

An Investigation Into Determinants Of Corporate Disclosure & Transparency Of Listed Companies In Zimbabwe During Financial Crisis (2007-2008)

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Abstract:- Zimbabwe, once a breadbasket of Southern Africa, faced the worst financial crisis in 2008. This study critically examined the degree of corporate disclosure and transparency using annual reports of 2007 and 2008 of listed companies in Zimbabwe and analysed corporate disclosure practices as a function of specific firm characteristics. The analysis used the disclosure and transparency scores extracted from a survey instrument designed to rate disclosure practices of publicly listed companies by using the OECD Corporate Governance Principles as an implicit benchmark. The methodology utilised was mainly on quantitative research. The researcher constructed a corporate disclosure and transparency model. Undue influence on the model parameters was investigated using standardised residuals and Cook's distance measures. Since the diagnostics for the regression model used in this study is a good fit of the observed data, the results can be generalized to the wider population of Zimbabwean companies. This study indicates that Zimbabwean publicly listed companies have low levels of corporate disclosure and transparency. Overall, the empirical results show that Zimbabwean firms' are weakest in the role of stakeholders in corporate governance. Furthermore, the results indicate that the variability in corporate disclosure and transparency scores can best be explained in terms of accounting standards and total debt to total assets (leverage). The results are broadly consistent with the notion that good corporate governance leads to better corporate disclosure and transparency in less developed markets. The research findings in this study are comparable to similar studies during financial crisis of 1997 that swept through most of East Asia and to World Bank Group-ROSC of 2000.

Index Terms:- Annual Reports , Corporate Disclosure, Corporate Governance, Financial Crisis, Transparency, Zimbabwe Stock Exchange.

1 INTRODUCTION

In a declining economy, it is widely known that companies are under pressure to engage in unorthodox means of survival, which means there is lack of transparency and no good corporate governance. Even the agrarian reforms through farm invasions have been construed as a disregard of property rights laws by the Zimbabwean government (Sithole, 2006:1). In this case the Zimbabwean legal system would be viewed as weak in enforcing rules and regulations resulting in shareholder and creditor rights being compromised. Given the extraordinary circumstances in Zimbabwe where the economy was at its worst state, it is interesting and challenging to investigate corporate governance where the prevailing economic and political conditions present ethical dilemmas for company directors during the years, 2007 and 2008. As a result, the objectives of this study are to assess the corporate disclosure and transparency of Zimbabwean businesses and to empirically explain the variability in the corporate disclosure and transparency levels of the sample companies in terms of nine company-specific attributes and seven corporate governance mechanisms. The analysis used the disclosure and transparency scores extracted from a survey instrument designed to rate disclosure practices of publicly listed companies by using the Organisation of Economic Cooperation and Development (OECD) Corporate Governance Principles as an implicit benchmark. The study used mainly the quantitative research and statistical analysis such as ordinary least squares multiple regression and Pearson's Correlation Matrix to get the results. Multiple regression models were employed to establish the predictive power of the variables in this study, and the developed hypotheses were tested. Because of high multicollinearity between some proxies, 6 models were run. The several diagnostic tests ran showed that the regression model used in this study is a good fit of the observed data and can be generalised to the wider population of Zimbabwean companies. The research findings show that there were low levels of corporate disclosure and transparency in Zimbabwe during the

financial crisis of years 2007 and 2008. The remainder of this paper is organised into five sections: section 2 describes the sample and defines the variables. In section 3 the results of the research are given, and in section 4 the robustness checks are provided. A conclusion is presented in section 5.

2. SAMPLE AND DATA

2.1 Sample

The degree of corporate disclosure and transparency for companies in Zimbabwe was examined in this study by using data obtained from annual reports of Zimbabwe Stock Exchange (ZSE) listed companies. Due to the relatively small number of companies listed on the market, all the 79 companies were considered for their audited annual reports for the financial year of 2008. The research started by considering the total population of 79 listed companies in Zimbabwe. Then the total population was critically examined. To ensure uniformity in the annual disclosure practices of the sample, some companies were eliminated from the sample. In order to be included in the study, a firm must have a full set of financial information covering the entire 2007 and 2008 fiscal years. Any firms that went public in 2008 are excluded, as are firms undergoing financial restructuring such as David Whitehead Textile, TZI and Barbican. Banks are eliminated as they report under different regulatory framework and corporate governance is mandatory, and supervised by Reserve Bank of Zimbabwe. Also companies that are merely listed on the Zimbabwe Stock Exchange, but not incorporated under Zimbabwean law, such as Pretoria Portland Cement, Old Mutual, Hwange Colliery and CAFCA are deemed not to be representative of the general population of Zimbabwean companies, and have thus been eliminated from the sample. After eliminating the above mentioned unqualified companies, the resulting final sample of 55 companies represented about 89% of the total population of Zimbabwean, non-banking, listed companies as at 31st December 2008.

