

Conference Paper

Non-financial Performance Disclosure and Company Performance: Australian Evidence

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Abstract

The objective of this paper is to examine the relationship between company financial performance, company characteristics and non-financial performance disclosure (NFPD) in terms of quantity and quality. This paper uses a NFPD index that covers six perspectives: three perspectives of the Balanced Scorecard (BSC) and three perspectives of Environmental, Social and Governance (ESG) disclosure. The sample data used in this study is 30 Australian listed companies in 2014. The results show that in terms of quantity, there is a significant relationship between company financial performance (Return on Equity-ROE and Earning per Share-EPS), company type, company age, auditing firm and non-financial performance disclosure while Return on Asset (ROA) and size of company shown no significance. Meanwhile, in terms of quality, only ROE and company age were significantly related to non-financial performance disclosure. Overall, by using the six perspectives of non-financial performance disclosure in the 30 companies in Australia, this study has contributed new understandings to the main corporate social disclosure studies focused on non-financial performance disclosure, which should motivate companies to produce and disclose annual and sustainability reports that are more comprehensive and highly credible.

Tujuan dari penelitian ini adalah untuk menguji hubungan antara kinerja keuangan perusahaan, karakteristik perusahaan dan pengungkapan kinerja non-keuangan (NFPD) dalam hal kuantitas dan kualitas. Penelitian ini menggunakan indeks NFPD yang mencakup enam perspektif: tiga perspektif Balanced Scorecard (BSC) dan tiga perspektif pengungkapan Lingkungan, Sosial dan Pemerintahan (ESG). Sampel data yang digunakan dalam penelitian ini adalah 30 perusahaan yang terdaftar di Australia pada tahun 2014. Hasilnya menunjukkan bahwa dalam hal kuantitas, ada hubungan yang signifikan antara kinerja keuangan perusahaan (Return on Equity-ROE dan Earning per Share-EPS), tipe perusahaan, umur perusahaan, perusahaan audit dan pengungkapan kinerja non-keuangan sementara Return on Asset (ROA) dan ukuran perusahaan tidak menunjukkan signifikansi. Sementara itu, dalam hal kualitas, hanya ROE dan usia perusahaan yang secara signifikan terkait dengan pengungkapan kinerja non-keuangan. Secara keseluruhan, dengan menggunakan enam perspektif pengungkapan kinerja non-keuangan di 30 perusahaan di Australia, studi ini telah memberikan kontribusi pemahaman baru terhadap studi pengungkapan sosial utama perusahaan yang berfokus pada pengungkapan kinerja non-keuangan, yang seharusnya memotivasi perusahaan untuk memproduksi dan mengungkapkan tahunan dan laporan keberlanjutan yang lebih komprehensif dan sangat kredibel.

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1. Introduction

Adanya peningkatan signifikan dalam tingkat pengungkapan Corporate Social Responsibility (CSR) yang dilaporkan oleh perusahaan-perusahaan secara global dalam tiga dekade terakhir. CSR dijelaskan sebagai konsep, kebijakan, program, dan prosedur yang diterapkan pada berbagai konteks bisnis, termasuk hubungan politik, budaya, ekonomi, dan hubungan sosial yang dimiliki perusahaan dengan masyarakat tempat mereka menjalankan bisnis mereka. (Malik, 2015). Meningkatnya kesadaran, dan perhatian terhadap, dampak lingkungan dan sosial dari bisnis telah membuat perusahaan berusaha untuk memperhitungkan dan mengelola jejak kaki keberlanjutan mereka. (Kerr, Rouse, & de Villiers, 2015; Maas, Schaltegger, & Crutzen, 2016).

Menurut survei KPMG pada tahun 2011, 95 persen dari 250 perusahaan terbesar di dunia (perusahaan G250) mengungkapkan tindakan tanggung jawab perusahaan mereka, yang mewakili peningkatan lebih dari 14 persen dibandingkan dengan studi KPMG sebelumnya pada tahun 2008 (KPMG, 2011). Angka ini mencerminkan fakta bahwa perusahaan mulai menyadari bahwa pelaporan CSR adalah kewajiban kewarganegaraan perusahaan yang baik dan merupakan salah satu proses pembelajaran yang mendorong perusahaan untuk mengembangkan bisnis mereka dan memperluas nilai organisasi mereka. (KPMG, 2011). Namun, menurut survei oleh KPMG pada 2015, tingkat CSR sedikit menurun karena tingkat pelaporan mendekati 100%. Tren ini terjadi karena tidak ada persyaratan pelaporan wajib yang dapat mendorong laporan CSR. Diharapkan juga tingkat pelaporan CSR akan tetap sama kecuali ada persyaratan pelaporan wajib baru yang diperkenalkan di tahun-tahun berikutnya. However, according to survey by KPMG in 2015, the level of CSR was slightly decrease as reporting levels approaching 100%. This trend occurs since there is no mandatory reporting requirements that could drive the CSR report. It is also expected that reporting level of CSR will remain the same unless there are new introduced mandatory reporting requirements in the following years (King, Bartels, McKenzie, & Austin, 2015).

