CEO CHARACTERISTICS AND CORPORATE TURNAROUND: EVIDENCE FROM AUSTRALIA

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Abstract

This study explores the role of strategic leadership in declining firms by empirically examining the association between various CEO characteristics such as duality, tenure, interlocking, founder status, functional background and the turnaround outcome for the firm. Using a match-pair sample of 94 turnaround and 94-non-turnaround Australian firms, results show that turnaround firms are more likely to have CEOs that are also board chairpersons, have more external board appointments and short tenures. In contrast, any significant association between a CEO’s functional background, founder status and likelihood of turnaround was not identified. Overall, the findings provide further empirical support for the role of CEOs strategic leadership in shaping organisational outcomes especially when companies are under performing.

Keywords: Corporate Governance, Turnaround, Non-Turnaround, Organisational Decline, CEO Leadership

1. Introduction

My study examines the association between top or senior executive (especially the chief executive officer–CEO) characteristics and corporate turnaround outcome for Australian firms for the period 2004 to 2012. In particular, I examine whether certain CEO characteristics - duality, tenure, interlocking, founder status and functional back-ground are associated with a firm’s financial turnaround. The reason for choosing this period is that it followed the 2003 introduction of the Australian Stock Exchange (ASX) Corporate Governance Council’s ‘Principles of Good Corporate Governance and Best Practice Recommendations’ requirement. Prior to 2003, companies effectively but on voluntary basis enforced own corporate governance practices. There were no specific compulsory guidelines which companies had to follow. However, after 2003, all listed companies were required to include a disclosure in their annual reports outlining their compliance with these best-practice recommendations. In cases of non-compliance with these best-practice recommendations, companies had to provide an explanation in their annual reports why they had not followed this specific recommendation. Thus, the period 2004-2012 has implications for corporate governance policy set by the ASX Corporate Governance Council. It allows us to identify the type of leadership attributes which will most likely aid firms in turning around their financial decline and becoming profitable again.

Given the complex nature of the contemporary global economy, severity of competition and constant technological changes, businesses constantly strive to adapt to their environment. Nevertheless, a significant number of firms facing this challenge fail to adapt to ever-changing circumstances and as a result experience serious performance decline (Abebe, 2009). In the scenario of organisational decline, top executives are often charged with formulating and implementing effective turnaround strategies to reverse this trend (Lohrke et al., 2004). Consequently, top executives’ responses to organizational performance decline are considered critical in regaining sustained profitability (Ketchen and Palmer, 1999).

Both business reporters and scholarly researchers have acknowledged the role of top executives in corporate turnaround (Dumaine, 1990; Lohrke et al., 2004). A significant number of journal articles and magazine stories have been written highlighting the crucial role those top executives - especially CEOs play in corporate turnaround (Abebe et al., 2009). Media stories often highlight the dramatic performance turnaround in businesses, attributing such positive outcomes to the ability of top executives to formulate and execute turnaround
strategies (Morris, 2007). While these studies and business press all suggest that strategic leadership is important to the success of turnaround strategies, little empirically supported knowledge exists about how such top executives’ characteristics differ from those in charge of firms that continue to decline. Despite the publication of a number of large sample studies examining successful and unsuccessful turnaround strategies (Schendel et al., 1976; Hambrick and Schecter, 1983) most empirical investigations of leadership characteristics of turnaround firms have been limited to only a small number of firms (Abebe, 2004).

Using a big sample, this paper will seek to answer following research question regarding the Australian market: Is there any difference in the various characteristics of CEO between turnaround and non-turnaround firms listed on the Australian Stock Exchange? As per my knowledge, this represent the first Australian study to provide evidence on the role of strategic leadership in declining firms by empirically examining various CEO characteristics as predictors of the likelihood of a successful corporate turnaround. The following section reviews the relevant extant literature and develops theory-driven hypotheses on the role of various CEO characteristics in successful corporate turnarounds.

2. Literature review and hypotheses development

A successful corporate turnaround has been defined as existence-threatening performance decline followed by substantial and sustained positive change in performance (Bibeault, 1982; Hambrick and Schecter, 1983; Robbins and Pearce, 1992; Pandit, 2000). Extant literature on corporate turnaround has to date mainly explored the causes of a firm’s decline in terms of: firstly, strategic misalignment (Schendel et al., 1976; Arogyaswamy et al., 1995; Bruton et al., 2001; Ferrier et al., 2002); and secondly, managerial responses to business decline in the form of turnaround strategies such as retrenchment and strategic re-orientation (Hofer, 1980; Robbins and Pearce, 1992; Pearce and Robbins, 1993; Barker and Mone, 1994; Chowdhury and Lang, 1996; Bruton and Rubanik, 1997; Castrogiovanni and Bruton, 2000; Bruton et al., 2001; Sudarsanam and Lai, 2001; Morrow et al., 2004). Researchers have also explored the role of various leadership dynamics such as demographic background (Hambrick and Mason, 1984; Lohrke et al., 2004), top management team (TMT) replacement (Balgobin and Pandit, 2001; Barker et al., 2001; Sudarsanam and Lai, 2001; Gibson, 2003; Aivazian et al., 2005; Shimizu and Hitt, 2005; Lel and Miller, 2008), ownership change2 (Fisher et al., 2004), and attitude towards strategic changes (Clapham et al., 2005) in turnaround and non-turnaround firms.

Examining the demographic background of top managers provides important insights into the strategic choices and performance outcomes of turnaround firms (Hambrick and Mason, 1984; Lohrke et al., 2004). However, the results of the above-stated studies are inconsistent in their recommendations. Such inconsistencies in their empirical findings have led to a call for research that focuses on the impact of these demographic factors under a variety of situational contingencies (Lohrke et al., 2004). In particular, I examine whether any differences are evident in the characteristics of CEOs who head turnaround and non-turnaround Australian firms.

2.1 Hypotheses development

In this section, I review the findings for five key CEO characteristics: duality, tenure, interlocking (external board appointments), founder status and functional background.