2.2 Measure of Corporate Disclosure and Transparency

The research examined the degree of corporate disclosure and transparency in annual reports of listed companies in Zimbabwe and analysed corporate disclosure practices as a function of specific firm characteristics. Nine financial variables and seven corporate governance variables (table 1) are proposed in this study, intending to capture different firm characteristics that can influence the degrees of corporate disclosure and transparency.

Table 1:- Summary of the Operationalisation of Independent Variables

This table represents 9 independent variables on firm characteristics and 7 independent variables on corporate governance characteristics that are going to be tested on corporate disclosure and transparency of 55 and 42 listed companies in Zimbabwe during 2008 and 2007 respectively.

INDEPENDENT VARIABLE	MODEL NOTATION	OPERATIONALISATION
	<u>Corporate</u>	<u>Characteristics</u>
1. Company Size	COSIZE 1 COSIZE 2	i) Log of total assets as at 2007 & 2008 financial year-ends ii) Log of total turnover as at 2007 & 2008 financial year-ends
2. Profit	ROE ROA	i) Return of equity (ROE) defined as net income total owners' equity ii) Return on assets (ROA) is net income divided by total assets
3. Turnover	TURN	Sales divided by total assets A
4. Fixed Assets	FA	Fixed Assets net of depreciation divided by total assets
5. Leverage	LEVRG	Debt ratio defined as total debt to total assets
6. Liquidity	LIQ	Ratio of current liabilities to current assets
7. Accounting Standards	ACCSTD	Given one if disclosed, otherwise zero
	<u>Corporate</u>	<u>Governance</u>
8. Ownership Concentration	CONC	Existence of a controlling shareholder, defined as the single shareholder owing largest shareholding
9. Board Composition	BSIZE	Ratio of non-executive directors on board of directors
10. Audit Committee Composition	AUDIT	Ratio of non-executive directors on audit committee
11. Size of Executive Directors	BEXC	Ratio of executive directors to total number of directors
12. Size of Independent Directors	OUT	Ratio of independent directors total number of directors
13. Cross-Directorship	XDIR	Ratio of directors on the board with directorships in other companies to total number of directors
14. Foreign Ownership	FOREIG	Ratio of total shares owned by foreigners to total number of shares issued

Then, the model for measuring disclosure and transparency was constructed. The survey instrument that reflects the Organisation of Economic Cooperation and Development (OECD) corporate governance guidelines was used in this study. Furthermore, based on the OECD Principles, the study used the Thai Institute of Directors (IOD)'s Survey Questions that were framed objectively to maintain confidence in the research process and to ensure that the research was consistent with ethical principles. Although the survey contains more than 80 individual means, questions specifically addressing disclosure and transparency were selected from the full set of survey responses. Only 45 questions from the survey are used to construct measures of disclosure and transparency, which is the focus of this study. Companies were scored in all applicable areas of the survey. To avoid subjective on the level of corporate governance for an individual company, different raters were used to crosscheck and audit. Nearly every survey measure was refined so as to be quantifiable. This added qualitative dimension to the governance measures. Companies that omitted or did not comply with a specific scoring criterion receive a 'poor' score (that is, 1). Meeting the legal compliance standard earned a firm a score of 'fair' (that is, 2), while firms that exceeded the regulatory requirements and/or met international standards received the highest score (that is, 3). On completion of assessment, a simple average of the scores for all questions in a section yields the score for that section. Individual scores were calculated for the five survey section: shareholders' rights, treatments of shareholders, treatments of stakeholders, disclosure and transparency, and the roles of the board of directors. In addition to scores by section, a single composite score for transparency (TRANSP) was calculated by taking a weighted sum across the scores for each of the five sections. Financial data, used to construct control variables as well as measures of return and corporate governance variables were constructed using manually collected data from annual reports. The measure of disclosure and transparency in question, TRANSP, is the dependent variable in the following equation to be estimated for Zimbabwe:

