

## Voluntary Sustainability Disclosure, Revenue, and Shareholders Wealth- A Perspective from Singaporean Companies

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### Abstract

*There is an unprecedented growth among wide range of stakeholder's attention to environmental and social performance, and disclosure by companies. People within a community are worried about natural resources, air and water pollution, as well as low income-tier group of the community. Companies started to perform in a way to minimize their negative and adverse impact on natural scarce resources, and practice some social-friendly activities in order to either build a shared value for long term purpose, and to gain customers and shareholders attention for short term purposes. Since environmental and social issues are associated with peoples' right and public law, thus some governments have legislated certain rules and regulations and also have made CSR disclosure as a mandatory practice for public listed firms. But CSR disclosure is still optional in most of countries. Environmental and social performance and disclosure in Singapore are not mandatory. So Singaporean public listed companies perform and disclose their CSR activities voluntarily.. Findings of this research show that there is a positive and significant relationship between environmental and social performance disclosure as well as revenue. This research investigated the relationship between environmental and social disclosure and shareholders wealth in Singapore; meanwhile it has found that there is a positive and considerable relationship between sustainability reporting and amount of paid dividend and share price as well.*

**Key words:** Revenue, Sustainability Reporting, Shareholders Wealth



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### INTRODUCTION

In the last decade, reporting of non-financial information has become widespread (Ioannou and Serafeim, 2011). In the emerging market there are increasing numbers of companies that perform environmentally, socially, and disclose their CSR practices in their annual reports. The main aim of each business is to generate profit and ultimately maximizing its shareholders wealth, therefore businesses must have realized that sustainability practices help them to achieve their aims. Sustainability practices and disclosure would impact on companies' performance and boosts up their efficiency. Environmental and social performance and disclosure would affect customers' perception about a company's product or service; as a result this change can increase number of sale and ultimately can increase total revenue. On the other hand, companies need to assure shareholders about the risk. Naturally potential investors look for lower risk and higher return. thus sustainability reporting would increase share price in two ways, first by increasing revenue, net profit and inspires better financial performance, and second by assuring investors and shareholders. Sustainable development has become more momentous currently, customers and shareholders are asking for companies' societal and environmental performance information, which bring about sustainable and continuous growth, and consequently result in creating shared value in the community and environment that companies operate in.

The main aim of this research is to find any significant relationship between the level of sustainability disclosure and the level of revenue, amount of paid dividend and ultimately share price among Singaporean companies. In old days, prosper business considered as a business that contributes to community by generating profit, which covered employment salaries, purchases, and investments. But nowadays, a community needs a successful business to provide jobs and wealth creation opportunity for its citizens (Porter and Kramer, 2011). A business needs a successful community, not only to create

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demand for its products but also to provide critical assets and a supportive environment (Porter and Kramer, 2011). Sustainability reporting is the practice of measuring, disclosing, and being accountable to internal and external stakeholders for organizational performance towards the goal of sustainable development. (GRI- Sustainability Reporting Guideline, 2011).Leibs (2007) defined sustainability reporting as “the practice of publicizing a company’s environmental and social risks, responsibilities, and opportunities”. Here are the research questions that this research is going to investigate among Singaporean companies:

1. To what extent environmental and social performance disclosures affect company’s reputation? or. Is there any relationship between the level of CSR disclosure and revenue?
2. Is there any significant relationship between environmental and social performance disclosure and amount of paid dividend?
3. Is there any significant relationship between CSR reporting and companies, share price?

## LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### **Sustainability Reporting and Revenue**

There are an unprecedented number of scholars that have conducted research on sustainability reporting and its financial impacts during last decades. The enormous number of studies on effects of environmental and social performance disclosure addresses the importance of this issue, the profound impacts of CSR practices disclosure on wide range of stakeholder’s behaviors resulted in affecting financial performance, and has made CSR issue as a prominent and noteworthy area in the accounting field as well. Murphy (2002) concluded that there is a profitable correlation between superior environmental stewardship and financial performance. Baumunk (2009) cited three major benefits of sustainability reporting; 1) more demand for the company’s products and/or services, 2) a higher price for its shares, and 3) better internal reporting. The first and the second benefits mentioned by Baumunk are in line with the aims of this research. The impact of sustainability reporting on revenue and share price is going to be studied concurrently in this research.

