCON*, and *INDUS* are significantly negative. However, it can be seen that the results of the OLS and panel data analysis are different because the reporting practices of firms are a dataset in which the behavior of entities observed across time changes (see Table 2).

Table 4: Multivariate results for 2012-2014

	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)
	OLS	RE	FE	RE	FE
Integrated framework	0.0506 (0.0884)	-0.0306 (0.0845)	-0.0464 (0.0920)	-0.0188 (0.0823)	0.0113 (0.0928)
Separated report	0.335* (0.174)	-0.0431 (0.109)	-0.218 (0.156)	-0.0172 (0.113)	-0.199 (0.173)
GRI certificate	0.231 (0.201)	-0.110 (0.165)	-0.391** (0.172)	-0.0814 (0.184)	-0.327* (0.183)
Log asset	-0.0515* (0.0263)			-0.0328 (0.0350)	-0.141 (0.380)
Debt to equity	-0.00984 (0.00871)			-0.00162 (0.0109)	0.00988 (0.0171)
CONSUMP	-0.870*** (0.130)			-0.886*** (0.204)	
FINCIAL	-0.277 (0.176)			-0.345 (0.231)	
INDUS	-0.636*** (0.131)			-0.656*** (0.207)	
PROPCON	-0.222* (0.118)			-0.276 (0.183)	
RESOURC	-0.238 (0.145)			-0.220 (0.205)	
SERVICE	0.340** (0.147)			0.322 (0.227)	
TECT	-0.136 (0.166)			-0.166 (0.271)	
Constant	2.560*** (0.588)	1.257*** (0.0881)	1.298*** (0.0698)	2.241*** (0.815)	4.463*** (8.570)
Observations	1,275	1,275	1,275	1,275	1,275
R-squared	0.090	0.003	0.005	0.003	0.024
Number of firms		425	425	425	425
Hausman test Prob>chi ²			**		***

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Note: This table presents the coefficient of estimates from the regression model explaining the factors that affect firm value on the Stock Exchange of Thailand firms from 2012-2014. The dependent variable is $n's Q$. The method used in the first panel is pool OLS. The second panel consists of the variable considerations on *SR Format* only and the method used random-effect panel regression. The third panel is the same, but with fixed-effect panel regression. The last two panels consist all of the variable considerations, *SR Format* and control variables. We employ random-effect panel regression for the third panel. In the last panel the method used is fixed-effect panel regression.

Therefore, we are confident that the panel data analysis is more accurate than OLS. Then, the effect of the SR alone on Tobin's q was estimated, as specified in the first and second panels. Model (2) shows a random-effect (RE) regression, while Model (3) shows a fixed-effect (FE) regression. According to the first two models, the Hausman test gives a figure of 8.24 and p-value of 0.0413 suggesting that the fixed effects panel regression is an appropriate model to fit this data. We therefore focus on interpreting the fixed-effect results of the SR format on firm value in Model (3). The results reveal negative relation between the degree of disclosed and the firm value.

Next, for the last two panels of the regressions Models (4) and (5) take into account the control variables in the estimation equation. The Hausman test give a figure of 15.88 and a p-value of 0.0072 again, suggesting that fixed effects model is more accurate. Therefore, we focus on interpreting the results of the financial considerations on firm value in Model (5) the fixed effects regression. From the results of the panel data analysis, Tobin's q was negatively related to the GRI having been certified. The coefficients for the other two group dummies (integrated framework, separate report) did not statistically differ from zero significantly, and do not contribute to a higher Tobin's q as compared to non-disclosure of an SR. This supports the study by Richardson and Welker (2001), who found a positive link between social disclosure and the cost of equity capital.

