



JOURNAL OF THE ASIA-PACIFIC CENTRE FOR ENVIRONMENTAL ACCOUNTABILITY

VOLUME 14, NUMBER 1, MARCH 2008

	Page
Editorial	1
Feature articles	
<i>Social disclosure practices by Jakarta stock exchange listed entities</i> Fitra Roman Cahaya, Dr. Stacey A. Porter, and Associate Professor Alistair M. Brown	2
<i>Transparent blue skies for the global airline industry: A study of key accounting disclosures</i> Ivy Isack and Rebecca Chyi Woan Tan	12
Environment extra!	24
Call for papers	28

Published by the *School of Commerce, Division of Business, University of South Australia*, Australia.
Supported by *CPA Australia (SA Division)*, 280 Pulteney Street, Adelaide, SA 5000, Australia.

© University of South Australia 2008ISSN 1442-1224

EDITORIAL

The *APCEA Journal* for March 2008 is again supported by CPA Australia who, after ten years, remains steadfast in their contribution. The editors would like to thank CPA Australia and the various Divisions that have assisted over the years – including Tasmania, Newcastle, the ACT, and South Australia. Dr Sumit Lodhia takes over the co-editorship of the Journal in 2008, and thanks are due to Dr Xiao Hua for her past contribution as co-editor.

The lead article in this issue, *Social Disclosure Practices by Jakarta Stock Exchange Listed Entities*, is by Fitra Roman Cahaya, Dr. Stacey A Porter and Associate Professor Alistair M Brown. The authors extend understanding of social disclosure practices by focusing on the Indonesian context, a context which has had limited coverage in prior literature.

Transparent Blue Skies for the Global Airline Industry: A Study of Key Accounting Disclosures is written jointly by Ivy Isack and Dr. Rebecca Tan. The authors also focus on a particular context, the global airline industry, and present useful insights into social and environmental disclosure in this industry.

Both the articles in this issue have a strong theoretical underpinning, with stakeholder theory being utilised. These articles are followed by the journal's regular sections **Environment extra!** and **Call for papers**.

Contributors should contact

Dr. Sumit Lodhia

Co-Editor

Email: sumit.lodhia@anu.edu.au

Ph: +61 2 61258460

Fax: +61 2 61255005

Instructions for contributors

Articles should be submitted in a word document, *Times New Roman*, 12 point, single spaced, two columns, attached to an email. References should be in the UniSA

Harvard author-date referencing style, available from the following link:

<http://www.unisanet.unisa.edu.au/learningconnection/student/learningAdvisors/documents/harvard-referencing.pdf>

Feature articles are independently peer reviewed by members of the Editorial Board in accordance with the following requirements for classification as a C1 journal article in Australia: 'For the purposes of the HERDC, an acceptable peer review process is one that involves an assessment or review of the research publication in its entirety before publication by independent, qualified experts. Independent in this context means independent of the author.'

APCEA editorial board

Professor Roger Burritt, Co-Editor
University of South Australia, Australia

Dr Sumit Lodhia, Co-Editor
The Australian National University

Associate Professor Lorne Cummings
Macquarie University, Australia

Associate Professor Geoff Frost
The University of Sydney, Australia

Professor Gary O'Donovan
University of Tasmania, Australia

Dr Jean Raar
Deakin University, Australia

Editorial Support:
Paul Burger, Janette Taga-an

SOCIAL DISCLOSURE PRACTICES BY JAKARTA STOCK EXCHANGE LISTED ENTITIES

Fitra Roman Cahaya

Curtin University of Technology, Australia

Dr. Stacey A Porter*

Curtin University of Technology, Australia

Associate Professor Alistair M Brown

Curtin University of Technology, Australia

*Address for correspondence:

School of Accounting

Curtin University of Technology

Perth, Australia, 6845

Ph: 61-8-9266-2375

Fx: 61-8-9266-7196

Stacey.Porter@cbs.curtin.edu.au

Abstract

This study examines the relationship between specific company characteristics and the extent of voluntary social disclosure practices of 100 *Jakarta Stock Exchange* (JSX) listed entities for the 2004 financial year.

While descriptive statistical analysis indicates that the overall mean of voluntarily social disclosures is low at 14.15%, multiple regression analysis reveals that company size and international operations are positive and significant predictors of this disclosure. It appears companies with these characteristics disclose more social information in their annual reports to satisfy the interests of a greater number of key stakeholders through annual report disclosures.

Introduction

The aim of this paper is to throw further light on the social disclosure practices of Indonesian listed companies. Cahaya, Porter and Brown's (2006) recent work on the extent of voluntary social disclosure practices by JSX listed entities using the *Global Reporting Initiative* (GRI) as the basis for a simplified social disclosure index showed that JSX companies disclosed low

levels of overall social disclosures. It was a significant piece of work because it canvassed reasons for the relatively low levels of disclosure in an Indonesian setting and identified components of the GRI where JSX reporting was completely silent (for example, on the GRI components of *Child Labour*, *Forced and Compulsory Labour*, and *Disciplinary Practices*).

This study extends that work by examining the relationship between specific company characteristics (company size, leverage, economic performance, complexity of business, and international operations) and the extent of voluntary social disclosure practices of 100 JSX listed entities for the 2004 financial year. This is an important extension because while the descriptive statistics provided by Cahaya, Porter and Brown (2006) offered insights into the motivations for the non-disclosure of social issues by JSX listed companies, together with an extensive commentary on how the GRI was a useful benchmark in an Indonesian setting, it did not discuss possible explanatory predictors of the level of JSX social disclosure practices. This study rectifies the situation by looking at the explanatory power of Indonesia's company characteristics on social disclosures.

Accordingly, the following research question is posed: Are there any relationships between the quantity of voluntary social information disclosed in the annual reports and company size, leverage, economic performance, complexity of business, and international operations?

This research provides several contributions to the accounting literature. It increases the knowledge of social disclosure studies of developing country entities and provides explanatory insights into the level of social disclosures generated by JSX

companies. It also improves understanding about the characteristics of companies listed on JSX and the underlying theory of voluntary social disclosure.

Following this introduction, this paper is organized as follows. The next section discusses the theoretical framework adopted in the study, reviews prior social disclosure studies and develops the paper's hypotheses. The research methodology section presents the research methods used in the study, including details of the sample selection, disclosure index and the GRI indicators. This is followed by a 'Results' section which outlines both descriptive and inferential results of the study. The paper culminates in a discussion of the implications of, and the conclusions from, the findings.

Literature review and hypotheses development

Based on descriptive statistics, Cahaya et al. (2006) argued that both managerial and ethical branches of stakeholder theory played a role in the level of social disclosures generated by JSX companies. Indonesian companies, they claimed, identify, manage, and inform a wide range of stakeholder groups not only to win over perceived important groups of society in order to manage them for the benefit of the company but also to serve the needs of all stakeholder groups who have an ethical right to be informed about how the company will affect them.

This argument is examined further by next considering some company specific characteristics (company size, leverage, economic performance, complexity of business, and international operations) which have appeared as useful explanatory factors under the stakeholder theory umbrella in determining the level of company social disclosure practices (Brammer & Pavelin 2004; Craig & Diga 1998; Haniffa & Cooke 2002; Purushothaman, Tower, Hancock & Taplin 2000).

Company size

Large companies tend to be more visible to the public and therefore subject to greater pressure from external parties (Brammer & Pavelin 2004; Brown & Deegan 1998). To respond and manage this situation, and consistent with stakeholder theory, firms identify the most important groups of stakeholders and voluntarily disclose relevant information to them (Henderson, Peirson & Harris 2004). Therefore, it can be argued that larger firms voluntarily disclose more information as they have a greater number of stakeholders with different interests. For instance, the local community may be interested in information about community involvement whereas labour unions may consider employees' health and safety issues to be just as important. Most prior studies suggest a positive relationship between company size and the level of social disclosure (Adams, Hill & Roberts 1998; Brammer & Pavelin 2004; Gao, Heravi & Xiao 2005; Hossain, Perera & Rahman 1995; Meek, Roberts & Gray 1995; Purushothaman, Tower, Hancock & Taplin 2000). Accordingly, this study hypothesizes that:

H1 There is a positive relationship between company size and the extent of voluntary social disclosure in annual reports

Leverage

Stakeholder theory posits that leverage is positively associated with the level of social disclosure (Purushothaman, Tower, Hancock & Taplin 2000). Prior studies conclude that companies see creditors as important stakeholders whose influences could be managed (Barton, Hill and Sundaram 1989; Cornell & Shapiro 1987). Roberts (1992, p. 602) argues that companies' social responsibility activities are assessed by creditors. According to Purushothaman, Tower, Hancock & Taplin (2000, p. 123), creditors assess companies' social information to maintain their confidence in these companies. Thus, companies with a greater degree of leverage disclose more

social information. However, prior studies report mixed results on the direction of the relationship between leverage and social disclosure. Some studies find that leverage is positively associated with the level of social disclosure (Cornell & Shapiro 1987; Craig & Diga 1998; Meek et al., 1995; Purushothaman, Tower, Hancock & Taplin 2000; Roberts 1992) whereas other studies find no relationship between the two (Cormier & Gordon 2001; Kusumo 1998). Therefore, this study predicts a non-directional hypothesis:

H2: There is an association between leverage of the company and the extent of voluntary social disclosure in annual reports

Economic performance

Stakeholder theory postulates that there is a positive association between economic performance and social disclosure practices (Purushothaman, Tower, Hancock & Taplin 2000). Consistent with Ullman (1985), satisfactory financial performance helps companies contribute to socially responsible activities such as donations to local communities and establishment of employee training programs. Furthermore, such companies have greater financial support for voluntarily disclosing information which is relevant to various stakeholders (Meek, Roberts & Gray 1995). As with leverage, previous studies show inconsistent results in relation to the direction of the relationship between economic performance and social disclosure practices. Some studies show a positive association (Cochran & Wood 1984; Roberts 1992; Ullman 1985) whereas a study undertaken by Patten (1991) indicates a negative relationship between the two. Accordingly, this study hypothesizes:

H3: There is a relationship between economic performance and the extent of voluntary social disclosure in annual reports

Complexity of business

Complexity of business refers to the structural complexity faced by a company

due to the existence of one or more subsidiaries (Haniffa & Cooke 2002). This variable has also been referred to as the parent company relationship (Cooke 1989a, 1989b).¹ This study argues that complexity of business is relevant for explaining the level of social disclosure within the stakeholder theory framework because a company which has a subsidiary usually has more stakeholders. Larger numbers of stakeholders means additional differing interests and expectations that a company should meet. Thus, it is expected that an Indonesian company which has a more complex business structure (i.e. greater numbers of subsidiaries) discloses more social information in its annual report. As prior studies have not found a relationship between complexity of business and disclosure practices (Cooke 1989a, 1989b; Haniffa & Cooke 2002), this study proposes a non-directional hypothesis:

H4: There is an association between complexity of business and the extent of voluntary social disclosure in annual reports

Extent of international operations

Meek, Roberts & Gray (1995) argue that the increased internalization of operations results in a larger proportion of foreign stakeholders in the company. An Indonesian company, for instance, will potentially have foreign consumers, employees, and investors if this company opens branches in foreign countries. As there are a greater number of stakeholders, the level of social disclosure is expected to increase. However, as with leverage and economic performance, the results of prior studies are mixed. A study completed by Zarzeski (1996) found a positively significant relationship between international operations and disclosure practices whereas Meek, Roberts & Gray

¹ In Haniffa and Cooke (2002), complexity of business actually refers to structural complexity faced by a company because of the number of subsidiaries. As Indonesian companies do not always have subsidiaries, the definition of complexity of business in this study focuses on the existence of subsidiaries, not the number of subsidiaries.

