



## An Analysis of the Buoyancy of Corporate Income Tax in Zimbabwe (2009 – 2018)

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### Abstract

The research scrutinized the buoyancy of corporate income tax in Zimbabwe. The anecdote of this study is to establish the buoyancy of corporate income tax, identify the weak and strong spots of corporate income tax and to draw policy recommendations. The research exploits OLS approach and quarterly time series data for the period 2009 to 2018 and buoyancy estimates were determined using a double logarithmic model. Official data sources used in this study includes statistics from ZIMRA revenue database, RBZ yearly publications and ZIMSTAT quarterly and yearly publications. The study revealed a positive and statistically significant association between corporate income tax and GDP. The degree of buoyancy was found to be greater than the unitary figure of one, thus corporate income tax is buoyant. With a buoyant corporate income tax, the study recommends fiscal authorities in Zimbabwe to re-evaluate growth strategies that will widen the tax base and initiate counterproductive reforms that entice full exploitation of revenue potential in Zimbabwe

**Keywords:** Tax Buoyancy, Corporate Income Tax, Gross Domestic Product, Tax Reforms

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### Introduction

Tax revenues remain important to many governments of the world including both developed and developing. Like many developing countries Zimbabwe has solely relied on tax revenues to tackle the country's expenditure needs. Encounters such as persistent and increasing poverty levels, deteriorating investment environment, inadequate skilled human resources, declining productivity in the real sector, dwindling infrastructure and limited access to quality social services have put exorbitant pressure on tax revenues. Azubike (2009) pointed out that adequate tax revenues enable governments to perform and concentrate on their conventional roles thus, public expenditure which is allocated for the provision and maintenance of state goods, national protection in form of defence and other essential services are efficiently attained.

The extent to which a country is able to fulfil its mandate is reliant on tax revenues. The buoyancy of tax revenues is an important aspect in a fiscal policy. Tax revenue buoyancy and elasticity of a tax system have been used interchangeably in the literature. According to Omondi *et al* (2014) buoyancy estimates show the response of tax revenue to changes in an underlying macroeconomic base, including changes that may result from policy actions. Chiefly, estimates of tax revenue buoyancy capture the sensitivity of tax proceeds to changes in the economy including discretionary changes to the tax system. Andersen (1973) expressed that buoyancy expresses pure outcome of tax receipts with respect to the fluctuations in the macroeconomic base and they signify automatic growth potential of tax revenues.

Developing countries are largely affected by fiscal deficits caused by fiscal imbalances which are better explained by the rapid expansion in expenditure despite low revenue collections. Romer (1986) showed that growth is better achieved when fiscal imbalances are reduced or eliminated and he suggested that this can be realised only if government expenditure is reduced or tax revenues are increased. As such developing countries have opted to reduce expenditure to achieve fiscal balance by reducing expenditure on health, education and infrastructure is contrary to the famous Rostow Musgrave theory in public sector growth which suggests expenditure on the above as prerequisites for growth.

African countries have long been characterised by perpetual tax reforms in which Omondi *et al* (2014) have considered as positively influencing buoyancy and elasticity. However, empirics have shown that tax reforms on its own is inadequate to provide sufficient revenue to match the cumulative government expenditure. Characterised by an unresponsive tax system most African governments have to re-evaluate the implementation strategies and pursue further reforms to fully exploit the tax revenue potential in the economy. African governments are enticed to re-evaluate growth strategies that will widen the tax base and initiate counterproductive reforms that induce full exploitation of revenue potential.

An unmatched ratio between public expenditure and mobilised revenue is a topical phenomenon for most African countries, in efforts to meet the growth objective and have caused huge fiscal deficits. Proper domestic resource mobilisation in Zimbabwe has not been an easy task for the tax collector largely because of resistance in the form of tax avoidance, tax evasion and corruption which has seriously contributed to stagnation in the economy (Adegbie and Fakile, 2011). It is clear that tax revenues are a tool for accelerated growth and development that has led government to constantly check up on the magnitude of fiscal deficits in the country. Thus, tax reforms have been regularly crafted and applied nearly annually clearly detailing the tax system framework also with the composition of public expenditure. Accurate approximations of the optimum and sufficient required tax revenue are based on the estimates of buoyancy figures of a tax system. This has been utilised to help identify viable revenues and determine appropriate modifications to a country's tax system.

