

EFFECT OF TAX REFUNDS ON STOCK MARKET PERFORMANCE OF LISTED COMMERCIAL BANKS IN NAIROBI SECURITIES EXCHANGE

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International Academic Journal of Economics and Finance (IAJEF) | ISSN 2518-2366

Received: 13th July 2023

Published: 9th August 2023

Full Length Research

Available Online at: https://iajournals.org/articles/iajef_v3_i10_83_99.pdf

Citation: Nyasende, E. O., Maoebe, A., Chesoli, J. W. (2023). Effect of tax refunds on stock market performance of listed commercial banks in Nairobi Securities Exchange. *International Academic Journal of Economics and Finance*, 3(10), 83-99.

ABSTRACT

The global spread of the coronavirus across countries had a devastating effect on economies globally. Stock markets have suffered the blunt of the pandemic with a number of stock markets crashing even in developed economies. In response to the crisis using Keynesian model governments employed fiscal policies to address the challenges. The main aim of the study was to determine establish the effect of tax refunds on stock market performance of listed commercial banks in Kenya. This study was supported by the following theories: The Ability-To-Pay, Theory and efficient market theory. The study adopted descriptive design. The target population constituted 181 bank employees from 12 listed commercial banks in the Nairobi Securities Exchange. The sample size of the study was 178 bank employees comprising of managers and accountants who were selected through stratified-random sampling. The data was obtained from NSE for the period starting 25th March 2020 to 31st December 2020. The study applied closed-ended questionnaires to collected primary while secondary data was

collected using data collection sheet from annual reports. Collected data was analyzed through descriptive statistics (mean and standard deviation) and inferential statistics (correlational and simple and multiple regression). Pilot test was conducted on non-listed commercial banks in Kenya. Cronbach alpha was used to test reliability while face validity was used to test validity. The study found out that, tax refund had a strong positive and highly significant correlation with stock performance of listed commercial banks in Kenya $N=130$, $r=.365(**)$, $P=.000 < 0.05$. The study concluded that, tax refund had a strong, positive and highly significant correlation with stock performance of listed commercial banks in Kenya. The study recommended that, the government should consider giving firms incentives and other items like reducing the cost of energy and other necessary input materials instead of reducing corporation tax alone.

Key words: Tax refund, financial performance, commercial banks, return on assets

INTRODUCTION

The global spread of the coronavirus across countries has had devastating effects on economies globally. Numerous stock markets crashed leading investors into a panic. Consequently, most investors resorted to risk aversion strategies leading to stock declining. Starting mid-march 2020 sharp declines or even crash of stock markets globally spread. Based on reports from in some cases, stock market reported over 30% decline even in leading economies including the United States, China, Japan and United Kingdom (OECD outlook, 2020).

In response governments across the globe introduced unprecedented measures to contain the pandemic. These measures included instances of complete shutdowns and travel restrictions. These measures increased uncertainty further eroding investors' confidence thus negatively impacting economies. While necessary to contain the virus, these measures led to many businesses being shut down temporarily, widespread restrictions on travel and mobility, financial market turmoil, an

erosion of confidence and heightened uncertainty. To forestall the loss of jobs and economic decline governments resorted to diverse policy interventions. Fiscal policies interventions including taxation and government expenditure were some of the policies adopted by different nations to constrain the challenges resulting from the effects of COVID-19 pandemic on economies (IMF, 2020).

Energy tax refunds affects performance of manufacturing firm in Finland. Tax refunds increases in revenue, value added or wages for firms. Tax refunds negatively affected gross output of firms producing less, and those firms charging lower prices. Tax refunds and revenue are statistically and significantly, negative related (Laukkanen, Ollikka & Tamminen, 2019).

Tax refund delays encourage hardship and unsecured debt. The tax refund patterns in 2016 and 2017 were alike indicating lack of changes in filing behaviors among tax filers after the new reform. Tax refund delays increased food insecurity among early Earned Income Tax Credit (EITC) filers relative to later EITC filers following the implementation of the PATH Act (Kondratjeva, Roll, Despard & Weiss, 2019).