(1995) and Craig and Diga (1998) did not find a relationship between the two. Accordingly, this study proposes a non-directional hypothesis:

H5: There is a relationship between international operations and the extent of voluntary social disclosure in annual reports

Industry type

In addition to the independent variables examined in the five hypotheses above, this study employs industry type as a control variable as prior researchers have argued that industry type may act as an intervening variable and therefore should be controlled (Cowen, Ferreri & Parker 1987; Roberts 1992). According to Dye and Sridhar (1995), companies tend to disclose information in accordance with the peculiarities of their industry. Consumer-oriented industries (e.g. services), for example, may disclose more information on consumer satisfaction issues to enhance their corporate image among market consumers (Cowen, Ferreri & Parker 1987). On the other hand, labour intensive industries (e.g. manufacturing) are more likely to provide more disclosure on employee issues to reflect sensitivity to their particular problems (Haniffa & Cooke 2005). Therefore, it is expected that the inclusion of industry type as the control variable in this study will help explain social disclosure practices of JSX listed entities.

Methodology

A sample of 100 publicly listed entities was randomly chosen from a population of 331 companies from the Jakarta Stock Exchange (JSX) for the financial year ending 2004 (Jakarta Stock Exchange 2004). The selection of the sample companies was based on the accessibility of annual reports from the JSX website and the clarity of those reports' presentation in the Adobe Reader file.²

² In addition to the ease of obtaining listed entities' annual reports (accessible from the JSX website), these entities play a crucially important role within the Indonesian economy and gain considerable interest from key stakeholders (Nurhayati 2005).

This study adopted a simplified disclosure index to measure the extent of social disclosure³. A number of studies have noted that a disclosure index seems to be more suitable for measuring the level of disclosure in developing countries whose set of economic, political and social conditions are very different from those of developed countries (Brown, Tower & Taplin 2004; Nurhayati, Brown & Tower 2006). The use of a simplified index is deemed suitable for such countries because the index avoids penalizing companies for a non-disclosed item when it is not relevant to them (Cooke 1991; Meek, Roberts & Gray 1995; Nurhayati 2005). Furthermore, it has been argued that generally a disclosure index enables researchers to gain a very useful insight into the level of information disclosed by companies (Cooke & Wallace 1989; Hossain, Perera & Rahman 1995).

Following Cahaya, Porter & Brown (2006), GRI social indicators were adopted in this study for its high international profile with a primary focus on the content of sustainability reporting (Adams 2004). GRI social indicators consist of four categories (*Labour Practices and Decent Work, Human Rights, Society, and Product Responsibility*) and, for the purpose of this study, are sub-categorized into 20 items.⁴

The measurement techniques for the independent variables are based on past studies (Craig & Diga 1998; Haniffa & Cooke 2002, 2005; Meek, Roberts & Gray 1995; Nurhayati 2005; Zarzeski 1996). The

³ The disclosure index adopted in this study is un-weighted and considered less subjective. Moreover, each disclosure item in the checklist is considered equally important and relevant to all sample companies (Craig & Diga 1998, p. 258).

⁴ There are twenty-one social items available from the 2002 GRI guidelines. However, this study only uses twenty GRI social indicators as the disclosure checklist because the first GRI indicator, *Employment*, is a mandatory item of GRI Section 1 on employee benefits. Thus, this item is excluded from the study.

hypotheses on these possible determinants of social disclosure practices are tested by using multiple regressions. Table 1 presents the measurement technique for the independent and control variables.

Table 1: Measurement technique of the independent and control variables

Independent Variable	Control Variable	Measurement		Data Type
Company Size		Total assets		Continuous
Leverage		Total liabilities divided by total equity		Continuous
Economic Performance		Return on Assets (ROA)		Continuous
Complexity of Business		Dichotomous Scale	0= No subsidiaries 1= Yes – Do have a subsidiary	Dichotomous
International Operations		Dichotomous Scale	0= No foreign sales, foreign subsidiaries or foreign branch offices 1= Has foreign sales, foreign subsidiaries or foreign branch offices	Dichotomous
	Industry Type ⁵	Dichotomous Scale	0= Non services 1= Services	Dichotomous

Results

Table 2 shows a summary of the descriptive statistics of the continuous independent variables.⁶ *Company Size*, as measured by total assets, ranges from 262 million Rupiah to approximately 248,155,827 million Rupiah, with mean total assets of about 10,945 billion Rupiah.

⁵ Sample companies were initially classified into 9 JSX's categories: 1 = Agriculture, 2 = Mining; 3 = Basic industry and chemicals, 4 = Miscellaneous industry, 5 = Consumer goods industry, 6 = Property and real estate, 7 = Infrastructure, utilities and transportation, 8 = Finance, 9 = Trade, services and investment. Because the number of sample companies was unevenly distributed into the respective categories, a reclassification of industry type into a dichotomous classification (non-services and services) was therefore conducted. JSX's categories 1 to 7 were classified as non-service industries with categories 8 and 9 classified as service industries.

⁶ Before performing the statistical analysis, the data was independently verified by three postgraduate students majoring in accounting. The purpose of this verification was to ensure the accuracy of the data.

Table 2: Descriptive statistics of continuous variables

Continuous variables	Minimum	Maximum	Mean	Standard deviation
Company Size (in million Rupiah)	262	248,155,827	10,945,051	34,130,485
Leverage (in %)	4.15	1430.17	217.45	305.13
Economic Performance (in %)	0.47	26.90	5.96	5.37

The range between the minimum and the maximum *Leverage* (the ratio of total liabilities to total equity) is 4.15% to 1430.17%.⁷ The mean of 217.45% suggests that, on average, the amount of money borrowed by JSX listed entities is 117.45% more than the amount of equity they have. Accordingly, it indicates that Indonesian listed companies rely extensively on the funds borrowed from creditors in running their businesses. Interestingly, the mean of *Economic Performance* 5.96% indicates that, on average, Indonesian listed entities have improved their economic performance over the time period 2001, 2002 and 2003 by an average of 2%. Nurhayati (2005) claims that the very low mean of ROA for 2001-2003 shows that many Indonesian companies had not fully recovered from the effects of the 1997 Asian economic crisis. However, in this study, JSX listed entities' ROA for 2003-2004 has improved by about 4%.⁸ This might be due to the significant improvement of economic performance in Indonesian finance industries from 2003 to 2004 (Kinerja Perusahaan Multifinance Membaik 2004)

For the categorical independent variables (*Complexity of Business* and *International Operations*), which are essentially

⁷ The very high leverage was calculated as follows: total liabilities divided by total equity = $\frac{17,456,975 \text{million}}{1,220,621 \text{million}} = 14.3017 = 1430.17\%$

⁸ In Nurhayati (2005), the figure of the average ROA is about 4% lower than this study's figure. This might be because the averaged period of ROA is different. In Nurhayati's (2005) study, ROA is averaged over three financial year periods (2001, 2002, and 2003). In this study, ROA is averaged over two financial year periods (2003 and 2004). The 4% increase in the value of averaged ROA indicates that there is a gradual improvement in the economic performance of Indonesian listed entities from 2001 to 2004.

dichotomous, it was found that 31% of sample companies do not have subsidiaries and 69% do have subsidiaries, ranging from one to 89 subsidiaries. It was also found that 67% of sample companies do not have international operations while 33% have international operations. For the dichotomous control variable (*Industry Type*), the descriptive statistics reveal that 31% of sample companies are classified as non-services with 69% classified as services.

Table 3 illustrates that all 100 sample companies disclose some social information in their annual reports with a mean of social disclosure level of 14.15% (approximately 2.83 out of 20 items), suggesting that social disclosure practices by Indonesian companies listed on JSX are low.⁹ Further analysis reveals that the lowest social disclosure level (5%) was made by 37 companies while the highest social disclosure level (40%) was made by three companies.

Table 3: Descriptive statistics of social disclosure practices

Dependent variable	Minimum (%)	Maximum (%)	Mean (%)	Standard deviation (%)
Social disclosure index (%) of all 100 sample companies	5	40	14.15	10.05

Determinants

One-Way ANOVA tests were performed to examine whether there are any statistical differences in the means of the level of social disclosure across the categorical variables, namely *Complexity of Business*, *International Operations*, and *Industry Type*. The results of ANOVA are summarized in Table 4.

⁹ Although the extent of social disclosure (14.15%) found in this study is low, it is higher than an Indonesian study by Nurhayati, Brown & Tower (2006) on natural environmental disclosures. Nurhayati, Brown & Tower (2006) found that the level of disclosures was 9%, with only 37 out of 100 sample entities disclosing natural environmental information. This may imply that Indonesian companies are placing a greater priority on social issues.

Table 4: Overall social disclosure practices and specific social disclosure items across categorical variables¹⁰

	Complexity of Business (Sig.)	International Operations (Sig.)	Industry Type (Sig.)
Overall social disclosure practices	0.114	0.001**	0.272

**significant at 5% level

The results in Table 4 show that there are significant differences in the means of social disclosure practices between companies for *International Operations*. Conversely, *Complexity of Business* and *Industry Type* are not significant predictors of overall social disclosure practices.

Hypotheses 1-5 were tested using multiple regressions by the complete method.¹¹ Table 5 shows the predictive power of the regression model. The *P*-value of the overall model of 0.000, which is smaller than the 0.01 significance level, shows that the regression model is highly predictive of the level of social disclosure. The value of the adjusted R-square 0.426 indicates that the variation of social disclosure practices can be explained by the variation of the five independent variables and the control variable as much as 42.6%.

Table 5: Predictive power of the multiple regression model

	Overall Model P-value	R-Square	Adjusted R-Square	Standard error of the estimate
Model of social disclosure Complete regression	0.000*	0.458	0.426	0.53685

*Significant at 1% level

¹⁰ *Child Labour, Forced and Compulsory Labour, Disciplinary Practices, Bribery and Corruption, Political Contributions, Advertising, and Respect and Privacy* were excluded from the analysis because none of the sample companies disclosed these items.

¹¹ To ensure that the results of the multiple regression were truly representative of the sample and that the best results could be obtained (Hair, Anderson, Tatham, and Black 1998), this study ran an assumption test first before conducting multiple regression. The assumptions to be tested consist of multicollinearity, normality, linearity, outliers, and homoscedasticity. Initially, the result of the assumption test (not shown for brevity) suggested that the assumption of normality was not met. Data of all continuous variables were therefore transformed into natural logarithm. After this transformation, all of the assumptions were met and the multiple regression analysis could be performed and discussed.