The failure of a tax system in generating sufficient revenue is attributed to poor revenue forecasting. Overtime the ratio of tax to GDP been increasing indicating that aggregate tax revenues have been growing at a faster rate than GDP (ZIMRA, 2018) suggesting that tax revenue buoyancy should be approaching the unitary value. Despite this, studies have shown that the Zimbabwean tax system is not buoyant (Chidakwa, 1996; Ndedzu *et al* 2013 and Bonga *et al.* 2015). It is against this study background this study seeks to scrutinize the responsiveness of corporate income tax to changes in GDP in Zimbabwe for the period 2009-to-2018 in efforts to bring insights regarding the buoyancy of the corporate income tax revenues to changes in GDP. As in Mawia and Nzomoi, (2013) the novelty of this paper is the use of quarterly data contrary to annual data used by many previous empirical studies.

Apart from contributing to the existing literature on corporate income tax buoyancy. This paper relates to at least three other strands of research. First, the paper partially answers Ndedzu *et al.* (2013) and Bonga *et al.* (2015) call for researchers to examine individual tax head buoyancies in Zimbabwe. Second, the increase in dependency volumes to tax revenues in Africa and the worsening of economic conditions has been the subject of considerable interest among development economists and public finance (for example, Wawire, 2003; and Upender, 2008). By examining only corporate income tax, this paper extends understanding of how this important tax head responds to changes in GDP over time.

## Literature Review

### Concept of Tax Buoyancy

Tax buoyancy is the change in tax revenue with respect to changes in tax base. Estimates from buoyancy indicates the sensitivity of tax proceeds to fluctuations in underlying macroeconomic base, inclusive of changes as a result of policy actions (discretionary changes). An established body of literature on tax responsiveness has surprisingly concentrated on tax elasticity rather than tax buoyancy. One of the dominant reasons is difficulties in obtaining information on discretionary changes. Typically, the base that is used in the calculation of buoyancy is Gross Domestic Product (GDP). Tax revenue buoyancy is given by a ratio as follows:

$$TB = \frac{\% \Delta \text{Tax Revenue}}{\% \Delta \text{GDP}} \quad (1)$$

In this paper corporate income tax buoyancy is derived by dividing the change in corporate income tax revenues by the change in GDP. The formula is as follows:

$$\text{Corporate Income Tax Buoyancy} = \frac{\% \Delta \text{Corporate Income Tax Revenues}}{\% \Delta \text{GDP}} \quad (2)$$

A higher buoyancy coefficient shows an incorporated suppleness in a tax system thus, if it exceeds the value of 1, it solidifies that tax revenues response is more than proportionate to a rise in GDP. Generally, buoyancy estimates higher than 1 implies that any change in GDP results in an even greater change in tax revenues. This is a desirable situation particularly in terms of long-term fiscal sustainability being cognisant that the demand for public expenditures is also ever increasing.

If tax buoyancy is equal to 1, it indicates that a one percent increase in GDP results in a one percent increase in tax revenues (that is there is no change in the tax-to-GDP ratio). On the other hand, a less than 1 coefficient, shows that tax revenues response to increases in GDP is less than proportionate. It is critical to note that buoyancy measurement is dynamic and changes approximately on a yearly basis, therefore it is imperative to capture buoyancy estimates covering longer time periods, such as ten to twenty years (Bonga *et al.* 2015).

