

# Effects of Corporate Short-Termism on Organisational Resilience: Evidence from Listed Companies in Zimbabwe

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## ABSTRACT

This study examines the effects of corporate short-termism on organisational resilience, using a unique panel data set on a sample of 36 listed companies purposefully drawn from an array of industries 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 the analysis of panel data. The main results of this study suggest that strategic capital expenditures generate more benefits than tactical capital expenditures. However, additional results reveal that there is no material difference in the benefits generated by TCEs and SCEs when companies invest consistently. More importantly, the results of this study suggest that maintaining a right balance between short-term and long-term goals consistently guarantees organisational resilience.

**Keywords:** Short-termism, organisational resilience, endogeneity, capital expenditures, system generalised methods of moments

## INTRODUCTION

Recently, academics, policymakers and business practitioners have paid attention to the consequences of short-termism for companies, society and the economy at large. The central concern about short-termism is that managers, when making intertemporal choices, overly focus on decisions that discourage long-term capital investments, yet long-term capital investments are the primary ingredients for the long-term success of individual firms and economies [1]. Applied to the economic and finance sectors, short-termism describes a tendency to place too much focus on short-run profitability at the expense of long-run resilience or growth that needs certain types of investment [2]. Ensuring the right balance between short-term and long-term goals is crucial for the sustainability of a business as this forms the ground on which management is founded [3], [4]. However, available evidence indicates that long-term goals have been neglected because of too much focus on short-term performance [3], [5]. Considering that Barton et al. (2017) found that long-term companies continue to invest in difficult times and deliver superior financial performance, it is of great interest to study whether short-termism destroys organisational resilience. Scholars, such as Ortiz-de-Mandojana and Bansal (2016) and Slawinski and Bansal (2015), have linked short-termism to organisational resilience. Nadkarni and Chen (2014) reasoned that intertemporal resource allocation choices are shaped by what managers pay attention to. Given that scenario, managers' short-term orientation, that is, the relative cognitive dominance of the near versus distant future, is a significant determinant of a firm's strategy and competitive advantage [8]. For instance, Brauer (2013) found that short-term orientation negatively impacts on medium-term performance while long-term behaviour is positively related with corporate performance in the medium term. However, little is known empirically in emerging African countries about how short-termism influences organisational resilience.

The relevance of this study emanates from the recognition that the Zimbabwean economy failed to hold on to the strong positive economic growth trajectory that was ushered in by the liberalization of the foreign exchange system in 2009 due to short-termism [9]. The negative effects of short-termism as reflected through massive closure of companies, rising formal unemployment and the parallel foreign currency market instability, are a handicap to Zimbabwe's economic growth and development under vision 2030. For

instance, providing evidentiary support for short-termism in the Zimbabwean economy, data collected in 2017 by World Bank, revealed that the ratio of capital expenditure to gross domestic product in Zimbabwe peaked at 19% in 2010, and then dropped to 17% in 2011. The trend continued and in 2016 it stood at 10%. Additionally, short-termism has choked the performance of Zimbabwean firms, with businesses being saddled with high gearing ratios, antiquated machinery and high labour costs. Having said that, short-termism ultimately leads to destruction of shareholder value and impediments to efforts to strengthen corporate governance [10].

The aim of this paper is to add insights into an understanding of the effects of corporate short-termism on organizational performance. This will be addressed by answering the following research questions:

1. Do strategic capital expenditures (hereafter SCEs) generate slower, but more benefits than tactical capital expenditures (hereafter TCEs)?
2. Is there any material difference between benefits generated by SCEs and TCEs provided companies consistently invest in capital expenditures?

The remainder of this paper proceeds as follows; first, Section II looks at an overview of the literature on effects of short-termism and hypothesis development. 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 few studies have empirically tested the consequences of short-termism [11], there are two lines of thought on the effects of short-termism: those who claim that short-termism destroys value and those who dismiss the idea that short-termism is destructive [12]. On one hand, some researchers have contended that short-termism is not a problem per se [3]. If a company is to survive, short-term goals must be met to some extent [12] to solve agency and liquidity problems [13]. Relatedly, others claim that long-term decisions bear a lot of risks and uncertainties since they have payoffs that are delayed [14]. Under this case, short-term decisions are preferred [15]. More so, other studies are of the view that short-termism is not detrimental to individuals, societies and the economy at large. This is because there is insufficient evidence to substantiate that short-termism is detrimental since it is not being reflected in economy-wide data in the US; the profitability of US companies is not declining [16], [17].

On the contrary, other studies argue that the problem of short-termism occurs when managers fail to balance short- and long-term goals [3], [4], [18], focusing overly on short-term goals at the cost of long-term objectives [18]–[20]. For example, it is argued that US companies as a group under invest in capital expenditures, as well as research and development [17], [21]. According to this contention, this brings benefits to the companies in the short-term, but destroys the firms in the long-run. In a recent study by Barton et al. (2017), it was found that 55% of directors and executives at companies without a strong long-term culture say their company would delay a new project to hit quarterly targets even though it sacrificed some value, which is consistent with findings by Graham, Harvey and Rajgopal (2005). Additionally, Barton et al. (2017) reported that long-term companies exhibit stronger financial performance between 2001 and 2014, added nearly 12000 more jobs than their counterparts between 2001 and 2015 and their return to shareholders was superior with 50% chance that they would be top decile or top quartile by 2014. Similarly, a study by Des Jardine (2016) looked at the effectiveness of strategic social and environmental practices (SSEPs) and tactical social and environmental practices (TSEPs) on organizational resilience using a sample of US firms and found evidence that SSEPs provide more resilience compared to TSEPs.

Companies, however, face a dilemma—whether to pursue long-term goals in line with national economy's

interests or focus on short term goals that parallel managers' and short-term investors' interests. Verstein (2018) argued that both too much obsession on a particular time horizon whether near or far is not good for companies. Souder et al. (2016) found that the most positive returns occur when long horizon investments are aligned with investor patience and yet in certain circumstances short-term decisions must be met for firms to survive. In cognizance of that view, Jack Welch, the former CEO for General Electric argued that management is not only about focusing on either short or long term goals, but balancing those two is what management is [3]. Similarly, Des Jardine (2016) noted that maintaining the right balance between short-term and long-term goals ensures business sustainability. As such, Thakor (2020) found that one-way executives can balance short-term and long-term goals is through selecting capital investments of varying horizons. In the Zimbabwean context, Reserve Bank of Zimbabwe Governor, Dr Mangudya understood better that most companies in Zimbabwe had backlogs of capital expenditures to replace old equipment that had piled during the 'lost years' of hyperinflation [9]. Earlier academics, such as Porter (1992) shared the same insights that investment in capital expenditures allowed companies to enjoy competitive advantages in the global economy.