The results of hypothesis testing of the five independent variables, presented in Table 6 shows that *Company Size* and *International Operations* are statistically significant at the 1% and 5% levels respectively. Consistent with Hypothesis 1, the positive coefficient of *Company Size* reveals a positive relationship between this variable and the level of social disclosure. The other independent variables (*Leverage*, *Economic Performance*, and *Complexity of Business*) and the control variable (*Industry Type*) were not found to be significant.

Table 6: Results of complete multiple regression

Variable	P-value	Coefficient
Company Size	0.000*	0.177
Leverage	0.208	0.074
Economic Performance	0.245	0.072
Complexity of Business	0.103	-0.224
International Operations	0.031**	0.285
Industry Type (Control Variable)	0.496	-0.086

Legend: *significant at 1% level; **significant at 5% level

Discussion

Company Size was a significant predictor of social disclosure practices. Larger companies tend to be more visible to the public and therefore subject to greater pressure from outside parties such as labour unions (Brammer & Pavelin 2004). As claimed by Tambunan & Purwoko (2002), Indonesian labour unions can function as an effective controller of whether regulations in relation to labour are fully implemented by employers. It is also argued that larger companies' operations affect a greater number of stakeholders and therefore those companies are socially accountable to them and potentially identify a number of different social interests to be disclosed. This is consistent with stakeholder theory. Thus, the positive significance of *Company Size* may imply that bigger Indonesian companies undertake and disclose those activities in their annual reports in order not only to satisfy the pressure from stakeholders but to inform all stakeholders of their social commitment.

Similar to *Company Size*, *International Operations* was found to be a positive significant predictor of the extent of social disclosure. This finding is consistent with

Zarseski (1996) and strengthens the evidence that *International Operations* do explain social disclosure practices in contrast to prior studies that found no significant relationship between the two (Craig & Diga 1998; Meek, Brown & Gray 1995). One explanation is that Indonesian companies with international operations potentially have a greater number of stakeholders. Consequently, and consistent with stakeholder theory there are more stakeholders with rights to be provided with social disclosure. Data from the JSX shows that 41% of total trading for the 2004 financial year was made by foreign investors (Jakarta Stock Exchange 2004) from a number of different countries such as Singapore, Malaysia, US, and Hong Kong (Dharmasaputra 2004; Haikal 2004). Thus, it is implied that Indonesian companies heed foreign stakeholders' information needs as they considerably contribute to not only the companies' financing but also the achievement of long term objectives, particularly for their operations in foreign countries. In addition, as much of the foreign investment comes from developed nations it could be argued that foreign stakeholders may be concerned or prefer different social issues from local (Indonesian) stakeholders. This latter point may highlight why certain items such as child labour, and bribery and corruption for example, are not disclosed by Indonesian companies. Many foreign investors might consider these to be unimportant in the context that in their own countries, abuse of child labour, and high levels of bribery and corruption do not exist or are minimal and therefore these are not social issues of concern. Thus, the provision of more social disclosure for satisfying both foreign and Indonesian stakeholders potentially explains the increase in the level of social disclosure by JSX listed entities and possibly the type of disclosure.

This study found that *Leverage* does not significantly affect the extent of social disclosure. This finding is consistent with Cormier & Gordon (2001), Kusumo (1998), and Meek, Brown & Gray (1995). According to Kusumo (1998) another insignificant

relationship between *Leverage* and the quantity of voluntary environmental and social accounting disclosure is partially explained by the unique closeness of business interrelationships including lending in the Indonesian context. *Economic Performance* was also not significant for the level of social disclosure. This finding is consistent with studies by Purushothaman, Tower, Hancock & Taplin (2000) and Kusumo (1998). It is possible that the association between *Economic Performance* and the level of social disclosure does exist but not in a cross-sectional study (McGuire, Sundgren & Schneeweis 1988; Purushothaman, Tower, Hancock & Taplin 2000).

Complexity of business was also found to be insignificant. This finding is consistent with studies by Haniffa and Cooke (2002), and Cooke (1989a; 1989b). One reason is that the link between JSX listed parent companies and their subsidiaries in relation to corporate social responsibility activities is weak or that subsidiaries hide particular social information behind the good image of other subsidiaries or the parent company itself.¹² The control variable, Industry Type was not significant.

In summary, the results highlight that *Company Size* and *International Operations* are significant predictors of social disclosure by Indonesian listed entities. The positive significant relationship of these two variables and the level of social disclosure imply that larger Indonesian companies with more diversified stakeholders have a stronger commitment to undertaking and disclosing those activities in their annual reports. Within the stakeholder theory framework, this commitment exists due to the greater number of stakeholders larger companies deal with, are accountable to, and possibly identify with. In contrast, smaller companies disclose less social information as they transact with fewer stakeholder groups.

¹² According to Cooke (1989a) companies with more subsidiaries may hide information by aggregation.

References

- Adams, CA 2004, 'The ethical, social & environmental reporting: performance portrayal gap', *Accounting, Auditing & Accountability Journal*, vol. 17, no. 5, pp. 731-757.
- Adams, CA Hill, W & Roberts, CB 1998, 'Corporate social reporting practices in Western Europe: legitimating corporate behaviour?', *The British Accounting Review*, vol. 30, no. 1, pp. 1-21.
- Barton, S Hill, NC & Sundaram, S 1989, 'An empirical test of stakeholder theory predictions of capital structure', *Financial Management*, vol. 18, no. 1, pp. 36-44.
- Brammer, S & Pavelin, S 2004, 'Voluntary social disclosures by large UK companies', *Business Ethics: A European Review*, vol. 13, no. 2/3, pp. 86-99.
- Brown, AM Tower, G & Taplin, R. 2004, 'A study of the provision of natural environmental disclosures in the annual reports of Pacific Island countries' entities and user/preparer needs', in *Environmental disclosure practices and financial performance*, eds. E. Karim & RW Rutledge, Praeger Publishers, Westport, pp. 21-48.
- Brown, N & Deegan, C 1998, 'The public disclosure of environmental performance information: a dual test of media agenda setting theory and legitimacy theory', *Accounting and Business Research*, vol. 29, no. 1, pp. 21-41.
- Cahaya, R Porter, S & Brown, A 2006, 'Nothing to report? Motivations for non-disclosure of social issues by Indonesian listed companies', *The Journal of Contemporary Issues in Business and Government*, vol. 12, no. 1, 43-61.
- Cochran, PL & Wood, RA 1984, 'Corporate social responsibility and financial performance', *Academy of Management Journal*, vol. 27, no. 1, pp. 42-56.
- Cooke, TE & Wallace, RSO 1989, 'Global surveys of corporate disclosure practices and audit firms: A review essay', *Accounting and Business Research*, vol. 20, no. 77, pp. 47-57.

- Cooke, TE 1989a, 'Disclosure in the corporate annual reports of Swedish companies', *Accounting and Business Research*, vol. 19, no. 74, pp. 113-124.
- Cooke, TE 1989b, 'Voluntary corporate disclosure by Swedish companies', *Journal of International Financial Management & Accounting*, vol. 1, no. 2, pp. 171-195.
- Cooke, TE 1991, 'An assessment of voluntary disclosure in the annual reports of Japanese corporations', *The International Journal of Accounting*, vol. 26, no. 3, pp. 147-189.
- Cormier, D & Gordon, IM 2001, 'An examination of social and environmental reporting strategies', *Accounting, Auditing & Accountability Journal*, vol. 14, no. 5, pp. 587-616.
- Cornell, B & Shapiro, A 1987, 'Corporate stakeholders and corporate finance', *Financial Management*, vol. 16, no. 1, pp. 5-14.
- Cowen, SS Ferreri, LB & Parker, LD 1987, 'The impact of corporate characteristics on social responsibility disclosure: a typology and frequency-based analysis', *Accounting, Organizations and Society*, vol. 12, no. 2, pp. 111-122.
- Craig, R & Diga, J 1998, 'Corporate accounting disclosure in ASEAN', *Journal of International Financial Management & Accounting*, vol. 9, no. 3, pp. 246-274.
- Dharmasaputra, M 2004, *Investor asing kembali protes Indonesia*, viewed 21 October 2006, <<http://www.tempointeraktif.com/hg/ekbis/2004/06/23/brk,20040623-01.id.html>>.
- Dye, RA & Sridhar, SS 1995, 'Industry-wide disclosure dynamics', *Journal of Accounting Research*, vol. 33, no. 1, pp. 157-174.
- Gao, SS Heravi, S & Xiao, JZ 2005, 'Determinants of corporate social and environmental reporting in Hong Kong: a research note', *Accounting Forum*, vol. 29, no. 2, pp. 233-242.
- Haikal, MM 2004, *Menyoroti divestasi Bank Permata: mencari investor dan harga yang ideal* viewed 21 October 2006 <http://www.bisnis.com/servlet/page?pa_geid=268&dad=portal30&schema=PORTAL30&p_ared_id=315017&p_ared_at_op_id=O09>.
- Hair, JF Anderson, RE Tatham, RL & Black, WC 1998, *Multivariate Data Analysis*, 5 edn, Prentice-Hall, New Jersey.
- Haniffa, RM & Cooke, TE 2002 'Culture, corporate governance and disclosure in Malaysian corporations', *Abacus*, vol. 38, no. 3, pp. 317-349.
- Haniffa, RM & Cooke, TE 2005, 'The impact of culture and governance on corporate social reporting', *Journal of Accounting and Public Policy*, vol. 24, no. 5, pp. 391-430.
- Henderson, S Peirson, G & Harris, K 2004, *Financial accounting theory*, Pearson Prentice Hall, Frenchs Forest.
- Hossain, M Perera, MHB & Rahman, AR 1995, 'Voluntary disclosure in the annual reports of New Zealand companies', *Journal of International Financial Management and Accounting*, vol. 6, no. 1, pp. 69-87.
- Jakarta Stock Exchange 2004, *Annual report 2004*, viewed 23/8/2005 <<http://www.jsx.co.id/misc/AR2004.pdf#search=%22investor/asing/dan/corporate/social/disclosure/indonesia>>
- Kinerja Perusahaan Multifinance Membaik 2004, viewed 5/10/2006 <<http://www.suaramerdeka.com/harian/0409/23/eko01.htm>>.
- Kusumo, S 1998, *The determinants of the quantity and quality of voluntary environmental and social accounting disclosures by Indonesian listed companies*, Murdoch University (Unpublished Honours Thesis), Perth.
- McGuire, JB Sundgren, A & Schneeweis, T 1988, 'Corporate social responsibility and firm financial performance', *Academy of Management Journal*, vol. 31, no. 4, pp. 854-872.
- Meek, GK Roberts, CB & Gray, SJ 1995, 'Factors influencing voluntary annual report disclosures by US, UK and continental European multinational