Processing of tax refunds at Kenya revenue authority is average. Tax refund funding, the audit and compliance checks, the information technology used and staff were inadequate to carry out the work smooth refunding. Monthly settlement of tax refunds is inadequate to settle all the tax refund arrears regardless of consisted funding from Treasury. Additional funds from Treasury is valuable in enhancing speed and the monthly tax refunds (Munyallo, 2011).

Tax refund faces numerous challenges in Kenya. VAT refund faces many cases of refunds backlog which it has to control within the mandate given by the government and to the expectation of the society. VAT refunds has been a recurrent problem for traders as Kenya Revenue Authority has never been able to promptly act on refunds. Tax refunds has been prominent, with investors crying foul due to the overwhelming delays by the Kenya Revenue Authority in processing the refunds (Waithaka, 2010).

Statement of the Problem

Implementation of taxation measures such as PAYE, VAT, and tax refunds moderated by information technology enhances stock market performance of listed firms in Nairobi stock exchange.

At the close of the 2021, equity turnover decreased by 7.6% to close at Kshs. 137.4 Billion, compared to Kshs.148.6 Billion in 2020. This was as a result of reduced equity activity from local and international investors who instead reallocated more capital towards Fixed Income assets, owing to attractive yields. This decline affected stock market performance due to the tax measures introduced and COVID-19 pandemic (NSE, 2021).

Okong'o (2018) aimed at assessing the effect of taxation on financial performance of small business enterprises in Ugenya Sub –county, Siaya County in Kenya. To attain its goal, the study was guided

by the following independent variables: taxation awareness and knowledge, tax rates and tax administration. Maeri (2017), evaluated the effect of taxation on performance of micro, small and medium enterprises in Migori County, Kenya. It was based on: tax compliance, tax incentives and tax coping systems and independent variables. Kabajulizi (2018), studied the effect of taxation policies on the financial performance of small and medium enterprises in Hoima district: a case of Hoima municipality (Mparo division). Level of taxation awareness and knowledge tax administration and tax rate were independent variables of the study. Apparently, this study failed to focus on: PAYE, VAT, Corporate tax and tax refund. It's against this backdrop that this study sought to establish the effect of taxation measures during covid-19 on stock market performance of listed commercial banks in Kenya.

Objectives of the study

The main aim of the study was to determine the effect of tax refunds on stock market performance of listed commercial banks in Kenya

Research Hypothesis

H₀₁: Tax refunds has no statistically significant effect on stock market performance of listed commercial banks in Nairobi Securities Exchange.

Theoretical Review

Efficient Market Hypothesis

Efficient Market Hypothesis was introduced by Fama in 1970. It states that an efficient market is a market where all prices, the current stock prices reflect all the available information. Competition was the cause effect of new information to be reflected in stock prices immediately. Investors therefore, looked for assets that are undervalued with the aim of outperforming the market. The efficient, market hypothesis concludes that benefiting from price movement in stock markets is unlikely. The main cause of price in stock market is availability of new information. In an efficient market price adjusts quickly from new information. As a result, the current prices assets in securities market reflect all the available information. Efficient market hypothesis describes the response of information to the stock price, which is how information affects stock price (Bradshaw, Liao, & Ma, 2013).

The assumption of these theory includes: there is a right or wrong time to issue securities i.e. new shares can be only be issued when the market is at the top rather than the bottom. If the market is efficient however, price follows a trendless random walk and it's impossible for managers to know whether today's price is the highest or the lowest. Timing other policies e.g. release of financial statements, announcement of stock splits, e.tc. has no effect on share prices. Additionally, the theory assumes that, if markets are efficient then they reflect all known information in existing share prices and investors therefore know that if they purchase a security at the current market price they are receiving a fair return and risk combination. This means that under or overvalued shares or market

securities do not exist. Companies shouldn't offers substantial discounts on security issues because investors would not need extra incentives to purchase the securities (Saliha & Abdessatar,2011).

The limitations of the theory include; the flow of information is not uniform in the market. Those whose receive information earlier would react faster as compared to others who receives information later. Additionally, the theory is limited by the existence uneven risks in the industry. Thus, risk and investment assessment dependent on individual firms. Also, prices of stock are not only determined by the information available in the market but also other factors like legal fees, cost of preparation of equity documents etc. (Masso, Meriküll, Vahter, 2011).

