



# EFFECT OF CAPITAL ALLOWANCE INCENTIVE ON THE PERFORMANCE OF EPZ FIRMS IN KENYA

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#### **ABSTRACT**

This study intended to investigate the influence of the effect of capital allowance incentives on the performance of EPZ firms in Kenya. The study adopted a descriptive and explanatory research design. The study used a stratified sampling approach because the number of the EPZ firms in Kenya was categorized into 4 strata. The total numbers of firms used in the study were 86 registered EPZ firms in Kenya according to Export Processing Zones Authority (EPZA). The study adopted a census survey design. Census survey was adopted because the population of interest was small. A sample size of all the 86 registered EPZs firms was used in this study. Primary data was obtained using questionnaires. Secondary data from the registered firms was collected on; ROA, number and value of jobs created and the length of stay of the firms. The secondary data was collected from operating EPZ firms in Kenya annual report. The study assessed the performance of EPZ firms against the tax incentives they benefited for the last ten years. The study used both descriptive and inferential statistics to conduct data analysis. Descriptive statistics included frequencies, percentages, mean and standard deviations while inferential statistics were correlations and regression analysis. The study findings revealed that at 5% significance level, capital allowance tax incentive had a positive and significant relationship with performance of EPZ firms measured using ROA, number of jobs created and length of stay. The study concluded that increase in capital allowance tax incentive resulted to increase in both ROA of the firms and the number of jobs and length of stay. The study recommended that stakeholders in tax policy should reconsider the economic value of capital allowances.

**Keywords**: Capital allowances, performance, EPZ firms. ROA, number of jobs created and length of stay

#### **Background of the Study**

Governments all over the world use tax incentives to enhance economic activities and investments by firms, they use these form of incentives to channel some special economic activities towards some important sectors of the economy where they are either not felt or not existing at all (Kaplan, 2001).



Tax incentives are widespread around the globe and are always advancing. They are measures that accommodate a more encouraging duty treatment of specific exercises or segments contrasted with what is conceded to general industry, it comes in form of an offer to pay less tax. According to Institute of Economic Affairs (2012), tax incentive is an arrangement that concedes any individual or action great conditions that move away from the ordinary arrangements of the excise enactments.

In developed nations, tax incentives frequently assume different forms including, credits for investors of assets, high rates of depreciation, and exciting treatments for all expenditures incurred in research and developments. In created nations, tax incentives frequently appear as venture duty credits, quickened devaluation, and positive expense treatment for uses on innovative work.

Tax incentives may take different structures. In the case of Kenya the pertinent tax incentives include, tax holidays, investment allowances and tax credits, accelerated depreciation, special zones, investment subsidies, tax exemptions, reductions in tax rates and indirect tax incentives (Tembur, 2016). In developed nations, tax incentives frequently assume different forms including, credits for investors of assets, high rates of depreciation, and exciting treatments for all expenditures incurred in research and developments.

In Kenya companies including those operating at EPZ benefit from major tax incentives especially capital allowances such as Investment building deductions (IBD), Investment deduction (ID) and Wear & Tear allowances by claiming deductions from their corporate tax liability. Incentives lowers the cost of the firm especially where the government offer subsidies and other forms of incentives to firms such as low interest rates, grants, lowering the cost of labor, and improving transportation networks to make transportation cost low, with reduced costs, the net profit posted by firms will be high and hence leads to high financial performance.

Governments through capital allowances attempt to influence physical and financial capital. The Income Tax Act provides for various tax incentives through capital deductions. The government has allowed a claim of 150% for companies who invest outside the 3 cities and incur expenditures of more than 200 million. It has further been proposed in the Amendments to the Income Tax Act in the 2015/16 Budget statement 100% for ships from the initial allowance of 40% and capital deduction for buildings used for educational and training services to be increased from 50% to 100%.

### **Statement of the Problem**

According to the Singa (2007), there is an increase in the number of countries using EPZs in sub-Saharan Africa. Despite this growth in EPZs activity, EPZs still experience poor financial performance. There has been a decreasing trend in the number of employees recruited by EPZ firms in Kenya. Also the number of jobs decreased significantly between 2007 and 2009 (EPZ financial report, 2015). This extension of poor financial performance of EPZs has now happened in the face of expanding global trade and stiff beneficial competition. The economic competition has seen developed countries dominate the domestic firms, a situation that calls for government intervention to encourage financial performance of EPZs.

