

Impact of Institutional Investors and Board Independence on Corporate Short-Termism: Longitudinal Evidence from Zimbabwe

Trustmore Bekapi

Graduate School of Business, Bindura University of Science Education

DOI: <https://dx.doi.org/10.47772/IJRISS.2023.71027>

Received: 10 September 2023; Accepted: 14 September 2023; Published: 17 October 2023

ABSTRACT

This study examines the effects of institutional investors and board independence on corporate short-termism, using panel data for 36 listed companies in Zimbabwe from 2010 to 2018. By using the Arellano-Bover/Blundell-Bond system Generalised Methods of Moments (Sys-GMM) dynamic estimator, this study effectively addresses autocorrelation, heteroscedasticity and endogeneity in panel data analysis. The empirical results of this study revealed that institutional investors significantly influence managers to make myopic investment decisions, whereas independent non-executive directors reduce managers' myopic tendencies. Additional analyses of the results confirms that INEDs mitigate managers' myopic behaviour, whereas institutional investors increase the managers' myopic behaviour. More so, this study found a significant and positive relation between dedicated institutional ownership and capital expenditures, which suggests that dedicated institutional investors help to reduce short-termism. Given that the results show that past short-termism begets more short-termism, the results of this study can help shareholders, policymakers, regulators and executives to understand the influence of institutional investors and board independence on long-term corporate investment decisions, which is an unexplored issue from the Zimbabwean context.

Keywords: Institutional investors; board independence; short-termism; system generalized methods of moments; corporate governance

INTRODUCTION

Worldwide, corporate executives, policymakers, judges and academics have repeatedly argued that corporate short-termism or myopia [1]–[7], is a cause for concern in the global financial market. However, while there have been some studies on corporate short-termism in the Anglo-Saxon and Asia-Pacific markets that looked at the topic of short-termism, none has yet produced a definite answer to the apparently simple question, 'what is the effect of institutional investors and corporate board independence on short-termism?' From the causes of short-termism, those related to institutional investors and board independence are the mostly contested ones[8]–[10]. Apparently, there is a tension in literature on whether institutional investors and board independence mitigate or exacerbate short-termism in capital markets [9]–[15]. Following the mixed results from these studies, the present study has noticed that while studying causes of short-termism, very few studies have appreciated that short-termism cannot be explained by a single factor, rather it is a function of a multiple of factors that a focused research must study all of them at once. This observation has made the researcher to contend that the conflicting results from prior research could be due to endogeneity issues emanating from omitted variable bias. Thus, taking the advice by Barton and Wiseman (2014), Alexander (2017) and Goergen and Tongs (2017), the present study will examine jointly the effects of institutional investors and board independence on corporate short-termism for publicly listed Zimbabwean companies during the recovery and stabilisation period.

Recently, it has been widely believed that short-termism is a first order problem being encountered by modern firms today [16]–[18]. The problem leads decision makers, in particular, top management team members to overly focus on short-term goals at the cost of long-term goals, resulting in inadequate attention

being paid to fundamentals, strategy and long-term value creation of the business [19]–[28].

While there is a growing unanimity among academic researchers that each emerging market economy is unique, with its own market structure, regulatory environment, and levels of development [29], there has been few empirical studies into the effect of institutional investors and board independence on short-termism in developing countries. Therefore, considering the research gap and relevance of this issue, the results in this paper have potential policy implications for regulators and shareholders in developing nations.

This empirical investigation uses a sample of 36 publicly listed Zimbabwean companies over the period from 2010 to 2018. The Zimbabwean setting is attractive as it offers a natural environment to analyse how listed companies operating in Zimbabwe respond to institutional ownership and board independence during the recovery and stabilisation period that was ushered in by the integration of the opposition Movement for Democratic Change (MDC) into government executive structures [30].

The aim of this paper is to add insights into an understanding of the effects of institutional investors and board independence on corporate short-termism. This will be addressed through answering the following research questions:

1. Do institutional investors punish corporate short-termism?
2. Does corporate board independence mitigate corporate short-termism?

The remainder of this paper proceeds as follows; first, Section II looks at an overview of the literature on causes of short-termism, in particular, how institutional investors and board independence influence short-termism. Second, Section III presents the methodology for the study, while Section IV reports the main findings. Section V discusses alternative and possible explanations for the findings and Section VI offers concluding remarks, which factor in the study's contributions and limitations for the study.

LITERATURE REVIEW

While there has been some interest from management scholars on the effect of institutional investors and board independence on short-termism in recent years, there is still a stalemate in the debate. This chapter will review the key arguments in the literature on both sides of the debate on the effects of institutional investors and board independence on short-termism.

Impact of Institutional investors

Some studies that were based on samples of companies from Anglo-Saxon and Asian-Pacific markets found that institutional ownership exacerbates corporate managers to behave myopically [10], [12], [31]–[34]. In convergence with the above findings, institutional investors were also accused of inducing short-termism that manifested during the 2007-2009 global financial crisis [35], [36], particularly when they act as passive monitors [9], [34] and turn towards hedge funds [37], [38]. Similarly, Ferreira and Matos (2008) argued that pressure sensitive institutional investors are less independent, usually have to engage in hard to detect criminal activities, for example, undercutting capital expenditures.

However, other related studies reported different findings, which suggest that dedicated institutional ownership with large stakes in investee firms reduces the tendency by corporate managers to take on short-term decisions [9], [12], [15], [20], [21], [36], [39]–[44]. Similarly, a study by Bena et al. (2017) found that foreign institutional investors lead firms to forgo a short-term orientation and invest in long-term investment. However, from the perspective of the regulators in Zimbabwe, there seems to be no clear answer to the question, 'do institutional investors encourage or mitigate corporate managers to behave myopically?' On March 15 2020, the Minister of Finance and Economic Development Professor Mthuli

Ncube issued a press statement suspending Old Mutual Limited from trading its shares for malpractice linked to the parallel foreign currency market, which was viewed as an act of war on the economy (Ncube, 2020). Such short-termist behaviour had been on the charge sheet for fuelling parallel foreign currency market instability. However, on July 28, 2020, the press statement issued by the Minister of Finance and Economic Development noted that Old Mutual Limited was not involved in any malpractice linked to the parallel foreign currency market (Ncube, 2020). Nevertheless, on May 9 2022, the Governor of the Reserve Bank of Zimbabwe Dr John Magudya issued a circular to banks that temporarily banned lending activities by all financial institutions [46]. The Governor highlighted that financial institutions' were abusing loan facilities to the detriment of the economy, which resultantly fuelled parallel foreign currency market instability. And yet, on May 17 2022, the Governor of the Reserve Bank of Zimbabwe issued another press statement that lifted the temporary suspension of financial institutions from issuing loans [46]. Either way, from the perspective of researchers and regulators, it remains ambiguous whether Zimbabwean institutional investors promote or mitigate short-termism.

Hypotheses1: institutional investors are myopic

Hypothesis 1a: transient institutional investors exacerbate short-termism

Hypothesis 1b: dedicated institutional investors mitigate short-termism

Impact of independent corporate boards

According to agency theory, the composition of the board of directors (Johnson and Greening, 1999), might be the reason why managers behave myopically. Although, the directors owe a fiduciary duty to the corporations (Salter, 2013; Paquette, 2019), protecting the value for shareholders by investing for the long [49], the Enron, WorldCom, Lehman Brothers and many other corporate scandals that were caused by unsustainable business models have put corporate boards on the spotlight [19], [48], [50], [51]. More importantly, the corporate boards are being accused of inducing short-termism that led to the 2007-8 global financial crisis [52]. Similarly, banks with more independent directors took more risks and performed poorly during the 2007-8 global financial crisis [53].

And yet, some empirical studies reported that board independence reduces short-termism [8], [54], [55]. However, independent board members have been argued in literature to lack the time and ability to absorb the vast amounts of information required to understand a company's operations [40]. Relatedly, corporate board members can easily be enticed by short-term rewards of their own and thus, lack the requisite long-term orientation [56]. Most importantly, corporate boards do not have a clear sense of their companies' strategy (McKinsey and Co., 2005), which implies that they are out of touch with their companies' prospects and problems [47]. Consequently, Carter and Lorsch (2004) found that a majority of CEOs had no confidence that their directors understand the company's business, regardless of the amount of time they spent on it. As a consequence, it has been suggested that board members tend to prefer financial controls over strategic controls, incentivising managers to focus on short term earnings rather than long term value [57]. Similarly, citing an iconic example in the local context, on 25 August 2015, in his state of nation address comrade Robert Gabriel Mugabe noted with regret the extravagance that manifested through remuneration packages and associated benefits the corporate boards and management have been blithely awarding themselves, which reflects greed and avarice instead of the commitment to serve that is expected of them [58].

