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# **DOES STRATEGIC CONFORMITY MATTER IN FINANCIAL DISTRESS? EVIDENCE FROM LISTED FIRMS IN NAIROBI SECURITIES EXCHANGE WITH SPECIAL REFERENCE TO INVENTORY LEVELS & PLANT AND EQUIPMENT NEWNESS**

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## **Abstract**

*The main purpose of this study was to determine the relationship between strategic conformity and financial distress among listed firms in Kenya. The study employed panel analysis for a period covering ten years from 2006-2015 for all 64 listed firms in Nairobi Securities Exchange. Findings from random effects multiple regression analysis showed that inventory levels has a positive and significant effect on financial distress ( $\beta = 0.678$ ;  $p < 0.05$ ) while plant and equipment newness had a negative and significant effect ( $\beta = -0.580$ ;  $p < 0.05$ ) on financial distress. This study recommends that firms should ensure that they have policies that regulate inventory levels as this has a positive significant effect on financial distress, while adequate project appraisal should be done to inform acquisition of new plant and equipment.*

*Keywords: Inventory Levels, Financial Distress, Plant and Equipment Newness, Listed Firms*

## **INTRODUCTION**

Financial distress is a worldwide issue influencing both developed and developing economies. Financial distress has been seen in finance discourse as the organization's inability to meet its monetary commitments as and when they fall due (Pindado et al., 2008; Agrawal, 2015). Business firms encounter financial distress when they confront lacking income to meet their

current money related commitments (Jabeur & Fahmi, 2017; Mselmi et al., 2017). Moreover, financial distress is shown by a company's powerlessness to raise funding to back tasks (Bandyopadhyay, 2006). Mselmi et al., (2017) define financial distress as the situation where a firm's cash flows are not enough to meet contractually required payment. Sanz & Ayca (2006) describe financial distress as a circumstance where income is deficient to cover current budgetary commitments. The event of default of a firm's financial obligations indicates deterioration in the financial health of a firm, which needs to be identified in time (Agrawal & Maheshwari, 2014). According to Miller et al., 2013 the financial health of a firm may be affected by a firm's attempt to conform to the average strategic profile of organizations in its industry. Buchko (2011) points out that the setting of the institution in which the companies function can and in most cases results in the companies pursuing collective approaches. Consistent with institutional theory, researchers have argued that firms whose strategies conform to industry norms will secure greater legitimacy which plays a significant part in allowing companies to access crucial resources, for instance technology, economic and social capital, markets, partners, and customers. This can increase organizational performance (Higgins & Gulati 2006,). Therefore, Miller et al., (2013) indicates that strategic conformity can result in better financial returns. Various studies have shown that the evaluation of financial distress will avail critical data on the risk of default of firms to their creditors as well as other corporate players and regulators in the industry (Pindado et al., 2008; Tinoco & Wilson, 2013).

Corporate financial distress may occur due to a single factor or a mix of factors that can be either external or internal such as errors in management because of failure to change managerial and operational frameworks of the company in line with existing new realities, ineffective or inconsequential corporate policies, the economic setting, variations in legislation and decrease in the sector (Mousavi et al., 2015). As such, the area of organizational strategic conformity has attracted a good deal of attention (Miller et al., 2013). The results of strategic conformity are held by institutional scholars to be certain results which incorporate improved assets (Cohen and Dean 2005, Higgins and Gulati 2006), better securities exchange costs (Zuckerman 2000), and more help from partners (Choi and Shepherd 2005). A basic attestation of scholars building turnaround models for firms confronting monetary emergency is that firm-debilitating performance decreases (e.g., organizational emergencies) are an inescapable result of managers neglecting to keep up the arrangement of the company's technique with the requests of an advancing and evolving condition. The declining company's center issue could either be wasteful procedure or frail vital position with respect to contenders (Barker & Duhaime, 1997).

Since there are no known studies on the connection between strategic conformity and financial distress, except for the studies that capture financial leverage, a dimension of strategic conformity by Fitzpatrick & Ogden, (2011), Kim & Partington, (2014) among others, the current study utilized much theoretical literature from the strategic conformity measures. Moreover, no known study has utilized plant and equipment newness and inventory levels measures of strategic conformity to predict financial distress. Therefore, the current study investigated the effect of strategic conformity measures (plant and equipment newness and inventory levels) on financial distress among listed firms in Kenya.

In the past few years, many firms have been delisted due to financial difficulties with others being placed under receivership and therefore the need for this study. This has been witnessed by defaulted financial obligations such as defaulted principal and interest payments on loans, defaulted payment to suppliers and delayed/nonpayment of staff salaries which is evidence that listed firms could be facing financial distress. Several firms have been delisted from the stock market including Mumias sugar, Eveready, Lonrho East Africa, East African Packaging, Uchumi supermarkets while other firms have been placed under statutory management due to financial difficulties (Gathecha, 2016). This study therefore sought to determine the existing relationship between strategic conformity and the financial distress among listed firms in Nairobi securities Exchange. Thus, the study hypothesized that

H01: Inventory levels has no significant relationship effect on financial distress of listed firms in Nairobi Securities Exchange.

