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Editorial Volume 6 Issue 2

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Abstract

This issue of AABFJ has several finance articles from a New Zealand context. Koerniadi and Tourani-Rad (2012) examine board independence and firm value. Goslin, Chai and Gunasekarage (2012) consider whether financial statement information can be used to earn abnormal returns. Finally, Yahanpath and Koh (2012) look at bond covenants and the extent to which they offer protection to bondholders.

Keywords

Editorial, AABFJ

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Editorial Volume 6 Issue 2

Ciorstan Smark[1*]

This issue of AABFJ has several finance articles from a New Zealand context. Koerniadi and Tourani-Rad (2012) examine board independence and firm value. Goslin, Chai and Gunasekarage (2012) consider whether financial statement information can be used to earn abnormal returns. Finally, Yahanpath and Koh (2012) look at bond covenants and the extent to which they offer protection to bondholders.

On the accounting side, Faisal, Tower and Rusmin (2012) examine corporate sustainability disclosures in a global context. Also on a disclosure theme, Harun and Kamase (2012) use an institutional framework to examine a change in local government reporting in Indonesia. Lam, James and Leung (2012) offer a personal reflection on the transformative potential of education. In a brief technical note, Iskra (2012) considers how well current default superannuation investment strategies meet the needs of people nearing retirement.

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Does Board Independence Matter? Evidence from New Zealand

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This paper examines the effects of the presence of independent directors on firm value using both market-based performance measures (Tobin's Q ratio and EVA) and accounting-based ratios (ROA and ROE). We find that, instead of adding value, independent directors in New Zealand negatively affect firm value. We also find that, consistent with stewardship theory, independent directors have a positive effect on firm value only when they are in the minority. These findings are important given the increasing trend toward independence in corporate boards around the globe and suggest that board independence may not generally be suitable for countries where managers are considered as active partners along with other stakeholders in companies.

Keywords

Independent directors, firm performance, stewardship theory, EVA

Cover Page Footnote

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This article is available in Australasian Accounting, Business and Finance Journal: https://ro.uow.edu.au/aabfj/vol6/iss2/2

Does Board Independence Matter? Evidence from New Zealand

Hardjo Koerniadi[1] & Alireza Tourani-Rad[1]

Abstract

This paper examines the effects of the presence of independent directors on firm value using both market-based performance measures (Tobin's Q ratio and EVA) and accounting-based ratios (ROA and ROE). We find that, instead of adding value, independent directors in New Zealand negatively affect firm value. We also find that, consistent with stewardship theory, independent directors have a positive effect on firm value only when they are in the minority. These findings are important given the increasing trend toward independence in corporate boards around the globe and suggest that board independence may not generally be suitable for countries where managers are considered as active partners along with other stakeholders in companies.

Keywords: Independent directors, firm performance, stewardship theory, EVA

JEL Classification:G30, M40.

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Introduction

In response to major corporate failures in the last decade or so, public authorities around the world have introduced new governance codes and guidelines. Among other aspects, they focus on board composition and conduct, particularly emphasising the independence of boards. Independent directors, considered to be the "custodians of the governance process," are assumed to have less or no conflicts of interest in the companies they serve. The justification is that board members with a connection to the company or its management do not assess company performance impartially and might even collude with managers, as they could have a vested interest in the company's business dealings. The presence of independent directors on boards is supposed to add more value, as these directors impartially oversee the executive directors. This concept seems to have been accepted as conventional wisdom around the world. Many corporate governance advocates suggest that a board should be made up of all or a majority of independent directors, while others suggest that a board should include a balance of independent and executive directors (see for example, American Law Institute 1994; Business Roundtable 2010; Council of Institutional Investors 2011; Financial Markets Authority 2004). Although the use of independent directors has become increasingly accepted, especially in Anglo-American countries where the stock market performance of listed companies attracts a great deal of interest from the public, some scholars question its rationale (e.g., Bhagat & Black 2002; Black, De Carvaho & Gorga 2010; Chhaochharia & Grinstein 2007; Coles, Daniel & Naveen 2008; Donaldson & Davis 1991; Duchin, Matsusaka & Ozbas 2010; Hermalin & Weisbach 1991; Muth & Donaldson 1998; Nicholson & Kiel 2007). These critics argue that monitoring by independent directors can be ineffective. They point out that, while independent board members could be independent in their evaluation of corporate performance, they usually have much less knowledge of the company and their judgment is largely based on (biased) information provided by the managers. Moreover, while the profile of independent board members is clearly defined by law and regulations, there is a small pool of talented independent directors available in many smaller countries, ultimately forcing corporations to have either time-constrained skilled independent board members who hold multiple positions or less competent independent directors on their boards. In recent years, a growing trend in hiring outside professionals has prompted researchers to investigate whether their presence actually has a positive impact on corporate performance.

The existing literature does not demonstrate a definitive relationship between board composition and corporate performance. Empirical evidence on the association between the presence of independent directors and firm performance is equivocal. Independent directors, for example, have been reported to have a positive effect on firm performance in several European countries (Krivogorsky 2006), New Zealand (Hossain, Prevost & Rao 2001), Korea (Black Jang & Kim 2006), Scandinavia (Oxelheim & Randoy 2003) and Chile (Lefort & Urzua 2008). However, except for small firms (Daily & Dalton 1992), the presence of independent directors on corporate boards in the US has been observed to have a negative impact on firm performance (Agrawal & Knoeber 1996; Bhagat & Black 2002; Dalton et al. 1998; Hermalin & Weisbach 1991; Yermack 1996). Similar results have been documented for Canadian firms (Klein, Shapiro & Young 2004, 2005), Australian firms (Lawrence & Stapledon, 1999) and Brazilian firms (Black et al. 2010). The negative effect of independent directors on firm performance certainly contradicts the accepted corporate governance norms that favor board independence. Additionally, there are several other studies reporting that independent directors have no significant effect on firm performance whatsoever (see, for example, Adjaoud, Zeghal & Andaleeb 2007; Pham, Suchard & Zein 2008). More recently, Erkens, Hung and Matos (2010) observed that board independence was negatively correlated

with accumulated stock returns during the 2007 financial crisis, whereas Duchin et al. (2010) reported that outside directors can increase (decrease) firm value when information cost is low (high). All of these studies suggest that the verdict on the usefulness of independent directors is far from settled and that we cannot develop a generalised conclusion based on international evidence.

In this paper, we investigate if "board independence matters" using data from New Zealand, which has a much smaller capital market in both absolute and relative (to its GDP) terms as compared with many other developed markets. We believe that the New Zealand market provides an interesting setting to explore this issue for several reasons. First, the proportion of independent directors on New Zealand firm boards has been increasing since the introduction of the New Zealand Corporate Governance Best Practice Code in October 2003 to such an extent that currently independent directors form the majority on corporate boards. A previous study of New Zealand covered a period when the concept of independence had just been introduced and independent board members were a minority. It is necessary to investigate a more recent period reflecting more recently accepted practices. Second, listed New Zealand firms have quite a high ownership concentration. As the impact of independent directors on firm performance in highly concentrated ownership firms has still not been settled (Klein et al. 2005, Krivogorsky 2006; Lefort & Urzua 2008), the results from our study are expected to contribute to the debate in the literature. Third, a recent study has contended that directors of New Zealand firms put less weight on their monitoring role and are evolving towards a more collaborative role with management (Anderson, Melanson & Maly 2007). These changes in the directors' views and practices are more consistent with stewardship theory than with agency theory. In addition to traditionally employed measures such as Tobin's Q and accounting performance measures, we further contribute to the literature by employing Economic Value Added (EVA) as an alternative performance measure to examine the effects of independent directors on firm value.

Our results generally indicate that, instead of adding value, independent directors in New Zealand have a negative impact on firm values which is in line with recent findings in this literature (Black et al. 2010; Chhaochharia & Grinstein 2007; Duchin et al. 2010) This finding is important given the increasing trend of independence in New Zealand firm boards and suggests that board independence, which is considered to be a better monitoring function, may not be suitable for firms in this country.

The remainder of the paper is organised as follows. The next section briefly reviews the relevant literature linking independent directors to firm performance and develops our hypotheses. The third section describes the methodology and data. The fourth section discusses the results and the fifth shows the robustness of the results while the final section concludes.

Literature Review and Hypothesis Development

Why do independent directors in different countries have different effects on firm performance? It is well known that corporate performance and its relationship to the board need to be studied within the broader picture of the corporate structure and governance of a country. One possibility is the institutional and corporate structure differences among the countries studied. For example, the level of ownership concentration may influence the effectiveness of independent directors in monitoring firm performance (Lawrence & Stapledon 1999). This is an important issue to be considered in the present study. Healy (2003) documented that institutional ownership is approximately 76% in New Zealand, which is much higher than in the US or the UK, where institutional ownership is 39.8% and 60.8%, respectively. The high level of ownership concentration in New Zealand could act as a

substitute for the weak legal protection of investors and its less developed capital market (Mikkelson & Partch 1997; Shleifer & Vishny 1997). Highly concentrated ownership could increase the alignment of incentive of managers and large shareholders, which would minimise agency problems, resulting in improved firm performance. It could also be argued that a high level of ownership concentration can cause an "entrenchment effect" and have negative effects on company performance and valuation (Morck, Shleifer & Vishny 1988). That is, at higher levels of ownership concentration, large shareholders may make suboptimal decisions that benefit their own interests at the expense of minority shareholders, which could deteriorate the firm's performance and valuation. The empirical evidence on the relationship between independent directors and the performance of highly concentrated ownership firms is mixed. Klein et al. (2004, 2005) reported a negative relationship between performance and the presence of independent directors of highly concentrated ownership firms in Canada, while several other studies have found a positive relation for similar firms, for example, in New Zealand (Hossain, Prevost & Rao 2001), European countries (Krivogorsky 2006) and Chile (Lefort & Urzua 2008).

Another possibility for the mixed results on the impact of independent directors on firm performance could be the choice of performance measure. Most previous studies used Tobin's Q to measure firm performance. Tobin's Q, however, does not always indicate firm performance. It could also reflect growth opportunities related not to managerial decisions but to external conditions (Pham, Suchard & Zein 2007). Because the effects of independent directors on firm performance may differ depending on the performance measures used, different measures of firm performance may produce different results (Krivogorsky 2006; Lawrence & Stapledon 1999). A recent study by Elali (2006) found that Economic Value Added (EVA) outperforms Tobin's Q in explaining shareholder wealth. Except for Adjaoud et al. (2007) and Pham et al. (2008), there have been a limited number of studies that directly examine the effects of independent directors on firm performance using EVA as a performance measure. Interestingly, both studies report an insignificant relationship between board independence and EVA.

A further possibility for the ambiguous results could be that not *all* independent directors are truly independent or add value (Bhagat & Black 2002). In a recent paper, Cohen, Frazzini and Malloy (2010) showed that, in the US, while firms technically appoint independent directors based on regulatory definition, in reality, the independent directors are overly sympathetic to management. Based on a hand-collected database, the authors found that financial analysts who were overly optimistic regarding the firms' performance in the past were more likely to be appointed as independent directors of those firms. Furthermore, the issue of whether the independent directors are in the majority could also play a role. In studies documenting a positive relationship between independent directors and firm performance, the mean proportion of independent directors is less than 50% (see for example, Agrawal & Knoeber 1996; Black et al. 2006; Dalton et al. 1998; Hossain, Prevost & Rao 2001; Krivogorsky 2006; Lefort & Urzua 2008; Mura 2007; Oxelheim & Randoy 2003; Yermack 1996). These results could suggest that independent directors add value when they are in the minority on the board.

Previous literature on the relationship between board composition and firm performance generally recognises two theories: agency theory and stewardship theory (Nicholson & Kiel 2007). Agency theory, which dominates the corporate governance literature, has its basis in the separation of ownership and management and the divergent interests between the two. As such, it requires control of management by boards of directors operating as agents for the owners. External directors are expected to be free from the influence of the firm's management, which allows them to perform their duties more effectively and provide more value than internal directors. Effective monitoring by

independent directors is expected to lower agency costs and increase firm performance (Baysinger & Butler 1985; Fama 1980; Jensen & Meckling 1976; Lefort & Urzua 2008).

Therefore, according to this theory, board independence should be positively associated with firm performance. Despite substantial research, as discussed earlier, on the relationship between boards and firm performance, the extant empirical results are far from conclusive.

Stewardship theory refutes the notion of self-interested managers, claiming that managers and non-independent directors are good stewards of the resources entrusted to them and can be trusted to maximise the value of firms. Managers are driven by non-financial motives, such as the need for achievement and recognition, the satisfaction of successful performance and a strong work ethic (Donaldson & Davis 1991; Muth & Donaldson 1998). Thus, demands for extensive monitoring and controls by external directors are not needed. Non-independent directors involved in the company on a daily basis are assumed to have a better commitment to the company and its goal. However, independent directors may not have the necessary skills and knowledge, may be less committed to the company and may "fail to support and empower management and reduce company performance" (Muth & Donaldson 1998, p. 10).

A recent study has found that, in the period after the New Zealand Corporate Governance Best Practice Code was introduced, directors of New Zealand firms viewed their roles more as active partners with management rather than as monitors (Anderson et al. 2007). As a matter of law in New Zealand, directors must act in what they consider to be the best interest of the company which may not necessarily mean acting in the best interest of shareholders. This is in line with the emerging view that the conventional notion of a board's control role, originating from agency theory, should expand to incorporate a service role "where the board is expected also to be more active in setting the strategic direction and decision making of the firm in conjunction with management" (Ingley & Karoui 2010, p.129). These collaborative views and practices are more consistent with stewardship theory than with agency theory.

The controversy regarding the role of internal and external directors is at the heart of both agency and stewardship theory. We investigate which of these theories is more relevant and supportive of the current situation in New Zealand. We contend that, when there is a majority of internal directors in firms, it could be beneficial for firms. Therefore, our hypotheses are as follows:

H_1: Independent directors are negatively related to firm performance.

H_2: Independent directors add value as long as they are the minority on a board.

Data and Methodology

Data

We obtain financial data of firms listed in New Zealand from the NZX Deep Archive database from 2004 to 2006 and hand collect corporate governance information from the firms' annual reports. We exclude firm-year observations that do not have the necessary variables to run the regression model and extreme firm performance variables below the 1st percentile and above the 99th percentile. The final sample consists of 182 firm-year observations.

Methodology

We examine the effects of independent directors on firm performance by regressing measures of firm performance as the dependent variable on several corporate governance and control variables. The performance measures that we use are: EVA, Tobin's Q, ROA and ROE. Tobin's Q is measured as the sum of the market value of equity and the book value of debt divided by total assets. ROA is calculated as the net income divided by total assets, and ROE is calculated as the net income divided by total equity.
EVA is defined as:

$$EVA = IC \times (ROIC - WACC). \quad (1)$$

where:

IC = Invested capital at the beginning of the year calculated as total assets at t-1 and non-interest-bearing liabilities at t-1
ROIC = Return on Invested Capital = NOPLAT/invested capital at the beginning of the year
NOPLAT = EBIT – taxes + changes in balance sheet deferred taxes
Taxes = Income tax + tax shield on interest expense
WACC = Weighted Average Cost of Capital
We deflated EVA by 1,000,000 so that the scale would be consistent with that of the other variables (Adjaoud et al. 2007).

To examine the relationship between the proportion of independent directors and firm performance, we use the following model:

$$\begin{aligned} Performance_t = {} & \alpha + \beta_1 \% IND_t + \beta_2 BDSIZE_t + \beta_3 BUSY_t + \beta_4 ACSIZE_t + \beta_5 BLOCK_t \\ & + \beta_6 LEV_t + \beta_7 B/M_t + \beta_8 SIZE_t + \varepsilon_t \end{aligned} \quad (2)$$

The independent variable, % IND, is the proportion of independent directors and is calculated as the number of independent directors divided by the total number of directors. Independent directors are defined according to New Zealand Stock Exchange Listing Rules, i.e., as non-executive directors holding less than 5% of the voting securities and having no direct or indirect interest or relationship that could reasonably influence their objective judgment and decision making. The existing literature on board size (BDSIZE) and firm performance usually reports that board size is negatively correlated with firm performance (Eisenberg, Sundgren & Wells 1998; Larcker, Richardson & Tuna 2007; Yermack 1996). Smaller boards are expected to work more efficiently than larger boards. Furthermore, Larcker et al. (2007) reported that the busier the directors, the lower the firm performance. The variable BUSY is the percentage of busy independent directors. An independent director is classified as a busy director if he or she serves as a director at more than three other companies. Larcker et al. (2007) also found that firms with a greater proportion of blockholders exhibit superior operating performance. However, Hossain, Prevost and Rao (2001) and Bhagat and Black (2002) found that blockholders are negatively correlated with firm performance. BLOCK is the cumulative percentage of shares held by shareholders holding at least 5% of ordinary shares in the firm. As discussed earlier, this variable is important in our study, as the New Zealand listed firms generally have high levels of ownership concentration. We also include audit committee size (ACSIZE) in our analysis, as

audit committees are expected to enhance the monitoring role of directors. Finally, we incorporate several commonly used control variables into our regressions. These variables are LEV, the ratio of long-term debt to total assets; B/M, the book to market ratio; and SIZE, the natural logarithm of the market value of equities.

In studies of firm performance and its relationship to corporate governance factors, which, in our case, is board composition, the issue of endogeneity needs to be addressed (see for example, Agrawal & Knoeber 1996; Hermalin & Weisbach 1991). In addition to employing OLS regressions, we address this issue by using two-stage least square regressions. Following Hermalin and Weisbach (1991) and Dahya, Dimitrov and McConnell (2008), we use the lagged values of independent variables as instruments for independent directors. Similar to Rajgopal and Shevlin (2002), in this estimation procedure, we assume that firm performance and independent directors are the only endogenous variables.[2]

We further use lagged values of firm performance as independent variables (Hermalin & Weisbach 1991; Rajgopal & Shevlin, 2002) to examine whether the independent directors' choice to sit on a board is affected by the firm's past performance. To accomplish this, we include the percentage of shares owned by independent directors as a control variable (Whidbee 1997).

Our second hypothesis is that independent directors add value as long as they are in the minority on a board. To test this hypothesis, we replace %IND with a dummy variable (NIND) that takes the value of 1 if independent directors are the minority and takes 0 otherwise. The second model we use is the following:

$$\begin{aligned} Performance_t = \alpha + \beta_1 NIND_t + \beta_2 BDSIZE_t + \beta_3 BUSY_t + \beta_4 ACSIZE_t + \beta_5 BLOCK_t \\ + \beta_6 LEV_t + \beta_7 B/M_t + \beta_8 SIZE_t + \varepsilon_t \end{aligned} \quad (3)$$

Empirical Results

Table 1 presents descriptive statistics for the sample firms. On average, as shown by positive firm performance across the four performance measures, New Zealand firms are profitable. The results show that Tobin's Q is approximately 1.65, return on assets is 9.5% and return on equity is 19%. These returns are well above the average Official Cash Rate, the prime rate in New Zealand, of 6.6% during the same period. In terms of EVA, the sample firms did not experience a significant increase in value. The average EVA is only around $0.002 million, which is only 0.001% of the average firm size.

Our data also reveal that there are, on average, six directors on a board. The number of directors is lower than that of US firms, which is around 12 directors (Yermack, 1996; Bhagat and Black, 2002). Board independence ranges from no independence to fully independent. Typically, however, independent directors are the majority on a board. The mean proportion of independent directors is 0.52.

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[2] Our two-stage least square regression approach, however, is subject to some limitations. Some may view board size and blockholders as also endogenous. The inclusion of more than one endogenous variable, however, would involve the difficult task of finding instrumental variables for each equation (Holthausen, Larcker & Sloan 1995; Ittner & Larcker 2001; Rajgopal & Shevlin 2002). There is also a possibility that our system of equations is misspecified because of the omitted variable problem. However, according to Hausman tests that we conducted to examine whether independent directors and performance should be treated as endogenous, endogeneity is rejected for all four performance variables.

Table 1 further shows that, on average, about 40% of independent directors serve as directors in more than three other companies, which is on the lower end internationally. For instance, the percentage in the US is closer to 60%. The mean cumulative percentage of shares held by shareholders holding more than 5% is 45%, reflecting the fact that the ownership of listed firms in New Zealand is highly concentrated. This figure is close to that of Laporta et al. (1998), who reported the mean shares owned by blockholders in New Zealand at 48%. High ownership concentration can discourage efficiency-enhancing takeovers as a transfer of control can take place with the consent of only a limited number of large blockholders (Prevost, Rao & Hossain 2002). The presence of large blockholders could protect the board from external market discipline, which reduces value. But their presence could also enhance the effectiveness of independent directors in monitoring firm performance (Larcker et al. 2007).

Table 1

Sample descriptive statistics

	MEAN	SD	MIN	25TH	MEDIAN	75TH	MAX
Tobin's Q	1.647	1.348	0.341	0.948	1.169	1.853	8.243
ROA	0.095	0.119	-0.571	0.063	0.089	0.146	0.393
ROE	0.190	0.214	-0.874	0.105	0.170	0.297	0.812
EVA (in millions)	0.002	0.018	-0.126	-0.001	0.001	0.006	0.065
%IND	0.519	0.224	0.000	0.333	0.500	0.667	1.000
NIND	0.466	0.501	0.000	0.000	0.000	1.000	1.000
BDSIZE	6.165	1.660	2.000	5.000	6.000	7.000	12.000
BUSY	0.391	0.345	0.000	0.000	0.333	0.667	1.000
ACSIZE	3.363	1.077	0.000	3.000	3.000	4.000	7.000
BLOCK	0.451	0.250	0.000	0.259	0.465	0.655	0.944
LEV	0.422	0.195	0.020	0.290	0.406	0.550	1.228
B/M	0.765	0.868	-0.175	0.325	0.604	0.994	10.044
MKTVAL (in millions)	11.609	1.408	8.117	10.524	11.609	12.618	14.776

Notes:
Tobin's Q is measured as the sum of market equity and book value of debt, divided by total assets. ROA is return on assets. ROE is return on equity. EVA is invested capital at the beginning of year x (return on invested capital – weighted average cost of capital). %IND is the proportion of independent directors on a board defined as the number of independent directors/total number of directors. NIND is a dummy variable of 1 if a firm board is nonindependent. BDSIZE is total number of directors. BUSY is the proportion of independent directors who serve in more than three other companies. ACSIZE is the number of directors on the audit committee. BLOCK is the cumulative percentage of shares held by shareholders holding at least 5% of ordinary shares in the firm. LEV is long-term debt/total assets. B/M is book to market ratio and MKTVAL is the market value equity. There are 182 firm-year observations from 2004 to 2006.

Table 2 presents the correlations among the variables. Tobin's Q is not significantly correlated with the other three performance variables. ROA and ROE are highly correlated (0.79). EVA as a measure of value added is not highly correlated with these two accounting-based profitability measures. This finding could be seen as consistent with the views of the proponents of EVA that positive accounting-based profit measures do not always increase firm value.

As predicted, the correlations between the proportion of independent directors (%IND) and the three performance measures (ROA, ROE and EVA) are strongly negative.

Although statistically insignificant, negative performance relations are also observed for board size (BDSIZE). The proportion of busy independent directors is negatively correlated with Tobin's Q. This finding could be interpreted as in line with stewardship theory, which states that busy independent directors are not fully committed to the companies they serve. Block ownership is negatively correlated with the proportion of independent directors, suggesting that block owners and the proportion of independent directors substitute for monitors. Block ownership is also negatively correlated with EVA, which suggests that high ownership decreases firm value.

Table 2

Correlation matrix among the corporate governance variables and performance measures

	Tobin's Q	ROA	ROE	EVA	%IND	NIND	BDSIZE	BUSY	ACSIZE	BLOCK	LEV	B/M
ROA	-0.032											
ROE	0.085	0.788										
EVA	0.118	0.246	0.189									
%IND	-0.105	-0.166	-0.191	-0.144								
NIND	0.054	0.111	0.173	0.131	-0.823							
BDSIZE	-0.020	-0.011	-0.132	-0.070	-0.088	0.044						
BUSY	-0.137	0.109	0.076	0.019	0.150	-0.156	0.055					
ACSIZE	-0.039	0.089	-0.027	-0.065	0.040	-0.084	0.312	0.069				
BLOCK	0.011	0.025	0.021	-0.122	-0.066	0.058	-0.092	-0.071	-0.120			
LEV	-0.052	-0.039	0.343	-0.086	-0.014	0.088	-0.106	0.071	-0.141	-0.137		
B/M	-0.372	-0.205	-0.278	-0.158	0.020	-0.16	0.079	0.030	0.070	-0.011	-0.217	
SIZE	0.144	0.240	0.150	0.065	0.043	-0.118	0.390	0.196	0.107	0.258	-0.056	-0.150

Notes:

Tobin's Q is measured as the sum of market equity and book value of debt, divided by total assets. ROA is return on assets. ROE is return on equity. EVA is invested capital at the beginning of year x (return on invested capital – weighted average cost of capital). %IND is the proportion of independent directors on a board defined as the number of independent directors/total number of directors. NIND is a dummy variable of 1 if a firm board is nonindependent. BDSIZE is total number of directors. BUSY is the proportion of independent directors who serve in more than three other companies. ACSIZE is the number of directors on the audit committee. BLOCK is the cumulative percentage of shares held by shareholders holding at least 5% of ordinary shares in the firm. LEV is long-term debt/total assets. B/M is book to market ratio and SIZE is the natural logarithm of market value equity. There are 182 firm-year observations from 2004 to 2006.

Table 3 reports results for the OLS and 2-Stage regressions of firm performance on corporate governance and control variables. The results from OLS and the 2-Stage regressions are largely similar. Consistent with our first hypothesis, the proportion of independent directors on a board (%IND) is negatively correlated with all four performance measures and significantly correlated with ROA and ROE.[3] These results point to the fact that the presence of an independent board has a negative impact on firm value, and these results are consistent with those reported in prior studies (Agrawal & Knoeber 1996; Bhagat & Black 2002). Our findings, on the whole, contradict the notion that company boards should

[3] The results are similar but of opposite signs when we use the proportion of non-independent directors (defined as 1-%IND) instead of %IND. We find that non-independent directors are positively associated with the four firm performance measures and significantly correlated with ROA and ROE. These results, to conserve space, are not reported but are available upon request.

consist mostly of independent directors. Board size (BDSIZE) is also negatively related to performance and significantly related to ROA and ROE. This finding is consistent with prior studies (Eisenberg et al. 1998; Hossain, Prevost & Rao 2001;Yermack, 1996) showing that the larger the board size, the less efficient the monitoring function of the directors, which reduces the value of the company.

Table 3

Cross sectional regression results for firm performance on corporate governance variables

	OLS	2-SLS	OLS	2-SLS	OLS	2-SLS	OLS	2-SLS
	Tobin's Q		ROA		ROE		EVA	
Intercept	1.828**	0.772	-0.036	0.125	-0.078	0.025	0.016	-0.042***
%IND	-0.585	-0.711	-0.115***	-0.146***	-0.215***	-0.249***	-0.015**	-0.005
BDSIZE	-0.057	-0.017	-0.013**	-0.015**	-0.029***	-0.034***	-0.002*	-0.001
BUSY	-0.522	-0.566*	0.033	0.003	0.034	-0.016	0.002	0.002
ACSIZE	-0.031	0.084	0.012	0.009	0.015	0.019	-0.001	-0.002
BLOCK	-0.427	-0.446	-0.033	-0.019	-0.018	-0.031	-0.016***	-0.011*
LEV	-0.941*	-0.36	-0.052	-0.047	0.324***	0.236**	-0.016**	0.003
B/M	-0.566***	-0.316***	-0.024**	-0.026***	-0.041**	-0.038**	-0.003**	-0.001
SIZE	0.155**	0.151*	0.023***	0.014*	0.034***	0.033**	0.002*	0.006***
Adj. R^2	0.159	0.119	0.123	0.121	0.221	0.148	0.078	0.206
N	182	103	182	103	182	103	182	103

Notes:
Tobin's Q is measured as the sum of market equity and book value of debt, divided by total assets. ROA is return on assets. ROE is return on equity. EVA is invested capital at the beginning of year x (return on invested capital – weighted average cost of capital). %IND is the proportion of independent directors on a board defined as the number of independent directors/total number of directors. BDSIZE is total number of directors. BUSY is the proportion of independent directors who serve in more than three other companies. ACSIZE is the number of directors on the audit committee. BLOCK is the cumulative percentage of shares held by shareholders holding at least 5% of ordinary shares in the firm. LEV is long-term debt/total assets. B/M is book to market ratio and SIZE is the natural logarithm of market value equity. Sample period is from 2004 to 2006.
* significant at 10% level; ** significant at 5% level; ***significant at 1% level

Table 3 also reports that blockholders (BLOCK) are negatively correlated with performance. This result is similar to those reported in prior studies (Hossain, Prevost & Rao 2001; Johnson et al. 2000; Laporta et al. 1998) that show that high firm ownership concentration has a somewhat negative impact on firm value.

The percentage of busy independent directors is negatively correlated with Tobin's Q, suggesting that busy independent directors do not add value, as they may not be fully committed to the company for which they sit as independent directors. The low average percentage of busy directors on a board (as reported in Table 1), however, may explain the weak significance of the relationship between the percentage of busy independent directors and firm performance.

In Table 4, we report the results of cross-sectional regressions on the relationship between the proportions of independent directors and lagged corporate governance variables. We observe that the lagged performances are negatively correlated with independent variables but are not statistically significant. These results confirm that endogeneity is not a problem in our study, and the results are generally consistent with Dahya et al. (2008),

showing that the relationship between firm performance and independent directors runs only in one direction.

Table 4

Cross sectional regression results on the relation between the proportion of independent directors and lagged corporate governance variables

Intercept	0.057	0.013	0.007	0.006
BLOCK	-0.026	-0.007	-0.009	-0.008
$BLOCK_{-1}$	0.117	0.106	0.108	0.112
% SIND	0.928**	0.929**	0.918**	0.936**
% $SIND_{-1}$	-0.870	-0.816	-0.809	-0.823
$\%IND_{-1}$	0.862***	0.853***	0.853***	0.858***
$BDSIZE_{-1}$	-0.012	-0.013	-0.013	-0.013
$BUSY_{-1}$	-0.082	-0.071	-0.071	-0.072
$ACSIZE_{-1}$	0.033**	0.033**	0.034**	0.032**
LEV_{-1}	-0.111	-0.080	-0.062	-0.076
B/M_{-1}	-0.015	0.011	0.009	0.014
$SIZE_{-1}$	0.004	0.003	0.003	0.002
Tobin's Q_{-1}	-0.022			
ROA_{-1}		-0.056		
ROE_{-1}			-0.047	
EVA_{-1}				-0.029
Adj. R^2	0.625	0.622	0.622	0.621
N	103	103	103	103

Notes:
Tobin's Q is measured as the sum of market equity and book value of debt, divided by total assets. The dependent variable is %IND which is the proportion of independent directors on a board defined as the number of independent directors/total number of directors. ROA is return on assets. ROE is return on equity. EVA is invested capital at the beginning of year x (return on invested capital – weighted average cost of capital). %SIND is the proportion of shares owned by independent directors. BDSIZE is total number of directors. BUSY is the proportion of independent directors who serve in more than three other companies. ACSIZE is the number of directors on the audit committee. BLOCK is the cumulative percentage of shares held by shareholders holding at least 5% of ordinary shares in the firm. LEV is long-term debt/total assets. B/M is book to market ratio and SIZE is the natural logarithm of market value equity. Sample period is from 2004 to 2006.

*, ** and *** denote significance at 10%, 5% and 1% respectively.

In Table 5, we present our results for the regression of firm performance variables on non-independent boards and other corporate governance and control variables. The coefficient of interest here is NIND, which positively correlates with four performance measures and has a particularly significant relationship with ROA and ROE. These results are essentially in line with our second hypothesis that independent directors add value as long as

they are in the minority, but when they become the majority, their effectiveness as monitors diminishes, which reduces firm value. The results for the other independent variables are principally similar to those reported in Table 3. Board size, the proportion of busy independent directors and blockholders are negatively correlated with firm performance. One common factor that can be observed, as in prior studies, is that the presence of independent directors is positively related to firm performance when they are the minority, but their presence negatively affects firm value when they are the majority. This observation may suggest that not *all* independent directors have the necessary knowledge, experience, time and skills to be effective monitors (Klein 1998), and, consistent with stewardship theory, that some or most of them are not good stewards of the companies they serve (Muth & Donaldson 1998).

As far as New Zealand is concerned, only one study has investigated the issue of board composition and firm performance (Hossain, Prevost & Rao 2001). During the period investigated, it can be noted that the independent directors of New Zealand firms were the minority on a board in more than half of the sample period. Therefore, we possibly could argue that the positive relationship between independent directors and performance reported in that study could be attributed to the performance of a non-independent board and not to that of an independent board. The proportion of independent directors at New Zealand firms has been growing over time. Taking into account more recent practice, our current research findings provide a worthwhile outcome for New Zealand.

Table 5

Cross sectional regression results on the relation between firm performance and the minority independent directors

	Tobin's Q	ROA	ROE	EVA
Intercept	0.422	0.037	-0.126	-0.046***
NIND	0.069	0.046**	0.083**	0.002
BDSIZE	0.000	-0.013**	-0.032**	-0.001
BUSY	-0.589**	-0.002	-0.024	0.002
ACSIZE	0.065	0.004	0.011	-0.002*
BLOCK	-0.421	-0.021	-0.035	-0.011*
LEV	-0.314	-0.036	0.254**	0.003
B/M	-0.312***	-0.023**	-0.033*	-0.001
SIZE	0.141	0.013*	0.032**	0.006***
Adj. R^2	0.107	0.109	0.144	0.209
N	103	103	103	103

Notes:
Tobin's Q is measured as the sum of market equity and book value of debt, divided by total assets. ROA is return on assets. ROE is return on equity. EVA is invested capital at the beginning of year x (return on invested capital – weighted average cost of capital). NIND is a dummy variable that takes the value of 1 if independent directors are the minority on a board, 0 otherwise. BDSIZE is total number of directors. BUSY is the proportion of independent directors who serve in more than three other companies. ACSIZE is the number of directors on the audit committee. BLOCK is the cumulative percentage of shares held by shareholders holding at least 5% of ordinary shares in the firm. LEV is long-term debt/total assets. B/M is book to market ratio and SIZE is the natural logarithm of market value equity. Sample period is from 2004 to 2006.
* significant at 10% level; ** significant at 5% level; ***significant at 1% level

Robustness Tests

Although the two-stage regression model can address endogeneity, the statistical properties of the simultaneous regression estimates are sensitive to the choice of instrumental variables because even the instrumental variables themselves can be partially endogenous (Larcker & Rusticus 2006). Therefore, we address both the endogeneity and fixed panel effects by using the feasible generalised least squares (FGLS) method and a generalised method of moment estimation (GMM). The GMM permits simultaneous control of both endogeneity and firm fixed effects (Mura 2007). In addition to these two estimation methods for our robustness tests, we also use the OLS method with adjustments in the standard errors of the OLS estimators, assuming the presence of both firm and time fixed effects (Petersen 2009) [4].