### Tax Buoyancy Estimation Methods

According to Bonga *et al.* (2015) and Dudine and Jalles (2017), tax buoyancy can be calculated using various formulas/methods. The first method is referred to as the traditional model. This model entails that tax revenues are caused and determined by GDP. A number of researchers (Osoro, 1993; Ariyo, 1997; Wawire, 2000; and Bonga *et al.*, 2015) have used this model. The second method is the Proportional Adjustment Method (PAM). The method isolates the data attributable to discretionary changes in a tax policy with data emanating from official government tax receipts.

The third approach is the Dummy Variable Method (DVM). With this method every exogenous tax policy implemented is represented by a dummy variable and a yearly lag to determine the impact of a policy change. The fourth method is the Constant Rate Structure (CRS), which collects data of actual tax receipts and tax revenues from lawful bases. A values and tax bracket for a base year are multiplied and summed up. The Divisia Index is the fifth and final model. Under this model, a proxy for discretionary changes is introduced and the index measures the impact of the changes on tax yields.

## Empirical Literature

Twerefou (2008) provide evidence on the buoyancy and elasticity of Ghanaian tax system. This study uses the Ordinary Least Squares approach and the dummy variable approach over the period 1970 to 2007 to adjust for the effects of unrestricted tax measures. Research findings exposed that in the long run aggregate tax structure is elastic and therefore, it is buoyant, although the short run elasticity was lower than the long run estimates. For the period 1970 to 2007 the estimate of 1.03 was above unit figure suggesting the sensitivity of the tax system to variations in Gross Domestic Product in Ghana. Corporate income tax was also found to be buoyant in that period. Insadoo (2008) however, found contradicting results from Twerefou (2008) for the studied period from 1965 to 1982 using the Divisia Index Approach and the regression analysis. The study found the overall tax buoyancy coefficient of 0.556. The disparities in their researches can be explained by tax reforms in Ghana for the different time periods and the differences in the methods used to estimate buoyancy.

Ndedzu *et al.* (2013) assessed the Zimbabwean aggregate tax framework, revenue productivity and distinct tax heads on the basis of tax buoyancy estimations. In a time series stretching from 1975 to 2008 the dummy variable technique was employed in calculating tax buoyancy and discern or abstract from the tax structure discretionary changes. The study finds that for the period 1975 to 2008 the total tax structure is not buoyant with a coefficient less than the unitary value (one) and all the tax heads were not responsive except for customs duty. Of relative importance, corporate income tax was not responsive and inelastic with an estimate of 0.895 which is similarly related to Chidakwa, (1996). The research concluded that the tax system in that period was non-productive as it failed to generate sufficient revenue thus it showed the gravity of discretionary tax measures in generating optimal tax receipts. Empirical findings of the studies by Chidakwa (1996) and Ndedzu *et al.* (2013) conform to the results of the study by Rao (1985).

Omondi *et al.* (2014) examined the effects of tax reforms and estimated tax elasticities using regression analysis together with the PCA and the DVA approach for the period 1963 to 2010 in Kenya. The research findings showed that the measurement of buoyancy was statistically significant and above the unitary value of one suggesting that Kenyan tax structure was buoyant for the 1963 to 2010 time period that was considered. Conclusively, the research revealed that Kenyan tax structure is buoyant ,indicating that the tax modifications significantly enhanced efficiency and productivity. These results are similar to Okech, (2011) and Mandela, (2015).

Bonga *et al.* (2015) researched on the tax system performance with regards to Zimbabwe employing traditional tax ratio trends and dynamic measures of tax buoyancy and tax elasticity. This analysis used the Ordinary Least Squares (OLS) and the DVA to estimate tax responsiveness covering a time series of 2000- 2013. The research findings showed that both the Ordinary Least Squares approach and the Dummy Variable approach generated a buoyancy estimate of 1.013 which is greater than one for the period 2000 to 2013. The estimate greater than one implied that the Zimbabwean Tax structure is sensitive to national income increase. The research concluded

that in Zimbabwe there's presence of lack of substantial difference in tax exposition comparing between Dollarization period and the Multicurrency period. This study however is not in covenant with Ndedzu *et al.* (2013) which found the Zimbabwean tax system not to be buoyant and unproductive.