The growing demand for companies to be more responsible has manifested in the proliferation in both the size and complexity of CSR practice (Engert & Baumgartner, 2016). Companies are forced to be more transparent in their actions and are obliged to provide relevant information about their activities to anyone who requires it (Fernandez-Feijoo, Romero, & Ruiz, 2014b). Publishing a sustainability report is one way for a company to be transparent about its operations.

A sustainability report is a method of presenting comprehensive information associated with the economic, social, environmental, and governance performance of a company (Global Reporting Initiative, 2012). A sustainability report should disclose positive and negative contributions, as well as showing balanced and reasonable accounts to represent the sustainability performance of an organisation. A sustainability report can be a stand-alone report or a section on a company's environmental and social dimensions in its annual report. Some companies also report on how they have addressed sustainability issues on their websites (Balatbat, 2012; Fatma & Rahman, 2014).

In the last two decades, most Australian companies have disclosed more details on the social impacts of their company operations in their sustainability reports, largely concentrating on the environment aspects rather than other community and social issues (Higgins, Milne, & Van Gramberg, 2015). In Australia, several government inquiries and publications have motivated companies to report on issues related to sustainability, mainly environmental sustainability. These publications have been initiated by organisations such as the New South Wales Environmental Protection Authority (in 1997), the Victoria Public Accounts and Estimates Committee (in 1998 and 1999), and the Commonwealth of Australia (in 2000). However, sustainability reporting has predominantly remained voluntary, or is in scope. For example, the National Pollutant Inventory (NPI) is limited to associated government agencies only (Frost, Jones, Loftus, & Laan, 2005).

According to several Australian studies, sustainability reporting has mostly concentrated on the environmental practices of companies, rather than other sustainability issues (Alrazi, De Villiers, & Van Staden, 2015; Fuisz-Kehrbach, 2015; Vintró, Sanmiquel, & Freijo, 2014). In a KPMG study (2011), Australia was ranked 23rd of 34 countries studied. While the 2011 study found a slight increase in sustainability reporting among Australian companies — a total of 57% of companies reported on corporate responsibility, compared with 45% in KPMG's 2008 study — Australia was found to rank behind South Africa, the United States, Russia, China, Nigeria and Mexico. Based on this, it is evident

that Australian companies need to place more emphasis on achieving an acceptable standard of sustainability reporting (Dellios, 2012).

Some contributions to current knowledge are presented in this study. Firstly, this research gives a different perspective to past studies of corporate social responsibility disclosure (CSR) by examining the relationship between company financial performance, company characteristics and company non-financial performance disclosure. Many previous studies of CSR practices have focused mostly on social, environmental and economic reports.

This study combines non-financial performance disclosure with the BSC and ESG aspects of company reports. Secondly, this study not only uses annual reports as the main data source, but also uses sustainability reports and websites as supplementary data. This is because prior studies have found that some companies' annual reports contain limited social and environmental information. Some annual reports provide insufficient information and a limited number of indicators about CSR (Dias, Rodrigues, & Craig, 2016). Therefore, this study also investigates the quantity and quality of NFPD. These results can provide more detailed information on NFPD, by scoring the usefulness of this disclosure and verifying how much non-financial information is disclosed in companies' annual and sustainability reports.

2. Literature Review and Development Hypothesis

Companies can be transparent regarding their non-financial performance and management aspects by performing sustainability reporting practices and generally also cover corporate social responsibility disclosure (CSR). Meanwhile, the most significant indicator of the strategic value of CSR is financial performance (Orlitzky, Schmidt, & Rynes, 2003), which also influences the corporate social disclosure practices of a company (McGuire, Sundgren, & Schneeweis, 1988).

Since CSR covers a wide range of aspects, companies have a limited ability to report all necessary and available CSR data. To deal with this limitation, several guidelines and systems have been developed to assist organisations in examining relevant aspects of CSR (Humphrey, Lee, & Shen, 2012). Internationally, a growing number of voluntary reporting frameworks or guidelines have been developed to promote mandatory reporting on social environmental issues (Tschopp & Huefner, 2015).