### **Sustainability Reporting and Revenue**

Generating revenue can be derived from several factors like reputation, price, offered products or services, etc. CSR disclosure can affect all indicators, which determine sales volume and results in revenue growth. UNEP and sustainAbility (2001), declared that “Employee-friendly work practices strongly contribute to increased revenue, as motivated employees are more productive, and willing to go ‘the extra mile’ for their employer”. (Mohr and Webb, 2005) concluded that corporate social responsibility has a positive effect on business evaluation and buying intent. (Porter and van der Linde, 1995) mentioned, “Both revenue growth and cost reduction can be enhanced by innovations spurred by demands from regulators, consumers, and other stakeholders”. UNEP and SustainAbility (2001) indicated that in business-to-business type of business, there is positive relationship between environmental performances and number of companies that looking for green supplier and partner, and for Business-to-customer type, customers look for greener products. Genuine community initiatives have been well documented to boost a company’s reputation. Community initiatives perceived as driven solely by public relations will not generally enhance-and can even harm-reputation (UNEP and SustainAbility 2001). Seifort, et al., (2003) mentioned that brand recognition and corporate reputation, can also be enhanced through strategic philanthropy. (Jacob, Singhal, and Subramanian 2008) cited Revenue growth can be achieved by improved execution in current market or reaching new market. (Klassen and McLaughlin 1996) mentioned that improvement in existing market can be realized through the reputational benefits of positive environmental performance, also they argued that reduction in environmental effects of companies’ products and performances, and well established environmental management system, can improve the reputation. Similarly, other environmentally conscious initiatives, such as alternative energy purchases or investments required to reduce emissions below regulatory

requirements, can signal a firm's concern for the environment and could have a positive impact on corporate reputation and brand recognition Jacobet et al., (2008). They mentioned that access to new market would be considered as another benefits of improved environmental performance. Improving existing market and accessing to new market can work parallel to achieve higher revenue and financial performance. Evolving environmentally conscious market, with their increasing desire for eco-friendly products can lead to new sales opportunities (Porter and van der Linde 1995). Businesses can achieve sale increase and cost reduction not only through the environmental performances and products, but also through caring about employees and making appropriate workplace. In addition to revenue gains and cost reductions, innovation can moderate the effects of environmental performance on revenue gains and cost reductions (Porter and van der Linde 1995).

### **Sustainability Reporting and Shareholders Wealth**

There is significant number of studies that found positive association between sustainability reporting, corporate social responsibility and investors' perception, and effects on the companies share value. Since the main aim of each business is to maximize its shareholders wealth, so increasing share value in the market, returning more on equity, and more EPS could play a vital role in order to achieve businesses' main goal. Feldman, Soyka, Ameer (1996) founded that businesses that improve their environmental management system and their future environmental performance will be able to increase their shareholders wealth perhaps five percent. Konar and Cohen (2001) cited that there is association between reduction in toxic emission release and greater firm value. As indicated by (Gottsmann and Kessler 1998) portfolios of firms with good environmental performance return more than portfolios of poor environmental performers. Cohen et al (1995) found that industry-balanced portfolios of low-pollution businesses earned greater stock returns than portfolios of high-pollution businesses. White I (1995) indicated that portfolio of companies which are well-known for their environmental practice earn greater than both portfolio of companies with abortive environmental reputation and portfolios of companies with bad reputation. Ziegler, Rennings, Schroder (2002) found that growth of environmental performance by companies have a positive impact on average monthly share returns. UNEP and SustainAbility (2001) mentioned that employee-friendly work practice and good workplace condition have a positive effect on share value. Kempf and Osthoff (2006) discussed social responsible investors do not suffer a performance loss by reaching their ethical aims. Finally the from the previous scholars findings, the study can draw conclusion that environmental and social performance can increase share value, by increasing in revenue, and decreasing costs, and totally generating more profit.