Bayu (2015) employed the Cointegration Approach logarithmic to estimate the Ethiopian tax system for the period 1974 to 2010. The research revealed that direct and indirect tax revenues together with aggregate revenues were not responsive in both the short and long run. Within the indirect tax group corporate income taxes were found to be buoyant and significant in the long run. Summarily the research posited that Ethiopian tax structure is not responsive (non buoyant) as such the fiscal authority is tasked to induce efficiency in the revenue administration and attract unaccounted tax payers in the system. Birhanu (2018) estimated tax buoyancy and stability in Ethiopia using a panel data (fixed effect and random effect models) for 12 years in three regional states. The results of the study brought about the same results with Bayu (2015). This study confirmed that total tax structure in Ethiopia is non-buoyant, supported by a coefficient of 0.78 which is far below the unit value. Also, the study found corporate income taxes in Ethiopia to be buoyant with a coefficient of 1.095 after regression and was significant. Generally, the two studies revealed that the Ethiopian tax structure is not buoyant, and therefore measures to improve the revenue productivity are required to mobilize all the domestic revenues.

Dudine and Jalles (2017) estimated the long and short run tax buoyancy for 107 countries for the period 1980 to 2014. Employing the Fulley- Modified OLS and Mean Group Estimators countries were distributed as advanced, emerging and low income to estimate their buoyancies. The research findings revealed that in advanced economies buoyancy estimates were not different from the unitary value one in the short term and long term. Developed countries in Europe and the United States of America had higher buoyancies compared to other advanced economies where the United States of America had a buoyancy coefficient of 2.652 the highest in the study. The emerging market economies also showed the same trend where buoyancy estimates were on average greater than one with African countries such as Angola, Algeria and South Africa showing higher buoyancy estimates. The results also showed that in advanced economies on average corporate income tax buoyancy exceeds one compared to emerging economies and low-income nations. Thus, for advanced nations the implication was that corporate income tax buoyancy is larger during contractions than during times of economic expansion showing how efficient advanced economies use the corporate income tax as a pro-cyclical measure in formulating an efficient and sustainable fiscal policy reform.

Vadika and Rami (2018) analysed the elasticity and buoyancy of centre, state and combined government revenues for the period 1990 to 2016 employing a log regression model in India. The estimations from the research demonstrated that the aggregate combined tax and state government tax are both buoyant with an estimate of 1.19. The study concluded that discriminatory measures had adversely affected the productivity of tax in India. Conclusively the study postulated that there is need to cut tax rebates and exemptions for the tax system to be more successful. Upender (2008) and Krushna (2015) also reached to the same conclusions on the responsiveness of Indian tax structure.

Sheefani (2019) examined the buoyancy of Namibia's overall tax system through the ECM approach for the period 2001 to 2014. In line with many empirical findings the outcome presented that aggregate tax system of Namibia was not responsive and inelastic with a buoyancy estimate of 0.036. Consequently, the value is less than the unitary value which means that the Namibian tax system does not respond to changes in national income. The study results conform to Ndedzu *et*

*al.* (2013) who also found similar results in a developing country Zimbabwe. Finally, the Namibian economy is not productive thus it indicates the scantiness and ineptitude of discretionary tax policies in producing sufficient revenue.

More recently, Mawia and Nzomoi (2013) provided evidence on the buoyancy of taxes on sub national levels. Their work uses Pooled mean group estimators to investigate the responsiveness and elasticity at the national level from 37 Sub Saharan countries over the period 1990 to 2015 and finds that tax buoyancy is larger in periods of economic meltdown than periods of financial booms. Furthermore, of 37 countries 11 countries showed that a buoyant tax system provides and acts as a good economic stabiliser. Also, Mandela (2015) employed the ECM approach to estimate South African tax system's short term and long-term buoyancy using annual data from 1974 to 2014. The research revealed that South Africa's total tax system is buoyant proofed by the coefficient of 1.77. Corporate income tax was also estimated to be buoyant in both the long term and short term with figures of 1.70 and 1.38 individually. The short run buoyancy of corporate income tax shows that the tax is the best automatic stabiliser in the short run as it is more responsive compared to other tax heads. In conclusion, Mandela (2015) and Sheefani (2019) results were different although they used the same estimation approach and this shows that the South African tax system is more productive and revenue mobilisation is much higher compared to Namibia.