However, to date there seems to be little research in the African perspective investigating the impact of short-termism on organisational performance. Therefore, this study examines the differential impact of SCEs and TCEs on organisational performance. Without empirically testing such differential impact, researchers cannot be confident in their results on the effects of short-termism of organizational performance.

## **A. Hypothesis development**

### **1. SCEs**

SCEs have always been identified as new capital investments to build new capability, representing a qualitative change to the firm's capability stock, and decision makers enact this change with the intent of broadening the opportunity set available to the firm [25]. In essence, SCEs represent radical innovation and Greenfield projects to meet the needs of emerging customers or markets. They require new knowledge or a departure from existing knowledge, and the payoffs take time to realize and are of higher uncertainty. Not only do firms make new capital investments to build new capabilities, but also improve their performance in the long run, ensuring business sustainability in the end.

### **2. TCEs**

In contrast, TCEs are capital expenditure to maintain, replace and add to the existing stock of capital investments and require no qualitative change to a firm's capability stock. Tactical capital expenditures maintain or increase the quantity of a capability, with the intent of leveraging existing capabilities and competencies [25], and therefore generates immediate benefits with less uncertainty [19], which are not sustainable. However, failure to invest in tactical capital expenditures often results in equipment breakdowns, which negatively affects productivity of firms.

### **3. The relative effects of SCEs and TCEs.**

In reality, firms have to constantly refine their current technologies to ensure stable future profits and maintain market shares and in the meantime, they also must invest in new knowledge and market opportunities to hedge against revolutionary technologies that may reshape the whole industry. March (1991) assumes that maintaining an appropriate balance between strategic and tactical innovation is critical for firm survival and prosperity. Ernst and Young (2014) argued that short-termism is not a problem per se. However, the problem occurs when managers fail to balance short- and long-term goals [4]. The study thus argues that capital investments of different horizons affect organisational performance. Strategic capital

investments generate slower, but more benefits than tactical capital expenditures.

However, there remains the additional puzzle as to whether long-term firms that invest more and more consistently than their short-term counterparts generate quality earnings, which guarantees organisational resilience. From the perspective of Jack Welch, the CEO of General Electric, everybody can manage short, everybody can manage long, and yet balancing those two is what management is founded on. Maintaining the right balance between short-term and long-term goals, therefore, supports organisational performance [4]. Jack Welch understood that, perhaps better than anyone else during his twenty years in office as the CEO for General Electric [3]. During his reign at the helm of General Electric, market capitalisation of General Electric increased by 2800% [3]. And yet, recent experience has shown that instead of ensuring a right balance, long-term goals have been neglected because of too much focus on short-term goals. In order to maintain the right balance between long-term and short-term goals, long-term firms should invest more and more consistently in capital expenditures in order to generate quality earnings [22]. Firms can buy fixed assets either for replacement or innovative purposes. The study argues that replacement capital expenditures, which the study has already argued to be TCEs generate immediate benefits, whereas innovative capital expenditures that the study has posited to be SCEs do not generate immediate benefits. Maintaining the right balance is essential for companies' ability to recover quickly from crises, thrive and survive in the long-term, thus enjoying sustained competitive advantage. In light of the above information, the following overarching hypotheses are formulated:

**Hypothesis 1:** SCEs relatively generate more benefits than TCEs, although SCEs benefits are delayed.

**Hypothesis 2:** there is no material difference between the benefits of SCEs and TCEs when companies consistently invest in both SCEs and TCEs.

## 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 [26]. 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 [26], and in the case of Zimbabwe, the period 2000 to 2008 has witnessed insignificant levels of investment due to hyperinflation[9]. 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 [26]. 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 [9] and feasible for capital investments [26].

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 [3].
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:

1. These companies are large companies relative to non-listed firms in Zimbabwe and through their investments (or lack thereof); therefore, influence in the economy.
2. 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.

### A. Model specifications

$$Ro_{it} = \alpha_0 + \alpha_1 Ro_{i,t-1} + \beta \Sigma Capex_{it-n} + \Sigma(Z_{it}) + \delta_i + \mu_{it} \dots \quad (1)$$

$$Ro_{it} = \alpha_0 + \alpha_1 Ro_{i,t-1} + \beta Capex\_depn_{it-n} + \Sigma(Z_{it}) + \delta_i + \mu_{it} \dots \quad (2)$$

Where  $i$  indexes firms and  $t$  indexes years,  $n$  takes values 0, 1, and 2,  $\delta_i$  is the firm specific fixed effects and  $\mu_{it}$  is the error term.

### 1. Dependent variable: ROA

Given that organizational resilience is a latent variable and cannot be observed directly [14], the study detected its presence through return on assets (Roa) [27].  $it$  represents organizational resilience, which is calculated as earnings before interest, tax, depreciation and amortization deflated by total assets. Profitability is essential for companies to maintain ongoing activity and for its investors to obtain fair returns, but is also crucial for supervisors as it guarantees more resilient solvency ratios, even in the context of riskier business environment. It measures how effectively and efficiently the organisation is able to generate profits from the capital employed. Net profit after all discretionary expenses is considered a firm's major monetary resource and enables a firm to adjust and respond flexibly to changing market conditions. Extant literature on organisational resilience argues that quality profitability is the best indicator of available resources to potentially respond to unexpected economic turbulences. Profitability increases organisational flexibility. More so, within the economic and strategic management literature this variable has been widely used to proxy the economic performance of organisations operating in different industry sectors [1], [27], [28]. On average, higher return on assets indicates higher organisational resilience capability. ROA is often calculated by dividing net income by total assets. However, net income may be a biased measurement of performance for three reasons. First, net income depends on taxation, which firms cannot control. Second, net income depends on leverage, but leverage determines potential slack. Third, the net income of Zimbabwean firms is often distorted due to frequent, related party transactions (especially with majority shareholders or their companies). These transactions are not part of the usual business and its actual performance. To avoid described issues, this study follows the approach of Rafailov (2017) and DesJardine (2016) and measures firm performance by ROA, which reflects cash flow, not accounting decisions. As such, ROA is calculated as earnings before interest, tax, depreciation and amortization deflated by total assets.

## 2. Independent variable: measurement of short-termism (Capex/Capex\_depn)

Measuring short-termism has been a challenge. Some researchers have relied on data collected through surveys [18], [29], whereas others have used text analysis of annual conference scripts [11], [14]. However, we chose capital expenditure as a good proxy measure of short-termism because of its efficacy in capturing behaviour, which is consistent with the theorizing for this study. The choice for this variable is rooted in empirical evidence by prior studies [3], [30]–[33], 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.