CEO duality

CEO duality occurs when the CEO also the chairman of the board in a corporation (Rechner and Dalton, 1991). Extant literature reports inconsistent views about whether the integrated chain of command formed by CEO duality contributes to either turnaround or continued decline (Daily and Dalton, 1994a). In particular, agency theory proposes that CEO duality leads to poor performance, whereas strategic management and organisation theory advocates that CEO duality can improve organisation performance (Finkelstein and D’Aveni, 1994).

Agency theorists argue that unambiguous leadership (CEO and board chairperson duality) in an organisation leads to CEO entrenchment and a decline in board independence from corporate management (Mueller and Barker, 1997). CEO duality can also interfere in the board of directors’ monitoring role (Fama and Jensen, 1983). Furthermore, the lack of board independence when the CEO is also the board’s chair may encourage top management to be more discrete when making decisions that maximise their own personal wealth at the expense of shareholders (Mallette and Fowler, 1992). CEO duality increases the likelihood of bankruptcy (Daily and Dalton, 1994b) and leads to greater occurrence of earning management in organisations (Liyu et al., 2007). Furthermore, Chen et al. (2005) argued that managerial entrenchment in the form of CEO duality makes the CEO more powerful within the organisation and less likely to be replaced or

They further defined significant influence or controlling interests as the capacity to affect or dominate the firm’s operations.

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2 Fisher et al. (2004) have defined change of ownership in terms of there being a change in the major shareholder who has significant influence or controlling interest in the firm.
challenged by the board of directors. Thus, agency theorists suggest that CEO duality more likely to be associated with declining performance than turnaround. Especially during the decline phase if effective turnaround plans require unpleasant actions such as firing long-tenure employees, admitting past mistakes or even stepping down, CEOs who also chairman of the board are more likely to avoid these decisions (Mueller and Barker, 1997).

Compared to agency theory, organisation theory and strategic management researchers argue that CEO duality could be positively associated with performance turnaround. For example, Donaldson and Davis (1991) and Finkelstein and D’Aveni (1994) claim that CEO duality provides clear leadership for the organisation that might be necessary for turnaround situations. Furthermore, Boyd (1995) reports that CEO duality could be advantageous for the declining organisations when resource scarcity appears. Massie (1965) provides evidence that CEO duality can actually benefit an organisation by increasing the speed of crucial strategic decision-making and forcibly introducing strategic change processes into their organisation. They are absolute necessities for declining organisations which are attempting to turnaround their economic circumstances. In contrast to this, separating the CEO and chairman position may diffuse the CEO’s power and create ambiguity within the organisation, increase internal resistance to strategic change (Finkelstein and D’Aveni, 1994), and thus speed of response to decline may be compromised.

On this basis it can be argued CEO duality provides a faster and more efficient decision-making process at the top management level which is required for the effective implementation of turnaround strategies. It may also outweigh the agency-theory implied costs of combining the CEO and chairman titles under one person. Therefore, it is hypothesized that:

**H1: There is a positive association between CEO duality and turnaround probability in Australian firms.**

**CEO tenure**

A chief executive officer is an organisation’s principal decision-maker, and as such, has the greatest power to make strategic decisions (Barker and Mueller, 2002). As a result, in an ever-changing business environment, CEOs’ choices contribute strongly to their firms’ relative success. According to the upper-echelon perspective, CEOs act based on their understanding of the strategic situations they confront (Hambrick and Mason, 1984), and this understanding is significantly shaped by their tenure (Souder et al., 2012).

A growing volume of evidence suggests that the TMT tenure is significantly associated with commitment to the strategic status quo (Finkelstein and Hambrick, 1990; Miller, 1991; Hambrick et al., 1993), or “belief in the enduring correctness of current organisational strategies and profiles” (Hambrick et al., 1993: p. 402). In a similar vein, Musteen et al. (2006) provide evidence that CEO tenure has a significant and direct relationship with attitude towards change. In fact there is a tendency for CEOs to become more conservative as their tenure lengths. Furthermore, Hambrick and Fukutomi (1991) suggest that long tenure might lead to lack of change in organisations because long-tenured CEOs become extremely committed to their paradigm for running the organisation. They avoid information that may discomfort their paradigm, experience declining interest in their jobs and have more power to resist any suggested changes.

Current literature also points out that the length of CEO tenure restricts the level of information searching, processing and diversity (Miller, 1991). Katz (1982) reports that as managers stay for longer periods in their position, they tend to develop accustomed information sources and ways of doing things, and heavily rely on past experience rather than new incitements. Similarly, Hambrick and Mason (1984) provide evidence that managers with long tenures tend to have a restricted knowledge base that will impede their responses to difficult situations in the firm.

Prior literature has also identified the negative effects of long-term management tenure on the extent of strategic change (Wiersema and Bantel, 1992; Cho and Hambrick, 2006). Finkelstein and Hambrick (1990) report that longer tenured top teams tend to pursue strategies that imitate industry trends. They further claim that such a pattern reflects managers’ risk aversion, commitment to prior actions and restrictions in information processing. Furthermore, in his study of long-tenured CEOs, Miller (1991) demonstrated a link to strategies inappropriate to current economic conditions. Short-tenured TMTs are more likely to formulate innovation strategies (i.e. new product introductions and moving into new markets) in declining firms attempting turnaround (Barker and Patterson, 1996; Barker and Duhaime, 1997; Barker et al., 2001; Lohrke et al., 2004).

Thus, it can be argued that when confronted with declining firm performance, CEOs with long tenure may be inclined to look for internal remedies such as retrenchment (asset and cost reductions) instead of more aggressive market-based strategies such as introducing new products and moving into new markets. Hence, it is hypothesized that:

**H2: There is a negative association between CEO tenure and turnaround probability in Australian firms.**

**CEO interlocking**

A CEO interlock between two organisations occurs when the CEO of one organisation also sits on the board of another. Using resource dependence
Data and board interlock literature, I argue why CEO external board appointments may in fact play a positive role in successful corporate turnaround.