$$\text{TRANSP} = B_0 + B_1 \text{SIZE}(X)_i + B_2 \text{PRFT}(X)_i + B_3 \text{TURN}_i + B_4 \text{FA}_i +$$

$$B_5 \text{LEV}_i + B_6 \text{LIQ}_i + B_7 \text{ACCSTD}_i + B_8 \text{CONC}_i + B_9 \text{AUDIT}_i + B_{10} \text{BEXC}_i +$$

$$B_{11} \text{OUT}_i + B_{12} \text{XDIR}_i + B_{13} \text{FOREIGN}_i + B_{14} \text{BSIZE}_i + e_i$$

Natural logarithms are used for the company size proxies of total assets and turnover in order to standardize the data. Natural logarithms have been used in prior studies such as Owusu-Ansah, 1998.

2.3 Validity and Reliability

The researcher in this study achieved validity and reliability by having the following procedures taken: validation observational procedures, triangulation of data collection methods, pilot study, member checking and audit trail.

2.4 Data Analysis Plan

The regression estimations for years 2007 and 2008 were developed to ascertain, in a conjunctive manner, the corporate governance and transparency levels of the sample companies. The use of ordinary least squares multiple regression approach is consistent with prior studies (Chen and Jaggi,

2000:285; Owusu-Ansah, 1998:605; Haniffa and Cooke, 2002:605). Regression analysis enables the investigation of the collective influence of several independent variables on a single dependent variable. In this context of study, it allows for investigation of the collective influence of both the corporate governance and company specific variables on the transparency scores. Another reason for using the multiple regression is the influence of each variable upon the dependent variable is measured, and its significance ascertained. The fourth reason is that it allows the combination of different variables, with differing measurement scales, into one model. Finally, the use of multiple regression analysis does not deny the existence of other factors that might influence corporate disclosure and transparency; rather, it merely estimates the proportion of the transparency score that can be explained by the identified variables. Thus, the above linear model is assumed to hold for the sample companies.

3 RESULTS

While correlations examine the extent to which variables are related, regression analysis will determine their predictive power thereby testing the hypotheses developed.

3.1 Empirical Results

Table 2 shows a comparison of the survey scores for years 2007 and 2008, giving an overview of how companies in the two years compare. For each survey question, the means for different years as well as those for Hong Kong and Thailand are shown. If firms have transparency and disclosure practices that meet or exceed all international standards, the rating would be three; the poorest practices would be uniformly rated as one.

Table 2:- Comparison of Corporate Disclosure and Transparency Mean Scores

This table compares mean scores for corporate disclosure and transparency. The mean scores are based on the subset of questions extracted from the full survey instrument developed by Thai Institute of Director Association (IOD). The survey uses the general classification according to the OECD Corporate Governance Principles. RIGHT is protection of the rights of shareholders; TREAT measures equal treatment of all shareholders; STAKE is the role of stakeholders in corporate governance; DISC measures the extent of disclosure and transparency; BOARD is the role of the board of directors; and TRANSP is an overall index of corporate disclosure and transparency.

CLASSIFICATION	ZIMBABWE		HONG KONG*	THAILAND*
	2007	2008	N=148	N=265
RIGHT	1.98	2.03	1.61	2.31
TREAT	2.46	2.45	2.83	2.60
STAKE	1.50	1.49	2.01	2.07
DISC	2.23	2.23	2.21	2.38
BOARD	2.00	2.02	1.61	2.08
OVERALL				
TRANSPARENCY	2.10	2.11	2.04	2.31
* Source: Cheung et al(2006:38)				