The results, not reported here to save space, are all largely in line with those reported in Table 3 and confirm our hypothesis that the presence of a majority of independent directors on the board of New Zealand firms is negatively associated with firm performance.

Summary

In this paper, we examined the effects of independent directors on firm performance. We found that, on average, independent directors are negatively associated with several measures of performance. On the basis of our findings, we could argue that independent directors add value only when they are in the minority. We note that the presence of independent directors is negatively (positively) associated with firm performance when they are in the majority (minority) on a board. Our results confirm recent findings in the literature that good governance practices are not universal but may depend on market and firm characteristics (Black et al. 2010; Coles et al. 2008; Chhaochharia & Grinstein 2007; Duchin et al. 2010).

A possible explanation as to why a board consisting mostly of independent directors could have a negative impact on firm value could be that the behaviour of executive or non-independent directors cannot be entirely explained by agency theory, which assumes that managers maximise their self-interest at the expense of shareholders. The New Zealand stock market consists mostly of small firms suggesting that it may not be that easy for these firms to have truly independent boards (Chhaochharia & Grinstein, 2007; Duchin et al. 2010). The relatively small size of the New Zealand market could also suggests that directors are strongly network connected, a characteristic where stewardship theory is likely to hold (Muth & Donaldson 1998). The stewardship theory, which contends that managers and non-independent directors are good stewards of firm assets and are loyal to the company, predicts a positive association between management and firm performance. Our results are more in line with the latter theory for the period investigated in New Zealand.

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Legitimising Corporate Sustainability Reporting Throughout the World

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Legitimising Corporate Sustainability Reporting Throughout the World

Abstract

This paper explores corporate sustainability disclosure practices in a global context. A unique sample of 2009 sustainability reports from some of the world's largest companies in 24 diverse countries are examined using a comprehensive disclosure index. These reports are analysed to better understand how company characteristics and institutional factors explain sustainability communication using a legitimacy theory framework. The world renowned Global Reporting Initiative 2006 guidelines are used as the benchmark disclosure index checklist. The empirical results indicate that the average level of sustainability disclosure is a surprisingly high 61.9 percent. Statistical analysis indicates that high profile industries and additional assurance procedures influence the disclosure of more sustainability information. Interestingly, companies operating in emerging country systems disclose more sustainability information than Anglo-Saxon or Communitarian jurisdictions. Consistent with legitimacy theory, these results suggest that these globally well known firms use sustainability disclosure as a legitimising tool.

Keywords

Sustainability disclosure, Global Reporting Initiative, international business systems

Cover Page Footnote

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Legitimising Corporate Sustainability Reporting Throughout the World

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Abstract

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Keywords: Sustainability disclosure; Global Reporting Initiative; international business systems.

JEL Classification: M40

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Introduction

This paper is motivated by the evidence that there has been an increase of sustainability reporting[3] in many world economies (Bebbington, Larrinaga & Moneva 2008). The KPMG International Survey provides data that indicates that sustainability reporting is going more mainstream, with nearly 80 percent of the largest 250 companies from 22 countries issuing stand alone reports, up from about 50 percent in 2005 (KPMG 2008). Yet, sustainability reporting is imbalanced globally. The KPMG survey shows that sustainability reporting in developed countries is higher than developing countries. Interestingly, our study findings add richer insights and different conclusions from the past literature. We note a fundamental shift in the status quo with companies from emerging countries demonstrating higher (not lower) communication levels.

The intensification in sustainability disclosure coincides with an upturn in community concern regarding social and environmental matters and in academic accounting research (Van der Laan Smith, Adhikari, & Tondkar 2005). The growing accounting research in the social and environmental disclosure area has largely focused on the extent and determinants of disclosure in annual reports in a single country setting. However, such disclosure studies evoked the potential for failure to link empirical results to the political, economic or cultural characteristics of broader jurisdictional units (Williams 1999). The primary purpose of this paper is to provide evidence on sustainability disclosure practices globally.

The potential contributions of this paper are threefold. First, this paper concentrates solely on sustainability reports as a data source to capture and analyse sustainability information. Previous studies on social and environmental practices have focused on the more generic annual report. Few cross-country studies have been conducted using sustainability reports. Past studies find that annual reports contain the key information on social and environmental issues. However, as a reporting medium, the annual reports face the limitation in the number of indicators observed and diversity of information provided (Frost et al. 2005). Recent past research has argued that companies now rely more heavily on alternative media to communicate social and environmental information such as discrete sustainability reports (Frost et al. 2005; Ho & Taylor 2007). This paper is important because it provides a deeper analysis of the extent of companies' sustainability disclosure communication in separate stand-alone sustainability reports.

Second, to better explain the extent of sustainability disclosure, this paper investigates how industry type may influence political visibility (Patten 1991) and drive companies to disclose sustainability information in order to mitigate pressures from stakeholders. In addition, 'voluntary' assurance statements play an important role in improving the credibility of disclosed information (Simnett, Vanstraelen & Chua 2009). For instance, over 60 percent of sustainability reports issued by companies in France, Spain, Korea, and Italy incur the extra costs to voluntarily include assurance statements (KPMG 2008). This raises questions about what drives a company to seek assurance statements on sustainability reports. Despite growing demand of such voluntary assurance statements, research on the effect of assurance on sustainability reporting is sparse (Kolk & Perego 2010).

By analysing companies from a large number of diverse countries, this paper also better captures how jurisdictional settings potentially influence corporate reporting regulation (Leuz 2010). This paper posits that corporate governance, in particular board independence and type of business systems, influence companies to adopt voluntary corporate disclosure (Garcia-Meca & Sanchez-Ballesta 2010; Millar et al. 2005). Fundamental differences in the type of business systems comprise a main source of variations in the jurisdictional context with potentially important ramifications on sustainability disclosure and overall corporate communication (Aerts, Cormier & Magnan 2006). Finally, this paper contributes to future research and development in sustainability disclosure by examining the potential effect of legitimacy theory. Legitimacy theory seeks to

[3] Corporate sustainability reporting is variously known as corporate social reporting, corporate responsibility reporting, triple bottom line reporting, corporate, social and environmental reporting.

understand what factors may cause variability in sustainability disclosure and to what extent the variables of interest within an organisation may influence organisational actions in seeking legitimacy (Haniffa & Cooke 2005). Deegan (2002) and Islam and Deegan (2008) argue that corporate disclosure is best explained as a tool for maintaining legitimacy.

Literature Review and Hypotheses Development

Legitimacy theory posits that the legitimacy of a business entity to operate in society depends on an implicit social contract between the business entity and society. Companies can lose their license to operate in society by breaching society's norms and expectations. Accordingly, legitimacy theory predicts that companies adopt environmental and social responsibility reporting to legitimise their operations when society's norms and expectations of the business entities change or the business entities perceive themselves in breach of existing norms and expectations of society (Deegan 2002; Deegan & Blomquist 2006; O'Donovan 2002).

The Global Reporting Initiative (GRI 2006) characterises sustainability as the practice measuring performance on economic, environmental, and social impacts to internal and external stakeholders. KPMG (2008, p.12) uses the term 'corporate responsibility' to describe the ethical, economic, environmental and social impacts and issues that concern the private sector. This paper adopts the definition used by GRI (2006), because it is broader than other definitions in that it encompasses six comprehensive key themes. These important global themes are economic, environment, labour practices and decent work, human rights, society, and product responsibility. This broader definition is also used by Frost et al. (2005) and Clarkson et al. (2008). Frost et al. (2005) argue that GRI is employed as an indicator of the content and scope of sustainability reporting. Since this paper treats sustainability reports as a medium of sustainability disclosure; the GRI definition provides a valuable template to measure a company's sustainability communications (Frost et al. 2005).

The growing accounting research in the social and environmental reporting area within a country has usually focused on the extent and determinants of social voluntary disclosure (see for example Belkaoui & Karpik 1989; Branco & Rodrigues 2008; Clarkson et al. 2008; Cowen, Ferreri & Parker 1987; Hackston & Milne 1996; Haniffa & Cooke 2005; Islam & Deegan 2008; Naser et al. 2006; Ness & Mirza 1991; Nurhayati, Brown & Tower 2006; Reverte, 2009; Roberts 1992; Trotman & Bradley 1981). In the international arena researchers are beginning to examine the institutional factors that influence social voluntary disclosure (see for example Baughn, Bodie & McIntosh 2007; Buhr & Friedman 2001; Chapple & Moon 2005; Holland & Foo 2003; Van der Laan Smith et al. 2005; Xiao et al. 2005; Williams, 1999). These studies indicate that country of origin (Newson & Deegan 2002; Van der Laan Smith et al. 2005), culture and institutional factors (Buhr & Friedman 2001), the stage of a nation's social and economic development (Chapple & Moon 2005; Xiao et al. 2005), and legal and regulatory context (Holland & Foo 2003) are potential important determinants of the level and type of social voluntary disclosure.

Hypotheses Development

Deegan (2002) notes legitimacy theory is widely used to explain social and environmental reporting. Legitimacy theory relies on the notion that the legitimacy of a business entity to operate in society depends on an implicit social contract between the business entity and society (Guthrie & Parker 1989) and they will adopt disclosure strategies to conform to society's expectations (Deegan 2002). Using legitimacy theory it is argued that type of industry can influence political visibility and drives disclosure in order to minimise pressure and criticism from society (Patten 1991). In previous studies, industry type is a common variable employed to explain the content and extent of disclosure (Adams, Hill & Roberts 1998; Cowen et al. 1987; Hackston & Milne 1996; Ness & Mirza 1991; Roberts, 1992; Williams 1999). Overall, more sensitive industries are considered to be those with more risk of being criticised in corporate social responsibility matters because their

activities have the perception of higher risk (Reverte 2009). The 'sensitivity' of industries is a consistent theme with legitimacy theory. Roberts (1992) and Hackston & Milne (1996) use a dichotomous classification of high profile and low profile industries[4]. Roberts (1992) defines high profile industries as those with consumer visibility, a high level of political risk or concentrated intense competition. Hackston & Milne (1996) provide evidence that high profile industries disclose significantly more social and environmental information than low profile industries. Based on legitimacy theory tenets it is hypothesised:

H1: Firms in high profile industries will provide higher voluntary disclosure in sustainability reports than firms in low profile industries.

The practice assurance statement in sustainability reports serves as a communication mechanism as it arguably enhances the clarity and reliability of these statements (Deegan, Cooperr & Shelly 2006). Simnett, Vanstraelen & Chua (2009, p.939) posit that companies' purchase of assurance is driven by their objective to increase stakeholder or user confidence in the quality of the sustainability information provided and/or to increase stakeholder trust in the level of organisational commitment to sustainability agendas. Kolk & Perego (2010) argue that the demand of assurance services is significantly influenced by the legal environment in which a firm operates. Moreover, they conclude that the governance mechanism, country level institutional mechanisms, and level of awareness on sustainability issues are factors that are related to adoption of assurance services. In summary, voluntary assurance plays an important role in improving the credibility and transparency of the sustainability information disclosed. This leads to the second hypothesis:

H2: Firms with an assurance statement in their sustainability reports will provide higher voluntary disclosure than firms with no assurance statement.

'Jurisdictional' trait is defined as a particular characteristic of the power or influence that a country or group of similar countries possesses to carry out legal decisions enforce laws and/or affect change to influence firm communication. Several studies in the accounting literature state that jurisdiction traits may make a difference to the pattern of disclosure. There are several factors that impact on disclosure at the national level such as the type of corporate governance systems (Van der Laan Smith et al. 2005), the type of business systems (Buhr & Freedman 2001; Chapple & Moon 2005), the type of legal system and level of enforcement (Williams 1999; Holland & Foo 2003), and the level of economic development (Xiao et al. 2005). Using several institutional factors, this paper focuses on how the type of business environment within various countries affects the company decision to adopt voluntary disclosure policies. Jurisdictional business system of a country is considered an important determinant of strategic transparency (Millar et al. 2005), because it consists of various institutional and cultural factors and strategic transparency is associated with the extent to which information is disclosed (Eldomiaty, Choi & Cheng 2006). Most previous studies on social disclosure tend to only focus on a comparison between shareholders versus stakeholders orientation. As international business systems consist of more than just shareholder and stakeholder structures, it is important to include emerging systems as well.

The broader analysis is consistent with Millar et al. (2005) argument that there are three major types of business systems: Anglo-Saxon, Communitarian and Emerging Market systems. The classification of these systems is based on the characteristics of national culture, legal and regulatory environment relationship, the role of financial institutions and corporate governance systems. In some countries, when the firms reach a certain size they turn to the stock market as their main source of capital. These business systems are characterised as the Anglo-Saxon system (for example US, UK, and Canada). In other countries, the companies still depend on bank financing as their primary source of capital and multi stakeholders (employee, suppliers, government and the

[4] Consistent with past studies, the agriculture, forest and paper, automobile, airlines, mining, metal, oil, utilities, chemicals, banking and finance industries are classified as high profile industries. The consumer goods, construction and property, service, food, retail, and other industries are included as low profile industries (Hackston & Milne, 1996; Roberts, 1992, and Newson & Deegan (2002).

community) these are characterised within the Communitarian system. Germany, France and Switzerland are countries with Communitarian systems. In many emerging countries (often in Asia), companies tend to be dominated by family owners and have weaker investor protection. These are characterised as being within emerging systems' jurisdictions.

Given this categorical distinction, Van der Laan Smith et al. (2005) argue that firms from countries with stronger emphasis on social issues and which place more emphasis on their multi stakeholder will have a higher of level and quality of social disclosure than firms from countries with a weaker emphasis on social issues and dominated by shareholders. Millar et al. (2005) note that the Anglo-Saxon business system is characterised by the expectation of a high degree of information disclosure, while Communitarian and emerging business systems are more likely to provide limited information disclosure and lack transparency consistent with lower legitimacy tenets. Based on these arguments, it is hypothesised that there is a relationship between type of business system and the extent of sustainability disclosure.

H3: There is an association between type of 'jurisdictional' business system and the extent of voluntary disclosure in sustainability reports.

The empirical governance literature suggests that the degree of board involvement is related to composition and independence. Importantly, it is argued that it will elevate board effectiveness (Said, Zainuddin & Haron 2009) and encourage voluntary disclosure (Garcia-Meca & Sanchez-Ballesta 2010). In this paper, the proportion of independent non-executive director is used as a proxy of better corporate governance characteristics. Directors who are more independent to the management may be more likely to encourage the disclosure of more sustainability information. Consequently, a higher percentage of independent directors in the board arguably results in greater communication (Haniffa & Cooke 2005).

The presence of independent directors in the board composition may strengthen the public perception of corporate legitimacy. The public may value an entity highly if it has a high level of independent directors on the board because such a condition might signify a more effective board in supervising the management activities (Nurhayati et al. 2006). Independent directors also play an important role in enhancing corporate image and act as a monitoring role in ensuring that companies are properly managed by their management (Said et al. 2009). The final hypothesis states:

H4: There is an association between board independence and the extent of voluntary disclosure in sustainability reports.

These four hypotheses will be statistically tested using multiple regression analysis as documented in the following section.

Research Approach

The data collected for this paper is sourced from 125 public companies from 24 separate countries. This paper uses the official GRI list of companies supplying stand-alone sustainability reports (retrieved on the 6th October 2010) to derive a comprehensive sample. The companies are selected based on stratified proportional random sampling. The sample companies meet the following criteria:

1. Data encompasses 2009 activities.
2. There is a 2009 stand-alone sustainability report.
3. The sustainability report is written in the English language.
4. All companies are publically listed and are the parent entity in their home country

In total, the GRI website shows 1421 firms (representing 59 countries) submitted a 2009 sustainability report. Of these 1421 firms, 183 reports are excluded because they are not stand-alone reports (integrated/combined report), an additional 393 reports are excluded because they are not

written in English, 254 non public and parent companies are excluded due to a lack of complete financial data, finally 48 companies from 34 countries with very low sample numbers (less than 3 companies) are excluded. This leads to a final available population of 541 sustainability reports from 24 diverse countries from around the world. From this population, a final selection of 125 sustainability reports is utilised representing over 20 percent of the available population.

Data sources for firm characteristics; size, board independence, return on assets and leverage are extracted from each company's annual reports. Industry sectors in the Global Industry Classification Standard (GICS) are used to initially classify industry type, these are then dichotomously categorised as high or low profile industries.

Measurement of Variables

Sustainability Disclosure Index (SDI)

In this paper**,** the extent of sustainability disclosure is the dependent variable. The Sustainability Disclosure Index (SDI) score is calculated through use of the globally-respected GRI 2006 guidelines. The GRI reporting guidelines contain 79 items that comprehensively reflect the spirit of sustainability reporting. The 79 items are from three main GRI-based categories: economic (9 items), environmental (30 items), and social (40 items).

Consistent with past studies, the SDI is calculated as a dichotomous equally weighted index on a 0-100% scale. This technique is considered less subjective than a weighted index and is more relevant to companies (Cooke 1989; Meek, Roberts & Gray 1995). All items are equally weighted and each of the 79 possible items that are disclosed is awarded a score of 1 (and if not disclosed a score of 0 is given). Items are removed from the equation when they are clearly not applicable. Marston and Shrives (1991) in their review of the disclosure index literature, report that a wide variety of studies have adopted such a disclosure index as a mechanism to measure the extent of disclosure. Table 1 outlines the measurement of the dependent, independent, and control variables.

Table 1

Variables and measurement

Variables	Measurement
Dependent:	
Sustainability Disclosure Index (SDI)	Unweighted Sustainability Disclosure Index
Independent:	
Industry Type (IT)	1 = high profile and 0 = low profile
Presence of Assurance (PA)	1 = assured and 0 = not assured
Business System (BS)	BS_1 = Communitarian, BS_2 = Emerging Market BS_3 = Anglo-Saxon
Board Independence (Board)	Proportion of independent non-executive directors to total directors
Control:	
Size (Size)	Total assets
ROA (ROA)	Total net profit divided by total assets
Leverage (LEV)	Book value of total debt divided by total assets

This study employs several statistical techniques to test the hypotheses. *Independent sample t-tests* and ANOVA are used to statistically test the extent of sustainability disclosure between industry profile, level of assurance, and type of business systems. *Ordinary Least Squares* (OLS)

regressions test the associations between the dependent and predictor variables. The regression models are defined in the following equation:

$$SDI = \beta_0 + \beta_1 IT + \beta_2 PA + \beta_3 BS1 + \beta_4 BS2 + \beta_5 BS3 + \beta_6 Board + \beta_7 Size + \beta_8 ROA + \beta_9 LEV + \varepsilon_{it}$$

Where:
SDI = social disclosure index
IT = industry type
PA = presence of assurance
BS1 = communitarian
BS2 = emerging market
BS3 = Anglo-Saxon
Board = independence of board director
Size = firm size
ROA = return on assets
LEV = leverage
$\beta 0$ ...$\beta 9$ = coefficient to be estimated
ε_i = disturbance term

Findings

Descriptive Analysis

Table 2 shows the descriptive statistics of the companies per country. With regards to industry type, 56 percent of the firms in the sample are classified as high profile while 44 percent are low profile. Table 2 also reveals that 53.6 percent of these firms have voluntary assurance statements in their sustainability reports[5]. Of the 125 firms from 24 countries, 80 firms or 64 percent are classified as a country with Communitarian systems, 24 firms or 19.2 percent are included as firms in Emerging market systems, 21 firms or 16.8 percent are categorised as Anglo-Saxon system.

Table 2 reveals that firms from the Emerging market jurisdictions have the highest overall mean of SDI (70 percent). This category includes companies from Malaysia (83.8 percent), China (69.3 percent), Brazil (68.3 percent) and South Africa (58.6 percent). The overall mean of SDI of Communitarian jurisdictions business systems is the second highest (60.7 percent) with South Korean firms leading the pack (SDI of 82.7 percent) followed by Spain (79.7 percent), Germany (76.6 percent) and Italy (75 percent).

[5] This high level of voluntary assurance statement is consistent with the KPMG (2008) finding that 39 percent N100 companies and 40 percent G250 companies included an additional formal assurance statement in their sustainability reports.

Table 2
Descriptive statistics per country

Jurisdiction Business System	Country	SDI (%)	Economic (%)	Environmental (%)	Social (%)	Firms (%)	HP (%)	LP (%)	Assured (%)	Not Assured (%)
Emerging Market	Malaysia	83.8	94.4	70	86.9	3.2	0.8	2.4	2.4	0.8
	China	69.3	84.4	58	57.5	4	2.4	1.6	2.4	1.6
	Brazil	68.3	70.8	65.4	68.8	6.4	5.6	0.8	4.8	1.6
	South Africa	58.6	85.7	60	68.6	5.6	4.8	0.8	3.2	2.4
Mean (Total)		***70***	***83.7***	***63.4***	***70.4***	***(19.2)***	***(13.6)***	***(5.6)***	***(12.8)***	***(6.4)***
Communitarian	South Korea	82.7	83.3	72.5	88.8	3.2	2.4	0.8	2.4	0.8
	Spain	79.7	90.7	81.1	82.1	4.8	4.8	0	4.8	0
	Germany	76.6	77.8	67.3	75	4	0.8	3.2	1.6	2.4
	Italy	75	80	65.3	72	4	1.6	2.4	2.4	1.6
	Austria	72.8	88.9	70.1	70	3.2	2.4	0.8	3.2	0
	Switzerland	69.2	75.9	54.4	68.3	4.8	0.8	4	2.4	2.4
	Sweden	67.8	64.8	56.1	60.4	4.8	1.6	3.2	1.6	3.2
	Portugal	65.2	66.7	54.4	57.9	4.8	2.4	2.4	3.2	1.6
	Belgium	58.3	40.7	30	28.3	2.4	0	2.4	0.8	1.6
	Finland	52.6	40	45.3	48.5	4	4	0	0.8	3.2
	Netherland	52.6	48.9	42.7	32.5	4	1.6	2.4	1.6	2.4
	Norway	47.7	44.4	28	41.5	4	1.6	2.4	0.8	3.2
	Denmark	45.7	28.9	60.7	38	4	4	0	1.6	2.4
	France	43.8	50	59.4	51.3	4.8	1.6	3.2	2.4	2.4
	Japan	43.2	29.6	50.6	29.6	4.8	3.2	1.6	1.6	3.2
	Singapore	37.5	37	48.9	26.7	2.4	0	2.4	2.4	0
Mean (Total)		***60.7***	***59.2***	***55.5***	***54.4***	***(64)***	***(32.8)***	***(31.2)***	***(33.6)***	***(30.4)***
Anglo-Saxon	Canada	59.8	69.4	53.3	51.3	4.8	4	0.8	4	0.8
	United Kingdom	58.7	70.4	62.8	52.9	4.8	4	0.8	4	0.8
	Australia	55.2	55.6	60	50	4	2.4	1.6	1.6	2.4
	United States	47	55.6	48.3	37.1	4.8	1.6	3.2	0.8	4
Mean (Total)		***55.2***	***62.7***	***56.1***	***47.8***	***(16.8)***	***(9.6)***	***(7.2)***	***(7.2)***	***(9.6)***
Mean (Total)	***(N = 24)***	***61.9***	***68.6***	***58.3***	***57.6***	***(100)***	***(56)***	***(44)***	***(53.6)***	***(46.4)***

*HP = high profile industries, **LP = low profile industries

Table 3 provides the descriptive statistics for the continuous variables. The mean (median) of the sustainability disclosure index (SDI) is 61.9 percent (62 percent) which indicates that these large global companies communicate almost two thirds of the total benchmark sustainability disclosure items. This result is consistent with predictions that the extent of sustainability disclosure in sustainability reports is higher than in annual reports[6]. It also supports the decision to focus solely on sustainability reports.

Table 3

Descriptive statistics

Variables	Mean	Median	Std Dev	Min	Max
SDI (%)	61.9	62	21.1	16.7	100
Board Independence (%)	61.6	61.5	21.4	15.3	92.8
Size (billion USD)	54	10.6	16.2	6	1,000
Size (log)	9.9	10	0.8	6.7	12.1
ROA (%)	4.2	2.9	8.1	-19.2	46.1
Leverage (%)	56.7	57.4	21.1	0.6	95.6

Table 3 shows that the average company board independence is high at 61.6 percent[7]. The mean of firm size is 54 billion with a median of 10.6 billion US dollars. The large gap between mean and median indicates that firm size possesses some extreme valued and is skewed[8]. Both figures highlight the enormous average size of the sample companies. The result indicates that large firms may be more motivated to legitimise their activities to a global audience. The mean of return on assets (ROA) and leverage ratio is 4.2 percent, and 56.6 percent respectively.

The *Independent Samples t-tests* (see Table 4) indicate that there are significant differences across high profile and low profile industries (t = 3.109; p-value = 0.002) with respect to the sustainability disclosure index (SDI). Consistent with legitimacy theory, this finding implies that firms in high profile industries provided statistically more sustainability information compared with firms in low profile industries. This finding is consistent with Roberts (1992), Hackston & Milne (1996), Patten (1991), and Reverte (2009). The presence of the extra voluntary assurance report variable also highlights a similar result (t = 2.677; p-value = 0.008) that there are significant differences between assured and not assured sustainability reports in regards to sustainability communication (Table 4 panel A). Firms

[6] Ho & Taylor (2007) and Haniffa & Cooke (2005) find the level of disclosure index in annual reports as 26.4 percent and 17.1 percent respectively while Michelon & Parbonetti (2010) calculate their disclosure index in annual reports as 19.5 percent but far higher in sustainability reports (49.1 percent).

[7] Raheja (2005) argues that ideally the proportion of independent directors is 50 percent. Boone et al. (2007) report the proportion of independent directors in their study is 69 percent.

[8] For regression analysis, firm size is logged to reduce the skewness. This study also conducted outlier tests (Mahalanobis and Cooke Distance) showing no concerns with outliers.

with extra voluntary assurance statements on their sustainability reports are more likely to disclose sustainability information[9].

Table 4
Independent samples t-tests and ANOVA

Panel A

Disclosure Index	Mean	t-value	p-value
Industry Type		3.109	0.002
High Profile	67.3		
Low Profile	55.9		
Presence of Assurance		2.677	0.008
Assured	65.9		
Not Assured	56		

Panel B

		F	p-value
Levene's Test of Equality of Error Variance		0.875	0.419
Tests of Between Subjects Effects		2.381	0.097

Multiple Comparisons: (Tukey HSD)	Business System Types	Mean Differences	p-value
Communitarian	Emerging Market	-0.07172	0.306
	Anglo-Saxon	0.06382	0.429
Emerging Market	Communitarian	0.07172	0.306
	Anglo-Saxon	0.13555	0.080
Anglo-Saxon	Communitarian	-0.06382	0.429
	Emerging Market	-0.13555	0.080

The results of ANOVA (see Table 4, panel B) also show that there is a significant relationship between sustainability disclosure with business systems (F = 2.381 and p-value = 0.097). As illustrated in the additional Tukey HSD test, there are statistically significant mean differences between Emerging and Anglo-Saxon systems but little difference of means exists between Emerging market and Communitarian systems. The result indicates that sustainability disclosure of firms from emerging market jurisdiction is higher as compared to Anglo-Saxon country firms. This surprising result may be changes in the status quo in that large companies from emerging nations are leading the charge of legitimising their business activities to an ever shrinking global audience.

[9] To check the robustness of the result, this study also conducts additional independent t-tests to assess whether any significant differences exist between the mean of the presence of assurance in high and low profile industries. Consistent with the result in Table 4, sustainability disclosure in the presence of a voluntary assurance statement is higher in both high profile and low profile industries than those without the extra assurance.

Multivariate Analysis

Table 5 presents the multiple regression results for the 125 companies in the global sample. The result is consistent with the independent sample t-test and supports the hypothesis that firms in high profile industries tend to disclose more sustainability information compared to firms in low profile industries (p-value = 0.002). Similarly, the presence of an extra voluntary statement is also a significant and statistically positive relationship (p value = 0.017) with sustainability disclosure index (SDI).

Table 5

Results on multiple regression analysis

Variables	Predicted Sign	Coefficient	t-value	p-value
Intercept		0.389	1.733	0.086*
Hypotheses:				
H1: Industry	+	0.132	3.504	0.001***
H2: Assurance	+	0.036	2.431	0.017**
H3 =Communitarian	±	0.093	1.848	0.067*
H3 =Emerging Market	±	0.138	2.177	0.031**
H4: Board Independence	+	0.138	1.541	0.126
Control Variables:				
Size	+	-0.014	-0.056	0.538
ROA	+	0.324	1.341	0.183
Leverage	-	0.120	1.223	0.224
Adjusted R^2		0.131		
F-value		3.330		
Prob. (F)		0.002		

Statistical significance at level *** (1%); ** (5%); * (10%). Anglo-Saxon is excluded

The Table 5 results also show that type of business systems is associated with SDI. Emerging market system is positively and significant at p-value < 0.05, and the Communitarian system is also positively and significant at the < 0.10 p-value level. Firms in emerging market jurisdictions have higher sustainability disclosure index than firms in Communitarian and Anglo-Saxon countries (Table 4). Interestingly, board independence is not a significant predictor for sustainability communication. The control variables of size, ROA, and leverage are also not statistically significant for SDI.

Overall, the regression results in Table 4 lead to the following conclusions:

- The findings support H1 legitimacy tenets, firms in high profile industries tend to disclose more sustainability information than those in low profile industries.
- H2 is also supported. This study finds that firms that make the effort to pay for and include additional voluntary assurance statements do provide more sustainability information. This result is again consistent with legitimacy theory that firms voluntarily purchase additional assurance services in order to enhance their reputation.
- The regression results also show that there is an association between SDI and type of business systems, with surprising results for companies in Emerging systems countries. Emerging market companies disclose higher sustainability communications compared to those in Communitarian and Anglo-Saxon jurisdictions. Based on the results, H3 is supported. This finding is important because most past studies find that level of voluntary disclosure in emerging countries (mostly in Asia) is low. This result may be revealing a fundamental shift

in disclosure as Millar et al. (2005) note that in the past emerging countries were typically characterised by their lack of transparency.

- H4 is rejected. The result does not find any association between board independence and SDI. The regression results indicate that the corporate governance system, particularly the percentage of independent non-executive directors does not have a differential impact in influencing these very large firms' sustainability communication.

Implication and Conclusions

This study provides evidence on corporate sustainability disclosure practices and factors that influence disclosures in globally prominent companies across 24 diverse countries. Our unique data set comes from the GRI website which is a worldwide data benchmark source whose companies listed are arguably some of the biggest global advocates of superior reporting of economic, environmental, and social issues in sustainability reports.

There are several key contributions of this study. First, it focuses solely on sustainability reports as a better media source to capture and analyse the sustainability information, and to advance a greater and deeper comprehending of the extent of companies' sustainability disclosure details in sustainability reports. Second, it explores the role of additional voluntary assurance reports to improve the credibility of disclosed information. Third, it looks at companies throughout the globe using a rich data set of 24 diverse countries with different business systems rather than merely looking at the sustainability disclosure made by companies in a single jurisdiction.

The results of this study indicate that firms in a high profile industry and those that include an additional assurance statement have greater levels of sustainability information communication. These findings are consistent with past studies regarding the relationship between high profile industry and disclosure (see for example Adams et al. 1998; Hackston & Milne 1996; Haniffa & Cooke 2005; Ho & Taylor 2007; Reverte, 2009). As explained by legitimacy theory, high profile industries may be making more sustainability disclosure to improve their accountability and visibility. Under legitimacy tenets the nature of industry type potentially affects sustainability disclosure; the influence of industry type on disclosure may depend on how critical the company feels their economic activities impact on society (Haniffa & Cooke 2005). It is argued that higher profile industries have a bigger effect on their communities and therefore normally have a broader group of stakeholders to satisfy (Adams et al. 1998; Hackston & Milne 1996; Haniffa & Cooke 2005; Reverte 2009).

There is evidence that firms with additional voluntary outside assurance statements provide a higher extent of sustainability disclosure compared with firms without such assurance statements. This result is consistent with the argument that companies purchase assurance service to increase stakeholder and user confidence regarding the quality of sustainability information (Simnett et al. 2009). This finding is also in line with Deegan et al. (2006) and Kolk & Perego (2010) position that assurance statement may enhance the clarity and reliability of the sustainability information disclosed. From the legitimacy perspective, the adoption of such voluntary assurance statements may lift the reputation of companies and strengthen and legitimise their social responsibility activities.

The jurisdictional type of business system is statistically significant. These findings support the past studies that institutional factors, in particular business systems, are a key factor in the implementation of quality global reporting. The types of legal and institutional country structures help explain why corporate reporting differs (Garcia-Meca & Sanchez-Bellasta 2010; Leuz 2010). However, our findings reveal the possibility of a fundamental shift. Large global firms from 'emerging' areas communicate higher (not lower) levels of

sustainability data. This changing scenario may be reflecting these firms' greater desire to be seen to be world's best practice advocates.

Finally, the relationship between sustainability disclosure and board independence is not consistent with Haniffa & Cooke (2005), Said et al. (2009), Nurhayati et al. (2006), and Garcia-Meca & Sanchez-Bellasta (2010) results. Our finding fails to provide evidence that board independence contributes to increases in sustainability disclosure. This may be a reflection of the usually strong firm 'governance' presence in our sample frame. Our sample contains many of the largest companies in the world. These are companies that may already have strong corporate governance systems. For instance, Table 2 shows that these firms average over 61 percent independent directors on their boards. These globally, stronger corporate governance systems may have in the past already increased sustainability reporting communication for their firms to what they see as an equilibrium level.