This theory is relevant for this study as it was used to explain the relation between tax refund policies and stock market performance. Stock market react very fast according to changes in any fiscal policies. Once the Information regarding fiscal policies changes is echoes in the market, prices of stocks changes to reflect changes in policies.

Empirical Literature

Tax refund and stock performance

Laukkanen, Ollikka and Tamminen (2019), assessed the impact of energy tax refunds on manufacturing firm performance: evidence from Finland's 2011 energy tax reform. A difference-in-differences matching approach was adopted as research design. The independent variables of the study were gross output, revenue and value added while plant's total output, sales of the plant's output and total output and production costs were measure of each variable. Secondary data was collected from annual reports from Longitudinal Database on Plants in Finnish Manufacturing (LDPM) panel from Statistics Finland. Data analysis was done through Descriptive statistics. The findings of the study indicated that there was no unidirectional difference in gross output, revenue, value added or wages for the two groups of plants. Further, the study noted that employees, total energy use and gross output relative to energy were not the same for exempt and non-exempt firms. Additionally, the study noted that there was a negative effect on gross output that was consistent both with firms producing less, and with firms charging lower prices. The study concluded that revenue is not statistically significant, but the point estimate is negative.

Kondratjeva, Roll, Despard and Weiss (2019), assessed the effects of Tax Refund Delays on the Experience of Hardship and Unsecured Debt. The study adopted difference-in-differences approach. Secondary data was collected through survey method in 2016 and 2017. Stratification was applied to select sample of 5,333 from Earned Income Tax Credit (EITC)-receiving households. Ordinary least squares (OLS) regression was applied to analyze collected data. The study found out that, tax filing patterns were same as 2016 and 2017, indicating lack of changes in filing behaviors among tax filers after the new reform. Additionally, the study noted that food insecurity went up among early EITC filers relative to later EITC filers following the implementation of the PATH Act. Also, the study noted that skipping housing bills decreased among early EITC filers relative to later EITC filers after the tax reform. The study concluded that the sensitivity of household food

insecurity to the refund delay indicates that changes to food consumption may be one of the first and primary strategies households follow when faced with a liquidity shock.

Munyalo (2011), did a study on factors that influence the processing of tax refunds at Kenya revenue authority. Descriptive research design was adopted by the study. With the help of stratified random sampling technique, the study selected 45 respondents from a target population of 90 staff from Domestic Taxes Department, Customs Services department and Finance department. Primary data was collected by questionnaire. Qualitative Data analysis was done through content analysis while quantitative was analyzed using descriptive statistics and correlation analysis. The findings of the study indicated that, the speed of tax refund processing was average. Further, the study noted that funding, the audit and compliance checks, the information technology used and staff were inadequate to carry out the work. Additionally, the study noted that all the independent variables (Treasury funding, audit and compliance, staff adequacy and information technology) had a significant positive influence on tax refunds. The study concluded monthly settlement of tax refunds is inadequate to settle all the tax refund arrears regardless of consisted funding from Treasury. The study recommended that the Treasury ought to enhance the monthly provisions for tax refunds.

Waithaka (2010), did a study on what more to be done on tax refund challenges in Kenya. The study found out that the VAT refund faces many cases of refunds backlog which it has to control within the mandate given by the government and to the expectation of the society. Further, the study noted that VAT refunds has been a recurrent problem for traders as Kenya Revenue Authority has never been able to promptly act on refunds. Additionally, the study established that tax refunds has been prominent, with investors crying foul due to the overwhelming delays by the Kenya Revenue Authority in processing the refunds. Also, the study noted some of claims forwarded for refund to KRA are fake, hence the need to come up with stringent audit measures in a bid to ensure validity of the refunds. The study concluded that, the need to verify calms has led unwarranted lengthy, tedious and time-consuming tax refunds processes impacting negatively on the operations of the businesses.

Summary of Research Gaps

Munyalo (2011), did a study on factors that influence the processing of tax refunds at Kenya revenue authority. Descriptive research design was adopted by the study. With the help of stratified random sampling technique, the study selected 45 respondents from a target population of 90 staff from domestic taxes department, customs services department and Finance department. Primary data was collected by questionnaire. Qualitative Data analysis was done through content analysis while quantitative was analyzed using descriptive statistics and correlation analysis.