H02: Plant and equipment newness has no significant effect on financial distress of listed firms in Nairobi Securities Exchange.

## LITERATURE REVIEW

A number of theories have been fronted to explain the phenomenon of financial distress. Agency theory forms the basis of most of the theoretical models. The agency theory hypothesizes that managers seek to maximize their own interests, but these interests may not be aligned to the interest of shareholders. Agency theory predicts that the misalignment of interests amongst managers and investors could prompt operational issues. Managers take part in exercises for their own advantage as opposed to the advantages of the company's investors considering the existence of principal-agent relationship that exists between firm managers and shareholders (Jensen and Meckling, 1976). This conflicts brings out a highly reported organization issue referred to as administrative "domain building". This alludes to managers' inclinations to keep up unutilized assets or to develop the firm past its ideal size with the

motivation behind expanding individual utility from control, pay, status and glory (Jensen 1986; Stulz 1990; Hope & Thomas 2008).

The agency issue can be mitigated by great corporate administration and control administrators' motivators to promote their own advantages to the detriment of the investors (Shleifer & Vishny 1997). Jensen & Meckling (1976) additionally contend that administrative agency costs increment with the partition of proprietorship and control. Directors as the specialists of investors are prone to squander the corporate assets to fulfill their self-interests. In line with the writing, Chrisman et al., (2004) noticed that organization issues emerge when important specialist connections are described by disparate interests and enlightening asymmetries. Their discoveries demonstrate that agency-related expenses emerge from the costs caused for the exercises and frameworks set up by principals to control operators' conduct and from the outcomes of specialists' practices that are not in light of a legitimate concern for principals. This makes it important to review the effect of managerial agency cost on financial distress.

Following Ridge et al., (2014) the strategic dimensions that capture conformity in strategy includes; plant and equipment newness and inventory levels. Plant and equipment newness are markers of the allotment and administration of firm assets crosswise over limit development exercises.

### **The Relationship between Inventory Levels and Financial Distress**

Inventory levels is the proportion of a firm stock levels of inventories compared to sales which demonstrate creation process duration and working capital administration (Maccini & Pagan, 2008; Ridge et al., 2014). Inventories comprise a substantial percentage of the total assets of a firm (Baños-Caballero, 2014).

Inventory levels of the firm have received significant attention in the operations management literature in as far as evaluating the profitability of firms (Elsayed & Wahba, 2016). Mantrala & Raman (1990) maintained that when actual sales greatly exceed the inventory levels, it may strain production capacity or result in stock-outs. This is because stocking out of materials inventories entails costs associated with production disruptions that are distinct from the costs associated with lost sales. On the other hand, firms abstain from holding exorbitant loads of inventories by offering more on credit and accumulating debt claims when future request is questionable (Caglayan *et al.*, 2012) which might lead to increased level of debtors and bad debts. Larger stocks of inventories may indicate higher sales uncertainty which may apply indirect consequences for the fixed capital investment of a firm through company's leverage, cash holdings or money streams (Caglayan *et al.*, 2012). Potential loan agencies can't

precisely assess the association's financial soundness in a domain with enhanced vulnerability. Sales vulnerability will constrain the company's capacity to raise outside assets by potential loan specialists raising the risk premium they require (Caglayan *et al.*, 2012). In addition, reduction in inventory projects is also greatly developed with the objective of realizing finances for other uses. The thinking behind this notion is that reducing inventories leads *ceteris paribus* to decreased requirements in capital resulting in measures in profitability such as increase in return on assets (Obermaier & Donhauser, 2012).

Likewise, there are expected genuine impacts of investment unreasonably in working capital that can bring about negative impact on the value of the organization at given levels of working capital. Keeping stock accessible improves the costs, for example, the lease of the stockroom, protection and security costs which generally increment as the level of stock increases. On the other hand, Kieschnick *et al.* (2013) note that firms that hold more noteworthy working capital additionally experience more interest costs and, subsequently, more consumption of monetary assets. As working capital expands, it is more probable that organizations will encounter financial distress and face the risk of insolvency. In addition, huge investment in inventories can also curtail the capacity of the company to acquire other projects that are value- promoting (Baños-Caballero, 2014), which would have otherwise improved their financial resources.

Stock-performance relationship is an exploration region that has developed extensively in the operations management writing, and gave various discoveries. In particular, while different examinations have detailed the beneficial outcome of stock decrease on association performance, different investigations found no unmistakable proof for this relationship (Elsayed and Wahba, 2016). The consequences of Lieberman and Demeester (1999) bolstered the positive connection between stock decrease and profitability development. They inferred that stock decrease can be considered as a critical driver of process change. Fullerton and McWatters (2001) additionally highlighted a beneficial outcome of stock decrease on association performance in a JIT setting. They showed that association performance has been improved through stock decrease, and in addition lessening in quality costs along these lines expanding client responsiveness.