### Data Source, Type and Refinement

This study aims to establish the buoyancy of corporate income tax in Zimbabwe centred on a quarterly time series data covering the period 2009 to 2018. Quarterly times series data on corporate income tax revenues was collected from Zimbabwe Revenue Authority (ZIMRA) and Gross Domestic Product (GDP) data was collected from the Reserve Bank of Zimbabwe (RBZ) and Zimbabwe National Statistics Agency (ZIMSTAT). All these units are measured in United States Dollars (US\$). GDP data was collected in annual frequency and to convert the annual frequency to quarterly frequency the study employed a Denton (1970; 1971) econometric approach to determine quarterly estimates. This process involves employing a correlated high frequency index from a series of observed data to interpolate or estimate low frequency observations with the assistance of a statistical package (Abdul and Zanib, 2013). EViews was employed to convert annual GDP data to quarterly frequency. The research purely employs the OLS estimation approach and data is estimated and analysed in EViews.

### Research Methodology

The baseline model for estimating buoyancy is based on the traditional Singer (1968) multiplicative function which is specified as:

$$TR = e^{\alpha} Y^{\beta} e^{\varepsilon} \quad (3)$$

Where TR represents total or gross tax revenue, national income (GDP) is represented by Y proxies the tax base,  $\alpha$  is the intercept or constant term,  $\beta$  is the parameter coefficient which captures buoyancy,  $e$  represents the natural number and  $\varepsilon$  is the stochastic error term. An established body of literature (Rao, 1985; Ariyo, 1997; Wawire, 2000 and 2003) has used the above equation to measure tax productivity. Equation (3) is linearized by employing natural logarithms of variables to form an ordinary OLS model. The resultant function will be specified as:

$$\ln TR_t = \beta_0 + \beta_1 \ln GDP_t + \mu_t \quad (4)$$

The above model will be simplified to express the model which is used in this research. The corporate income tax equation is as follows:

$$\ln CIT_t = \beta_0 + \beta_1 \ln GDP_t + \mu_t \tag{5}$$

Where CIT is corporate income tax in time t, GDP is gross domestic product in time t,  $\mu$  represents composite error term,  $\beta_0$  is the constant term and  $\beta_1$  is the coefficient of GDP (which is the buoyancy of corporate income tax). Based on Ariyo (1997), Ndedzu *et al.* (2013) and Omondi (2014), to capture new policy guidelines presented in national budgets, it is necessary to introduce a yearly lag in national income in the tax function such that future conceivable effects on tax revenue are billeted. Taking into consideration the time lag the corporate income tax equation changes to:

$$\ln CIT_t = \beta_0 + \beta_1 \ln GDP_t + \beta_2 \ln GDP_{t-1} + \mu_t \tag{6}$$

Where; CIT is corporate income tax,  $GDP_t$  is current real gross domestic product,  $GDP_{t-1}$  is the previous year's real gross domestic product,  $\beta_1$  and  $\beta_2$  are buoyancy estimates for the present period and preceding period correspondingly. Therefore, this research will rely on equation (6) as its main equation to approximate the buoyancy of the corporate income revenues in Zimbabwe for the specified period.

## Empirical Results

### Unit Root Test

Stationarity and non-stationarity of a time series forms an important base for a research which renders the study's results admissible or nonsensical. Gujarati and Porter (2008) posits that a series is stationary if the mean and the variance are constant and has an independent covariance this is normally called a reverting series. This study assumes a cross-sectional independence of variables and therefore the stationarity tests are based on the p values of the Augmented Dickey Fuller (ADF). Table 1 depicts that all variables were stationary at I (0) which means there is cointegration in the long run among  $CIT$ ,  $GDP_t$  and  $GDP_{t-1}$  the variables rendering the framework fit from spurious analysis.