Despite that the Zimbabwe economy was more stable in 2007 than in 2008, from the researched results of this study where the variable of interest (TRANSP) has a mean of 2.10 and 2.11 respectively, it is concluded that the degrees of corporate disclosure and transparency for Zimbabwean firms in 2008 are more or less the same as those for Zimbabwean firms in 2007 as shown in table 2. This is inconsistent with the notion that the levels of corporate disclosure and transparency are higher in a more stable economic condition, which is perceived to have a better environment for corporate governance. However, the levels of transparency may have significantly increased because companies improved their corporate governance in response to the crisis. When the corporate disclosure and transparency are disaggregated according to OECD principles into 5 categories of; rights of shareholders, equitable treatment of shareholders, roles of stakeholders, disclosure and transparency, and the role of the board of directors, an interesting pattern emerges. The results of the study show that the Zimbabwean firms are best on corporate governance in terms of equitable treatment of shareholders (about a mean score of 2.45 in year 2008 and 2.46 in year 2007), followed by disclosure and transparency with mean score of 2.23 in both years of 2008 and 2007 (that is, about 74% of category scores). According to corporate disclosure and transparency scorecard, the rights of shareholders and the responsibilities of the board of directors have more or less similar results. The sample companies have poorest corporate disclosure and transparency scorecard on role of stakeholders in corporate governance, having a mean score of 1.49 (about 50% of category scores) for year 2008 and mean score of 1.5 for year 2007.

3.1 Descriptive Statistics

Table 3 presents the descriptive statistics for year 2008. From an initial sample of 75 firms, firms in the financial services sector are removed from the sample. The company size 1, with mean of 6.6, has a higher mean value than company size 2 that has a mean of 4.8. This suggests that Zimbabwean listed companies may prefer to measure their firm sizes using natural logarithm of total assets as opposed to natural logarithm of total turnover during hyperinflation era.

Table 3:- Descriptive Statistics

This table presents descriptive statistics for the variables used in the regression models. The sample consists of 55 firms listed on Zimbabwe Stock Exchange (ZSE) during 2008. Firms registered under the Banking Act, companies not incorporated in Zimbabwe and those suspended on ZSE or registered during the period 2008 are excluded from country sample. Financial data are obtained from annual reports. Corp.Disc & Transp is an index of corporate disclosure and transparency, constructed from corporate governance surveys conducted in Zimbabwe.

VARIABLE	ABBREVIATIONS	MEAN
Corporate Disc. & Transparency		2.121
1. Company Size	COSIZE 1	6.639
	COSIZE 2	4.834
2. Profit	ROE	0.499
	ROA	0.2382
3. Turnover	TURN	0.3463
4. Fixed Assets	FA	0.5622
5. Leverage	LEVRG	0.1947
6. Liquidity	LIQ	0.7479
7. Accounting Standards	ACCSTD	0.5454
8. Ownership Concentration	CONC	0.3561
9. Board Composition	BSIZE	0.0872
10. Audit Committee Composition	AUDIT	0.7964
11. Size of Executive Directors	BEXC	0.3082
12. Size of Independent Directors	OUT	0.6759
13. Cross-Directorship	XDIR	0.3535
14. Foreign Ownership	FOREIG	0.0527

The return measures are 0.50 and 0.24 for ROE and ROA, respectively. Zimbabwe listed companies have a lower average for ROA than that of ROE, perhaps supporting the above assumption that the increase in total assets may be not as a result of better performance. The financial leverage (Levrg), as measured by the ratio of total debt to total assets, has an average of 0.19 suggesting that Zimbabwean companies are not geared to the tune of 81%. The uncertainties surrounding the economy discourage financial institutions to advance long-term loans to companies in Zimbabwe. The shortages of goods and cash may have caused the firms to have current assets almost the same as the current liabilities. On ACCSTD, about 30 firms out of 55 managed to comply with accounting standards relevant to their industries. The 55% of sampled firms probably see the practice of proper accounting standards as very significant in the sense that it leads to the effective disclosure and consequently good corporate governance programmes. Turning next to corporate governance variables, the ownership concentration proxy has an average of 36% taken by the largest single shareholders, whilst 64% ownership is spread among various shareholders. In 2003 the ownership concentration was still at 38% as presented by Zimbwa (2005:53) in his empirical assessment of corporate transparency in Zimbabwe. The optimal board size suggested in this research is between 6 and 10 directors. About 87% of sampled quoted companies in Zimbabwe achieved this optimal