Tax incentives tend to reduce government revenues by 1—2% of GDP, according to the Organization for Economic Co-operation and Development (OECD). The IMF notes that



investment incentives, if they are to be of benefit, should be well targeted and focused narrowly on the activities they seek to promote but that "the corporate income tax holiday usually does not meet the criterion of a well-targeted incentive". On the other hand tax incentives also have a variety of benefits to a country and these include helping infant companies to quickly establish themselves which leads to creation of employment. Incentives also attract investors hence contributing to economic development. Tax holidays strongly favour transitory rather than sustainable investments and create glaring opportunities for aggressive tax avoidance. A joint report by the IMF, OECD, United Nation (UN) and World Bank comes to the same conclusion, noting that, where governance is poor, corporate income tax exemptions "may do little to attract investment". When they do, "this may well be at the expense of domestic investment" (Schwab & Sala-i-Martin, 2011)

Generally, investment incentives are recommended when the business is in the nature of a public good, such as with projects for encouraging green technologies, primary health care and disease prevention, upgrading skills of workers, and research and development (Morisset, 2003). Such tax incentives would only be important if the EPZ firms remained sustainable in terms of performance which includes creation of jobs if the tax incentives are lifted. This study therefore aims to find out if allowances tax incentive provided to EPZ firms is worthwhile by considering the value such firms add to the economy. The study will address the gap between cost incurred by the government inform of tax incentives and the value the firms receiving tax incentives add to the economy.

# **Purpose of the Study**

The purpose of the study was to investigate the effects of capital allowances incentives on the performance of EPZ firms in Kenya.

#### **Research Hypotheses**

**H<sub>0</sub>:** Capital allowance has no significant relationship with the performance of EPZ firms in Kenya.

**H**<sub>1</sub>: Capital allowance has a significant relationship with the performance of EPZ firms in Kenya.

#### **Justification of the Study**

The research will provide the corporate tax payers with an insight on available tax incentives and how to utilize them in order to increase their savings for future investments. Rise in level of investments in the country is likely to result to rise in level of revenue for the government through taxation. The researchers will have a basis for further research by adopting different research methodology or extending the period of analysis. The report forms a reference for future studies.

This study will be of great value to the Government. It formed the basis of reviewing the tax policies and carrying out an evaluation on their effectiveness. A review of the current tax policies can aid in carrying out a cost benefit analysis and guiding the policy makers on appropriate incentives. This can help in formulating fiscal policies aimed at reducing external borrowing and also enhance investments and employment creation. This research may provide the government with empirical evidence on performance of current tax incentives and hence makes informed decision in improving the status quo.



Other various stakeholders may use the information as they take their decisions relative to a firm's performance and position based on the accounting information supplied by it in its annual financial reports and accounts. The study may be of value to Scholars as they may be able to use the research gaps identified in this study to progress further academic discourse on accounting information, performance and investment decision making.

#### **Literature Review**

## **Theoretical Review: Normative Theory**

The theory is also divorced from the practical considerations of tax administration. Despite these shortcomings, this prescriptive theory is presented uncritically in textbooks and is commonly the basis of advice offered to policy makers.

The normative theory describes how the development of the institutional structure of government creates a set of incentives as well as constraints within which governments and other actors operate. These incentives shape the path of development, and different governments may evolve in different ways, not all of which are efficient. Tax policy-making and tax administrative reform therefore evolve simultaneously and symbiotically. The institutional theory developed here provides a generalizable framework that we believe can be used to better understand the development of tax policy and administration across time and cultures. It offers an attractive model for description, explanation and prediction (Tresch, 2014). This theory also covers all the objectives since it gives an overview of actions taken by players in an administration due to incentives provided by that administration. In the case of this study the theory suggests that influx of EPZ firms is anchored on tax incentives provided other than the need to add value to the economy.

#### **Empirical Review**

Githaiga (2013) surveyed that the impact of tax incentives on FDI inflows of firms listed at the NSE. This study focused on the impacts of Wear and Tear Allowances; Investment Deductions and Industrial Building Deductions, towards attracting FDI inflows to firms listed at the NSE. The results of the study revealed a strong relationship between wear and tear allowances and FDI inflows. Industrial building deductions and investments deductions had no significant relationship with FDI inflows.

Agundu and Ohaka (2013) examined the extent to which capital allowance served as veritable captivating investment incentive to stakeholders in the Nigerian manufacturing sector. The corporate financial performance attractions considered were profit after tax (PAT), return on total assets (ROTA), and return on shareholders' equity (ROSE). Statistical results such as coefficients of correlation and determination emerging from the process justified the potency of capital allowance as it was significantly associated with PAT, ROTA and ROSE.