Yet, theoretically, the gospel of corporate governance recommends more independent board members to reduce agency problems [59]. A study by Gonzalez and André (2014) found that board effectiveness mitigates agency problems. Relatedly, staggered boards have been found to mitigate short-termism [60]. In line with this, the legislative response to various accounting scandals and financial crisis has been to

increase the number of independent directors. The 2010 UK Corporate Governance code recommends that at least 50 per cent of the directors to be independent, possibly with the view of reducing agency problems. However, corporate governance prescriptions are not universal [59], and little empirical work argues that board independence mitigates temporal orientation of corporate executives driven by agency problems. Thus, an important blind spot exists on our knowledge base of what constitutes effective corporate governance for firms – governance that reduces short-termism. To obtain key insights into this knowledge gap, the present study also examines the effect of board independence on corporate short-termism.

Hypothesis 2: independent non-executive directors reduce short-termism

SAMPLE DATA AND PERIOD

Because of political and economic conditions that changed over the last two decades in Zimbabwe, this paper focused on the period 2010 to 2018, which is the recovery and stabilisation period [30]. Most publicly listed companies had their annual reports published on the internet beginning 2010 after the introduction of the multi-currency system in 2009. During recovery periods, managers have got a higher propensity to invest in capital projects [30], and in the case of Zimbabwe, the period 2000 to 2008 has witnessed insignificant levels of investment due to hyperinflation[61]. In light of the above, this paper posits that neglect of capital expenditures during the period 2010 to 2018 is a reflection of short-termism. The 2008 national elections saw a critical change in governance with the integration of the opposition MDC into government executive structures [30]. Following the formation of the Government of National Unity (GNU) by two main opposition parties in 2009, the political situation in Zimbabwe could be said to have been relatively peaceful [61] and feasible for capital investments [30].

Similar to other related studies on short termism, this study focused on a sample of Zimbabwean based, publicly listed firms. The assets under management (AUM) in equity of Zimbabwean listed companies by institutional investors such as asset managers, mutual funds, pension funds, banks and insurers, is very significant, relative to total funds invested. By market capitalisation, the insurance and pension funds industry owns around 70% of shares listed on the ZSE [62]. The asset management industry in Zimbabwe therefore surely bears a large degree of responsibility to fight short-termism in listed companies. In terms of assets, the insurance industry's total assets stood at US\$825.1 million as at March 31, 2021, which is a huge amount compared to the size of the economy. Additionally, the banking industry's total assets stood at around US\$6.642 billion as at September 31, 2021 (RBZ, 2021).

The sample was gathered from the annual reports of 36 Zimbabwean listed firms, over the period from 2010 to 2018, and computed in Excel and STATA. The annual reports were downloaded from the companies' websites and African financials website. In cases where annual reports were not available from the aforementioned sources, efforts were made to obtain the annual reports from the companies' secretary. In order to ensure the accuracy and objectivity of the results, the companies were selected on the following principles:

1. Delisted companies were excluded from the sample in order to observe regular business activities; this reduces the number of outliers and the anomalous performance.
2. Only companies with all annual reports available for every year (2010-2018) were selected, in order to ensure data reliability.
3. Financial firms were excluded since their annual reports differ substantially from other nonfinancial firms. This is in tandem with most prior researchers.
4. Firms with return on equity higher than 500% or lower than -500% were excluded [23].
5. Firms with debt-to-assets ratio greater than 100% were excluded as this would imply presence of negative stock variables especially net assets and equity that would lead to values that merit no

economic justification (for example, getting a positive ROE when the company had made a loss).

The study focuses on listed companies for primarily two reasons:

- These companies are large companies relative to non-listed firms in Zimbabwe and through their investments (or lack thereof); therefore, influence in the economy.
- Listed companies are obliged to publish annual reports which make their data readily available. The available data is not mined or analysed in any detail from the economic perspective of regulators and presents a rich source of information to analyse trends and patterns in the behaviour of managers that warrants further policy consideration.

Measurement of short-termism

Measuring short-termism has been a challenge. Some researchers have relied on data collected through surveys [26], [63], whereas others have used text analysis of annual conference scripts [64], [65]. However, the researcher chose capital expenditure as a good proxy measure of short-termism because of its efficacy in capturing behaviour, which is consistent with my theorizing for this study (Souder and Bromiley, 2012). The choice for this variable is rooted in empirical evidence by prior studies [23], [66]–[69], who showed that a reduction in capital expenditure (**capex**) can indeed reflect short-termism. Mathematically, it is calculated as annual capital expenditures deflated by total assets. Our interest in modelling capex levels arises from the desire to examine cross-sectional differences in capex intensity between independent directors and non-independent directors and also dedicated and transient institutional investors, rather than changes across years. This is because while we expect myopic firms to underinvest in capex on average, we do not necessarily expect them to reduce capex investment every year.

Institutional investors

First, the independent variable of interest is institutional ownership total (Inst) in the firm's total shareholding, where institutional shareholders are professional money managers who manage assets on behalf of their clients in a trust relationship [70]. They include mutual funds, banks and trust firms, insurance companies, endowments funds, hedge companies, research firms and pension funds [42]. They are calculated as the percentage of shares owned by institutional investors in a company [10], [12]. To offer a more nuanced insight into the myopic behaviour of institutional investors, the study considered the heterogeneity among the institutional investor groups, namely pressure-insensitive (dedicated) institutional investors (for example, pension funds) and pressure-sensitive (transient) institutional investors (for example, insurance companies, securities companies), based on the strength of potential and current business linkages between institutional investors and their investee companies [71].

Dedicated institutional investors

Dedicated institutional investors are more independent and freer from conflicts of interest and thus provide a stable source of capital that deliver long-term sustainable value creation [70], [71]. In light of the above, pressure-insensitive institutional investors are often locked into the shareholding of most large companies on a long-term basis by the very nature of the investment business, and have got low portfolio turnover [72]. To capture this group of institutional investors, we follow Kim and Kim (2020) who argued that before a shareholder or group of shareholders with an ownership position of 5% or more can nominate a director, a year must have passed since they purchased the ownership block. This puts limits on their ability to influence firm management for the first one year. Thus, the crucial momentum derived by dedicated institutional investors is more likely to emerge at least over one year after they invested their ownership block. Consequently, we subtracted annual institutional ownership change from the total institutional ownership considering that they are often locked into the shareholding of the investee companies on a long-

term basis or in other terms we used institutional investor ownership at the beginning of the period ($Inst_{t-1}$) and labelled the variable dedicated [34], [73].

Transient institutional investors

Transient institutional investors are often not locked into the shareholding of most large companies on a long-term basis and behave more like traders. Ferreira and Matos (2008) argued that pressure sensitive institutional investors are less independent, usually have to engage in hard to detect criminal activities, for example, undercutting capital expenditures. To capture this group, we calculated transient institutional ownership as the annual percentage change of institutional ownership, taking into consideration the fact that they can easily sell their shares to pursue short-term objectives since they have high portfolio turnover [64].

Board independence

Next, my independent variable of interest is board independence. The 2010 UK Corporate Governance Code recommended that at least 50% of the board members should be independent so as to mitigate the agency problem. So taking a cue from the 2010 UK Corporate Governance Code, board independence is coded 1 when it exceeds 50% and zero otherwise. The inclusion of this variable is to assess whether the corporate boards walk the talk of fiduciary responsibility. More so, another additional independent variable of interest is related directors, which is used for robustness checks. The variable for related directors is calculated as the percentage of related directors on the board.

Controls

Following the relevant literature, I controlled for a vector of firm-level characteristics that could affect short-termism. Each control variable controls for within firm changes in the firm level characteristics. I controlled for firm size because organisational structure is debated in literature to create cognitive distance between senior managers and operations, causing managers to perceive short-term pressures to be more salient [65]. Findings by Kleinknecht (2018) attest to that fact. Larger size reflects a greater scope of operations, reducing managers' ability to focus on specific aspects of operations. Therefore, firm size was included to control for the cognitive distance between top management and operations. Firm size (**Size**) is measured as the natural logarithms of total revenue to deal with skewness issues. As research indicates, I also controlled for firm age (**Age**) because young managers tend to manage younger firms which spend more in capital expenditure. I define firm age as the natural logarithm of the number of years the firm has been incorporated on the Stock Exchange [23], [64], [67], [70]. The inclusion of this control variable is to minimise potential for omitted variable bias (Ntim et al., 2012). I also included Leverage (**Lev**) defined as total debt deflated by total assets. The inclusion of this variable depends on the intuition that firms can use borrowings to finance their investment and face greater market scrutiny from debt holders. I also controlled for CEOs' decision horizon proxied by CEO age and tenure [29], [65]. I measure CEO age as the natural logarithm CEO age and CEO tenure as the number of years since the CEO assumed the position as the CEO of the company. CEOs closer to retirement are likely to reduce long-term investment possibly because they are unlikely to benefit from such investments with longer-term payoffs [29], [74]. Lastly, I controlled for availability of financial resources proxied by cash flow, return on assets (ROA) and dividend dummy. Firms with more financial resources face less pressure from the capital market for short-term returns, hence undertake long-term capital projects (Stein, 2003). Cash flow is measured as cash flow from operations deflated by total assets. ROA is return on assets measured earnings before interest, tax, depreciation and amortization deflated by total assets. Dividend dummy takes the value 1 in the year the company paid dividend and zero otherwise.