board size (Bsize) in 2008. There are about 465 directors of sampled 55 listed companies in Zimbabwe for year 2008 and the number of directors for each firm range from 5 to a maximum of 14. Out of 465 directors, 167 directors have cross-directorship (Xdir). The ratio of directors on the board with directorships in other companies has a mean of 35%. The board composition, being the same for 2008 and 2007, is made up of 70% outside or non-executive directors and 30% executive directors. The ratio of non-executive directors on audit committee on Zimbabwe listed firms is 0.73 in 2003 (Zimbwa, 2005:53), and is still 0.73 in 2007 and has increased to 0.80 in 2008 as per this research. As concluded by prior researchers, firms with a high proportion of non-executive directors on audit committee have high levels of corporate disclosure and transparency. Most companies in Zimbabwe have a majority of non-executive directors on the board. However, whether the non-executive directors are truly independent as defined in the Corporate Governance Practices for Publicly listed companies Guidelines draft (2000) is difficult to determine especially where 35% of directors have cross-directorship. There may be an issue where director A of company CA may seek favours from director B in company CB to be appointed as a non-executive director in company CB for a return of appointing director B as a non-executive director in company CA. Hong Kong and Thailand listed firms have similar to Zimbabwe board composition of mean percentage of independent directors on boards (OUT) identical at 30% according to the results of Cheung et al., (2006:39). The ratio of total shares owned by foreigners to total number of shares issued (Foreign) is 5% whilst the 95% is owned by locals in Zimbabwe. However, the results of Zimbwa (2005:53) has a mean of 15% on foreign ownership in 2003, a drop of 10% to 2008, perhaps showing that the effects of 2008 financial crisis may still be influencing foreign investors' expectations of future prospects for Zimbabwe firms.

3.2 Correlation Analysis

After a descriptive analysis of the data to establish measures of central tendency and dispersion, this section deals with the strength of relationships between the variables. It is generally argued that highly correlated variables should not be included in the same regression model. This is so because owing to a high level of correlation between the independent variables, the reliability of the regression coefficients is reduced. When the independent variables are correlated among themselves, intercorrelation or multicollinearity among them is said to exist (Neter, Wasserman and Kutner, 1990:296). However, the problem lies in determining what constitute a high correlation coefficient. Farrar and Glauber (1967) suggest that simple correlation between independent variables should not be considered harmful until they exceed 0.80 or 0.90. For some, a high coefficient is anything above 0.50; for others it is anything around 0.60 (Eastman, 1984) In this study the Pearson product momentum test was employed to assess the strength of the bivariate relationships between the variables. However, in August 2008, the Reserve Bank of Zimbabwe rebased the functional currency by the removal of ten zeros that led to either one or zero dollars for 2007 on comparison with figures in financial statements of 2008. The comparison of figures for 2007 and 2008 is rendered misleading, and therefore the regression models and correlations for 2007 are not presented in this study. The correlation analysis table is available upon request. The results of Pearson product-moment correlation revealed that accounting standards (ACCSTD) are significantly

correlated with corporate disclosure and transparency at the 0.05 confidence level (2-tailed). Other independent variables are not significantly correlated at the 0.05 level with corporate disclosure and transparency. Although not significant, total turnover (company size 2), ROE, ROA, sales divided by total assets (Turn), leverage (Levrg), liquidity (Liq), ownership concentration (Conc), outside directors (Out), foreign ownership (Foreign) and cross-directorship (Xdir) are positively correlated with corporate disclosure and transparency as predicted. However, company size 1, asset utilization (FA), audit and the proportion of executive directors on board (Bexc) are not in line as predicted. The uncertainties in the adverse Zimbabwe economic environment during year 2008 made the researcher to increase the number of independent variables, that is, determinants, than previous researchers so as to enhance explanations of the corporate disclosure and transparency index. However, out of the 16 independent variables, only one proxy, accounting standards, is significantly correlated with corporate disclosure and transparency. Owusu-Ansah (1998:605) also found mixed results for his 1994 Zimbabwean sample, with the Pearson product-moment correlation test showing a positive association with mandatory disclosure, while a negative association was found with the Spearmanrank-order test. Both correlations were, however, not statistically significant. The accounting standards variable that is significant in this study, has not been used as a proxy to corporate disclosure and transparency by other previous researchers.