Sustainability reporting has led to both a growing awareness and demand for meaningful data related to environmental, social and governance issues (ESG) that provide the

necessary outcomes for both investors and companies (Dellios, 2012). The ESG includes the three main areas of key performance indicators (KPIs) which are environment (e.g. climate change, energy and water use and carbon emissions), social responsibility (e.g. fair trade principles, human rights, product safety, gender equality and health and safety) and corporate governance (e.g. board independence, corruption and bribery, reporting and disclosure and shareholder protection). The ESG key performance indicators provide values which are useful for companies when measuring their progress in the pursuit of sustainability strategic goals (Kocmanová & Dočekalová, 2012). Presently, ESG issues have become important indicators of management competency, risk management and non-financial performance (Lokuwaduge & Heenetigala, 2017).

The Balanced Scorecard (BSC) is a measurement performance tool that complements the conventional business performance that solely focus on financial numbers (Lipe & Salterio, 2000). The BSC provides a framework to measure multiple performance focused on four different perspectives combining financial performance and non-financial performance. These four perspectives are the financial perspective, and non-financial perspectives which include customer, business internal process and learning and growth activities. Kaplan and Norton (1992) stated that integrating all perspectives of the BSC could help managers to understand cross-functional relationships among them which could improve managers' problem solving and decision making abilities. By using the BSC, companies could improve their overall strategic alignment (Self, Self, Matuszek, & Schraeder, 2015).

The relationship between the extent of CSR disclosure and Financial performance (FP) of a company has been discussed and established for a long time ago (Brooks & Oikonomou, 2017) and indicated various results. Some of them showed a correlation, either positive or negative, while others found no correlation (Kansal, Joshi, & Batra, 2014; Lima Crisóstomo, de Souza Freire, & Cortes de Vasconcellos, 2011; Saeidi, Sofian, Saeidi, Saeidi, & Saaeidi, 2015; Wang, Hsieh, & Sarkis, 2018). Some studies reported that there was no evidence that CSR related to company financial performance measured using ROA (Aras, Aybars, & Kutlu, 2010; Dragomir, 2010). These authors suspect that correlation between company financial performance and CSR may not be strong. Dragomir (2010) found that the correlation between CSR and company financial performance over a short period (1 year) was weaker compared to a longer period (1 to 10 years).

There are many ratios that measure the financial aspect of a company's economic performance. Investors will be more satisfied if a company can provide a superior financial performance that complements profitability, growth and market value (Cho &

Pucik, 2005). Moreover, Glick, Washburn, and Miller (2005) argued that the capability of a company to create returns in the past can be measured by its profitability. Additionally, profitability can be defined as the final net outcome of several rules and judgements of management. The profitability ratio represents the effectiveness of the management of a company and can be calculated using return on assets (ROA), return on equity (ROE), and earnings per share (EPS).

H1a: ROA positively related to the extent of non-financial performance disclosure in terms of quantity.

H1b: ROA positively related to the extent of non-financial performance disclosure in terms of quality.

H2a: ROE positively related to the extent of non-financial performance disclosure in terms of quantity.

H2b: ROE positively related to the extent of non-financial performance disclosure in terms of quality.

H3a: EPS positively related to the extent of non-financial performance disclosure in terms of quantity.

H3b: EPS positively related to the extent of non-financial performance disclosure in terms of quality.

Previous studies found that the type of industry can be an explanatory key for some of the variations in companies' disclosure (Meng, Zeng, Shi, Qi, & Zhang, 2014; Plumlee, Brown, Hayes, & Marshall, 2015). Consistent with prior studies (Hackston & Milne, 1996), this study classifies industries as either highly sensitive industries (high-profile) or non-sensitive industries (low-profile). A category label of 1 is given if the company is sensitive and 0 if it is non-sensitive. Sensitive industries are those in agricultural and associated sectors, chemicals, energy and fuel, engineering, forestry, liquor and tobacco, media and communications, mining, transport and tourism. Non-sensitive industries are industries in building construction, electrical, finance and banks, food, investment, medical supplies, meat and by-products, miscellaneous services, property, retailers, and textiles and apparel.

These classifications are applied in this study in order to make a distinction between sensitive and non-sensitive industries in Australian listed companies.

H4a: Companies in sensitive industries will provide a higher extent of non-financial performance disclosure in their reports than companies in non-sensitive industries in terms of quantity.

H4b: Companies in sensitive industries will provide a higher extent of non-financial performance disclosure in their reports than companies in non-sensitive industries in terms of quality.

Company size is positively significantly linked to CSR, according to prior studies (Chan, Watson, & Woodliff, 2014; Dias, Rodrigues, & Craig, 2017). Company size is commonly measured by total assets or total sales. Since there is no particular measurement for company size for disclosure studies, total assets are applied as a proxy of company size (Song, Zhao, & Zeng, 2017). This study uses total assets as proxy for company size.

H5a: Company size positively related to the extent of non-financial performance disclosure in company reports in terms of quantity.

H5b: Company size positively related to the extent of non-financial performance disclosure in company reports in terms of quality.