Model specification and estimation method

Given that short-termism appears to be a largely contemporaneous phenomenon, models such as System

Generalised Methods of Moments (Sys-GMM) that can estimate contemporaneous coefficients are very useful. More so, the challenges that the Zimbabwean economy face are so interwoven that it is very difficult to separate the causes from the effects of the challenges, so models that can deal with reverse causality are encouraged. Following Arellano and Bond (1991), Arellano and Bover (1995) and Blundell and Bond (1998), the researcher used the following general dynamic generalised methods of moments model:

$$\text{capex}_{it} = \alpha_0 + \alpha_1 \text{it-1} + \beta \mathbf{X}_{it} + \Sigma(\mathbf{Z}_{it}) + \delta i + \mu_{it} \dots \quad (1),$$

Where \mathbf{X} represents a vector of independent variables, \mathbf{Z} represents a vector of control variables, δi is the firm specific fixed effects and μ_{it} is the error term.

The researcher considered lagged investment to solve dynamic endogeneity which is common in corporate investment researches. By including the lagged dependent variable as an independent variable, the dynamic model can control for the possible effects of omitted variables. The lagged performance variable can explain various determinants of short-termism in the previous year. Moreover, the lagged dependent variable included accounts for persistence in responses. To deal with the reverse causality endogeneity and unobserved heterogeneity, this model was estimated using a two-step Arellano-Bover/Blundell-Bond Sys-GMM, dynamic estimator with robust standard errors, which is consistent in the presence of any pattern of heteroscedasticity and autocorrelation (Arellano and Bover, 1995; Blundell and Bond, 1998). Two-step Arellano-Bover/Blundell-Bond Sys-GMM, unlike ordinary least square (OLS), fixed effects and random effects estimations, does not require distributional assumptions, like normality. The Sys-GMM model provides better consistent estimates in the presence of different sources of endogeneity and performs better in small samples than other panel estimation strategies. The Sys-GMM model removes endogeneity by internally transforming the data, for instance, the two step Sys-GMM applies forward orthogonal deviations which means subtracting the average of all future available observations from the current observations [75]. The dynamic variant of the model also controls for changes in political and economic cycles that took place during the recovery and stabilisation period (2009-2018). For post estimation tests the researcher applied the Arellano and Bond test for autocorrelation of the disturbance error term. The Wald test is used to test the joint significance of the coefficients of the included variables.

ANALYSES AND EMPIRICAL RESULTS

This section presents the empirical results on the effects of corporate governance on corporate short-termism in Zimbabwe, in particular, how institutional ownership and corporate boards influence capital investment decisions. The analysis was conducted using an econometric analysis of pooled cross-sectional time series of 36 listed firms in Zimbabwe over the 2010-2018 period. Annual panel data from 2010 to 2018 was used to examine the effects of institutional investors and corporate board independence on corporate short-termism during the recovery and stabilisation period. Balanced panel data regression estimation technique was used. The econometric analysis begins with descriptive statistics, followed by diagnostic tests, presentation of the results, interpretation and analysis of the results.

Descriptive statistics

Table 1 in the appendix presents descriptive statistics of the dependent and independent variables used. Descriptive statistics have widely been used in researches related to managerial short-termism [64], [65]. The descriptive statistics results show that the mean values for capital expenditures is 6% of total assets which is too low compared to 10% for South Africa (Bosiu et al., 2017). The lower proportion of capital expenditure to total assets is a clear testimony of significant short-termism in the economy during this period. On average, institutional shareholders hold 46% of stocks for listed companies in Zimbabwe and reflects that institutional ownership continued to fall from 55% obtained in 2014 [62]. However, this figure shows that institutional investors control a sizable chunk of stocks of listed companies and thus may

influence corporate decisions. Almost 51% of the companies' assets are financed by debt, which suggests that availability of borrowing facilities is critical in bankrolling investment projects and confirms that Zimbabwean firms are saddled with high debts (RBZ, 2014). Zimbabwean firms generate cash flow at an average rate of 7% and furthermore the average firm age is 35 years. On average, the board is composed of more independent non-executive directors which is in accordance with recommendations of King III report of 2009 and 2010 UK Corporate Governance Code. The average (median) size is 7.80 (7.65), which is considerably large according to prior researchers. Among the 36 firms represented, the average CEO age is 55 years, which is comparable to prior research. Last but not least, the average CEO tenure is 6 years, which indicates that the market is dominated by CEOs with short management horizons.

Heteroscedasticity results

The Breusch-Pagan/ Cook-Weisberg test for heteroscedasticity was done. In all the cases considered, the null hypothesis of constant variance was rejected, and it was possible to proceed with two-step Arellano-Bover/Blundell-Bond Sys-GMM with robust standard errors.

Multicollinearity test results

Table 2 in the appendix provides Pearson correlations for each variable used to examine the determinants of managerial short-termism. The researcher ran multicollinearity test, and the results in Table 2 suggest that the independent variables included were not highly correlated as all the correlations coefficients are below 0.8, which corresponds to the limit from which multicollinearity problem is detected [76].

Regression analysis

This section presents the regression results obtained from dynamic panel data estimation method, more specifically two-step Arellano-Bover/Blundell-Bond System GMM and discusses the relationships between short-termism and its antecedents. Table 3 in the appendix presents the results for regressions based on equation for effect of institutional investors and board independence on short-termism. First, the regression was estimated for four models, depending on the variables included. Regression 1 is the baseline model and only includes control variables. Regression 2 adds institutional investors to the baseline model, while Regression 3 adds independent non-executive directors to the baseline model and lastly, Regression 4 includes both institutional investors and independent non-executive directors to the baseline model. Further, regressions 5-8 provide additional analyses on dedicated and transient institutional investors.

Model specification test

Table 3 reports the System GMM results of equation (1) – (8). The p-values of m_1 and m_2 test statistic indicate that very little unobserved firm specific effects exist in the estimation results. The Wald test confirms that the models are correctly specified. I correct standard errors for heteroscedasticity at the firm level. The significant positive association of lagged capital expenditures with capital expenditures in all the models implies its persistent effect in firms' capital expenditures, which in turn, indicates that past short-termism begets more short-termism. Although Sargan test could not be computed due to heteroscedasticity of data, the m_2 tests show that the results can be relied upon.

Institutional ownership and corporate short-termism

To test the effect of institutional ownership on organizational investment horizon, I reran model 1 in Section III, which has all control variables with an additional covariate for institutional ownership ($Inst_{it}$). Hypothesis 1 in Section II suggested that institutional investors exacerbate managers' myopic investment tendencies. The regression results reported in column 4 of Table 3 with institutional investors as an

additional covariate are in parallel with our claim. We find a negative and statistically significant association between institutional investors and capital expenditures (model 2: $\beta = -0.0527$, $p < 0.05$; model 4: $\beta = -0.0485$, $p < 0.05$). Thus, using results of column 4 in Table 3, an increase in institutional ownership by one standard deviation increases capital expenditures by 0.23 multiplied by 0.0485, which is approximately 0.01116. One standard deviation of capital expenditures is 0.06. A decline in capital expenditures by 0.01116 represents decline of 18.6% of the standard deviation. Hence, the documented effect of institutional ownership was statistically significant and economically meaningful. This finding is consistent with other prior researchers who found that institutional investors exacerbate corporate short-termism by showing less commitment to firms that invest in long-term capital investments [11], [32], [68], [77]–[79] and this observation is characteristic of transient institutional investors [11], [80].

To get deeper insight of the aforementioned finding, we separated institutional investors into dedicated and transient institutional investors. The coefficient for the covariate on transient (short-term) institutional ownership (model 6: $\beta = -0.054$, $p < 0.01$), was negative and significant. This is consistent with the hypothesis 1a, which suggested that transient institutional investors encourage managers to behave myopically. This result is even robust after controlling for political uncertainty (see column 8 of Table 3).

However, the hypothesis 1b proposes that increased monitoring by dedicated institutional investors mitigates the tendency by executives to underinvest in capital expenditures [9], [11], [12], [16], [81]. In model 5 of Table 3, the coefficient on dedicated ($\beta = 0.057$, $p < 0.10$) was positive and significant. This is consistent with the hypothesis 1b, which stated that dedicated institutional investors reduce the myopic behaviour of managers. A close look at the impact of dedicated institutional ownership reveals that the coefficient of CEOs' career horizon becomes insignificant, suggesting that dedicated institutional ownership lowers or nullifies managers' myopic behaviour [11], [12], [16], [82]. This is consistent with Acharya et al. (2011) who theorize that older CEOs near retirement are myopic, and thus need external corporate governance to mitigate agency problems [84]. Additionally, the effect of independent non-executive directors (INEDs) on capital investments is strengthened, suggesting that active monitoring by dedicated institutional investors leads to the independent non-executive directors to increase their monitoring of CEOs, thereby encouraging good governance [41], [59], [85].