3.3 Multiple Regression Analysis

A multiple regression model is employed to establish the predictive power of the variables in this study, and test the hypotheses developed. The variables used as predictors in this study have been selected using both past research and substantive theoretical importance. The variables, corporate disclosure and transparency, turnover and ROE that exhibited positive skewness have been transformed in order to remedy the non-normality and unequal variances departures from regression model (Nater et al., 1990; Weisburg, 1985). Model 1 was run with sixteen predictors of independent variables on a sample of 55 firms listed on Zimbabwe Stock Exchange. The model is a simple ordinary least squares regression model. Using Cook's Distance statistics, the model proved to be problematic as it has two cases that are not within the recommended threshold (Neter et al., 1990). Also, model 1 has high multicollinearity between some proxies (Neter et al., 1983). Therefore, Model 1 is rejected in this study. Model 2 was run after removing two cases with problems from the original sample of 55, leaving 53 observations. This now leaves all cases within the recommended threshold (Neter et al., 1990). Though this problem is solved, the multicollinearity problem is compounded since the variance inflation factors exceed 10 (Neter et al., 1983), has doubled from two to four. This still makes the regression model not a good predictor and, thus, is rejected in this study. Model 3 discloses the results of the regression. The model is a simple ordinary least squares regression model, regressing corporate disclosure and transparency scores against company size (COSIZE 1, COSIZE 2), profitability (ROA), asset utilization (TURN, FA), leverage (LEVrg), liquidity (LIQ), accounting standards (ACCSTD), ownership concentration CONC, FOREIGN, audit committee (AUDIT) and board structure (OUT, BSIZE, XDIR). On profitability, the model excludes ROE, whilst on board composition, it excludes BEXC, leaving 14 independent

variables. In other words, the model uses ROA on profitability and OUT on board composition. The VIF (variance inflation factor) does not exceed 10 (Neter et al., 1983), which means that multicollinearity is not a real issue.

Table 4:- Regression Results for 2008

Sample of 52 listed companies in Zimbabwe observed over the period 2008 classified in accordance with OECD corporate governance principles using survey instrument developed by Thai Institute of Director Association (IOD). See Table 1 for variable definitions. T-statistics are reported in parentheses. * denotes significance at 5% level. Only model 3 is presented as the other models 4 to 6, give the same results as model 3.

VARIABLE	Coefficient	T-statistic
(Constant)		-7.4616
COSIZE 1	-0.1278	-0.7317
COSIZE 2	0.0593	-0.3305
ROE		
ROA	0.1004	-0.5801
TURN	-0.2946	-1.214
FA	0.263	-1.3421
LEVRG	0.5724*	-2.5811
LIQ	0.1412	-0.8928
ACCSTD	0.3205*	-2.0149
CONC	0.1081	-0.7232
BSIZE	0.0861	-0.5575
AUDIT	-0.1976	-1.2898
OUT	0.04927	-0.274
XDIR	0.1833	-1.0766
FOREIG	0.0185	-0.1119
R Squared	0.3348	
Adjusted R Squared	0.0897	
F Statistics	1.3659	
VIF max	2.8089	

The coefficient of determination in this model is 0.33 whilst the adjusted R-squared value becomes 0.09. This means the independent variables selected in this study explain about 9% of the variation in the dependent variable (corporate disclosure and transparency). The coefficients of determination in this study are well comparable to the results of Cheung (2006:27) after the Asian financial crisis of 1997, marked by the *de facto* devaluation of the Thai currency in mid-1997. He found the values for adjusted R-squared ranging from 7% to 8% for Thailand firms and 23% to 29% for Hong Kong. Zimbabwe financial crisis of 2008 like the Asian financial crisis of 1997, has the values for adjusted R-squared ranging from 8% to 9%. Thailand, well comparable to Zimbabwe, encountered the most severe economic collapse in the country's history as a result of the Asian financial crisis. On the other hand, Hong Kong went through the crisis with relative ease and did not experience an economic meltdown of the scope and scale as Thailand and Zimbabwe. The model 3 regression coefficients for leverage and accounting standards are positive and statistically

significant at the five percent level, with F-statistics value of 1.4. The *t* statistics of the remaining 12 variables are not significant at 5% level, indicating a negligible effect on corporate disclosure and transparency practices of Zimbabwe listed companies. Two separate determinants of board structure (BEXC and OUT) as well as three separate performance measures (ROA and ROE) mean that four models are created for each year. A seventh regression Model, was run using the stepwise regression method in order to confirm the predictive power of the variables identified as significant by other Models. However, because this model gives the same results as other models, the results of this model are not reported. The reliability of the statistical model was tested using the robustness checks. Several diagnostic tests ran proved that the regression model constructed is a good fit of the observed data and can be generalised to wider population of Zimbabwean companies. The results show that there are low levels of corporate disclosure and transparency in Zimbabwe during the financial crisis of 2007 and 2008.