- corporations', *Journal of International Business Studies*, vol. 26, no. 3, pp. 555-572.
- Nurhayati, R 2005, *The determinants of the level of natural environmental disclosures of JSX listed entities*, Curtin University of Technology (Unpublished Master Thesis), Perth.
- Nurhayati, R Brown, AM & Tower, G 2006, 'Understanding the level of natural environmental disclosures by Indonesian listed companies', *Journal of the Asia Pacific Centre for Environmental Accountability*, vol. 12, no. 3, pp. 4-11.
- Patten, DM 1991, 'Exposure, legitimacy, and social disclosure', *Journal of Accounting and Public Policy*, vol. 10, no. 4, pp. 297-308.
- Purushothaman, M Tower, G Hancock, P & Taplin, R 2000, 'Determinants of corporate social reporting practices of listed Singapore companies', *Pacific Accounting Review*, vol. 12, no. 2, pp. 101-133.
- Roberts, RW 1992, 'Determinants of corporate social responsibility disclosure: an application of stakeholder theory', *Accounting, Organizations and Society*, vol. 17, no. 6, pp. 595-612.
- Tambunan, THT & Purwoko, B 2002, 'Social protection in Indonesia', in *Social protection in Southeast and East Asia*, (Eds.), E Adam, M Hauff & M John, viewed 19 August 2006 <<http://library.fes.de/pdf-files/iez/01443.pdf>>.
- Ullman, AA 1985, 'Data in search of a theory: A critical examination of the relationship among social performance, social disclosure, and economic performance of US firms', *Academy of Management Review*, vol. 10, no. 3, pp. 540-557.
- Zarzeski, MT 1996, 'Spontaneous harmonization effects of culture and market forces on accounting disclosure practices', *Accounting Horizons*, vol. 10, no. 1, pp. 18-37.
-

TRANSPARENT BLUE SKIES FOR THE GLOBAL AIRLINE INDUSTRY: A STUDY OF KEY ACCOUNTING DISCLOSURES

Ivy Isack

St George Bank

Rebecca Chyi Woan Tan

The Australian National University

Abstract

This cross-sectional accounting study focused on voluntary environmental and social accounting disclosure (VESAD) provided by public listed airline companies from a global perspective using stakeholder theory. The study empirically examined the factors that influence voluntary environmental and social accounting disclosure (VESAD) in the financial, non-financial sections and the annual report as a whole of airline companies. The paper concludes that airlines in an alliance arrangement and with greater government ownership provided greater VESAD in the financial section. In contrast, the larger the company and the quicker the annual report is issued, the greater is the VESAD in the non-financial section and the annual report as a whole.

Overview of airline industry

The airline industry, one of the largest global industries, with operating profits of US \$9 billion on revenue of US \$301 billion in 2000 (IATA 2001) is one that has experienced rapid growth since the first airline operation in 1903 (ATA 2001; Straszheim 1969). It is an industry that has grown rapidly (Straszheim 1969). In 1986, airline companies transported approximately 960 million passengers and by 1999, the number of passengers increased to 1.6 billion (Yergin, Vietor, & Evans 2000).

The airline industry is unique, with a high rate of growth accompanied by low levels of profitability (OECD 1988; Hanlon 1996). Profitability of the industry has been

marginal, with some airlines experiencing a net loss (especially since the 2001 September 11 tragedy), attributed to high operating costs towards wages, jet fuel, maintenance and depreciation expenses (Straszheim 1969; OECD 1988). Furthermore, it is an industry which is dependent upon costly forms of technology and has a political and strategic importance, such as war preparation and the politics of expansionism (Lyth 1996).

Voluntary disclosures and VESAD

Voluntary disclosures are defined as 'disclosures in excess of requirements [and] represent free choices on the part of company management to provide accounting and other information deemed relevant to the decision needs of users of their annual reports' (Meek, Roberts and Gray 1995, p. 555). VESAD is defined by Matthews and Perera (1995, p. 364) as 'an extension of disclosure into non-traditional areas such as providing information about employees, products, community service and the prevention or reduction of pollution.' Therefore, VESAD is a subset of voluntary disclosure.

This study encompasses the five main themes of VESAD: environment, employees, health and safety, community and energy, consistent with Guthrie and Parker (1989), Gray, Kouhy and Lavers (1995a and 1995b), and Williams (1999).

The research question explored in this study is: What are the factors that influence VESAD practices in annual reports of global airline companies?

Background and theoretical framework

The airline industry faces many challenges; especially in the five aforementioned VESAD areas. One of its major concerns

relates to its environmental impact, for example, air pollution, noise control, recycling, and ozone layer depletion. The airline industry is labour intensive with more than one-third of revenue generated going to pay its workforce; the labour cost per employee is the highest of any industry (IATA 2000).

Recently, health issues are of growing concern, especially in relation to deep vein thrombosis (DVT) and the risk associated flying (IATA 2001b). Safety is another fundamental issue in the airline industry and is the prime objective of the International Air Transport Association (IATA). The IATA Safety Committee developed a safety strategy, *Safety Strategy 2000+*, to ensure there are continuous improvements in safety within the global airline industry (IATA 2001c). One other issue of concern related to the energy efficiency of the industry. The large upward trend in global fuel prices represents a major cost challenge for airline companies. Fuel cost was the largest single cost item for the industry in 2006. Fuel prices have increased by approximately 136%, the average price of jet fuel per barrel rising from US\$34.7 in 2003 to US\$81.9 in 2006, putting pressure on airlines to be more energy efficient (IATA 2007).

As issues such as pollution, resource depletion, product quality and safety attract increasing attention of stakeholder groups (Gray, Owen, and Maunders 1987), corporations are being held accountable to a wider audience who require disclosure on broader issues such as VESAD information, not just profit figures (Hackston and Milne 1996; Williams 1998). Therefore, VESAD disclosure would enhance the credibility of airlines and increase accountability to various stakeholder groups and maintain sustainability within the industry. Higher levels of disclosure may assist investors in interpreting the airlines' economic prospects therein making the capital allocation process

more efficient and reducing the cost of capital (FASB 2001).

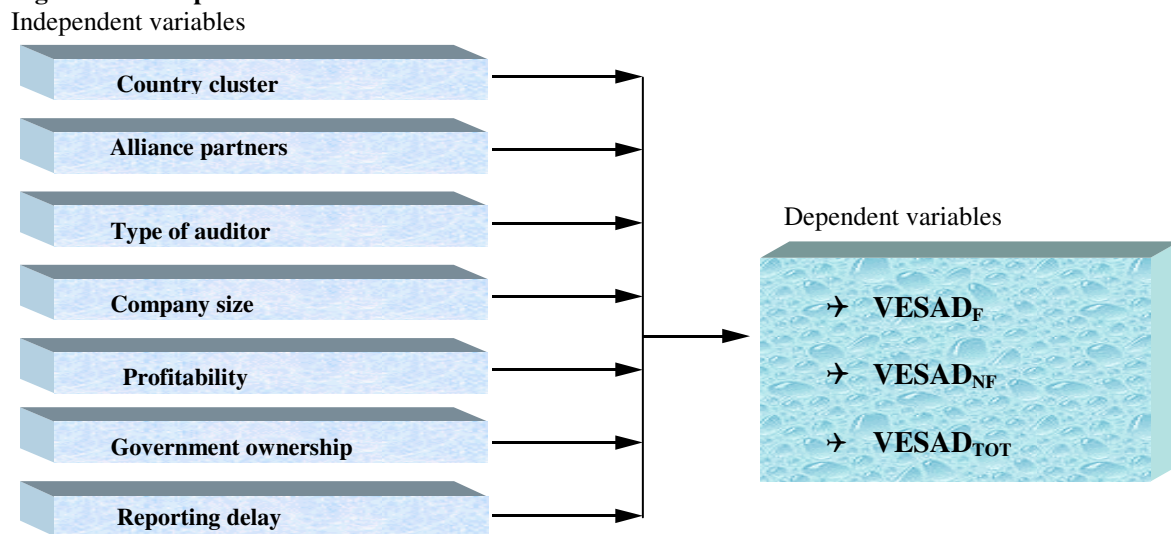
This study empirically examines the ability of stakeholder theory to explain the extent of VESAD practices of airline companies consistent with Gray, Kouhy & Lavers (1995a), Roberts (1992), Kusumo, Towers, Williams & Taplin (1999) and Purushothaman, Tower, Hancock & Taplin (2000). Stakeholder theory is 'explicitly bourgeois in that the world is seen from the perspective of the management of the organisation who are concerned strategically with the continued success of the company' (Gray, Kouhy & Lavers 1995a, p. 53). This theory is used in defining the objectives of the organisation, which includes meeting the demands of various stakeholders (Roberts 1992). Stakeholders of a company are defined as 'any individuals or groups having an interest in the company because they can affect and/or be affected by the company's activities' (Freeman 1984, p. 41).

Literature review

A common predictor variable, company size, consistently examined in past literature (Cowen, Ferreri and Parker 1987; Cooke 1991; Hossain, Perera and Rahman 1995; Meek, Roberts & Gray 1995; Hackston and Milne 1996; Williams 1999) is included in this study together with variables of alliance partners, country cluster, type of auditor, profitability, government ownership and reporting delay.

This study, as depicted in Figure 1 (below), tests the determinants of the seven independent variables and the effect on VESAD within the financial, non-financial sections and the annual report as a whole of airline companies. The VESAD measure comprises an aggregation of VESAD themes of environment, employee, health and safety, community and energy. For the VESAD dependent variables, a set of seven general testable hypotheses are proposed.

Figure 1: Conceptual schema - Extent of VESAD



Country cluster

Past studies suggest that the country within which the company reports will affect the contents of its annual report (see for example Guthrie and Parker 1990; Meek, Roberts & Gray 1995; Craig and Diga 1998; Tan, Tower, Hancock & Taplin 2002). However, due to the small cell sizes, country cluster is used in this study as the proxy variable as opposed to country of origin. Nobes' (1998) and Nobes and Parker's (2000) classification systems are used to group the countries examined in this study into two main classes namely, Class A and B based on the dominant accounting systems in each country. To be classified into Class A, countries need to have strong equity markets; otherwise Class B will prevail where accounting systems are dominated by tax/creditor rules (Nobes & Parker 2000). Stakeholder theory suggests that stakeholders such as creditors and owners will demand similar information needs within each country cluster. Class B countries will focus on creditor needs whereas Class A countries will concentrate on the investor group. Therefore, this study hypothesizes that:

H1: There is an association between country cluster and the level of VESAD provided in the financial section, non-financial section

and the entire annual report of airline companies.

Alliance partners

A structure unique to the industry is alliance arrangements. When the study was conducted, there were five major global strategic alliance groupings, *Qualifyer Group*, *Star Alliance*, *Oneworld*, *SkyTeam*, and *Northwest-KLM Alliance* (IATA 2001). Formation of alliances is partly due to regulatory barriers such as the restrictions of domestic markets faced by foreign carriers and limits on foreign ownership, which restrict entry of new carriers on international routes between countries (Gallacher and Odell 1994).

There is no known literature examining alliance partners as a determinant to VESAD. Given the unique structure of the industry, this variable is an important one to examine. Stakeholder theory suggests a positive relationship between alliance partners and VESAD in meeting the demands of various stakeholder groups. Pressures for companies to satisfy an increased range of stakeholders' demand in an efficient and effective manner may result in increased transparency of the company (Schaltegger & Burritt 2000). As a result, this study hypothesizes that:

H2: There is a positive association between membership in an alliance and the level of

VESAD provided in the financial section, non-financial section and the entire annual report of airline companies.