Resource dependence theorists argue that “the key to organisational survival is the ability to acquire and maintain resources” (Pfeffer and Salancik, 1978, p. 2). External pressures – such as competition, regulation and social forces – cause a firm to seek out environmental linkages to acquire and maintain critical resources (Boyd, 1990). An organisation also needs to actively engage in responding to and shaping its environment for the purpose of minimizing such external dependence as well as acquiring critical resources needed for achieving its objectives (Boyd, 1990; Hillman et al., 2009). Resource dependence theory suggests a wide variety of tactics in which an organisation can ensure the supply of resources critical to its survival. These include interorganisational relationships such as joint ventures, mergers and acquisitions, political actions, executive succession and co-optation of those who control the required resources.

A joint venture is the creation of a new organisational entity by two or more interdependent organisations to manage resource interdependence (Pfeffer and Nowak, 1976). Merger and acquisition can enhance access to scarce resources by facilitating joint strategy formation and implementation (Drees and Heugens, 2013). Organisations’ active use of political mechanisms to manage their environmental dependency has also received considerable empirical support in resource dependence literature (Hillman et al., 1999; Peng and Luo, 2000; Hillman, 2005). In particular, these studies highlight that organisations engaging with governmental and political entities experience a significant improvement in their market share and profitability. Extant resource dependence theory literature has also shown that executive succession is often helpful in reducing the external dependency of the organisation (Guthrie et al., 1991). Co-optation refers to a process of diffusing the influence of powerful external parties by appointing their representatives to the organisation’s governing board (Pfeffer and Salancik, 1978; Hillman et al., 2000).

Extant literature based on resource dependence theory has also witnessed a significant surge in interest in interorganisational networks (Haunschild, 1994; Westphal et al., 2006). In particular, researchers have examined the benefits of ‘interlocking of board directors’ (Carpenter and Westphal, 2001; Ruigrok et al., 2006). Boards that have strong external network ties with other boards increase their ability to receive new information that may augment their skills and competence so that strategic decisions and functions can be fulfilled. This scenario also assists boards in gaining new insights that help to solve non-routine challenges (George et al., 2010). In sum, I argue that CEO interlocking is an important determinant of corporate turnaround performance because links with other organisations provide critical information and access to scarce resources that are needed to formulate and implement successful turnaround strategies. Hence, I hypothesize the following:

**H3:** There is a positive association between extensiveness of CEO interlocking and turnaround probability in Australian firms.

**Founder-CEO**

Numerous studies have been carried out on the role of founder-CEOs in strategic decision-making and organisational performance. For example, researchers have examined the relationship between a CEO’s founder status and firm performance (Daily & Dalton, 1992; Anderson and Reeb, 2003; Ding et al., 2007; Adams et al., 2009), strategic decision-making (Fahlenbrach, 2009) and strategic change (Fischer and Pollack, 2004). Other researchers have focused on the role which founder-CEOs play during the transformation of a venture from a start-up stage to becoming a large, established business organisation (Wasserman, 2003; Ding et al., 2007).

Founder-CEO plays an instrumental role in establishing the initial organisational architecture of the firm including its structure, culture and strategy (Nelson, 2003). Therefore, during the performance decline phase of the firm, the founder-CEO can play a positive role by formulating a comprehensive turnaround strategy and communicating it to both external and internal parties in order to gather the required resources. Furthermore, founder-CEOs often have more equity ownership in the firm, which results in them having more influence when key strategic decisions have to be made (Jayaraman et al., 2000). Wasserman (2003) provides evidence that founder-CEOs often articulate a passion and deep vision and emotional attachment to the organization compared to non-founder CEOs. Using a sample of 1,455 firms, He (2008) reported that founder-CEOs are more committed and motivated to performing at their best, are less opportunistic and are more likely to identify themselves with the firm. It is also evident that founder-CEOs are more likely to possess a substantial amount of technical and market expertise as well as a deep understanding of the industry in which the firm operates (Jayaraman et al., 2000; Fahlenbrach, 2009).

On the basis of the above stated arguments, I believe that declining firms that are led by founder-CEOs are more likely to experience corporate turnaround because founder-CEOs are more able to exert influence in the strategic decision-making process. They can also create confidence among external stakeholders who are often sources of critical resources and information in times of crisis. Therefore, it is hypothesized that:

**H4:** There is a positive association between founder-CEO and turnaround probability in Australian firms.
**CEO functional background**

Extant leadership literature has explored the relationship between CEO functional background and innovation (Bantel and Jackson, 1989), strategic change (Wiersema and Bantel, 1992), strategic decisions (Hambrick et al., 1996) and firm performance (Carperenter, 2002). Consequently, it is evident that a CEO’s functional background constitutes an important demographic indicator affecting the operational and strategic decision-making process and, in turn, various performance outcomes (Hambrick and Mason, 1984; Lohrke et al., 2004). Dearborn and Simon (1958) and Zimmerman (1989) provide evidence that top managers are more inclined to delineate organizational problems consistent with their functional background and training.

Previous researchers have significantly highlighted that ‘strategic reorientation’ is an effective response to declining organizational performance as opposed to short-term cost and asset retrenchment strategies (Barker and Mone, 1994; Arogyswamy et al., 1995; Barker and Duhaime, 1997; Barker and Barr, 2002). Retrenchments strategies reduce employees’ morale and available resources, and hence may obscure, exacerbate and even reduce the chances of successfully recovery of a firm (Barker and Duhaime, 1997; Arogyswamy et al., 1995). Thus, top management - especially CEOs in declining firms need to address the challenges faced by struggling firms by formulating and implementing market-based (i.e. new product introductions and moving into new markets) turnaround strategies (Ford, 1985). Current turnaround literature indicates that top management functional back-ground affects the type of strategies that are formulated and implemented for reversing a firm’s financial decline (Lohrke and Bedeian, 1998). It has been argued that executives with an extensive output specialisation (i.e. marketing, sales and R & D) are open to more novel ideas and innovation. On the other hand, executives with throughput orientation (i.e. production, process engineering, accounting and finance) are more likely to resist change. This is because they place emphasis on maintaining control, improving efficiency and adherence to planned targets (Hambrick and Mason, 1984). This line of reasoning has been supported by numerous studies. For example, Thomas et al. (1991) indicated firms adopting innovation strategies such as relatively high R & D spending for advertisements, had a high proportion of their top management team from an output-based (such marketing and/or sales) functional background. Similarly, Barker and Mueller (2002) provided evidence that industry-adjusted R & D spending of publicly listed firm was significantly higher when they were headed by CEOs with an output-focused career background.