Board independence

Next, hypothesis 2 advocated that independent non-executive directors walk the talk of fiduciary responsibility and thus, encourage CEOs to invest in long-term capital projects. In line with expectation, the study finds that independent non-executive directors positively influence capital investment decisions (model 3: $\beta = 0.0163$; p -value < 0.05 and model 4: $\beta = 0.0156$; $p < 0.05$), a result which is also confirmed in models 5- 8 in Table 3; and thus, lower the managers' myopic behaviour [83], [84]. Thus, an increase in board independence by one standard deviation increases capital expenditures by 0.45 multiplied by 0.0156, which is approximately 0.007. One standard deviation of capital expenditures is 0.06. An increase in capital expenditures by 0.007 represents an increase of 11.7% of the standard deviation. Hence, the documented effect of board independence was statistically significant and economically meaningful. Literature argues that independent board members lack the time and ability to absorb the vast amounts of information required to understand the operations of their companies [40]. However, contrary to Porter's (1992) view, the results suggest that independent non-executive board members counterbalance managers' myopic behaviour and play a crucial role in limiting short-termism. Such results support the resource dependence perspective, which illustrates that independent directors assist a firm to guard against the external environment, uncertainties and as a consequence, enhance the firm's value creation process. Additionally, the results of this study support the findings of a study conducted by Ben-Amar and André (2006), who found a significant association between the proportion of unrelated directors and excess returns announced

by the acquiring firm. Furthermore, Osma (2008) noted that independent directors have sufficient knowledge to identify opportunistic reductions in R&D and to efficiently constrain myopic R&D spending. This is because the independent board members are appointed based on their reputation, expertise and industry network that the firm can leverage for value creation since they perform important functions for the organisations, for example, voting on major operation proposals, hiring the CEO and offering expert advice. Overall, the research finding provides empirical support to the 2010 UK Corporate Governance Code and King III report of 2009 that propose that the board should be dominated by independent directors in order to mitigate corporate short-termism.

Robustness tests

In this section, we present several robustness tests to ensure that the study's significant results are not due to the specific measures of independent, dependent and other control variables, as well as estimation methods. First, we employed an alternative measure of CEO time perspectives, which uses the sum of mean adjusted tenure and age of CEO to capture the CEO decision horizon (hereafter CEO_DH) [18] and estimate the models 1-4 using Sys-GMM. Second, to account for cross-sectional dependence, Panel corrected standard errors (PCSE) estimator was used to estimate models 1-4. Third, to control for cross-sectional variation in capital expenditures, Generalised estimating equation (GEE) estimator is used to estimate models 1-4.

Regression analysis for CEO's decision horizon and corporate short-termism

Table 4 in the appendix reports the results which captures the impact of CEO decision horizon on corporate short-termism. The results in columns 1-4 above reveal that the estimated coefficient of CEO_DH is positive and significant at 5%. These findings indicate that CEOs with a longer decision horizon invest more in long-term capital projects, whereas CEOs with a shorter decision horizon invest less in long-term capital investments. Furthermore, most of the other variables are consistent with results in Table 3, thus the results are robust to alternative measures of CEO time perspectives.

Additional robustness analyses: Considering potential cross-sectional dependence

For additional robustness checks, an alternative estimation approach, PCSE estimator was used. More so, apart from altering estimation approaches, career horizon (career) is replaced by the actual age of the CEO (Ceage), board independence (INEDs) is calculated as the ratio of independent directors to the total number of all directors, and firm age is calculated as the actual number of years since the firm was listed on the ZSE. However, before estimation of PCSE regressions, the variables were checked for panel unit roots and the panels were stationary, see Table 5 in the appendix.

Next, Table 6 reports the robustness of the findings on the effects of institutional investors and board independence on short-termism to alternative estimation methods that account for cross-sectional dependence, heteroscedasticity and autocorrelation problems and alternative variable formulations. The results for the key variables of interest, which are institutional ownership and board independence maintain their signs and remain statistically significant. When CEO age is used instead of career horizon the sign of the coefficient becomes negative implying that old CEOs reduce capital investments and this observation is just the same as the one reported in Table 4 above. Also, CEO tenure remains statistically insignificant as in system-GMM. Therefore, the results are robust to different estimation method and alternative measures for some of the variables.

Additional robustness analysis: Regression analysis using Generalised Estimating Equation (GEE).

More so, similar to other previous research focusing on strategy-related dependent variables, we decided to employ GEE estimator to check the robustness of our findings [15]. The GEE controls for correlation

within cross-sectional units and expected differences relative to the population average. More so, the GEE tends to estimate more consistent and robust estimates than fixed or random effects models can when autocorrelation is present [15]. We run the GEE in Stata 17 using `xtgee` command. We specified a first order autoregressive (AR1) correlation structure for our GEE. The autoregressive correlation structure chosen tackles the time-related correlation within the subjects (firms) of our dataset. Further, we also specified a Gaussian distribution, an identity link function, and clustering the errors at the firm-level. The GEE regression results of the key variables are supportive of the Sys-GMM results reported in Table 4 columns 1-4. None of the results significantly changed, which assured us that measurement errors were not driving the results. These GEE regression results are reported in Table 7 in the appendix.

Other additional robustness analyses:

Finally, in untabulated analyses, we explored the sensitivity of the study's main results to the following variations of the main proxy for short-termism for this study, which is capital expenditure. We manipulated the dependent variable, capital expenditures (Capex), in two different ways. In the first approach, to account for differences in investment patterns among sampled listed firms over the study period, we modified the approach of Mavruk and Carlsson (2015) and Ladika and Sautner (2016) by taking the median of the entire sample of the capital expenditure deflated by total assets. We calculated adjusted capital expenditure by subtracting each firm's capital expenditure by the median of the entire sample of capital expenditure. In the second approach, we computed abnormal reduction of capital expenditure as the residuals of the following equation by modifying the approach of Roychowdhury (2006):

$$\text{Capex}_{it} = \beta_0 (1/\text{Assets}_{t-1}) + \beta_1 (\text{Sales}_{t-1}/\text{Assets}_{t-1}) + e_{it}$$

The residuals are then multiplied by -1 and the result represents real earnings management which can capture short-termism. None of the results significantly changed, which assured me that measurement errors were not driving the results.

DISCUSSION OF RESULTS

Tables 3-4 report the Arellano-Bover/Blundell-Bond System GMM regression results. The p-values of m_1 and m_2 test statistic indicate that very little unobserved firm specific effects exist in the estimation results. The Wald test confirms that the models are correctly specified. We correct standard errors for heteroscedasticity at the firm level. Although Sargan test could not be computed due to heteroscedasticity of data, the m_2 tests show that the results can be relied upon. The significant positive association of lagged capital expenditures with capital expenditures in all the models implies its persistent effect in firms' capital expenditures and indicates that past short-termism begets more short-termism, hence short-termism seems to be a system-wide scourge that is contagious spreading from one period to the other. Supporting that, RBZ (2014) articulated the point that the short-termism being witnessed in Zimbabwe has got its roots in the hyperinflationary period when 'burning' was key for business survival.

The study found that institutional investors negatively impact on capital expenditures of listed Zimbabwean firms immediately in current year. This result indicates that managers were more likely to underinvest in long-term capital investment because of pressure of institutional investors. The results are consistent with other prior researchers who found that institutional investors exacerbate corporate short-termism by showing less commitment to firms that invest in the long-term [11]–[13], [78], [79]. Further analysis of the findings in column 6 of Table 3 also reveal that pressure-sensitive institutional shareholders punish firms that invest more in long-term value creation projects as they prefer short-term investments which generate short-term results. How can a firm invest for the long-term when its stocks are owned by transient institutional investors who will not own any of the firm's stocks tomorrow? The economy pays the price. In the context

of Zimbabwe, institutional investors want to meet their urgent cash obligations as policyholders demand their benefits and therefore induce managers to make short-term suboptimal investment decisions which generate short-term results. As a result, institutional investors may feel an incentive to focus on short-term results in order to retain their clients. In such a setting, the longer-term perspective is often lost, as clients are unwilling to wait that long and can easily shift their money from one investment fund to another with a single click due to technological advances that permit such transactions with minimum costs. Thus, the findings suggest that it is premature to extol the virtues of institutional investors in corporate governance as nonfinancial firms with an ownership dominated by transient institutional investors or pressure-sensitive institutional investors are more likely to cut investment in value creation projects [35].

Furthermore, these results suggest that in making capital investment, managers do not always select investment based on their merits but on the pressures experienced by and priorities of institutional investors. The results support the view that equity markets induce managers to behave myopically [2], [40], as transient institutional investors tilt their preference towards firms that show less commitment to long-term capital projects [35]. This view arises from the notion that pressure-sensitive or transient institutional investors cannot see beyond current earnings and exit a firm when there is any reduction in short-term earnings [35]. This is consistent with the notion that stock-based systems dominated by 'activist' investors are induce corporate managers to neglect capital investments [22]. Because capital expenditures are incurred immediately, managers have incentives to avoid such investments in spite of the long-term benefits, so that they can secure impatient capital from transient institutional investors and yet impatient capital cannot support long-term investment.