4 Robustness Checks

Several diagnostic tests were run in order to assess whether the regression model used in this study is a good fit of the observed data and can be generalized to the wider population of Zimbabwean companies. The researcher began by considering the graphic diagnostics such as the box plots, dot plots, normal probability plots and the scatter plots. The possibility that certain cases might exert undue influence on the model parameters was investigated using standardized residuals (DFFIT and DFBETA) and Cook's distance measures. Cook's distance is a measure of the overall influence of a case on a model and Cook and Weisberg (1982) have suggested that values greater than 1 are cause for concern. It is generally expected that ninety-five percent of cases would have standardized residuals within ± 2 (Field, 2000). From the fifty-five cases in this sample, two (4%) have standardized residuals outside ± 2 limits, and Cook's D statistics for these two cases are within the recommended threshold. The letters DF in DFFIT and DFBETA stand for the difference between the fitted dependent value for the case when all cases are used in fitting the regression function and the predicted dependent value for the case obtained when the case is omitted in fitting the regression function. As a guideline for identifying influential cases, Neter, Wasserman and Kutner (1990: 401) suggest considering a case influential if the absolute value of DFFIT or DFBETA exceeds 1 for small to medium-size data sets. None of the DFFIT and DFBETA statistics for these two cases has an absolute value greater than 1, showing that they have no undue influence over the regression parameters. Thus from these diagnostics, the regression model appears reliable.

5 Conclusions

In respect to the first objective of assessing the corporate disclosure and transparency, the empirical results lead to conclusion that Zimbabwean publicly listed companies have low levels of corporate disclosure and transparency. The Zimbabwean listed companies meet only the legal compliance and do not exceed the regulatory requirements and/or meet international standards. Although quite low, the mean corporate disclosure and transparency score of 2.12 or 71% is comparable to the transparency scores of other emerging economies. In another study of corporate disclosure and transparency, Cheung et al (2006:23) find the mean transparency score of 2.04 or 68% on Hong Kong, and mean

transparency score of 2.13 or 77% for Thailand. Another similar study in 19 emerging markets, Standard and Poor find the mean scores of their sample companies to range from 22% to 55 %, with varying means across the countries (Patel et al, 2002:325). South Africa was reported as having the highest mean score of 55%, followed by Asia at 43%, Europe and the Middle East with 36%, and Latin America companies have a mean score of 29%. Zimbwa (2005:52) finds the mean transparency score of 52% for the sample companies in the study. When the corporate disclosure and transparency are disaggregated according to OECD principles into 5 categories of; rights of shareholders, equitable treatment of shareholders, roles of stakeholders, disclosure and transparency, and the role of the board of directors, the results of the study show that the Zimbabwean firms are best on corporate governance in terms of equitable treatment of shareholders. The results are similar to Cheung et al (2006:23) who also find highest levels of corporate governance on equitable treatment of shareholders on Hong Kong and Thailand (Hong Kong 94%, Thailand 87%, this study on Zimbabwe 83%). This study indicates that Zimbabwean firms are weakest in the role of stakeholders in corporate governance with mean score of 1.513 and is consistent with the findings of World Bank Group-ROSC (2000:15). Interestingly, Thailand like Zimbabwe has the weakest corporate governance on role of stakeholders. The second conclusion that answers the final objective of this study relates to the statistical results of the multiple regression analysis to test the hypotheses developed. Empirical results show that financial characteristics explain some of the variation in the degrees of corporate disclosure for listed firms in Zimbabwe. The findings indicate that the variability in the transparency scores can best be explained in terms of leverage and accounting standards. Overall, the empirical results show that Zimbabwean publicly listed companies have low levels of corporate disclosure and transparency. The results are broadly consistent with the notion that good corporate governance leads to better corporate disclosure and transparency in less developed markets and comparable to similar studies during financial crisis of 1997 that swept through most of East Asia.

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