On this basis, it is argued that market-based turnaround strategies improve the performance of a declining firm and CEOs who possess an output-based functional background are better able to formulate and implement such strategies due to their extensive knowledge and career experience. Hence, it is hypothesized that:

H5: There is a positive association between CEO with output-based functional background and turnaround probability in Australian firms.

3. Sample selection, data collection and variables description

My initial sample population consists of all Australian firms (listed and non-listed) for the period 2004-2012. I use the Morningstar DatAnalysis Premium (formerly Aspect-Huntley) database to collect leadership variables and financial data information. Consistent with prior studies (Barker and Mone, 1994), my study employs Return on investment (return-based measure) for the identification and selection of turnaround firms. Extant research makes different claims concerning the length of the turnaround cycle, for instance four, six and eight years (Schendel et al., 1976; Chowdhury and Lang, 1996; Bruton et al., 2003; Smith and Graves, 2005). Following Pearce and Robbins (1993), Chowdhury and Lang (1996) and Smith and Graves (2005), my study uses a turnaround cycle of 4 years which comprises two years of distress (decline) and two years of post-distress (recovery) period.

A successful turnaround corresponds with a situation where a firm has two consecutive year of negative return on investment followed by two consecutive years of positive return on investment. We call this definition "--++" where the second year of loss is year Y0, the year preceding Y0 is Y-1 and the years with positive ROI are Y+1 and Y+2, respectively. During the two-year decline period, the firm also has to experience an Altman bankruptcy prediction Z-score of less than 2.99 for 4 years.

4. Sample selection, data collection and variables description

Due to a significant reduction in the sample size, my study has not employed the sampling window of 6 years (i.e. 3 years of sub-par performance followed by 3 years of positive performance) or 8 years (i.e. 4 years of sub-par performance followed by 4 years of positive performance).

5. Sample selection, data collection and variables description

Altman (1983) developed the following Z-score using financial measures to predict bankruptcy for manufacturing firms: $Z = 1.2 \cdot (\text{Working capital/total assets}) + 1.4 \cdot (\text{Retained earnings/total assets}) + 3.3 \cdot (\text{EBIT/total assets}) + 0.6 \cdot (\text{Market value of equity/total liabilities}) - 0.999 \cdot (\text{Sales/total assets})$. He describes firms as no longer being in the ‘safe zone’ when the Z-score falls below the cut-off value 2.99. Later on, Altman (2000) revisited the original Z score model, and the original model was modified ($Z = 5.65 \cdot (\text{Working capital/total assets}) + 3.26 \cdot (\text{Retained earnings/total assets}) + 6.72 \cdot (\text{EBIT/total assets}) + 1.05 \cdot (\text{Book value of equity/total liabilities})$) so that it could be applied to non-manufacturing firms. In the modified model the upper threshold value is 2.6.
manufacturing firms and 2.60 for non-manufacturing firms for at least one year during the decline period. The Altman Z score is one of the most established bankruptcy prediction models, having been widely used in the turnaround literature (Barker and Mone, 1994; Barker and Duhaime, 1997). According to Altman (1983), a score of less than 3 suggests a high likelihood of bankruptcy in the short-term. This is consistent with the turnaround literature which states that the decline should be severe enough to threaten the firm’s survival, warranting implementation of an appropriate turnaround strategy (Barker and Duhaime, 1997). A firm has been classified as a non-turnaround if it has experienced four consecutive years of negative return on investment (‘- - - -’).

My definition has resulted in the identification of 108 turnaround firms. I exclude 5 financial firms because of their specification and operating nature, leaving 103 firms. Each identified turnaround firm is then matched with a non-turnaround firm belonging to the same industry and time period. Nine of the turnaround firms are dropped because matching firm belonging to the same industry and time period could not be identified. Thus, the final sample comprised 188 firms, which consists of 94 turnaround and 94 non-turnaround firms. The detailed information about this sample is provided in Table 1.

I classify firms into nine industries according to the Australian standard industry classification codes that incorporate the total number of turnaround and non-turnaround firms. A large proportion (27.66%) of the turnaround firms is concentrated in the Materials industry. The second and third highest percentages of firms’ are from the Industrial (20.21%) and Consumer Discretionary (13.82%) sectors respectively.

Table 1. Sample firms

<table>
<thead>
<tr>
<th>Panel A: Sample firms</th>
<th>Turnaround firms: 94</th>
<th>Non-turnaround firms: 94</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total firms:</td>
<td>188</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Financial characteristics of turnaround and non-turnaround firms in distress and post-distress years

<table>
<thead>
<tr>
<th>Financial characteristics</th>
<th>Turnaround (decline period)</th>
<th>Non-turnaround (decline period)</th>
<th>Average of two distress years</th>
<th>Test of difference t-value (p)</th>
<th>Turnaround (recovery period)</th>
<th>Non-turnaround (recovery period)</th>
<th>Average of two post-distress years</th>
<th>Test of difference t-value (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBIT/Sales</td>
<td>-65.142</td>
<td>-349.729</td>
<td>1.261</td>
<td>(0.208)</td>
<td>0.133</td>
<td>-16.345</td>
<td>5.476</td>
<td>(0.000)***</td>
</tr>
<tr>
<td>ROE</td>
<td>-1.132</td>
<td>-0.779</td>
<td>-1.054</td>
<td>(0.293)</td>
<td>0.207</td>
<td>-1.313</td>
<td>2.342</td>
<td>(0.020)**</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.278</td>
<td>-0.892</td>
<td>5.135</td>
<td>(0.000)**</td>
<td>0.088</td>
<td>-1.460</td>
<td>5.649</td>
<td>(0.000)***</td>
</tr>
<tr>
<td>PBITD/CE</td>
<td>-0.424</td>
<td>-0.367</td>
<td>-0.215</td>
<td>(0.830)</td>
<td>0.157</td>
<td>-0.775</td>
<td>1.827</td>
<td>(0.069)*</td>
</tr>
<tr>
<td>PBITD/TD</td>
<td>-6.851</td>
<td>-31.546</td>
<td>2.642</td>
<td>(0.009)**</td>
<td>6.133</td>
<td>-11.623</td>
<td>4.970</td>
<td>(0.000)***</td>
</tr>
</tbody>
</table>