Type of auditor

Studies by Singhvi and Desai (1971), Watts and Zimmerman (1986), and Craswell and Taylor (1992) found that larger audit firms were significantly associated with higher disclosure levels. Larger audit firms are also perceived to offer a high quality service and face risks of losing their established reputation if they are associated with clients who provide limited disclosure, thus greater pressure for clients to disclose greater amounts of information (Craswell and Taylor 1992).

Stakeholder theory also suggests that choice of an external auditor can potentially enhance credibility within stakeholders such as investors on their investment decisions, with Big Five audit firms having a greater influence over the non-Big Five.¹³ Therefore, this study hypothesizes that:

H3: There is a positive association between type of auditor and the level of VESAD provided in the financial section, non-financial section and the entire annual report of airline companies.

Company size

Stakeholder theory suggests that larger companies provide higher levels of disclosure as they face more scrutiny by the general public and special interest groups (Roberts 1992). Numerous studies have suggested a positive relationship between company size and voluntary disclosures as larger firms have lower information production costs and lower costs of competitive disadvantage associated with disclosure (Trotman and Bradley 1981; Hossain, Tan & Adams 1994; Meek, Roberts & Gray 1995; Williams 1999; Purushothaman, Tower, Hancock & Taplin 2000). Trotman and Bradley (1981) argue

that larger companies also face greater pressure to exhibit social responsibility due to the attention received from the general public.

Larger companies tend to have more shareholders who are interested not only in the financial position but also the impact on the environment and community, and thus, are more likely to disclose voluntary information through formal communication (such as the annual report) to interested parties (Cowen, Ferreri & Parker 1987). Accordingly, it is hypothesized that:

H4: There is a positive association between company size and the level of VESAD provided in the financial section, non-financial section and the entire annual report of airline companies.

Profitability

Stakeholder theory argues that the stronger the financial performance of a company the greater the social pressures likely to be faced by the organisation (Roberts 1992). Firms also have to consider a multitude of different stakeholder groups to be profitable and thus provide more VESAD to satisfy those demands (Schaltegger and Burritt 2000). Profitable firms have incentives to distinguish themselves from less profitable firms to raise capital on the best available terms (Meek, Roberts & Gray 1995). One way to achieve this is through disclosure of voluntary information (Foster 1986). Roberts (1992) and Meek, Roberts & Gray (1995) found a positive relationship between profitability and voluntary disclosure. As a result, the hypotheses relating to this study is:

H5: There is a positive association between profitability and the level of VESAD provided in the financial section, non-financial section and the entire annual report of airline companies.

Government ownership

Companies under government ownership will be less transparent than more privatized companies because of the lack of

¹³ This study examined the accounting environment before the *Arthur Andersen* collapse, thus the term Big Five instead of Big Four is used.

competition faced and less pressure from equity financiers (Gonenc and Nicoletti 2001). Further, board of directors and managers of government owned firms are less accountable for enhancing shareholder value. Government owned firms receive government funding and face less pressure in paying dividends (Jensen 1986). Moreover, disclosure issues become more important as ownership is diffused (Nair and Frank 1980).

This study proposes VESAD to be negatively associated with government ownership under stakeholder theory. Airlines that are owned by the government would have relatively fewer shareholders, and any form of reporting is directly to the management and government. Companies that are privatised have a higher commitment to provide greater voluntary disclosure such as about environmental, health and safety, social, community and sustainability to meet the wide range of stakeholder needs. The following hypothesis is derived:

H6: There is a negative association between government ownership and the level of VESAD provided in the financial section, non-financial section and the entire annual report of airline companies.

Timeliness of reporting

This study considers timeliness of reporting as an exploratory independent variable. Larger companies are under greater pressure to release information on a timely manner due to greater external pressures (Ng & Tai 1994). Given the airline industry is one of the largest global industry, it is anticipated that airline companies will make timely voluntary disclosures. Thus, an inverse relationship between timeliness and VESAD would apply since larger companies are under external pressures from stakeholders who require timely information for decision making.

Timely information is required for investors to assess the probability of future cash flows from interest payments and redemption of capital. Concerned stakeholders also require timely information

to evaluate the performance and service delivery of the company (Dwyer & Wilson 1989). Stakeholder theory also suggests that companies are under an obligation to provide annual reports with a shorter reporting delay and also ensure adequate information is disclosed. Therefore, this study predicts that:

H7: There is a negative association between timeliness of reporting and the level of VESAD provided in the financial section, non-financial section and the entire annual report of airline companies.

Research methods

Data was collected from annual reports of seventy airline companies from forty-two countries with financial year ends in 2000. The disclosure index (keywords) developed for this study was adapted from Meek, Roberts & Gray (1995), AlNajjar (1995), Williams (1999) and Purushothaman, Tower, Hancock & Taplin (2000). These key terms appear to be the most common synonyms in the VESAD literature. The measurement techniques for both dependent and independent variables are shown in Table 1.

Results

In this study, five variables of total revenue, total assets, number of employees, revenue passenger kilometres (RPK) and available seat kilometres (ASK) are used as a composite proxy for company size. Factor analysis is performed on the five variables to form an overall single measure of company size. Multiple regression is then used to test the composite size measure as one of the predictors of VESAD (financial), VESAD (non-financial) and VESAD (total). Therefore, the composite measure comprises multiple key attributes (Cooke 1992).

All the assumptions needed to be met before multiple regressions performed were tested. Results show departures from the normality assumption for variables used in the composite size measure (total revenue, total assets, number of employees, RPK and ASK). To alleviate this violation, the natural logs of these variables were used.

Table 1: Summary of measurement technique for variables

Variables	Measurement technique	Key literature
Dependent variables		
VESAD _F VESAD _{NF} VESAD _{TOT}	Aggregated measure of five VESAD themes using zero for non-disclosure and one for disclosure; separately calculated for financial, non-financial sections and annual report.	Chow & Wong-Boren 1987; Cooke 1991; Hossain et al. 1994; Meek et al. 1995; and Williams 1999.
Independent variables		
Country cluster	Broader classification scheme of scoring 0, 1, or 2 for each country cluster classification - Class A (strong equity), Class B (weak equity) and unclassifiable.	Nobes 1998; Nobes & Parker 2000.
Alliance partners	Dichotomous dummy classification of 0 and 1, where 0 signifies an airline not part of an alliance and 1 represents an airline that belongs to an alliance group.	An exploratory dichotomous ordinal measure is used.
Type of auditor	Dummy variable of 1 if audited by Big Five audit firm or 0 if audited by non-Big Five is used.	Craswell & Taylor 1992; Hossain et al. 1995; Choi & Wong 2002.
Company size	Composite size index by factor analysis consisting of total revenue, total assets, number of employees, and measures of airline's capacity of revenue passenger kilometres and available seat kilometres.	Ahmed & Nicholls 1994; Craig & Diga 1998; Tan et al. 2002.
Profitability	Two-year average of the ratio of profit before tax and interest on a two-year average of total assets.	Cowan et al. 1987; Hackston and Milne 1996; Tan et al. 2002.
Government ownership	Measured according to the % of government ownership of airlines	Airline Business 1998
Timeliness of reporting	Exploratory variable measuring calendar days from year end of financial statements to date of auditor's report, a proxy known as audit delay.	Whittred 1980; Davies and Whittred 1980; Lont and Duncan 1989; Ng and Tai 1994; Courteau and Zeghal 1999, 2000.

Table 2 (see below) shows the disclosure levels of each of the five VESAD themes in the annual report as a whole. The employee theme is the most disclosed in the annual reports of listed airline companies, and is consistent with other studies such as Cowen, Ferreri & Parker (1987), Hackston and Milne (1996), Williams (1998) and Purushothaman, Tower, Hancock & Taplin (2000). This is followed in order by the disclosure of energy-related issues which is inconsistent with past studies such as Hackston and Milne (1996), Williams (1998)

and Purushothaman, Tower, Hancock & Taplin (2000) which reported low levels of energy disclosure. Health and safety, and environment themes come next. The lowest level of disclosure is about the community, but is still higher than past studies, as mentioned above. The five themes received significant attention in the airline industry reports, suggesting that all the five themes are highly regarded by airline companies. Consistent with stakeholder theory, airline companies supply high levels of VESAD in response to the differing demands of the stakeholders.

Table 2: Comparison of scores of VESAD themes for the 70 airlines sampled

	Environment	Employee	Health and Safety	Community	Energy
Disclosure level	67%	100%	83%	53%	99%

Note: Total sample in this study is seventy passenger airline companies.

Table 3 highlights the ranges, means and standard deviations of each of the continuous independent variables. Five variables were used to obtain a composite company size measure. Currency values are denoted in US dollars as at the relevant fiscal year to ensure comparability. Company size measures of

total revenue, total assets, number of employees, RPK and ASK were all highly positively skewed. The average government ownership is 32%, suggesting a fairly de-regulated sample. The average reporting delay is 83 days, which is less than the three months required by many regulatory bodies.

Table 3: Descriptive statistics of continuous independent variables (n = 70)

Independent Variables	Minimum	Maximum	Mean	Std Dev.
Company size				
Total Revenue (USD millions)	14.29	19,703	3,399	4,744
Total Assets (USD millions)	6.04	26,213	4,263	6,128
Number of Employees	180	103,172	17,588	23,569
RPK (millions of km)	6.29	204,362	33,207	45,720
ASK (millions of km)	10.40	282,531	44,078	61,901
Profitability (%)	-13.4	29.1	4.5	6.5
Government Ownership (%)	0	100	32	39
Timeliness of reporting (days)	16	191	83	44

All airline companies disclosed at least one of the VESAD themes in their full annual report. Between the two sections in the annual report, airline companies tend to disclose more VESAD in the non-financial as compared with the financial section. Results from the regression analyses conducted are shown below in Table 4.

Airlines in an alliance provide greater VESAD in the financial section of the annual report, positively correlated at the 5% level. Airlines with full or partial government ownership disclosed less VESAD in the financial section.

Results for VESAD_{NF} and VESAD_{TOT} were similar as both company size and timeliness of reporting were significant in predicting VESAD. Therefore, the larger the airline company the higher the level of VESAD and the quicker the airline company issues its annual report, the greater the VESAD in the non-financial section and the annual report as a whole. Other variables of country cluster, type of auditor, profitability and leverage were not significant influences on VESAD practices within the airline industry.

Table 4: Summary of significant results from multiple regressions analysis.

Dependent variables	Significant independent variables	Hypotheses	Coefficient sign	P-Value	Adjusted R ²
VESAD _F	Alliance partners	H ₂	Positive	0.011	0.063
	Government ownership	H ₆	Negative	0.028	0.100
VESAD _{NF}	Company size	H ₄	Positive	0.000	0.208
	Timeliness of reporting	H ₇	Negative	0.093	0.211
VESAD _{TOT}	Company size	H ₄	Positive	0.000	0.213
	Timeliness of reporting	H ₇	Negative	0.035	0.240

Implications

The insignificant results of country cluster found in this study could be attributed to a number of factors. First, as suggested by Taylor and Turley (1986), each nation's accounting rules and regulations are based upon its culture, economics, political and legal systems, therefore diversity in accounting regulations will exist.