4.3 Discussion

Since 2012, the regulator has encouraged organizations to use the SR framework for reporting. The results from Table 2 reveal that nearly all the companies had already been reporting sustainability information using different frameworks although there are some companies that have not started disclosing SRs. As indicated above, most of them provided substantial sustainability information internally and this was being used in annual reports. When this view is adopted in the light of SRs, one can argue that by disclosing sustainability information in one year could create the commitment to disclose in future years. However, the reported improvement mainly in the separate report but not GRI framework, which an assessment of GRI indicators is difficult to produce and costly. According to the multivariate results (Table 4), it is surprising that the report practice of adopting GRI has negative impact on firm value. However, most firm reports with GRIs are in the resource industry, in which it is unavoidable to mention the pollution. It could be the case as mentioned by previous studies that disclosure of negative information hurts firm value. In accordance with Berthelot et al. (2003) who argued that while capital market responses to environment, financial statement disclosures are mixed, disclosures regarding accidents, fines, penalties, or other government actions are consistently associated with negative returns. In addition, Hughes (2000) examined the market value of equity and the publication of non-financial pollution publications. The findings suggest a significant negative correlation between stated pollution and stock price. For our results there are two plausible explanations: 1) the pollution sensitive industry: according to the GRI framework to report all pollution, Hughes (2000) suggests that a possible liability in the future is recognized through the non-financial data by investors and shareholders. 2) the time period (2010-2012) for which data were available for energy stock, the world energy price fell, with the Tobin's Q average decrease maybe not being the result of adopting GRI. It therefore cannot be concluded that disclosing under GRI do hurt firm value.

5. Conclusions

In summary, the SR has become more widespread in Thailand. Public companies also recognize the importance of acting and reporting in a sustainable way and hence using the report as a tool for signal transparency and disclosure to reduce information asymmetry. However, the SR is fairly new in terms of voluntary disclosure in Thailand, with firms disclosing their activities and proceeding with different practices to reports. Thus, this paper has explored the issue what kind of reporting can create value for a firm. Based on our findings, the results reveal that when a firm provides greater disclosure, financial performance decreases. The SR is a sensitive issue and the creation of social value for the firm is necessary to maintain an effective process for the creation of economic and financial value. In order for regulators requires voluntary participating companies to produce a sustainability report need to be incentivized to see advantages other than financial performance. However, as this is the initiation of the SR in Thailand, we also believe that the SR will be essential and inevitable for reporting in the future. It is suggested that further study investigate the evolution of sustainability over time.

References

- Akerlof, G 1970, The market for 'lemons': quality uncertainty and the market mechanism. *Quarterly Journal of Economics* 90, 629–650.
- Andriof, J., Waddock, S., & Rahman, S. S. (Eds.) 2002), *Unfolding stakeholder thinking: theory, responsibility and engagement*. Greenleaf Publishing.
- Antoncic, B., & Hisrich, R. D 2001, Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of Business Venturing*, 16 (5), 495-527.
- Antoncic, B., Cardon, M. S., & Hisrich, R. D 2004, Internationalizing corporate entrepreneurship: The impact on global HR management. In Katz, J. A., & Shepherd D. A. (Eds.), *Corporate Entrepreneurship: Advances in Entrepreneurship, Firm Emergence and Growth, Vol. 7*. Oxford, UK: Elsevier, JAI, 173-197.
- Antonia García-Benau, M., Sierra-Garcia, L., & Zorio, A 2013, Financial crisis impact on sustainability reporting. *Management decision*, 51(7), 1528-1542.
- Berthelot, S., Cormier, D., & Magnan, M 2003, Environmental disclosure research: Review and synthesis. *Journal of Accounting Literature*, 22, 1.
- Chava, S 2010, Socially responsible investing and expected stock returns. *Available at SSRN 1678246*.
- Chung, H., Judge, W. Q., & Li, Y. H 2015, Voluntary disclosure, excess executive compensation, and firm value. *Journal of Corporate Finance*, 32, 64-90.
- Chung, K. H., & Pruitt, S. W 1994, A simple approximation of Tobin's q. *financial management*, 70-74.
- Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P 2008, Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, organizations and society*, 33(4), 303-327.
- Dhaliwal, D. S., Li, O. Z., Tsang, A., & Yang, Y. G 2011, Voluntary nonfinancial disclosure and the cost of equity capital: The initiation of corporate social responsibility reporting. *The accounting review*, 86(1), 59-100.