**Table 1: Summary of Unit Root Results**

Variable	ADF Statistic	Critical Value	Order of Integration	Prob.
CIT	-5.975362***	1% -4.219126	I (0)	0.0001
		5% -3.533083		
		10% -3.198312		
$GDP_t$	-10.35442***	1% -4.219126	I (0)	0.0000
		5% -3.533083		
		10% -3.198312		
$GDP_{t-1}$	-10.3442**	1% -4.219126	I (0)	0.0000
		5% -3.533083		
		10% -3.198312		

\*Means significant at 10% \*\*means significant at 5% and \*\*\*means significant at 1% and all level of significant.

## Normality Test Results

The test for normality was done through the Jarque-Bera which according to Gujarati and Porter (2008) if the error terms are normal when plotted on a probability graph, they depict a straight line and if not normal the plots may show a marked deviation from the origin and the x-axis. The following results were determined in Table 2.

**Table 2: Results for Normality Test**

Mean	Skewness	Kurtosis	Jarque-Bera Statistic	Probability
7.60e-16	-0.130881	3.587517	0.672254	0.714532

The probability value of the Jarque-Bera statistic of 0.714532 which exceeds 0.05 revealed that the null hypothesis was not rejected implying a normal distribution for the series. The asymmetric dispersion around the mean is measured by the skewness in a time series and as such the results show that the distribution is negatively skewed as shown by -0.130881. Further to that the kurtosis value is compared to 3 as shown by the results the value 3.587517 suggests that the peakedness of the dispersion is high and well in the specified range. Therefore, this series can be used for policy analysis since it is free from the critical econometric problems associated with time series data.

## Buoyancy Estimates

The regression results presented in Table 3 were directly related to the study's major objective to determine the buoyancy of corporate tax revenue in Zimbabwe.

**Table 3: Buoyancy Estimation Results**

Variable	Coefficient	T- statistic	Probability
Log GDP <sub>t</sub>	1.085988	6.566309	0.0000
Log GDP <sub>t-1</sub>	0.245136	1.522253	0.1367
Constant	-7.990273	-9.299783	0.0000
Adjusted R <sup>2</sup>	0.847		
F-statistic	106.48		
Durbin Watson stat	1.84		
Probability Value	0.000000		

From Table 3 adjusted R<sup>2</sup> of 0.847 shows that current real income and previous real income explains 84.7% of variations in corporate income tax in Zimbabwe tax system while the other 15.3% is attributed to other factors outside this model after adjusting for degrees of freedom. Also, the Durbin Watson statistic is closer to 2 which means that the model is correctly specified and far from a spurious regression. In addition, the overall model is significant at 5% as shown by the probability value of 0.0000.

The coefficient of log GDP<sub>t</sub> was a positive 1.0859 and was significant at 5% level of significance as shown by the probability value of 0.0000 and a t-ratio of 6.566. The results are in line with theory which posits that a positive relationship exists between GDP and tax revenues. Consequently, a percentage (1%) change in GDP will lead to a 1.086% rise in Corporate tax revenues which means that increases in current GDP will directly induce growth in Corporate tax revenues in Zimbabwe's tax system. The inference of a buoyancy coefficient greater than the unitary value 1 is that the current tax policies were sufficient to increase corporate tax yield in Zimbabwe. The results show a new piece of evidence which conforms to Bonga *et al.* (2013) who

also found that corporate income tax is buoyant in Zimbabwe. The major reason for this is that Zimbabwe Revenue Authority (ZIMRA) has had reforms that are directly focused on mopping revenues from the small to medium enterprises. In addition, the absence of informal sector in the tax domain which is now being slowly captured into the tax net has attributed to the tax head being marginally buoyant. Another reason to the marginal buoyancy of the tax head is the considerable growth of companies during the period under study following a decade of slump in growth which was extreme in 2008. The growth and enhanced productivity has resulted in companies recording profits which enhanced collections from corporate income tax. The results are contradictory to other findings in Zimbabwe such as Ndedzu *et al.* (2013) and Chidakwa (1996) mainly due to different time periods and the reasons stated above.