However, to get more nuanced insight into the behaviour of institutional investors, we added dedicated institutional investors in column 5 of Table 3. The coefficient for dedicated institutional ownership that captures insensitive institutional investors is significant and positive (coefficient = 0.0591; p-value < 0.05). This finding suggests that pressure-insensitive or dedicated institutional investors mitigate myopic investment tendencies of corporate boards and managers as they promote investee companies to invest in long-term value creation projects. A higher percentage of dedicated institutional investors implies greater monitoring on myopic managers, thereby lowering the managers' myopic behavior. The results of the study confirm that, as the significance level of the coefficient of CEO age is lowered after adding dedicated institutional investors to the model. Acharya, Myers and Rajan (2011) theorize that older CEOs near retirement are myopic and thus need external corporate governance to mitigate agency problems. This finding supports the works of prior researchers who found that managers were more likely to invest in research and development and capital investments when the firm was owned by institutional investors who had a long-term orientation [89], [90], in particular, dedicated institutional investors [11]. Overall, the findings of this study parallel Bushee's (1998), who found out that transient institutional investors exacerbate managerial short-termism, whereas dedicated institutional investors mitigate managerial short-termism. Overall, the evidence reveals that directors and executives cannot manage for the long-term when their shareholders furiously trade their companies' shares.

In line with expectation, this study did find that independent non-executive directors positively affected capital investment decisions and lower the managers' myopic behaviour as the results confess by lowering the significance levels of the variables that capture CEO age [83]. Literature argues that independent board members lack the time and ability to absorb the vast amounts of information required to understand the operations of their companies [40]. However, contrary to Porter's (1992) view, the results suggest that independent non-executive board members counterbalance transient institutional investors' myopic dominance and play a crucial role in limiting short-termism. Such results support the resource dependence perspective, which illustrates that independent directors assist a firm to guard against the external environment, uncertainties and as a consequence, enhance the firm's value creation process. Additionally, the results of this study support the findings of a study conducted by Ben-Amar and André (2006), who

found a significant association between the proportion of unrelated directors and excess returns announced by the acquiring firm. Furthermore, Osma (2008) noted that independent directors have sufficient knowledge to identify opportunistic reductions in R&D and to efficiently constrain myopic R&D spending. This is because the independent board members are appointed based on their reputation, expertise and industry network that the firm can leverage for value creation since they perform important functions for the organisations, for example, voting on major operation proposals, hiring the CEO and offering expert advice. Overall, the research finding provides empirical support to the 2010 UK Corporate Governance Code and King III report of 2009 that propose that the board should be dominated by independent directors in order to mitigate short-termism.

The current study found that related directors are more likely to reduce capital investments. This result confirms the notion that outside-related directors are associated with more short-term behaviour, such as reduced R&D spending and under-pricing of initial public offerings [56] and, as a consequence, corporate governance literature, in particular, King III report of 2009 and 2010 UK Corporate Governance Code recommend that unrelated directors should dominate the board. The Enron scandal and the 2007-8 global financial crisis, provide damning evidence of weak board oversight [49], [91]–[93], with some board of directors, in particular, related directors appearing to forget that fiduciary responsibility is the first line of defence against corporate short-termism [47]. This result confirms the argument that short-termism is a crisis that replicates corporate governance crisis [47].

Last but not least, results in Tables 3-7 indicate that the coefficient of the leverage ratio is significant and positively affects longer term capital investments of corporations. The results support the notion that bank-based systems as opposed to stock-market based systems are less prone to short-termism [22]. The nature and duration of banks' corporate client relationships is usually considered as a driver to corporate short-termism. This is possible given that banks through long-term client relationships participate in corporate decision making when granting loans and thus take a longer term view of corporate success. Banks' relationships with corporate clients are usually maintained till the loan matures, which normally exceeds a duration of one year. Consequently, corporations invest in long-term capital goods that generate long-term returns.

CONCLUSIONS AND RECOMMENDATIONS

This study addressed short-termism, which is a hot corporate governance issue. Despite the increasing concerns about short-termism in the global finance world, there is little agreement on the sources of short-termism. However, it is crucial to investigate the effects of institutional investors and corporate board oversight on this phenomenon in the Zimbabwean economy. Discussions regarding the causes of short-termism are most prevalent in the Anglo-Saxon context among regulators, researchers, policy makers, academics and practitioners. This paper investigated the effects of institutional investors and corporate boards on short-termism using panel data from 36 listed firms in Zimbabwe during the stabilisation and recovery period.

The results reported in this paper confirmed some conclusions from prior studies carried out in developed markets, as well as extending our understanding of the effects of institutional investors and corporate boards on short-termism by introducing new empirical evidence from Zimbabwe. First, the results show that transient or pressure-sensitive institutional investors exacerbate the myopic behaviour of managers as they encourage managers to underinvest in capital projects. However, dedicated or pressure-insensitive institutional investors mitigate the myopic behaviour of short-sighted managers. This observation is in line with Bushee's (1998) findings.

Second, as expected, the results indicate that board independence mitigate short-termism in the Zimbabwean

context. The results support the assertion that when there is corporate governance crisis there is also short-termism crisis. Given that situation, it is worth noting that good corporate governance, through board independence, alleviates the problem of short-termism in the economy.

This paper contributes to extant literature on the role of institutional investors and corporate boards in influencing short-termism. The behaviour of institutional investors and corporate boards is considered an important source of information for investment policy formulation and implementation. This study can be considered a base-line study and one of the logical extensions could be to identify and discuss other determinants of short-termism, such as CEOs' attributes and organisational slack resources.

A series of limitations to the current study must, however, be mentioned. These limitations, in turn, provide avenues for future research. First, the study data may lack the required depth to provide a deeper understanding of the phenomenon being studied as it is only limited to listed companies in Zimbabwe from 2010 to 2018. Second, the results in the study may suffer from survivorship bias as companies that delisted from the Zimbabwe Stock Exchange between 2010 and 2018 were excluded from the sample since the study relied on a balanced panel data. Last but not least, the results reported in the study depend on secondary data. Further research on short-termism may be conducted to elicit primary data that determine more insights from the capital market players. Such a research would be more valuable, for example, specifically designed researches that use the survey method through interviews and questionnaires would assist in this regard.

REFERENCES

1. R. Rieg, 'Dynamics of value-based management : does shareholder value cause short-termism ?', *J. Manag. Control*, vol. 26, no. 2, pp. 193–224, 2015, doi: 10.1007/s00187-015-0211-4.
2. M. T. Jacobs, 'Short-term America: the causes and cures of business myopia.', Boston. Harvard Bus. Sch. Press, 1991.
3. T. Brunzell, E. Liljebloom, and M. Vaihekoski, 'Short-term Expectations in Listed Firms : The Effects of Different Owner Types', *J. Int. Financ. Manag. Account.*, vol. 26, no. 3, pp. 223–256, 2015.
4. J. Pogach, 'Short-termism of executive compensation', *J. Econ. Behav. Organ.*, vol. 148, pp. 150–170, 2018, doi: 10.1016/j.jebo.2018.02.014.
5. X. Chen, Q. Cheng, A. K. Lo, and X. Wang, 'CEO contractual protection and managerial short-termism', *Account. Rev.*, vol. 90, no. 5, pp. 1871–1906, 2015, doi: 10.2308/accr-51033.
6. J. Alexander, 'Short-Termism and Corporate Myopia : The Values Assigned by the Market to Short-Term and Long-Term Firms', *CMC Senior Theses*. 1499, 2017. [Online]. Available: http://scholarship.claremont.edu/cmc_theses/1499
7. D. A. Kern and M. White, 'A matter of strategic mis-fit: Management myopia and value destruction', Oklahoma State University, 2006.
8. Z. Sanad, R. Shiwakoti, and G. Kukreja, 'The Role of Corporate Governance in Mitigating Real Earnings Management: Literature Review', *KnE Soc. Sci.*, vol. 2019, no. 1999, pp. 173–187, 2019, doi: 10.18502/kss.v3i25.5197.
9. S. H. Abedin, H. Haque, T. Shahjahan, and N. Kabir, 'Institutional Ownership and Firm Performance : Evidence from an Emerging Economy', *J. risk Financ. Manag.*, vol. 15, pp. 1–17, 2022.
10. B. Kabaciński, J. Mizerka, and A. Stróżyńska-Szajek, 'Institutional investors and real earnings management: A meta-analysis', *Econ. Bus. Rev.*, vol. 8, no. 2, pp. 50–79, 2022, doi: 10.18559/ebr.2022.2.4.
11. B. J. Bushee, 'the influence of institutional investors on myopic R&D investment behaviour', *J. Account. Rev.*, vol. 73, pp. 305–333, 1998.
12. B. J. Bushee, 'Scholarly Commons Do Institutional Investors Prefer Near-Term Earnings Over Long-Run Value ? Do Institutional Investors Prefer Near-Term Earnings Over Long-Run Value ?', vol. 18, pp. 207–246, 2001.