The other measure used for this analysis which captures short-termism is measured as the ratio of capital expenditure to depreciation [22], [34]. This measure captures consistency of investment rates in capital expenditures and is proxied as Capex\_depn. This measure is adopted from the Corporate Horizon Index (CHI) of McKinsey Global Institute to measure investment [22].

To get a more nuanced insight into the effects of short-termism on corporate performance, the researcher included the contemporaneous, one-year and two-year lagged terms of Capex and Capex\_depn and examined their combined effects on performance. The contemporaneous terms captures TCEs whereas the two year lagged term captures SCEs.

## 3. Control variables:

$Z_{it}$  represents a vector of other variables that influence organizational resilience. The researcher incorporated the following control variables in the study: firm size, firm age, financial leverage, proximity to bankruptcy, institution investors, cash flows and board size. First, firm size was included as a control variable because it has been found that smaller banks were more resilient than larger ones [35]. This could be as result of the cognitive distance between managers and operations since greater scale of operations, hierarchy and bureaucracy was found to reduce slack resources important for resilience of organizations [36]. Size is the natural logarithm of total sales.

I also include age of the firm (Age), as past research shows that older firms were more resilient [14], [37], which is probably related to the fact that older companies might be more likely to acquire other resources that were not of interest but helped them manage negative events (for instance, human capital). In line with that, Desjardine, Bansal and Yang (2019) argued that resilience is a path-dependent quality: those companies that experienced prior adversity become more capable of managing adversity over time. I calculated Age as the natural logarithm of one plus the number of years since the company was first listed.

Additionally, I include financial leverage (Lev), as prior studies have shown that in crises, investors tend to flock to safe companies that have lower leverage ratios which support the companies' recovery. In the same vein, borrowing insights from the banking sector, bank leverage ratios are seen as a micro-prudential measure that intends to increase bank resilience. Therefore, we include leverage to control for the fact that highly leveraged firms are less resilient and vice-versa. Leverage is the sum of long-term debt divided by the book value of total asset. Lower leverage ratio indicates a smaller proportion of financing from debt.

Proximity to bankruptcy captures a company's distance from bankruptcy using Altman Z-score. A higher value indicates a lower risk of financial distress, which guarantees organisational resilience and yet, a lower value indicates greater financial distress that might cause firms to fail to recover or survive from crises.

Board size (BS) is the number of board members on the corporate board, which is a covariate for corporate governance. Larger boards may encounter communication and coordination problems that reduce their effectiveness as they take time to make decisions, making it difficult to provide solutions to urgent problems

especially in the presence of moral hazards, hence compromising the resilience capability of firms.

Cash flow is the lifeblood of the business as it can easily be allocated within a firm and this makes it an appropriate source of financing for new ventures and increasing the potential for the long-term success of the company. As such, the following are the positive effects of cash flow: greater resilience to external shocks, curbing internal conflicts and facilitating innovation and development. More so, cash flow creates more strategic options for firms to obtain competitive advantages because it provides resources to exploit opportunities when the external environment changes. This strategic advantage is highly valuable in economic downturns and crises since firms with financial slack can obtain resources for a price below their economic value.

Institutional ownership is the percentage of shares held by institutional investors [38]. Institutional investors provide a stable source of long-term capital that guarantees organisational resilience and it is argued that long-term institutional investors are less myopic and believe that things will stabilise in the future and thus provide good governance to firms that foster their resilience [38]. However, short-term institutional investors are myopic and do not invest for the long-term, which may deplete the resilience capability of firms [39], [40]. Therefore, we include institutional investors to control for the impact of institutional investors on organisational resilience.

## ANALYSES AND EMPIRICAL RESULTS

This section presents the empirical results on the effects of corporate short-termism on organisational resilience of firms in Zimbabwe, in particular, how capital expenditures influenced Zimbabwean firms to bounce back and bounce forward after the hyperinflationary period (2000-2008) and the 2007-2009 global financial crisis. The analysis was conducted using an econometric analysis of pooled cross-sectional time series of 36 listed Zimbabwean firms over the period from 2010 to 2018. Annual panel data from 2010 to 2018 was used to examine the effects of corporate short-termism on organisational resilience of firms in Zimbabwe. The balanced panel data regression estimation technique was used. The econometric analysis begins with descriptive statistics, followed by diagnostic tests, and presentation and discussions of the results.

### A. Descriptive statistics

**Table 1: Descriptive Statistics**

Variable	N	Mean	SD	MIN	MAX
capex	324	0.059	0.059	0.006	0.424
Lev	324	0.505	0.202	0.023	0.993
CFO	324	0.071	0.163	-1.071	0.703
Age	324	1.427	0.331	0.000	1.857
Size	324	7.804	0.618	6.536	9.229
BS	324	8.867	2.113	4.00	16.00
Inst	324	0.459	0.226	0.040	0.970
Altam_Z	324	1.556	1.229	-2.362	4.664
ROA	324	0.103	0.127	-0.251	0.817
Capex_depn	324	1.824	1.427	0.027	8.428

Table 1 presents descriptive statistics of the dependent and independent variables used. Descriptive statistics have widely been used in researches related to managerial short-termism [11], [14]. The descriptive

statistics results show that the mean values for capital expenditures is 6% of total assets, which is comparable to the mean value found by DesJardine (2016) of 5%. 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. This figure shows that they 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. Zimbabwean firms generate profits at an average rate of 10%. The average age of firms is 35 years. More so, the average Altman Z-score is 1.56, which shows that sampled firms were financially constrained. The average board size is almost 9 members.

**B. 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.

**C. Multicollinearity test results**

Table 2 provides Pearson correlations for each independent variable used to examine the effects of managerial short-termism on organisational resilience. The researcher ran the multicollinearity test, and the results in Table 2 suggest that the 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 (Gujarati, 2003).