Overall, the findings of this study are consistent with legitimacy theory that predicts firms disclose their sustainability activities to legitimise their operations (Deegan 2002). High profile industries disclose more sustainability information in order to minimise pressure and criticism from society (Patten 1991) and respond to the information needs of stakeholders who wish to know the risks from firm's activities (Hackston & Milne 1996). Types of business systems are also associated with sustainability disclosure. Interestingly, the result shows that sustainability disclosure in emerging countries is higher than Communitarian and Anglo-Saxon jurisdictions. From the legitimacy lens, this result implies that the emerging-style developing countries are now placing greater emphasis on sustainability disclosure to better address stakeholder holistic expectations in order to attract capital and build a more successful business image.

Future research is recommended to further our understanding of sustainability disclosures. A longitudinal data set could explore sustainability communication over periods of differing economic conditions (e.g. firms now beginning to recover from the Global Financial Crisis). In addition, other more qualitatively-oriented research techniques could be employed to obtain interview and focus group style data from key senior corporate managers to better understand their constraints and incentives to communicate sustainability information.

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Accounting Change and Institutional Capacity: The Case of a Provincial Government in Indonesia

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Keywords

Accrual accounting, accountability, performance improvement, Indonesian local government

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Accounting Change and Institutional Capacity: The Case of a Provincial Government in Indonesia

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Abstract

This study examines a reporting system change of a provincial government in Indonesia. The study also draws attention to the institutional capacity of the provincial administration and implementation problems it encountered in adopting an accrual accounting system. Following the work of Lapsley and Pallot (2000), this study uses economic and institutional perspectives in conceptualising how an accounting change has been undertaken. The study shows that from an economic based perspective, the adoption of the new reporting system was stimulated by the wish to improve government organisations' performance in the country. It is also found that the change of the reporting system was not accompanied by the separation of the roles of elected local officials (i.e. the governor) and local parliamentary members as politicians and decision-makers in the allocation of funding and budget formulation in the provincial government. This situation undermines the instrumental roles of accounting for decision making. Moreover, drawing upon institutional theory, the adoption of the new reporting system at provincial level in the country is indicated by the presence of coercive pressure as local administrations in Indonesia are required to comply with rules imposed by the central government. However, based on the experience of a provincial government in implementing the new accounting system, the policy to adopt the new accounting regime fails to recognise a low level of institutional capacity of local administrations. As a consequence, the institutionalisation of the new accounting system has yet to bring intended outcomes. In this vein, the role of accounting as a political tool for controlling people overshadows its roles for efficiency and performance improvement. As the study demonstrates the use of mixed methodological perspectives (i.e. economic and institutional theories) is useful to fully capture and understand the dynamic process of accounting change in a specific setting.

Key words: Accrual accounting, accountability, performance improvement, Indonesian local government

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Introduction

The debate about the implementation of business-like accounting systems for government entities has existed since the 1970s. Earlier studies in this area (e.g. Ingram 1984; Zimmerman 1977) employed an economic based theory in providing explanation for accounting innovations in the public sector. As Zimmerman (1977) suggested, economic factors influence the practice of government financial reporting in the United States. He also believed that any adoption of specific accounting practices within the government context is aimed to signal the quality of management to external stakeholders. Ingram (1984, p130) also adds a similar notion that "…the higher quality of management may lead to benefits in the form of lower interest costs on municipal debt, and increase in the politician's popularity as a result of recognised performance". Under the banner of public sector reforms, the adoption of business style accounting regimes has been a global phenomenon in the developed and developing nations in the last two decades as part of broader economic and political reforms (Carlin 2005; (Chang 2009; Christensen 2002; Lapsley & Pallot 2000).

Following the resignation of President Suharto in 1998, Indonesia has experienced dramatic reforms in the political system and the public sector governance in the country. Unlike the Suharto regime (1966-1998), successive administrations have adopted a more democratic political system, in which people can directly elect the presidential and parliamentary member positions through free election. As Baswedan (2007) suggests, coupled with the political reform, an autonomy policy has also been granted to local governments at the provincial and district levels in governing their own administrations. In addition, the Government has adopted accrual accounting in the public sector. In this case, a new law and a set of governmental accounting rules have been issued aimed at improving the quality of the Government's reports and public sector practices in the country. The Law (*Undang-undang keuangan negara,* UU No. 17*)* issued in 2003 defines that the Government's departments and agencies at the national level are required to prepare their reports in accordance with the accrual based reporting system. This policy also applies to local governments. Specific rules about the types of reports and accounts relating to the Indonesian government financial accountability and reporting systems are outlined in the Government Accounting Standards (*Standar Akuntansi Pemerintahan*, SAP) issued in 2005.

Drawing from the new public management (NPM) philosophy, the Indonesian government initiatives are aimed at improving the quality of its public sector reports and this shows that the country follows a similar pattern to other nations where private sector managerial tools are incorporated into government institutions' practices (Guthrie 1998; Lapsley & Pallot 2000; Ryan 1999; Sharma & Lawrence, 2008). The Government believes that the adoption of the new government accounting standards will enhance the quality of financial information about the assets, liabilities and the operation of public sector agencies.

However, a formal adoption of accrual accounting would not automatically bring intended outcomes as officially stated. In this case, especially in developing countries there are many technical and institutional problems that the authors believe could potentially hamper the government's efforts to reform the public sector accounting for improving efficiency. Moreover, recent literature in the public sector accounting has critically questioned the claimed benefits of accrual reports for government organisations when it comes to actual implementation (Carlin 2005; Christensen 2007; Christiaens & Rommel 2008; Connolly & Hyndman 2008). On the one hand such a critical assessment run counters the globalisation movement towards the adoption of business-style practices that still continues (Broadbent & Guthrie 2008). On the other hand, this trend indicates that public sector accounting policy makers around the globe have paid little attention to the potential obstacles

that have made the use of the private sector practices overweighs its implementation costs. A number of technical and institutional constraints have been identified as major problems which have contributed to the failure of public sector reforms in developing nations (e.g. Mimba, Van Helden & Tillema 2007; Rahaman 2009; Sharma & Lawrence 2008). In developing countries these problems include the lack of technical capacities, underused of accounting information for managerial purposes, also old managerial practices and culture (Mimba et al. 2007; Rahaman 2009; Sharma & Lawrance 2008). Technically, ignoring these issues would be a waste of tax payers' money as the adoption of business-styles accounting systems is costly and time consuming (Van Peursem & Pratt 1998). It also runs counter to the basic rhetoric behind the use of accrual accounting for efficiency improvement as promoted by the proponents of NPM-based practice. The rest of the paper is structured as follows: purpose of the study, literature review and theoretical lenses of the study, methods, result and discussion and conclusions and suggestion.

Purpose of the Study

The purpose of the study is to theorise how an accounting system was adopted by a Provincial Government under Study (henceforth PGUS) in Indonesia and to examine institutional capacity of the provincial administration in adopting a new accounting system. In accordance with the definition of institutional capacity proposed by Howitt (1977) and the World Bank (2004), Mimba et al. (2007, p196) conceptualise it as the ability of an institution to decide on and pursue its goals, to perform tasks, and to improve performance constantly. In a government organisation, institutional capacity can be defined as the organisation's ability to identify problems, to develop and evaluate policy alternatives, and to operate the government's programmes. Thus in an organisational context, the level of institutional capacity of an organisation would depend on technical capacity and understanding of its employees to perform a specific task with the resources provided. Moreover, the presence of implementation problems also determines the institutional capacity of organisations in implementing their tasks. Therefore to examine how a new reporting system in an Indonesian provincial government has been changed and institutional capacity of the local government in Indonesia in adopting a new reporting system (i.e. the SAP), the study focuses on four issues:

- The nature of the reporting system change.
- The availability of skilled human resource required in adopting the new accounting system.
- The understanding of senior officials on technical and managerial aspects with respect to the adoption of the new accounting system.
- Potential implementation problems.

By uncovering and discussing these issues this study will not only contribute to provide knowledge about the role of accounting in a specific organisation and but also how an accounting system is actually implemented as suggested by Hopwood (2000), Lüder and Jones (2003) and Nor-Aziah and Scapens (2007).

Theoretical Lenses

Public sector accounting research has used numerous methodological frameworks in theorising public sector accounting reforms. Two of these frameworks are economic and

institutional theories. Following Lapsley and Pallot's (2000) work this study uses both theories.

Economic Theory

From an economic theory perspective, it is assumed that that the accountability and performance of public sector organisations can be enhanced by transforming the ways public organisations are managed, evaluated and financed into private sector managerial practise. Under the banner of NPM based principles, since the 1980s the role of business-style practices in the public sector across the globe has been strengthened (Broadbent & Guthrie 2008; Guthrie, 1998). According to Lapsley and Pallot (2000) the transformation of the public sector practices falls into seven key components:

> "(i) the disaggregation of large public service bureaucracies into decentralized, corporatized units based on 'products', (ii) the introduction of contracts (short term) for employees and public service organization outputs (as an incentive), (iii) the adoption of what is considered to be private sector management styles and techniques, (iv) a greater stress on 'frugality' (economy and efficiency in resource use) and discipline,(v) a greater visibility to top management direction, (vi) greater quantification of 'standards' of service and performance measurement and (vii) a greater emphasis on outputs" (Lapsley and Pallot: 215-216).

Given the focus of NPM-based practices is to record, measure and present the economic data of organisations, accounting technology plays a central role. As a consequence, private sector accounting systems (i.e. accrual information, activity based costing system) that have been promoted as "more informative and objective" than cash based systems which are now formally institutionalised into public sector arena across the globe (Christensen & Parker 2010). Following the path of developed nations, NPM based-programs which emphasise the adoption of private sector style practise, accounting technology also has been integrated into public sector accounting reforms in developing economies (Sharma & Lawrence 2008).

Lapsley and Pallot (2000) suggested that NPM philosophy is drawn from three paradigms: public choice theory, agency theory and transaction cost economics. They also stated that the proponents of the public choice theory suggest that the attitude of organisations' employees as human beings is mainly driven by their own interest (Lapsley & Pallot 2000). Therefore, the adoption of a more informative accounting system is required to reduce that tendency. In this vein, it is necessary to separate regulating agencies from providing services and information about costs, subsidy policies and contract procedures available to the public (Boston *et al.,* 1996).

Agency theory assumes the human's tendency to maximise their self-interest (Lapsley & Pallot 2000). This situation can create conflicts between the principal and agents of an organisation. To overcome these problems, each organisation needs to develop a mechanism to reduce these conflicts by emphasising a system that can measure, report and evaluate performance as the basis in formulating incentives and sanctions (Lapsley & Pallot 2000). With respect to the transaction cost economics paradigm, this school of thought is concerned with the efforts to optimise governance structures. Based on this vein, rational agents will select governance structures which minimise their aggregate production and transaction costs (Williamson 1985). It can be concluded that the central notion of the economic-based perspectives is emphasised on rationality as the core concept of the paradigm. As suggested

by Lapsley and Pallot (2000) that concept differs from institutional theory perspectives as explained below.

Institutional Theory

One of theoretical frameworks used by accounting scholars to understand accounting changes is institutional theory. According to this theory, organisations tend to adopt specific systems, structures, or procedures that are valued in their social and cultural environments (Ribeiro and Scapens 2006, p96). Therefore, an institution is defined as an established order comprising rule-bounded and standardised social practices (Dillard, Rigsby & Goodman 2004, p508). DiMaggio and Powell (1983) suggested that there are three types of institutional pressures which lead organisation to adopt a new rule or practice: coercive (rules and regulations imposed by regulatory authorities); normative (general societal beliefs and norms, including professionalisation); and mimetic (the tendency of organisations to copy the successful behavior of other organisations in the same field)" (DiMaggio & Powell 1983, p150). Thus, the rational function of accounting for promoting efficiency is only part of wider roles of accounting socially, economically and politically (Hopwood, 2000).

Institutional theory has been employed by numerous studies of public sector accounting reforms in developed and emerging economies. These studies include the work of (Lapsley & Pallot (2000) who observed the effect of the adoption of the accrual regime in New Zealand and UK; and Canada (Baker & Rennie 2006). Moreover, ter Bogt and Van Helden (2000) also investigate the influences of public sector accounting on the actions of managers and politicians in local governments in the Netherlands. In a developing country context, Nor-Aziah and Scapens (2007) also use Institutional theory in examining the implementation process of a private sector accounting technology adopted by a government organisation in Malaysia.

Although there is a growing number of accounting studies using institutional theory, these studies have been criticised as they were mainly focused on legitimacy and decoupling issues as the central notions in explaining accounting change phenomena (Dambrin, Lambert & Sponem 2007; Siti-Nabiha & Scapens 2007). Beyond this, accounting researchers need to expand their arguments in examining the detailed aspects of an institutionalisation process. In this process a number of issues can be further explored such as the ways organisations' actors operate, the motives of these actors and also the implications of their actions (Nor Aziah & Scapens 2007). This is required to provide a better insight about how and why an accounting system is actually institutionalised.

Methods

This study employed a case study approach as a means to provide a deep understanding of how a specific organisation as a unit of analysis adopted a new accounting system. As Yin (2009) suggests that a case study approach can be used for both developing and constructing theory. In contrast to the quantitative approach which emphasises the testing of specific hypotheses to explain and predict future phenomena (Luder 1992), a qualitative approach is designed to answer why and how questions related to a specific setting as suggested by Yin (2009). In collecting the data, the study uses two source of information: (1) document sources and (2) depth interview and questionnaire. The use of such methods has previously appeared in numerous accounting studies investigating an accounting change in an organisation (e.g. Dambrin *et al.,* 2007; Sharma & Lawrence 2008; Siti-Nabiha & Scapens 2005).

Document Sources

This study used document sources such as official policies of public sector reporting systems used in PGUS. There are two main sources that we examined: the Indonesian government's law and regulations about finance and reporting systems in the country including UU No 13 issued in 2003 and the SAP issued in 2005. In addition, we also examined the reports of the PGUS and published papers about the public sector accounting reforms in Indonesia.

In-depth Interview and Questionnaire

To capture the views of the people who have been assigned the task to implement the SAP in the organisation under study, interviews were undertaken with six managers in accounting, financial and internal audit divisions of a provincial government in Indonesia. The author used open-ended questions as guidance for discussion with the participants, but the interviewers were allowed to speak freely (Table 1).

Table 1

Main questions asked for open-end interviews

No.	Questions
1.	Why did this provincial government implement the SAP
2.	What is your opinion about the SAP?
3.	Do the staf here prepare the reports in accordance with the SAP?
4.	What are the main problems ecountered in adoptiong the SAP?
5.	Do you use the reports for decision making?

. The length of the interviews was 60 up to 90 minutes. All interviews were tape recorded. In addition, the study also used a simple questionnaire technique to capture the views from 23 staff in accounting and financial sections representing one person of each division. Their views are also important to gauge the level of understanding and technical capacity of those who have been assigned the task to produce financial statements based on the SAP. As Hepworth (2003) states, accrual accounting is not only about preparing reports. This also includes the whole process of preparing and using these accrual reports for decision-making. Accrual accounting is about the whole process of financial management. It is partly about obtaining a better understanding of the nature of 'costs', but it is also about a better understanding of what those costs mean for the financial management of government and the outcomes that a government is trying to achieve (Hepworth 2003, p38).

In collecting the information through the questionnaire, the participants were given an opportunity to complete the questionnaire over a period of one week. Any issues related to the questionnaire were clarified during the first meeting with the participants. The authors directly approached the participants in their office and their responses were collected one week to ten days later. The interviews were conducted in December 2007-January 2008. To protect the confidentiality of the participants, they were allowed not to disclose their identity (name and position) in the questionnaire. Twenty participants of twenty three interviewees who were approached replied to the questionnaire, which indicates a high level of response (86%). As this study is a case study, the questionnaire was only used to complement their views captured through open-ended interviews. Moreover, the unit of analysis of the study was a provincial government, thus each participant was treated as an informant in the context of an organisation under study. Therefore, statistical tests were unnecessary (Mignot & Dolley, 2000; Rutherford, 1992).

Results and Discussion

This section reports the findings; (1) reporting system change and (2) institutional capacity and (3) implementation problems with respect to the adoption of a new accounting system in a provincial government in Indonesia.

Reporting System Change

Significant reforms of laws about public sector management practices only occurred following the overhaul of the political system since the late 1990s. These reforms included the adoption of accrual accounting for local governments (provincial and district levels) in 2003. As explained earlier the policy to adopt accrual accounting is based on UU No. 17 promulgated in 2003, and SAP (a set of government accounting standards) issued in 2005. These rules required the Government at all levels to produce financial statements. Each local provincial government, for example, must produce not only budget realisation reports but also balance sheets, cash flows & notes to financial statements. These reports must be available both at provincial level (consolidated reports) and each division (agencies, organisations, hospitals) of a province.

Table 2
Reporting systems

Reporting system	Types of report	Reporting level
Old reporting system 1945-2003	Budget realisation reports	Provincial level
New reporting system (Since 2004)	• Budget realisation reports • Balance sheet • Cash flow • Notes to financial statements	• Provincial level • Divisions level (24 entities)

Source:,Harun (2007), SAP (2004), UU No. 17 (2003)

According to SAP the implementation of the new government accounting standards is necessary to enhance the relevance, neutrality, timeliness, completeness and comparability of the government's reports. Beyond this, the SAP states that the implementation of the new accounting system will support the Government's efforts to combat corruption as the producers of government reports at the central and local levels are required to publish their reports for the public. It is also expected that by producing more informative financial information in accordance with the SAP – it enables the tax payers and recipients of the public sector services to identify the level of the effectiveness and efficiency of public sector agencies' operation in the country. Moreover, with the availability of accrual reports, the managers and decision makers across public sector's agencies in the country will be better informed in making better decisions in investment and operational spending (SAP 2005). Thus, the availability of high quality financial information is believed to reduce the gap of information asymmetric between the government and society and other stakeholders on the use and allocation of state finances. As stated by the former Head of the State Audit Board, Anwar Nasution (Nasution 2008), the lack of public financial transparency contributed to the flourish of corruption during the Suharto era, thus the adoption of a more informative reporting system is necessarily required to strengthen the transparency of the government and prevent the misuse of the government assets. This fact indicates that the Indonesian government policy to adopt the SAP was driven by NPM based philosophy, in which the

adoption of a business -styles accounting systems would improve the efficiency and performance of public sector organisations.

Institutional Capacity and Implementation Problems

The issue of the institution capacity belonging to the provincial government is drawn from information about human resource availability and the understanding of senior officials in the PGUS about the new accounting rules. Moreover, implementation problem issues reflect the views of the participants with respect to the most critical problems in adoption of the GAS in the provincial government.

HUMAN RESOURCE AVAILABILITY

Human resource availability is one of the most important factors that determine the extent to which institutional capacity of an organisation can successfully implement a new accounting system (Christensen 2002, 2010; Luder 1992; (Jones and Puglisi (1997); ter Bogt & Van Helden 2000). Nonetheless, this study finds the adoption of the SAP in the PGUS has not been equipped with a significant number of personnel to implement the new accounting system. There were only two senior officials who have bachelor degrees in accounting (without professional accreditation) and none of them have experience in accounting jobs. Other officials mostly graduated from political science, law, and public administration and none of them have had prior experience in the private sector accounting. This situation indicates these officials have irrelevant educational backgrounds to adopt the new accounting system (Table 2).

This finding indicates that the lack of accountants is confronted with the abundant tasks to prepare twenty three sets of financial statements of all divisions (or agencies, organisations, hospitals) and one set of consolidated reports at the provincial level. To prepare these reports, the provincial government under study was forced to hire accountants from outside consulting or accounting firms to do the jobs. A senior official in financial and accounting of the provincial government stated:

> "It is more complicated, but the law [Law 17/2003] requires us to implement it. We have no choice, but to outsource the work to outside."

The statement also represents the views of three other senior officials interviewed who suggested that the technical capacity of existing employees in the PGUS do not allow them to cope with the requirement of the new accounting system. As a consequence, the application of the new accounting system has increased the costs incurred in preparing the PGUS's reports. Moreover, the PGUS still pays the salary of existing employees in the accounting function. This is due to the fact that the existing human resource management system in PGUS, as with other government institutions in the country still gives privilege to civic employees as they can only be dismissed if they are involved in criminal acts or voluntarily resign (McLeod 2006). As stated by an interviewee, it is not easy to dismiss a government official regardless of his or her actual work. Therefore as the policy to adopt a new accounting system in the PGUS is institutionalised into an old type of human resource management system, the adoption of the new accounting system produces an outcome that contradicts the very notion of NPM-based practices for efficiency improvement as it increase the cost of the accounting function in the provincial government.

Table 3
Profile of senior accounting and financial officials in PGUS

Tertiary education background	**Number of employees (%) N = 23**
Accounting	2 (8%)
Political sciences	6 (25 %)
Agriculture	8 (33%)
Public administration	3 (12 %)
Others	4 (16)

LEVEL OF UNDERSTANDING

The information captured through the questionnaire indicates that the majority of the officials lack understanding about the importance of the SAP. As Table 3 shows only a small minority (10%) of the interviewees indicate that that they have a good understanding of the purpose of the implementation of the SAP. Only five 5% of participants stated that they have the technical capacity to use the SAP in preparing the annual reports of the PGUS. Although they recognised the implications of their failure to present the reports in accordance with the SAP[3], only 15% of the interviewees suggest that they can independently analyse the information reported in the financial statements of the PGUS (Table 3).

Table 3
Level of understanding

Interviewees's statement		**N= 20**
1.	I fully understand the purpose of the SAP's implementation	10%
2	I am able prepare the annual reports based on the SAP	5%
3.	I am able to independently analyse the information in the financial statements prepared based on the SAP	15%
4	I understand the consequence if the organization fails to prepare the reports based on the SAP	80%

The views from three interviewees in the accounting division of the PGUS also confirm the lack of understanding among the officials and politicians (the governor and local parliamentary members) in using the PGUS's reports in making decisions.

"These reports are complicated to understand."

"We also do not use these reports in the budget formulation".

The interviewees also suggest that the political reasons are more important factors in the decision making process in the provincial government:

[3] If local governments fail to produce a set of reports based on the GAS, the auditors (from the State Audit Board) will issue them with qualified or no opinion. At the time of this paper being written (2010) there were no formal rules about sanction for the failure to produce SAP-based reports.

> "I doubt these reports are used by our boss [the governor] for making decisions. These reports are only used for complying with the law [Law 17/2003 on state finance"]".
>
> Making decisions about the budgets and projects are more related to the interests of these people [politicians].

Thus it appears that both the lack of understanding and political motives have undermined the managerial function of the accrual reports in the PGUS. In other words, the change in the reporting system has no or little impact on the process of decision making.

IMPLEMENTATION PROBLEMS[4]

In responding to the question about the most critical (number one) problem in implementing the GAS, a great number of the participants (40%) point to the lack of skilled staff in accounting. Two interviewees of the study state:

> "The biggest problem we are facing is the lack of people who can do the job [preparing the reports in accordance with the SAP]".

> "We are struggling to prepare the reports as no one can prepare the reports properly"

This factor was followed by the lack of experience in the relevant area (30%) and facilities (15%) and leadership deficiencies from senior managers (10%). Only five percent of them point out lack of penalty as the most essential implementation constraint (Table 4).

Table 4

Implementation problems

No.	Interviewees' statement on the most critical implementation problems	Participants (%)
1.	Lack of skilled staff	40%
2.	Lack of relevant experince	30%
3.	Facilities deficiencies	15%
4.	Lack of leadership	10%
5.	Lack of penalty	5%

Discussion

This section discusses the findings based on both economic and institutional perspectives:

Economic Perspectives

[4] In this case the participants were instructed to choose only one answer they suggest as the most crucial problems in the implementing the SAP in the PGUS.

From an economic-based perspective, the adoption of a more informative accounting system indicates that the provincial government follows the path of government entities in the developing countries in adopting a NPM-based practise. Nonetheless, the political and managerial roles of the executive officials (the governors and the managers of the provincial government's divisions) have yet to be separated. In other words, the change in how the local government's reports are prepared is not coupled with the separation of the roles of the governor and the local parliamentary members as politicians and managers. This fact contradicts the core argument of NPM-philosophy that to ensure the conflict of interests, it is necessary to separate the roles of elected politicians by the people from managerial decisions and actions (Lapsley & Pallot 2000).

Therefore, it can be argued that from NPM-based principles, the organisational framework of the PGUS limits the usefulness of accrual information for making economic decisions. As Lapsley and Pallot (2000) state, the NPM-based philosophy promotes the separation of regulating agencies from managerial roles. This is necessary to prevent people's tendency from serving their own agenda in allocating and using public money (Boston *et al*., 1996). As there is no separation between the political and managerial roles of the elected politicians in the PGUS (i.e. the governor and the local parliamentary members) – this situation potentially opens an opportunity for them to allocate the local government's resources that can serve their own political interests regardless of the economic reasons.

In addition, the study also shows a gap between the rhetoric or the intention behind the policy to adopt the SAP for improving efficiency and the lack of institutional capacity of the PGUS. This situation is indicated by the fact that policy to adopt the new accounting system failed to recognise the lack of skilled human resources and existing implementation problems. As a consequence, the adoption of the SAP has made the expenditures incurred to run the accounting function of the PGUS more costly. From economic based perspectives, the increasing of costs in the accounting function of the PGUS contradicts the views of the proponents of NPM-based practices to make public sector organisations be more efficient.

Institutional Perspectives

This study finds the decision to adopt the accrual based reporting system in the PGUS was beyond its authority. From an institutional perspective, the adoption of the new accounting system at the provincial level in Indonesia is indicated by coercive isomorphism as local authorities are obliged to comply with accounting rules (i.e. SAP) issued by the central government. This situation differs from the early process of the public sector accounting reforms in New South Wales, Australia (for example) where accounting consultants and senior local government officials played a leading role in diffusing the ideas to adopt accrual accounting (Christensen 2002). The nature of the political and legal systems in Indonesia implicates how an accounting system is institutionalised in the public sector in the country (Fitrani, Bert & Kai 2005). This point supports Luder's (1992) assessment that the nature of legal and political systems shapes the framework of a government's reporting practice. This fact is not surprising as the decision-making of the administration system in Indonesia has been determined at the central level. As Luder (1992) argues that the nature of legal and political systems is one of dominant factors influencing a public sector accounting reform of a nation. Institutionalised orders and practices influence how a new practice is adopted (Siti-Nabiha & Scapens 2007).

Moreover, at the implementation level this study also shows that the PGUS has not been equipped with sufficient institutional capacity in terms of human resource deficiency and the presence of implementation barriers. This fact implies that the decision for adopting a new accounting system at the local level in Indonesian did not carefully consider the

technical capacity of an organisation assigned to adopt the new accounting system. In this vein, the policy to use the new accounting system was primarily imposed by the government at the central level regardless of the institutional capacity of local administrations and related costs incurred. Therefore, the gap between the rhetoric behind the accounting reform for efficiency improvement contradicts its consequences.

In this case the accounting reforms at the local level in Indonesian governments can be seen as "an arena" for powerful actors at the central level to exercise their power rather than a search of efficiency improvement. The power of the Government at the central level has been effectively demonstrated through the accounting change at local level. As the study shows, accounting has been used by the central government to determine financial and reporting practices at lower administrations. This observation falls under the notion that "[a] central government normally has the power and authority to define the norms and standards of conduct that direct behaviour of local units (Chang 2009, p149). Beyond this, the argument supports Covaleski and Dirsmith's (1995) view that the process of institutionalising calculative techniques such as accounting systems in the public sector is a political process and often influenced by the relative power of organisational constituents. This finding also emphasises the notion that the formulation of a reporting system is not a neutral process but dominated by the institutional interests of a more powerful Government (Chang 2009, p149).

Conclusions and Suggestion

The study attempts to understand how accounting change has been directed in a provincial government in Indonesia. The study also examines the institutional capacity of the provincial administration and problems it encounters in adopting a new accounting system. Both economic and institutional perspectives have been useful to demonstrate how accrual accounting has been incorporated into the public sector arena and its consequences in a public sector context.

Drawn from an economic perspective, the policy to adopt the accrual accounting system in provincial government level Indonesia indicates the country follows a similar pattern to other countries aimed at strengthening a more accountable, and transparent efficient government. As with the managerial reforms of public sector organisations in Australia, New Zealand and UK, the decision to adopt accrual accounting has been the central theme of these reforms (Ryan 1998; Carlin 2005). In the context of the PGUS, accrual accounting has also been promoted for efficiency improvements in the government organisations at the national and local level. Nonetheless, the reporting system change was not followed by the separation of conflicting roles between the governor and local parliament in PGUS as politicians and managers. This situation undermines the technical role of accounting for economic reason.

From institutional theory, the study shows two critical points. Firstly, this study indicates how accounting has been used by the central government in determining the nature of a reporting system at provincial level in Indonesia. The nature of the political system in Indonesia which gives significant roles of the central government to oversee local administrations has easily facilitied accounting to be "a political instrument" to control local governments. This differs (for example), from the Australian approach in the public sector accounting reforms, where the process of the adoption of accrual accounting was more complex and involved competing stakeholders from government and professional organisations (Christensen 2002, 2010; Ryan 1999). These arguments imply that for the Indonesian context -- the role of accounting as a political tool for controlling people (and organisations) undermines its roles of enhancing performance and efficiency improvement. In other words, the arguments of the study also add a further example, how established orders

(in terms of organisational structures, old practise, existing institutional capacity) can hamper the values of public sector reforms as a managerial tool to improve the operation of public sector entities.

For further studies, the use of economic-based perspectives along with institutional theory has \ potential in examining a specific accounting change of an organisation from different perspectives. Moreover, the use of multiple approaches in collecting the data was useful in providing a complete picture of the dynamic process of accounting changes in a public sector context. Therefore this approach can be replicated in the context of local governments in other countries. However, the insights presented here cannot be generalised as the data of the study was only drawn from a provincial government in Indonesia.

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The Usefulness of Financial Statement Information in Predicting Stock Returns: New Zealand Evidence

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The Usefulness of Financial Statement Information in Predicting Stock Returns: New Zealand Evidence

Abstract

This study examines whether financial statement information can be used to implement an investment strategy in order to earn abnormal returns. Using financial statement information, we develop multiple logit models that predict either the year-ahead earnings changes (earnings-based approach) or the direction of stock returns (returns-based approach). The study labels the earnings-based approach as the 'indirect method' and the returns-based approach as the 'direct method'. The coefficient estimates of these models are used to generate *Pr* measures which are used to formulate investment strategies. Specifically, an investment strategy that involves buying stocks with high *Pr* values and selling stocks with low *Pr* values is examined. We find that both approaches generate positive returns for holding periods between six to eighteen months. However, when the influence of stock characteristics was analysed, only the *Pr* measures generated by the direct method demonstrated a significant influence on the stock returns. These findings remained unchanged across a number of sensitivity tests conducted.

Keywords

Financial statement information, Logit Models, New Zealand market

Cover Page Footnote

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The Usefulness of Financial Statement Information in Predicting Stock Returns: New Zealand Evidence

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Abstract

This study examines whether financial statement information can be used to implement an investment strategy in order to earn abnormal returns. Using financial statement information, we develop multiple logit models that predict either the year-ahead earnings changes (earnings-based approach) or the direction of stock returns (returns-based approach). The study labels the earnings-based approach as the 'indirect method' and the returns-based approach as the 'direct method'. The coefficient estimates of these models are used to generate *Pr* measures which are used to formulate investment strategies. Specifically, an investment strategy that involves buying stocks with high *Pr* values and selling stocks with low *Pr* values is examined. We find that both approaches generate positive returns for holding periods between six to eighteen months. However, when the influence of stock characteristics was analysed, only the *Pr* measures generated by the direct method demonstrated a significant influence on the stock returns. These findings remained unchanged across a number of sensitivity tests conducted.

Key words: Financial statement information; Logit Models; New Zealand market

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Introduction

According to the semi-strong form of the efficient market hypothesis (Fama 1970), publicly available information such as financial statement numbers cannot be used to detect mispriced securities; any investment strategy designed on the basis of published financial information therefore should not prove profitable. In contrast to this argument, fundamental analysts believe that the markets may misprice securities in the short run although the correct price will eventually be reached over a longer time frame; profits can be made by buying (selling) undervalued (overvalued) securities. Once the market realises its mistake and re-prices securities accordingly, the trading strategy will earn sizeable gains (Graham 2005; Graham, Dodd & Cottle 1962).

Many researchers have argued in favour of fundamental analysis suggesting that it is possible to make informed financial projections using financial statement information and to earn consistent excess returns (Abarbanell & Bushee 1997; Lewellen 2004). Research suggests that most analysts employ fundamental analysis when valuing company shares (e.g. Arnold & Moizer 1984; Arnold, Moizer & Noreen 1984; Barker 1998; Pike *et al.* 1993). Further, they attach a great deal of importance to income statement and balance sheet information when conducting this fundamental analysis.

In this study, we conduct a comprehensive financial analysis using financial statement information for New Zealand companies and build multiple logit models that predict the direction of one-year-ahead earnings or stock returns. The predictions generated by such models are then used to rank companies and to assign them to six portfolios; the profitability of an investment strategy of taking a long position in the stocks that were assigned to top two portfolios and a short position in the stocks that were assigned to the bottom two portfolios was examined across a number of time intervals up to 24 months. The remainder of the paper proceeds as follows: The second section provides a brief review of the relevant literature and highlights the contribution of the paper. The third section describes the analytical procedure. The logit models generated by the above analytical process and their prediction accuracies are then explained. The fifth section presents the results relating to the returns generated by the investment strategy. The last section offers the conclusion.

Literature Review

Ou and Penman (1989) conducted a pioneering study in which they performed an extensive analysis of company fundamentals in order to derive a summary measure that predicted the direction of future earnings changes of companies; the companies were then assigned to long and short positions on the basis of this calculated summary measure and the profitability of investing in a hedged portfolio was examined. Their approach reduced a large array of financial statement information into a scalar measure called *Pr*. They took long positions in companies with $Pr \geq 0.60$ and short positions in companies with $Pr \leq 0.40$; these positions were held for periods of 3, 6, 9, 12, 18, 24 and 36 months. The hedged position of this strategy generated a significant market adjusted return of 14.53 per cent over a 24-month holding period. Subsequent studies such as Ou (1990), Lev and Thiagarajan (1993) and Charitou and Panagiotides (1999) provided corroborative evidence to those reported by Ou and Penman (1989).