13. B. J. Bushee, M. E. Carter, and J. Gerakos, 'Institutional investor preferences for corporate governance mechanisms', *J. Manag. Account. Res.*, vol. 26, no. 2, pp. 123–149, 2014.
14. J. Tong and F. . Zhang, 'Does the Capital Market Punish Managerial Myopia ?', *FIRN Res. Pap.*, 2014.
15. J. Oehmichen, S. Firk, M. Wolff, and F. Maybuechen, 'Standing out from the crowd : Dedicated institutional investors and strategy uniqueness', *Strateg. Manag. J.*, vol. 42, pp. 1083–1108, 2021, doi: 10.1002/smj.3269.
16. A. Edmans, 'Blockholder Trading , Market Efficiency , and Managerial Myopia', *J. Finance*, vol. 64, no. 6, pp. 2481–2513, 2009.
17. A. Edmans, V. W. Fang, and K. A. Lewellen, 'Equity Vesting and Managerial Myopia *', pp. 1–54, 2013.
18. B. Guanyu, 'CEO Decision Horizon and firm performance- Evidence from Chinese Listed Firms', *Concordia University School of Graduate Studies*, 2017.
19. L. A. Bebchuk, 'THE MYTH THAT INSULATING BOARDS SERVES LONG-', *Columbia Law Rev.*, vol. 113, pp. 1637–1694, 2013.
20. Q. Cao, M. Ju, J. Li, and C. Zhong, 'Managerial Myopia and Long-Term Investment : Evidence from China', *Sustain. MDPI*, vol. 15, no. 708, pp. 1–20, 2022.
21. Q. Chen, X. Gao, S. Niu, and X. Wang, 'Local-province chief executive officer and managerial myopia : Evidence from China', *Front. Psychol.*, no. September, pp. 1–25, 2022, doi: 10.3389/fpsyg.2022.966996.
22. EBA, 'EBA REPORT ON UNDUESHORT-TERM PRESSURE FROM THE FINANCIAL SECTOR ON CORPORATIONS', 2019.
23. Ernst and Young, 'Short-termism in business: causes, mechanisms and consequences', 2014. [Online]. Available: [www.ey.com/publication/vwLUAssets/EY_Poland_Report/\\$FILE/Short-termism_raport_EY.pdf](http://www.ey.com/publication/vwLUAssets/EY_Poland_Report/$FILE/Short-termism_raport_EY.pdf)
24. A. Felstead, 'Tracing the connections : short-termism , training and recession recession', *Int. J. Hum. Resour. Manag.*, vol. 5192, pp. 1–19, 2018, doi: 10.1080/09585192.2016.1184176.
25. M. Harber, 'The role of institutional investors in promoting long-term value creation : A South African perspective', vol. 9, no. 1, pp. 272–291, 2017.
26. D. Marginson and L. Mcaulay, 'EXPLORING THE DEBATE ON SHORT-TERMISM : A THEORETICAL AND EMPIRICAL ANALYSIS', *Strateg. Manag. J.*, vol. 29, pp. 273–292, 2008, doi: 10.1002/smj.
27. J. W. Ridge, D. Kern, and M. A. White, 'The influence of managerial myopia on firm strategy', *Manag. Decis.*, vol. 52, no. 3, pp. 602–623, 2014, doi: 10.1108/MD-01-2013-0037.
28. H. Ullah, H. A. Shah, and M. Siddique, 'Managerial Myopia , Capital Market Reaction and Compensation Policy (A CSR and Marketing Perspectives)', *Int. J. Innov. Creat. Chang.*, vol. 14, no. 12, pp. 1031–1055, 2020.
29. G. Gupta, J. Mahakud, and B. Debata, 'Impact of CEO's characteristics on investment decisions of Indian listed firms: Does crisis make any difference?', *Cogent Econ. Financ.*, vol. 6, no. 1, pp. 0–15, 2018, doi: 10.1080/23322039.2018.1439258.
30. R. Saunders, 'The politics of resource bargaining, social relations and institutional development in Zimbabwe since independence', *UNRISD Working Paper*, No. 2019-1, United Nations Research Institute for Social Development (UNRISD), Geneva, 2019.
31. L. R. Kabbach-de-castro, G. Kirch, and R. Matta, 'Do internal capital markets in business groups mitigate firms ' financial constraints ?', *J. Bank. Financ.*, vol. 143, p. 106573, 2022, doi: 10.1016/j.jbankfin.2022.106573.
32. K. J. M. Cremers, A. Pareek, and Z. Sautner, 'Short-Term Investors, Long-Term Investments, and Firm Value', *SSRN Electron. J.*, 2018, doi: 10.2139/ssrn.2720248.
33. C. Dreyer and O. Schulz, 'Investor horizons and corporate policies under uncertainty', *Rev. Financ. Econ.*, no. September 2020, pp. 5–19, 2022, doi: 10.1002/rfe.1129.
34. C. H. Kim and S. Kim, 'Once Dedicated , Always Dedicated ? Long-Term Effects of Dedicated Ownership by Institutional Investors', no. 012, 2020.

35. L. L. Dallas, Short-Termism , the Financial Crisis , and Corporate Governance, vol. 37, no. 2. 2012.
36. J. Callen and X. Fang, ‘Institutional investor stability and crash risk: Monitoring versus short-termism?’, *J. Bank. Financ.*, vol. 37, pp. 3047–3063, 2013.
37. A. L. Berger, ‘Loosening the Long-Only Leash’, 2007.
38. H. Kim and K. Park, ‘Institutional Investment Horizons and Corporate Innovation’, 2015.
39. J. Chowdhury, ‘Managerial Myopia : A New Look’, *SSRN Electron. J.*, 2011, [Online]. Available: <http://ssrn.com/abstract=1991429>
40. M. E. Porter, ‘Capital choices: Changing the way America invests in industry’, *J. Appl. Corp. Financ.*, vol. 5, no. 2, pp. 4–16, 1992.
41. J. Harford, A. Kecskés, and S. Mansi, ‘Do Long-Term Investors Improve Corporate Decision Making ?’, Unpubl. Manusc., pp. 1–67, 2014.
42. X. Chen, J. Harford, and K. Li, ‘Monitoring: Which institutions matter?’, *J. financ. econ.*, vol. 86, no. 2, pp. 279–305, 2007.
43. H. . Gao, Z. . Shen, Y. . Li, X. . Mao, and Y. . Shi, ‘Institutional investors , real earnings management and cost of equity : Evidence from listed high-tech firms in China . Emerging Markets Finance and Trade , The material cannot be used for any other purpose without further permission of the publisher and’, *Emerg. Mark. Financ. Trade*, vol. 56, no. 14, pp. 3490–3506, 2020, doi: 10.1080/1540496x.2019.1650348.
44. X. Jiang and Q. Yuan, ‘PT’, *J. Corp. Financ.*, 2017, doi: 10.1016/j.jcorpfin.2017.09.019.
45. J. Bena, M. . Ferreira, P. Matos, and P. Pires, ‘Are foreign investors locusts? The long-term effects of foreign institutional ownership.’, *J. financ. econ.*, vol. 126, pp. 122–46, 2017.
46. RBZ, ‘Lifting of temporary suspension of lending by banks’, May 2022.
47. M. S. Salter, ‘How Short-Termism Invites Corruption ... And What to Do About It ... AND WHAT TO DO ABOUT IT’, *Edmond J. Safra Work. Pap.*, no. 5, 2013.
48. C. Paquette, ‘PROMOTING THE LONG-TERM MANAGEMENT OF PUBLIC CORPORATIONS THROUGH A REFORM OF CANADIAN CORPORATE LAW’, *Appeal*, vol. 24, pp. 19–44, 2019.
49. D. Barton and M. Wiseman, ‘Focusing capital on the long term’, *Harv. Bus. Rev.*, vol. Jan-Feb, pp. 1–5, 2014, doi: <https://doi.org/10.1353/abr.2012.0147>.
50. R. Leblanc, ‘Corporate governance and board effectiveness 2.0’, *Int. J. Bus. Gov. Ethics*, vol. 3, no. 2, pp. 106–112, 2007, doi: 10.1504/IJBGE.2007.012605.
51. K. Mcneil and K. Johnson, ‘Michigan Business & Entrepreneurial Law Review The Elephant in the Room : Helping Delaware Courts Develop Law to End Systemic Short-Term Bias in Corporate Decision-Making THE ELEPHANT IN THE ROOM : HELPING DELAWARE COURTS DEVELOP LAW TO END SYSTEMIC SHORT’, *Michigan Bus. Entrep. Law Rev.*, vol. 8, no. 1, pp. 1–28, 2018.
52. M. Conyon, W. Q. Judge, and M. Useem, ‘Corporate Governance and the 2008–09 Financial Crisis’, *Corp. Gov. An Int. Rev.*, vol. 19, no. 5, pp. 399–404, 2011, doi: 10.1111/j.1467-8683.2011.00879.x.
53. S. Pathan, M. Haq, R. Faff, and T. Seymour, ‘Institutional Investor Horizon and Bank Risk-taking Institutional Investor Horizon and Bank Risk-taking’, 2021.
54. A. Gonzalez and P. André, ‘Board Effectiveness and Short Termism’, *J. Bus. Financ. Account.*, vol. 41, no. 1–2, pp. 185–209, 2014.
55. B. G. Osma, ‘board independence and real earnings management: The case of R&D expenditure. Corporate Governance’, *An Int. Rev.*, vol. 16, no. 2, pp. 116–131, 2008.
56. J. . Arthurs, R. . Hoskisson, L. . Busenitz, and R. . Johnson, ‘Managerial agents watching other agents: multiple agency conflicts regarding underpricing in IPO firms.’, *Acad. Manag. J.*, vol. 51, no. 2, pp. 277–294, 2008.
57. B. . Baysinger and R. . Hoskisson, ‘Diversification strategy and R&D intensity in multiproduct firms’, *Acad. Manag. J.*, vol. 32, no. 2, pp. 310–332, 1989.
58. G. Kanyenze, P. Chitambara, and J. Tyson, ‘THE OUTLOOK FOR THE ZIMBABWEAN ECONOMY’, no. September. SET, 2017.
59. F. Di Tommaso and A. Gulinelli, ‘Corporate Governance and Economic Performance : The Limit of Short Termism’, *Financ. Mark. institutions risks*, vol. 3, no. 4, pp. 49–61, 2019.