Conceptual Framework

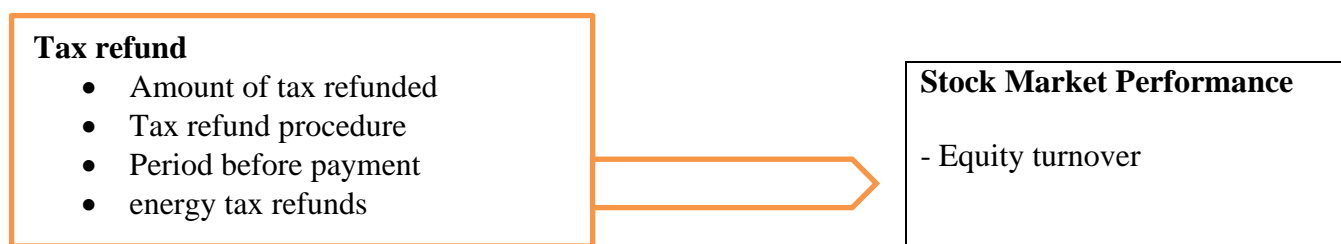


Figure 2.1: Conceptual Framework

RESEARCH METHODOLOGY

Research Design

The research study adopted descriptive research design. According to (Mugenda & Mugenda, 2009) descriptive design is a process of describing the situation with the aim of collecting data to test hypotheses or to answer questions with an indication of progress status of designs under study. Descriptive research design was appropriate because it described the information under study as the situation is and explore the effects of COVID -19 interventions on Nairobi Securities Exchange. Kamwana and Muturi, (2014) conducted a study using descriptive research design and found it suitable in their application on respondents who have the homogenous features.

Study Area

The study was based on commercial banks listed in Nairobi Securities Exchange market. This is a leading securities market in Kenya, an emerging market. Nairobi Securities Exchange market was chosen because of being vibrant and the fact that the government of Kenya had made pronouncements on COVID- 19 interventions.

Target Population

The target population constituted of 181 managers and accountants from all the 12 listed companies in the Nairobi Securities Exchange as shown in table 3.1 below;

Table 3.1 Target Population

BANKING	Top managers	Accountants	sample
ABSA Bank Kenya Plc Ord 0.50	3	11	14
BK Group Plc Ord 0.80	4	12	16
Diamond Trust Bank Kenya Ltd Ord 4.00	3	12	15
Equity Group Holdings Plc Ord 0.50	4	13	17
HF Group Plc Ord 5.00	3	10	13
I&M Holdings Plc Ord 1.00	3	10	13
KCB Group Plc Ord 1.00	4	14	18
National Bank of Kenya Ltd Ord 5.00	3	12	15
NCBA Group Plc Ord 5.00	3	11	14
Stanbic Holdings Plc ord.5.00	3	10	13
Standard Chartered Bank Kenya Ltd Ord 5.00	4	13	17
The Co-operative Bank of Kenya Ltd Ord 1.00	4	12	16
Totals	41	140	181

NSE, 2021

Size and Sampling Design

The study aimed to sample through stratified random sampling form 12 listed commercial bank in NSE. The study used Yamane, of 1967 formula to get a sample size.

$$n = \frac{n}{1 + n(e)^2}$$

Where

n = the Minimum Size of the Sample;

N = Size of population

- e = confidence level at 95 % (5%=0.05)

$$\frac{181}{1+181(0.0025)} = 125$$

To cater for non- respondent, 30% of sample size was added. Therefore, the sample size for this study was as shown below:

$$70\% = 125 \quad \text{thus,} = \frac{125 \times 100}{70} = 178$$

100%=?

Hence, the sample size was 178 representing respondents from all listed firms at NSE in Kenya

Table 3.2 sample size

BANKING	Top managers	Accountants	sample
ABSA Bank Kenya Plc Ord 0.50	3	11	14
BK Group Plc Ord 0.80	4	12	16
Diamond Trust Bank Kenya Ltd Ord 4.00	3	12	15
Equity Group Holdings Plc Ord 0.50	4	13	17
HF Group Plc Ord 5.00	3	10	13
I&M Holdings Plc Ord 1.00	3	10	13
KCB Group Plc Ord 1.00	4	14	18
National Bank of Kenya Ltd Ord 5.00	3	11	14
NCBA Group Plc Ord 5.00	3	11	14
Stanbic Holdings Plc ord.5.00	3	10	13
Standard Chartered Bank Kenya Ltd Ord 5.00	3	13	16
The Co-operative Bank of Kenya Ltd Ord 1.00	3	12	15
Totals	40	138	178

Researcher 2022

Data Collection

The study applied both primary and secondary data. Primary data was collected using closed- ended questionnaires and the study applied data collection sheet to collect secondary data from NSE.