Holthausen and Larcker (1992) proposed an alternative approach. They predicted the association between stock returns and accounting information directly. Their investment strategies yielded annual excess returns that were smaller than those documented by Ou and Penman (1989) but still significantly different from zero; for a 12-month holding period, their

strategy generated an excess return that ranged between 4.26 per cent and 7.97 per cent depending on the excess return metric used. However, when they replicated the Ou and Penman (1989) approach, they found that the 24-month holding period return for this earnings-based strategy was much lower (between 2.23 per cent and 3.74 per cent) than that reported by Ou and Penman (1989) (i.e. 14.53 per cent).

Setiono and Strong (1998) employed both the Ou and Penman and the Holthausen and Larcker approaches in the UK market. Their results showed that a UK investor could earn a significant excess return of 17.38 percent for a 24-month holding period using Ou and Penman's strategy but an insignificant return using Holthausen and Larcker's direct approach. These results were consistent with an earlier study conducted by Bernard, Thomas and Wahlen (1997); they found that, even though the accounting-based stock price anomalies documented by Ou and Penman and Holthausen and Larcker generated significantly positive market-adjusted returns, the former strategy was able to outperform the latter strategy by a significant margin.

Researchers have also examined whether the profit generated by this investment strategy is influenced by various risk factors identified in the finance literature. Ou and Penman (1989) reported that the profits of their strategy cannot be attributable to return-based risk factors; their highest *Pr* portfolio and the lowest *Pr* portfolio reported higher beta values than the rest of the groups. Further, both Ou and Penman (1989) and Setiono and Strong (1998) report that, even though the abnormal returns decline when size differences among firms are taken into account, the profits based on market-value-adjusted returns remain significant for a 24-month holding period. Similarly, Holthausen and Larcker (1992) found that their investment strategy remained significantly profitable generating an annual excess return of between 6.0 per cent and 7.9 per cent even after controlling for the effect of these anomalies. However, Greig (1992), who examined whether the *Pr* measure of Ou and Penman (1989) proxied for the equity beta and firm size, found no evidence of abnormal returns after controlling for these two risk factors.

The existing US and UK studies do not provide conclusive evidence on the profitability of the above investment strategy, irrespective of whether the relationship between financial information and stock returns is predicted directly or indirectly via one-year ahead earnings. These two models seem to be sensitive to the market and the time period analysed. For example, Holthausen and Larcker (1992) reported that their strategy was more profitable in the 1978-1982 sub period than in the 1983-1988 sub period while the Ou and Penman strategy was profitable only in the first sub period. Also, they found that the latter strategy works well on NYSE/AMEX firms rather than OTC firms while their own strategy was equally successful in all exchanges. However, Setiono and Strong (1998) found that the Ou and Penman strategy worked well on their UK sample while the Holthausen and Larcker strategy proved to be unprofitable.

We investigate this anomaly for the New Zealand market employing both the Ou and Penman (1989) (referred to as the 'indirect method' in our study) and the Holthausen and Larcker (1992) (referred to as the 'direct method' in our study) approaches. We believe that applying fundamental analysis to a small market like New Zealand offers a valuable contribution to academic research for a number of reasons. First, market efficiency does not preclude the existence of abnormal returns in one market or in a particular time period. The existing US and UK evidence on this investment strategy seems to depend on the approach used (i.e. indirect versus direct), market analysed and the time period investigated. Therefore, more evidence across different countries and different time periods is necessary to come to a conclusion on the profitability of this trading strategy. Second, the New Zealand market is

smaller in size than its US and UK counterparts[3] and therefore, company financial statements may not be studied by a large number of expert individuals. An early study by Chang, Most and Brian (1983) found evidence in support of this argument. In their study, New Zealand investors rated newspapers, magazines and stockbrokers' advices as more important sources of information than corporate annual reports in their investment decisions compared to their US and UK counterparts. In such a situation, investment strategies based on fundamental analysis can be expected to be more profitable in this market than in the US and the UK markets. Finally, if this strategy works in the New Zealand market, it may be very useful to investment analysts in their portfolio decisions as very little has been researched on market anomalies in New Zealand.

Analytical Procedure

Our sample includes the companies listed on the New Zealand Stock Exchange (NZX) for which the relevant accounting and share price data are available for analysis. The period under investigation spans from 1995 to 2006. We analyse, on average, 70 companies per year which represents 36% of the total population in the NZX over the study period.[4] The source of financial statement information was the NZX Deep Archive Service. The monthly adjusted stock prices and the market index were obtained from Datastream. We identified 75 accounting ratios from various sources but ended up using only 54; 21 ratios were dropped due to the unavailability of information needed for the calculation of such ratios.[5] We adopted the motto of 'let the data speak' rather than making a conscious attempt to select them.

We use the above accounting ratios for the six-year period from 1995 to 2000 to build multiple logit models that predict the changes in one-year-ahead earnings (indirect method) or the direction of one-year-ahead returns (direct method). The steps followed in each approach are highlighted below:

Indirect Method

i. Calculate the change in year-ahead earnings per share (EPS) for each company in every year from 1995 to 2000 as follows:

$$\Delta EPS_{i,t+1} = EPS_{i,t+1} - EPS_{i,t} - Drift_{i,t+1} \quad [1]$$

where $\Delta EPS_{i,t+1}$ is the change in (year-ahead) earnings per share for firm i in year t+1, $EPS_{i,t}$ is the earnings per share before extraordinary items for firm i in year t and $Drift_{i,t+1}$ is the drift term (i.e. the mean EPS change over the four years prior to year t+1).

ii. Use $\Delta EPS_{i,t+1}$ to create a binary variable; this variable takes the value of '1' if the one-year-ahead earnings change is positive and '0' if it is negative. This variable acts as the dependent variable in our logit models.

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[3] At the end of 2006, the last year of the prediction period of this study, the market capitalisation of New Zealand Stock Exchange (NZX) amounted to $NZ76.49 billion while its US and UK counterparts reported market capitalisations of $NZ30.65 trillion $NZ9.20 trillion respectively.

[4] Our sample is biased towards firms that have the necessary financial statement information for a long period. They tend to be large in size. Readers should be aware of this feature when interpreting results.

[5] We don't report the accounting ratios used in the analysis to conserve the space. They are available upon request from the authors.

iii. Estimate 54 univariate logit models on pooled data using each accounting descriptor as the sole explanatory variable and identify descriptors whose slope coefficients are significant at the 20 per cent level.[6]
iv. Estimate a multiple logit model using the variables that were found to be significant in the previous step. This was done in a step-by-step process by dropping insignificant explanatory variables until the final earnings prediction model was developed.

Direct Method

i. Calculate the year-ahead buy and hold raw return for each company in every year from 1995 to 2000 as follows:

$$BHRR_{i,12} = \prod_{t=1}^{12}(1+R_{i,t})-1 \quad [2]$$

where $BHRR_{i,12}$ is the buy-and-hold return for firm i for twelve months and $R_{i,t}$ is the return of company i in month t. This return measure corresponds to the stock return generated by a firm in the year following the end of a particular accounting year. We keep a three-month gap between the end of the accounting year and the first month of the *BHRR* calculation period (i.e. t=1).
ii. Use $BHRR_{i,12}$ to create a binary variable; this variable takes the value of '1' if one-year-ahead *BHRR* is positive and '0' if it is negative. This variable acts as the dependent variable in our logit models.
iii. Repeat steps iii and iv as discussed in the indirect method and generate the final return prediction model.

The coefficient estimates of these logit models together with the relevant accounting ratios are used to generate *Pr* values for each company in each year for the six-year period from 2001 to 2006 as follows:

$$\Pr_{i,t} = \frac{1}{1+e^{-(\alpha+\beta_1 X_{1,t}+\beta_2 X_{2,t}+...+\beta_j X_{j,t})}} \quad [3]$$

where, $X_{1,t}$ to $X_{j,t}$ is a vector of accounting variables available for firm i at the end of year t and β_1 to β_j is a vector of coefficients generated by the multiple logit model. These *Pr* values are used to rank companies from lowest to highest and assign firms to one of six equally-sized portfolios in each year. We designate the companies in portfolios one and two as 'short position' investments and companies in portfolios five and six as 'long position' investments.

In the next stage, the return performance of these long and short position investments is examined for a number of holding periods; they include 3-month, 6-month, 12-month, 18-month and 24-month holding periods. We use monthly returns for the companies in the sample and generate market-adjusted buy-and-hold return as follows:

$$MABHR_{P,M} = \frac{1}{N}\sum_{i=1}^{N}\left[\prod_{t=1}^{M}(1+R_{i,t})-\prod_{t=1}^{M}(1+R_{m,t})\right] \quad [4]$$

In the above equations, $MABHR_{P,M}$ is the market-adjusted buy-and-hold return for portfolio P from month 1 (the fourth month after the accounting year end of a firm[7]) to month M, $R_{i,t}$ is

[6] Prior studies used 10 per cent but we use 20 per cent considering the small sample size available to generate logit models in the New Zealand market.

the return of firm i in month t, $R_{m,t}$ is the return of the market index in month t, and N is the number of observations in the portfolio. If a company is delisted during a holding period, such a company is assigned zero market-adjusted return for the remaining months of the holding period.

Multiple Logit Models and Prediction Accuracy

We use the financial statement information for the six-year period from 1995 to 2000 to derive the multiple logit models; between 411 and 416 companies were used for this purpose with annual observations ranging between 62 and 78 firms. When the univariate logit models were estimated, 20 accounting descriptors generated significant coefficients under the indirect method of which 14 were significant at the 10 per cent level while the remaining six were significant at the 20 per cent level. Under the direct method, 18 accounting ratios emerged as influential variables of which 15 coefficients were significant at the 10 per cent level while the remaining three were significant at the 20 per cent level.[8] These important accounting descriptors were included in multiple logit models, which followed a step-by-step process, in order to derive the final multiple logit models.

Table 1 presents the coefficient estimates for the two final models built under the indirect method and the direct method. Our earnings-based prediction model, Table 1 Panel A, contains five financial ratios which capture three important financial profiles of the firm – liquidity (represented by the change in the current ratio and the change in the quick ratio), profitability (represented by return on total assets and pre-tax income to sales) and operating activity (represented by the ratio of sales to inventory). Interestingly, three coefficients are significant at the five per cent level while the remaining two are significant at the 10 per cent level. As the multiple logit model parameters reported in Panel B of the table reveal, more accounting ratios seem to be useful in predicting year-ahead stock returns; nine accounting ratios entered into our stock return prediction model with significant coefficients. All but one of these coefficients are significant at the one per cent level indicating the robustness of this model compared to its earnings change prediction counterpart. Also, this model drew upon a wide range of firm financial profiles such as profitability (represented by return on opening equity, return on closing equity, pre-tax income to sales, operating income to total assets and change in operating income to total assets), the level of capital expenditure (lag of change in capital expenditure to total assets and change in depreciation), size of the firm (change in sales) and operating activity (sales to inventory).

We find some similarities between our models and those generated in prior studies. For example, in our EPS change prediction model, return on total assets and pre-tax income to sales variables have negative coefficients. In Ou and Penman's (1989) study, similar variables such as return on opening equity, return on closing equity and return on total assets enter into multiple logit models with negative coefficients. Setiono and Strong (1998) report similar findings for the UK market; in their EPS prediction model, return on opening equity and net profit margin contain negative coefficients. In our stock return prediction model, change in depreciation and change in capital expenditure possess negative coefficients. The sample period of this study coincided with a period of strong economic growth in New

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[7] We keep a gap of three months in order to allow for the possible time gap between the end of the financial year of a firm and the publication of its annual reports. Conover et al. (2008) reported that, during the 1992-96 period, the New Zealand firms took a median number of 87.5 days to publish their financial statements.

[8] We don't report the coefficients of these univariate models in the text to save the space. They are available from the authors upon request.

Zealand. In such a period, companies may focus on investing in growth opportunities and this may have a depressing effect on short term profitability and share prices. The negative association between variables such as the change in capital expenditure and share returns may reflect this effect.

Table 1
Multiple Logit Model Parameters

Accounting Descriptor	**Coefficient**	***z*-statistic**	***p*-value**
Panel A: Logit Model generated by Indirect Method			
Intercept	0.0451	0.25	0.80
Change in current ratio	1.2659	1.63	0.10
Change in quick ratio	-1.4621	-1.90	0.06
Return on total assets	-4.0123	-2.58	0.01
Pre-tax income to sales	-1.9504	-2.42	0.02
Sales to inventory	0.0055	2.05	0.04
Panel B: Logit Model generated by Direct Method			
Intercept	-1.3316	-4.56	0.00
Change in sales	3.0405	2.87	0.00
Change in depreciation	-0.3636	-2.62	0.01
Return on opening equity	7.9456	3.04	0.00
Lag of change in capital expenditure to total assets	-3.6062	-2.26	0.02
Return on closing equity	-13.5525	-3.60	0.00
Pre-tax income to sales	3.0887	3.12	0.00
Sales to inventory	0.0087	2.51	0.01
Operating income/total assets	7.0604	2.75	0.01
Change in Operating income/total assets	0.5566	3.73	0.00

This table reports the output for the final Logit regression models which were developed through a step-by-step process by dropping explanatory variables which failed to generate significant slope coefficients at each step. It reports the accounting ratios that entered into the final models with significant coefficients, the slope coefficients of the explanatory variables, and the associated *z*-statistics and *p*-values. Panel A reports the coefficient estimates when the indirect method was used to generate the model while Panel B reports the coefficient estimates when the direct method was used to estimate the model.

The above models are used to generate *Pr* values (as shown in equation [3]) for each firm in each year over the six-year period 2001-2006. Using these *Pr* values, the companies were ranked from low to high and six equally-sized portfolios were created each year; the shares in portfolios five and six were designated as the long position investments while the shares in portfolios one and two were designated the short position investments.

Table 2 reports the information relating to predictive accuracy of our logit models. As Panel A of this table reveals, the indirect method analysed 416 company earnings changes while 411 company returns were subjected to the analysis under the direct method during this six-year period.[9] The logit model generated by the indirect method correctly classified 276 earnings changes and thereby achieved a 59.78 per cent accuracy rate; the multiple logit model generated by the direct method achieved a slightly lower prediction accuracy of 54.41

[9] The number of companies analysed under direct method is lower than that analysed under indirect method because of the unavailability of stock price information for some firms in the sample.

per cent by correctly classifying 272 firms. As the chi-squared statistics reveal, both these prediction accuracies are significant at the one per cent level. Our accuracy rates do not demonstrate significant deviations from those reported by previous studies for large markets. For example, Ou and Penman's (1989) EPS change prediction models produced accuracy rates between 60-67 per cent while Holthausen and Larcker's (1992) stock return prediction models generated accuracy rates between 51-53 per cent.

Table 2

Prediction Accuracy of Logit Models

Panel A: Prediction Accuracy for Total Sample		
	Indirect Method	**Direct Method**
No. of companies analysed	416	411
No. of observations correctly predicted	276	272
% correct predictions	59.78	54.41
Chi-squared	44.68**	62.52**
% correct EPS increase predictions	58.52	N/A
% actual EPS increasing firms	48.55	N/A
% correct EPS decrease predictions	60.99	N/A
% actual EPS decreasing firms	51.45	N/A
% correct positive return predictions	N/A	69.70
% actual positive return firms	N/A	64.71
% correct negative return predictions	N/A	40.00
% actual negative return firms	N/A	35.29

Panel B: Prediction Accuracy by Portfolios				
Portfolio	**Indirect Method**		**Direct Method**	
	No. of Observations	**% Correct Predictions**	**No. of Observations**	**% Correct Predictions**
Long Position:				
Portfolio 5	70	59.42	70	69.12
Portfolio 6	71	57.58	70	70.31
Short Position:				
Portfolio 1	71	59.15	70	52.86
Portfolio 2	70	62.86	70	27.14

The table reports information relating to the prediction accuracy of multiple logit models developed under both indirect and direct approaches. Panel A reports the prediction accuracy for the total sample while Panel B reports the prediction accuracy across individual portfolios in long and short positions. The ** indicates statistical significance at the 1 per cent level. The 0.01 critical value of the Chi-Squared statistic with one degree of freedom is 10.83. The NA refers to not applicable.

The logit model generated under the indirect method seems to be able to classify both EPS increases and EPS decreases with similar accuracies; this model predicted 59 per cent (61 per cent) EPS increases (EPS decreases) correctly. However, our stock return prediction model demonstrated a higher rate of accuracy in predicting positive returns (70 per cent) than predicting negative returns (40 per cent). Panel B of the table reports the accuracy rates for both the long and short position portfolios together with the number of firms placed in each portfolio. No discernible differences can be observed across the four portfolios except for the

relatively low predictive accuracy reported by the direct method model for the portfolio 2 with the short position investment.

The Profitability of Investment Strategy

Market-adjusted Buy-and-hold Return

Our investment strategy involves taking a long position in the two portfolios with the highest *Pr* values (portfolios 5 and 6) and a short position in the two portfolios with the lowest *Pr* values (portfolios 1 and 2).[10] In Table 3, we report the market-adjusted buy-and-hold returns for all six portfolios and for our strategy for the five holding periods mentioned above; Panel A of the table provides the returns earned by these portfolios from implementing the indirect method while Panel B reports the returns when the direct method was employed.

As the statistics in Panel A of this table reveal, when the indirect method was implemented, the two portfolios with the long position (portfolios 5 and 6) outperformed, on average, other portfolios in five holding periods considered by generating the highest returns. However, the portfolios with the short position (portfolios 1 and 2) did not necessarily underperform others in all the holding periods analysed; for example, they generated higher returns than portfolio 3 in the last two holding periods. There is a general tendency for portfolio returns to gradually decline when we move from portfolio 6 to portfolio 1. Clearly, the long position has outperformed its short position counterpart in all five holding periods. For a 24-month holding period, the long position generates an average market-adjusted buy-and-hold return of 18.76 per cent while its short position counterpart earns an average return of 12.22 per cent; the overall strategy, therefore, provides an average return of 6.54 per cent to investors.

However, as the table reveals, the indirect method did not generate consistently increasing returns for the strategy. The return to the strategy peaks at 5.31 per cent for a 6-month holding period but declines to 3.76 per cent for a 12-month holding period. It bounces back to 8.91 per cent for an 18-month holding period but again drops to 6.54 per cent for a 24-month holding period. The annual return generated by this strategy for different holding periods are as follows: for a three-month holding period 9.44 per cent; for a six-month holding period 10.62 per cent; for a twelve-month holding period 3.76 per cent; for an 18-month holding period 5.94 per cent; and for a 24-month holding period 3.27 per cent. Therefore, the optimum holding period for an investor who implements this indirect method seems to be six months. However, the largest magnitude of excess return for the strategy is reported for the 18-month holding period.

The market-adjusted buy-and-hold returns for the strategy, when the direct method is implemented, are reported in Panel B of the table. Portfolios 5 and 6 (long position) have outperformed the market by generating positive market-adjusted returns for almost all the holding periods analysed. On the other hand, portfolio one (in short position) underperformed the market consistently by generating negative returns in all the holding periods. The long position has been able to earn higher returns than its short position counterpart in all the holding periods of the study. For example, for a 24-month holding period, the long position (short position) realised 19.42 per cent (9.38 per cent) and thereby generated 10.04 per cent

[10] Our method is analogous to that used in Holthausen and Larcker (1992). Since the number of available firms in our sample is small, this approach ensures that we have enough observations in calculating investment profits generated by Pr values.

market-adjusted return to investors. The annual return achieved by the strategy for different holding periods are as follows: for a three-month holding period 2.48 per cent; for a six-month holding period 6.92 per cent; for a twelve-month holding period 8.14 per cent; for an 18-month holding period 8.75 per cent; and for a 24-month holding period 5.02 per cent. Unlike the indirect method, with this direct method the return to strategy continuously increases up to the holding period of 18 months; the optimum holding period for the strategy seems to be 18 months. As was observed under the indirect method, the largest magnitude of excess return is reported for the 18-month holding period.

Table 3

Market-adjusted Buy-and-Hold Returns for the Portfolios

Portfolio	Average *Pr* Value	Holding Period				
		3-month	**6-month**	**12-month**	**18-month**	**24-month**
Panel A: Indirect Method						
1	0.2002	-0.0043	0.0147	0.0844	0.0792	0.1004
2	0.3463	-0.0371	-0.0256	0.0306	0.0712	0.1439
3	0.4091	-0.0312	-0.0066	0.0592	0.0503	0.0693
4	0.4607	-0.0087	0.0238	0.0913	0.1319	0.2094
5	0.5574	-0.0245	0.0412	0.1115	0.1564	0.1977
6	0.8358	0.0303	0.0541	0.0787	0.1722	0.1774
Long Position (Portfolios 5+6)		0.0029	0.0476	0.0951	0.1643	0.1876
Short Position (Portfolios 1+2)		-0.0207	-0.0055	0.0575	0.0752	0.1222
Strategy [(5+6)-(1+2)]		0.0236	0.0531	0.0376	0.0891	0.0654
Panel B: Direct Method						
1	0.1254	-0.0203	-0.0187	-0.0765	-0.0716	-0.0261
2	0.3174	0.0022	0.0383	0.1579	0.1902	0.2137
3	0.4496	-0.0220	-0.0037	0.0974	0.1127	0.2140
4	0.5633	-0.0228	0.0039	0.0539	0.0818	0.1606
5	0.7207	-0.0444	0.0034	0.1087	0.1572	0.1915
6	0.9368	0.0387	0.0854	0.1356	0.2240	0.1969
Long Position (Portfolios 5+6)		-0.0028	0.0444	0.1221	0.1906	0.1942
Short Position (Portfolios 1+2)		-0.0090	0.0098	0.0407	0.0593	0.0938
Strategy [(5+6)-(1+2)]		0.0062	0.0346	0.0814	0.1313	0.1004

The table reports buy-and-hold market-adjusted returns for the six portfolios for the following holding periods: 3-month, 6-month, 12-month, 18-month and 24-month. It also provides the average *Pr* value for each portfolio together with the periodic returns to long position (i.e. investing in portfolios 5 and 6), short position (i.e. shorting portfolios 1 ad 2) and for the overall strategy (i.e. long position minus short position). Panel A provides the above statistics when the indirect method was implemented while Panel B provides the relevant statistics when the direct method is implemented.

The general conclusion that emerges from the analyses conducted so far is that the direct method (which uses financial information to predict the direction of year-ahead stock returns and then uses such predictions to assign stocks into long and short positions) is persistent in generating increasing excess returns for investors as the holding period increases gradually. But, its indirect counterpart (which uses financial information to predict the year-ahead EPS changes and then uses such changes to assign stocks into long and short positions) is unable to sustain an incremental growth in excess returns across different holding periods. However, both methods, on average, reported the highest magnitude of excess returns to the

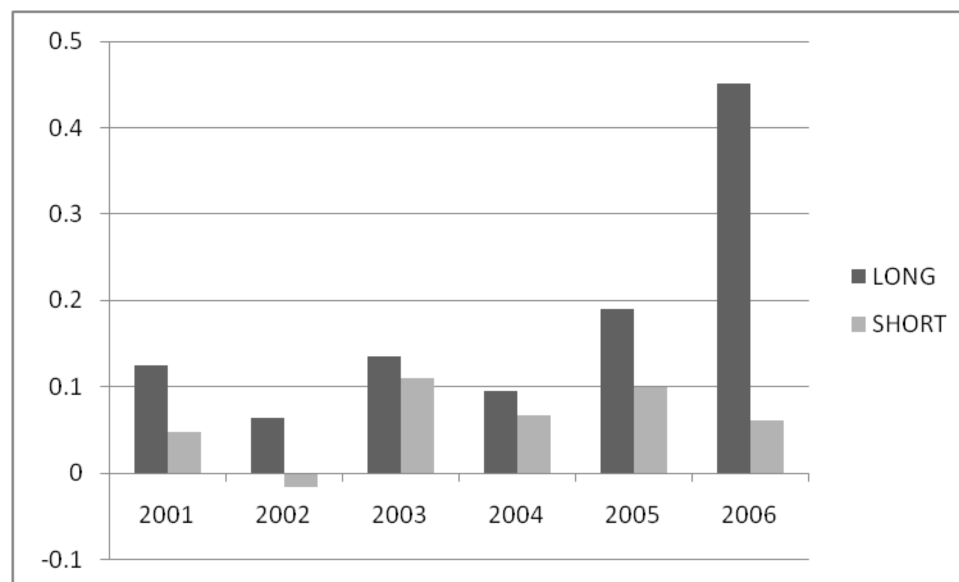
strategy for the 18-month holding period. Due to this reason, we use the 18-month holding-period returns generated by these two methods as the basis in our forthcoming analyses.[11]

Year by Year Analysis of Returns

Figures 1 and 2 present year-by-year distributions of market-adjusted buy-and-hold returns for the 18-month holding period.

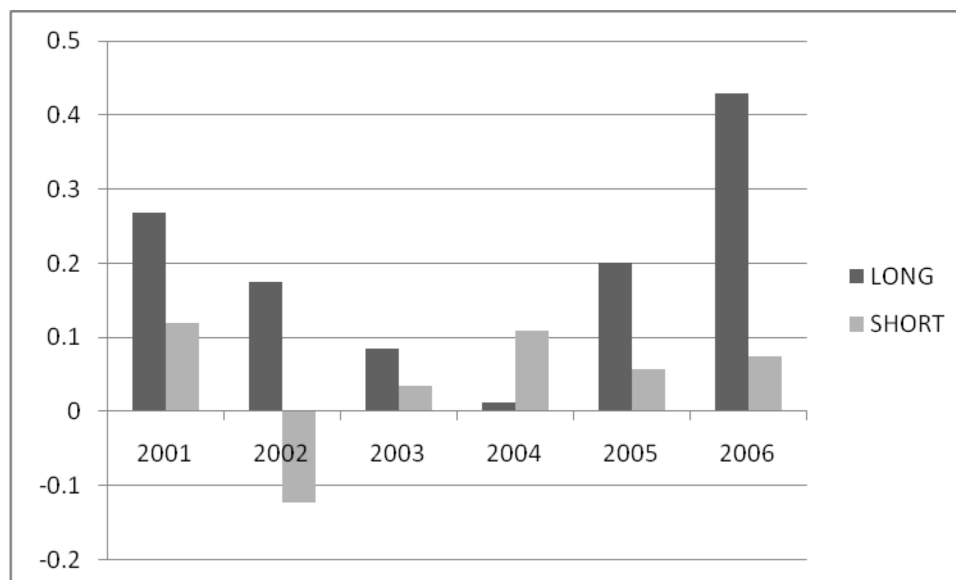
As can be seen in Figure 1, under the indirect method, the long position reports higher market-adjusted returns than the short position in all six years analysed. Therefore, the overall strategy generates positive returns in every year of the sample period. The contribution of the long position to the strategy demonstrates a large spike in 2006. However, the short position does not necessarily generate negative returns; it is only negative in 2002. A similar picture emerges from an analysis of Figure 2. The market-adjusted return for the long position is positive in every year and higher than that of the short position in five of the six years analysed. The short position outperforms the long position only in 2004. The return to the overall strategy, therefore, is positive in five years. The year-by-year return statistics do not demonstrate any year-specific influence on the results generated by the two methods.

Figure 1
Year by Year Distribution of 18-month holding period Market-adjusted Returns for the Indirect Method: 2001-2006



[11] Our findings can be interpreted as evidence of a capital market anomaly where fundamental analysis can generate abnormal returns to investors. This interpretation is based on the assumption that market is efficient in semi-strong form and at any point in time, actual prices of individual securities already reflect the information based on events that have already happened and on events the market expects to take place in the future. The readers should be aware of the limitation associated with this type of analysis in interpreting the possible implications of our findings accordingly.

Figure 2
Year by Year Distribution of 18-month holding period Market-adjusted Returns for the Direct Method: 2001-2006



Stock Characters and the Performance of Investment Strategy

Numerous studies have established strong evidence for the existence of a relationship between accounting fundamentals and stock returns. Such characteristics include the P/E ratio (Basu 1977), firm size (Banz 1981), the book-to-market ratio (Fama & French 1992), cash flow yield (Chan, Hamao & Lakonishok 1991) and the debt-to-equity percentages (Mukherji, Dhatt & Yong 1997). Previous studies that employed both indirect and direct methods have analysed the influence of these characteristics on the return generated by the strategy; the evidence is inconclusive, however.

To demonstrate the robustness of our results, we consider the influence of a number of stock characteristics on our results. These stock characteristics include firm beta (BETA, calculated by regressing the returns of the company on that of the market for the previous 36-months), the book to market ratio (B/M, calculated by dividing the book value of equity by the market value of equity at the end of the most recent financial year), the earnings to price ratio (E/P, calculated by dividing the EPS at the end of the most recent financial year by the share price at the beginning of that financial year), the natural logarithm of market value (LOGMV, calculated using the market value at the end of the most recent financial year) and cumulative raw returns for the last 12 months as a measure of momentum (CRR12, calculated using monthly returns for the 12-month period prior to the formation of portfolios).

The influence of these variables is examined by estimating the following regression:

$$MABHR_{i,t} = a_{0,t} + a_{1,t}PR_{i,t} + a_{2,t}BETA_{i,t} + a_{3,t}\left(B/M\right)_{i,t} + a_{4,t}\left(E/P\right)_{i,t} + a_{5,t}SIZE_{i,t} + a_{6,t}CRR12_{i,t} \quad [5]$$

where $MABHR_{i,t}$ is the market-adjusted buy-and-hold return for firm i (generated for the 18-month holding period); $PR_{i,t}$ is the *Pr* measure generated for the share; $BETA_{i,t}$, $B/M_{i,t}$, $E/P_{i,t}$, $SIZE_{i,t}$ and $CRR12_{i,t}$ are the stock characteristics introduced before.[12] The above

[12] The correlations between variables in the model may cause the multicolinearity problem. We found that the correlations between the explanatory variables in equation [5] were generally low (well below 0.20 in absolute

regression was estimated using all the stocks considered in the study – i.e. not only those included in the long and short portfolios.

We first estimate univariate regressions to directly test the influence of stock characteristics on market-adjusted buy-and-hold return. To ensure we have enough observations, we use the pooled time-series cross-section approach in the analysis. Table 4 reports the coefficient estimates for the stock characteristics; the relevant *t*-statistics of these coefficients are reported in parentheses. The univariate regression results reported in the above table do not reveal any evidence that the market-adjusted returns generated by these strategies for New Zealand stocks are influenced by the stock characteristics identified in the finance literature. All the stock characteristics except beta generate insignificant coefficients; however, the coefficient of firm beta is negative, which suggests that low beta stocks have higher subsequent returns than high beta stocks in our sample. On the other hand, both *Pr* coefficients generate positive values but only that generated by the direct method demonstrates a significant relationship with stock returns.

Table 4

Influence of Stock Characteristics on the Returns of the Strategy

Constant	BETA	B/M	E/P	LOGMV	CRR12	*Pr* (Indirect)	*Pr* (Direct)
0.1512 (4.98)**	-0.1239** (-3.65)						
0.0495 (1.72)		0.3088 (1.59)					
0.0815 (3.95)**			0.0094 (1.36)				
-0.2390 (-0.90)				0.0171 (1.24)			
0.0899 (4.01)**					-0.7389 (-1.07)		
0.0286 (0.40)						0.1837 (1.11)	
-0.0173 (-0.32)							0.2576** (2.79)
-0.0480 (-0.15)	-0.1072 (-1.67)	0.1343 (0.39)	0.1850 (0.47)	0.0057 (0.34)	-1.3518 (-1.39)	0.2245 (1.61)	
0.0858 (0.28)	-0.0766 (-1.19)	0.3173 (0.99)	-0.0303 (-0.07)	-0.0052 (-0.32)	-1.7461 (-1.87)		0.3090** (2.64)

The table reports coefficient estimates when the 18-month market-adjusted buy-and-hold return is regressed on a set of independent variables. The independent variables considered in the estimation of the model include *Pr* value of an individual stock, firm beta (BETA), book-to-market value (B/M), earnings-to-price ratio (E/P), natural logarithm of market value (LOGMV) and the 12-month cumulative raw return (CRR12). The *t*-statistics are provided in parentheses. An *(**) indicates statistical significance at the 5 per cent (1 per cent) level.

A similar picture emerged when we estimated equation [5]. When the 18-month buy-and-hold market-adjusted return was regressed on the stock characteristics and the *Pr* values generated by the indirect method, all the independent variables entered into the regression model with insignificant coefficients. However, when the same model was estimated using stock characteristics and the *Pr* values generated by the direct method, the *Pr* coefficient entered into the model with a positive and statistically significant coefficient (coefficient

term) except for those with firm size. We re-estimated the regressions excluding firm size and found that the results were qualitatively similar.

value = 0.3090 and *t*-value = 2.64) while the other independent variables possessed insignificant coefficients. Clearly, the predictive ability of the logit model that directly predicts one-year-ahead stock return using financial statement information is not subsumed by any relationship that stock characteristics have with subsequent returns. Therefore, in this small developed market, this direct method demonstrated a superior ability to generate significant excess returns to investors than its indirect counterpart.

The Effect of Cross Listing on the Return Generated by Strategy

We argue that due to the small size of the New Zealand market, the financial statements may not be extensively researched by the investment community and therefore, this strategy could be more profitable in this market. However, some of the New Zealand stocks are listed on the Australian market; these companies may attract a wider coverage than those that are listed only in the New Zealand market. In this section, we investigate whether these dual listed stocks influence our findings. For this purpose, we exclude stocks that were listed on exchanges outside New Zealand and conduct the analyses outlined in prior sections using stocks listed only on NZX. Approximately 30 per cent of our sample stocks have been listed on the Australian Securities Exchange (ASX) and the majority of them are large in size. We use the remaining stocks to build logit models based on the direct and indirect approaches. We then calculate *Pr* values for each stock in the updated sample and use them to formulate the investment strategy outlined in the previous section.[13] The results are presented in Table 5.