**Table 2: correlation matrix**

	Capex	Inst	ROA	Lev	Age	Size	CFO	BS	Altman_Z	Capex_depn
Capex	1.00									
Inst	0.0290	1.000								
ROA	0.3925	0.1131	1.0000							
Lev	0.0486	-0.0557	-0.1700	1.0000						
Age	-0.1054	0.0394	0.0628	-0.0042	1.0000					
Size	0.3744	0.4099	0.3491	-0.1348	0.0653	1.0000				
CFO	0.3777	0.0278	0.5975	-0.1370	0.0219	0.2987	1.0000			
BS	0.2296	0.3886	0.1014	-0.1619	0.1999	0.4381	0.1313	1.0000		
Altman_Z	0.1465	0.0300	0.5631	-0.4009	-0.0137	0.3658	0.2794	-0.0316	1.0000	
Capex_depn	0.7392	0.0118	0.2029	0.0496	-0.0370	0.2192	0.1474	0.1803	0.0936	1.0000

**D. Regression results for effect of short-termism on organizational resilience**

**Table 3: System-GMM Regression results for effect of short-termism**

model	(1)	(2)	(3)	(4)
ROA <sub>i,t-1</sub>	0.297*** (0.078)	0.321*** (0.113)	0.287*** (0.075)	0.320** (0.127)
Capex <sub>i,t</sub> (TCEs)	0.189* (0.106)			0.220* (0.116)
Capex <sub>i,t-1</sub>		-0.123 (0.139)		-0.120 (0.120)



Capex <sub>i,t-2</sub> (SCEs)			0.400*** (0.084)	0.363*** (0.085)
Lev <sub>i,t</sub>	0.101 (0.102)	0.072 (0.062)	0.099 (0.072)	0.045 (0.042)
CFO <sub>i,t</sub>	0.195*** (0.086)	0.249*** (0.065)	0.259*** (0.069)	0.239*** (0.068)
Altman_Z <sub>i,t</sub>	0.045*** (0.016)	0.050*** (0.015)	0.048*** (0.011)	0.047*** (0.011)
Age <sub>i,t</sub>	0.042 (0.058)	0.039 (0.063)	0.087 (0.070)	0.071 (0.062)
Size <sub>i,t</sub>	-0.00294	-0.003225	-0.005044	-0.075 (0.046)
BS <sub>i,t</sub>	0.005 (0.009)	0.003 (0.007)	-0.002 (0.005)	-0.004 (0.006)
Inst <sub>i,t</sub>	0.090 (0.087)	0.109 (0.074)	0.051 (0.115)	0.098 (0.136)
Cons	0.332 (0.288)	0.395 (0.271)	0.553* (0.329)	0.413 (0.297)
m <sub>1</sub> (p)	0.0281	0.0245	0.0146	0.0200
m <sub>2</sub> (p)	0.4641	0.4378	0.8912	0.7296
N	324	288	252	252

The Table presents Sys-GMM estimations of effect of short-termism on organizational resilience of listed companies on ZSE over the period 2010-2018. The dependent variable is ROA.  $m_1(p)$  and  $m_2(p)$  are tests for first-order and second-order serial correlation in the first differenced residuals, under the null hypothesis of no serial correlation, \*significant at 10%; \*\*significant at 5%; \*\*\*significant at 1%. Robust standard errors are reported in parentheses.

Table 3 presents the regression results obtained from two-step Arellano-Bover/Blundell-Bond System GMM for model 1. Columns 1, 2 and 3 of Table 3 examine the contemporaneous, one-year and two-year lagged effects of capital expenditure on firm performance, respectively, whereas column 4 of Table 3 examines their combined effects. To address the threat of collinearity, the researcher computed the average variance inflation factor for all variables. For all the equations, the maximum variance inflation factor is 2.07, which is below 10, an accepted rule of thumb against which collinearity becomes a problem. The results for this diagnostic test do not raise collinearity problems. The p-values of  $m_1$  test statistic indicate that there is serial correlation in the potentially endogenous explanatory variables and the p-values of  $m_2$  test statistic indicate that very little unobserved firm-specific effects exist in the estimation results among unobserved sources of endogeneity. I checked the number of instruments in all the models and they were less than the number of cross-sectional units (N = 36). Roodman (2006) noted that too many instruments can lead to over-fitting the exogenous variables, where the instruments fail to extract the endogenous components. The maximum lag of the dependent variable is restricted to one in all the models in order restrain the number of moment conditions. 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 ROA with current ROA in all the models implies its persistent effect in the performance of firms, which in turn, indicates that past resilience begets more resilience. 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  $m_2$  test checks the specification of the model by evaluating the validity of t-2 variables as instruments.

I tested the hypothesised relationships in Section II (A) by including both contemporaneous and lagged terms of capital expenditures to capture TCEs and SCEs in our models. This approach helped us to isolate the effects of one type of capital expenditures. First, in models 1, 2, 3 and 4 in Table 3, there is a reversal on the effect of capital expenditure on firm performance. Contemporaneous capital expenditure relates positively with firm performance both in isolation (model 1 1:  $\beta = 0.189$  |  $p < 0.10$ ) and in combination (model 4:  $\beta = 0.22$  |  $p < 0.10$ ). This finding suggests that TCEs help firms to recover quickly and thus build resilience [21]. Then, the beta coefficient of one-year lagged capital expenditure failed to meet the significance test. Though not significant, a negative effect suggests that, on one hand, the timing effect of

SCEs is not one period delay; and on the other hand, the benefits from TCEs are not prolonged into the future. However, there is a significant positive effect of two-year lagged capital expenditure on firm performance and results from model 3 ( $\beta = 0.400 \mid p < 0.001$ ) and model 4 ( $\beta = 0.363 \mid p < 0.001$ ) of Table 3 show that, suggesting that firms that build a portfolio of strategic SCEs generate more benefits and improve performance [5]. Overall, the above results support hypothesis 1, suggesting that SCEs generate slow but more benefits than TCEs. The results in model 4 of Table 3 indicate that a one standard deviation in SCEs increases firm performance by roughly 17%, whereas a one standard deviation in TCEs increases firm performance by around 10%. In this case, we, therefore, conclude that the effect of SCEs on organizational performance is larger than the effect of TCEs both in terms of statistical as well as economic significance. Thus, the results indicate that capital expenditures of different horizons have a differential temporal lags causal effect on organisational performance.

### E. Additional analyses

To check whether the results hold for companies that invest consistently, I also estimated models 5-8, which involve a variable that accounts for consistency in investment rates. Table 4 presents the results. The results are qualitatively similar, if not more insightful. In particular, the coefficient of the contemporaneous variable for Capex\_depn in isolation (model 5:  $\beta = 0.006 \mid p < 0.10$ ) is positive and statistically significant and the coefficient for two-year lagged variable for Capex\_depn in isolation (model 7:  $\beta = 0.009 \mid p < 0.05$ ) is positive and statistically significant. Comparing the relative coefficients of Capex\_depn<sub>i,t</sub> and Capex\_depn<sub>i,t-2</sub> in models 5 and 7 reveals that Capex\_depn<sub>i,t-2</sub> (SCEs) have a stronger effect in isolation on organizational resilience than Capex\_depn<sub>i,t</sub> (TCEs), which parallels the study's first hypothesis. Conversely, when Capex\_depn<sub>i,t</sub> (TCEs) and SCEs (Capex\_depn<sub>i,t-2</sub>) are examined in combination (model 8:  $\beta = 0.009 \mid p < 0.05$ ), the relative coefficient are almost congruent, suggesting that there is no material difference between the effect of SCEs and TCEs provided companies maintain the right balance between short-term and long-term goals, which supports hypothesis 2. Generally speaking, this observation is quite surprising, interesting, informative and intuitive as it supports Jack Welch's statement.