Beside company size, company age also become as one of the most important factors influencing the level of disclosure. Company age is commonly associated with the stage of the company's growth and development. Compared to younger companies, well-established or older companies are expected to provide much more information in their annual reports (Kansal et al., 2014; Muttakin & Khan, 2014).

H6a: Company age positively related to the extent of non-financial performance disclosure in company reports in terms of quantity.

H6b: Company age positively related to the extent of non-financial performance disclosure in company reports in terms of quality

The level of differences in company disclosure may be affected by variations in the types of auditing firms. Since big auditing firms are more concerned with their own image, and have better reputations than others, they are more likely to be involved with companies that provide sufficient information about their company activities. Big auditing firms also persuade companies (their clients) to release and provide more evidence in their reports (Müller, Riedl, & Sellhorn, 2015).

H7a: Companies audited by Big Four auditing firms will provide a higher extent of non-financial performance disclosure in reports in terms of quantity than companies audited by non-Big Four auditing firms.

H7b: Companies audited by the Big Four auditing firms will provide a higher extent of non-financial performance disclosure in reports in terms of quality than companies audited by non-Big Four auditing firms.

3. Data and Research Methodology

3.1. Sample

This study requires minimum 10% from the total companies among the 200 largest ASX listed companies in the year 2014. Using simple random sampling. A total of 30 annual reports were collected from various companies representing the 10 different sectors based on Global Industry Classification Standard (GICS). Data in this study were collected from the annual and sustainability reports of the 30 companies, for a period of 0 to 12 months of the 2014 financial year. The annual and sustainability reports issued by the companies were explored to obtain detail on their voluntary non-financial performance, environment, social and governance disclosure for each sample.

3.2. Dependent Variable

Many accounting studies have applied a systematic and scientific approach to applying a disclosure index to determine the level of CSRD in both the quantity and quality of disclosure (Barakat, Pérez, & Ariza, 2015; Cerf, 1961). However, there has not been a standardised method of selecting and gauging the disclosure items for each index until now. As a result, researchers can adapt or adopt an existing index with or without modifications, or compose a new customised index based on their needs and their specific research environment.

The extent of non-financial performance disclosure of Australian listed companies in this study is measured using the scoring index, namely NFPD Index. The NFPD Index applied in this study is elaborated from the BSC, and the ESG frameworks. This index consists of measurement items that are selected and adapted to the environment of Australia's company-reporting practices. The complete disclosure items in the NFPD index comprise of 77 items that focus on three perspectives of Balanced Scorecard (customer, internal business process, learning and growth) and three perspectives of ESG (environmental, social and governance).

This study used the content analysis method to collect data from annual reports, sustainability reports and other information from companies' websites. Content analysis was defined by Carney (1972) as: 'any technique for making inferences by objectively and systematically identifying specified characteristics of messages'. Krippendorff (2012) also described content analysis as: 'a research technique for making replicable and valid inferences from data to their context'. The content analysis also includes codifying any

terms or words and any relevant sentences to track the pattern in the communication media (Krippendorff, 2012). In the field of accounting research, content analysis has been employed extensively in corporate social, ethical and environmental reporting (for example Holsti, 2012; Krippendorff, 2012).

3.2.1. Scoring the items of Non-Financial Performance Disclosure (NFPD) index

The quantity of non-financial performance disclosure in this study measured by score range from 1 to 5. Score 1 is given if the information is provided in one or two sentences, score 2 is given if the information is provided in one paragraph (which concludes with at least three sentences), score 3 is given if the information is presented in two or more paragraphs (up to half an A4 page), score 4 is awarded if information is given in full in an A4 page and score 5 is awarded to company that provided information in more than A4 page. This scoring system is adopted from Raar (2002).

In order to evaluate the quality of non-financial performance disclosure on the annual reports, this scoring system is adopted from Cross and Djadikerta (2004) and based on the three dimensions of evidence, timeframe, and specificity. The scoring system for quality of disclosure each component are ranged from zero to four as shown in Table 1.

TABLE 1: Quality of non-financial performance measurement

Dimensions	Item	Score
Evidence	Qualitative and monetary information	4
	Monetary/quantitative	3
	Non-monetary/qualitative	2
	Declarative	1
	No evidence	0
Time frame	Future	2
	Present	2
	Past	1
	No time frame	0
Specificity	Specific	1
	General	0

Adopted from Cross and Djadikerta (2004)

Table 2 displays the total number of disclosure items of NFPD index in each perspective and also the scoring of each perspective in terms of quantity and quality.