Given that the sample airlines in this study were from forty-two different countries, accounting rule diversity is a real concern. However, with moves towards international harmonisation of accounting principles and practices each country's accounting techniques and concepts may be conforming to what is supported globally (Cooke and Wallace, 1990). Moreover, IATA's six airline accounting guidelines (AAG) for worldwide airlines established greater consistency between airlines (KPMG and IATA, 1992) and reduced the variance in airline financial accounting practices (Tan, Kidman & Cheong 2002). Therefore, the IATA guidelines (an example of industry self regulation) may have greatly reduced the expected country diversity affect.

Class A (micro) and B (macro) developed by Nobes (1992; 1998) and Nobes and Parker (2000) were used to classify the countries into two groups. However, Cooke and Wallace (1990) felt that countries cannot be established into abstract categories as each nation's accounting rules and regulations is unique and is dependent upon its culture, economics, political and legal systems. Moreover, Nair and Frank (1980) argue that disclosure practices do not conform well to such conceptual classification schemes after finding that the

pattern underlying measurement practices differs from those underlying disclosure practices. They also note that disclosure practices exhibit greater diversity from measurement practices, thus accurate taxonomies are problematic.

An important finding of this study is that participation in an alliance is a driving factor for VESAD in the financial section of the annual report. Stakeholder theory supports a positive relationship between alliance partners and VESAD (financial) as there will be increased pressures for companies to satisfy stakeholders' demand in an efficient manner, and this leads to increased transparency of the company (Schaltegger and Burritt, 2000). Thus, airlines in an alliance link are more transparent and disclose more VESAD than those airlines not part of an alliance.

However, a financial focus seems to be the driving imperative in predicting VESAD practices. Statistical analysis shows there is no relationship between alliance categories and VESAD (non-financial) and VESAD (total), failing to support stakeholder theory. Perhaps the (mainly) financial linkages within an alliance are generating similar located disclosures.

Stakeholder theory suggests that employing Big Five audit firms would enhance credibility to the various stakeholders on investment decisions. However, type of auditor is not a significant predictor in this study for all three dependent variables. Watts and Zimmerman (1986), and Craswell and Taylor (1992) claim the extent of voluntary disclosures is higher for companies audited by Big Five audit firms and lower if audited by non-Big Five firms. Hossain, Tan & Adams (1994)

proposed a positive relationship between type of auditor and voluntary disclosure, but their findings were insignificant, consistent with other studies such as Firth (1979), Tan, Kidman and Cheong (1990), Simon, Teo, and Trompeter (1992), and Hossain Perera & Rahman (1995). The insignificant results could be caused by sample size imbalance in the non-Big Five cell since 91% of the sampled airlines are audited by the Big Five leaving only 9% in the other category.

Dierkes and Coppock (1978) and Trotman and Bradley (1981) have argued that larger companies face greater pressure for social reporting as they receive more attention from the general public. Larger companies also have more stakeholders who might be concerned with the social programs undertaken by the company, smaller companies do not face such pressures and tend to communicate social programs by more informal channels (Cowen, Ferreri & Parker 1987).

Consistent with past literature, company size is a significant predictor for VESAD (non-financial) and VESAD (total), the larger the company the greater the level of VESAD. This supports prior research on voluntary disclosure practices which have noted the strong positive influences of company size (Cooke, 1991; Hackston & Milne, 1996; Hossain, Perera & Rahman 1995; Meek, Roberts & Gray 1995; Williams 1999; Purushothaman, Tower, Hancock & Taplin 2000). The non-financial section is directed towards the company's social accountability and is aimed at a broader group of stakeholders than the owners and investors who pay more attention to the financial section. Therefore, more VESAD may be provided in the non-financial section to meet the needs of the various stakeholders.

Profitability is not a significant predictor of VESAD, contradicting the positive relationship advocated by stakeholder theory, which argues that the stronger the financial performance of a company, the more social pressures likely to be faced by the organisation (Roberts, 1992; Williams,

1999). Past empirical research is divided, for example AlNajjar (1995) found a positive relationship between profitability and VESAD practices, whereas Hackston and Milne (1996) detected no association when examining VESAD of entities in New Zealand. Other studies such as Foster (1986), Purushothaman, Tower, Hancock & Taplin (2000), Meek, Roberts & Gray (1995), Wallace, Nasar & Mora (1994) and Cowen, Ferreri & Parker (1987) also found no association. Perhaps the unique nature of the airline industry makes other more unique measures (such as revenue passenger kilometres and available seat kilometres) the key performance indicators in measuring performance over profitability (Tan 1999).

There is little research examining the effects of government ownership on voluntary disclosure. Although more airlines are seeking privatisation, government ownership is still relatively common among the airline industry (Gallacher & Odell 1992). Based on stakeholder theory it is expected that airlines under some form of government ownership will disclose less VESAD information. Disclosure becomes more important as ownership is diffused (Nair & Frank, 1980). The insignificant results of government ownership and VESAD_{NF} and VESAD_{TOT} fail to support the tenets of stakeholder theory. The insignificant results can also be explained from the perspective that there is less need for capital funding from the global markets. There is also limited competition faced by airlines, resulting in few shareholders and lower importance placed on VESAD.

Annual reports need to be issued in a timely way with greater levels of VESAD (under stakeholder theory tenets) to meet the needs and expectations of various stakeholders. Interestingly, findings showed VESAD (non-financial) and VESAD (total) are driven by the timeliness of reporting predictor. This suggests that the more organised (timely) airline companies are, the more they disclose. This finding is a shift from the other findings of this study, which

predicted significant results for VESAD in the financial section.

Conclusion

This study provides partial support of stakeholder theory to explain VESAD within the airline industry. The results partially validate the conceptual scheme from which the hypotheses of this study were derived which extends the scope of VESAD practices to the sub-sections of an annual report. Findings note that business environmental attributes like alliance partners and government ownership are predictors of VESAD in the financial section. For the non-financial section and the annual report as a whole, company's attributes of company size and timeliness of reporting were found to be predictors. Therefore, by sub-dividing the annual report, this study distinguishes that the drivers differ between the financial and non-financial sections and the annual report as a whole.

References

- Ahmed, K and Nicholls, D 1994, 'The impact of non-financial company characteristics on mandatory disclosure compliance in developing countries: The case of Bangladesh', *International Journal of Accounting*, vol. 29, no. 3, pp. 62-77.
- ATA 2001, *The airline handbook—online version*, Air Transport Association, viewed 10 Oct 2001, <<http://www.airlines.org/public/publications>>.
- Airline Business 1998, 'Airline ownership survey: Lords and masters', *Airline Business*, vol. 14, no. 7, pp. 63-66.
- AlNajjar, FK 1995, 'Determinants of social responsibility disclosure of US Fortune 500 firms: An application of disclosure analysis', Paper presented at the *National Meeting of the American Accounting Association*, Orlando, Florida.
- Choi, JH and Wong, TJ 2002, 'Auditor choice and legal environments: an international investigation', paper presented at the *Accounting Association of Australia and New Zealand Conference*, Australia.
- Cooke, TE 1991, 'An assessment of voluntary disclosure in the annual reports of Japanese corporations', *International Journal of Accounting Education and Research*, vol. 26, no. 3, pp. 174-189.
- Cooke, TE 1992, 'The impact of size, stock market listing and industry type of disclosure in the annual reports', *Accounting and Business Research*, vol. 22, no. 87, pp. 229-237.
- Cooke, TE and Wallace, RSO 1990, 'Financial disclosure regulation and its environment', *Journal of Accounting and Public Policy*, vol. 9, no. 2, pp. 79-110.
- Courteau, L and Zeghal, D 1999/2000, 'Timeliness of annual reports: An international comparison', *Accounting Enquiries*, vol. 9, no. 1, pp. 47-100.
- Cowen, SS Ferreri, LB and Parker, LD 1987, 'The impact of corporate characteristics on social responsibility disclosure: A typology and frequency-based analysis', *Accounting, Organizations and Society*, vol. 12, no. 2, pp. 111-122.
- Craig, RJ and Diga, JG 1998, 'Corporate accounting disclosure in ASEAN', *Journal of International Financial Management and Accounting*, vol. 9, no. 3, pp. 246-274.
- Craswell, AT and Taylor, SL 1992, 'Discretionary disclosure of reserve by oil and gas companies: An economic analysis', *Journal of Business Finance and Accounting*, vol. 19, no. 2, pp. 295-308.
- Dierkes, M and Coppock, R 1978, 'Europe tries the corporate social report', *Business and Society Review*, vol. 25, pp. 21-24.
- Dwyer, PD and Wilson, ER 1989, 'An empirical investigation of factors affecting the timeliness of reporting by municipalities', *Journal of Accounting and Public Policy*, vol. 8, no. 1, pp. 29-55.
- FASB 2001, 'Improving business reporting: Insights into enhancing voluntary disclosures', *Financial Accounting Standards Board*, viewed 20 March 2001, <<http://accounting.rutgers.edu/raw/fasb/brrp/BRRP2.PDF>>.
- Firth, M 1979, 'The impact of size, stockmarket listing and auditors on voluntary disclosure in corporate annual reports', *Accounting and Business Research*, vol. 9, no. 36, pp. 273-280.
- Foster, G 1986, *Financial statement analysis*, Prentice-Hall Publishing, Englewood Cliffs.
- Freeman, RE 1983, 'Strategic management: A stakeholder approach', *Advances in Strategic Management*, vol. 1, no. 1, pp. 31-60.