The results are similar to those in Table 3. The strategy generates consistently higher returns under the direct method than under the indirect method for every holding period analysed. For example, for a 18-month holding period, the direct method generates market-adjusted buy and hold return of 15.92 per cent while its indirect counterpart returns only 4.26 per cent. We also estimate equation [5] for this category of using 18 months market-adjusted buy-and-hold return as the dependent variable. The results (not tabulated) indicate that, similar to those reported in Table 4, only the *Pr* variable generated from the direct approach is significant. Together, these findings indicate that our results are not influenced by large companies which are listed on both exchanges.

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[13] We are thankful to the reviewer for raising this point.

Table 5
Market-adjusted Buy-and-Hold Returns for the Portfolios formed Using Only NZX Listed Firms

Portfolio	Average *Pr* Value	Holding Period				
		3-month	6-month	12-month	18-month	24-month
Panel A: Indirect Method						
1	0.1064	0.0128	-0.0184	0.0412	-0.0015	0.0037
2	0.3068	-0.0139	0.0022	0.0901	0.1000	0.1313
3	0.4099	-0.0104	0.0332	0.1375	0.1910	0.2691
4	0.4988	-0.0026	0.0442	0.1577	0.2488	0.3847
5	0.5863	-0.0135	0.0466	0.1021	0.1048	0.1419
6	0.8101	-0.0175	-0.0360	-0.0158	0.0789	0.1363
Long Position (Portfolios 5+6)		-0.0155	0.0053	0.0432	0.0918	0.1391
Short Position (Portfolios 1+2)		-0.0006	-0.0081	0.0657	0.0493	0.0675
Strategy [(5+6) - (1+2)]		-0.0149	0.0134	-0.0225	0.0426	0.0716
Panel B: Direct Method						
1	0.0916	-0.0334	-0.0600	-0.0499	-0.0345	0.0081
2	0.2534	-0.0238	0.0474	0.1010	0.1563	0.2609
3	0.3837	-0.0097	0.0144	0.1174	0.2269	0.3378
4	0.4883	-0.0350	0.0001	0.1076	0.0926	0.1972
5	0.6348	-0.0087	0.0433	0.1475	0.1393	0.2123
6	0.8731	0.0256	0.0616	0.2273	0.3008	0.3548
Long Position (Portfolios 5+6)		0.0085	0.0524	0.1874	0.2201	0.2836
Short Position (Portfolios 1+2)		-0.0286	-0.0063	0.0256	0.0609	0.1345
Strategy [(5+6) - (1+2)]		0.0370	0.0587	0.1619	0.1592	0.1491

The table reports buy-and-hold market-adjusted returns for the six portfolios for the following holding periods: 3-month, 6-month, 12-month, 18-month and 24-month. It also provides the average *Pr* value for each portfolio together with the periodic returns to long position (i.e. investing in portfolios 5 and 6), short position (i.e. shorting portfolios 1 ad 2) and for the overall strategy (i.e. long position minus short position). Panel A provides the above statistics when the indirect method was implemented while Panel B provides the relevant statistics when the direct method is implemented.

Sensitivity Checks

Our decision to use a four-year drift term in equation [1] may induce a survivorship bias to the indirect method employed in the study. A company has to survive four years in order to enter into our sample; many small companies in small markets may not survive very long and as a result such a filtering system may favour large surviving firms. In order to address this possible bias, we reduced the drift term to two years and repeated the process. This alteration resulted in a slight increase in the sample size. However, the strategy did not generate impressive returns. In fact, the hedge position remained unprofitable up to twelve months

generating negative returns; the market adjusted buy-and hold return for a 12- month holding period was a negative 5.39 per cent and the associated return for an 18-month holding period was only 0.49 per cent. As the surviving companies are mainly large and healthy firms, this result implies that the indirect method may only, if at all, work among firms that have good future prospects in the New Zealand market.

Our second concern is how stock characteristics react to different holding period returns. The investment strategy was found to perform well for a six-month holding period under the indirect method; it is also highly profitable for a 12-month holding period under the direct method. In order to examine whether our findings are holding-period specific, we re-estimated equation [5] using both six-month and 12-month buy-and-hold market adjusted returns. The findings revealed that, irrespective of the length of the holding period used, the *Pr* coefficient remained insignificant under the indirect method but remained significant under the direct method, thereby ruling out the possibility of holding-period specific influence on our findings.[14]

Our last concern is the absence of negative returns among short portfolios. In previous studies, stocks in short portfolios generated negative returns, on average, during respective holding periods. However, in our study, the short position generated positive returns for the holding periods above 12 months. As mentioned before, we analysed, on average, 70 stocks per year from 2001 to 2006; the market had, on average, 200 listed companies. Many companies in the sample survived long as evidenced by the availability of financial statement information for many years. In addition, the sample period coincided with an expansionary period experienced by the New Zealand economy. It is therefore possible that these stocks have performed relatively well compared to the market. A comparison of average monthly return (equally-weighted) of our sample with the market revealed that, for the period from 2001 to 2006 (i.e. the period used to calculate portfolio returns), the sample earned an average monthly return of 1.16 per cent while the market generated 0.55 per cent. Accordingly, it is not surprising that the “market-adjusted” returns are positive for all the portfolios formed in our study.[15]

Conclusion, Limitations and Suggestions for Future Research

We conducted a comprehensive financial analysis using New Zealand data and developed multiple logit models that predict the direction of year-ahead earnings changes or stock returns. These multiple logit models were built using the data for the six-year period from 1995 to 2000 and the parameters of these models together with financial information were used to generate *Pr* values for each company in each year for the six-year period from 2001 to 2006. The *Pr* values generated by these logit models were used to assign companies into six portfolios and the profitability of taking a long position in the top two portfolios and a short position in the bottom two portfolios was examined across different time intervals up to 24 months.

[14] For the sake of brevity, we do not report these findings in the text. They are available from the authors upon request.

[15] Indeed, if we use the equally-weighted return of the sample stocks as the “market”, we will observe negative returns appearing in portfolios 1 and 2 and positive returns in portfolios 5 and 6. This corroborates our findings that stocks with high *Pr* values outperform those with low *Pr* values.

The preliminary evidence revealed that both approaches were able to generate excess returns to the strategy. For an 18-month holding period, the indirect approach generated market adjusted return of 8.91 per cent while the direct approach generated market adjusted return of 13.13 per cent. The direct method was found to produce consistently increasing returns as the holding period expands; such a pattern was not visible under the indirect method. Also, the year-by-year analysis of stock returns revealed that the return generated by the overall strategy under the indirect method was concentrated mainly around one or two years of the analytical period. The influence of stock characteristics on our results was also investigated. We could not uncover strong evidence that these stock characteristics influence the returns generated by New Zealand firms. However, the regression outputs revealed that the *Pr* values generated under the direct method remained significant even after introducing these variables into the analysis while those generated by the indirect method did not display any significant influence on subsequent stock returns. Overall, in this small developed market, the direct method of using financial statement information to predict year-ahead stock returns outperformed its indirect counterpart by establishing a strong link between the predicted *Pr* values and subsequent stock returns.

One of the main limitations common to this type of an investigation is the lack of a sound theoretical foundation to justify the selection of accounting fundamentals. In this context, future research could benefit by employing approaches adopted in studies such as Lev and Thiagarajan (1993) and Piotroski (2000) that use readily available financial signals in separating companies into different portfolios. The other limitation of this study is the small sample size. Ou and Penman (1989) used more than 11,000 observations in developing their prediction models while Setiono and Strong (1998) used more than 2,000 observations. By contrast, our models are based on a sample of slightly higher than 400 observations. This limitation is mainly attributable to small size of the New Zealand market. However, it can be argued that an analytical procedure of this nature does not fit with the size of the sample. Future research could benefit by analysing large samples gathered across long time periods that represent different cycles of the economy. Future research could also investigate whether the approaches adopted in studies such as Lev and Thiagarajan (1993) and Piotroski (2000), that use readily available financial signals in separating companies into different portfolios, could produce similar results to those uncovered in this study.

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Strength of Bond Covenants and Bond Assessment Framework

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Abstract

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Keywords

Government policy and regulation, bond covenants, bondholder protection

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Strength of Bond Covenants and Bond Assessment Framework

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Abstract

We examine bond covenants of 29 New Zealand bond issues between 2001 and 2007. Results from the study indicate that protection provided for bondholders is weak and limited. On average, only 2-3 types of covenants are embedded with the issues and only 27% of these covenants provide full protection to the bondholders. However, bondholders are not compensated for taking the additional risk. We propose an alternative assessment framework that directly assesses the level of protection offered to bondholders. We calculate the covenant quality score for the issues and classify them into four levels of protection: very high protection, moderate, low and very low. Recent legislative changes will go some way towards improving investor protection and confidence, but the effect is yet to be seen. This proposed scoring framework can be used by potential investors to complement the traditional credit ratings when making their investment decisions.

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JEL classification: G18, G31, G33.

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Introduction

Credit risk is commonly defined as a lender's exposure to the possibility that a borrower will fail to perform its obligations under a loan or other credit instrument, principally the payment of principal and interest (Whitehead 2009). Given that lenders risk the loss of wealth in the face of management opportunism that only looks after the shareholders' interest, lenders may rely on the inclusion (at the expense of the borrowers) of covenants that restrict the management's actions and potentially furnish control rights to lenders (Jensen & Meckling 1976). How extensively the levels of such covenants are included may be determined by the amount of borrower information that a lender possesses or can cheaply acquire (Denis & Mihov 2003). If the lender is less well-informed, it is more likely to seek stricter covenants in order to more closely control a borrower's future activities. However, the widespread nature of debt decoupling[3] may limit the effectiveness of covenants and weaken debt governance by dampening a lender's incentive to monitor borrowers or act in the interest of others to whom loans or credit exposure have been transferred. Nonetheless, in the absence of a liquid credit market, such as that of New Zealand's (NZ) debt market, lenders may still place greater reliance on covenants and monitoring, especially when covenants may still be the least costly means to managed credit risk.

In this paper, we examine bond covenants embedded in NZ bond issues between 2001 and 2007. Given that NZ has only a small and relatively illiquid secondary market for corporate bonds, lenders are likely to place a greater reliance on covenants to monitor management's actions and to protect their interests. This provides us with a natural experimental setting to test the strength of bond covenants embedded in debt issues: do issuing firms provide enough protection (against management opportunism) to lenders? A brief discussion on the evolution of debt issues in NZ is discussed next: Prior to 1987, equities were the most prevalent investments in NZ mainly because the NZ stock market rode on the bandwagon of the international bull market in the 1980s and enjoyed significant growth. From 1982, the NZ market rose about 600%, compared with 250% in the US and 400% in Australia. However, the growth disappeared when share values dropped by $5.7 billion in four hours, following a dramatic fall on Wall street on "Black Tuesday" in October 1987 (Grant 2010). As investors shunned the equity market, domestic companies looked for alternative sources of funding. Consequently, bonds became a popular fund-raising security in NZ; capital liquidity was scarce as banks tightened their credit criteria, and companies were forced to look to bond investors to raise their required funds. On the other hand, the poor performance of the NZ stock market also served to increase the popularity of bonds among investors who were looking for investments that returned a fixed income. In 1997, the first junk bond was issued in NZ at a rate of 18%. Such issues were also a result of the difficulty in raising capital from private investors in NZ and the fact that banks would never finance 100% of a development for the issuing companies. For that reason, issuing companies look to the retail market of 'mum and dad' investors to cover their shortfall. During the three years that followed, there were an estimated 30 junk bond issues, raising more than $200 million dollars (McIlroy 2000). However, in NZ, there is only a small and relatively illiquid secondary market for corporate bonds. The majority of NZ's corporate debt is issued in the three- to ten-year tenor of the yield curve. Typically, NZ firms have obtained short-term

[3] Hu and Black (2008) suggest that ownership of debt customarily conveys (among other legal rights): a package of economic rights (to receive payment of principal and interest) and contractual control rights (to enforce, waive, or modify the terms of the debt contract). However, debt decoupling can have negative impact on financial stability: lenders' ability to shed risk weakens their incentives to assess and monitor debtors' repayment ability. Debt decoupling also impedes 'debt governance' – the interactions between creditors and firms (or other debtors) such as negotiations to address loan terms and conditions.

(one–five years) funding from banks, and have turned to the corporate bond market for longer-term funding (Tyler 2006).

When a company collapses, equity investors (shareholders) are the greatest losers, but debt investors (bondholders) can sometimes be reimbursed some, or even all, of their investments. However, when a company does not collapse, risk can be transferred to debt investors through various practices, leaving these bondholders with the same fixed return and disproportionately higher risk. Equity holders then receive the benefits of higher returns for correspondingly less risk. Therefore, bonds issued in NZ are often embedded with a variety of restrictive covenants marketed as safety nets to protect investors from any expropriation of funds to shareholders. Specifically, these covenants are considered to be restrictive to the issuing companies because the companies may have to turn down their own investment or growth opportunities because of these constraints, and incur on-going costs in monitoring their compliance. To bondholders however, these covenants provide protection[4] against any agency cost implications.

During the period 2006-2010, more than 50 NZ finance companies have failed, owing investors (mainly bondholders) over $6.5 billion (Financial Markets Authority 2010). As a result of these collapses, in order to address the calls for tighter controls of the financial sector, the NZ government passed a series of new regulations[5] (Dalziel 2007). For example, the previous Securities Markets Act of 1988 did not stipulate that the registration process for securities exchanges for a market operator must include an evaluation of the operational proficiency and suitability. Subsequent amendments were made to the Securities Markets Act of 1988, one of which was a criterion for a regulated exchange's trading rules and systems, including procedures for the proper management of large exposures, default risk and market disruption. These amendments to the Securities Markets Act came into force on February 29, 2008. On 14 September 2010, the NZ government introduced the Financial Markets (Regulators and KiwiSaver) Bill. Under this Bill, the Financial Markets Authority (FMA) was established to take over the functions of the Securities Commission of NZ. It combines the functions of the Securities Commission and the Government Actuary, with some regulatory functions of the Ministry of Economic Development and the Minster of Commerce. With the establishment of the FMA, NZ capital market regulation will take an historic step towards full implementation of global standards (Diplock 2010). In particular, the new regime introduces a system and procedures for prospectus review and registration. As per this model, the FMA will be responsible for the substantive examination of prospectuses, and there will be a minimum ‘pause’ period of five working days (extendable to ten at the FMA’s request) during which the FMA will carry out this review (Tripp 2010). The main objective of this (examination) requirement is to ensure that issuers comply with the Securities Act and Regulations, and that there are no false or misleading statements or omissions of material. However, it is noted that even for the well-developed bond markets, such as the USA, the quality of covenants can be classified as strong, good or weak (Moody’s 2006). This is mainly because the strength of covenants always leads to corresponding costs and benefits to the issuer (as well as to the investor). Therefore, even after the

[4] Yahanpath and Bellard (2004) find that the information provided in some bond issues is not perfectly transparent and distorted to some extent. This suggests that the bond market in New Zealand is inefficient – particularly information wise, and that the bondholders may gain little protection from the protective covenants provided by issuer.

[5] In 2004, the International Monetary Fund (IMF) conducted a detailed assessment (Financial System Stability Assessment) of New Zealand’s compliance with the International Organisation of Securities Commissions' (IOSCO) Objectives and Principles of Securities Regulation. The IMF also found gaps in the regulatory framework, which might inhibit the early detection of problems and, at times, enforcement (IMF 2004).

implementation of the new regime under the FMA, it can be expected that some degree of variation in covenant quality will continue.[6]

In light of this situation, the aims of this paper are; firstly, to examine a sample of bond issues in NZ to evaluate whether the presence of bond covenants is an adequate mechanism to protect bondholders; and secondly, to develop a conceptual framework on covenant quality score as a second-level, risk-measurement indicator for potential bonds investors. We examined 29 bond issues and found that, while over 93% of the sample companies embedded restrictive covenants in their debt issues, the issuing companies appear to have embedded only restrictive covenants that are most advantageous to themselves; ie, those for which the probability of (non-compliance) default by the issuers is least. This suggests that these assurances are inadequate for bondholders' protection. Next, using a questionnaire, we surveyed the respondents' views on the degree of importance of the various types of covenants. Using the responses, we developed a covenant quality score (CQS) that classifies bonds into four protection levels: very high, moderate, low and very low. The proposed framework is simple to use by potential bond investors and is a good complement to bond ratings by rating agencies.

Theoretical Background

A company seeking to finance an investment project has a number of means by which to raise the required funds. One choice available is to enter into contractual arrangements with providers of the funds in the credit markets. One such borrowing arrangement is the issuing of bonds. Specifically, bonds are claims on the company's final project returns which are sold directly by the company to investors. In return for their surplus funds, investors are provided with regular returns. Typically, bonds may contain two types of clauses: covenants and payments. In particular, a covenant confers upon lenders the right to place the company in default for specified values of the indicator[7], thereby forcing the company to liquidate the project (Berlin & Loeys 1988).

Bond covenants are a persistent phenomenon and prior studies argue that the presence of covenants in financial contracts is motivated and indeed rationalised (Tirole 2006), by their ability to mitigate agency problems (Jensen & Meckling 1976; Smith & Warner 1979) and aid in securing financing through the pledging of state-contingent control rights (Aghion & Bolton 1992; Dewatripont & Tirole 1994).

Rodgers (1965) is among the first to discuss the use of debt covenants in US debt contracts. He also discusses the history of the American Bar Foundation's Corporate Trust Indenture Project, under which the *Commentaries* were written. The *Commentaries* documented the various covenant provisions found in financial contracts in actual practice (Smith & Warner 1979).

Indeed, if managers of the borrowing firms act in the lender's best interests in all states of the world, then there would be little reason for lenders to include complex debt contracts embedded with various covenants to ensure that their capital is eventually returned (with interest). However, it is well-known that managers will not always act in the best

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[6] A future research opportunity is to study the impact of the FMA on the NZ corporate bond market in general and effectiveness of bond covenants in particular when sample data post-FMA establishment becomes available. It is also a possible research avenue to compare the covenant quality scores pre- and post-FMA, as an event study.

[7] Berlin and Loeys (1988) state that these indicators might be routine financial ratios used to measure the company's financial health or even the company's ability to make coupon payments on time. Bond covenants are written as functions of these indicators, and a company's inability to satisfy these covenants places the company in default.

interests of their creditors. Jensen and Meckling (1976) for example, discuss the "nexus of contracts" view of the company and the implications of the agency cost between shareholders and bondholders. In particular, agency conflicts can exist between managers/shareholders and creditors that give rise to actions by borrowing firms that cause creditors some concerns. One potential conflict occurs when shareholders expropriate funds from bondholders either by increasing leverage, investing in new risky projects, or payments of dividends. Any of these actions will increase risk to the bondholders without a corresponding increase in return because returns to bondholders are fixed. Such concerns by bondholders further intensify in settings characterised by a substantial probability of distress[8] where managers may make decisions that are advantageous to shareholders to the detriment of creditors (Guay 2008). Therefore, covenants are seen as to protect lenders from activities that prevent transfers to borrowers arising from the agency cost. Such provisions act as early warning "trip wires" that assist lenders to manage credit risk, permitting them to reassess a borrower's managers when weakened financial conditions increase the risk of opportunism and mitigate loss by renegotiating loans in anticipation of, or following a breach (Whitehead 2009). Hence, covenant violations identify a specific mechanism, the transfer of control rights, by which the misalignment of incentives can then be addressed by creditors (Chava & Roberts 2008).

On the other hand, it may also be beneficial to borrowing firms to include covenants in their financing contracts. Bradley and Roberts (2004) for example, find that bond yields are lower, all else equal, when firms include covenants in their loan agreements. Although restrictions imposed by these covenants are costly to the firm, their benefit includes reduction in agency costs which translates into a lower cost of debt. As long as the costs of the constraints imposed by the covenants are less than the increase in the proceeds of the issue, firms will include covenants in their debt contracts.[9]

When covenants are embedded in the financing contracts, bondholders assume that they are protected against future events by the use of covenants, and that issuing companies relying on future funding will want to maintain a good reputation. Smith and Warner (1979) for example, argue for a costly contracting hypothesis and suggest that restrictive covenants can be incorporated to prevent shareholders from taking actions that reduce company value. However, if covenants are violated, it can also be very costly to borrowing firms. Upon breaching a covenant, control rights shift to the creditor, who can use the threat of accelerating the loan to choose his or her most preferred course of action or to extract concessions from the borrower to choose the borrower's most preferred course of action (Chava & Roberts 2008). Chava and Roberts (2008) find that capital expenditure decline in response to a covenant violation by approximately 1% of capital per quarter - a 13% decline relative to investment prior to the violations. Their finding is consistent with the intuition provided by control-based theories, the transfer of control rights accompanying a covenant violation leads to a significant decline in investment activity as creditors intervene in order to thwart inefficient investment or punish managers for perceived misbehaviour (Aghion & Bolton 1992; Dewatripont & Tirole 1994; Gorton & Kahn 2000). Chava and Roberts also

[8] Black, Brassil and Hack (2010) find that, following the increase in risk aversion associated with the Global Financial Crisis, investors have demanded stronger covenants. Recently issued corporate bonds have contained covenants such as negative pledges (to prevent the issuer from issuing debt that would rank higher than the bond) and change-of-control provisions (the investor has a 'put option' to sell the bond back to the issuer if there is a change of control at the company that could reduce credit quality, such as a leveraged buy-out). This suggests that borrowers regard covenants as one of the important protective measures for their investments.

[9] Bradley and Roberts (2004) argue that in the absence of covenants, the value of the firm's debt will be lower but the value of its equity will be higher. However, the decrease in the value of the debt due to agency cost will be greater than the increase in the value of the equity. Thus, stockholders would be better off if they could eliminate these agency costs. The sum of the value of the firm's outstanding equity, plus the proceeds from the debt issue would be greater, the lower the agency costs of debt (Bradley & Roberts 2004, p.5, footnote 6).

find that the investment response to covenant violations varies systematically with several different ex ante proxies for the misalignment of incentives and information asymmetry between borrowers and lenders. For example, punishments (ie, decline in investment) are more severe for (1) borrowing firms with no previous dealings with their current lender (due to little reputational capital), (2) firms with loans from a single lender relative to firms borrowing from a large lending syndicate (due to the moral hazard problem) & (3) firms with relatively larger stockpiles of cash compared to firms with smaller cash holdings (due to free cash flow problem). Therefore, an issuing company may weigh up the benefits and costs of each contractual feature and determine a value-maximising set of terms in its bond contracts (Nash, Netter & Poulsen 2003).

The seminal work of Smith and Warner (1979) was among the first to provide a detailed analysis of the different types of restrictive covenants in the indentures of public debt issues and the types of stockholder-bondholder conflicts that these covenants are designed to mitigate. In particular, they classified these restrictive covenants into four major categories: those that restrict the company's (1) investment policy, (2) payment of dividends to shareholders, (3) financing policies such as issuance of debt instruments (subsequent to the current issue) and (4) bonding activities, such as the specification of accounting technique and the required purchase of insurance. While subsequent studies into the use of debt covenants by other researchers attempt to reclassify and group restrictive covenants into other categories, they are generally similar to Smith and Warner's classification. Billett, King and Mauer (2007) for example, categorise their covenants[10] into four main categories[11]: (1) payouts restriction to equity holders and others (such as dividend restriction and restriction on share repurchase), (2) restrictions on financing activities (such as restricting the issuer from issuing additional subordinate, senior and secured debt), (3) event driven covenants (such as a decrease in credit rating or net worth or a poison put provision) and (4) restrictions on investment policy (such as asset sale clause, investment policy and merger restrictions).

In NZ, companies typically issue bonds with a variety of restrictive covenants which aim to restrict the issuers' actions and protect the bondholders. Using Smith and Warner's classification, we examined nine restrictive covenants[12] that are used in NZ bonds to protect bondholders from expropriation of funds. We provide a brief discussion on each of these.

Category 1: Investments policy

Covenant (A): Restriction on investment policy

This gives a bondholder the right to direct what a company can invest in and how much risk it may take. Effectively, it gives the bondholder the power to veto actions against investment policies that are not in their best interests.

Category 2: Payment of dividends

Covenant (B): Restriction on dividends policy

This prevents any erosion of the value of the bond. Other things being equal, an increase in dividends will likely increase stock prices. When stock prices increase, bond prices will generally decrease. Therefore, an issue of a dividend may decrease

[10] Billett et al. (2007) find that of the 15 covenants studied in their paper, the most frequent covenants are secured debt restrictions (44% of debt issue studies have this covenants embedded), cross-default provisions (51%), asset sale clauses (65%) and merger restrictions (65%)

[11] Using a cluster analysis, Billett et al. (2007) suggest that the investment policy and payout restrictions tend to be in distinct covenant groups with each group including financing restrictions.

[12] These covenants represent all the covenants that are used in NZ. Given that the choice of covenant categories model does not affect our research question (ie, the testing of the strength of bond covenants embedded in debt issues), we choose to follow Smith and Warner's (1979) classification framework as it is also the base model used by subsequent studies.

the value of the bonds. Alternatively, payment of dividends may also be detrimental to the bondholders because any such payments will erode the company's ability to service its coupon payments or the repayment of principal to the bondholders. Generally, this restriction is achieved by linking dividend payments to earnings.

Category 3: Financing policies

Covenant (C): Restriction on additional leverage

Such a covenant places a requirement on an issuing company to seek the bondholders' consent before issuing a new secured debt. Therefore, it prevents the issuer from borrowing over and above a preset limit.

Category 4: Bonding activities

Covenant (D): Minimum level of liquidity

Liquidity relates to the ability of the company to meet its short-term obligations; it refers to overall solvency.[13] If the issuing company fails to maintain a pre-agreed level of liquidity, it gives the bondholders the right to place the company in default.

Covenant (E): Poison put

This covenant gives bondholders the right to sell their bonds back to the issuer under certain conditions, such as an acquisition, a rating downgrade or a leveraged restructure.

Covenant (F): Prohibition on selling assets

The issuer has certain assets that are not used as security for the issue of the bond. However, this covenant provides assurance that these assets are provided as a protection for bondholders and cannot be sold, leased or otherwise disposed of.

Covenant (G): Security and prohibition on further security of assets

Some bonds are issued against the security of the issuer's asset base and guarantees are given that those assets will not be used as security for further issues. However, if these assets are used again, then no additional issue will rank ahead of the bonds being assured.

Covenant (H): Additional margin

This covenant explicitly provides the bondholders with the right to an additional margin or percentage if there is a breach of other covenants (such as a reduction in credit rating).

Covenant (I): Call option

The issuing company may have the option to call the bonds; that is, to redeem them from the bondholder. If these bonds are called when market interest rates have fallen, the bondholder can be disadvantaged by not being able to receive the high return offered. Therefore, strictly speaking, this is not a restrictive covenant on the issuing company. In contrast to the other eight covenants discussed above, an absence of such conditions will be more advantageous to the bondholders.

Data and Research Design

We first examined how extensively the nine bond covenants (as discussed in the preceding section) are used by the issuing companies to protect investors in NZ. We then developed a

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[13] The solvency test has two parts: firstly, can the company pay its debts as they become due in the normal course of business and, secondly, is the value of the company's assets greater than the value of its liabilities, including contingent liabilities.

conceptual framework on covenant quality score as a second-level risk measurement indicator.

A total of 156[14] issuers were identified as having various numbers of bonds on issue in NZ. These included public companies, private companies and government bodies. We first eliminated the issues made by government bodies because the risk and characteristics of government issues can be very different from commercial issues. We then collected from a number of different sources, the corresponding covenants used by these companies for their bond issues. This involved going through the original prospectuses[15] that were prepared at the time of issue, visiting the individual company websites and examining the database maintained by the New Zealand Companies Office.[16] After eliminating bond issue statements due to missing information (such as missing prospectuses or insufficient documents to work out the types of restrictive covenants embedded in the bond issues), a total of 29 issuers were examined in our study. Of these 29 issuers, some had multiple bond issues during the period 2001 to 2007. Table 1 presents the final list of companies surveyed in this paper.

From the issue documents and/or trust deeds for the 29 issuers, we classified the types of covenants that were embedded with the issue, based on the classification found in the preceding section. When an issuer had multiple bond issues (within the same financial year or in different years prior to 2007), we examined the multiple issues collectively and reported the types of covenants used by this particular issuer. The information relating to each type of covenant was then examined for each bond issuer separately to evaluate the effectiveness of the covenants. An assessment grade, Y, L or N, was given, based on the following criteria:

Grade	Description
Y	A restriction that adequately protects the bondholder was placed on the issuer
L	A limited restriction was placed on the issuer
N	The company had no restrictions in that area

[14] These issues were made (between 2001 and 2007) prior to the Securities Market Act that came into force in 2008. We do not include bond issues during the Global Financial Crisis (GFC) (ie, 2008 and 2009) because of the highly volatile financial market during that period. Also, we do not have a sample relating to the period after the establishment of the FMA, that can be included in this study to make a reasonable analysis. As mentioned in footnote 4, we believe that one potential extension of this study is to include bond issues after the establishment of the FMA to examine if there is a change in the use of covenants by NZ issuers. However, due to the lack of NZ samples available, we are limited to the testing of the samples prior to the FMA's establishment.

[15] We found that investment statements were often too wordy and difficult to read; that they sometimes contained ambiguities; and that important information was not always easily found. Thus we observed some degree of creative drafting of bond covenants which undermined these tools and mitigated the protection provided to investors.

[16] Accessible from www.companies.govt.nz/cms

Table 1- Complete List of Companies and Issued Studied

Company	Company Code	Issue #	On Issue (Millions)	Issue year	Time to maturity
ANZ National Bank	ANB	20	150	2006	1.1
		30	150	2006	3.1
		40	350	2006	8.6
		50	250	2007	9.1
		60	350	2007	9.5
Blue Star Print Group Ltd	BLU	20	105	2005	4.7
Infratil Limited	IFT	40	20	2002	3.9
		60	85	2003	5.7
		70	120	2004	7.8
		90	77	2005	12
		110	57	2005	4.8
		130	0.68	2005	2.9
		140	112	2005	3.4
		HA	197	2007	N/A
Powerco Limited	PWC	40	100	2004	3.2
		50	100	2004	5.2
		60	50	2004	7.4
		70	100	2005	2.3
		80	100	2005	4.7
		90	130	2005	9.6
PPCS Limited	PPC	20	50	2004	1.2
		30	75	2006	4.9
Sky City	SKC	20	150	2005	2.4
St Laurence	STL	10	29	2005	2.5
		30	50	2006	3.4
		FA	1	2005	2.5
TrustPower	TPW	20	108	2002	4.7
		30	50	2003	1
		60	54	2004	6.2
Vector Limited	VCT	20	200	2003	1.2
		40	307	2006	4.4
Auckland International	AIA	30	38	2004	0.9
		40	67	2004	1.6
		50	70	2004	3.6
		60	50	2005	4.8
		70	100	2005	7.8
Babcock & Brown	BNB	10	4	2006	3.7
BBI Networks	BBN	10	146	2004	1.9
		20	150	2006	4.9
Burns Philp Finance Ltd	BPF	10	173	2003	1
		20	38	2003	3.9
CBA Capital	CBA	FA	350	2005	N/A
Fidelity Capital	FDY	10	75	2007	5.5
Fletcher Building Finance Ltd	FBF	10	112	2002	0.2
		20	37	2002	2.2
Fonterra Co-operative	FCG	HA	102	2001	N/A
Generator Bonds	GTR	10	129	2003	C
	MCB	10	1.2	2006	3.7
Hellaby Holdings	HBY	10	50	2006	3.4
HY-FI Securities	HYF	10	95	2003	0.6
		20	50	2003	0.6
New Zealand Finance	NZF	10	20	2006	3.2
Origin Energy	OCF	HA	200	2007	N/A
Rabobank Nederland	RBO	HA	960	2007	N/A
Rural Portfolio Capital	RPC	10	60	2007	3.3
Rural Portfolio Investments	RPI	20	42	2004	1.3
Sky Network Television	SKT	FA	200	2006	N/A
Strategic Finance	SFL	HA	50	2007	N/A
TCNZ Finance Limited	TCN	480	250	2006	5.2
		490	150	2006	8.1
Works Finance (NZ) Limited	WKS	10	200	2007	4.4

We now discuss in detail how we use the quality assessment of the nine types of covenants studied in this paper.

Covenant (A): Restriction on investment policy

If a covenant complies strictly with the restrictions on investment policy, a Y is given. If the company specifically states that there are no limitations on the type of business it can carry out, an N is given. An L is given when the prospectus or trust deed specifically states that there are limitations on the type of business activities that are permitted or that there must not be a substantial alteration to its core business structure.

Covenant (B): Restriction on dividend policy

Typically, a restriction on dividend policy occurs when issuers are restricted to dividend payments if the company does not reach a pre-agreed level of earnings. However, such a condition is not used in NZ. Instead, NZ companies tend to disallow dividend payouts to shareholders when there are unpaid or overdue payments of principal or interest to bondholders. In some instances, NZ companies even self-impose penalties for breaches of this policy. Therefore, when paid dividends incur an additional penalty, a Y is given. An N is given when the investment statement limits dividends only as directed by the solvency test; in New Zealand, under the Companies Act 1993 section 4, all companies must pass the solvency test before making any distribution or repurchase of bonds or other issues. If the dividend policy limits when distributions can be re-established after a default but do not impose an additional penalty, an L is given.

Covenant (C): Restriction on additional leverage

Leverage has been determined in some companies' investment statements as "interest covered ratios" or "gearing ratios" expressed by (Debt:EBITDA); (Debt:Debt plus Equity); (EBITDA:Interest); and/or percentage (Debt:Tangible Assets). If a company pays a margin or premium when their gearing levels are breached, the company is given a Y. An L is given for any other limitation on leverage. An N is given if the company specifically states that there is no limitation on whether the company can issue new secured debt.

Covenant (D): Minimum level of liquidity

If a company gives an assurance that it will maintain a certain level of liquidity above the minimum, a Y is given. An N is given if the company specifically states that no particular liquidity level needs to be maintained. If a company gives an assurance of minimum net worth[17], an L is given.