- El Ghoul, S., Guedhami, O., Kwok, C. C., & Mishra, D. R 2011, Does corporate social responsibility affect the cost of capital?. *Journal of Banking & Finance*, 35(9), 2388-2406.
- Farneti, F., & Rammal, H. G 2013, Sustainability reporting in the Italian public sector: motives and influences. In *Seventh Asia Pacific Interdisciplinary Research in Accounting Conference, Kobe* (pp. 26-28).
- Freeman, R. E 2010, *Strategic management: A stakeholder approach*. Cambridge University Press.
- Frias-Aceituno, J. V., Rodriguez-Ariza, L., & Garcia-Sanchez, I. M 2013, The role of the board in the dissemination of integrated corporate social reporting. *Corporate Social Responsibility and Environmental Management*, 20(4), 219-233.
- Gray, R., & Milne, M 2002, Sustainability reporting: who's kidding whom? *Chartered Accountants Journal of New Zealand*, 81(6), 66-70.
- Hackston, D., & Milne, M. J 1996, Some determinants of social and environmental disclosures in New Zealand companies. *Accounting, Auditing & Accountability Journal*, 9(1), 77-108.
- Hisrich, R. D., Peters, M. P., & Shepherd, D. A 2008, *Entrepreneurship. 7th ed.* Boston, MA: McGraw-Hill.
- Hughes, K. E 2000, The value relevance of nonfinancial measures of air pollution in the electric utility industry. *The Accounting Review*, 75(2), 209-228.
- Hughes, S. B., Anderson, A., & Golden, S 2001, Corporate environmental disclosures: are they useful in determining environmental performance. *Journal of accounting and public policy*, 20(3), 217-240.
- Ingram, R. W., & Frazier, K. B 1980, Environmental performance and corporate disclosure. *Journal of accounting research*, 614-622.
- Ioannou, I., & Serafeim, G 2014, The consequences of mandatory corporate sustainability reporting: evidence from four countries. *Harvard Business School Research Working Paper*, (11-100).
- Jo, H., & Harjoto, M. A 2011, Corporate governance and firm value: The impact of corporate social responsibility. *Journal of business ethics*, 103(3), 351-383.
- Jovanovic, B 1982, Truthful disclosure of information. *The Bell Journal of Economics*, 36-44.
- Margolis, J. D., Elfenbein, H. A., & Walsh, J. P 2007, Does it pay to be good? A meta-analysis and redirection of research on the relationship between corporate social and financial performance. *Ann Arbor*, 1001, 48109-1234.
- Menon, A., & Menon, A 1997, Enviropreneurial marketing strategy: the emergence of corporate environmentalism as market strategy. *The Journal of Marketing*, 51-67.
- Michelon, G., & Parbonetti, A 2012, The effect of corporate governance on sustainability disclosure. *Journal of Management & Governance*, 16(3), 477-509.
- Nakao, Y., Amano, A., Matsumura, K., Genba, K., & Nakano, M 2007, Relationship between environmental performance and financial performance: an empirical analysis of Japanese corporations. *Business Strategy and the Environment*, 16(2), 106-118.
- Plumlee, M., Brown, D., & Marshall, S 2008, The impact of voluntary environmental disclosure quality on firm value. *Available at SSRN 1140221*.
- Prado-Lorenzo, J. M., Gallego-Alvarez, I., & Garcia-Sanchez, I. M 2009, Stakeholder engagement and corporate social responsibility reporting: the ownership structure effect. *Corporate Social Responsibility and Environmental Management*, 16(2), 94-107.

- Reverte, C 2012, The impact of better corporate social responsibility disclosure on the cost of equity capital. *Corporate Social Responsibility and Environmental Management*, 19(5), 253-272.
- Richardson, A. J., & Welker, M 2001, Social disclosure, financial disclosure and the cost of equity capital. *Accounting, organizations and society*, 26(7), 597-616.
- Schadewitz, H., & Niskala, M 2010, Communication via responsibility reporting and its effect on firm value in Finland. *Corporate Social Responsibility and Environmental Management*, 17(2), 96-106.
- Ullmann, A. A 1985, Data in search of a theory: A critical examination of the relationships among social performance, social disclosure, and economic performance of US firms. *Academy of management review*, 10(3), 540-557.
- Verrecchia, R. E 1990, Information quality and discretionary disclosure. *Journal of Accounting and Economics*, 12(4), 365-380.
- Wagner, M., Van Phu, N., Azomahou, T., & Wehrmeyer, W 2002, The relationship between the environmental and economic performance of firms: an empirical analysis of the European paper industry. *Corporate Social Responsibility and Environmental Management*, 9(3), 133-146.
- Wahba, H 2008, Does the market value corporate environmental responsibility? An empirical examination. *Corporate Social Responsibility and Environmental Management*, 15(2), 89-99.
- Wiwattanakantang, Y 2001, Controlling shareholders and corporate value: Evidence from Thailand. *Pacific-Basin Finance Journal*, 9(4), 323-362.