TABLE 2: The disclosure items for NFPD index and its scoring

Perspective	Number of disclosure items	Scale		Max Scores	
		Quantity	Quality	Quantity	Quality
Customer 1. Customer relations	13	0-5	0-7	65	91
Internal Business Process 1. Internal work processes 2. Innovative process 3. Management policy and products	2 3 4	0-5 0-5 0-5	0-7 0-7 0-7	10 15 20	14 21 28
Learning and Growth 1. Information systems 2. Employee health and safety 3. Capacity and willingness to act 4. Quality of workplace 5. Employee benefits	4 4 3 6 1	0-5 0-5 0-5 0-5 0-5	0-7 0-7 0-7 0-7 0-7	20 20 15 30 5	28 28 21 42 7
Environmental 1. Natural resources use 2. Environmental pollution and climate change	5 4	0-5 0-5	0-7 0-7	25 20	35 28
Social 1. Human rights and labour rights 2. Community	6 7	0-5 0-5	0-7 0-7	30 35	42 49
Governance 1. Board and management structure 2. Transparency, disclosure and audit	13 2	0-5 0-5	0-7 0-7	65 10	91 14
Total number of disclosure items	77	5	7	385	441

3.3. Independent variables

To measure the company financial performance, ROA, ROE, and EPS were included in this study. Glick et al. (2005) argued that profitability measures a company’s past capability to create returns. Additionally, profitability can be defined as the final net outcome of several rules and judgements of management. The profitability ratio represents the effectiveness of the management of a company.

Many prior empirical studies have investigated the relation between corporate social disclosure and company characteristics (Fernandez-Feijoo, Romero, & Ruiz, 2014a; Mutakin & Khan, 2014). Most of these studies have found a link between corporate social

disclosure and company characteristics such as type of industry, company size, company age, etc. This study uses company type, company size, and company age to examine the link between company characteristics and non-financial performance disclosure.

Although the primary responsibility for preparing the annual report lies with company management, external auditors play a major role in the disclosure policies and practices of their clients. Large auditing firms apply a monitoring role in limiting opportunistic behaviour by management (Watts & Zimmerman, 1990). This study includes auditing firm, which is divided into big four and non-big four, as one of the independent variables.

Prior studies have often used leverage as an indicator to measure the systematic risk faced by companies. Leverage is measured as the ratio of total liabilities to total assets. Some studies on disclosure found that leverage is often negatively related to corporate social disclosure (Ferrell, Liang, & Renneboog, 2016). Given that reason, this study adds leverage as a control variable.

3.4. Regression Model

In this study, the main statistical method used to test the association between the dependent variable of NFPI Index and the independent variables in terms of quantity and quality was OLS regression. Leverage as a control variable was also included in the regression model in order to minimise cross-sectional variations. The regression model of this thesis is as follows:

$$\text{NFPI (quantity, quality)} = \beta_0 + \beta_1 \text{ROAi} + \beta_2 \text{ROEi} + \beta_3 \text{EPSi} + \beta_4 \text{Typei} + \beta_5 \text{SIZEi} + \beta_6 \text{AGEi} \\ + \beta_7 \text{AUDITi} + \beta_8 \text{LEVi} + \varepsilon$$

Where:

4. Results and Discussions

4.1. Content analysis

All 30 companies chosen in this study had their annual reports (100 per cent), but only 18 companies (60 per cent) published a stand-alone sustainability report. Additionally, 28 companies (93.33 per cent) disclosed information about governance, sustainability and other information on their website.

NFPD (quantity, quality)	= Total score of non-financial performance disclosure (quantity, quality) items reported by company in the 2014 annual report
ROA	= Ratio of return on assets of company as reported in the 2014 annual report
ROE	= Ratio of return on equity of company as reported in the 2014 annual report
EPS	= Ratio of net income deducted dividends on preferred stock divided by average outstanding shares of company as reported in the 2014 annual report
TYPE _i	= Categorical variable to control for industry differences with industry company is given a dummy variable to the value of one (1) if the company is in a sensitive industry; otherwise zero (0)
SIZE _i	= Natural logarithm total assets of company as reported in the 2014 annual report
AGE _i	= Ratio of company age calculated by the number of months company has been established
AUDIT _i	= Categorical variable to control for auditor differences with the auditing firm of the 2009 annual report of firm is given a dummy variable in the value of one (1) if the auditing firm is one of the 'Big Four'; otherwise zero (0)
LEVI	= Ratio of total liabilities to total assets of company, as reported in the 2014 annual report
β_0	= Regression constant
$\beta_{1,2,\dots,n}$	= Coefficients to independent and control variables
i	= Company specific
ϵ	= Error of prediction.

Table 3 shows the quantity level of companies' disclosure in each of the six perspectives of NFPD. The overall quantity of NFPD is 36.90 per cent, which is still low. According to the sample, the highest level of information disclosed by the companies is 'governance' (51.20 per cent), followed by internal business process (40.27 per cent), customer (38.00 per cent), environmental (36.59 per cent), learning and growth (30.67 per cent) and social (25.69 per cent).