Burggraeve, Jeanfils, Van Cauter, and Van Meensel (2008) conducted a study on macroeconomic and fiscal impact of the risk capital allowance. More particularly, the study aimed to assess the extent to which the objectives of the law of 22 June 2005 introducing a tax allowance for risk capital had been achieved. It was therefore decided to assess a range within which the net fiscal impact of the measure for the 2007 tax year was likely to fall. It was also necessary to confine the sectoral approach to an estimation of the gross fiscal impact of the risk capital allowance, as the



data were still too fragmentary to attempt any disaggregated quantification of its secondary effects on employment, investment or the public finances. The introduction of the risk capital allowance led to a structural change in the financial behaviour of companies, as it was very much in their interests to adapt their financial structure to take full advantage of the tax concession. It could therefore be to their advantage to establish a subsidiary or to operate via finance companies. One aim of the tax reform was to strengthen the solvency of companies established in Belgium. In that regard, a very marked increase in shareholders' equity and authorized capital was recorded in 2006 and 2007. This increase was due to capital contributions of both Belgian and foreign origin.

UNCTAD's Uganda IPR (2000) noted that depreciation and capital allowances were generally preferable to tax holidays, as they specifically encouraged new investment. CITA (2004) regarded capital allowance as a relief that was given to any person who had acquired qualifying capital expenditure during a basis period in respect of assets in use for the purpose of business or a trade at the end of a basis period. Lall (2001) discovered that, in Ghana, investment allowances and tax-deductible R&D expenditures failed to evoke a significant response from the business community. Trela and Whailey (1991) in the application of equilibrium model examine the impact of rebates of direct and indirect taxes on exports, investment allowance, tax holidays and investment tax credits on Korean growth performance. The result showed that tax policy accounted for less than one – tenth of the growth of the Korean economy during 1962-82. There was no significant relationship between investment allowance and foreign direct investment in Korea.

Thus the study hypothesized that;

 $H_0$ : Capital allowance has no significant relationship with the performance of EPZ firms in Kenya.

# **Research Methodology**

The research design was correlation research design. Correlation research design was best suited since panel data was used. Correlation design was suitable for this study because it enabled the researcher to establish the relationship between tax incentives available and performance of EPZ firms in Kenya. Such designs seek to explain how one variable affects another. The use of the correlation research design was considered appropriate to use any time there is need to clarify a perceived problem.

The study population was 86 finance managers drawn from all EPZ firms. The sampling frame of this survey was the finance managers in the firms. The study adopted a census survey design. Census survey was adopted because the population of interest is small and thus all the 86 registered EPZs firms was used in this study.

Primary data was obtained using questionnaires. Secondary data from the registered firms was collected on; profitability, share on profits expatriated, number and value of jobs created and the length of stay of the firms. This secondary data was collected from operating EPZ firms in Kenya. After data was collected through questionnaires, it was prepared in readiness for analysis by editing, handling blank responses, coding, categorizing and keying into statistical package for social sciences (SPSS) computer software for analysis. SPSS was used to produce frequencies, descriptive and STATA software was used in inferential analysis so as to derive conclusions and generalizations regarding the population. The particular descriptive statistics were frequencies,



mean scores and standard deviation. The particular inferential statistics were regression and correlation analysis.

The analysis of variance (ANOVA) was checked to reveal the overall model significance. In particular, the calculated f statistic was compared with the tabulated f statistic. A critical p value of 0.05 was used to determine whether the overall model was significant or not. The individual regression coefficients were checked to see whether the independent variable capital allowance incentives significantly affected the performance of EPZ firms. A critical p value of 0.05 was also used to determine whether the variable was significant or not.

A regression model used to link the independent variables to the dependent variable as follows;

$$Y = \beta_0 + \beta_1 X + \mu$$

Where;

Y = Performance

 $X_1$  = Capital Allowance Incentive

 $\mu = Error Term$ 

The specific models were as follows;

 $ROA = \beta_0 + \beta_1$  Capital Allowance Incentives+  $\mu$ 

Number of Jobs created =  $\beta_0 + \beta_1$  Capital Allowance Incentives +  $\mu$ 

Length of stay =  $\beta_0 + \beta_1$  Capital Allowance Incentives +  $\mu$ 

In the model,  $\beta_0$  = the constant term while the coefficient  $\beta_i i = 1$  were used to measure the sensitivity of the dependent variable (Y) to unit change in the predictor variables X.  $\mu$  is the error term which captures the unexplained variations in the model (Olusola et. al, 2013).