Validity and reliability of research instruments

Validity

Validity measures the strength of an instrument to be accurate in data collection in order to achieve research goals (Kimberlin & Winterstein 2008). According to Mugenda and Mugenda (2008) Validity measures the accuracy of research instrument in data collection. This study applied face validity using supervisors and from other experts form NSE

Reliability

According to AlAli, and AlAli, (2020), reliability is the method of measuring consistency of research instruments. In this study, reliability was tested using Cronbach alpha after pilot study in non-listed commercial banks in Kenya. According to (Baker, 2004) 10%-20% of the sample size is suitable for pilot testing. The study used 10% of the sample size for pilot testing. Hence, 18 questionnaires were used for pilot study. According to Cronbach alpha coefficients when reliability is more than 0.7 its accepted while reliability of less 0.7 rejected. According to the findings of the Cronbach alpha coefficients study all items were more 0.7 hence, research instruments were reliable

Data Analysis

Data analysis refers to a process and techniques used in reducing data to a manageable size leading to the development of summaries, patterns and application of statistical techniques (Sahu, 2013). Data were analyzed using descriptive and inferential statistics

Descriptive statistics

Descriptive statistics is a statistical tool that helps in organizing, summarizing and presenting data in a convenient and informative way (namesake, 2018). This study applied minimum maximum, mean, s and standard deviation.

Inferential statistics

The applied correlation and multi-variate regression analytical methods to analyze collected data. The findings of this study were presented in tables and figures. Regression model for the study was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Where

Y – Stock market performance

β_1 , – Regression coefficients

X_1 – Tax refund

ε = Error term

β_0 - Constant variable

Hypotheses testing criteria

The study tested hypotheses based on the decision criteria set out in the table below.

Table 3.3 Hypotheses testing criterial

Hypotheses	Analytical model	Criteria of Decision the relationship
H0₁: Tax refunds has no statistically significant effect on stock market performance of listed commercial banks in Nairobi Securities Exchange.	$Y = \beta_0 + \beta_1 X_1 + \varepsilon$	P= .000<0.05. If P value is < 0.05, the null hypothesis is rejected

RESULTS AND DISCUSSIONS

Reliability Test

The study gave out 18 closed ended questionnaires to managers and accountants in accounting and procurement department of other non-listed commercial banks to test for reliability and validity of research instruments. The study used Cronbach's alpha to determine reliability of the research instrument. According to Cronbach's alpha coefficient, if alpha coefficient is more than 0.70, reliability is accepted. On the other hand, if alpha coefficient is less than 0.70, reliability is rejected. Hence, research tools are assumed to be unreliable. The findings of the study were presented in the table below.

Table 4.1 Reliability test

Items	N of Items	Cronbach's Alpha
Tax refunds	4	.942

Source Filed data:2023

The study identified that, Tax refunds had Cronbach's Alpha .942, To this end, the study discovered that the Cronbach's Alpha of all variable (, Tax refunds,) was more than 0.70, Hence, research instruments were reliable.

Correlation Analysis

The study conducted a correlation analysis to determine the relationship between independent variable (tax refund) and stock performance during COVID-19 pandemic. Stock performance was measured through stock turnover. The findings of the study were presented in the table below

Table 4.2 Correlations Analysis

		tax refund	Stock performance
tax refund	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	130	
Stock performance	Pearson Correlation	.365(**)	1
	Sig. (2-tailed)	.000	
	N	130	130

Source: field data 2023

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

The study found out that, tax refund had a weak positive and highly significant correlation with stock performance of listed commercial banks in Kenya N=130, $r=.365(**)$, $P=.000 < 0.05$. These findings disagreed with Laukkanen, Ollikka and Tamminen (2019), who noted that, there was no unidirectional difference in gross output, revenue, value added or wages for the two groups of plants.