TABLE 3: Level of NFPD by companies – Quantity and Quality

NFPD indicators	Quantity %	Quality %
Customer	38.00%	58.72%
Internal Business Process	40.27%	60.43%
Learning and Growth	30.67%	48.20%
Environmental	36.59%	52.43%
Social	25.69%	37.40%
Governance	51.20%	64.44%
Overall	36.90%	53.33%

The information on 'governance' in the annual reports and website seemed to be presented structurally and comprehensively because this information is required by the ASX Rules and the government. This perspective may be the most important one for companies in many sectors to disclose in their reports. Although some companies did not completely disclose their 'governance' performance, at the very least they still gave basic information in their annual and sustainability reports and website in accordance with ASX Corporate Governance Council Principles and Recommendations.

The information about 'internal business process' and 'customer' is commonly disclosed in companies' annual reports. Some companies put the 'customer satisfaction' information as their positive image in annual reports. This result also indicated that some companies disclosed information about 'environmental' as part of their responsibility, and thus may realise the importance of disclosing this information in their annual and sustainability reports. Some of the companies put the information evidently in the way they manage their emissions, effluence and waste.

On the other hand, the information about 'social' is at the lowest quantity level of information provided by companies, and it is still disclosed only occasionally. Some companies do not provide their 'social' information in their annual reports but disclose it in stand-alone sustainability reports or on their website — for example, activity focused on supporting their local communities, such as donations, providing aid or compensation and partnering with departments or academics.

Table 3 also displays the level of NFPD disclosed by companies in terms of quality. The overall extent of NFPD in terms of quality is 53.33 per cent. Similar to the previous result (in terms of quantity), 'governance' is still the most information disclosed by companies (64.44 per cent), followed by internal business process (60.43 per cent), customer (58.72 per cent), environmental (52.43 per cent), learning and growth (48.20 per cent) and lastly, social (37.40 per cent). The result also shows the same order of information in terms of quantity and quality, even though these companies are based in various industries.

As seen in Table 4, 'governance' is the only information that has been disclosed by all companies in their annual and sustainability reports (100% of the total sample). This is then followed by 'customer' information that has been disclosed by 90% of the total sample (27 companies), internal business process (26 companies), environmental (25 companies), learning and growth (23 companies) and social (21 companies). These results may indicate that most Australian companies disclose all information about board and management structure, about their non-financial performance (customer, internal business process and leaning and growth) and about their corporate social responsibility

to the environment and social community such as supporting their local communities through donations, providing aid or compensation and partnering with departments or academics.

TABLE 4: The percentage of Australian listed companies

Perspective	Number of companies	Percentage (%)
Customer	27	90.00
Internal business process	26	86.67
Learning and growth	23	76.67
Environmental	25	83.33
Social	21	70.00
Governance	30	100.00

4.2. Normality test

A normality test for residuals using untransformed and transformed data was presented on the table 5. The value of Kolmogorov-Smirnov of NFPD Quantity is.719 and NFPD Quality is.841 while p-value.679 and.478. As the p-value is more than.05, it can be concluded that the residual is normally distributed for NFPD Quality and Quantity.

On the other hand, all predictor variables – namely, ROA, EPS, total assets, company age and leverage – were not normally distributed. Consequently, the six variables that were not normally distributed needed to be transformed. In order to conduct the transformation, this study used van der Waerden's transformation (Cooke, 1998; Haniffa & Cooke, 2005; Branco & Rodrigues, 2008). The transformations of the six variables were entirely successful using log transformation before conducting the regression analysis. Accordingly, parametric tests were applied in this study.

4.3. Hypotheses analysis

A multiple regression analysis was applied in order to examine all predictor variables in this study. Table 6 shows the results of the main multiple regressions performed using NFPD as dependent variable in terms of quantity. The multiple regression results indicate that the model fits and is statistically significant (p-value = 0.000) with F-statistic = 61.928. Meanwhile, the regression has an adjusted R^2 of 0.944, which indicates that 94.4 percent of the variation in predictor variables can be explained by the extent of non-financial performance disclosure, leaving 5.6 percent unexplained.