### **Hypothesis 1: Sustainability Disclosure and Revenue**

Increasing number of researches show that there is a positive relationship between sustainability performance, environmental management, social responsibility and revenue

*Hypothesis 1:* There is a positive relationship between sustainability reporting and companies revenue.

### **Hypothesis 2: Sustainability Disclosure and Share Price**

Since many scholars found positive association between sustainability reporting and share price, and sustainability reporting and social responsibility have impact on stock returns, and also by changing in investor's perception by assuring them about risk and continuous performance, can encourage more investors to invest in a company, so both, result in increase in share price.

*Hypothesis 2:* There is a positive relationship between the level of sustainability reporting and companies share price.

## **RESEARCH METHODOLOGY**

### **Population and Sampling**

This purpose of this research is to study about the impact of environmental and social disclosure on companies' revenue and share price. Thus, we have narrow down the scope of our study to public listed companies, which are listed in the Singapore Exchange main market. Since sustainability performance and disclosure indicators would vary industry to industry. The research aimed three industries to study; 1) constructors and property developers, 2) manufacturer, and 3) service and trading. Studying all

companies in those sectors would be impossible with regard to limitation of time. Thus, the research has selected 15 companies in each sector, and studied three fiscal years in row (2008-2010). The random selection is used to choose sample companies, but selected companies has three common characteristics; 1) their fiscal year begins at the first of January each year and ends at the 31st of December of that year, 2) all their reports are in Singapore Dollar, and 3) are listed in the Singapore Exchange main market.

### **Environmental and Social Indicators**

Based on the GRI- Sustainability Reporting Guideline (2011), the research has selected five environmental indicators and five social indicators to calculate the sustainability index. Environmental indicators are: energy, water, biodiversity, environmental management system (EMS), and environmental friendly products and services. Social indicators are: employment, occupational health and safety, training and education, community involvement, and customers' health and safety.

### **MEASUREMENTS**

#### **Inset table 1-2 here**

All financial data are collected from companies' annual reports. Average share price is calculated based on the minimum and maximum price within a month for each year. The sustainability index is calculated based on the number of indicators that are disclosed and the level of disclosure (quantitative and qualitative). If a company disclosed about any indicators, the research assigned 1 or that company did not disclosed about indicators, the research putted 0. In the second part score assigning is based on the intense of disclosure. Score assigning for the intense of disclosure is based on quantitative or qualitative disclosed information. Here is the score assigning method for the level of disclosure.

### **ANALYSIS AND RESULT**

#### **Inset table 3-5 here**

Here is the table of bivariate correlation between three variables; sustainability reporting index, revenue, and share average share price. The findings in table 3 illustrate the considerable and positive relationship between sustainability index and revenue. Also the findings show there is a significant and positive relationship between sustainability reporting index and share price. In the next step the research conducted bivariate linear regression test and found the linear regression model between variables. Adjusted R squares in table 4 and 5. Would help to find a linear regression models between variables. Here are the linear regression models between variables.

#### **Sustainability reporting index and share price:**

**Share Price= 0.529+0.354 (Sustainability Reporting Index)**

#### **Sustainability reporting index and revenue:**

**Revenue=135337572+87276945(Sustainability Reporting Index)**

Table 3 which has placed at the end of the paper shows the correlation coefficient of 0.300 with significant level of 0.000 ( $p < 0.01$ ) between sustainability reporting index and share price in Singapore. The R square is 0.090 and the adjusted R square is 0.081. This means 8.1% of total variation in share price in Singapore can be explained from sustainability reporting index. Table 4.3 demonstrates that there is a positive and significant relationship between sustainability reporting index and Singaporean companies' revenue. The correlation coefficient between sustainability reporting index and revenue in Singapore is 0.434 with significant level of 0.000 ( $p < 0.01$ ). The R square of the linear regression analysis is 0.188 and adjusted R square is 0.182, which means 18.2% of total variation in Singaporean companies' revenue can be explained from sustainability reporting index.