#### **Research Findings and Discussion**

#### **Description of Capital Allowance Tax**

The study analysed the secondary data on capital allowance tax incentives given to EPZ firms for the period of 2003 to 2014 collected from EPZA.



Table 1: Descriptive of Capital Allowance Tax Incentive for EPZ firms

| Year  | N   | Mean       | Std. Deviation |
|-------|-----|------------|----------------|
| 2003  | 32  | 5,877,799  | 7,820,261      |
| 2004  | 24  | 4,051,231  | 5,888,118      |
| 2005  | 25  | 6,575,869  | 24,631,088     |
| 2006  | 18  | 2,876,412  | 4,892,512      |
| 2007  | 17  | 1,374,937  | 1,730,580      |
| 2008  | 22  | 2,595,046  | 4,274,967      |
| 2009  | 24  | 7,527,464  | 21,878,425     |
| 2010  | 28  | 12,498,141 | 42,985,676     |
| 2011  | 37  | 6,122,338  | 16,618,672     |
| 2012  | 36  | 4,654,335  | 9,666,155      |
| 2013  | 27  | 4,310,442  | 9,086,340      |
| 2014  | 36  | 3,968,622  | 9,439,480      |
| Total | 326 | 5,416,866  | 17,522,076     |

The descriptive statistics of the data revealed that the total cumulative number of EPZ firms that benefited from capital allowance tax incentive between 2003 and 2014 were 326. The results also revealed that the highest capital allowance incentive was given in 2010 while the lowest was given in 2007. The means and standard deviation for the period from 2003 to 2014 are shown in Table 1

# Trend for the Mean of Capital Allowance Tax Waived for EPZ Firms

The figure below shows how the capital allowance tax incentives had been fluctuating across the study period. The chart shows that 2010 had the highest capital allowance tax incentives given to the EPZ firms followed by 2009 and 2005. While 2007 had the lowest capital allowance tax incentive followed by 2008 and 2009 respectively.

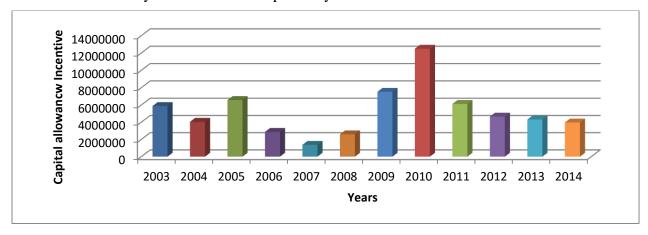


Figure 1: Trend for the Mean of Capital Allowance Tax Waived for EPZ Firms

Effects of Capital Allowance Incentive on ROA



The results presented in table 2 present the fitness of model used of the regression model in explaining the study phenomena. Capital allowance incentives explained 33.6% of variation in ROA.

Table 2: Model Fitness

| Indicator                  | Coefficient |  |  |
|----------------------------|-------------|--|--|
| R                          | 0.580       |  |  |
| R Square                   | 0.336       |  |  |
| Adjusted R Square          | 0.1023      |  |  |
| Std. Error of the Estimate | 3.23456     |  |  |

The null hypothesis that was tested was as follows:

**H0:** There is no statistical significant relationship between Capital allowance Incentive and the performance of EPZ firms in Kenya.

ROA (EZP Performance) = 345,478,042.10 + 5.893 (Capital allowance Incentive)

From the findings, the study rejected the null hypothesis that Capital allowance incentive has no significant relationship with the performance of EPZ firms in Kenya. This is because the probability value (p-value = 0.002) was less than the conventionally value of 0.05. Therefore, the study concludes that capital allowance incentive has a positive relationship with the performance of EPZ firms in Kenya.

Table 3: Effects of Capital Allowance Incentive on ROA

| Parameter Estimate      | В              | Std. Error     | Beta  | t     | Sig.  |
|-------------------------|----------------|----------------|-------|-------|-------|
|                         | 345,478,042.10 | 453,238.345.11 |       |       |       |
| (Constant)              |                |                |       | 6.345 | 0.023 |
| Capital allowance waive | 5.893          | 2.891          | 0.123 | 3.281 | 0.002 |

#### Effects of Capital Allowance Incentive on the Number of jobs

The results presented in table 4 present the fitness of model used of the regression model in explaining the study phenomena. Capital allowance incentives explained 16% of variation in Number of jobs.