Notes: This table shows the financial characteristics of turnaround (94) and non-turnaround (94) firms in distress and post-distress years. PBIT= Profit before interest and tax. Return on Equity (ROE) = profit after tax for ordinary shareholders/ shareholders’ funds. Return on assets (ROA) = PBIT/total assets. PBITD= PBIT plus depreciation. Capital employed (CE) = total assets less current liabilities. TD = Total debt. Differences in means between the two groups are tested using the t statistic. *** and * are significant at 1%, 5% and 10% respectively.
Table 2 shows the financial characteristics of the sample firms in terms of a range of conventional accounting measures of performance. Profit margin, return on equity and assets, cash flow returned to capital employed, and cash flow cover for debt all show significant improvement in the recovery period for turnaround firms. In particular, the major improvement is in PB/ITD/TD, the cash flow cover for debt. This improvement indicates the improving profitability of the turnaround sample firms reflected in profit margin and return ratios, and also of the rapid drop in debt of the sample turnaround firms. Furthermore, these results provide a degree of confidence in the criteria used for selecting sample firms.

3.1 Variables description

3.1.1 Dependent variable

The dependent variable in this study is a dichotomous variable coded as ‘1’ for turnaround firms and ‘0’ for non-turnaround firms, based on the consecutive-year ROI definition outlined above.

3.1.2 Independent variables

The first explanatory variable of interest in this study is CEO duality (CDUALITY). Following Abebe (2009), CEO duality is represented by a dichotomous variable coded as ‘1’ if the CEO also serves as chairperson of the board of directors, otherwise ‘0’ if not. CEO (CTENURE) tenure is measured as the number of years a CEO had occupied that position (McClelland et al., 2012). Extensiveness of CEO interlocking (CINTLOCKING) is measured for each sample firm by counting the CEO’s external board of directorships during each year of decline and recovery period. Consistent with Fahlenbrach (2009), I define CEO founder (CFOUNDER) as a dichotomous variable coded as ‘1’ if the CEO is founder or co-founder of the company and ‘0’ otherwise. CEO functional background (CFUNBACKGROUND) is operationalized as dichotomous variable coded as ‘1’ if the CEO has an output-based functional background (i.e. marketing, sales and product R & D) and ‘0’ if the CEO has a throughput-based functional background (i.e. accounting, operations, productions, process engineering and finance).

3.1.3 Control variables

Based on prior studies, I identified six variables that could control for other influences beyond leadership characteristics: firm size, organisational slack, proportion of outside directors’ firm age, severity of distressed state and downsizing. It has been have reported that firm size affects the capacity of the businesses to make the necessary adjustments in a changing economic environment (Lai and Sudarsanam, 1997). Following Bruton et al. (2003), firm size (SIZE) is controlled by adding the natural logarithm of total assets for each firm in all years. Following Morrow et al. (2004), organizational slack (SLACK) is measured as a ratio of total debt to total equity (debt/equity) for all years. This variable has been identified in the turnaround literature as an important factor influencing the firm’s ability to execute effective turnaround strategies (Mueller and Barker, 1997). It is evident from the previous studies that presence of outside directors (OUTSIDERS) on boards can affects the extent of strategic change (Hambrick and D’Aveni, 1992; Mueller and Barker, 1997). Therefore to control this, the proportion of outside directors on the board is calculated as the number of outside directors7 divided by the total number of directors for each year of decline and recovery period. Following Anderson and Reeb (2003), firm age (AGE) is measured using the number of years since the firm’s inception. The sign for the AGE variable is expected to be positively related to the probability of turnaround. It has been claimed that severity of the financial distress influences a firm’s ability to initiate a recovery (Smith and Graves, 2005). Severely financially distressed firms need to make aggressive costs and assets reductions in order to survive. However, aggressive reduction of costs and assets are difficult to carry out because there is organisational resistance and hidden costs make such action self-defeating (Slatter, 1984). Therefore, to control for severity of distressed state (SEVERITY), I employ Zmijewski financial score (1984)8 for all years. Efficiency-oriented strategies play a critical role in the turnaround process, and downsizing is a crucial factor in such a strategy (Arogyaswamy et al., 1997). Following Smith and Graves (2005) downsizing (DOWNSIZE) is measured in each year.

7 Directors are classified as independent if they are not a substantial shareholder or an officer or affiliate of a substantial shareholder of the company; a principal adviser or consultant to the company; a material supplier or customer of the company or have any related party relationship with the company; a relative or descendant by birth or marriage of company founders; currently, and have not previously been, employed by the company in an executive role. This definition of independent directors is consistent with that used in the ‘Principles of Good Corporate Governance and Best Practice Recommendations’ by the Australian Securities Exchange (ASX) Corporate Governance Council (2003).

8 Zmijewski Financial Score (ZFC) is one of the most established models for measuring a firm’s severe financial circumstances. The score is constructed based on an index calculation incorporating multiple financial ratios representing firm profitability, leverage and liquidity, as follows: ZFC= -4.326 - 4.513(Net Income/Total Assets) + 5.679(Total Debt/Total Assets) - 0.004(Current Assets/Current Liabilities). A higher score indicates (less negative or more positive) a firm’s higher financial severity.
of decline and recovery period as follows: tangible assets (t)-tangible assets (t-1)/tangible assets (t-1). I also include year dummy to control for fixed effects associated with time periods.