60. K. J. M. Cremers, L. P. Litov, and S. M. Sepe, 'staggered boards and firm value', 2013.
61. RBZ, 'MONETARY POLICY STATEMENT BY GOVERNOR RESERVE BANK OF ZIMBABWE " ECONOMIC TRANSFORMATION THROUGH TRANSPARENCY AND ACCOUNTABILITY "', no. January, 2014.
62. Report of the Commission of Inquiry, 'Report of the Commission of Inquiry into the conversion of insurance and pension values from the Zimbabwean Dollar to the United States Dollar', Harare, 2017.
63. M. A. Abernethy, J. A. N. Bouwens, and L. V. A. N. Lent, 'The Role of Performance Measures in the Intertemporal Decisions of Business Unit Managers *', *Contemp. Account. Res.*, vol. XX, no. X, pp. 1–40, 2012, doi: 10.1111/j.1911-3846.2012.01178.x.
64. M. R. DesJardine, 'The causes and consequences of corporate short-termism', *Electronic Thesis and Dissertation Repository*. 3784, 2016. [Online]. Available: <https://ir.lib.uwo.ca/etd/3784>
65. R. . Kleinknecht, 'Organizational antecedents of managerial short-termism', 2018.
66. J. Asker, J. Farre-Mensa, and A. Ljungqvist, 'Corporate investment and stock market listing: A puzzle?', *Rev. Financ. Stud.*, vol. 28, no. 2, pp. 342–390, 2015.
67. T. Ladika and Z. Sautner, 'Managerial short-termism and investment: Evidence from accelerated option vesting', 2016.
68. G. . Martin, R. M. Wiseman, and L. . Gomez-Mejia, 'Going short-term or long-term? CEO stock options and temporal orientation in the presence of slack.', *Strateg. Manag. J.*, vol. 37, no. 12, pp. 2463–2480, 2016.
69. U. Malmendier and G. Tate, 'Behavioral CEOs: The Role of Managerial Overconfidence', *J. Econ. Perspect.*, vol. 29, no. 4, pp. 37–60, 2016, doi: 10.1257/jep.29.4.37.
70. Q. Zhang, 'Corporate governance , institutional investors and firm performance : A comparative study of South Africa and China', Stellenborsch University, 2016.
71. M. . Ferreira and P. Matos, 'The colors of investors' money: the role of institutional investors around the world', *J. financ. econ.*, vol. 88, pp. 499–533, 2008.
72. G. Cespa, 'short-term investment and equilibrium multiplicity', *Eur. Econ. Rev.*, vol. 46, no. 9, pp. 1645–1670, 2002.
73. M. Alhadab and T. Nguyen, 'corporate diversification and accrual and real earnings management: A non-linera relationship', *Rev. Account. Financ.*, vol. 17, no. 2, pp. 198–214, 2018.
74. P. M. Dechow and R. Sloan, 'executive incentives and the horizon problem: an empirical investigation', *J. Account. Econ.*, vol. 14, pp. 51–89, 1991.
75. D. Roodman, 'How to do xtabond2: An introduction to difference and system GMM in Stata', *Stata J.*, vol. 9, no. 1, pp. 86–136, 2009, doi: 10.1177/1536867×0900900106.
76. D. N. Gujarati, *Basic Econometrics*. New York: McGraw-Hill, 2003.
77. D. J. Denis, P. Hanouna, and A. Sarin, 'Is there a dark side to incentive compensation?', *J. Corp. Financ.*, vol. 12, no. 3, pp. 467–488, 2006.
78. V. Dill, U. Jirjahn, and S. C. Smith, 'Do foreign owners favour short-term profit? Evidence from Germany.', *Cambridge J. Econ.*, vol. 40, no. 1, pp. 123–140, 2016.
79. W. Shi, B. L. Connelly, and R. . Hoskisson, 'External corporate governance and financial fraud: Cognitive evaluation theory insights on agency theory prescriptions', *J. Manage.*, vol. 38, no. 6, pp. 1268–1286, 2017.
80. R. Sampson and Y. Shi, 'Are investor time horizons shortening?', *Seattle Univ. Law Rev.*, vol. 41, no. 2, pp. 543–550, 2018.
81. H. Sakawa, 'Institutional Ownership and Firm Performance under Stakeholder-Oriented Corporate Governance', *Sustain. MDPI*, vol. 12, pp. 1–21, 2020.
82. M. Kaldonski, T. Jewartowski, and J. Mizerka, 'capital market pressure, real earnings management, and institutional ownership stability–Evidence from Poland.', *Int. Rev. Financ. Anal.*, vol. 71, p. 101315.<https://doi.org/10.1016/j.irfa.2019.01.009>, 2020.
83. V. . Acharya, S. C. Myers, and R. G. Rajan, 'The internal governance of firms', *J. Finance*, vol. 66, no. 3, pp. 689–720, 2011.
84. I. E. Brick, D. Palia, and Y. Qiao, 'IMPACT OF INTERNAL GOVERNANCE ON A CEO ' S INVESTMENT', in Unpublished manuscript, 2021, pp. 1–55.

85. C. S. Tuggle, D. G. Sirmon, C. R. Reutzel, and L. Bierman, 'Commanding board of director attention: Investing how organizational performance and CEO duality affect board members' attention to monitoring', *Strateg. Manag. J.*, vol. 31, no. 9, pp. 946–968, 2010.
86. D. Walker, 'The challenge of improving the long-term focus of executive pay', *Bost. Coll. Law Rev.*, vol. 51, no. 2, pp. 435–472, 2010.
87. T. Mavruk and E. Carlsson, 'How long ia a long-term firm investment in the presence of governance mechanisms?', *Unpubl. Manusc.*, pp. 1–40, 2015.
88. S. Roychowdhury, 'Earnings Management through real activities manipulation', *J. Account. Econ.*, vol. 42, pp. 335–370, 2006.
89. R. . Hoskisson, M. . Hitt, R. . Johnson, and W. Grossman, 'Conflicting voices: the effects of institutional ownership heterogeneity and internal governance on corporate innovation strategies', *Acad. Manag.*, vol. 45, pp. 697–716, 2002.
90. S. A. Wahal and J. . McConnell, 'Do institutional investors exacerbate managerial myopia?', *J. Corp. Financ.*, vol. 6, no. 3, pp. 307–329, 2000.
91. G. Lees and R. Malone, 'Building world-class businesses for the long-term: Challenges and opportunities', London. Chartered INSTITUTE OF MANAGEMENT ACCOUNTANTS, 2011.
92. D. Barton, 'Capitalism for the long-term', *Harv. Bus. Rev.*, vol. 89, no. 3, pp. 84–91, 2011.
93. E. Duruigbo, 'tackling shareholder short-termism and managerial myopia', *Kentucky Law J.*, vol. 100, pp. 531–584, 2012.

APPENDIX

Table I: Descriptive statistics

Variable	Obs.	Mean	SD	Min	Max
Capex	324	0.06	0.06	0.0006	0.424
Inst.	324	0.46	0.23	0.040	0.970
Tenu	324	6.01	3.91	0.500	18.00
ROA	324	0.10	0.13	-0.251	0.817
Div	324	0.40	0.49	0.000	1.000
Age	324	1.43	0.33	0.000	1.857
CFO	324	0.07	0.16	-1.071	0.703
Lev	324	0.51	0.20	0.023	0.993
Size	324	7.80	0.62	6.536	9.229
INEDs	324	0.73	0.45	0.000	1.000
Career	324	10.17	4.54	0.000	20.00

Table 2: Multicollinearity results

	1	2	3	4	5	6	7	8	9	10	11
1. Capex	1.00										
2. Inst	0.03	1.00									
3. Div	0.27	0.20	1.00								
4. Lev	0.05	(0.06)	(0.38)	1.00							
5. CFO	0.27	0.14	0.44	(0.19)	1.00						
6. Age	(0.11)	0.04	0.02	(0.00)	(0.03)	1.00					
7. Career	(0.11)	(0.06)	0.14	(0.13)	0.13	0.24	1.00				
8. Size	0.37	0.41	0.53	(0.13)	0.28	0.07	0.10	1.00			
9. ROA	0.39	0.11	0.52	(0.17)	0.56	0.06	0.12	0.35	1.00		
10. INEDs	(0.02)	0.16	0.18	(0.18)	(0.03)	0.06	0.10	0.05	(0.08)	1.00	
11. Tenu	0.07	0.07	0.12	(0.08)	0.15	0.01	0.20	0.23	0.11	0.00	1.00