Table 4: Model Fitness

| Indicator                  | Coefficient |
|----------------------------|-------------|
| R                          | 0.400       |
| R Square                   | 0.160       |
| Adjusted R Square          | 0.0163      |
| Std. Error of the Estimate | 4.83251     |

The study conducted a linear regression to ascertain the influence of capital allowance incentive on the EPZ firm's performance. The performance of firms was measured by the number of total workers.

Table 5: Effects of Capital Allowance Incentive on the Number of jobs

| Parameter                       | В     | Std. Error | Beta  | t     | Sig.  |
|---------------------------------|-------|------------|-------|-------|-------|
| (Constant)                      | 2.526 | 0.624      |       | 4.046 | 0.000 |
| Log capital allowance incentive | 0.208 | 0.045      | 0.248 | 4.6   | 0.000 |

The following null hypothesis was tested:

**H0:** There is no significant relationship between Capital allowance incentive and performance of EPZ firms in Kenya.

Y = 2.526 + 0.208 X

Y=Ln (Number of jobs)

X=Ln (Capital allowance Incentive)

From the findings, the study rejected the null hypothesis that capital allowance incentive has no significant relationship with performance of EPZ firms in Kenya. This is because the probability value (p-value = 0.000) was less than the conventionally value of 0.05. Therefore, the study concluded that capital allowance incentive has a positive relationship with the performance of EPZ firms as measured using the number of total workers created in Kenya.

#### **Effects of Capital Allowance Incentive on the Length of Stay**

The results presented in table 6 present the fitness of model used of the regression model in explaining the study phenomena. Capital allowance incentives explained 14.4% of variation in Length of Stay.



Table 6: Model Fitness

| Indicator                  | Coefficient |
|----------------------------|-------------|
| R                          | 0.380       |
| R Square                   | 0.144       |
| Adjusted R Square          | 0.01263     |
| Std. Error of the Estimate | 4.21545     |

The study conducted a linear regression to ascertain the influence of capital allowance incentive on the EPZ firm's performance. The performance of firms was measured by the number of years in operation.

Table 7: Effects of Capital Allowance Incentive on the Length of Stay

| Parameter                       | В      | Std. Error | Beta  | T      | Sig.  |
|---------------------------------|--------|------------|-------|--------|-------|
| (Constant)                      | -0.304 | 0.534      |       | -0.569 | 0.570 |
| Log capital allowance incentive | 0.154  | 0.038      | 0.241 | 4.021  | 0.000 |

The following null hypothesis was tested:

**H0:** There is no significant relationship between Capital allowance incentive and performance of EPZ firms in Kenya.

Y = -0.304 + 0.154 X

Y=Ln (Length of Stay (EZP Performance))

X=Ln (Capital allowance Incentive)

From the findings, the study rejected the null hypothesis that capital allowance incentive has no significant relationship with performance of EPZ firms in Kenya. This is because the probability value (p-value = 0.000) was less than the conventionally value of 0.05. Therefore, the study concluded that capital allowance incentive has a positive relationship with the performance of EPZ firms as measured using the number of years in operation.

### **Correlation Analysis for Capital Allowance Incentives and Performance**

The Table 8 below presents the results of the correlation analysis. The results presented shows that corporate income tax incentive and performance of EPZ firms are positively and significant related (r=0.423, p=0.021).



**Table 8: Correlation Analysis Results** 

|                              |                     | Performance |
|------------------------------|---------------------|-------------|
| Performance                  | Pearson Correlation | 1.000       |
|                              | Sig. (2-tailed)     |             |
| Capital Allowance incentives | Pearson Correlation | 0.423       |
| -                            | Sig. (2-tailed)     | 0.021       |

#### **Conclusion, Recommendation and Areas for Further Research**

#### **Conclusion**

Based on the study findings, the study concluded that capital allowance incentives had a positive effect on the performance of EPZ firms in Kenya as measured by the ROA, number of jobs and length of stay. Hence capital allowances advanced to EPZ firms were crucial in enhancing the growth of these firms and also in attracting FDI into the country through investors.

#### Recommendation

This study recommended that stakeholders in tax policy should reconsider the economic value of capital allowances incentives and conduct a cost benefit analysis of such incentives so that they can benefit these firms more and help expand the foreign direct investments into the country.

#### **Areas for Further Research**

The study recommended that future studies should aim to broaden the causes of low performance of EPZ firms in Kenya not identified in this study. The study also suggested that a study on the remedies to the low performance of EPZ firms be conducted. This would assist in improving EPZ firms in Kenya and to encourage more investors.



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