Regression analysis

The study carried a simple regression analysis between tax refund and stock market performance of listed commercial banks in Kenya during the COVID- 19 period. Findings were presented below.

Table 4.3 (a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.583	.534	.525	.29899

Source: field data 2023

a. Predictors: (Constant), tax refund

The findings of the study revealed that, R was =.583. This identified that, tax refund had a positive correlation with stock market performance of listed commercial banks in Kenya. Further, it was discovered that, the model had an R square of .534. Thus, tax refund accounted for 53.4 % change in stock market performance of listed commercial banks in Kenya during COVID- 19 period.

Table 4.4 (b) ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	.367	1	.367	4.476	.045
1	Residual	10.548	128	.082		
	Total	10.916	129			

Source: field data 2023

a. Predictors: (Constant), tax refund

b. Dependent Variable: Stock market performance

The study identified that F test was 4.476, $P=.045 < 0.05$. This showed that, the overall regression model was fit for the study. Additionally, the findings of the study revealed that, tax refund had significant effect on stock market performance of listed commercial banks in Kenya during the COVID-period.

Table 4.5 (c) Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error				
	(Constant)	.200	.107		1.872	.064
1	tax refund	.087	.043	.183	2.027	.045

Source: field data 2023

a. Dependent Variable: Stock market Performance

The study established that, tax refund had a direct and significant effect on Stock market performance of listed commercial Banks in Kenya $B=.087$, $t=2.027$, $P=.045 < 0.05$. Taking other factors to be constant at zero, tax refund explained 20% a change in stock market performance of listed commercial banks in Kenya. Additionally, the study identified change in tax refund led to an increase in stock market performance of commercial Banks in Kenya by 8.7%. These findings disagreed with (Laukkanen..et al..2019), who noted that, there was a negative effect on gross output that was consistent both with firms producing less, and with firms charging lower prices

$$Y = \beta_0 + \beta_4 X_4 + \epsilon \dots \dots \dots \text{Equation (4)}$$

$$Y = .200 + 0.87 X_4 + \epsilon$$

Hypothesis testing

Table 4.6 Coefficients

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.509	.192		2.658	.009
	Tax refund	.128	.035	.271	3.633	.000

Source: Field data 2023

a. Dependent Variable: Stock market performance

The study identified that, tax refund had a positive and significant inverse effect Stock market performance of listed commercial Banks in Kenya $B = .128$ $t=3.633$, $P=.000 < .05$. Thus, a unit change in tax refund led to a significant increase in Stock market performance of listed commercial Banks in Kenya. According to Munyalo (2011), monthly settlement of tax refunds is inadequate to settle all the tax refund arrears regardless of consisted funding from Treasury. The study recommended that the Treasury ought to enhance the monthly provisions for tax refunds. Hence, the null hypothesis was rejected.

Discussion of Findings

Tax refunds

The study found out that, tax refund had a weak positive and highly significant correlation with stock performance of listed commercial banks in Kenya. The study also, the study established that tax refund had a positive and significant inverse effect Stock market performance of listed commercial Banks in Kenya $B = .128$ $t=3.633$, $P=.000 < .05$. Thus, a unit change in tax refund led to a significant increase in Stock market performance of listed commercial Banks in Kenya. The study further, established that, information technology had a positive and significant effect on the relationship between tax refund and stock performance of listed commercial banks in Kenya.

Conclusions for the study

Tax refunds

The study concluded that, tax refund had a weak positive and highly significant correlation with stock performance of listed commercial banks in Kenya. The study also, concluded that, Tax refund had a positive and significant effect on financial performance of commercial Banks in Kenya. Variation in Tax refund led a significant increase in Stock market performance of listed commercial Banks in Kenya. The study further concluded that, information technology for tax refund had a positive and significant effect on the relationship between tax refund and stock performance of listed commercial banks in Kenya.

Recommendations

Tax refunds

The study recommended that; the government should fast track tax refund process. Faster and shorter tax refund period would increase cash flow to investor and consequently enhance stock market performance. Further, the recommended that, the government through KRA should put in place high end computer technology systems to track, prepare and implement genuine tax refund claims seamlessly. This would reduce cost and time spend on tax refund claims.

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