Table 3: Sys-GMM results

	(1)	(2)	(3)	(4)
Capex _{i,t-1}	0.275** (0.099)	0.232** (0.110)	0.278*** (0.094)	0.238** (0.104)
Inst _{it}		-0.053** (0.021)		-0.049** (0.023)
INEDs _{it}			0.016** (0.008)	0.015** (0.008)
Tenu _{it}	-0.000 (0.002)	-0.000 (0.002)	-0.000 (0.002)	-0.000 (0.002)
Career _{it}	0.003** (0.001)	0.003** (0.001)	0.003* (0.001)	0.003** (0.001)
Div _{it}	0.017* (0.009)	0.016* (0.008)	0.015 (0.010)	0.014* (0.008)
Lev _{it}	0.123** (0.052)	0.120** (0.051)	0.119** (0.048)	0.119** (0.045)
ROA _{it}	0.079 (0.063)	0.074 (0.060)	0.088 (0.059)	0.081 (0.055)
Age _{it}	-0.112* (0.063)	-0.114** (0.056)	-0.123* (0.067)	-0.127** (0.057)

Size _{it}	-0.046** (0.023)	-0.041* (0.021)	-0.047** (0.021)	-0.041** (0.020)
CFO _{it}	0.074** (0.030)	0.065** (0.028)	0.071*** (0.026)	0.064** (0.025)
_cons	1.175** (0.497)	1.176*** (0.450)	1.218** (0.524)	1.190** (0.469)
m ₁ (p)	0.0516	0.0718	0.0515	0.0689
m ₂ (p)	0.6692	0.5699	0.6586	0.5622
Vif	1.73	1.71	1.69	1.68
Wald test	0.0000	0.0000	0.0000	0.0000
NOB	288	288	288	288

Table 3 continued

	(5)	(6)	(7)	(8)
Capex _{it,t-1}	0.305*** (0.086)	0.256*** (0.097)	0.312*** (0.080)	0.272*** (0.092)
INEDs _{it}	0.021** (0.009)	0.017** (0.008)	0.021** (0.009)	0.019** (0.008)
Career _{it}	0.003 (0.001)	0.003* (0.001)	0.003 (0.002)	0.003* (0.001)
Dedicated _{it}	0.057* (0.031)		0.052* (0.027)	
Transient _{it}		-0.054*** (0.017)		-0.053*** (0.017)
Pol-Eco _{it}			0.008 (0.006)	0.006 (0.007)
Other Controls	Yes	Yes	Yes	Yes
_cons	1.04* (0.571)	1.12** (0.500)	0.485** (0.214)	0.554*** (0.208)
m ₁ (p)	0.0423	0.0635	0.0428	0.0563
m ₂ (p)	0.7167	0.6721	0.6981	0.7078
vif	1.76	1.63	1.61	1.58
Wald test	0.0000	0.0000	0.0000	0.0000
NOB	288	288	288	288

Table 3 presents Sys-GMM estimations for the effects of institutional investors and board independence of short-termism of listed companies on ZSE over the period 2010-2018. The dependent variable is Capex which is defined as annual capital expenditures deflated by total assets. Career is the difference between retirement age in Zimbabwe, which is 65 and the number of years since the CEO was born. Inst is the total shareholding of institutional investors. Age the natural log of the number of years since the firm was listed on the ZSE. Size is the natural log of total revenue. Lev is total debt deflated by total assets. CFO is measured as cash flow from operations deflated by total assets. ROA is return on assets measured earnings before interest, tax, depreciation and amortization deflated by total assets. Dividend dummy (Div) takes the value 1 in the year the company paid dividend and zero otherwise. *, **, and *** denote significance at 10%, 5% and 1% respectively, two tailed. Standard errors are reported in parentheses. m₁ (p) and m₂ (p) are tests for first-order and second-order serial correlation in the first differenced residuals, under the null hypothesis of no serial correlation.

Table 4: Sys-GMM results for CEO’s decision horizon and corporate short-termism.

	(1)	(2)	(3)	(4)
Capex _{it,t-1}	0.256** (0.099)	0.217** (0.108)	0.259*** (0.091)	0.224** (0.104)
CEO_DH _{it}	0.002** (0.001)	0.002** (0.001)	0.002** (0.001)	0.001** (0.001)
Inst _{it}		-0.047** (0.023)		-0.044* (0.026)
INEDs _{it}			0.016* (0.008)	0.016* (0.009)
Other Controls	Yes	Yes	Yes	Yes

_cons	0.463*** (0.170)	0.427** (0.173)	0.471*** (0.167)	0.434** (0.168)
m ₁ (p)	0.0558	0.0635	0.0428	0.0563
m ₂ (p)	0.6787	0.6721	0.6981	0.7078
vif	1.76	1.63	1.61	1.58
Wald test	0.0000	0.0000	0.0000	0.0000
NOB	288	288	288	288

Notes: n=288; *significant at 10%; **significant at 5%; ***significant at 1% m₁ (p) and m₂ (p) are tests for first-order and second-order serial correlation in the first differenced residuals, under the null hypothesis of no serial correlation.

Source: Author’s own tabulation using Stata software (version 17.0)

Table 5: Unit root test results

Variable	Levin–Lin–Chu	IM-Perasan-Shin	Hadri-LM stationarity
	Implied order of integration	Implied order of integration	Implied order of integration
Capex	I (0)	I (0)	I (1)
Inst.	I (0)	I (0)	I (1)
Tenu	I (0)	I (0)	I (1)
ROA	I (0)	I (0)	I (1)
age	I (0)	I (0)	I (1)
CFO	I (0)	I (0)	I (1)
Lev	I (0)	I (0)	I (1)
Size	I (0)	I (0)	I (1)
Ceage	I (0)	I (1)	I (1)

Table 6: PCSE regression results

	PCSE (1)	PCSE (2)	PCSE (3)	PCSE (4)
Inst _{it}		-0.041*** (0.014)		-0.043*** (0.014)
INEDs _{it}			0.030* (0.016)	0.037** (0.018)
Tenu _{it}	-0.000 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
Ceage _{it}	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.001)	-0.003*** (0.000)
Div _{it}	0.009 (0.006)	0.007 (0.005)	0.009 (0.006)	0.001 (0.006)
Lev _{it}	0.036** (0.017)	0.036** (0.017)	0.041** (0.018)	0.038** (0.018)
ROA _{it}	0.076* (0.039)	0.081** (0.040)	0.077** (0.039)	0.083** (0.040)
Age _{it}	-0.019* (0.011)	-0.022* (0.012)	-0.026** (0.013)	-0.024* (0.012)
Size _{it}	0.025*** (0.007)	0.033*** (0.008)	0.023*** (0.006)	0.032*** (0.007)
CFO _{it}	0.041*** (0.014)	0.037*** (0.014)	0.046*** (0.014)	0.041*** (0.014)
_cons	0.021 (0.062)	-0.014 (0.065)	0.030 (0.060)	-0.027 (0.061)
R-squared	0.3270	0.3476	0.3424	0.3668
Wald test	0.0000	0.0000	0.0000	0.0000
NOB	324	324	324	324

Notes: n=324; *significant at 10%; **significant at 5%; ***significant at 1%

Source: Author's own tabulation using Stata software (version 17.0)

Table 7 Robustness analysis: GEE regression results

	(1)	(2)	(3)	(4)
Inst _{it}		-0.031 (0.019)		-0.033* (0.019)
INEDs _{it}			0.014 (0.022)	0.018 (0.022)
Tenu _{it}	-0.000 (0.001)	-0.000 (0.001)	-0.001 (0.001)	-0.000 (0.001)
Ceoage _{it}	-0.002*** (0.001)	-0.002** (0.001)	-0.002* (0.001)	-0.002** (0.001)
Div _{it}	0.013 (0.008)	0.012 (0.008)	0.012 (0.008)	0.011 (0.008)
Lev _{it}	0.060** (0.019)	0.058*** (0.019)	0.061** (0.019)	0.060*** (0.019)
ROA _{it}	0.104*** (0.031)	0.106*** (0.031)	0.104*** (0.031)	0.107*** (0.031)
Age _{it}	-0.0004* (0.000)	-0.0004* (0.000)	-0.0004* (0.000)	-0.0003* (0.000)
Size _{it}	0.020*** (0.008)	0.025*** (0.008)	0.020** (0.008)	0.025*** (0.008)
CFO _{it}	0.048*** (0.020)	0.046*** (0.014)	0.050** (0.021)	0.048*** (0.020)
_cons	-0.038 (0.062)	-0.052 (0.075)	-0.043 (0.077)	-0.060 (0.076)
Wald test	0.0000	0.0000	0.0000	0.0000
NOB	324	324	324	324

Notes: n=324; *significant at 10%; **significant at 5%; ***significant at 1%

Source: Author's own tabulation using Stata software (version 17.0)