Also, Demeter (2003) detailed a beneficial outcome of stock turnover on association performance. Besides, Deloof (2003) observed that lower stock and higher performance are emphatically associated. Shah and Shin (2007) inspected stock as a mediating factor, and broke down its impact of on the connection between interest in data innovation and performance. They inferred that there is a positive and noteworthy impact of stock lessening on performance. Associations that have exceptional performance convey lower stock level

(Swamidass, 2007). Likewise the higher the association stock level, the lower its profitability rate (Koumanakos, 2008) . The results of Capkun *et al.*, (2009) indicate that total inventory levels have a positive effect on firm performance. The positive effect on the relationship between inventory levels and firm performance was further supported by the results of Pong & Mitchell (2012) and Elsayed (2015a). In addition, the results of Shin *et al.*, (2015) demonstrate that a lower proportion of stock to deals for a firm is related with higher net revenue for the firm.

In any case, in different examinations, the outcomes were not as strong of stock's power in assessing the performance of firms. For instance, the evaluation of Balakrishnan *et al.* (1996) was not ready to identify a huge variety consequently on resources between without a moment to spare organizations and non-in-the-nick-of-time organizations. Steady with this discovering, Cannon (2008) and Eroglu and Hofer (2011) uncovered that stock and association performance have no critical relationship. In any case, Chen *et al.*, (2005) detailed that organizations with anomalous high inventories have strangely poor long-term returns. Firms with somewhat lower than normal inventories have great stock returns, however firms with the least inventories have common returns. Associations that have high stock levels will probably acknowledge terrible financial performance (Boute *et al.*, 2007). Firms that have the most reduced stock level have likewise the most exceedingly bad performance level (Obermaier and Donhauser, 2012). As of late, Elsayed and Wahba (2016) demonstrate that stock to deals proportion has applied a negative and noteworthy coefficient on association performance.

As indicated by Cannon (2008) stock is seen as on a very basic level a driver of costs that show themselves in renounced venture open doors as the consequence of tied-up capital. It additionally makes auxiliary expenses caused in moving, putting away or generally essentially taking care of stock or unsolved process issues that are concealed by the stock. In this view, orderly decreases in stock would be seen as confirmation of effective administration. Along these lines, an assessment of stock levels would be fundamental in the appraisal of monetary distress of firms.

### **The Relationship between Plant and Equipment Newness and Financial Distress**

Plant and equipment newness has been associated with the net value of plant and equipment in the firm's asset structure (Adam & Goyal, 2008). The total spending on new fixed investment such as property plant and equipment replaces depreciated capital goods. This gives a feeling of how much cash an organization is spending on capital things utilized for operations (Liargovas and Skandalis, 2010).

Proceeded with interest in the capital things of a firm is vital in light of the fact that the helpful existence of existing capital things lessens after some time. New interest in capital

things, for example, plant and hardware extend the creation and income producing limit of the firm thus positively related to firm performance (Liargovas & Skandalis, 2010). Business people think that its less demanding to bring outside capital up in ventures which utilize more unmistakable resources that can fill in as insurance, for example, plants and apparatus (Claessens and Laeven, 2003). Geng et al. 2015 keep up that an association's definitive presence depends on the procuring energy of its advantages. Moreover, indebtedness in a sense happens when the aggregate liabilities surpass a reasonable valuation of the company's advantages with esteem dictated by the procuring energy of the benefits (Altman, 2000).

This study examines the link between effective tax rates and capital intensity and finds that asset values reduce payable taxes because of accelerated depreciation charges relative to asset values (Adhikari, 2006), thus higher depreciation tax savings. Manova (2008) argues that the availability of collateralizable assets determines a firm's ability to raise outside capital, which is enhanced by the value of plant and equipment. This recommends the absence of guarantee makes it exorbitant for firms to acquire financing and is solid confirmation of a credit limitations channel. Within the sight of money related erosions, the venture openings open to firms with lacking private capital are restricted (Manova, 2008).

Plant and equipment represents the fixed costs that have been allocated to the company cost structure. Most of the capital investments are greatly regressive in the short-time and thus they restrict the company's ability to adjust its costs to the revenue (Pourali *et al.*, 2013). Explicitly, Smaller firms that have less physical resources may have higher exchange and data expenses and along these lines might be more defenseless against negative profitability and market esteem stuns. They may likewise think that it's harder to raise value or offer resources while doing ineffectively. Such monetarily challenged firms are probably going to have a higher financial distress for any given debt ratio (Hovakimian *et al.*, 2011).

Lee *et al.* (2011) noted that greater capital intensity tends to increased company's risk which is sourced from the idea that the company with a higher level of fixed assets naturally faces more fixed expenses that are static depending on the firm's level of sales. Pourali *et al.* (2013) finds that there is a negative significant relationship between capital intensity and degree of financial distress, while Lee *et al.* (2011) finds that capital intensity reduces financial distress thus having a negative relationship.

Kane & Richardson (2002) find that when management invests in property plant and equipment, financial distress is intensified. This is because increasing the asset base amplifies the need for borrowing money to facilitate the purchase/expansion of property, plant and equipment which increases the necessary uses of working capital as debt must be serviced. Conversely, Bhat (2000) provided evidence that age of a plant is one of the most significant



factors that can influence maintenance costs. Older machines require replacement of parts and more intensive maintenance. Consequently, companies with older plant, equipment and building spend more on maintenance. Continued investment in capital items used for operations (such as property, plant and equipment) of a company is significant because the useful life of existing capital decreases over time (Liargovas & Skandalis, 2010). The amount of net investment has a positive relationship with the performance of a company because new investments increase the production and the cash flow generating capability of the company.