Covenant (E): Poison Put

When any breach allows the bondholder to 'put' the bond automatically, a Y is given. When the issuer allows a 'put' to be made only in the case of late payment of principal or interest, liquidation or acquisition, an N is given. If the company allows the bondholder or trustee to 'put' the bond when a financial covenant has been breached (other than late payment of interest or principal, liquidation or an acquisition event) and that breach is not rectified within a certain number of days, or a bondholder may 'put' the bond during a re-marketing event, an L is given.

[17] Net worth does not actually relate to short-term liquidity, but may give assurance to bondholders of the overall true value should the company needs to liquidate at some stage.

Covenant (F): Prohibition on selling assets
When a covenant exists to limit the sale, lease or disposal of assets, a Y is given. If the document specifically states that there is no limitation or there is a limitation but it allows the issuer to sell in excess of 15% of the assets, an N is given. If the limitation allows up to 15% of assets, an L is given.

Covenant (G): Security and prohibition on further security of assets
A Y is given if the bonds are secured and there is a prohibition against further security of assets, or when there is a limitation on the amount of indebtedness that is secured and the issuer will not create or permit any security interest to rank ahead of the bonds. An N is given if the company states that the issue is unsecured and/or there are no assurances as to the creation of new mortgages or charges against the issuer's assets. If the bonds are unsecured but the company gives an assurance that it will not allow any security over its assets without also providing that security to bondholders, an L is given.

Covenant (H): Additional margin
A Y is given if an accruing margin is added for unpaid coupons and when an additional margin for other breaches also applies. An N is given if unpaid coupon is not specified and no margin is added for further breach of covenants. If an additional margin applies on unpaid coupons, reduction in credit rating, takeover event, or breach of financial covenant, an L is given.

Covenant (I): Call option
Given that this is not really a restrictive covenant against the issuing companies, we have reversed our assessment grade for this covenant. If the company specifically states that it will not call the bonds unless an event, such as liquidation or takeover of the company, necessitates the call, a Y is given. If the company may call at any time with little limitation, an N is given and when a call is available after a certain fixed period, an L is given.

Results

The Extensiveness of Restrictive Covenants Used by Bond Issuers

Table 2 presents the types of restrictive covenants used by the issuers, grouped according to four broad industry categories: (1) Banks (2) Industries (3) Non-bank deposit takers (including finance companies) and (4) Utilities (including energy distribution, road network and telecommunications). Inspection of Table 2 suggests that few companies give bondholders extensive assurance through covenants. Even for those companies that do provide some assurance, the majority of these assurances are inadequate for bondholder protection.

Table 2 - Assessment grades

Company	A	B	C	D	E	F	G	H	I	Average Return (%)	Industry Category
ANZ National	N	N	N	N	N	N	N	N	L	7.3	Banks
CBA Capital	L	L	N	N	N	N	N	N	L	8.8	Banks
Rabobank Nederland	N	N	N	N	N	N	N	N	L	9.5	Banks
Auckland International	N	N	N	N	L	N	N	N	N	6.9	Industrials
Blue Star	L	Y	Y	N	N	N	N	Y	L	9.1	Industrials
Burns Philp	N	N	N	N	N	N	N	N	N	9.9	Industrials
Fletcher Building	N	L	N	N	N	N	N	L	N	8.7	Industrials
Fonterra Co-operative	N	L	N	N	L	N	N	L	N	9.4	Industrials
Hellaby Holdings	N	N	N	N	N	N	N	L	N	8.5	Industrials
PPCS Limited	N	Y	Y	N	N	N	Y	Y	L	10.3	Industrials
Rural Portfolio Capital	N	L	L	N	Y	N	L	N	L	10.1	Industrials
Rural Portfolio Investments	N	N	L	N	Y	N	N	N	N	10.8	Industrials
Sky City	N	L	L	N	N	N	N	N	N	8	Industrials
Sky Network Television	L	N	N	N	N	Y	L	N	N	9.4	Industrials
St Laurence	N	N	N	N	N	Y	N	N	Y	9.8	Industrials
Babcock & Brown	N	N	N	N	L	N	N	N	N	9	NBDT
Fidelity Capital	N	N	N	N	N	N	N	L	N	8.1	NBDT
Generator Bonds	N	N	N	N	N	N	Y	N	N	8.1	NBDT
HY-FI Securities	N	N	N	N	N	N	N	N	L	7.6	NBDT
New Zealand Finance	L	Y	Y	N	N	N	Y	L	N	9.8	NBDT
Strategic Finance	L	N	L	N	N	N	N	N	N	11	NBDT
BBI Networks	N	Y	L	N	N	Y	N	L	L	8.3	Utilities
Infratil Limited	N	L	Y	N	L	N	L	L	L	8.4	Utilities
Origin Energy	N	L	N	N	N	N	N	L	L	10.2	Utilities
Powerco Limited	N	Y	L	L	L	L	L	L	N	6.7	Utilities
TCNZ Finance Limited	N	N	N	N	N	N	L	N	N	7	Utilities
TrustPower	N	N	N	N	N	N	N	N	N	8.4	Utilities
Vector Limited	N	N	L	L	L	N	L	N	Y	7.5	Utilities
Works Finance (NZ) Limited	N	L	N	N	L	N	N	L	L	9.8	Utilities

A Restriction on investment policy
B Restriction on dividend policy
C Restriction on additional leverage
D Minimum level of liquidity
E Posion put
F Prohibition on selling assets
G Security and prohibition on further security of assets
H Additional margin
I Call Option

Of the 29 issuers, only 2 issuers (Burns Philp and Trust Power) do not have any of the nine covenants embedded in their issues. This indicates that over 93% of the issuers do provide some form of protection for their bondholders.[18] However, for those issuers who have embedded restrictive covenants in their prospectuses, the inclusions are not all-embracing. On average, only 2-3 types of covenants studied are embedded. Furthermore, most of these covenants are limited restrictive covenants against the issuers; only 27% of these covenants provide complete protection to the bondholders. The remainder of this section provides an analysis of the prevalence of each covenant.

Only five companies have a covenant to restrict their investment policy. However, none of these covenants provides full protection to bondholders. The issuers still have flexibility in deciding their investment policy without much regard to the covenants. Thus, bondholders are still subject to the possibility of expropriation of funds.

Sixteen of the 29 companies make no comment about any restriction to their dividend policies. Eight have limited dividend policy protection. Only five companies impose a penalty on themselves by accruing an additional margin to the bondholder for any breach of dividend policies.

Eighteen companies do not have a covenant that restricts any increase in financial leverage; of these, eight companies state explicitly in their issue documents that there is no restriction on, or limitation of, the level of leverage. Only four companies have self-imposed penalties for breaches of leverage covenant, while another seven companies have limitations on leverage but the resulting protection is limited.

A covenant to assure a minimum level of liquidity appears to be the least prevalent restriction. Only two companies provide limited assurance to maintain a minimum net worth.

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[18] The average return from all the sample issuers is 8.8% per annum. While Burns Philp offers a higher average return (9.9%) than the sample mean to its investors, Trust Power offers a lower average return (8.4%) than the sample mean return despite not having any restrictive covenants to provide any protections to its investors.

Two companies, by design, allow their bondholders to 'put' the bond if any breach occurs, while seven others give a certain 'grace period' for the bondholder to 'put' the bond. Only fourteen issuers provide the 'put' option when the company is either late with payment of the principal or interest, is in liquidation or is subject to an acquisition. The remaining seven issuers make no statement about a bondholder's right to 'put' the bonds.

Only four of the 29 companies provide restriction on selling or leasing assets of the company. One allows up to 15% asset sales, and another allows up to 50% asset sales without the approval of the trustee. The majority of the companies examined remain silent on this important covenant.

A total of twenty companies do not make any assurances about the security of their assets. Of these, nine companies explicitly state that their issue is unsecured and give no assurance that they will not use the assets as collateral at some future period. The rest are silent on this restriction. Six companies also issue unsecured debt. Only three companies secure their bonds and place a prohibition on further security of assets.

Two companies add a penalty margin to coupon rate for either defaulting on coupon payments or a breach of other covenants. Ten companies have limited covenants for a margin to be added only in the event of a breach of financial covenant, a drop in credit rating or an acquisition. The remaining companies examined make no comment relating to additional penalty margins.

A total of 11 companies have a condition embedded in their issues that allow them to exercise the call option only after a specified period. Seven companies specifically state they can exercise the call option at any time. Two issuers specifically state that they cannot call the bonds unless liquidation or another extreme unforeseen event occurs, while the remaining eleven issuers make no indication on the call option in their investment statements.

Generally, for each covenant embedded with the bond issues, it is preferable that bondholders have full protection rather than limited or no protection against any agency cost that may trade off the value of the bonds they hold. If this is the case, then it is also reasonable to expect that bondholders would consider a Y rating to be higher than an L rating, and an L rating to be higher than an N rating. In view of that, we attempt to derive the extensiveness of the covenants by incorporating bondholders' perceptions of the degree of protection they receive from the individual covenants. In particular, we give a value of 2 for each Y, I for each L and 0 for each N. The values of 0, 1 and 2 are somewhat arbitrary and we do not suggest that a covenant with full protection in favour of the bondholders (those covenants with the assessed grade of Y) is preferred twice as much by bondholders compared to those covenants with partial limitations (those covenants with the assessed grade of L). However, this mechanism provides some indication of the level of protection these covenants offer to a bondholder (from his or her perspective). Table 3 presents the relative magnitude of the extensiveness of usage of covenants.

Table 3 - Companies by Issuing Category

Company	A	B	C	D	E	F	G	H	I	Total
ANZ National	0	0	0	0	0	0	0	0	1	
CBA Capital	1	1	0	0	0	0	0	0	1	
Rabobank Nederland	0	0	0	0	0	0	0	0	1	
Auckland International	0	0	0	0	1	0	0	0	0	
Blue Star	1	2	2	0	0	0	0	2	1	
Burns Philp	0	0	0	0	0	0	0	0	0	
Fletcher Building	0	1	0	0	0	0	0	1	0	
Fonterra Co-operative	0	1	0	0	1	0	0	1	0	
Hellaby Holdings	0	0	0	0	0	0	0	1	0	
PPCS Limited	0	2	2	0	0	0	2	2	1	
Rural Portfolio Capital	0	1	1	0	2	0	1	0	1	
Rural Portfolio Investments	0	0	1	0	2	0	0	0	0	
Sky City	0	1	1	0	0	0	0	0	0	
Sky Network Television	1	0	0	0	0	2	1	0	0	
St Laurence	0	0	0	0	0	2	0	0	2	
Babcock & Brown	0	0	0	0	1	0	0	0	0	
Fidelity Capital	0	0	0	0	0	0	0	1	0	
Generator Bonds	0	0	0	0	0	0	2	0	0	
HY-FI Securities	0	0	0	0	0	0	0	0	1	
New Zealand Finance	1	2	2	0	0	0	2	1	0	
Strategic Finance	1	0	1	0	0	0	0	0	0	
BBI Networks	0	2	1	0	0	2	0	1	1	
Infratil Limited	0	1	2	0	1	0	1	1	1	
Origin Energy	0	1	0	0	0	0	0	1	1	
Powerco Limited	0	2	1	1	1	1	1	1	0	
TCNZ Finance Limited	0	0	0	0	0	0	1	0	0	
TrustPower	0	0	0	0	0	0	0	0	0	
Vector Limited	0	0	1	1	1	0	1	0	2	
Works Finance (NZ) Limited	0	1	0	0	1	0	0	1	1	
	5	18	15	2	11	7	12	14	15	99
Maximum magnitude	58	58	58	58	58	58	58	58	58	522
% over maximum protection	8.6%	31.0%	25.9%	3.4%	19.0%	12.1%	20.7%	24.1%	25.9%	19.0%

An inspection of Table 3 suggests that, despite covenants being marketed as a safety net for bondholders, NZ bondholders receive very little protection from the covenants embedded with the bonds issued. Based on the values of 0,1 and 2 for the levels of protection, if all bond issuers have all the covenants studied in this paper embedded in their issues, then the maximum value for full protection from all covenants is 522 (29 issues multiplied by 9 covenants with a value of 2). However, across all bond issues in our sample, the total degree of protection that NZ bondholders receive is only 99 out of the possible maximum value of 522 (i.e. 19% level of protection, on average). This suggests that protection provided to NZ bondholders by way of the bond covenants is marginal.

Covenants and Corresponding Weights

Individual bondholders have individual investment portfolios and risk preferences, which may differ from other holders. These variances may also result in bondholders having different perspectives on the types of covenants that they deem important to their investment portfolios. Such perspectives may also be different from what the bond issue companies deem important and necessary to be embedded in their issues. Furthermore, it is possible for bond-issuing companies to embed only certain covenants which are least possible for them to breach, to give bondholders the option (right) to exercise their rights under the restrictive covenants.

Therefore, in order to assign a weighting to each of the nine covenants, we designed a structured questionnaire using a five-point, Likert-type scale (where 1 = least important and 5 = most important) to measure the level of importance of the covenants. A total of 30 respondents were selected carefully, based on their knowledge about the use of bond covenants from a bondholder's perspective and availability. The questionnaire was emailed to these 30 respondents, and an online survey was conducted. The sample covers 20 entities including universities, financial advisors, share-brokers. The respondents represent both academia and corporate practitioners (with relative split 55:45 respectively) - although it was difficult to categorise many respondents as academics or practitioners, because the sample includes some academics with past industry experience and vice versa. The questionnaire invited respondents to rate each of the nine covenants, based on how important they thought the covenant was, from a bondholder's perspective. Table 4 reports the responses.

Table 4 - Survey results - The most important covenants deemed by bondholders

	Least Important				Most Important		
	1	**2**	**3**	**4**	**5**	**Mean**	**Rank**
C) Restriction on increasing leverage	0%	0%	4%	59%	37%	4.33	1
D) Required minimum levels of liqudity	4%	0%	22%	48%	26%	3.93	2
A) Restriction on investment policy	4%	7%	15%	48%	26%	3.85	3*
G) Securities and prohibition of futher securities of assets	0%	4%	37%	30%	30%	3.85	3*
B) Restriction on dividend policy	4%	7%	26%	37%	26%	3.74	5
H) Additional margin	0%	11%	56%	22%	11%	3.33	6
E) Poision put	4%	15%	37%	37%	7%	3.30	7
F) Prohibition on selling assets	7%	19%	37%	30%	7%	3.11	8
I) Call option	15%	30%	22%	22%	11%	2.85	9

* - Joint rank

Based on the responses, the covenant on financial leverage is deemed to be the most important (mean of 4.33) and the call option is deemed least important (mean of 2.85). In Tables 2 and 3, we found that the magnitude of the extensiveness of the restriction on increasing leverage has a percentage of 25.9% over the maximum protection and is not the covenant that is most widely used by NZ issuing companies in their bond issues, as NZ

companies tend to embed restriction on dividend policy in their bond issues. However, a comparison with the result in Table 3 also suggests that NZ companies do embed call option in their issues (providing a percentage of 25.9% over the maximum protection) as often as the use of the restriction on increasing leverage. These findings imply that NZ issuing companies are not providing the right covenants, according to what bondholders perceive as important for their benefit or protection. Instead, NZ issuing companies may be embedding only restrictive covenants that are most advantageous to themselves; ie, those for which the probability of (non-compliance) default by the issuers is least.

Covenant Quality Score and Bond Rating

A credit rating can be used to assess the credit-worthiness of a bond issuer, whereby bonds can be broadly classified into: (1) investment grade bonds and (2) junk bonds. To assess the credit-worthiness of the issuing company, rating agencies typically use a range of indicators, including financial, non-financial and qualitative information. However, the quality of covenants is not directly included in the rating methodologies used by rating agencies (Standard and Poor's 2009). Therefore, our aim is to develop a Covenant Quality Score (CQS) which we believe will be a valuable input to the overall bond-rating framework. Moody's (2006) has proposed a framework for the evaluation of the relative quality of each key covenant individually, in a package and of the covenant package as a whole, assigning a score of CQ-1 to CQ-3[19] to the indenture. Though Moody's framework is a useful classification, it stops short of a numerical score. In this paper, we use Moody's line of argument and proposed a framework for assigning a numerical score for covenant quality – for each key covenant individually, in a package and of the covenant package as a whole. Our emphasis has been to develop a simple, user-friendly modelling framework that is useful particularly to smaller corporate bond markets.

The methodology we use here is very simplistic, due mainly to the limited availability of data on corporate bonds in the NZ debt market. There are many interesting opportunities to expand upon this work by applying some of the more advanced models in larger debt markets. Notwithstanding the above, Vojetek & Kocenda (2006) state that the choice of methodology depends on data availability and other characteristics. They also argue that alternative methods have excellent potential in pattern recognition and that they are competitive with more advanced methodologies such as logit regression.

In order to calculate the CQS, we use the degree of importance of the covenants (as perceived by bondholders who completed the questionnaire) as the weighting (see Table 4) and multiply this weighting by the extensiveness of the covenants used by the sample firms (from Table 3) to obtain the CQS for each issuer. From this CQS, we find the 25th percentile (first quartile), median (second quartile), and 75th percentile (third quartile) CQS for the whole population. We then group the sample firms into four quartiles: Group D are issuers who have CQSs less than 3.32 (very low protection); Group C are issuers with a CQS between 3.32 to less than 9.93 (low protection); Group B are issuers with a CQS between 9.93 to less than 21.24 (moderate protection); and Group A are issuers with a CQS of 21.24 and above (very high protection). Table 5 presents the breakdown of our sample firms into the four groups, based on the CQS.

As can be seen in Table 5, we find that, of the 29 issuers, almost half (14 issuers) can be categorised as bonds with low protection. When we assess the average returns offered to

[19] Moody's defines CQ-1 as strong investor protection, CQ-2 as good investor protection and CQ-3 as weak or no investor protection.

bondholders, those bonds with low protection offer only 8.4% compared to the 9.2% offered by the high protection bonds (the difference is statistically significant at 10% level); holders of lower protection bonds are not compensated for the additional risk they take. These results contradict the dictum ‘the higher the risk, the higher the return’. Thus, this study offers some evidence of the mispricing of bonds. The above findings also suggest that some form of CQS is a relevant research direction and can be a valuable contribution to the assessment of risk-return trade-off for corporate bonds.

Table 5 - Companies by Covenant Quality Score

Covenant Type	A	B	C	D	E	F	G	H	I	CQS	CQS Group
Company \ Weighting	3.85	3.74	4.33	3.93	3.30	3.11	3.85	3.33	2.85		
ANZ National	0	0	0	0	0	0	0	0	1	2.85	D
CBA Capital	1	1	0	0	0	0	0	0	1	10.44	B
Rabobank Nederland	0	0	0	0	0	0	0	0	1	2.85	D
Auckland International	0	0	0	0	1	0	0	0	0	3.30	D
Blue Star	1	2	2	0	0	0	0	2	1	29.52	A
Burns Philp	0	0	0	0	0	0	0	0	0	0.00	D
Fletcher Building	0	1	0	0	0	0	0	1	0	7.07	C
Fonterra Co-operative	0	1	0	0	1	0	0	1	0	10.37	B
Hellaby Holdings	0	0	0	0	0	0	0	1	0	3.33	C
PPCS Limited	0	2	2	0	0	0	2	2	1	33.37	A
Rural Portfolio Capital	0	1	1	0	2	0	1	0	1	21.37	A
Rural Portfolio Investments	0	0	1	0	2	0	0	0	0	10.93	B
Sky City	0	1	1	0	0	0	0	0	0	8.07	C
Sky Network Television	1	0	0	0	0	2	1	0	0	13.93	B
St Laurence	0	0	0	0	0	2	0	0	2	11.93	B
Babcock & Brown	0	0	0	0	1	0	0	0	0	3.30	D
Fidelity Capital	0	0	0	0	0	0	0	1	0	3.33	C
Generator Bonds	0	0	0	0	0	0	2	0	0	7.70	C
HY-FI Securities	0	0	0	0	0	0	0	0	1	2.85	D
New Zealand Finance	1	2	2	0	0	0	2	1	0	31.04	A
Strategic Finance	1	0	1	0	0	0	0	0	0	8.19	C
BBI Networks	0	2	1	0	0	2	0	1	1	24.22	A
Infratil Limited	0	1	2	0	1	0	1	1	1	25.74	A
Origin Energy	0	1	0	0	0	0	0	1	1	9.93	B
Powerco Limited	0	2	1	1	1	1	1	1	0	29.33	A
TCNZ Finance Limited	0	0	0	0	0	0	1	0	0	3.85	C
TrustPower	0	0	0	0	0	0	0	0	0	0.00	D
Vector Limited	0	0	1	1	1	0	1	0	2	21.11	B
Works Finance (NZ) Limited	0	1	0	0	1	0	0	1	1	13.22	B
									Total	353.15	
									Mean	12.18	
									25 Percentiles	3.32	
									50 Percentiles	9.93	
									75 Percentiles	21.24	

Summary and Conclusion

Restrictive covenants may be embedded in bond issues to give potential investors some comfort that the issuers will not behave to the detriment of investors' interests. However, if managers are embedding only restrictive covenants which they know the company will have

very low risk of defaulting on, then the real protection that restrictive covenants can provide to bondholders will be manipulated, and is therefore meaningless. By such creative drafting of restrictive covenants in their investment policies, financing policies and bonding activities, companies still can expropriate funds from bondholders to its shareholders.

Using a sample of 29 bond issuers in NZ, we examine the extensiveness of the restrictive covenant embedded with their bond issues. We find that the bonds issued in NZ offer very limited protection to bondholders, and the protection that is provided is not deemed by bondholders to be important.

As the quality of bond covenant is an important input to the overall bond assessment, we have conceptualised a CQS and a bond-assessment framework incorporating it. In this process we compute the covenant quality score for each bond issue in our sample and group them into four covenant quality categories (A to D): four protection levels from very high, moderate, low to very low. Moody's (2006) has proposed a framework for the evaluation of the relative quality of each key covenant individually in a package and of the covenant package as a whole, assigning a score of CQ-1 to CQ-3 to the indenture. We extend this concept and introduce CQS as an input to the bond-assessment framework.

Along with the Securities Market Act which came into force on February 29 2008 and the establishment of the FMA in 2010, in part to govern the actions of investment advisers and market participants, an alternative framework may be a good complement to traditional credit ratings, to assist investors in making their investment decisions, especially in light of the recent financial crisis.

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The Rebuilding of a Life after Jail Time for Fraud

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The Rebuilding of a Life after Jail Time for Fraud

Abstract

After a brief introduction from the second-mentioned author, which sets the scene for the story as Cabramatta and environs in Sydney's outer south-western suburbs, the first-mentioned author takes over and gives readers his life story beginning with his family fleeing the Communists in South Vietnam, moving on to his days in his twenties running his own accounting firm in western Sydney to tax frauds, court case, and jail time. He moves on to explain how he began a conscious strategy to re-create his life existentially by studying MBA in prison. The first-mentioned author concludes with an important personal message, borne out of his own personal life experiences, to readers of the journal followed by some reflection from the second-mentioned author. This article will be of interest to accounting students, accounting educators, and any young (or not so young) accounting professionals under temptation to commit fraud to make a quick dollar. Sartrean existentialism and Marxist-Stalinist ethics inform the analysis of the case by the second-mentioned author. The role of gambling addiction in the story is topical given Singapore's recent decision to open two new casinos, the first to open in the city-state since its 1965 independence.

Keywords

Accounting education, Business ethics, existentialism, gambling addiction, Sydney, tax fraud, Vietnamese-Australians, Vietnamese diaspora

Cover Page Footnote

We would like to thank the three anonymous reviewers, the Editor, and participants at a research seminar held at University of Southern Queensland (Toowoomba) for helpful and constructive feedback.

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The Rebuilding of a Life after Jail Time for Fraud

Joseph Lam[1] , Kieran James[2] and Jenny Kwai-Sim Leung[3]

Abstract

After a brief introduction from the second-mentioned author, which sets the scene for the story as Cabramatta and environs in Sydney's outer south-western suburbs, the first-mentioned author takes over and gives readers his life story beginning with his family fleeing the Communists in South Vietnam, moving on to his days in his twenties running his own accounting firm in western Sydney to tax frauds, court case, and jail time. He moves on to explain how he began a conscious strategy to re-create his life existentially by studying MBA in prison. The first-mentioned author concludes with an important personal message, borne out of his own personal life experiences, to readers of the journal followed by some reflection from the second-mentioned author. This article will be of interest to accounting students, accounting educators, and any young (or not so young) accounting professionals under temptation to commit fraud to make a quick dollar. Sartrean existentialism and Marxist-Stalinist ethics inform the analysis of the case by the second-mentioned author. The role of gambling addiction in the story is topical given Singapore's recent decision to open two new casinos, the first to open in the city-state since its 1965 independence.

Keywords: Accounting education; Business ethics; existentialism; gambling addiction; Sydney; tax fraud; Vietnamese-Australians; Vietnamese diaspora.

JEL Classification: M40

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[1] This is not the real name of this author. This author has consented for his story to be told but prefers his identity to remain anonymous. The sentiments and views expressed by "Joseph Lam" are not necessarily those of the other authors or of the Publisher.

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We would like to thank the three anonymous reviewers, the Editor, and participants at a research seminar held at University of Southern Queensland (Toowoomba) for helpful and constructive feedback.

> The sole focus of pathological gamblers is to spend as much time [as possible] purely gambling, preferably in a casino, and to raise as much money from whatever means possible – including theft – to fund that sole activity, (da Cunha 2010, p101)

Introduction by Second Author (Kieran James, Associate Professor in Accounting)

I wait outside my budget motel for "Joseph Lam" (name changed) to come around and pick me up. This is culturally diverse, working-class, permanently depressed and yet not without a ray of hope, outer Western Sydney on a warm and sunny late summer afternoon. Cars race by on the Hume Highway, the engine roars the sounds of alienated repressed aggression. I am in suburban Casula, the real Sydney in some people's opinion, 80 minutes by hot and decrepit train from the Harbour Bridge and Opera House and around 120 minutes and 1.5 social classes from the world famous Bondi Beach. Compared to the rest of Sydney you are aware of open spaces, plentiful trees, blue skies, and four-lane highways. Cabramatta, two stations closer to the city, is a Vietnamese town, and the broader Liverpool-Fairfield area has a large population not only from Vietnam but also from Croatia, Macedonia, Russia, and Serbia.[4] Wikipedia's Cabramatta page correctly notes that: "The bustling city centre of Cabramatta could have been confused with the streets of Saigon and historic 'Chinatown', while the Sydney CBD appeared very Western in comparison".[5] Furthermore, as Wikipedia also points out, "Cabramatta became uniquely, and infamously, known by its specialist niche reputation in the city as 'the' place for an authentic Asian experience". The word "infamous" here may be a sly reference to the drug haven capital of Australia that Cabramatta became for a short period of time prior to the police effectively shutting the trade down (or perhaps in part driving it further underground) around ten years ago. Physically the major arterial roads in the Liverpool-Fairfield region are lined with tyre, pool supply and furniture warehouses; fast-food outlets; cheap motels; car dealerships; and football fields. The quieter residential back-streets in the area are characterised by unpretentious square-shaped houses on their own blocks; and red and brown brick government flats of two and three storeys built in the 1960s and 1970s. There is aggression and humility in the air here, no-one has any pretensions of greatness and no-one is permitted any. A few days here would give anyone a sense of perspective on one's true position in the world. Joseph arrives in his car. He is very happy to tell me that he has started a new administration job at a construction company in the Cabramatta area. His bail conditions at present prevent him from working in accounting and finance but the present job touches on some accounting aspects as he is required to utilise and enhance his knowledge of Mind Your Own Business (MYOB) and Microsoft Excel software. We share dinner at a Vietnamese restaurant on the Cabramatta main strip where Joseph knows the staff who do not mind us bringing in our own beer or keeping the beer cold for us.

We spend the evening at Sydney United Sports Centre in nearby Edensor Park where local Croatians watch Croatian football (soccer) clubs Sydney United and Melbourne Knights play a pre-season friendly game. Both former National Soccer League clubs have seen better days but the crowd of 2,000 is in fine vocal form. The hardcore Sydney United hooligan firm brandishes banners written in Croatian language and in the red, blue, and white of the Croatian flag. For some of these people the Balkans War was very close to their hearts, not a foreign conflict half a world away. This is western Sydney in all its unselfconscious multicultural authenticity: we have had a Vietnamese dinner and watched Croatian football. The Russian Orthodox Church on John Street is a prominent visual landmark in the district even for those who never enter it. This is where Joseph Lam grew up, after his family arrived

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[4] Cabramatta is located 30 kilometres south-west from Sydney city centre.

[5] http://en.wikipedia.org/wiki/Cabramatta,_New_South_Wales [accessed 22 February 2010].

as refugees from South Vietnam when he was six-years-old. Context is always important and Cabramatta is the area that shaped Joseph both as a human being and as an accountant. Without aiming to excuse any of his behaviours, growing up here gave Joseph a self-assured charm, a determination to persevere in all things, and access to ethnic community small businesses that would make up the bulk of his 1,500 tax and accounting clients over the period 1994 to 2005. Joseph is qualified as an accountant; operated his own small public accounting practice firm for more than several years in "Paraville" [location of business premises changed] in Sydney's west; and was recently released from jail after serving three years for accounting and tax frauds. Surviving and prospering in western Sydney, let alone in a western Sydney jail, is not for the faint-hearted and Joseph has proved himself to be a survivor.

As we depart after the football game Joseph agrees to meet me in local pubs on the coming Monday and Tuesday evenings for detailed interviews.[6] This story, based on those 4.5 hours of interview sessions, begins with 36-year-old Joseph's childhood in South Vietnam; takes us through his heady days as the owner of a small public accounting practice in "Paraville"; continues on to his court case and jail time; and discusses his desire, in the terminology of the French existentialist philosopher Jean-Paul Sartre (2003, 2007), to re-create his own life in jail through beginning MBA studies. Joseph's story appears verbatim, in his own words, in Section 2 of this paper. I have done no editing apart from in the few places where my notes were inadequate or where the wording needed further clarification. All footnotes and explanatory additions within square brackets in Section 2 of the paper were prepared by me, the second-mentioned author.

As Joseph first forged his values authentically as a teenager in the (then) drug haven of Vietnamese-Chinese Cabramatta, his recent jail time and MBA studies have been used by him to create a more authentic and durable self-identity and set of values not built exclusively around making a fast dollar or feeding an addiction. The major setback in his life has served as a "negative dialectic" in the manner of the writings of the Frankfurt School philosopher Theodor W. Adorno (1990), i.e. as a catalyst to engender and empower more authentic and sustainable self-development and progress. We can view Joseph's story in terms of the "thesis-antithesis-synthesis" model of Karl Marx and Friedrich Engels' theory of "dialectical materialism" with the "thesis" being his successful years as an accountant owner-operator, the "antithesis" being his jail time, and the "synthesis" being his efforts in jail and today to rebuild his life based around a new set of values.[7] The first-mentioned author's Section 2 concludes with his personal message to accounting students and practitioners who might be tempted to commit fraudulent acts, now or in the future, in order to gain access to some fast money. After Joseph's Section 2, I (the second-mentioned author) return in Section 3 of the paper to offer some final personal reflections upon Joseph's case.

Where do I fit into this story? From May to August of 2006 I was Joseph's MBA lecturer in introductory accounting and finance when I was working at Charles Sturt University in Wagga Wagga in New South Wales (Australia). I would occasionally talk, for short periods of time each session, with Joseph by phone and e-mail during those tumultuous times in his life spent inside jail.[8] My purpose in presenting this case narrative, in conjunction

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[6] Interviews were held on 1st and 2nd February 2010 in the following locations: (a) the Fairfield RSL Club in Anzac Avenue in Fairfield, western Sydney; (b) the Stardust Hotel in Broomfield Street in Cabramatta; and (c) the Phounguen Laotian/Thai Restaurant in Cabramatta Road East in Cabramatta.

[7] Regarding the theory of "dialectical materialism", see Althusser (2006, 2007, 2008), Cooper et al. (2005), Marx (1976a, 1976b, pp.100-103), Tinker (2001, 2005), Tinker and Gray (2003), and Tinker, Lehman and Neimark(1991).

[8] All phone calls made from NSW jails are limited to six minutes and are monitored and recorded. In regards to e-mails, inmates are not allowed to use computers unsupervised and all e-mails are done (written) by Educational Officer(s) and/or approved by the Senior Corrective Officer. With the support of the Educational

with Joseph, is that I perceive that Joseph's case is a self-contained "moral message" (as opposed to a moralistic message) which presents a social-realist story that readers, especially accounting students and lecturers, will be able to relate to and learn from. This is in the manner of "moral messages" contained within classic Russian short stories by Count Leo Tolstoy (1983a, 1983b, 2008) such as *The Kreutzer Sonata*, *The Devil*, and *The Death of Ivan Ilyich*. I think our use of the existentialism of Jean-Paul Sartre (2003, 2007) and Marxist-Stalinist ethics (see later discussion in Section 3) prevents the story coming across as moralistic preaching or as a condemnation of Joseph. Joseph has placed his trust in me not to distort the story and not to condemn him publicly or doubt his ability and willingness to re-create himself in the Sartrean existential sense. It is now up to him to rebuild his life. Please bring your beer to our table at the Fairfield RSL Club and join us for Joseph's story.