**Table 4: System-GMM Regression results for consistency of capital expenditures**

model	(5)	(6)	(7)	(8)
ROA <sub>i,t-1</sub>	0.303*** (0.071)	0.306*** (0.100)	0.293*** (0.070)	0.291*** (0.110)
Capex_depn <sub>i,t</sub> (TCEs)	0.006* (0.003)			0.009** (0.004)
Capex_depn <sub>i,t-1</sub>		-0.003 (0.005)		-0.001 (0.005)
Capex_depn <sub>i,t-2</sub> (SCEs)			0.009** (0.004)	0.009** (0.004)
Lev <sub>i,t</sub>	0.101 (0.102)	0.075 (0.063)	0.099 (0.072)	0.050 (0.038)
CFO <sub>i,t</sub>	0.202** (0.092)	0.249*** (0.065)	0.278*** (0.092)	0.239*** (0.078)
Altman_Z <sub>i,t</sub>	0.045*** (0.014)	0.050*** (0.015)	0.047*** (0.010)	0.049*** (0.012)
Age <sub>i,t</sub>	0.050 (0.058)	0.041 (0.071)	0.087 (0.070)	0.083 (0.057)
Size <sub>i,t</sub>	-0.070* (0.042)	-0.075* (0.043)	-0.084** (0.041)	-0.080* (0.046)
BS <sub>i,t</sub>	0.005 (0.009)	0.003 (0.008)	-0.003 (0.005)	-0.005 (0.007)
Inst <sub>i,t</sub>	0.090 (0.087)	0.118 (0.082)	0.072 (0.121)	0.129 (0.137)
Cons	0.340 (0.270)	0.399 (0.284)	0.462 (0.289)	0.420 (0.308)
m <sub>1</sub> (p)	0.0232	0.0236	0.0129	0.0155
m <sub>2</sub> (p)	0.4254	0.4254	0.8906	0.9934
N	324	288	252	252

Table 4 presents Sys-GMM estimations of effect of investing consistently on organizational resilience of listed companies on ZSE over the period 2010-2018. The dependent variable is ROA.  $m_1(p)$  and  $m_2(p)$  are tests for first-order and second-order serial correlation in the first differenced residuals, under the null hypothesis of no serial correlation. \*significant at 10%; \*\*significant at 5%; \*\*\*significant at 1%. Robust standard errors are reported in parentheses.

## F. Robustness tests and additional analyses

In this section, I 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, to test the robustness of the findings, the study added industry specific factors that might be relevant to the study's objectives. Firms listed on the ZSE are categorized into different sectors, which include but not limited to consumer goods, consumer services, industrial, consumer health, telecom and basic material. I grouped the firms according to these sectors to capture sectorial specific investments and how they influence organisational resilience. Industry dummy variables were created.

Second, since I could not obtain adequate data from delisted companies because some of the companies were delisted for failure to adhere to the listing requirements of publishing their annual reports, I carried out survival analysis, which is common in studies dealing with organisational resilience analysis [14], in particular, panel data parametric regression analysis. For survival analysis, I constructed the resilience variable as a dummy variable taking the value 1 when the company reports a profit and zero otherwise. A loss signifies a higher chance of business failure, whereas a profit reflects business success. I did this after taking into consideration that during the hyperinflationary period from 2000 to the 2008, which according to RBZ (2014) is referred as the 'lost years' most of the companies reported losses in real terms; so the period from 2009 to 2018 was regarded as the recovery and stabilization period [26], good enough to explore the resilience of firms. So making a profit signifies business resilience, whereas a loss signifies a higher chance of business failure. Then, in column 2 of Table 6, I took the ROA figure to check the robustness of the study's results.

Last, but not least, to get a glimpse of the population results, I turn to Generalised Estimating Equation GEE, which controls for correlation within cross-sectional units and expected differences relative to the population average. The results are reported in Table 7.

### 1. Industry-specific factor analysis.

Table 5 reports the results which captures the impact of industry-specific factors on organizational resilience, based on the equation for the effect of short-termism on organisational resilience. The regression was estimated for seven models, depending on the industry or sector being controlled. Regression 1 controls for consumer goods. Regression 2 controls for consumer services, while regression 3 controls for industrial companies. Regression 4 controls for consumer health services, whereas regression 5 controls for telecom. Regression 6 controls for basic material firms and lastly regression 7 controls for all the sectors. The following subsections present the results in detail.

#### i. Consumer goods

The results in column 1 of Table 5 show that the effect of TCEs on organizational resilience is not significant ( $\beta = 0.17 \mid p > 0.10$ ) and the effect of SCEs on organizational resilience is significant ( $\beta = 0.36 \mid p < 0.001$ ). This evidence suggests that managers in this sector build resilience through strategic investments like building brand reputation and hard to copy capabilities.

**ii. Consumer services**

The results in column 2 of Table 5 show the effect of TCEs on organizational resilience is significant ( $\beta = 0.23 \mid p < 0.10$ ) and the effect of SCEs on organizational resilience is significant ( $\beta = 0.33 \mid p < 0.001$ ), suggesting that both TCEs and SCEs are important for this sector. This is quite true considering that in the hotel and clothing industry which form part of the sector there is need to refurbish buildings to keep the appearance of the buildings in order to keep customers and also invest strategically to increase market share.

**iii. Consumer health**

The results in column 3 of Table 5 show the effect of TCEs on organizational resilience is significant ( $\beta = 0.25 \mid p < 0.05$ ) and the effect of SCEs on organizational resilience is significant ( $\beta = 0.36 \mid p < 0.001$ ).

**iv. Industrial**

The results in column 4 of Table 5 show the effect of TCEs on organizational resilience is significant ( $\beta = 0.29 \mid p < 0.05$ ) and the effect of SCEs on organizational resilience is significant ( $\beta = 0.33 \mid p < 0.001$ ). The results suggest that both TCEs and SCEs are important. Firms in this industry need to replace old equipment to reduce machine and plant breakdowns and at the same time invest in SCEs to create new products and markets in order to foster organizational resilience.