## **METHODOLOGY**

Positivism was employed in the study which supports this study since it aims at working with observable social reality (strategic conformity and financial distress of listed firms in Nairobi securities exchange) and that the end product of this research is on causality and law-like generalizations. The hypotheses in this study were examined by utilizing panel data analysis. This study focused on 40 listed firms in Nairobi Securities Exchange over the period 2006-2015. This study utilized secondary data which was extracted from a number of secondary sources which include the companies' year-end financial reports in Compustat-Capital IQ, Nairobi Securities Exchange (NSE), and annual reports lodged in the Capital Markets Authority (CMA) library.

### **Measurement of Variables**

Financial distress was measured using the Z-score for firm  $i$  in year  $t$ , developed and validated by Altman (1968) and reviewed by Altman & Hotchkiss (2006). The Z-score is examined in time period  $t$  in order to make predictions about firms' financial distress in the following period ( $t+1$ ) as this should reflect normalized operating performance (Altman, 2004; Altman & Hotchkiss, 2006).

Inventory levels indicate production cycle time and working capital management (Maccini & Pagan, 2008; Ridge et al., 2014). Thus following studies by Geletkanycz & Hambrick (1997) and Ridge et al., (2014) inventory levels was measured by inventories divided by sales for firm  $i$  in year  $t$ .

Plant and equipment newness is defined and measured as net plant and equipment/gross plant and equipment (Finkelstein and Hambrick, 1990) for firm  $i$  in year  $t$ . Several studies have used this dimension to measure strategic conformity (Geletkanycz & Hambrick, 1997; Ridge et al., 2014).

Strategic conformity measure for inventory levels and plant and equipment newness was constructed in three steps following Geletkanycz & Hambrick (1997). First each of the variables

for all firms in the industry was standardized by industry mean; next the absolute difference between a firm's score on the variable and the average score for all firms in the industry was calculated and multiplied by minus one to bring the measure in line with conformity (Geletkanycz & Hambrick, 1997).

Firm size is defined and measured as natural log of total value of firm assets (Back, 2005; Boyd et al., 2005; Agarwal & Taffler, 2008; Brad et al., 2015; Doumpos et al., 2015) for firm  $i$  in year  $t$ .

### Analytic Model

Multiple regression analysis was conducted to show the amount of variations explained by the independent variable on the dependent variable. Hair et al. (2010) point out that the coefficient of determination,  $R^2$ , is used as a measure of how good a predictor in the regression equation is likely to be. It represents the proportion of the variability in the dependent factor that can be explained by your multiple regression equation. Therefore, hypotheses' testing was conducted using hierarchical moderated regression analysis.

$$FD_{it} = \beta_0it + \beta_1it \text{ Size}_{it} + + \epsilon_{it} \dots \dots \dots \text{Model 1}$$

$$FD_{it} = \beta_0 it + \beta_1it \text{ Size}_{it} + \alpha \beta_2it \text{ INVL}_{it} + \beta_3t \text{ PE}_{it} + \epsilon_{it} \dots \dots \dots \text{Model 2}$$

$FD_{it}$  = Financial distress, measured by Z-score for firm  $i$  in year  $t$ .

$INVL_{it}$  = Inventory levels, measured as inventories divided by sales for firm  $i$  in year  $t$ .

$PE_{it}$  = Plant and equipment newness measured by net plant and equipment divided by gross plant and equipment for firm  $i$  in year  $t$ .

$Size_{it}$  = Firm size measured by natural log of total value of firm assets for firm  $i$  in year  $t$ .

$\beta_0$  = Constant

$\beta_1 - \beta_{12}$  = Coefficients of Regression

$\epsilon_{it}$  = Error terms

$i$  = Firm

$t$  = Time

### Econometric tests

Goodness of fit test for normal distribution was done using the Jarque-Bera (JB) test proposed by Brys et al., (2004) and the normal probability plots recommended by Hair et al., (2010) to test for normality. The White test was used to assess whether the variances of a single variable are equal across any number of variables. The results of White test were above 0.05 indicating absence of heteroscedasticity. Regression errors whose variances are not constant across observations are said to be heteroscedastic (Greene, 2003). The parameter linearity

assumption was tested by plotting residuals against predicted values of the response variable, whereby the relationship should take a linear form for this condition to be met (Osborne & Elaine, 2002). The Durbin-Watson statistic was used to test whether the value of the dependent variable at time  $t$  was related to its value at the previous time period, commonly referred to as  $t-1$ . The results were found to be within the acceptable threshold of values between 1.5-2.5, indicating that the error terms were independent. Multicollinearity was examined by means of tolerance and Variance Inflation Factor (VIF). Very small tolerance value (0.10 or below) or a large VIF value (10 or above) indicates high collinearity (Hair et al., 2006). This study incorporated the Levin-Lin test which tests the null hypothesis that the series contains a unit root (or  $H_0: \alpha = 0$ ) vs. the alternative hypothesis, the series is stationary.