Also shown in Table 3 is the coefficient of lagged logGDP. Lagged logGDP has a positive and insignificant relationship with corporate income tax revenues at 5% level of significance. Thus, corporate income tax revenues are responsive to lagged GDP changes though previous GDP has no significant influence on current corporate income tax revenues.

## Robustness Checks

The relationship between tax revenue and GDP is somewhat indistinct and to determine what the relationship is in Zimbabwe the Granger causality test was used in determining the direction which corporate tax and GDP follow. The results of the robustness checks based on the above test are in Table 4.

**Table 4: Granger Causality Test Results**

Null Hypothesis:	Lags	F-Statistic	Prob.
LOG(GDP <sub>t-1</sub> ) does not Granger Cause LOG(CIT)	3	0.96745	0.4209
LOG(CIT) does not Granger Cause LOG(GDP <sub>t</sub> )	3	3.86835	0.0188

A one-way causality direction between CIT and GDP is found, thus to say CIT granger causes GDP in the Zimbabwean context.

## Conclusion

It is found that corporate income tax in Zimbabwe is buoyant hence the tax head is productive. The anecdote of the study was to ascertain the buoyancy of corporate income tax in Zimbabwe. The study found that corporate income tax has a buoyancy coefficient exceeding unitary value which was 1.0586 with GDP and with the one period lag of GDP of 0.24 which was less than 1. The higher buoyancy was attributed to reforms from 2009-2018 in the multicurrency period which supplemented the productivity of corporate income tax and better methods of collecting taxes from the small and medium semi registered businesses together with the informal sector.

In addition, the second aim of the study was to find strong and weak spots of corporate income tax in Zimbabwe. It is found that the strong spots emanate from how ZIMRA is now able to harness revenue efficiently from the dwindling tax base which suggests that the tax reforms implemented to enhance sufficient revenue collection have worked as shown by a buoyant coefficient for corporate income tax. The weak spots still faced by ZIMRA in collecting corporate tax is the existence and the increase of the informal sector. Without a definite and adamant plan on how to cater for the informal sector proposals have been made on tax reforms and specifically a tax tool in form of turnover tax. With a turnover tax the authority expects to include a larger chunk of the informal sector into the existing tax base. However, taxation of the informal sector

presents itself with challenges that include high monetary investments which the tax authority may not be able to meet.

## Policy Implications

Zimbabwe should focus on aggressive growth strategies and as such an export led growth policy should be implied. With an export led growth approach domestic production is the focal point to drive growth through increased exports by local companies and infant industries protected by the government. This approach will increase domestic output and widens the tax base as theory posits tax revenue is dependent on the growth and performance of its tax base. Therefore, with growth in the tax base corporate tax revenues will consequently increase as more companies will be able to meet their tax obligations.

ZIMRA should implement more taxpayer education, tax audits and enforce tax compliance in efforts to prevent corporate income tax evasion. With a lot of tax revenues lying in the informal sector which are not efficiently exploited the tax authority is mandated to carry intensive taxpayer education and conduct intensified tax audits to collect all the corporate income taxes in the large informal sector that Zimbabwe has. Tax compliance will enhance revenue collection and all taxpayers will be aware of their tax obligations. Consequently, this will undoubtedly improve tax capacity and therefore make the tax head buoyant in the long run.

Lastly new tax reforms should be implemented to maximise corporate income tax revenues. Such reforms include the implementation of a turnover tax for the informal sector. A turnover tax has been implemented in several African countries and has yielded remarkable improvement in tax revenues collected. However, the government of Zimbabwe has to harness sufficient resources to successfully implement such reforms.

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