4. Research Methodology

My study uses the following logit model to test the association between CEO characteristics and turnaround outcome of the firm:

\[ \text{TURNAROUND}_{it} = \beta_0 + \beta_1 \text{CDUALITY} + \beta_2 \text{CTENURE} + \beta_3 \text{CFOUNDER} + \beta_4 \text{CFUNBCKGROUND} + \beta_5 \text{SIZE} + \beta_6 \text{SLACK} + \beta_7 \text{OUTSIDE} + \beta_8 \text{AGE} + \beta_9 \text{SEVERITY} + \beta_{10} \text{DOWNSIZE} + \sum \beta_{11} \text{Year}_{it} \]

Where, for sample firm I and year t:

\[ \text{TURNAROUND}_{it} = 1, \text{ When the firm is classified as turnaround, and 0 if otherwise.} \]

The explanation of other variables has been provided in section 3.1.

5. Descriptive statistics and results

Table A.1 (See Appendix A) provides the descriptive statistics for the leadership variables and results of independent sample t-tests group mean differences for the turnaround and non-turnaround firm sub-sample groups, respectively. Results show that in turnaround firms, 21% of CEOs had served as chairperson of the board compared to only 16% in non-turnaround firms, with the mean difference being statistically significant. The mean value of CEO tenure in turnaround firms is 3.877 compared to 4.518 for non-turnaround firms, indicating that the latter have longer tenure. In terms of CEO interlocking, I find that in turnaround firms 58% of CEOs are serving on other boards compared to 39% in non-turnaround firms. The difference in the CEO founder status between the two groups is not statistically significant. The mean for CEO functional background is significant, suggesting that turnaround firms (81%) have more CEOs with output-based functional backgrounds compared to non-turnaround firms (74%).

Table B.1 (See Appendix B) presents the pairwise correlation between the independent and control variables. The largest observed positive correlation for the independent and control variables 0.513 is between CEO tenure (CTENURE) and founder status (CFOUNDER), which indicates that founder CEOs have long tenure. Another positive correlation that emerges is 0.227 between the firm size (SIZE) and slack (SLACK). There is a significant negative correlation of -0.448 between the firm size (SIZE) and severity of the distressed state (SEVERITY) which indicates that larger companies are less severely distressed. The existence of CEO duality (CDUALITY) is negatively associated with the presence of independent directors on a company board (-0.186).

Results for the logistic regression analysis are summarised in Table 5. In model 1, the control variables are entered into the analysis. In Model 2, the four predictor variables are included in the analysis. A lack of statistically significant difference in CEO founder status between the two sub-samples of turnaround and non-turnaround firms leads me to exclude this variable from the regression analysis. Results show that the coefficient for the CDUALITY variable (0.744) is positive and statistically significant at the 1% level. This finding is consistent with Mueller and Barker (1997), who identified a significant positive association between CEO duality and corporate turnaround. The results in Table 5 show that CTENURE variable is negatively related to the likelihood of turnaround at the 1% significance level. Consistent with the findings of Abebe et al. (2012), the CINTLOCKING variable is positive, indicating that there is a significant relationship between CEO’s external board appointments and turnaround probability. CFUNBCKGROUND variable is not statistically significant, indicating there is no association between a CEO’s functional background and the probability that the firm will turnaround.

With respect to control variables, SIZE and AGE variables are positively associated with the turnaround probability of sample firms. The SEVERITY variable, on the other hand, is negative and statistically significant (p < 0.01) which suggest that severely distressed companies are less likely to experience performance turnaround. A significant negative coefficient for the DOWNSIZE variable indicates that efficiency strategies have an impact on sample firm turnaround likelihood. SLACK and OUTSIDER variables failed to show any association with likelihood of turnaround. The year dummy variables included in the model are not statistically significant at any level.

6. Discussion of findings

Results of my empirical analysis indicate a number of interesting relationships between various leadership characteristics and likelihood of turnaround. First, the results of my study indicate that the CEO duality is positively related to corporate turnaround. This finding is intriguing because the association between CEO duality and firm performance has previously been the subject of controversy (Fama and Jensen, 1983; Donaldson and Davis, 1991). In fact the formal corporate governance code in Australia recommends the separation of CEO and board chairperson roles (ASX Corporate Governance Council, 2003) as an appropriate structure for a firm.

I believe my finding reflects one of the benefits of CEO duality which is that clear leadership emerges under one executive. In a turnaround situation, a firm is required to make crucial decisions within a short
time frame (Hambrick, 1985). CEO duality enables efficient co-ordination and information processing when making strategic decisions. These are essential for a declining firm which is attempting to turn around its economic fortune. In contrast to this, in context of CEO non-duality, their possibly differing perceptions on the key issues facing the business could compromise and slow down the response to declining performance. As a result, the situation can spiral out of control.

My study also identifies a significant negative relationship between CEO tenure and corporate turnaround outcome. Previous studies have identified that longer tenured executives are incapable in leading large-scale strategic change in their organisation because this means challenging the established status quo (Finkelstein and Hambrick, 1990; Miller, 1991). Thus, my findings provide further support for the empirical observation in the turnaround literature that it is important to replace the longer tenured CEO prior to implementing an effective turnaround strategy.

Results reported in Table 5 provide evidence that the number of a CEO’s external board appointments significantly increases the likelihood of successful corporate turnaround. These external appointments help in building social networks and relationships that could serve as important channels through which the declining firm accesses necessary resources and information. These could well prove critical to formulating and implementing an effective turnaround strategy (Hillman et al., 2009). The findings here contribute to the growing turnaround literature by highlighting the importance of the CEO’s external board appointments as important mechanisms through which critical resources, information and other necessary advice can be received for reversing a company’s financial decline.