"Joseph Lam's" Story as Told to the Second-Mentioned Author

Early Times in Vietnam and En Route to Australia via Hong Kong

Hi, I'm Joseph Lam. I'm [ethnic] Chinese, born in Vietnam, so I am Vietnamese-Chinese, with Chinese grandparents who immigrated to Vietnam when they were [both] around thirteen years old due to famine. They were from Guangzhou. My parents were born in Vietnam in the late-1920s. They survived the World War II Japanese Occupation. I was born during the Vietnam War. At that time it was the peak of the war. There were many kidnappings of young children, midnight curfews, and military soldiers and tanks on the streets. The Viet Cong or Communists, also known formally as North Vietnam during the war, it's like a parade; they executed many South Vietnamese soldiers and civilians who they suspected as traitors against the Communist regime. The Communists thought that whoever co-operated with the Americans in the past deserved harsh punishment. I still remember "kindy" [kindergarten] and year 1 and year 2. I survived year 1 but year 2 not really. At that time the Communists took over South Vietnam, 30 April 1975. My dad and mom went to jail simply because we were trying to escape from the Communist regime. I didn't know anything about this. People's assets were frozen first by the Communists and then those people considered to be the most dangerous to the regime, such as the upper middle and upper classes, the rich people, and those related to the former authorities, were put in jail and forced to do hard labour work such as rebuilding the infrastructures of the war torn country of Vietnam. My mom and dad together with my uncle (dad's brother) and aunty bought two boats; it was supposed to be a family escape thing. Then my mum and dad got caught, someone dobbed them in; they were surrounded by soldiers and police; my dad went to jail for two years and my uncle went to jail for one year.[9] One year after the Communist takeover they [my parents] tried to find somewhere to escape to. They did not want to remain in South Vietnam under the Communist regime. In 1976 they bought the boat. My mom went in and out of jail three times. We were under house arrest, our whole family. We constantly had to ask our relatives for help. We were woken up and told [that] we were going to our cousins' house to sleep. Every time we went in and out of our house our bags were searched, just like Aung San Suu Kyi.[10] We came from a moderately wealthy family; we had two houses in two buildings in different locations with six levels. My dad had worked very hard to build up his businesses from nothing and to achieve his status of the time. My grandparents and my dad

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Officer the inmate may be able to hand-write an e-mail and ask the Educational Officer to type it in to the computer and send it as an e-mail.

[9] To "dob in" is Australian slang for "informed on" as in informing the authorities.

[10] This is a reference to the dissident Burmese politician, Aung San Suu Kyi, now released from house arrest in Burma.

and his younger brother and four younger sisters were very poor after World War II. My dad had only two years of schooling in his whole life. He had to sell fried peanuts on streets to support his younger brother and sisters. My dad's businesses involved manufacturing of cotton, plastic containers, incense coil for insect, mothball making, and retail selling of Western household products (mainly American products). Overnight, on the 30th April 1975, the Communists took everything and his dream was crushed. The Communist Government later on converted our house into a court.[11]

In 1978, late 1978, I still remember it was towards Christmas, the monsoon period, we left, my two brothers, my two sisters, my grandmother, my uncle, my aunty, my three cousins, eleven of us including me. We left Vietnam, Saigon, in December of 1978. I remember it wasn't long before we reached Hong Kong. It was a cargo boat, 3,400 plus [people] on a steel boat from [made in] Taiwan. I was six [years old], we were one of the first to arrive in Hong Kong and were known as the "boat people". We were squeezed together right at flag pole at the back of the boat. Our bodies would be touching each other with, literally, no room for movements. During the monsoons all the water splashed up, that was a tough time. It took five days to get to Hong Kong and for one month we had to stay in the water. The Hong Kong Government did not recognise us as refugees, but the Hong Kong Government had no choice as Hong Kong was a British Colony at that time so we had to be let in. We stayed in Hong Kong for one year in a refugee camp in Kowloon. Our family made three separate trips; my first two older brothers had left for Thailand first in 1976. They [left early because] they were to be compulsorily entered into the military at age sixteen. Then my dad had to wait for my mom to come out of jail. We all reunited in Australia, in Sydney, our group arrived on 7 November of 1979. I have been in Australia just on 30 years.

When we came to Australia we settled in Cabramatta immediately. We were allocated to a hostel for one month; my mom and dad stayed in Westbridge Hostel.[12] The Government let you stay there as long as you wanted and gave you food, clothing and enough welfare money for my mom and dad to seek employment. Not long after that my mom and dad set up a clothing manufacturing business. They started in 1980-81 in Canley Vale.[13] We lived in Gladstone Street, Cabramatta, 1980-87, in a small three bed unit, townhouse, and eleven people in our family. When I first got here I hadn't seen my mom and dad for three years, they were in jail in Vietnam. All I remember is that he [my dad] said to me always in Vietnam: "Put more effort into studying, study hard, son". To me I didn't know anything. When I came to Australia I was very young, it was exciting and [I was] full of curiosity about this new western country. I was too young to know anything. I didn't know I would grow up here. There was a lot of uncertainty. I didn't speak one word of English.

University Years at University X, the Accounting Firm in "Parraville", Gambling, Tax Fraud, Nightlife and a Life Spiralling out of Control

When I went to university I met a lot of international students. I attended University X[14], Bachelor of Commerce, majoring in accounting and finance. I enjoyed the study but my regret is [that] in high school I did not pay much attention to English. At University X, I

[11] The Lams' former family residence remains a court building to this day in Ho Chi Minh City (Saigon). Joseph's 80-year-old father still today shows photos of the courthouse and his former shop to anyone who comes to visit the family home in Sussex Street, Cabramatta. He still tells visitors about his businesses being taken by the Communists. This is not to suggest that the family has not moved on. Graduation pictures of the now adult children, including Joseph, also adorn the living room walls.

[12] Westbridge Hostel is currently known as Villawood Detention Centre and refugees are currently housed there.

[13] Canley Vale is the suburb immediately adjoining Cabramatta to the east and is one railway stop closer to the city centre.

[14] To protect Joseph's identity, we have not named the university that he attended.

failed three subjects. "Dr. Worthington" [name changed], he's the one who failed me in *Introduction to Australian Business Environment*. He said I should go and have English lessons. I felt quite crap [as a result of this]. I had thought my English was okay, but he was right. I only failed by three marks or something. I did finish all my subjects on time. I was a very popular student at uni, one of the most popular among my group. We went to national parks for barbecues, frequent gathering for lunches of yum cha and dinners. Uni was such good lifestyle and I took education for granted and I didn't have any worries in the world except to complete my degree on time. We had a group of around 20 of us, we went regularly out, and we were a mix of locals and international students. I went through it [my degree course] in three years, on time, 1989-91. I graduated in 1992.

I came out to work in 1992, a bad year to come out; it was one of the worst recessions in Australia. Australia hit 11.6% unemployment rate under Keating.[15] He said that it was the recession we had to have.[16] I came out [as in he came out of university]. I started working in 1992 in this stingy public accountant firm in Campbelltown.[17] There was only me and the boss. I was there for one year. Since I graduated I have mainly worked in CPA/CA firms specialising in taxation.

When I started work at restaurants [during high school years] I was saving some money. I got into gambling when I was young, twelve or thirteen. In Cabramatta, back then, there was no gambling age limit [i.e. no age limit policed effectively]. Illegal gambling dens would give you two dollars of pocket money in a red packet then you could go in and start to play. These Vietnamese and Chinese gambling dens operated on commercial shopping premises; they would pay off the coppers [police]. In 1996 there was a Police Royal Commission headed by Justice James Wood, and also one prior to that, on the New South Wales police.[18]

I was sucked into it, I gambled through my younger life, and through my uni life on a 'social level'. Once I started working as an accountant and including setting up my own small accountant practice firm, I did not gamble at all as I was too busy working about twelve hours a day, seven days a week during the peak tax season almost every day throughout the year. I was working upstairs in Burwood [inner western Sydney] in 1993. Later I started my own accountant firm because I saw there was a huge opportunity. [In the Burwood arrangement in 1993] it was a partnership; I was working for him on commission during 1993. I was like a silent partner, he paid me AUD50,000; I contributed no capital. I was a very ambitious individual, the accounting practice grew rapidly and for me it was not enough. As I made more money, I was spending more; it was like a vacuum.

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[15] This is a reference to the Australian Labour Party's Mr Paul Keating, Federal Treasurer in the Hawke Government from 1983 to 1990 and then the Prime Minister of Australia from 1991 to 1996. According to Australian Bureau of Statistics (1992), as at November 1992 the official unemployment rate was 11.5% for all persons and 11.6% for persons aged from 15-64 so Joseph's quotation of the 11.6% rate is accurate.

[16] This statement was actually made by Mr Keating on 29 November 1990 during the Australian recession of 1989 to 1992 [see the Paul Keating – Chronology page at AustralianPolitics.com, http://www.australianpolitics.com/executive/keating/keating-chronology.shtml, accessed 22 February 2010].

[17] Campbelltown is an outer south-western suburb of Liverpool located 51 kilometres from the Sydney city centre. As many people living in that part of Sydney would know, trains on the Inner West line depart from Platform 19 in Central Station, passing through Cabramatta Station 59 minutes later, en route to their final destination at Campbelltown. There are stories that Macquarie Fields Station on the Inner West line is haunted by a moaning teenage girl who can be seen late at night walking around and sitting by herself on the platform benches (Australian Ghosthunters &Paranormal Investigators, 2010). It appears that life in western Sydney is an eternal struggle with even death not always providing the hoped-for relief.

[18] The Independent Commission Against Corruption (in the New South Wales Police Force) was headed by Ian Temby QC. This preceded the Wood Royal Commission. "Volume 1: Corruption" of the Wood Royal Commission Report is available online at: http://archives.hempembassy.net/hempe/resources/VOLUME1.pdf [accessed 17 May 2010].

Back then it only cost AUD10,000 to set up a CPA firm. You just needed computer, desk, taxation software, rental and small overhead cost – the potential was huge, I could still do it [nearly this cheaply] now. In 1994 [after starting my own accounting firm] there was work pressure, I was working seven days a week. I had set up my own firm, Lam and Associates [name changed] in Church Street, "Paraville" [location changed]. The clients were mixed.[19] From 1994 to 2001, I built up around 1,500 clients. I am very, very good at doing this. My biggest downfall was gambling and the nightlife.

On New Year's Eve two months ago [Joseph now leaps in time forward to the present] I joined this club [Fairfield RSL Club, home to a huge poker machine area]. There's no desire [to gamble], there's no thrill, because I've been to hell and back. Back then it's when I had the power and the authority and the control of finances [to become an addictive gambler together with nightlife and the continual income stream to feed the habit]. As we Chinese say, if you've seen ghosts you are [now] scared of the dark.

I started gambling when I was twelve. I took it more seriously [towards the end of the period running the "Paraville" firm]. Some gambling clients and the nightlife people fed me information about the 'dark side' of accounting, of tax, of trust accounts. It opened my mind to this 'bad and evil' corruption world because once you start to dig your own hole it gets bigger, bigger and bigger until you cannot cover or fill it back. I am telling you this because I have learned my lesson. I've seen the 'dark side'. Back then the Tax Office was asleep, they had no MIS, matching information system, and they did not link up with Centrelink [Australian federal government agency that administers and pays welfare benefits] or anywhere then. You could do fraud left, right and centre, even asleep. We are talking about a lot of money here. There weren't any identity checks on individuals, you could ring up the ATO and pretend to be someone else and get very useful personal information on other people. For example, a clothing manufacturer, my client, came and taught me and said "my firm turned over three million, I have made AUD750,000 profit, I don't want to pay tax". There are three types of clients [ethnic groups in western Sydney] that are notorious: X, Y [and] Z.[20] I'm not saying [that] any of these is the worst but some of my clients were very bad [ethically]. Some X group people don't give a damn about [paying] tax at all. I'm quite fair when it comes to paying tax to the government but some [clients] would turn around and say to me "Joseph, look, I will teach you what to do. I will write a check for AUD15,000; just give it back in cash". Back then there was no RPS, Reportable Payment System, GST, no ABN requirement only ACN is required and many more. In 1997-98 the ATO [Australian Taxation Office] introduced this and then gradually went to ABN [Australian Business Number]. Basically the Australian Taxation System is very complicated [so] that [even] the ATO itself cannot sort out their own mess. They say we will simplify the tax system. It went from Hawke to Keating, then to Howard and to Rudd and currently awaiting for the Henry Tax Review [as at the date of our interviews, February 2010].

There was a case, Fashion Company X [name changed]. The mother and two sons were slogged big time. What they did was similar to what I did, one section of it. Millions of dollars of taxes were owed. My frauds continued on in the period 1994 to 1997. The clothing manufacturer, to continue the example, writes a check AUD20k payable to ABC Fashions [fictitious company]. So you [the accountant] set up a false company name under ABC Fashions then you give them, less 8% commission, AUD18,400 [cash].[21] You deposit the check, clear it after three days, then give them back AUD18,400 (less the 8%). Every day I was carrying AUD50 thousand, they don't pay tax on the AUD20 thousand, they get a

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[19] The reference "mixed" here probably refers to both ethnicity and line of business.

[20] The reference here is to three specific ethnic groups but the ethnic groups have been removed, at the suggestion of an anonymous reviewer, so that the paper does not cause offence to any reader.

[21] Even today Joseph does not need a calculator to tell you that 92% of 20,000 equals 18,400!

business deduction on the AUD20 thousand, and they can pay the workers AUD5 to AUD7 per hour cash from this money.[22] The whole thing is a scam and the 'black economy' gets bigger and bigger as the ATO is asleep. To give a more complete example: Client X, annual turnover AUD3 million, gross profit AUD750,000, company tax at tax rate > 30%, say 33%, nominal tax AUD250,000. Net income after tax should be AUD500,000. Instead of paying tax they will write out many, many checks to ABC Fashions, XYZ Fashions, etc. [i.e. all fictitious companies] for the AUD250,000 before the 30th June financial year ends. Back then there was no checking [by the ATO]. All checking was based on check butts. So [the writing of checks continues until] net profit equals AUD10 thousand (say), [you] pay tax on the AUD10 thousand. I helped them do this, charging 8% commission [on each check]. I did around AUD10 million of transactions, that is AUD800 thousand commissions. That's only one way [to make money through assisting client frauds], the simplest way. There are around four other ways. It's still possible to cheat the Tax Office now [today] but it's much harder.

If you come from a violent Third World country [to Australia] you don't give a damn about the tax[23] especially the X ethnic group. Do you remember how they [the ethnic criminal gangs] punish the subordinates in King's Cross?[24] They smash a chair over a kneeling man's head. The police have cleared out many dirty things [in Sydney]. X and Y are not so bad; W and Z do not want to pay one cent of tax or they will go elsewhere [to another accounting firm]. I was quite aggressive at that time. I helped these non-compliance tax payers to get through the tax system. I was digging my own hole deeper and deeper to feed my gambling addiction and the nightlife. What I am doing now [telling my story] is invaluable to the society as I can act as a mentor [to university students and young accountants facing ethical pressures].

It's a disease [the urge to gamble] that grows inside of you; it is an urge – like a cancer keep on growing and growing. If a gambler is going through this process [feeding and succumbing to the urges] and I tell him to stop and please do not go [gambling], it is very hard for this gambler to understand me and in his/her mind is an obsession for gambling. There is one method to go around him/her and tell him/her in a different way [i.e. hearing personal stories of former gamblers such as this one]. I have been hitting walls in a bouncy castle, I relapse, I can't get out, and I've tried many ways. I've made AUD8 million. I've lost AUD7.8 [million], the rest sort of evaporated. I have nothing now but I'm still young and have potentials as I have my MBA. I have opened my eyes, I have opened my mind. [My approach now is to] go to the people who I think can't disappoint me, can help me. I go to them directly. I want to see who my genuine friends are and who are not during this lowest and most difficult time of my life. To find out this information from your friends are invaluable as human have 'blind spot', everybody have 'blind spot'. Some people pretend very well, to become a very good friend to you but in reality can be your worst and most dangerous enemy in your life. I'm very lucky [to come out of this unscathed except

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[22] This hourly rate, of course, excludes payments for overtime and superannuation and is well below the minimum hourly wage rate enshrined in Australian law.

[23] The implication here is that these people are so concerned with mere survival in brutal countries that tax payments are seen as an academic nicety regarded as dispensable especially so as the Tax Office is perceived to be far away, foreign, and benign. There is a Chinese saying that the country is hilly and the Emperor is far away. We might also say that Jean-Jacques Rousseau's concept of the "social contract", where tax is paid to provide public goods as part of the social contract between citizens and the state, is a product of the Western European Enlightenment and basically not appreciated in the same way in the murkiest parts of the business world. These are Joseph's perceptions and we leave them here although some might view them as non-PC.

[24] King's Cross is a traditional red-light and entertainment precinct in the inner eastern suburbs of Sydney. It is allegedly controlled by ethnic gangs. Many see "the Cross", as it is known, as having had its most vibrant days back in the 1970s and 1980s. The 2010 Channel Nine TV series *Underbelly: the Golden Mile* documents most vividly the violent and seedy life of the Cross during the era 1988-99.

financially]. I think this is the biggest lesson in my life so far, it's huge. My biggest problem was gambling and the nightlife. It took me so long to get out of this. Without gambling I would have had no major problems in my career. I was a time bomb waiting to explode. I have not touched "pokies" [poker machine] gambling for a long time. On parole [from jail] they kept hounding me about my gambling habit? "Are you still gambling? Are you still gambling?" I've seen so many counsellors. They say [that] "you don't have a problem, Joseph, full-stop". But they [the parole officers] don't believe it and I have to do it [counselling] again.

Basically, the banking system back in the 1990s, the ATO back in the 1990s, the relevant authority ASIC [Australian Securities and Investment Commission] as well, it was called ASC back then, ASC was pathetic, literally. They did not have an MIS, matching information system and the identity checks. They [the various authorities] did not talk to each other, Immigration, Tax Office, banking, ASIC, Customs. They did not have a matching system; it was a paradise for fraud. This was back in the early 1990s [up] to 1998.

Under the Prescribed Payment System or PPS, for contractors and subcontractors, you paid 20% of your [declared] income. ATO didn't liaise with Customs which didn't liaise with Immigration or the banks. There are people that have done it big time. The only reason I did this was to feed my gambling habit and the nightlife. But it's like a spell. You don't want to listen to anyone. I was running this [accounting] practice of mine during the peak tax season seven days a week, literally twelve hours a day, running a one-man show with one secretary. There was pressure, stress, and deadlines. I eventually collapsed. The way I relieved my pressure was through gambling and meeting people in nightlife.

From 1999 to 2005, I started to gamble very heavily there, my life was in a mess. It was like going through hell, on one side you wanted it to stop, but the other side of you lets it continue. From 1994 to 2000 I didn't go into it [gambling] heavily because I wasn't greedy. My nature was: 'why do I need to do it [fraud] if I don't need it [gambling money]'. In 2000 I was in disarray, lost, lonely, confused, and uncertain. Gambling is a disease; it's an attraction, power, being on top of the world. All these casinos give you benefits, five-star hotel, limousine, flights to all around Australia, entertainment etc. to entice you. Once you win you are OK but once you lose it is the bitterest pill to swallow in the whole world.

Return to Sydney, Nightlife Continues, Collapse of the "Paraville" Accounting Practice, and Gambling Addiction Worsens

I will tell you the mind of a gambler. I understand the [mental] process because I have been through it. I consider myself very lucky because I went to jail and did my MBA. Name anyone in this world who fell into a s***hole and came out with a gold chain, an MBA. In New South Wales I could be the first or second. I know some who did their Masters but to get through the system it is so tough. It depends on whether the Education Officer is willing to do it for you; [whether the Officer] … understands. I [later] met "Mary Baxter" [Educational Officer, Correctional Centre Y, name changed].

In gambling you cannot chase the money you have lost. Why do you think casinos around the world don't close [the intended meaning here is "go out of business"] except in a recession era? The way they make money is that they look for people like me. But for me to get money in a short period of time I had to commit more fraud and there is a way to access it. This is one of the ways [i.e. tax fraud].

If you can break the law [without being caught] 1,000 times all you need is one mistake. Among 1,000 times we are talking about 0.1 percent, or if 10,000 times then 0.01 percent. One mistake and that is it; it can land you in hot water. I have known people inside

[prison] who did fifteen, eighteen or twenty years of drug runs, many times over 200 or 300 times. All they needed was one little hiccup and they were gone.

I have stopped gambling. The disease is gambling. If you take gambling out of my life everything is [Joseph searches for the right word here and you feel that the two he chooses do not fully capture the intended meaning] successful, easygoing. Gambling is as bad as drugs and paedophilia. It is a big social problem; a huge social problem in our society. Why? Because, being a human, once you step into that gambling territory your mind is not as strong as a computer or machine to say "stop".[25] I hung around with a lot of bad gamblers and nightlife people at that time. You would see me at the casino three days a week or five days a week, during working hours. I was running the business diverting my calls over to the mobile. Between 2000 and 2003 it was like stepping into very dangerous territory. To feed my habit, and the nightlife habit, I had to step up the tax fraud. It is like digging the hole deeper and deeper. I would have engaged in 500, 1,000 or 2,000 frauds; millions of dollars were involved. All I had was a good time but there was no control; it just gets bigger and bigger until you get caught and it becomes a lonely world inside you.

Police Undercover Surveillance Operation, Comments on the Legal System, Jail Time, and MBA Studies

I could tell that the authorities were on to me, Tax Office, Police, Immigration, Customs, Federal Government, Federal Police, State Police, you name it. I had a brief of 34-36 foolscap volumes [kept about me by the police]. There were around 80 authorities working on my case for 1.5 years. My whole objective of [participating in] this whole research is [to communicate that] I have changed. I built up 1,500 clients. I was very successful until I gambled very heavily.

At that time I lost my mind, I was losing my mind; my gambling got heavier and heavier, like a cat and mouse game. All you need is one mistake; that is what I have learned in my life. One mistake out of 1,000 transactions and then you are gone. I was under surveillance for five to six months [when I was] living in Cabramatta. I had a bit of money. One thing I know is that lawyers, solicitors, and barristers are as bad as corrupt coppers; they have their way out of things but when it gets too serious they suck your blood so badly that you are dry, like Dracula until the day that you drop.[26] Once you are on the other side of the fence [being pursued by the authorities], when you are about to go down but when you still have money, say AUD500 thousand, they can see that [i.e. they can see your financial position]. They are so calculative that they think "this is a big fish, this is a big turtle", they will drag out the court case on and on for years to suck your [financial] blood just like a dragon. They suck your blood until you are dry and then – this is what is so interesting – when you cannot pay them anymore they literally treat you like a prostitute as in "f*** off". If you want them to continue their "expert" services [the word "expert" is used in a sarcastic manner here] you have got to keep it up, you have got to do more fraud; that is the name of the game. Once you are in trouble you can get bail but you need AUD5 to 20 thousand. The barrister or solicitor has good contacts with the magistrate and can get you bail. Bail is what you want, that is how the society works. The barrister charges AUD5 thousand per day or

[25] A Marxist critique here would point to the western Sydney poker machine rooms in working-class hotels and pubs being, literally, human being versus machine with the machine programmed to serve the profit-maximising agendas of capitalists close to 24 hours a day (the massive Fairfield RSL Club in fact closes for four hours each night) without fatigue, doubt, confusion or regret.

[26] The discussion on this issue in this paragraph is reminiscent of French philosopher Michel Foucault's (1977) theory of the nature of surveillance and control in modern institutions in his book *Discipline and Punish*. Of course that theoretical framework applies well to the prison system also.

AUD50 thousand for two weeks. But if the court does not go ahead in those two weeks … they do not do service unless money is transferred to their account before it is rendered. Their typical phrase is "I allocated my time for you; if it does not go ahead I still need payment". How many times did I go through that? Many times I asked a barrister to represent me but the trial could not go ahead. Of course I could not get a refund. He allocated his time for me.

The police caught on to me. They charged with me with 100 plus charges after six months of surveillance. They said "we know what you did, over 100 charges. You can fight the charges, whatever you want". I was under Section 12 and Section 9 bond and unable to get bail unless I went to the Supreme Court [of New South Wales]. A Section 12 bond is for suspended sentence and a Section 9 bond is a good behaviour bond. I was on both. It was all leading up to the big charge, starting small. It was me digging my hole bigger and bigger until there was no point of return. I am the perfect person [now] to be a gambling counsellor or even a life experience counsellor.

First I went to MRRC or Metropolitan Reception Remand Centre; that is the maximum security. When I first got there I was freaked out because I did not know I would be held with the hardcore criminal people looking at five years and above. They have a classification: AA is Maximum Security, followed by A, B, and then C. I was C classification meaning white-collar crime. I was kept there for three months at MRRC and then they had to move me to Correctional Centre Y [name of prison changed]. I was there for one year and nine months. I was sharing with other inmates. Most times I had a lot of problems with cell mates as most were druggies. I shared with as many as fifteen to twenty "cellies" [cellmates] in my time there.

When I first got there I met Mary Baxter [Educational Officer, name changed]. She helped me to apply for MBA. It is up to the [discretion of] the Educational Officer whether they will apply for you. If she or he is unwilling, then there is no point to go ahead. In around November or December of 2005 she applied for me but I did not start until May 2006. It was a nightmare to apply for [sitting] the exam. It was waiting and waiting. You have no-one to speak to, literally, [you are] shut out from the world. The only communication line was through Mary Baxter; she was the only link to the outside world for education. It took me about six months to apply. I applied in November so I missed the February start. I started in May 2006 through to August 2006, my first trimester. When it first started it was exciting. I was a bit nervous as I hadn't studied for ten years. I was bored; I wanted to make my time useful. In my time inside something had woke me up. I couldn't gamble or drink. Every day I had routine of wake up, athletics, etc. I read Clinton *My Life* [and] Mandela *Long Walk to Freedom*. He [Nelson Mandela] was locked away for 27 years.[27] So this inspired me, reading this book. I also read *Snapshots from Hell: the Making of an MBA* [by Peter Robinson].[28] These two books [*Long Walk to Freedom* and *Snapshots from Hell*] inspired me. I read Reagan as well, Nixon, JFK, and *The Encyclopaedia of American History*, big huge book; I didn't finish it though. I spent a lot of time reading, first time in my life. Why? You have all the time in the world, locked up seventeen hours per day.

The prison is just awful. The "screws" [prison officers – amongst inmates we call prison officers as screws] are so uneducated. They have no idea what an MBA is. When I started my MBA exam one time I needed permission [to get back into the cell area]. I said

[27] The Amazon.com link for *Long Walk to Freedom* is as follows: http://www.amazon.com/Long-Walk-Freedom-Autobiography-Connections/dp/0030565812/ref=sr_1_1?ie=UTF8&s=books&qid=1272342215&sr=1-1 [accessed 27 April 2010].

[28] The Amazon.com link for *Snapshots from Hell: the Making of an MBA* is as follows: http://www.amazon.com/Snapshots-Hell-Making-Peter-Robinson/dp/0446671177/ref=sr_1_2?ie=UTF8&s=books&qid=1272342325&sr=1-2 [accessed 27 April 2010].

"Chief [inmates address prison officer as chief], I'm late, I need to go back inside my cell; I just finished my MBA exam".[29] The Chief said: "What's that?" I replied "MBA". He said: "I've done that before". It's literally like [me] talking to a little boy. All my assignments had to be handwritten. The computer access is so limited, two hours per week and no internet.[30] All I can rely on is MB [Mary Baxter], my Education Officer, to copy-paste my [incoming] e-mails on to Microsoft Word and print them out. I used to enjoy my class colleagues' e-mails [probably Study Desk Subject Forum online postings] talking amongst themselves. Some say: "Hello, I'm from Finland, Denmark, Canada, Fiji, Hong Kong, Singapore, USA, etc."

Correctional Centre Y [similar to the jail immortalised in the masterful Cold Chisel song "Four Walls"] is old and filthy. At one time it was 46 degrees [Celsius] outside and 60 degrees inside. It's so inhumane. We have a big sandstone cell with a window one foot by three foot, with barbed wire in between big thick bars. Probably the worst time in my life was in Correctional Centre Y for one and three-quarter years. When I was there the MBA kept me going because I was busy studying.

Plea Bargaining, Court Case and Police Decision not to Appeal

So the coppers' strategy was to keep me on remand as long as they could. Normally you get sentenced within six months but, no, they dragged it on. They interviewed me five times over two years. They harassed and intimidated me. They said: "We can press more charges; we know what you did". They don't physically hit you but if it was a normal person [being questioned] they would break down and cry, lose it, and give up everything. But I held up under it. First I had 30 charges, and then it ended up as 110 or something. I said "I will not plead guilty" and hence I was kept waiting and waiting. The good thing is I was doing my MBA so I didn't care how long it took. I was studying. When I was studying I didn't really think about my court case. It [studying] got my mind away from my court case. They kept changing the goal posts when I was on remand. I had to go to court at least seven times before I got sentenced. What I learned was that, in the Westminster System, if you are rich you can defend yourself and you can get the best barrister. If your family has power, not just money, they will do it [defend you] very rigorously and strenuously for you. If you are no-one, but with one million dollars in your bank account, it will dry up in two or three years. You have to have money, power, and connections to get a [good] result. That's how I see this Westminster system of ours. Why? Because the DPP [Director of Public Prosecutions], prosecutor, and police have an unlimited budget to fight you; when you don't have the money to back you up that's it. If you look at the Asian system people [here] say "corrupt, corrupt, corrupt" but what about Australia? Where is the real corruption? It's [in] how the politicians, judges, and barristers manipulate the system. Who is the judge? God is the judge. God will be the judge of everyone. He [barrister] only puts a wig on because he has been in the legal system all his life. Ultimately someone has to make the decisions. I had a very good outcome but two years on remand [before trial] was crazy. The maximum time on remand should be six months and at most one year. Why did this happen? Firstly, the coppers were playing a waiting game. Two, I was using Legal Aid; I paid very little for my lawyer. Three, I didn't give a s*** because I was studying my MBA; I was changing myself; I was doing better for myself. It went to the stage where the judge wanted to wrap things up.

So the judge literally pushed it a bit, Mary Baxter wrote me a good reference… Kieran James (second author) wrote me a good reference, as did my friend from outside. The

[29] Prison officers are addressed as "Chief" by inmates within the prison but when not being specifically addressed they are referred to as "screws".

[30] The second-mentioned author received handwritten assignments from Joseph when he taught Joseph's first MBA subject, Introductory Accounting and Finance, from May to August of 2006.

judge did not pay much attention to it except for Mary Baxter's reference because she was a correctional officer. She saw me Monday to Friday where I worked at the library earning AUD45 per week. I worked in the library for over eighteen months. A guy gave me a hard time, he was a poof; he took over from Mary Baxter [as Educational Officer]; she was only acting head of education. Klaus [name changed] gave me a hard time because I was close to Mary. At the end he left. At one time he would not let me do that exam of yours [referring here to exam in Kieran James's subject that Joseph should have taken in August but which had to be postponed until November]. He offered me to take the exam back to my cell for a day but I told him [that] I refuse to cheat.

At court my lawyer said "the coppers want to negotiate. They will drop half the charges, grouping them together in Form One into seven charges, if you plead guilty". I was willing to plead guilty to 23 charges. Then later I pleaded guilty to 50 or 56 but grouped together to seven charges. Two weeks later a deal was done. There was no certainty regarding sentencing but I took a calculated risk to reduce the number of charges. It went up against Justice Cameron [name changed] who disagreed with the prosecutor's argument. He didn't take into account [much] the references other than Mary Baxter's. Based on that, he said: "Joseph has been through a lot and has tried to change through doing his education and I will give him five years top to three years bottom". The prosecution protested and pointed out how tax fraud defrauded the Commonwealth Government of Australia, [and is] considered to be the worst crime [by the police for that reason]. They argued that: "Joseph has not changed; look, he is studying financial management subject!"[31] I got a very tough opposition DPP. Then the judge said that he disagreed with the prosecutor and said that Joseph is studying and has stopped gambling. Also I should mention Afsana Ahmad [name changed], psychologist at the prison. She helped me out as well by writing me a reference letter. She is a very independent psychologist. She said "Joseph was a very changed person". It was a very accurate picture of me.

The coppers said that they would appeal my sentence. They got my file, sent it to the DPP in Canberra, and asked him to review my case.[32] A month later nothing came back and the solicitor said [to me] that the HQ in Canberra had said that an appeal was not cost-effective. I got the sentence and, because I was C classification, I was sent to Correctional Centre Y [name of prison changed], [which] is a small jail in New South Wales.

Time on "Work Release", Transfer Of Degree, New Life and New Girlfriend

Anyone with three years of jail will usually stay at Correctional Centre Y as it is a minimum security prison. The remainder of my time, one year, was in John Marony's "work release" program. I could go out to study, had to go back to prison to sleep, [and] on weekends I could go back to my family. I had to wear an anklet. When I started at University Z [university name changed], 25 February 2008, it was very exciting. I started on a Monday. At that time I was on the work release program. On 27th I met "Aki" [name changed], [now] my new girlfriend. When a [straight] guy has not seen women or girls for nearly three years, you meet any girl and say "hey". But before I did anything intimate with Aki I told her exactly where I'm from, what I did, everything. This was in April, around her mid-semester exam. From February to April I did not tell her. I did not have a mobile number and kept talking to her on e-mail. She thought that this guy is very strange as he does not have a mobile number. So it became a pattern. On Monday and Wednesday it was "daytime" in terms of when I was

[31] This police perspective cited here, i.e. that studying finance suggests that a tax cheat has not changed, might distress some of our finance professors and lecturers!

[32] Canberra (population 345,257) is Australia's capital city and where the highest ranks of all government departments, including the Federal Police, are located.

allowed out, 7.30am to 6.30pm. On Tuesday and Thursday I could come out 11.30am to 11pm. She [Aki] was quite shocked when I told her these things. She said her Mom and Dad [in Japan] cannot know about this. I talked to her on the phone on the weekend and said I have something to tell you. I postponed telling her until she pressured me to tell her. First she asked what it was, I said "I was in jail", and she asked "what for?" I said "tax fraud" and she said "well, that's alright". I hope to inspire people [through my story]. I keep stressing that because, since I was thirteen, it [gambling] was a disease that kept getting worse because I had the power and authority and easy access to cash. It was feeding the bushfire; that [gambling] was the ingredient that got me into this. I reached the point of no return. Some psychologists know what I'm going through but the parole officer does not have a clue. They keep asking me whether I have the urge to gamble again and play the machines. F***cking hell, it's been a bloody year and a half and they still ask me the same question. We are in the RSL Club here [in Fairfield, western Sydney]. Have I made a move over there? [Joseph looks and gestures over in the direction of the poker machine area]. My psychologist says: "I can't see that you have a problem anymore".

Further Personal Reflections

I'm feeling very positive now about myself. I'm doing this administration job [at a local construction company] now just to complete my parole time. I have to report to them, and be accountable. I cannot do accounting and finance jobs under my parole conditions. Before [all these events] I didn't treasure things in my life. After this I learned I have to be accountable for things in my life. One is treasure the real value of money; two, treasure friendships; three, find out who are my real friends in this world; four, do not take things for granted, treasure it whilst it's there; and five, focus on my career. My utmost objective in my life is to pursue my career. I plan to go into accounting and finance and make full use of my MBA studies and apply in my best capacity and all [that] I have learned in life. Being in jail has given me human instinct about people and I'm sure I can use this later in my career. What is very visible in jail [human nature] is much more subtle and less visible outside but it is there, waiting to be discovered.