### Testing for Fixed or Random Effects

To decide between fixed or random effects, Hausman test was run where the null hypothesis is that the preferred model is random effects vs. the alternative model being fixed effects (Green, 2003). This was to test whether the unique errors ( $e_i$ ) are correlated with the regressors, the null hypothesis is that the unique errors are uncorrelated with the regressors. If the difference in coefficients is not significant ( $p \geq 0.05$ ), then the null hypothesis is rejected and it is concluded that the unique errors are correlated with the regressors and thus the fixed effects regression model will be used and vice versa (MacManus, 2011).

## FINDINGS

### Descriptive Statistics

Descriptive statistics included in this study were mean, minimum, maximum and standard deviations of the variables of this study are presented in Table 1 below.

Table 1: Distribution of the Mean and Standard Deviation of the Variables

	N	Mean	Std. Deviation
Financial Distress	400	2.158	1.534
Firm size(log asset)	400	0.767	0.762
Inventory Levels	400	1.334	0.315
Plant and Equipment Newness	400	5.552	0.428

### Correlation Analysis

In order to assess the effect of strategic conformity on financial distress, Pearson's correlation analysis was performed. The correlation among the variables in this study was done and

presented in Table 2 below. Inventory levels was found to be positively and significantly correlated with financial distress ( $P < 0.01$ ). The logic behind this argument is that decreasing inventories leads ceteris paribus to reduced capital requirements, causing profitability measures such as return on assets to increase. Shin et al., (2015) show that a lower ratio of inventory to sales for a firm is associated with higher profit margin for the firm.

Plant and equipment newness correlation was found to be negatively and significantly correlated with financial distress ( $p < 0.01$ ). This means that when plant and equipment are new the chances of the firm facing financial distress is minimal. The probable reason is that assets determine a firm's ability to capital from outside sources; this is enhanced by the value of plant and equipment. Therefore, it means that lack of collateral makes it costly for firms to obtain funding and is strong evidence of a credit constraints channel.

Firm size was found to be negatively and significantly correlated with financial distress ( $P < 0.01$ ). This implies that small firms are likely to be in financial distress than large firms. The reason could be that small firms get it difficult to access funding from outside the firm since they have limited assets to form a collateral security compared to large firms. These results were in agreement with those by Babalola (2013) whose study of 80 Nigerian manufacturing listed firms in the Nigerian stocks exchange showed a positive and significant relationship between firm size and financial position.

Table 2: Pearson correlation Coefficient Results

	Financial Distress	Inventory Levels	Plant & Equipment	Firm size
Financial Distress	1			
Inventory Levels	.474**	1		
Plant & Equipment	-.579**	.645**	1	
Firm size	-.187**	.320**	.143**	1

\*\* Correlation is significant at 0.01 level \* Correlation is significant at 0.05level

### Hypothesis testing

Regression analysis was conducted to test the dependence of financial distress on control variables, independent variables and the interaction terms. Hierarchical regression method was used which involved entering variables in blocks. In model 1 the control variables were entered which included the firm size. In model 2 the independent variables were entered. These included; inventory levels and plant and equipment newness. Random effects regression models were run for all the models and the results are presented in Table 3.

Model 1 presents the results for control variables firm size. The results showed that firm size had a negative and significant effect on financial distress ( $\beta = -0.064$   $p < 0.001$ ). This implies that larger firms are less likely to be financially distressed as compared to small firms. Prior research done by Xiaozhou et al., (2008) suggested that large firms have larger resources to adapt their strategy in such a way that they can obtain a performance at least as small as the market performance value.

Hypothesis H01 postulated that inventory levels has no significant effect on financial distress of listed firms in Nairobi Securities Exchange. The results indicated a positive and significant effect of inventory levels on financial distress ( $\beta = 0.678$ ;  $p < 0.05$ ). The result therefore means that hypothesis H03 is rejected. Maccini & Pagan, (2008) argue that keeping stock available increases costs such as warehouse rent, insurance and security expenses, which tend to rise as the level of inventory increases. The result of this study is however contrary to the study by Capkun et al., (2009) which found positive and significant relationship between inventory and financial performance of manufacturing firms in the United States of America

Hypothesis H02 stated that plant and equipment newness has no significant effect on financial distress of listed firms in Nairobi Securities Exchange. The results however showed a negative and significant effect of plant and equipment newness on financial distress ( $\beta = -0.580$ ;  $p < 0.05$ ). The results thus mean that hypothesis H04 is rejected. It thus, indicates that when plant and equipment are new the firm is less likely to face financial distress. The possible explanation for this could be that newness of plant and equipment increases chances of the firm to get access to funds since they act as collateral. In addition, (Liargovas & Skandalis, (2010). Indicate that new investment in capital items such as plant and equipment expand the production and cash flow generating capacity of the firm thus positively related to firm performance.