TABLE 5: Test of Normality

	Untransformed data		Transformed data	
	Kolmogorov-Smirnov		Kolmogorov-Smirnov	
	Statistic	p-value	Statistic	p-value
Dependent variables				
NFPD_Quantity	0.719	0.679		
NFPD_Quality	0.841	0.478		
Independent variables				
ROA (%)	1.721	0.005	0.76	0.611
ROE (%)	1.462	0.028	0.475	0.978
EPS (%)	1.39	0.042	0.568	0.904
Total Assets (\$1000)	1.506	0.021	0.998	0.272
Company Age (month)	1.364	0.049	0.573	0.897
Control Variable				
Leverage	1.558	0.016	0.547	0.926

TABLE 6: Multiple Regression Results: NFPD – Quantity

Independent Variables		Coefficient	t-value	p-value
Constant			6.613	0.000
ROA	H1	-0.067	-0.567	0.576
ROE	H2	0.382	3.753	0.001**
EPS	H3	0.400	6.556	0.000**
Company Type	H4	0.302	5.587	0.000**
Company Size	H5	0.152	2.059	0.052
Company Age	H6	0.455	8.576	0.000**
Auditing Firm	H7	0.219	4.013	0.001**
Control Variables				
Leverage		0.010	0.176	0.862
Adjusted R ²	0.944			
F-statistic	61.928			
p-value	0.000			
N	30			

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

** Correlation is significant at the 0.05 level (2-tailed).

Table 7 displays the multiple regression analysis results of the seven predictor variables and the extent of non-financial performance disclosure in terms of quality. As a result, the multiple regressions show the model fits and is highly significant, with

F-statistic = 8.962 and p-value = 0.000. Meanwhile, the regression has an adjusted R2 lower than quantity disclosure (68.7 percent).

TABLE 7: Multiple Regression Results: NFPD – Quality

Independent Variables		Coefficient	t-value	p-value
Constant			3.531	0.002
ROA	H1	0.003	0.012	0.990
ROE	H2	0.527	2.190	0.040*
EPS	H3	-0.016	-0.112	0.912
Company Type	H4	0.256	2.002	0.058
Company Size	H5	0.204	1.167	0.256
Company Age	H6	0.474	3.782	0.001**
Auditing Firm	H7	0.101	0.783	0.442
Control Variables				
Leverage		0.207	1.495	0.150
Adjusted R ²	0.687			
F-statistic	8.962			
p-value	0.000			
N	30			

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

* Correlation is significant at the 0.05 level (2-tailed).

The results indicate that there is not a relationship between ROA and the extent of non-financial performance disclosure in terms of both quantity and quality (p-value>0.05). Meanwhile, the coefficient is also negative in relation to quantity but positive in relation to quality. Since many companies in this pilot study had a negative ROA value, this may have affected the results on the relationship between ROA and the extent of non-financial performance disclosure. Using more than 30 companies as a sample data set in the main study may provide better results regarding this relationship.

This study is consistent with previous studies which stated that there was no relationship between corporate social responsibility and financial performance measured using ROA (Aras et al., 2010; Dragomir, 2010). These authors suspect that the relationship of financial performance with corporate social responsibility may not be strong. Dragomir (2010) found that the relationship between corporate social responsibility and financial performance over a short period (1 year) was weaker compared with the relationship over a longer period (1 to 10 years).

According to the findings of simple regression analysis, there is a significant relationship between ROE and the extent of non-financial performance disclosure in terms of

quantity and quality (p -value = 0.001 and 0.040, respectively). Hence, this result supports hypothesis 2.

The findings show that there is a significant positive relationship between EPS and the extent of non-financial performance disclosure in terms of quantity (p -value < 0.01) but not in terms of quality. The results indicate no relationship between EPS and the extent of non-financial performance disclosure in terms of quality, while the correlations are also negative.

Consistent to previous studies, Kwanbo (2011) performed a study to find out the relationship between CSD and financial performance of public companies in Nigeria, and used EPS as a proxy for financial performance. The results indicated that there was no significant relationship between CSD and EPS in public companies and suggested that CSD was not a main factor in boosting company profits. In their studies, Alikhani and Maranjory (2013) used EPS as a proxy for profitability. They found that there is no significant relationship between profitability and the level of corporate social and environmental disclosure. Furthermore, other studies by Jagongo and Makori (2013) used EPS to examine the relationship between profitability and environmental disclosure. They found that there is a negative relationship between EPS and environmental accounting.

An independent-sample t -test was performed in this study to check whether there was a difference between sensitive and non-sensitive industries. The results indicate that there are no significant differences between type of industry and the extent of NFPD in either quantity or quality (p -value > 0.05). Based on this finding, the differences in company type (sensitive or non-sensitive) do not appear to affect the extent of non-financial performance disclosure in Australian companies. The simple regression results also show there is a significant positive relationship between company type and the extent of non-financial performance disclosure in terms of quantity (p -value < 0.05). On the other hand, the results show no relationship in terms of quality (p -value > 0.05).

Several empirical studies have found a positive and significant relationship between CSR and type of industry (Branco & Rodrigues, 2008; Cowen, Ferreri, & Parker, 1987; Newson & Deegan, 2002; Parsa & Deng, 2008; Wanderley, Lucian, Farache, & de Sousa Filho, 2008). These studies indicate that the level and type of disclosure are significantly different when companies are from different industries. Additionally, certain industries tend to disclose more CSR information due to their nature; for example, consumer-oriented companies are more concerned with presenting their social responsibility to

their community, in addition to boosting their image and increasing their profits (Cowen et al., 1987).