- Gallacher, J and Odell, M 1994, 'Dragging along', *Airline Business*, vol. 11, pp. 25-42.
- Gonenc, R and Nicoletti, G 2001, 'Regulation, market structure and performance in air passenger transportation', *OECD Economic Studies*, OECD Publications and Information Centre.
- Gray, R Kouhy, R and Lavers, S 1995a, 'Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure', *Accounting, Auditing and Accountability Journal*, vol. 8, no. 2, pp. 47-77.
- Gray, R Kouhy, R and Lavers, S 1995b, 'Constituting a research database of social and environmental reporting by UK companies: A methodological note', *Accounting, Auditing and Accountability Journal*, vol. 8, no. 2, pp. 78-101.
- Gray, R Owen, D and Maunders, K 1987, *Corporate Social Reporting: Accounting and Accountability*, Prentice-Hall, London.
- Guthrie, JE and Parker, LD 1989, 'Corporate social reporting: A rebuttal of legitimacy theory', *Accounting and Business Research*, vol. 19, no. 76, pp. 343-352.
- Guthrie, JE and Parker, LD 1990, 'Corporate social disclosure practice: A comparative international analysis', *Advances in Public Interest Accounting*, vol. 3, no. 2, pp. 159-176.
- Hackston, D and Milne, M 1996, 'Some determinants of social and environmental disclosures in New Zealand companies', *Accounting, Auditing and Accountability Journal*, vol. 9, no. 1, pp. 77-108.
- Hanlon, P 1996, *Global airlines competition in a transnational industry*, Butterworth Heinemann, Oxford.
- Hossain, M Tan, LM and Adams, M 1994, 'Voluntary disclosure in an emerging capital market: Some empirical evidence from companies listed on the Kuala Lumpur stock exchange', *International Journal of Accounting Education and Research*, vol. 29, no. 3, pp. 334-351.
- Hossain, M Perera, HB and Rahman, AR 1995, 'Voluntary disclosure in the annual reports of New Zealand Companies', *Journal of International Financial Management and Accounting*, vol. 6, no. 1, pp. 69-87.
- IATA 2000, 'World air transport statistics', 44th Edition, International Air Transport Association, London.
- IATA 2001, 'World air transport statistics', 45th Edition, International Air Transport Association, London.
- IATA 2001b, *Deep vein thrombosis (DVT) and air travel*, International Air Transport Association, viewed on 13 June 2001, <<http://www.iata.org/pr/pr01feba.htm>>.
- IATA 2001c, Safety strategy 2000+, International Air Transport Association, viewed on 13 June 2001 <<http://www.iata.org/pr/pr01febd.htm>>
- IATA 2007, *Economic Briefing: June 2007*, International Air Transport Association, viewed 22 Feb 2008 <http://www.iata.org/NR/rdonlyres/4A49F6DA-2B12-48A9-A283-E035AEA5D165/0/Airline_Labour_Cost_Share.pdf>
- Jensen, MC 1986, 'Agency costs of free cash flow, corporate finance, and takeovers', *American Economics Review*, vol. 76, no. 2, pp. 323-330.
- KPMG and IATA 1992, *Accounting Policies, Disclosure and Financial Trends in the International Airline Industry: A Survey Conducted by KPMG in Association with the International Air Transport Association*, International Air Transport Association, Montreal.
- Kusumo, S Tower, G Williams S and Taplin, R 1999, 'Determinants of voluntary disclosures in Indonesian listed companies' paper presented at the *Accounting Association of Australia and New Zealand Conference*, Adelaide.
- Lont, D and Duncan, K 1989, 'Timeliness of New Zealand corporate reporting' paper presented at the *Accounting Association of Australia and New Zealand Annual Conference*, Melbourne.
- Lyth, P (ed.) 1996, *Air Transport*, Scolar Press, England.
- Matthews, MR and Perera, MHB 1995, *Accounting Theory and Development*, 3rd Edition, Thomas Nelson, Melbourne.
- Meek, GK Roberts, CB and Gray, SJ 1995, 'Factors influencing voluntary annual report disclosures by US, UK and continental European multinational corporations', *Journal of International Business Studies*, vol. 26, no. 3, pp. 555-572.
- Nair, RD and Frank, WG 1980, 'The impact of disclosure and measurement practices on international accounting classifications', *The*

- Accounting Review*, vol. 55, no. 3, pp. 426-450.
- Ng, PP and Tai, BY 1994, 'An empirical examination of the determinants of audit delay in Hong Kong', *The British Accounting Review*, vol. 26, no. 1, pp. 43-59.
- Nobes, C 1992, *International classification of financial reporting*, 2nd Edition, Croom Helm, London.
- Nobes, C 1998, 'Towards a general model of the reasons for international differences in financial reporting', *Abacus*, vol. 34, no. 2, pp. 162-187.
- Nobes, C and Parker, R 2000, *Comparative international accounting*, 6th Edition, Pearson Education Limited, Harlow.
- OECD 1988, *Deregulation and airline competition*, Organisation for Economic Co-operation and Development, Paris.
- Purushothaman, M Tower, G Hancock, P and Taplin, R 2000, 'Determinants of corporate social reporting practices of listed Singapore companies', *Pacific Accounting Review*, vol. 12, no. 2, pp. 101-135.
- Roberts, RW 1992, 'Determinants of corporate social responsibility disclosure', *Accounting, Organizations and Society*, vol. 17, no. 6, pp. 595-612.
- Schaltegger, S and Burritt, R 2000, *Contemporary environmental accounting issues, concepts and practice*, Greenleaf Publishing, Sheffield.
- Simon, DT Teo, S and Trompeter, G 1992, 'A comparative study of the markets for audit services in Hong Kong, Malaysia and Singapore', *The International Journal of Accounting*, vol. 27, no. 3, pp. 234-240.
- Singhvi, SS and Desai, HB 1971, 'An empirical analysis of the quality of corporate financial disclosure', *Accounting Review*, vol. 46, no. 1, pp. 129-138.
- Straszheim, N 1969, *The international airline industry*, The Brookings Institution, Washington.
- Tan, CW 1999, 'Empires of the sky: Determinants of global airlines' accounting policy choice decisions', *Honours Thesis*, Commerce Department, Murdoch University, Perth.
- Tan, CW Tower, G Hancock, P and Taplin, R 2002, 'Empires of the sky: Determinants of global airlines' accounting-policy choices', *The International Journal of Accounting*, vol. 37, no. 2, pp. 277-299.
- Tan, LT Kidman, ZA and Cheong, PW 1990, 'Information needs of users and voluntary disclosure practices of Malaysian listed corporations', *Malaysian Accountant*, pp. 2-6.
- Taylor, P and Turley, S 1986, *The regulation of accounting*, Basil Blackwell, Oxford.
- Trotman, KT and Bradley, GW 1981, 'Associates between social responsibility disclosure and characteristics of companies', *Accounting Organizations and Society*, vol. 6, no. 4, pp. 355-362.
- Wallace, RSO Naser, K and Mora, A 1994, 'The relationship between the comprehensiveness of corporate annual reports and firm characteristics in Spain', *Accounting and Business Research*, vol. 25, no. 97, pp. 41-53.
- Watts, RL and Zimmerman, JL 1986, *Positive accounting theory*, Prentice Hall, Englewood Cliffs.
- Williams, S.M. (1999) "Voluntary environment and social accounting disclosure practices in the Asia-pacific region: An international empirical test of political economy theory" *The International Journal of Accounting*, 34 (2), 209-238.
- Yergin, D., Vietor, R., and Evans, P. (2000) "Fettered flight: globalization and the airline industry" Cambridge Energy Research Associates, 1-61.

ENVIRONMENT EXTRA!

STRONG DEMAND FOR TRIPLE BOTTOM LINE REPORTING

5 December 2007

Reprinted with permission of CPA Australia

Australians strongly support the introduction of a carbon emissions trading scheme within five years and mandatory reporting of water use in company annual reports, according to CPA Australia's sixth annual *Confidence in corporate reporting 2007* survey, released today.

The overwhelming view emerged as part of strong support for laws requiring companies to prepare sustainability reports that reveal the social and environmental impacts of their activities, and for these reports to be independently reviewed.

CPA Australia chief executive officer Geoff Rankin said that the findings are further evidence of the growing demand in Australia for triple bottom line reporting.

'Sustainability type information is crucial to business decision making. While we understand the impulse to make this type of reporting mandatory, going down such a path would be a mistake,' Mr Rankin said.

The capacity of business to undertake mandatory sustainability reporting is unclear. What's more, prescriptive regulation is likely to lead to a one-size fits all approach which is inconsistent with the nature of sustainability information.

'We believe that sustainability reporting must be allowed to evolve through market and voluntary mechanisms and cannot be short-circuited through pre-emptive regulation.'

Mr Rankin said the majority of those surveyed wanted companies to report on environmental performance and the use of natural resources by their suppliers.

Of those surveyed, ninety-one per cent of the Australian public wanted companies' water use to be made public, with 84 per cent of finance professionals also strongly

supportive of this measure and business leaders showing the least support, but still with 76% in favour of the move.

'Many Australian households are now subject to varying levels of water restrictions, so it is not surprising that they want to know how much water corporate Australia is using,' Mr Rankin said.

CPA Australia has also recently partnered with Monash University to research how accounting for water can enhance the way government and business manage this precious resource.

There was also strong support (79%) for the introduction of a carbon emissions trading scheme within five years.

'CPA Australia is extremely active on the accounting and audit issues associated with an emissions trading scheme. They need to be tackled with urgency. Only last week I wrote to the Chairman of the International Accounting Standards Board encouraging him to take action on this issue.'

The survey results also show that an unfavourable environmental reputation is a substantial disadvantage for a company as most Australians would be discouraged from:

- Working for a company with an unfavourable environmental reputation (86%)
- Investing (85%)
- Buying products or services (85%)
- Providing services or supplies (69%)

'These findings send a clear message to business—sustainability issues matter. Ignore them at your peril.'

The survey found Australians use a range of sources of information when choosing socially and environmentally responsible investments.

The most favoured sources are financial advisers and annual reports, while fund managers also rely on investor briefings and ratings agencies. CPA Australia asked the same question as part of a previous survey and found that financial advisors and ratings

agencies were most favoured by respondents in 2005.

Mr Rankin said that he believed the preference for annual reports is a positive indication of an improvement in the quality and usefulness of the social and environmental information contained in annual reports.

Mr Rankin said that CPA Australia would equip its members to successfully manage and report sustainability information.

Background to survey

CPA Australia's sixth annual *Confidence in corporate reporting 2007* was conducted during October and November and surveyed 300 members of the public, as well as 200 directors/CEOs/CFOs, 150 financial analysts, advisers and stockbrokers, 100 auditors and 44 institutional investors and fund managers.

The 2007 survey captured their perceptions in four broad areas:

- confidence in investments and business professionals
- sustainability policy and reporting
- corporate governance
- new audit standards

The survey was commissioned by CPA Australia and undertaken by independent research organisation Di Marzio Research.

This article is available at

http://www.cpaustralia.com.au/cps/rde/xchg/cpa/hs.xsl/1019_24968_ENA_HTML.htm

WESTPAC REPORT PRODUCES MIXED SUSTAINABILITY RESULTS

17 December 2007

Christine Ahern

Courtesy of *Environmental Management News*
<http://www.environmentalmanagementnews.net>

Westpac reduced greenhouse emissions by 45% since 1996 but failed to meet its internal year-on-year reduction target of 5% for the past year, achieving instead a reduction of 1%. However, it made strong gains in minimising its indirect environmental impact, with the company

rolling out a sustainable supply chain code of conduct across all business units.

The *2007 Stakeholder Impact Report* said for Westpac's direct environment impact "it is fair to say that our performance has been mixed" for the past year. Its direct environmental impact is a result of activities ranging from the energy its buildings consume to the paper the company uses.

Westpac said the failure to meet an emission reduction target of 5% for the past year was in part due to the opening of three new business banking sites and ten new retail branches, as well the employment of 800 new people, largely in customer service roles.

Senior Sustainability advisor Emma Herd told EMN the company is developing a site-by-site map of energy consumption across its buildings. Currently, energy use accounts for about 96% of the company's total greenhouse emissions, so this is an area where strong gains can be made in reducing Westpac's environmental impact.

Mapping energy use across buildings will help Westpac identify and measure energy use so consumption can be managed throughout its properties, Herd said.

Westpac has an IT Equipment Purchasing Policy in place that requires energy efficiency be a core criterion for choosing computers to be used in offices and data centres. Herd said other strategies that will be rolled out to reduce energy use include focusing on raising awareness in the workplace of how employees can reduce energy use and using energy efficient technology for lighting and appliances.