**v. Telecom**

The results in column 5 of Table 5 show the effect of TCEs on organizational resilience is not significant ( $\beta = 0.24 \mid p > 0.10$ ) and the effect of SCEs on organizational resilience is significant ( $\beta = 0.36 \mid p < 0.001$ ). As expected, firms in this industry build resilience through investing in SCEs like network investments to provide quality service under modified demand patterns and consequently increase customer loyalty.

**vi. Basic material**

The results in column 6 of Table 5 show that the effect of TCEs on organizational resilience is significant ( $\beta = 0.25 \mid p < 0.10$ ) and the effect of SCEs on organizational resilience is significant ( $\beta = 0.33 \mid p < 0.001$ ). Just like the industrial sector, both TCEs and SCEs matter for resilience of firms in this sector.

**vii. Combination of all the sectors**

The results in column 7 of Table 5 show that the effect of TCEs on organizational resilience is significant ( $\beta = 0.32 \mid p < 0.05$ ) and the effect of SCEs on organizational resilience is significant ( $\beta = 0.33 \mid p < 0.001$ ), implying that both short-term and long-term goals are both economically and statistically important to drive the success of companies, though SCEs seem to be more statistically supported.

**Table 5: industry-specific factors**

	Consumer goods (1)	Consumer services (2)	Consumer health (3)	Industrial (4)	Telecom (5)	Basic material (6)	All (7)
ROA <sub>i,t-1</sub>	0.28** (0.136)	0.30** (0.116)	0.31** (0.124)	0.27** (0.132)	0.28** (0.121)	0.25* (0.136)	0.15 (0.131)
Capex <sub>i,t</sub> (TCEs)	0.17 (0.123)	0.23* (0.13)	0.25** (0.125)	0.29** (0.114)	0.24 (0.151)	0.25* (0.148)	0.32** (0.131)

Capex <sub>1,t</sub>	-0.08 (0.101)	-0.14 (0.121)	-0.11 (0.115)	-0.15 (0.112)	-0.12 (0.118)	-0.13 (0.113)	-0.08 (0.103)
Capex <sub>i,t-2</sub> (SCEs)	0.36*** (0.093)	0.33*** (0.077)	0.36*** (0.083)	0.33*** (0.086)	0.36***(0.085)	0.33*** (0.08)	0.33***(0.077)
Lev <sub>i,t</sub>	0.052 (0.048)	0.030 (0.044)	0.054 (0.045)	0.02 (0.064)	0.033 (0.048)	0.02 (0.056)	0.003 (0.070)
CFO <sub>i,t</sub>	0.25*** (0.084)	0.24*** (0.072)	0.25*** (0.078)	0.25*** (0.068)	0.22*** (0.064)	0.23*** (0.077)	0.24***(0.087)
Altman Z <sub>i,t</sub>	0.05*** (0.014)	0.05*** (0.015)	0.05*** (0.013)	0.06*** (0.015)	0.05*** (0.011)	0.04***(0.011)	0.05***(0.017)
Age <sub>i,t</sub>	0.083 (0.067)	0.03 (0.091)	0.08 (0.064)	0.11* (0.062)	0.06 (0.064)	0.09 (0.667)	0.08 (0.070)
Size <sub>i,t</sub>	-0.087* (0.052)	-0.075* (0.04)	-0.08* (0.044)	-0.11** (0.049)	-0.08** (0.04)	-0.07 (0.058)	-0.07 (0.053)
BS <sub>i,t</sub>	-0.01 (0.008)	-0.01 (0.009)	-0.002 (0.006)	-0.003 (0.007)	-0.004 (0.006)	-0.002 (0.007)	-0.003 (0.007)
Inst <sub>i,t</sub>	0.13 (0.150)	0.12 (0.122)	0.09 (0.135)	0.055 (0.090)	0.09 (0.125)	0.09 (0.100)	0.05 (0.079)
Cons	0.47 (0.294)	0.54 (0.339)	0.41 (0.279)	0.63 (0.335)	0.49 (0.256)	0.41 (0.360)	-0.79 (1.80)
m <sub>1</sub> (p)	0.0217	0.0169	0.0210	0.0217	0.0203	0.0218	0.0191
m <sub>2</sub> (p)	0.7252	0.6324	0.7011	0.5159	0.6219	0.5764	0.3743
N	252	252	252	252	252	252	252

The Table above presents Sys-GMM estimations of effect of short-termism on organizational resilience after controlling for industry-specific factors of listed companies on ZSE over the period 2010-2018. The dependent variable is ROA.  $m_1(p)$  and  $m_2(p)$  are tests for first-order and second-order serial correlation in the first differenced residuals, under the null hypothesis of no serial correlation, \*significant at 10%; \*\*significant at 5%; \*\*\*significant at 1%. Robust standard errors are reported in parentheses.

Overall, the results in columns 1 and 5 in Table 5 provide quite interesting and insightful evidence on the effects of short-termism on organizational resilience. In isolation, the results suggest that TCEs do not have a significant impact on organizational resilience for companies in the consumer goods and telecom sectors, thus TCEs did not help these companies to be resilient over the study period. Yet, SCEs do have a significant impact, which is expected given that these companies create competitive advantages by building long-term relationships with key stakeholders such as employees, customers and suppliers and also compete on revolutionary innovation that take time to generate benefits. However, the results in columns 2-4 and 6 suggest that both TCEs and SCEs do have a significant impact on organizational resilience for companies in the consumer services, consumer health, industrial and basic material, though, as expected, SCEs generate more benefits than TCEs. However, when examined in combination, results in column 7 indicate that there is no material difference between the impact of TCEs and SCEs on organizational resilience and this finding supports results in column 4 of Table 4. Overall, these results are almost similar to those obtained in Table 3 and 4, if not stronger, more interesting, and more intriguing on short-termism and its effects. We discuss these findings in greater detail in the Discussion and Conclusion section.