This study used total assets of companies as the main proxy for company size. According to the results of the simple regression, there is no relationship between company size (in terms of both quantity and quality) and the extent of non-financial performance disclosure. Prior studies found that company size has a significant and positive relationship with corporate social responsibility disclosure (Deegan & Gordon, 1996; Gray, Javad, Power, & Sinclair, 2001; Gray, Kouhy, & Lavers, 1995). Companies that provide poorer pollution control records tend to be smaller than companies with better pollution control records (Spicer, 1978). Meanwhile, companies with higher reputations will have a tendency to be more comprehensive in disclosing their corporate social responsibilities information (Adams, Hill, & Roberts, 1998; Belkaoui & Karpik, 1989).

According to Cormier, Magnan, and Van Velthoven (2005), larger companies will present more detailed information about their corporate social responsibility activities, since they are more noticeable. Hence, larger companies should also be more responsible and have more resources to provide corporate social responsibility information and environmental efforts that can influence the risk perceptions of investors (Liu & Anbumozhi, 2009). Because larger companies are more visible in external audiences and are vulnerable to receive more supervision from the stakeholder groups, large companies can increase their good reputation by communicating their corporate social disclosure to the public (Branco & Rodrigues, 2008).

The findings show that both in terms of quantity and quality, company age is positively and significantly affected by the extent of non-financial performance disclosure (p -value < 0.01). Several studies present a significant positive correlation between the level of CSR and company age (Delaney & Huselid, 1996). In his study, Roberts (1992) found that the extent of social disclosure is significantly affected by company age. Older companies seem to provide more information about CSR activities than do younger companies. In addition, older companies tend to more highly value their involvement in disclosing their CSR activities (Bhaduri & Selarka, 2016). Sánchez, Bolívar, and Hernández (2017) found that company age is highly significantly related to the extent of disclosure practices. As a result, older companies have more CSR practices than do younger companies.

The regression analysis results indicate that there is a positive significant relationship between companies audited by the Big Four auditing firms and companies audited by non-Big Four auditing firms in term of quantity, but not in terms of quality. Companies

audited by Big Four auditing firms usually provide more information than do companies audited by non-Big Four auditing firms.

Since big auditing firms are more concerned with their own image and have a better reputation than others, they are more likely to be involved with companies that provide sufficient information about their company activities and also persuade their clients (companies) to disclose more information in their reports. Large auditing firms will be more persistent in managing their tasks compared with small auditing firms because they have more stimuli to report. Since large auditing firms usually have more clients, they are more fee independent and do not rely on specific clients (Fama & Jensen, 1983; Svanberg & Öhman, 2015).

Additionally, agency theory proposes that in order to reduce conflicts of interest between managers and shareholders (since auditors assist shareholders in the monitoring process) companies need to choose their auditor firms carefully (Jensen & Meckling, 1976; Watts & Zimmerman, 1990). In their studies, D'Amico, Coluccia, Fontana, and Solimene (2016) state that the big auditing firms (such as the Big Four) make an attempt to increase their perceived audit quality by persuading their clients to disclose more information in their reports.

5. Conclusion

The regression analysis results show that no significant relationship can be reported between ROA and non-financial performance disclosure in terms of quantity. This result is consistent with some previous studies, which found evidence that ROA is not significantly related to NFPD (in terms of quantity and quality). This is because the value of ROA from companies in this study varies – few companies have a minus value for ROA, while some have a high ROA value. Consistent with prior studies, ROE and EPS, as proxies of company financial performance, are shown to be significant predictor variables of the extent of NFPD.

Company type is divided into two different industry types – sensitive and non-sensitive industries. These company types can be one of the important predictors in supporting the extent of NFPD, but only in terms of quantity not quality in Australian companies. Sensitive industries are more likely to provide NFPD than non-sensitive industries. The extent of NFPD in terms of quantity and quality in this study are not

affected by the size of the company. Generally, large companies have more responsibility than small companies to disclose detailed information to the public about non-financial performance in their sustainability reports. Meanwhile, company age was found to be a significant predictor variable for the extent of NFPD in terms of quantity and quality. Older or mature companies have a tendency to give more information on NFPD than young companies. This result seems consistent with previous studies.

The last predictor variable, auditing firm, has influenced the extent of NFPD only in terms of quantity nor quality. The findings show that there is a difference between companies audited by a Big Four accounting firm and those audited by a non – Big Four accounting firm. The reason is that many auditors who work in Big Four auditing firms support their clients in managing their business ethically and sticking to accounting policies, compared to auditors from non – Big Four auditing firms.

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