Table 5. Logit Regression Results for the relationship between leadership characteristics and turnaround outcome of the firm

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>Model 1 Coefficient (p-value)</th>
<th>Model 2 Coefficient (p-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant (Intercept)</td>
<td>-7.862 (0.000)***</td>
<td>-8.750 (0.000)***</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.444 (0.000)***</td>
<td>0.488 (0.000)***</td>
</tr>
<tr>
<td>SLACK</td>
<td>-0.064 (0.207)</td>
<td>-0.056 (0.279)</td>
</tr>
<tr>
<td>OUTSIDERS</td>
<td>-0.003 (0.208)</td>
<td>-0.002 (0.302)</td>
</tr>
<tr>
<td>AGE</td>
<td>0.016 (0.011)**</td>
<td>0.021 (0.002)***</td>
</tr>
<tr>
<td>SEVERITY</td>
<td>-0.189 (0.000)***</td>
<td>-0.187 (0.000)***</td>
</tr>
<tr>
<td>DOWNSIZE</td>
<td>-0.089 (0.027)**</td>
<td>-0.114 (0.007)**</td>
</tr>
<tr>
<td>CDUALITY</td>
<td>0.744 (0.002)***</td>
<td></td>
</tr>
<tr>
<td>CTENURE</td>
<td>-0.074 (0.001)***</td>
<td></td>
</tr>
<tr>
<td>CINTLOCKING</td>
<td>0.233 (0.014)**</td>
<td></td>
</tr>
<tr>
<td>CFUNBACKGROUND</td>
<td>0.032 (0.882)</td>
<td></td>
</tr>
<tr>
<td>Year dummies</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Model summary:

<table>
<thead>
<tr>
<th>Model Chi-Square</th>
<th>Nagelkerke R²</th>
<th>Cox and Snell R Square</th>
<th>-2 log likelihood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>212.688 (0.000)***</td>
<td>0.328</td>
<td>0.246</td>
</tr>
<tr>
<td>Model 2</td>
<td>241.958 (0.000)***</td>
<td>0.367</td>
<td>0.275</td>
</tr>
</tbody>
</table>

Notes: Definitions of included variables are as follows: CDUALITY is a dichotomous variable with a value of ‘1’ assigned if the CEO is also the chairperson of the board of directors, and ‘0’ if otherwise; CTENURE is measured as the number of years a CEO had occupied that position; CINTLOCKING is measured by counting the CEOs number of directorships in other firms; CFOUNDER is a dichotomous variable coded as ‘1’ if the CEO is founder or co-founder of the company, and ‘0’ if otherwise; and CFUNBACKGROUND is a dichotomous variable with a value of ‘1’ assigned if the CEO has an output-based functional background and ‘0’ if the CEO has an throughput-based functional background; SIZE is the natural logarithm of total assets for each firm in all years; SLACK is measured as a ratio of total debt to total equity (debt/equity) for all years; OUTSIDERS is the percentage of the total number of board members who are identified as independent directors; AGE is proxied using the number of years since the firm’s inception; Severity represents the Zmijewski Financial Score for each firm in all years; DOWNSIZE is measured as tangible assets (t)-tangible assets (t-1)/tangible assets (t-1) for each firm in all years.
The results of my analysis do not support the contention that a CEO’s functional background will predict the likelihood of corporate turnaround. Although more turnaround firms are currently being led by CEOs with output-based functional backgrounds as shown in Table 3, there is no statistically significant difference in the likelihood of corporate turnaround between turnaround and non-turnaround firms. Based on my sample, I conclude that the CEO’s functional background does not improve the chances of turnaround in declining firms. Similarly, my sample does not provide any evidence that a CEO’s founder status is linked to corporate turnaround. Such a non-significant finding indicates that under turnaround situations founder-CEOs might not be necessarily associated with more motivation, skill and legitimacy that can overturn a business in decline because they are committed to maintaining the status quo.

7. Implications for theory and practice

I believe that my study has important implications for both researchers and practitioners. My study highlights the important relationship between various CEO characteristics such as duality, interlocking, tenure and corporate turnaround outcome. The findings of my study show that the demographic characteristics of CEOs play an important role in a successful turnaround strategy. As a result, any turnaround attempt in declining firms should take into account the existing characteristics of the CEO in order to determine the necessity for possible changes. These findings also have implications for the ongoing corporate governance reform process in Australia. The results documented here suggest that adherence to the best practice recommendations introduced by the ASX Corporate Governance Council with specific reference to the separation of the CEO and chairperson roles, will not necessarily help the firm turnaround its business circumstances.

8. Conclusion

The findings of my paper provide a first step to understanding the relationship between leadership characteristics and turnaround outcome in Australian firms. My paper significantly contributes to the growing turnaround literature by investigating the impact of leadership characteristics on the turnaround process. The overall findings suggest the importance of examining various leadership characteristics, especially CEO external board appointments, duality and tenure in turnaround situations.

9. Limitations

There are a number of limitations in my research findings. First, I am conservative in my sample selection and matching process to ensure that only truly declining and turnaround firms are identified. Consequently, it is probable that I omitted other declining firms that did not necessarily fit in with my specific criteria. Second, to examine the association between leadership characteristics and corporate turnarounds, the scope of this study is restricted to Australian firms and sample focused only on limited period of time, 2004 to 2012. Thus, my findings and conclusion tend to reflect the Australian experience and what happened in a specific decade. Furthermore, it is not the scope of this study to examine the reasons for decline or the actual measures taken during the turnaround process, but rather to examine the relationship between various CEO characteristics and turnaround outcomes of the firm by employing basic econometrics in the dataset.

References

9. ASX Corporate Governance Council (2003), Principles of Good Corporate Governance and Best Practice Recommendations, First edition.
38. Dumaine, B. (1990), “The new turnaround chumps”, Fortune, July 16, Vol. 122 No. 2, pp.36. For information visit the following link:
770-786.
75. Massie, J. (1965), Management Theory, Handbook of Organizations, Rand McNally, Chicago, IL.