Table 3: Regression Analysis Results

<b>Variables</b>	<b>Model 1</b>	<b>Model 2</b>
<b>Controls</b>		
Constant	0.422 (0.699) **	0.687 (0.810) **
Firm Size	-0.064 (-0.906) **	-0.066 (-0.084) **
<b>Predictors</b>		
Inventory Levels		0.678 (0.848)
Plant and Equipment Newness		-0.580 (-0.450) *
<b>Model summary statistics</b>		
R Square	0.013	0.661

Adjusted R <sup>2</sup>	0.005	0.436	Table 3...
R <sup>2</sup> Change	0.013	0.433	
F- Statistic	3.682	3.722	
Sig. F-Stat.	0.048	0.045	

\*\* Significant at 0.01 level \* Significant at 0.05 level

Figures in parenthesis are t-statistics

Table 4: Summary of the study results

Hypotheses	Beta	p-Value	Decision
H01: Inventory levels has no significant relationship effect on financial distress of listed firms in Nairobi Securities Exchange.	0.678	p<0.05	Reject H01
H02: Plant and equipment newness has no significant effect on financial distress of listed firms in Nairobi Securities Exchange.	-0.580	p<0.05	Reject H02

## CONCLUSIONS

The findings of the study indicated that inventory level had a positive and significant effect on financial distress. Inventory is viewed as fundamentally a driver of costs that manifest themselves in forgone investment opportunities as the result of tied-up capital. It also creates ancillary costs incurred in moving, storing or otherwise simply handling inventory or unsolved process problems that are covered up by the inventory. Therefore, this study concludes firms should establish inventory reduction programs in order to release cash for alternative uses. The logic behind this argument is that decreasing inventories leads ceteris paribus to reduction in capital requirements, causing profitability measures such as return on assets to increase.

Plant and equipment newness was found to be negatively and significantly related with financial distress for the listed firms in NSE in the period of study. Continued investment in plant and equipment is crucial because the useful life of existing capital items diminishes over time. New investment in capital items such as plant and equipment expand the production and cash flow generating capacity of the firm thus positively related to firm performance. In addition, the availability of collateralizable assets determines a firm's ability to raise outside capital. This study therefore concludes by suggesting that firms with new plant and equipment are likely to

reduce the chances of the firm entering financial distress. Thus, firms should invest in new plant and equipment as it tends to influence the decisions of investors and lenders.

In conclusion, the findings of this study have significant implications for both academic, finance and corporate governance. As scholarly inquiries into the notion of strategic conformity and financial distress have remained conceptual to date, this study is one of the first to attempt to test the concept in empirical setting. The policy makers will find useful implications that are relevant and can be used to endorse the findings of this research in corporate governance policies.

## RECOMMENDATIONS

The study concludes that new plant and equipment influences investors and potential lenders to advance funds to the firms since the new plant and equipment act as security/collateral. Consistent with feedback hypothesis, new plant and equipment sends positive message to would be investors that the firm will be able to provide collateral to the finance advanced to the firm. Therefore, the study recommends that there is need for firms to invest in plant and machinery as it was found to be negatively relate to financial distress. In addition, asset values reduce payable taxes because of accelerated depreciation charges leading to higher depreciation tax savings.

This study only incorporated listed firms in Nairobi Securities Exchange. Since strategic conformity is a relatively new construct in financial distress research, the study therefore recommends future research using different samples (e.g. private non-listed firms or Small Market Enterprises) which may provide additional insights and add to the existing understanding of the issues explored in this study.

## REFERENCES

- Adam, T., & Goyal, V. K. (2008). The investment opportunity set and its proxy variables. *Journal of Financial Research*, 31(1), 41-63.
- Adhikari, A., Derashid, C., & Zhang, H. (2006). Public policy, political connections, and effective tax rates: Longitudinal evidence from Malaysia. *Journal of Accounting and Public Policy*, 25(5), 574-595.
- Agarwal, V., & Taffler, R. (2008). Comparing the performance of market-based and accounting-based bankruptcy prediction models. *Journal of Banking & Finance*, 32(8), 1541-1551.
- Agrawal, K. (2015). Default Prediction Using Piotroski's F-score. *Global Business Review*, 16(5), 175S-186S.
- Altman, E. (2004). Predicting corporate distress in a turbulent economic and regulatory environment. *Rassegna Economica*, 68(2), 483-524.
- Altman, E. I. (2000). Predicting financial distress of companies: revisiting the Z-score and ZETA models. *Stern School of Business, New York University*, 9-12.
- Altman, E., & Hotchkiss, E. (2006). *Corporate Financial Distress and Bankruptcy. Predict and Avoid Bankruptcy, Analyze and Invest in Distressed Debt*. 3rd Edition, New Jersey.