Considering that the period from 2009 to 2018 was referred to as a period of recovery and stabilization [26], it is necessary to examine whether the businesses had recovered and stabilized over the study period using survival analysis, a common method applied in related research on organisational resilience. During the study period, some businesses did recover and stabilise, whereas others did not; so survival analysis can handle both right censoring and asymmetrical distribution challenges. Specifically, I reran the analyses using panel data parametric hazard models, in particular, Weibull model. In model 1 of Table 6, I operationalized the dependent variable as a dummy variable taking the value 1 when the business reported profits, which indicates whether the business had recovered and stabilised or not, and zero otherwise. As a robustness check, model 2 of Table 6 operationalised the dependent variable as ROA, which has been used in the above models in Tables 3-5. Before attempting to interpret the results I used the `quadchk` command in Stata version 17 to see whether changing the number of integration points affects the results and I found that the results do not differ substantially. I report the results of parametric survival regression in Table 6. In column 1 of Table 6, I found that the results are very similar to the idea that both TCEs and SCEs influence organisational resilience, though SCEs generate slow but more benefits than TCEs. More specifically, the results in Table 6 column 1 suggest that for a given firm, the hazard would increase by around 34% with each dollar of TCEs invested and increase by around 80% with each dollar of SCEs invested, and thus, reduce the chances of business failure. More specific, the finding supports hypothesis 1. Additionally, the results in column 2 of Table 6 suggest that for a given firm, the hazard would increase by around 39% with each dollar of either TCEs or SCEs invested, leading to reduced probabilities of business failure. This finding supports hypothesis 2 and results in column 4 of Table 4, suggesting that maintaining the right balance between TCEs and SCEs plays a central role for the long-term success of companies. As such, managers are asked to pay greater attention on maintaining the right balance between both short-term and long-term goals of companies to foster organizational resilience. This finding corroborates well with findings in Table 3-5 and I discuss these findings in greater detail in the Discussion and Conclusion section.

**Table 6: Panel data parametric survival models (re)**

	Dummied ROA (1)	ROA (2)
Capex <sub>i,t</sub> (TCEs)	34.76** (49.18)	39.13*** (53.36)
Capex <sub>i,t-2</sub> (SCEs)	80.15*** (105.9)	38.82*** (52.22)
Lev <sub>i,t</sub>	1.86 (0.78)	2.13* (0.824)
CFO <sub>i,t</sub>	0.179*** (0.108)	0.09** (0.054)
Altman_ Z <sub>i,t</sub>	1.24*** (0.093)	1.142* (0.08)
Age <sub>i,t</sub>	0.589** (0.156)	0.660* (0.162)
Size <sub>i,t</sub>	0.806 (0.129)	0.762* (0.115)
BS <sub>i,t</sub>	1.048 (0.044)	1.048 (0.043)
Inst <sub>i,t</sub>	0.969 (0.345)	1.039 (0.343)

Table 6 presents panel data parametric survival estimations of effect of short-termism on organizational resilience of listed companies on ZSE over the period 2010-2018. The dependent variable is ROA absolute and ROA dummy. \*significant at 10%; \*\*significant at 5%; \*\*\*significant at 1%. Robust standard errors are reported in parentheses.

## 2. Strategy related analysis: GEE

Keeping in mind that the study addresses a strategy related issue, it is necessary to check the robustness of my findings by employing GEE method that prior research used in strategy related studies [41]. 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 [41]. I run the GEE in Stata 17 using xtgee command. In models 1, I 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, I also specified a Gaussian distribution, an identity link function, and clustering the errors at the firm-level. Once again, the results support the idea that both TCEs and SCEs are important for organizational resilience. At first glance, in column 1 of Table 7, it seems as if TCEs generate more benefits than SCEs, however, the coefficient of TCEs is only supported at a relaxed threshold of statistical significance (i.e.,  $p < 0.1$ ) compared to SCEs ( $p < 0.001$ ). Considering that, I conclude that benefits from TCEs are not sustainable compared to those generated by SCEs, which parallels the findings of the study. This enhances my confidence in supporting hypothesis 1, that is, SCEs generates more resilience than TCEs. Further, for additional robustness analyses, models 2 and 3 which specified an independent and exchangeable correlation structure respectively in Table 7 were run. Again, the results from these models are highly consistent with those obtained in model 1 of Table 7.

**Table 7: GEE results**

	1	2	3
Capex <sub>i,t</sub> (TCEs)	0.330*(0.189)	0.254*(0.148)	0.282**(0.130)
Capex <sub>i,t-1</sub>	0.009(0.070)	-0.070(0.073)	0.027(0.058)
Capex <sub>i,t-2</sub> (SCEs)	0.292*** (0.087)	0.199*** (0.088)	0.234*** (0.073)
Lev <sub>i,t</sub>	(-0.018)(0.047)	0.005(0.039)	0.006 (0.039)
CFO <sub>i,t</sub>	0.274*** (0.096)	0.252*** (0.076)	0.490*** (0.161)
Altman_ Z <sub>i,t</sub>	0.047*** (0.009)	0.049*** (0.009)	0.040*** 0.007
Age <sub>i,t</sub>	0.045(0.036)	0.063(0.034)	0.035(0.032)
Size <sub>i,t</sub>	-0.021(0.022)	-0.008(0.021)	-0.018(0.020)
BS <sub>i,t</sub>	-0.001(0.004)	-0.007(0.004)	-0.003(0.005)
Inst <sub>i,t</sub>	0.057(0.046)	0.045(0.046)	0.059(0.049)
Cons	0.068(0.136)	-0.003(0.136)	0.058(0.124)

Table 7 presents GEE estimations for the effect of short-termism on organizational resilience of listed companies on ZSE over the period 2010-2018. The dependent variable is ROA. \*significant at 10%; \*\*significant at 5%; \*\*\*significant at 1%. Robust standard errors are reported in parentheses.

## DISCUSSION OF RESULTS

This paper examined the effects of short-termism on organisational resilience. Prior research has argued that management involves balancing short-term and long-term goals [3], [4], [11]. Managers, however, take

actions that are favourable for them in the short-term at the expense of long-term performance of the firms. While short-term investments may, for instance, increase earnings in subsequent quarters, long-term investments may be important for businesses to remain competitive in future [11]. However, prior research has reasoned that intertemporal resource allocation choices are shaped by what managers pay attention to [42], [43]. Given that scenario, managers' short-term orientation, that is, the relative cognitive dominance of the near versus distant future, is a significant determinant of a firm's strategy and competitive advantage [8]. For instance, Brauer (2013) found that short-term orientation negatively impacts on medium-term performance while long-term behaviour is positively related with corporate performance in the medium term.

The results of the present scholarship provide empirical evidence which supports prior studies that argue that short-termism is detrimental to businesses, societies and the economy at large. Recent experience, for instance, the 2007-2009 global financial crisis has frequently been argued to have resulted mainly from short-term oriented behaviour exhibited by corporate executives [3], [14], [20]. This is the short-termism that the current study investigated, which deteriorates firms' competitiveness, increases systemic risk and reduces the long-term potential of the entire economy [10].