## APPENDIX A

### Table A.1. Descriptive statistics of leadership variables for turnaround and non-turnaround firms during distress and post–distress period (means %)

<table>
<thead>
<tr>
<th>Panel A - 94 turnaround firms</th>
<th>Distress period</th>
<th>Post-distress period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D</td>
</tr>
<tr>
<td>Leadership Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDUALITY</td>
<td>0.170</td>
<td>0.378</td>
</tr>
<tr>
<td>CTENURE</td>
<td>3.978</td>
<td>4.758</td>
</tr>
<tr>
<td>CINTLOCKING</td>
<td>0.560</td>
<td>0.797</td>
</tr>
<tr>
<td>CFOUNDER</td>
<td>0.170</td>
<td>0.378</td>
</tr>
<tr>
<td>CFUNBCKGROUN</td>
<td>0.820</td>
<td>0.387</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B - 94 non-turnaround firms</th>
<th>Distress period</th>
<th>Post-distress period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D</td>
</tr>
<tr>
<td>Leadership Variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDUALITY</td>
<td>0.200</td>
<td>0.404</td>
</tr>
<tr>
<td>CTENURE</td>
<td>3.862</td>
<td>4.880</td>
</tr>
<tr>
<td>CINTLOCKING</td>
<td>0.330</td>
<td>0.860</td>
</tr>
<tr>
<td>CFOUNDER</td>
<td>0.180</td>
<td>0.387</td>
</tr>
<tr>
<td>CFUNBCKGROU</td>
<td>0.740</td>
<td>0.438</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel C - Proportion test</th>
<th>Total CEO characteristics during distress and post-distress periods</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Turnaround (mean) Non-turnaround (mean) Test of difference t-stat (p-value)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>CDUALITY</td>
<td>0.210</td>
</tr>
<tr>
<td>CTENURE</td>
<td>3.877</td>
</tr>
<tr>
<td>CINTLOCKING</td>
<td>0.580</td>
</tr>
<tr>
<td>CFOUNDER</td>
<td>0.140</td>
</tr>
<tr>
<td>CFUNBCKGROU</td>
<td>0.810</td>
</tr>
</tbody>
</table>

Notes: This table shows the leadership characteristics of turnaround (94) and non-turnaround (94) firms in distress and post-distress years. CDUALITY is a dichotomous variable with a value of ‘1’ assigned if the CEO is also the chairperson of the board of directors, and ‘0’ if otherwise; CTENURE is measured as the number of years a CEO had occupied that position; CINTLOCKING is measured by counting the CEO’s number of directorships in other firms; CFOUNDER is a dichotomous variable coded as ‘1’ if the CEO is founder or co-founder of the company, and ‘0’ if otherwise; and CFUNBCKGROUND is a dichotomous variable with a value of ‘1’ assigned if the CEO has an output-based functional background and ‘0’ if the CEO has an throughput-based functional background. ***, ** and * are significant at 1%, 5% and 10% respectively.
## APPENDIX B

### Table B.1. Pearson correlation matrix for turnaround and non-turnaround firm sample

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>CDUALITY</th>
<th>CTENURE</th>
<th>CINTLOCKING</th>
<th>CFOUNDER</th>
<th>CFUNBCKGROUND</th>
<th>SIZE</th>
<th>SLACK</th>
<th>OUTSIDERS</th>
<th>AGE</th>
<th>SEVERITY</th>
<th>DOWNSIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDUALITY</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTENURE</td>
<td>0.167**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CINTLOCKING</td>
<td>0.173**</td>
<td>-0.025</td>
<td>-0.120**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFOUNDER</td>
<td>0.045</td>
<td>0.513**</td>
<td>-0.082*</td>
<td>0.127**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CFUNBCKGROUND</td>
<td>0.012</td>
<td>-0.069</td>
<td>0.142**</td>
<td>0.011</td>
<td>-0.125**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.112**</td>
<td>-0.055</td>
<td>0.039</td>
<td>-0.043</td>
<td>0.038</td>
<td>0.227*</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLACK</td>
<td>-0.091*</td>
<td>0.001</td>
<td>0.039</td>
<td>-0.125**</td>
<td>0.127**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OUTSIDERS</td>
<td>-0.186**</td>
<td>-0.007</td>
<td>-0.008</td>
<td>0.062</td>
<td>0.080*</td>
<td>0.237*</td>
<td></td>
<td>0.099**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>-0.050</td>
<td>0.027</td>
<td>0.049</td>
<td>-0.144**</td>
<td>0.005</td>
<td>0.100*</td>
<td></td>
<td>0.064</td>
<td>-0.014</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>SEVERITY</td>
<td>0.004</td>
<td>0.016</td>
<td>-0.044</td>
<td>0.069</td>
<td>-0.117**</td>
<td>-</td>
<td>0.448*</td>
<td>-0.042</td>
<td>-0.028</td>
<td>0.003</td>
<td>1</td>
</tr>
<tr>
<td>DOWNSIZE</td>
<td>0.070</td>
<td>-0.045</td>
<td>0.031</td>
<td>-0.024</td>
<td>0.012</td>
<td>0.044</td>
<td>0.048</td>
<td>-0.070</td>
<td>0.044</td>
<td>-0.123**</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: Definitions of included variables are as follows: CDUALITY is a dichotomous variable with a value of ‘1’ assigned if the CEO is also the chairperson of the board of directors, and ‘0’ if otherwise; CTENURE is measured as the number of years a CEO had occupied that position; CINTLOCKING is measured by counting the CEO’s number of directorship in other firms; CFOUNDER is a dichotomous variable coded as ‘1’ if the CEO is founder or co-founder of the company, and ‘0’ if otherwise; and CFUNBCKGROUND is a dichotomous variable with a value of ‘1’ assigned if the CEO has an output- based functional background and ‘0’ if the CEO has an throughput- based functional background; SIZE is the natural logarithm of total assets for each firm in all years; SLACK is measured as a ratio of total debt to total equity (debt/equity) for all years; OUTSIDERS is the percentage of the total number of board members who are identified as independent directors; AGE is proxied using the number of years since the firm’s inception; Severity represents the Zmijewski Financial Score for each firm in all years; DOWNSIZE is measured as tangible assets (t)-tangible assets (t-1)/tangible assets (t-1) for each firm in all years.