- Balakrishnan, R., & Gruca, T. S. (2008). Cost stickiness and core competency: A note. *Contemporary Accounting Research*, Forthcoming.
- Bandyopadhyay, A. (2006). Predicting risk of default of Indian corporate bonds: Logistic and Z-score model approaches. *The Journal of Risk Finance*, 7(3), 255.
- Baños-Caballero, S., García-Teruel, P. J., & Martínez-Solano, P. (2014). Working capital management, corporate performance, and financial constraints. *Journal of Business Research*, 67(3), 332-338.
- Barker III, V. L., & Duhaime, I. M. (1997). Strategic change in the turnaround process: Theory and empirical evidence. *Strategic management journal*, 13-38.
- Bhat, V. N. (2000). The determinants of maintenance expenditures in chemical companies. *Journal of Quality in Maintenance Engineering*, 6(2), 106-112.
- Boute, R., Lambrecht, M., Lambrechts, O., & Sterckx, P. (2007). An analysis of inventory turnover in the Belgian manufacturing industry, wholesale and retail and the financial impact on inventory reduction.
- Boyd, B. K., Gove, S., & Hitt, M. A. (2005). Consequences of measurement problems in strategic management research: the case of Amihud and Lev. *Strategic Management Journal*, 26(4), 367-375.
- Brad, L., Munteanu, A., & Brasoveanu, I. V. (2015). Measuring the performance of Romanian listed companies considering their individual characteristics. *Procedia Economics and Finance*, 32, 1225-1235.
- Brys, G., Hubert, M., & Struyf, A. (2004). *A Robustification of the Jarque-Bera Test of Normality*. Physica-Verlag/ Springer
- Buchko, A. (2011). Institutionalization, Coercive Isomorphism, and the Homogeneity of Strategy. *Advances in Business Research*, 2(1), 27-45.
- Caglayan, M., Maioli, S., & Mateut, S. (2012). Inventories, sales uncertainty, and financial strength. *Journal of Banking & Finance*, 36(9), 2512-2521.
- Cannon, A. R. (2008). Inventory improvement and financial performance. *International Journal of Production Economics*, 115(2), 581-593.
- Capkun, V., Hameri, A. P., & Weiss, L. A. (2009). On the relationship between inventory and financial performance in manufacturing companies. *International Journal of Operations & Production Management*, 29(8), 789-806.
- Chen, H., Frank, M. Z., & Wu, O. Q. (2005). What actually happened to the inventories of American companies between 1981 and 2000?. *Management science*, 51(7), 1015-1031.
- Choi, Y. R., & Shepherd, D. A. (2005). Stakeholder perceptions of age and other dimensions of newness. *Journal of Management*, 31(4), 573-596.
- Chrisman, J. J., Chua, J. H., & Litz, R. A. (2004). Comparing the agency costs of family and non-family firms: Conceptual issues and exploratory evidence. *Entrepreneurship Theory and practice*, 28(4), 335-354.
- Cohen, B. D., & Dean, T. J. (2005). Information asymmetry and investor valuation of IPOs: Top management team legitimacy as a capital market signal. *Strategic Management Journal*, 26(7), 683-690.
- Deloof, M. (2003). Does working capital management affect profitability of Belgian firms?. *Journal of business finance & Accounting*, 30(3-4), 573-588.
- Demeter, K. (2003). Manufacturing strategy and competitiveness. *International Journal of Production Economics*, 81-82, 205-213.
- Doumpos, M., Niklis, D., Zopounidis, C., & Andriosopoulos, K. (2015). Combining accounting data and a structural model for predicting credit ratings: Empirical evidence from European listed firms. *Journal of Banking & Finance*, 50, 599-607.
- Elsayed, K. (2015a). Exploring the relationship between efficiency of inventory management and firm performance: An empirical research. *International Journal of Services and Operations Management*, 21(N.1), 73-86.
- Elsayed, K., & Wahba, H. (2016). Reexamining the relationship between inventory management and firm performance: An organizational life cycle perspective. *Future Business Journal*, 2(1), 65-80.
- Eroglu, C., & Hofer, C. (2011). Lean, leaner, too lean? The inventory-performance link revisited. *Journal of Operations Management*, 29(4), 356-369.
- Fullerton, R. R., & McWatters, C. S. (2001). The production performance benefits from JIT implementation. *Journal of operations management*, 19(1), 81-96.