To reduce its indirect environmental impact, Westpac rolled out the *Sustainable Supply Chain Management* (SSCM) code of conduct this year. Herd said the policy sets minimum sustainability requirements every supplier must work toward.

Herd said Westpac has had positive feedback from suppliers regarding this policy. Suppliers often commented that setting up requirements provided them with the incentive to change practices and

introduce goals to lift their environmental performance.

Herd said the Westpac Climate Change Strategy, including targets for energy and greenhouse emission reductions, will be finalized sometime around February. Without commenting yet on specific details of the strategy, Herd said the targets will be far reaching and will be signed off by board members.

WA BILL EXTENDS RECYCLING RESPONSIBILITY TO PRODUCERS

17 December 2007

Christine Ahern

Courtesy of *Environmental Management News*
<http://www.environmentalmanagementnews.net>

The Waste Avoidance and Resource Recovery Bill (WARR) passed through the West Australian Parliament with provisions for the establishment of an *Extended Producer Responsibility (EPR)* scheme. John Lawson from the *Australian Council of Recyclers (ACOR)* said it is an encouraging development but a national EPR scheme is necessary to provide incentives for increased recycling.

WA Environment Minister, David Templeman, said a feature of the Bill is the creation of a new statutory *Waste Authority* to drive significant improvements in waste management and recycling.

‘The Waste Authority’s first priority will be to set out a comprehensive strategic five to 10-year plan on how we can achieve a major reduction in waste going into landfill across WA,’ Templeman said.

‘We have also increased landfill levies, which provide resources for the new Waste Authority to invest in programs and activities for reducing waste across state and local government, business and industry and the community.’

The current levies are \$3 for inert waste and \$6 for putrescible.

Templeman hosted a waste summit in September called *Partnering for Success: The Road to Best Practice*, attended by a

range of local government representatives, where he discussed the WARR Bill.

He said the rationale for increasing landfill levies was to reduce the finance burden on councils. He said local government should not have to pick up all of the costs associated with waste management.

The EPR scheme in the WARR Bill was also discussed by Templeman at the September summit. He said the scheme would provide incentives for manufacturers to take more responsibility for goods they produce over their lifecycle and consider disposal when designing products.

John Lawson from ACOR told EMN it is important state governments build regulatory capacity for EPR schemes but the best solution is to introduce a national EPR scheme. NSW and now WA are now the only states with EPR powers in place.

Lawson said ACOR has been working with NSW regulators and environmental groups to include dangerous goods such as lead acid batteries and gas bottles under NSW EPR schemes.

The environmental NGO Total Environment Centre released a report in November which called for the introduction of a national EPR scheme for used toxic lead acid batteries (ULAB) to prevent the one million ULABs ending up in landfill every year.

The report said the NSW Government identified ULABs as a ‘waste of concern’ and a candidate for an EPR scheme. However, NSW Environment Minister Phil Koperberg has so far opted for a voluntary approach, with little success.

BUSINESS EMISSIONS DATA NOT UP TO STANDARD: PWC SURVEY

Thursday, 31 January 2008

Christine Ahern

Courtesy of *Environmental Management News*
<http://www.environmentalmanagementnews.net>

Only 2% of Australia’s largest companies have a high level of confidence in their company’s greenhouse emissions data and 36% have no data about their business

emissions at all, according to a new *PricewaterhouseCoopers* (PwC) survey. PwC says swift action is needed in the climate of growing regulatory requirements and demand from investors for robust emissions data.

Only 8% of the CEOs or CFOs from 303 Australian companies with annual turnovers of at least \$150 million surveyed for the report *Carbon Countdown* feel they fully understand emissions reduction opportunities and risks, which PwC says is not surprising given the lack of confidence in baseline emissions data.

Furthermore, 98% of those surveyed say they are yet to implement a strategic response to climate change.

Andrew Petersen from PwC says the report highlights the need for companies to establish effective emissions reporting systems. He added experience in Europe shows business needs to be prepared for an *Emissions Trading Scheme* (ETS) that will come into effect in Australia by 2010.

‘Poor quality and unverified data was responsible for much of the early volatility in the start-up period of the EU emissions trading scheme,’ he said.

‘Australia is now in fortunate position to benefit from the lessons learnt in Europe by sourcing the critical investment-quality emissions data. This is one area that can give Australia a competitive advantage when it comes to creating a rational and robust trading scheme.’

The *National Greenhouse and Energy Reporting Act 2007* will add to pressure for companies to set up robust emissions data reporting systems. Some 700 companies are expected to disclose information regarding greenhouse emissions and energy use data under this scheme that will take effect from July.

Pressure is also coming from investors, with many beginning to assess how

companies are placed to deal with climate change risks and opportunities and demanding greater transparency in corporate responses to climate change.

The survey found 80% of respondents did not factor in climate change opportunities and risks when completing their annual reports or when discussing opportunities and risks with stakeholders.

Highlighting the exposure of the resource sector (mining and energy) to carbon risk, all of them claim climate change will be a risk to their business by 2012. Furthermore, 74% have already assessed risk at the board level, compared to the 4% industry average. Some 28% of resources companies have established a budget to respond to climate risks and opportunities, compared to 5% of the total sample. Nearly all (92%) of these organisations are formally factoring a value for carbon into their capital expenditure decisions, as opposed to 20% of total.

NATIONAL GREENHOUSE AND ENERGY REPORTING ACT 2007, AUSTRALIA

In the black March 2008, pp.28-33

Deborah Tarrant

In ‘Calculating your business carbon footprint’ Deborah draws attention to the fact that for big business and large emitters in Australia regulation is a matter of months away. Details of the requirements for reporting Scope 1 and Scope 2 emissions from 1 July 2008 are provided in the *National Greenhouse and Energy Reporting Act 2007*.

CALL FOR PAPERS

2008 NORTH AMERICAN CONGRESS ON SOCIAL AND ENVIRONMENTAL ACCOUNTING RESEARCH

1st CSEAR Summer School in North America **7-9 July 2008** at Concordia University, Montreal, Canada.

2nd Call for papers

The Centre for Social and Environmental Accounting Research (CSEAR) has held an annual conference in the UK for almost two decades.

Similar to the *CSEAR UK Summer School*, the Congress will be an informal gathering of researchers, teachers, students and practitioners concerned with social and environmental accounting, teaching and research in the widest sense. Limited to a maximum of 60 delegates, the emphasis is on a high level of interaction, discussion, and debate in a friendly, supportive, and relaxed atmosphere.

To inaugurate CSEAR in North America, the plenary speaker will be **Professor Rob Gray**, Professor of Social and Environmental Accounting at the *University of Saint Andrews, School of Management* and Director of the *Centre for Social and Environmental Accounting Research*.

Contact

Charles Cho at ccho@jmsb.concordia.ca or **Conference website** http://johnmolson.concordia.ca/csear_na_2008/

Registration deadline: April 15, 2008

Deadlines: Both *full* and *research-in-progress* papers are welcome. The deadline to submit abstracts is **February 28, 2008** (approximately 500-800 words), and the deadline to send full/research-in-progress papers is **April 15, 2008**.

Montreal in July is a very fun and active city, especially during the summer. There are several interesting museums and many festivals such as the *International Jazz Festival*, the *Just for Laughs Festival*, the *International Nuits d'Afrique Festival* and

many more will take place at that time! For details see http://www.go-montreal.com/attraction_events.htm

11TH ANNUAL CONFERENCE OF EMAN

OCTOBER 6-7 2008 BUDAPEST

Sustainability and corporate responsibility accounting—Measuring and managing business benefits

Hosted by the *Institute for Environmental Sciences* Corvinus University of Budapest, Budapest, Fővám tér 8, H-1093.

The conference will focus on the assessment of business benefits that can be realized through improvements towards sustainability and CSR performance. Specific topics which will be addressed in the conference include:

- Measuring business benefits of sustainability and CSR
- Environmental benefit accounting
- Tools and experiences for CSR and sustainability performance measurement in EMA
- Measuring the contribution of environmental performance to corporate value
- Sustainability issues in EMA
- New methods and procedures in environmental accounting
- Social performance and business success
- Stakeholder influence on EMA
- Sustainability accounting at the macro level (evaluation of environmental amenities, and indicators of development)
- New theoretical contributions to the field of environmental accounting
- Country studies, case studies, surveys and empirical analyses of innovative approaches

Call for abstracts

Contributions are invited from researchers and practitioners. Download the template for your abstract from <http://enman2008.uni-corvinus.hu>. Email your abstract as PDF to eman2008@uni-corvinus.hu with "EMAN 2008 Abstract - [your name]" in the subject and contact details and title in the body.

Dates

Abstracts: May 31

Extended Abstracts: August 31,

PowerPoint slides: September 30.

Organising committee

S Kerekes M Csutora

Z Szerényi PhD A N Zsóka PhD

S Luda L Baritz

All correspondence to: Gábor Harangozó

gabor.harangozo@uni-corvinus.hu

Venue: Institute for Environmental Sciences, Corvinus University of Budapest

Follow up conference—October 8

Sustainable Consumption

Organised by Gyula Zilahy of the *Hungarian Cleaner Production Centre*.

Separate registration is needed
gyula.zilahy@unicorvinus.hu

ENVIRONMENTAL MANAGEMENT ACCOUNTING NETWORK

Following the successful publication of four books in the Environmental Management Accounting Network's (EMAN's) series of books of leading papers on *Environmental Management Accounting* by Springer Publishers, and with the fifth *Environmental Management Accounting for Cleaner Production* currently in print, we call for papers for the sixth book in this series: *Environmental management accounting and sustainable supply chain management*.

The principal theme of this book will be EMA and Sustainable Supply Chain Management, which was the theme of last year's EMAN-Europe conference in Helsinki, but following our usual practice it will also offer a channel for publication of papers on any relevant and worthwhile aspect of environmental and sustainability accounting and reporting. It will therefore include a refereed and edited selection of

both the best conference papers which were presented at the two EMAN conferences in 2007, in Helsinki and Pretoria respectively, and other quality papers related to the topic of EMA (interpreted broadly). We therefore invite you to submit a paper to be considered for publication in this book.

Theoretical papers or broad empirical studies should normally be between 5,000 and 7,000 words, and papers containing case studies between 3,000 and 5,000. In order to secure a high quality publication, all papers will be double-reviewed. Submitted papers should be of original quality and should make clear their relevance to accounting and sustainable supply chain management, or sustainability and environmental management accounting or to managerial practice and or academic significance.

In format and presentation, papers should follow the *submission guidelines for prospective authors* available on the EMAN website www.eman-eu.net.

To publish the book as promptly as possible, we ask you to submit the paper by **31 May 2008**. Please send the full paper including figures and appendices as a Word document attached to an e-mail to: submissions@uni-lueneburg.de

Contact an editor if the deadline presents a problem, or you would like to discuss something in connection with your paper. We look forward to your contribution.

Martin Bennett mbennett@glos.ac.uk
Roger Burritt Roger.Burritt@unisa.edu.au
Stefan Schaltegger schaltegger@uni-leuphana.de
Tuula Pohjola tuula.pohjola@kolumbus.fi
Maryna Mohr Swart mmohrswart@bullion.org.za