I have to thank Aki in a personal way. She had finally wakened me up from all these years of mine of being lost in my life. It may not seem important to anyone or to her, but it means a lot to me as it is the beginning of my real "hungry power" in regards my career which is set for another 30 years in 2040.

Personal Message from Joseph to Readers of this Article

If you [have] made a dramatic mistake in your life, dipping into negative territory, life is not finished yet if you learn your lesson. If you truly want to change, and if there are people out there who genuinely want to help, there is hope. There may be 100 people who say "f*** off" and there may be one, two or three who genuinely ask: "What do you need?" Then admit the need without pretensions. If you genuinely ask for help, without bulls****ing and lying, there will be a few people willing to help. And, remember, if you do 1,000 things wrong [illegal actions] in this world, it only needs to go wrong one time, one f*** up, and the authorities will catch up to you.

If you want to do anything illegal then think about it. If you can do it a few times, well, good luck to you. But once the luck runs out for you it will be the end especially if it is something serious.

[It is now 10.30pm on Tuesday night, the story is told and written down, and we head out towards the main entrance of Fairfield RSL Club, leaving the poker machines, the unreformed late-night gamblers, and Joseph's former life behind us.]

Final Reflections from Second-Mentioned Author

It has been an honour first of all to help Joseph when he was an MBA student and later to meet him in person, become a friend, and work on this research project with him. He is also now friends with my wife Jenny and has met our two daughters and stayed in our home. Originally I did not plan to add any reflections here at the end as I felt Joseph's case per se was a self-contained "moral message" (as opposed to a moralistic message) which presents a social-realist, to use the Stalinist term, story that readers will be able to relate to and learn from. This is in the manner of "moral messages" contained within classic Russian short stories by Count Leo Tolstoy (1983a, 1983b, 2008) such as *The Kreutzer Sonata*, *The Devil*, and *The Death of Ivan Ilyich*. I think our use of the existentialism of Jean-Paul Sartre (2003, 2007) and Marxist-Stalinist ethics (see later discussion in this section) prevents the story coming across as moralistic preaching or as a condemnation of Joseph. Joseph has placed his trust in me not to distort the story and not to condemn him publicly or doubt his ability and willingness to re-create himself in the Sartrean existential sense. It is now up to him to rebuild his life.

On a related point, Australia has a long history of "wowserism" (meaning moralism) (Horne, 2009, pp. 55-59), in both its Protestant and Roman Catholic forms, and it is easy for ethics lecturers and authors to fall into the trap of pretending to be much more ethical than their students or their research study participants. Of course such moralistic attitudes turn students off from the life lessons that we hope to confront them with. In our story Joseph hides no details from us and I believe he successfully walks the fine path between self-condemnation and refusing to accept accountability for his actions. We do not know what the future holds for Joseph. He is presently a regular casual marker for my course at my present university and I hope that this will help him in terms of having a recent employment track record.

In terms of our traditional ethical theories, Joseph's story can be ambiguous in that we are not sure whether he is stating that the frauds would have been wrong even if he had not been caught (the deontological or ethical universalist perspective) or whether only the fact that jail was unpleasant makes the fraud wrong in hindsight in the strict cost-benefit sense (looking at it from the ethical egoist perspective). There are statements in the case that point towards either or both of these conclusions. We should remember that in the real world outside of the ivory towers, where Joseph inhabits, this is purely a hypothetical and intellectual point since in reality Joseph *was caught* and had to face the consequences. I asked him for his story and not for his academic theorising. When Joseph concludes in Section 2.8 with the comment "[i]f you can do it a few times [fraud] well, good luck to you", is the term "good luck" being used here in the literal sense or in the sarcastic sense where it is actually a veiled insult? I feel that Joseph's ethical outlook is predominantly that of ethical egoism which perhaps reflects the stereotypical view of Sydneysiders in Donald Horne's 1964 classic text *The Lucky Country* (Horne 2009) where he says Sydneysiders each go about their own daily affairs unaware of any concept of society. In Horne's (2009, p. 43) words: "There are no accepted forms in Sydney; it is anonymous; just people following their pursuits, indifferent to others". Horne (2009) contrasts this with the allegedly more communal and socially aware attitude of Melburnians. The ATO also has to share some of the blame for its own (presumably involuntary) ineptitude in Joseph's case which it has tried to resolve in more recent years and especially through the ABN system.

Joseph's existential anguish and struggle can be seen very clearly at several places in his very honest narrative, beginning with his apprehension felt while still in South Vietnam around the time of the Communist takeover, his journey on the over-crowded boat to Hong Kong, and then arriving in Sydney as a six-year-old without knowledge of the local culture or language. His parents must have felt similar anxiety but we see their tremendous work ethic in setting up a new business in Canley Vale only a few years after their arrival. As a young man Joseph experienced anxiety when told by his university lecturer that his English was not of a high enough standard for an undergraduate. This must have been a blow to his pride given that he had been in Sydney over twelve years by this point, but he accepted the validity of the point without resentment and he worked hard to overcome the problem. Joseph's anguish is obvious when he was held without trial for two years when the pre-trial period should have only been six months. He still faces anxiety especially in relation to his career prospects in the future, given his present record. Although he maintains a discourse of self-confidence, inner strength, and hope, he must also have some residual anxiety over his long-term ability to avoid a return to gambling addiction. In jail we cannot be sure whether Joseph was a co-operative prisoner (which clearly he was) to conserve energy and to escape further punishment or because he had reached Christian repentance. If the former then in the Foucauldian sense he has internalised surveillance and control as self-discipline (Foucault 1977, 1980a, 1980b, 1980c). The concept of repentance is problematic in any case as even theologians are unsure of exactly what it involves. Is it feelings of remorse, mental acquiescence of wrongdoing, and/or actual changed conduct? A primary emphasis on changed deeds is consistent with Christian existentialism. The biblical St Paul himself told his hearers to "demonstrate their repentance by their deeds" (Acts of the Apostles 26, verse 20) and St James said that "faith without deeds is dead" (St James 2, verse 26). Søren Kierkegaard (1985), the Danish Christian existentialist, pointed in *Fear and Trembling* to Abraham's anxiety and courage in following the voice of God to go to Mount Moriah to sacrifice his son Isaac, an anxiety made stronger by the fact that he could not hide in society's approval or "the ethical universal". The problem with a primary emphasis on inward or outward shows of contrition rather than deeds is that no-one truly knows another person's heart or mind. The future is truly up to Joseph and this is a frightening prospect, to some extent, not only for him but for those who choose to be his friends and supporters. Punk rocker Joe Strummer of The Clash paid a large sum of money (£30,000) in 1983 to a heroin dealer so that the band's former drummer Nicky "Topper" Headon could literally keep his legs unbroken (Salewicz, 2006). Clearly there was anguish involved here on everybody's part but ultimately a choice had to be made.

It is worthwhile raising here the topic of Marxist ethics and the various sub-branches that have been developed based on this concept. Of course Marx, as a materialist, saw the ruling ideas of an age as a product of the ruling class and to be simply a reflection of the society's economic base and mode of production. Marx and Engels (2007, p. 64) write that: "The ruling ideas are nothing more than the ideal expression of the dominant material relationships, the dominant material relationships grasped as ideas". This argument is spelled out clearly in Marx and Engels' (2007) essay *The German Ideology* where the ruling ideas, including law, culture, morality, and ethics are presumed to be merely ideology designed to safeguard the ruling class and capital accumulation. To cite Marx and Engels

> Morality, religion, metaphysics, all the rest of ideology and their corresponding forms of consciousness, thus no longer retain the semblance of independence. They have no history, no development; but men [*sic*], developing their material production and their material intercourse, alter, along with this their real

> existence, their thinking and the products of their thinking. Life is not determined by consciousness, but consciousness by life. (2007, p47)

Of course this does not mean that law, culture and ethics cannot take on sophisticated forms since ideology is most effective when it is not clearly and obviously functioning as ideology but has become "the language of real life" (Marx & Engels 2007, p47). Consistent with this materialist understanding of society and ethics, Lenin (1975a) writes that "one does not judge an individual by what he thinks about himself". We can allow Lenin's maxim to influence our perspective of Joseph.

We can see in Joseph's story, very obviously but perhaps so obviously it is overlooked, that the North Vietnam Communists had a different set of applied ethics from Joseph's parents and from Australian society. For the Communists, to support the revolution and the revolutionary war at all costs were the beginning and ending of ethics. In Joseph's early story we see a clash of ethics inherent in the clash between Joseph's parents and the Communists. Appropriation of assets and businesses were ethical rather than unethical actions for the North Vietnamese Communists, inspired by Marx's theory of surplus-value as unpaid labour time (Bryer 1994, 1995, 1999, 2006; Engels 1975; Lenin, 1975a, 1975b) and the later work of Lenin, Stalin, Mao Zedong, and Ho Chi Minh.[33] Engels (1959, p387, cited in Lenin 1975a, p38) says that "[t]he first act [of the proletarian state is] ... the taking possession of the means of production in the name of society" although he also suggests that small peasants should not be "forcibly expropriated" but encouraged to socialise their landholdings "by dint of example and the proffer of social assistance for this purpose" (Engels 1951, p393, cited in Lenin 1975a, p. 39). Although big landowners should be forcibly expropriated, the fate of small retail business owners is not made clear. I hope readers will allow this digression since we will reach some important theoretical and practical points.

Lenin's concept of ethics, following Marx and Engels, was that an ethical action is one that advances the cause of the working-class. For example, Engels (1846, cited in Lenin, 1975c, p77) writes that: "I therefore defined the objects of the communists in this way: 1) to achieve the interests of the proletariat in opposition to those of the bourgeoisie". Key to Leninism, outlined in the 1902 text *What is to be done?* (Lenin, 1960), was the idea of the Communist Party as "vanguard" leading the remainder of the working-class still outside the Party and stuck in the trade-union mentality. As the contemporary Slovenian philosopher Slavoj Žižek (2009) points out, under Leninism, each action was held to either objectively help or hinder the cause of the working-class so it was either progressive or reactionary. The correct action was seen as one consistent with the "Party line" as defined by the Party leadership. Significantly, Žižek (2009, pp. 230-231, 235) argues that under Leninism it was still *doctrinally* possible for one to be deceived. In other words you might innocently have the intention of advancing the cause of the working-class but in actual fact your action harms it. By contrast, under Stalinism, Žižek (2009, pp. 224, 230-231, 235) claims, everyone was held to know the objective meaning of her or his acts as being either progressive or reactionary. Therefore, under Stalinism, it was possible to harm the working-class while intending otherwise and *still be deemed guilty of the offence*. Žižek (2009, p. 235) writes that: "[S]ince, in the Stalinist universe, there are ultimately no dupes, and everyone knows the 'objective meaning' of their acts, disagreement with the official party line can [logically] only be the result of direct hypocrisy and deceit". As a result in the Stalinist show trials, all defences by the accused were irrelevant if the Party put forward the case that one had betrayed the revolution. Žižek (2009, p. 238) says that: "In the last decade and a half of his life, [the

[33] Lenin (1975b, p. 66) goes so far as to conclude that "[t]he doctrine of surplus value is the cornerstone of Marx's economic theory".

violinist] Prokofiev was caught up in the Stalinist superego at its purest: whatever he did was wrong [because changes to the Party line always caught him out]". Clearly there was "original sin" in Stalinism, not surprisingly perhaps given the period Stalin spent in his youth in a Russian Orthodox Church seminary. For Žižek (2009, p. 227), "the structure of Stalinism is inherently theological" with its implicit concepts of original sin and the "big other". Under Stalinism, you had "always already" betrayed the revolution. "The Stalinist purges of high party echelons relied on this fundamental betrayal: the accused were effectively guilty insofar as they, as the new *nomenklatura*, betrayed the revolution" (Žižek, 2009, p. 251). In other words, the purges both wiped out those accredited with Stalinist "original guilt" for objectively harming the revolution and original bona fide revolutionary Bolsheviks (thus allowing the counter-revolutionary aspects of high Stalinism to continue). However, Žižekalso points out that:

> Against the utopia of 'mechanised collectivism', high Stalinism of the 1930s stood for the return of ethics at its most violent, as an extreme measure to counteract the threat that traditional moral categories [as refined by Marxist-Leninism] would be rendered meaningless, where unacceptable behaviour would not be perceived as involving the subject's guilt, but as a malfunctioning measured by a special pressure gauge or a speedometer. (2009, pp212-213)

Žižek (2009, p213) notes that appreciation for Pushkin and Tolstoy was officially revived under high Stalinism, and argues that this was because "the universe of great classics such as Pushkin and Tolstoy contained an entire vision of culture, with its own ethics of social responsibility, [and] of solidarity with the oppressed against autocratic power". I have mentioned my desire for Joseph's case narrative to stand alone like a Tolstoy short story. At my university, in ACC3116: *Accounting and Society* class, students are taught and tested on the ethics inherent in Tolstoy's (2008) classic short story *The Death of Ivan Ilyich*. One of Stalin's (2010, first published 1954) last works, on linguistics, by arguing that words have no pre-existing or prima facie class origin, showed a line of thinking that had the potential to eliminate much of the silliness of Soviet Marxist-Leninism. It allowed for a reappropriation and rehabilitation of such pre-Communist authors as Tolstoy who had been a landowner.

Without denying the horrors of Stalinism, perhaps this aspect of Stalin's thoughts needs to be reconsidered today and in Joseph (Lam)'s case.[34] If Joseph Lam objectively acted against the Australian system by committing fraud, independently of his intentions, it is correct he was disciplined. However, on the other hand, his desire now to work in a good job, while appearing to be based on self-centred intentions, objectively will help society by his serving others in the course of his job, paying taxes, not being a financial drain on government money, and in future being able to financially support his family. Regardless of his intentions, his planned course of action is socially progressive and beneficial. Objectively he has gone from harming to helping society independently of his intentions then or now. Marxist ethics are also relevant here since Joseph physically hurt no human being. He did not even steal from friends, family members or small businesses who would personally feel the pain of the theft. Instead he stole from the ATO and the cause-effect chain between his actions and actual damage to physical human beings is lengthy and remote. Surely this is why Joseph's girlfriend Aki was relieved to hear that he had served jail time *only for fraud* and why his parents support and encourage him morally and emotionally even today.

[34] Žižek (2009, p260) makes the very interesting point that "[o]ne should never forget the extent to which [even] the dissident resistance was indebted to [aspects of] the official [Stalinist] ideology".

Regarding gambling it is concerning to hear from Joseph's case narrative of young children in Cabramatta being encouraged to gamble by community elders at age twelve or thirteen. Without denying personal responsibility, this culture should be addressed within the Chinese-Vietnamese community in Cabramatta and other parts of Sydney. Consistent with Joseph's case story, Glionna (2006) writes as follows about the Chinese-American situation:

> Many Asians – especially Chinese- consider gambling an accepted practice at home and at social events, even among the young. Chinese youth often gamble for money with aunts, uncles and grandparents. Many Chinese are fascinated by the mystical qualities of luck, fate and chance (cited in da Cunha 2010, p76).

Singapore's 18 April 2005 announcement to allow two casinos (Marina Bay Sands and Resorts World Sentosa) to open during 2010 suggests a victory for economic neo-liberalism over Chinese social conservatism in the prosperous city-state (da Cunha 2010; James & Grant, forthcoming). Singapore's founding father and current Minister Mentor Harry Lee Kuan Yew once said that Singapore would have a casino over his "dead body" (cited in da Cunha, 2010, p51). The People's Action Party (PAP) Government, in its typical benevolently paternal style, has put a S$100 per each 24-hour visit or S$2,000 annual flat fee (da Cunha, 2010, p60) on Singaporean citizens and Singaporean permanent residents so as to allegedly assist in deterring too frequent casino entry by locals. A survey conducted by Singapore's Ministry of Community Development, Youth and Sports of 2,004 residents in 2004-05 showed that 2.1% of total population?? or 55,000 people were "probable pathological gamblers" (cited in da Cunha, 2010, p75). Joseph Lam fits the profile of those found by the Singaporean survey to be most prone to addiction, i.e. a male ethnic Chinese aged between 30 and 49 years. It remains to be seen whether the Singapore casinos will reduce the profits of the casino in Genting Highlands, Malaysia or those further away in Macau and Australia. It appears unlikely that this will be the case. It remains also to be seen whether crime and financial fraud will increase in Singapore following the introduction of the casinos. The PAP Government's extensive procedures designed to thwart problem gamblers are innovative. For example, family members can call up and apply to bar a problem gambler from entering the casinos via what are termed Family Exclusion Orders (da Cunha, 2010, p93). In Australia, with South Australia being the only exception, it is only possible to ban oneself from the casino not one's family members. By mid-June 2009, two and a half months after the Family Exclusion Order system came into being, and eight months before the first casino opened, da Cunha (2010, p94) reports that 80 people had inquired about the orders, and fourteen of these 80 people had proceeded to make an application to bar a family member. Twelve of the fourteen applications related to male problem gamblers, and one of these was made by the parents of a youth aged less than 21 years (da Cunha, 2010, p94).

Joseph's story suggests that where gambling is rampant, financial fraud and crime will probably also be present as the intention in committing the fraud is very often to finance the gambling addiction. da Cunha (2010) in his book on Singapore's new casinos highlights four recent Singaporean cases (Chia Teck Leng, sentencing date 2 April 2004; Teo Sze Khoon, 25 May 2004; Ng Ting Hwa, 9 June 2008; Chua Geok Hiang, 3 February 2009) where financial fraud committed by an individual employee has been definitely linked to gambling addiction. Chia attempted to defraud four banks whereas the other three cases involved defrauding of the individual's own corporation. Before his arrest, Chia was "purportedly the second biggest casino gambler in the world" (Chia 2005, cited in da Cunha 2010, p83). These real-life characters follow in the footsteps of the lead character in the 2003 movie *Owning Mahowny*, which was based on the actual true crime story of a Toronto bank

manager who defrauded his bank in order to fund his pathological gambling addiction and trips to Las Vegas and Atlantic City (da Cunha 2010, p. 82).[35]

The Singaporean situation should be monitored carefully to see whether the new casinos increase significantly the rates of gambling addiction, petty crime, and financial fraud committed by individual employees (as opposed to more corporate types of fraud, such as falsifying financial statements, which are less likely to be connected to gambling addiction). Casino operators' declarations of concern for the welfare of problem gamblers must also be viewed with scepticism, consistent with Joseph Lam's story and our Marxist perspective.

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[35] Atlantic City is the subject of the haunting and powerful 1982 Bruce Springsteen song of the same name on the classic *Nebraska* album. The official video-clip, which can be accessed on Youtube, shows the physical dilapidation, poverty, and social dislocation evident in this small man's Las Vegas situated on the New Jersey Atlantic coast. This author presents the song and video-clip in the opening introductory lecture of his ACC3116: *Accounting and Society* course, bringing in the young Karl Marx's theory of alienation as a tool to aid understanding of the context. The Youtube.com link for the video-clip is: http://www.youtube.com/watch?v=M3eu1gW-bQ8 [accessed 31 May 2011].

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A Technical Note on Australian Default Superannuation Investment Strategies

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Abstract

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A Technical Note on Australian Default Superannuation Investment Strategies

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Abstract

Superannuation has become more complex over time. Individual investors are inclined to seek the 'path of least resistance' and invest in default investment funds which are typically concentrated in high risk assets. Understanding how these funds will meet the individual needs of members relative to their changing circumstances can provide peace of mind and confidence in the market. Given the value of superannuation as an investment in terms of the economy, it is paramount than an appropriate mechanism be in place for default fund investors. This paper will clarify the existing position relative to default fund investment options and outline future research which will provide the impetus for change in terms of government policy, the financial planning profession and for industry superannuation funds.

Key words: Retirement; fund choice; industry superannuation fund; default fund

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Introduction

The growth of superannuation (private pension systems) is a global phenomenon, to counter the financial burden of an ageing population. In Australia superannuation is part of the federal government's retirement income policy and is under continual examination. With the impact of the global credit crisis leading to reduced share market asset values and consequently reduced retirement funds, the review of superannuation look to include an assessment of 'investment, inflation and longevity risk' (Sherry 2009). With the majority of 'industry' superannuation fund members investing in high risk 'default investment strategies', how these funds cater for 'life cycle' issues, for example those moving into retirement, is unchartered.

This paper will commence with a review of superannuation 'life cycle re-balancing' trends overseas - the 'target-retirement-age' investment option in the United States and the asset allocation re-balance strategies in the United Kingdom. The next section will concentrate on the position in Australia, with consideration given to 'fund choice' and a 2008 proposed 'national default option'. This paper will conclude by outlining future research directions including the use of life cycle rebalancing to look at different investment strategies of superannuation members.

This study will contribute to the understanding of industry default funds and inform policy-making as part of ongoing superannuation review. By improving the retirement outcome for default fund members at the time of a financial crisis we facilitate a safer investment horizon and greater certainty of superannuation funding retirement income needs. This in turn promotes public confidence in the superannuation industry, which is in line with the Organisation for Economic Co-operation and Development's (OECD) reform of superannuation considerations.

Background

The OECD has highlighted the need for careful assessment of superannuation schemes to ensure countries have sustainable mechanisms in place to cater for retirement funding given the ageing of society (OECD 2009). According to its 2008 publication, *Private Pensions Outlook 2008*, 'the ongoing financial crisis is affecting the retirement savings of millions of individuals around the world.'(OECD 2009, p.26). The OECD explains that a mix of insufficient levels of savings for private pensions, a trend to more risky investing of these private pensions by some countries, combined with a market correction will ultimately lead to greater reliance on public pension funding (OECD 2009).

In the United Kingdom (UK) studies by Blake, Cairns and Dowd (2001), Booth and Yakoubov (2000), Byrne et al. (2007) and Hibbert and Mowbray (2002) focus on default fund investment strategies and life cycle[2] re-balancing investment implications. Studies by Ameriks and Zeldes (2001), Basu (2008), Bodie (2003) and Mitchell et al. (2008) are based on the United States (US) experience of life cycle investing.

Australian studies have focused on 'fund choice', in terms of behavioural factors (risk tolerance) by Hallahan, Faff and McKenzie (2004) and McCarthy (2009), or demographic characteristics, such as age or gender (Langford, Faff and Marisetty 2006). An Australian Prudential Regulatory Authority (APRA) working paper by Sy (2008) consolidates much of the research in terms of a default investment strategy for Australian superannuation funds;

[2] Life cycle strategies incorporate an automated move of investment assets away from growth to defensive assets as their retirement approaches

however, the contextual link between individual investors, current investment options and changing circumstances has not been adequately addressed.

Superannuation in Australia

When an Australian person retires from paid employment, generally at the age of 65, they need to replace their wages to accommodate their future funding and spending needs. This replacement income may be sourced from their personal savings or, on a needs basis, from the Government via an 'Aged Pension'. Superannuation is a concessionally-taxed retirement savings vehicle established via a trust deed or legislation where the benefits are paid either as a lump sum or as a pension upon retirement from paid employment. The main benefit of using superannuation to provide for income in retirement is the associated tax concessions that apply on entry, while in the fund and on exit or via an income stream/pension. Additionally, certain superannuation strategies[3] can be employed to assist maximise aged pension entitlements.

In Australia, prior to 1986, superannuation was only available to a select number of employees, for example, those working for government-owned organisations. Typically the superannuation provisions were of a 'defined benefit' nature, wherein the employer paid a benefit on retirement based on a mathematical formula, usually related to the employee's salary on exit and length of service. With this type of arrangement the employer bore the risk of the amount of the investment or payment of benefits, with provisioning based on actuarial advice. Upon retirement if the retiree was ineligible for superannuation they had to rely either on other personal savings or a government age pension, if they qualified, to fund their retirement.

Following trade union representations in 1985, 'industrial award employees' - those employees in specific industries where their employment conditions are protected by State laws, became eligible for superannuation at a rate of 3% of income, payable into an 'industry' fund (a superannuation fund covering different employers, within one industry or sector) by employers. This change led to a greater number of employees becoming eligible for superannuation. These funds were generally accumulation funds, wherein the retirement benefit paid is the accrued savings together with any investment earnings (based on returns from the underlying assets). The risk, in terms of the value of the superannuation investment on retirement, shifted to the employee.

Legislative change in 1991 introduced the Superannuation Guarantee Charge (SGC), wherein *all* employees were to be provided superannuation by their employers, with the minimum rate of 3% to increase to the target (current) rate of 9% of income. While these funds were also typically accumulation funds, the point of access widened from a predominantly industry, corporate or public sector superannuation funds market into a growing retail sector.

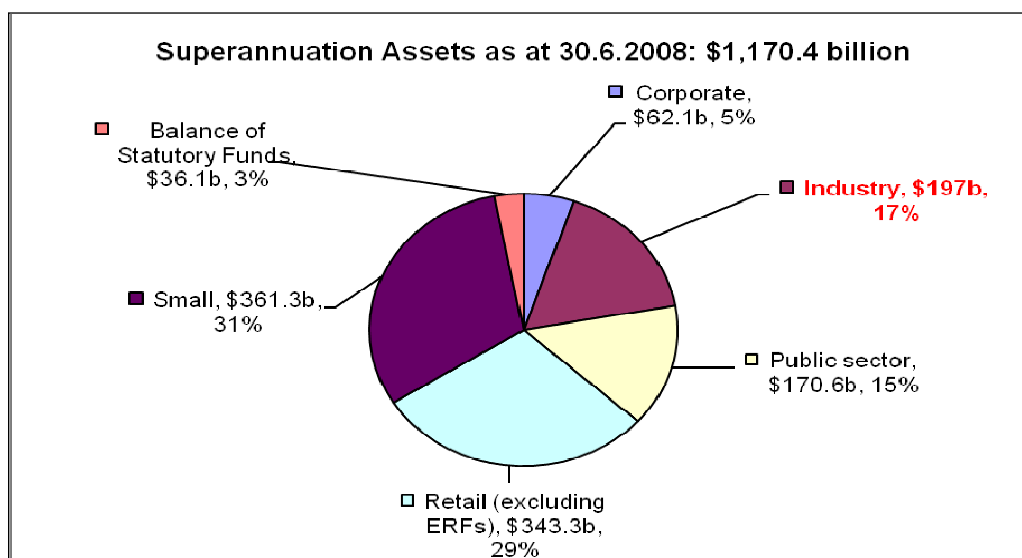
There are currently a number of different pieces of legislation that cover superannuation in Australia. The Superannuation Industry (Supervision) Act 1993 (SISA) prescribes the legislative requirements for superannuation funds; enabling applicable tax concessions for regulated funds, while the Financial Services Reform Act 2002 (FSR) administers licensing and the rules associated with the provision of financial planning advice including advice in relation to superannuation. In support of these pieces of legislation APRA[4] supervises (regulated) superannuation funds in terms of prudential management. The impact of changes to the superannuation environment, including the associated regulations,

[3] For example, the use of an account-based pension for an income test strategy.
[4] The Australian Prudential Regulation Authority (APRA) is the prudential regulator of the Australian financial services industry. It oversees banks, credit unions, building societies, general insurance and reinsurance.

includes the phenomenal growth of Australia's invested assets, the shifting of responsibility of these investments to employees and substantial complexity in the nature and management of superannuation.

As at 30 June 2008, the Australian superannuation market held $1,170 billion in assets (APRA 2009). Of this $1,170 billion industry superannuation funds represented 17% of the market, worth $197b as at 30 June 2008. The following diagram presents the breakdown of the superannuation market as at 30 June 2008.

Figure 1
Superannuation Assets as at 30.6.2008, (APRA 2009)



Within this 'industry' segment, almost 74% of assets were held in the default investment strategy. A 'default investment strategy' is the automatic placement of investment funds into different types of investable assets, for example, shares, property and cash. Based on these statistics, the majority of employees accept the 'default' strategy and automatically adopt the underlying investment profile that is provided to them. While APRA shows the asset allocation of default investment strategies for industry funds having 65% in growth assets (shares and property), a 'further 17% were held in other assets' – later defined '... such as hedge funds'. By default most employees accept that approximately 82% of their retirement funds are in 'risky' investments; wherein no financial planning advice has been provided.

Default investment strategies are not unique to Australian superannuation. However the level of risk borne by Australia superannuation members is significantly higher than the risk members in other countries experience due to the lack of legislation on the weighting to be placed on default investments. In the UK the use of 'default' investment strategies are guided by legislation (Byrne et al 2007) that requires automatic re-weighting of the default investment asset allocation, to accommodate a cash-based pension at retirement (a life cycle approach). While in the US, also guided by legislation, investors have a choice of default funds: one with a stated investment asset allocation and the other targeted to planned retirement that includes automatic life cycle re-balancing. US policy relating to the funding of retirement income is based on the target retirement age investment (Towers Watson 2007). However as Australian retirees typically purchase market-linked pensions, the automatic re-weighting relative to life cycle changes is not a legislated aspect of industry superannuation fund 'default' investments. The following section will discuss the need for automatic re-

weighting relative to life cycle changes in industry superannuation fund 'default' investments.

Demographic Trends

The shift away from defined benefit funds to accumulation funds is part of an international trend relative to the changing demographics (ageing) of society. Increased life expectancies combined with decreased mortality and fertility rates are the cause of an ageing population. More people will be retiring than working and this will result in employers being unable to continue to make defined benefit funds available as it will not be economically feasible.

In Australia, APRA data indicated that in 2008 only 4% of industry superannuation members are aged more than 60 years as at 30 June; 12% are aged 50 – 59; 30% are aged 35 – 49 with the balance aged below 35. Based on these statistics, the need for a life cycle re-balancing approach may not currently be a priority for industry superannuation as only a small percentage of members are about to retire, those aged more than 60 years. However in the next decade there will be a great need for a life cycle re-balancing approach to superannuation strategies.

In Australia since 1991 all employees are mandated to receive superannuation and this has led to the superannuation market in Australia reaching maturity while sizeable investment portfolios are accumulating. The investment outcome of superannuation to fund retirement income affects the country's retirement incomes policy and the individual in terms of meeting their lifestyle needs. The 'boom-bust' nature of investment markets creates uncertainty and concern about superannuation however as the ageing of the society continues such issues will become more problematic. As significant numbers of employees accept a default investment strategy, how these investments cater for their life cycle needs is important. While life cycle measures have been put in place in the UK and the US for default fund members through legislation that requires automatic re-weighting of the default investment asset allocation, there is no understanding of the options available for these investors in Australia.

Life Cycle Re-balancing

The combination of a life cycle re-balancing approach in the UK is mandatory for industry superannuation funds (Byrne 2007). UK studies by Blake et al (2001), Booth and Yakoubov (2000), Byrne et al (2007) and Hibbert and Mowbray (2002) add to the layers of study in the area of default investment strategies and life-cycle re-allocation, albeit from a returns/outcomes focus. In the UK market, a retiree typically would purchase a cash-based pension; the re-allocation of assets to cash-based ones in the lead-up to retirement, on this basis, has merit. In the US a '401(k) plan' is an optional superannuation investment made available by employers for their employees to contribute a portion of their wages for retirement. It wasn't until 2006 when the Pension Protection Act came into place that a greater number of employers provided default investment strategy options. At that time the Department of Labour proposed a balanced fund and a lifecycle fund as two types of default fund investment strategies for consideration. So, in the US, lifecycle re-balancing can be provided as an 'alternative' type of 'fund' that a superannuation member chooses when they start their account to realign the underlying asset allocation from growth stocks to income to preserve capital as part of retirement planning (Towers Watson 2007). While the literature on studies of these plans broadens our understanding overall, none adequately consider the circumstances of the default fund investor, as most focus on optimal asset allocation or approaches of this nature.

The government and industry in Australia has recognised the limitations of industry superannuation default investment strategies relative to individual investors' circumstances. Sy (2008) proposes a simple and understandable option for most employees. The suggestion is that a national default option be adopted by fund managers (suppliers of 'industry' superannuation funds). The default option would require part of an employee's SGC be paid into a 'growth'-based investment account and the balance transferred to a 'cash'-based investment account, with the proportions based on the age of the superannuation member. Gallery et al (2011) have pointed out that, if left to the individual fund member to exercise and initiate this choice, lack of financial literacy and other factors may lead to poor outcomes.

Cbus (2009) is one example of an industry superannuation fund. This fund receives contributions on behalf of its nationally defined member group of construction, building and allied industry workers. Its default investment strategy has an exposure of 92% to 'growth' or risky assets, there are no re-balance options automatically available. According to the Cbus website, following the global financial crisis, a Cbus default fund investor had a loss of 14.6% for the 12 month period ending 30 April 2009. Based on a typical retirement portfolio of $198,000[5] for a male aged 65, this could represent almost one year's funding of lifestyle needs[6] in retirement which could lead the investor being required to either work longer to make up the shortfall or retire and rely on government funding via the aged pension. The default investment strategy, based on a typical long-term investor, does not consider a member who is nearing retirement.

Discussion and Future Directions

UK legislation stipulates the purchase of a cash-based annuity on retirement, conversely, Australian retirees are able to remain 'in the market' by purchasing market-linked pensions - there is no requirement for default funds to move away from growth investments to cater for the drawdown phase related to retirement. This means that there is no formal need for some funds to be invested in cash-based assets to protect against 'shocks' or market down-turns in the lead up to retirement. The need for life cycle switching from growth-orientated, long-term - risky to cash-based, short-term - safer assets leading up to retirement makes sense. However, the timing of switches and the nature of the safer assets to be used, are matters for further study.

Future research could be undertaken to simulate outcomes from existing arrangements based on many different possible investment strategies based on life cycle. To review the impact of volatility relative to capital available at retirement, a Monte Carlo simulation model could be used. Consideration might be given to 'baby boomer' investors – those on the cusp of retirement - relative to the inequity of anticipated retirement wealth from a shortened SGC savings period. This analysis could be completed to assist in providing a framework for policy proposals.

[5] According to the Australian Bureau of Statistics
[6] Based on the concept of a "comfortable" lifestyle of $40,000 per annum, refer to http://www.superguide.com.au/superannuation-basics/a-comfortable-retirement-how-much-super-is-enough

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