- Gathecha, J. W. (2016). Effect of firm characteristics on financial distress of non-financial listed firms at Nairobi Securities Exchange, Kenya (Doctoral dissertation, Kenyatta University).
- Geletkanycz, M., & Hambrick, D. (1997). The External Ties of Top Executives: Implications for Strategic Choice and Performance. *Administrative Science Quarterly*, 42(4), 654-681.
- Geng, R., Bose, I., & Chen, X. (2015). Prediction of financial distress: An empirical study of listed Chinese companies using data mining. *European Journal of Operational Research*, 241(1), 236-247.
- Greene H. W. (2003). *Econometric Analysis*. 5th ed. New Jersey. Prentice Hall
- Grice, J. S., & Ingram, R. W. (2001). Tests of the generalizability of Altman's bankruptcy prediction model. *Journal of Business Research*, 54(1), 53-61.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate Data Analysis*, (6th Ed.) Pearson Prentice Hall, New Jersey.
- Higgins, M. C., & Gulati, R. (2006). Stacking the deck: The effects of top management backgrounds on investor decisions. *Strategic Management Journal*, 27(1), 1-25
- Hope, O. K., & Thomas, W. B. (2008). Managerial empire building and firm disclosure. *Journal of Accounting Research*, 46(3), 591-626.
- Hovakimian, A., Kayhan, A., & Titman, S. (2011). Are Corporate Default Probabilities Consistent with the Static Trade-off Theory?. *Review of Financial Studies*, 101.
- Jabeur, S. B. (2017). Bankruptcy prediction using Partial Least Squares Logistic Regression. *Journal of Retailing and Consumer Services*, 36, 197-202.
- Jensen, M. C. (1986). Agency cost of free cash flow, corporate finance, and takeovers. *Corporate Finance and Takeovers. American Economic Review*, 76(2).
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- Kane, G. D., & Richardson, F. M. (2002). The relationship between changes in fixed plant investment and the likelihood of emergence from corporate financial distress. *Review of Quantitative Finance and Accounting*, 18(3), 259-272.
- Kieschnick, R., Laplante, M., & Moussawi, R. (2013). Working capital management and shareholders' wealth. *Review of Finance*, 17(5), 1827-1852.
- Kim, M. H., & Partington, G. (2014). Dynamic forecasts of financial distress of Australian firms. *Australian Journal of Management*, 0312896213514237.
- Koumanakos, D.P. (2008). "The effect of inventory management on firm performance", *International Journal of Productivity and Performance Management*, vol. 57, no. 5, pp. 355-369.
- Lee, S., Koh, Y., & Kang, K. H. (2011). Moderating effect of capital intensity on the relationship between leverage and financial distress in the US restaurant industry. *International Journal of Hospitality Management*, 30(2), 429-438.
- Liargovas, P. G., & Skandalis, K. S. (2010). Factors affecting firms' performance: The case of Greece. *Global Business and Management Research*, 2(2), 184-197.
- Lieberman, M., & Asaba, S. (2006). Why Do Firms Imitate Each Other? *The Academy of Management Review*, 31(2), 366-385.
- Lieberman, M. B., & Demeester, L. (1999). Inventory reduction and productivity growth: linkages in the Japanese automotive industry. *Management Science*, 45(4), 466-485.
- Maccini, L. J., & Pagan, A. (2008). Inventories, fluctuations and business cycles. Manuscript.
- Majumdar, S. K. (1997). The impact of size and age on firm-level performance: some evidence from India. *Review of industrial organization*, 12(2), 231-241.
- Manova, K. (2008). Credit constraints, equity market liberalizations and international trade. *Journal of International Economics*, 76(1), 33-47.
- Mathuva, D. (2009). The influence of working capital management components on corporate profitability: a survey on Kenyan listed firms. *Research Journal of Business Management*, 3(1), 1-11.
- Miller, D., Breton-Miller, I. L., & Lester, R. H. (2013). Family firm governance, strategic conformity, and performance: Institutional vs. strategic perspectives. *Organization Science*, 24(1), 189-209.

- Mselmi, N., Lahiani, A., & Hamza, T. (2017). Financial distress prediction: The case of French small and medium-sized firms. *International Review of Financial Analysis*, 50, 67-80.
- Obermaier, R., & Donhauser, A. (2012). Zero inventory and firm performance: a management paradigm revisited. *International Journal of Production Research*, 50(16), 4543-4555.
- Osborne, J., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical assessment, research & evaluation*, 8(2), 1-9.
- Pindado, J., & Rodrigues, L. F. (2004). Parsimonious models of financial insolvency in small companies. *Small Business Economics*, 22(1), 51-66.
- Pong, C., & Mitchell, F. (2012). Inventory investment & control: How have UK companies been doing?. *British Accounting Review*, 44(3), 173–188.
- Pourali, M. R., Karkani, E., & Rafinia, V. (2013). Relationship between Capital Intensity with Degree of Financial Distress of the Listed Companies in Iran's Capital Market. *Technical Journal of Engineering and Applied Sciences*, 3(19), 2521-2528.
- Ridge, J., Kern, D., & A. White, M. (2014). The influence of managerial myopia on firm strategy. *Management Decision*, 52(3), 602-623.
- Sanz, L. J., & Ayca, J. (2006). Financial distress costs in Latin America: A case study. *Journal of Business Research*, 59(3), 394-395.
- Shin, S., Ennis, K. L., & Spurlin, W. P. (2015). Effect of inventory management efficiency on profitability: Current evidence from the US manufacturing industry. *Journal of Economics and Economic Education Research*, 16(1), 98.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, 52(2), 737-783.
- Stulz, R. (1990). Managerial discretion and optimal financing policies. *Journal of financial Economics*, 26(1), 3-27.
- Swamidass, P. M. (2007). The effect of TPS on US manufacturing during 1981–1998: inventory increased or decreased as a function of plant performance. *International Journal of Production Research*, 45(16), 3763-3778.
- Tinoco, M. H., & Wilson, N. (2013). Financial distress and bankruptcy prediction among listed companies using accounting, market and macroeconomic variables. *International Review of Financial Analysis*, 30, 394-419.
- Xiaozhou, X., Jin, L., & Hong, W. (2008). Stock ownership concentration and firm performance-an empirical study based on IPO companies in china. *International Management Review*, 4(2), 37-47.
- Yi, W. (2012). Z-score model on financial crisis early-warning of listed real estate companies in
- Zuckerman, E. W. (2000). Focusing the corporate product: Securities analysts and de-diversification. *Administrative Science Quarterly*, 45(3), 591-619.