In the main results, models 1, 2 and 3 in Table 3 examine the effects TCEs and SCEs in isolation, whereas Models 4 examines their combined influence. According to the results, TCEs and SCEs have positive and significant effects on the performance of firms, not only in isolation, but also in combination. However, on one hand, benefits from TCEs are not sustainable as shown by the reversal effect of one-year lagged capital expenditure on the performance of firms, both in isolation and in combination. On the other hand, the negative effect of 1-period lagged capital expenditure implies that the benefits from SCEs are delayed. As such, the estimation results suggest that despite the fact that TCEs generated fast profits as shown by the positive effect of the contemporaneous term for capital expenditure on firm performance in Table 3, these profits were not sustainable as indicated by the negative effect of one-year capital expenditures ( $Capex_{i,t-1}$ ) on firm performance. That is consistent with available evidence, which indicates that too much focus on short-term goals led to macroeconomic imbalances that resulted in economic downturns [3], [15], [44], [45]. Excessive focus on short-term goals by many firms and institutions has led to systemic risk, affecting the stability of the entire economy. For example, during the 2007-9 global financial crisis, large financial institutions issued subprime mortgage loans that allowed banks to make fast but unsustainable profits. This led to the housing bubble, the burst of which resulted in the 2007-9 global financial crisis [44], [46]. Additional analysis in Table 4, in which a variable that captures consistency of investment is employed, the results are qualitatively similar, if not stronger. Results in model 8 of Table 4 reveal that there is no material difference between benefits from TCEs and SCEs when companies invest consistently in both TCEs and SCEs. Thus, ensuring a right balance between short-term and long-term goals guarantees organisational resilience. Companies must invest in TCEs to keep up with frequent changes in products and process technologies [47], and also make SCEs that produce sustainable competitive advantages that set companies apart in the long run [48]. The most resilient organisation, however, should recover quickly from a crisis and at the same time survive and thrive in the long-term. Building such dynamic capabilities is of paramount importance for an organisation to withstand the test of time.

Further, after controlling for industry specific factors in order to provide more comprehensive analysis, the results in Table 5 indicate that both TCEs and SCEs underpin organizational resilience. However, sectorial differences emerge on the relative importance of TCEs and SCEs for organizational resilience. For instance, firms in the consumer goods and telecommunication sectors build their capabilities by making strategic investments, whereas those in the industrial or manufacturing sector build their core competencies by focusing on both exploitative and explorative investments. Such findings demonstrate that managers in the consumer goods and telecommunication can only survive in the long-term by building capabilities such as good employee relations, good customer relationships and revolutionary innovations. And yet, those in the industrial sector should concentrate on both exploitative investments (replacing, maintaining and



refurbishing old equipment to reduce machine breakdowns) and explorative investments (looking for new markets, building new state of the art plants and developing new products to meet new customer preferences) to guarantee organizational resilience.

Following from Jack Welch's statement about the importance of balancing short and long-term goals, the study shows that when core TCEs and SCEs are better integrated and coordinated, the firm tends to be more resilient. This is a key finding that allows managers and policy makers to consider both short-term and long-term goals in their strategic decision making to foster organizational resilience.

In addition to the above results, in terms of this study's control variables, the estimated coefficients are consistent with prior literature. The estimation results show that Altman's Z-score has a positive and statistically significant influence (under 1% significance level) on organisational resilience in all the models, which suggests that companies that were farther from bankruptcy were more resilient than those that were closer to bankruptcy. This is in line with DesJardine (2016).

More so, the estimation results show that older companies in the industrial sector were more resilient than younger ones. This correlation is quite interesting since some researchers argue that resilience is a path-dependent quality: those companies that experienced prior adversity become more capable of managing adversity over time [14], in particular, in the industrial sector. The findings of this study align with theory: older firms have likely experienced more economic crises over history, and are therefore more resilient than younger ones.

More so, the study found out that an increase in firm size, which is used to capture cognitive distance between managers and operations reduces the firms' resilience capability. This is possibly because in hierarchical organisations, those employees with expertise who are closest to the problem are not empowered to act, yet managers are detached from what frontline employees do and experience. As such, mindful action is weakened and organisations lose situational awareness to problems, leading organisations to lose their resilient capability. This is in line with Markman and Venzin (2014) who found that smaller banks were more resilient than big ones. Therefore, one way managers can develop resilience is to empower functional managers who are closest to the problem through adoption of democratic or transformational leadership styles.

The findings of this study also suggest that availability of financial resources enables firms to be more resilient as shown by the positive and significant relationship between cash flows and returns on assets (p-value under 1% significance level) in most of the models considered. This is in line with prior research who found that firms with the greatest financial reserves and that had avoided high levels of debt (for example, South West Airlines) prior to the event were able to return to and surpass previous levels of performance without resorting to layoffs [14], [27]. Therefore, reserve capacity allows a system to cope with unexpected circumstances.

Finally, another key finding from the results estimated by the system generalised methods of moments is the coefficient of the lagged dependent variable is fairly large, positive and significant, which represents the entire history of the model. Thus, the entire history of the model has a significant influence on current organisational resilience. Thus, much of what contributes to organisational resilience are current circumstances and events, combined with this fairly big influence from the measured past. Overall, the results of the control variables are in line with prior studies.

## CONCLUSIONS AND RECOMMENDATIONS

In this study, I use the listed companies in Zimbabwe over the period from 2010 to 2018 as a context to study how short-termism influence organizational resilience. The research outcomes definitely provide cue

to corporate management, in particular, the chief executive officer that SCEs generate slower but more benefits than TCEs. Additionally, the results reveal that the benefits from TCEs are not sustainable and those from SCEs are deferred. As such, an excessive focus on short-term goals leads to quick but unsustainable profits, which will lead to a sudden economic downturn. More importantly, additional analyses reveal that maintaining the right balance between short-term and long-term goals guarantees organisational resilience. Again, managers need also to pay attention to the industry in which they are operating when making capital investments. However, there is a scope of further improvement in similar studies. The first limitation is that the study only focused on Zimbabwean listed companies, which poses constraints in making a generalised comment on the subject. For further research, the investigators can consider several companies in other jurisdictions so as to capture the effect of jurisdictions that can have a moderating effect on the relationship between capital expenditure and firm performance. The second limitation arises from the fact that in the case of listed companies in Zimbabwe, other companies delisted from the Zimbabwe Stock Exchange. Thus, the analysis can also be done inclusive of delisted companies to find whether the results are valid for all companies or not. The researcher encourages other researchers to consider these issues when undertaking further studies on this aspect.

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The research paper addresses a critical gap in literature in that it provides nuanced insights on the effects of short-termism on organizational resilience. From the several models that were run it was found that short-termism was a critical factor affecting the resilience of firms. Future studies should focus on conducting empirical studies in other countries and consider also delisted companies.

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