### **CONCLUSION**

Findings of this research demonstrate that there is significant and positive relationship between sustainability reporting and Singaporean companies' revenue. Companies with higher CSR disclosure have higher revenue. Since sustainability reporting in Singapore is not mandatory so it would be possible

sustainability reporting affects Singaporean customers' perception. The research just has found a considerable association between the intense of corporate social responsibility disclosure and revenue, and the existence of this association does not imply that higher and stronger disclosure of CSR performance results in higher income. Environmental and social performance disclosure in Singapore is not mandatory. Findings of this research regarding to the first hypothesis, the research can conclude that companies with higher quality and quantity of sustainability disclosure have a more share price compare to companies that do not have a considerable corporate social responsibility disclosure but existing of significant relationship between sustainability reporting as an independent variable and companies share price as a dependent variable does not imply that more quality and quantity of sustainability reporting causes higher share price. Sustainability reporting would impact on total revenue, net profit or other financial performance, which would cause of higher share price. On the other hand sustainability reporting would ensure current investors about lower risk and simultaneously inspires the current and potential investors about continuous and sustainable profitability. This would increase demand for a specific stock and ultimately increase that stock's price. Since the main goal of each company is to maximize its shareholders wealth, and revenue increasing would be considered as fuel for profit maximizing machinery, consequently environmental and social disclosure would have a positive impact on increasing shareholders wealth. Because the research found that there is a positive and significant relationship between sustainability disclosure and share price. Also the research found a positive and considerable relationship between sustainability disclosure and revenue. Sustainability reporting inspire companies awareness about communities and the environment, in addition sustainability reporting would inspire a sustainable and continues profitability for companies as well.

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**Table 1: Assigning Score to Sustainability Disclosure**

Sustainability Disclosure	Score
Not-Qualitative & Not-Quantitative	1
Qualitative & Not-Quantitative	2
Not-Qualitative & Quantitative	3
Qualitative & Quantitative	4

**Table 2: Example of Sustainability Index Calculation**

HYFLUX - Year 2010				
Environmental Indicators	Disclose	Score	Level of Disclosure	Score
Energy	NO	0		0
Water	YES	1	Qualitative	2
Biodiversity	NO	0		0
EMS	NO	0		0
Products and Services	YES	1	Qualitative	2
Social Indicators				
Employment	YES	1	Qualitative and Quantitative	4
O.H.S *	YES	1	Qualitative	2
Training and Education	NO	0		0
Community Involvement	YES	1	Qualitative	2
C.H.S **	NO	0		0
Sum		5		12
Sustainability Index = $12 / 5 = 2.4$				
* Environmental Management System				
* Occupational Health and Safety				

\*\* Customer Health and Safety

(Based on the found scores (table 1 &2), the research calculated sustainability index for each company for each year. Here is the example of sustainability index calculation based on the mentioned indicators)

**Table 3: Bivariate correlation**

	Sustainability Index	Revenue
Sustainability Index		
Revenue	0.434*	
Share Price	0.300*	0.379*

\*. Correlation is significant at the 0.01 level (2-tailed).

**Table 4: Result of Regression Analysis between Sustainability Reporting Index and Share Price**

DV	R	Adj	Unstandardized		Standardized	t	Sig
	Square	R sq	Coefficient		Coefficient		
			B	Std. Error	Beta		
C	.090	.081	0.529	0.124		4.256	.000
SH.P			0.354	0.097	0.300	3.631	.000

Note. C= Constant and SH.P= Share Price.

**Table 5: Result of Regression Analysis between Sustainability Reporting Index and Revenue**

DV	R	Adj	Unstandardized		Standardized	t	Sig
	Square	R sq	Coefficient		Coefficient		
			B	Std. Error	Beta		
C	.188	.182	135337572	20028074		6.757	.000
R			87276945	15708977	0.434	5.556	.000

Note: C= Constant and R= Revenue