

Effect of Interest Rate Capping on the Payment of Corporation Tax by Tier Three Banks in Kenya

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Abstract

The interest rate charged on loans and the rate of interest paid on bank deposits, which translates to cost of funds both have a significant impact on the profitability of any commercial banks and hence the corporation tax paid thereof. In September 2016, the Banking Act was amended through insertion of clause 33B controlled lending interest rates to a maximum of 400 base points above CBR rate and interest on deposits to not less than 70% of the CBR rate. This study sought to determine the effects of interest rate capping on the Corporation tax paid by the tier three banks in Kenya. Specifically, the study examined the effect of profitability margins, loan book quality, cost of bank deposits, and cost of overheads on the payment of corporation tax by tier three banks in Kenya. The study utilized descriptive research design and targeted 18 tier three commercial banks leaving out Mayfair and SBM banks that were new, and those that had either been acquired by other banks or were under receivership or statutory management as at December of 2018. The findings indicated that cost of overheads have a positive and significant relationship with corporation tax payment by tier three banks ($\beta=0.148542$, $p=0.016$), profitability margin has a positive and significant relationship with corporation tax payment by tier three banks ($\beta=0.315405$, $p=0.000$), interest rate capping (control variable) had a negative and significant relationship with corporation tax payment by tier three banks ($\beta=-3.08364$, $p=0.001$), cost of deposits have a negative but insignificant relationship with corporation tax payment by tier three banks ($\beta=-0.05854$, $p=0.398$), while loan book quality has a negative but insignificant relationship with corporation tax payment by tier three banks ($\beta=-0.00443$, $p=0.795$). Based on the findings, the study concluded that the introduction of interest rate capping had a negative and significant effect on corporation tax payment by tier three banks in Kenya. From the findings, the study recommends that the government through the National Assembly should reconsider removing the interest rate capping. This is because it has adverse effects to all stakeholders including the government, banks and customers.

Keywords: *Interest rate capping, Corporation tax, Profit margin, Loan book quality*

1.0 Introduction

Tax is a compulsory contribution of a wealth of a natural or legal person to state revenue towards the service of the public (Muia, 2017). Income tax is a direct tax charged upon all the

income of a person, whether resident or non-resident, which accrued in or was derived from Kenya. Direct taxes are taxes where the impact and the incidence are on the same person. The payment and delivery of the taxes to the government is done by the same person, hence the person bears total responsibility. On the other hand, indirect taxes are imposed on one person but paid partly or wholly by another. The taxes are demanded from one person but are remitted to the government by another person. Example of indirect tax include; Value Added Tax and Excise duty (Vincent 2010).

Income tax is a direct tax imposed in a business income, employment income, as well as benefits, pensions, and investment income. The Kenyan law requires that everyone with a chargeable income is issued with a PIN from domestic Tax Department, KRA. Personal identification Number (PIN) is a crucial document where the individual can be allowed to transact business (privately and officially). For instance, goods clearance, banking services, water and electricity meter installation. All taxpayers are required by law to remit taxes annually (Moyi & Muriithi, 2003).

Income tax is charges on the basis of source and/or residence (Deloitte 2017). As per the Income Tax Act, a resident company in any year of income must have been incorporated under the Kenyan law, management and control is exercised in Kenya or it has been declared resident by a notice in the Kenya gazette by the Cabinet Secretary for the National Treasury. Section 2 of the Kenya's Income Tax Act has not expressly defined corporation tax though it can be deduced it to be the income that remains after subjecting the total income to sections 15 and 16 of the Income Tax Act, being the allowable and disallowable deductions respectively, then factored by the corporation tax rate, specified in the third schedule as thirty percent for resident companies and thirty seven point five percent for non-resident organizations.

1.1 Problem Statement

The banking sector plays a very crucial role in financial services provision to their clients. However, despite the significant role entrusted on banks by their clients, banks have for long charged high interest rates on the loans they advance to their clients. The high interest rates charged by banks have been a point of concern by many policy makers to protect consumers from exploitation across the globe leading to interest rates capping. Despite its introduction, interest rate capping is not a new strategy to protect consumers.

In Kenya, interest rate capping was introduced in 2016 slashing the interest rate on loans offered by 4.5% a factor that has since impacted on the banks profitability. This was the banking sector has for a long time recorded impressive performance. The prevailing average interest rate in 2016 was 18.5% and the law set it at no more than 4% of the CBK rate. The reason for government intervention was based on the fact the interest rate previously charged was excessive and was not fostering its economic growth target. Interest rate capping is perceived as welfare enhancing in that individuals will get access to credit at lower and less burdensome rate and will be able to improve their lives cheaply (Hester & Benjamin, 2016).

Before the introduction of interest rate capping laws in Kenya, the overall amount generated from interest rate products by banks in amounted to Shs. 273.11 billion which accounted for around 60% of the overall Shs. 448.03 billion generated in the banking sector during the 2015 financial year (CBK, 2016). The Markit Stanbic Bank Kenya Purchasing Managers' Index (PMI) dropped to 49.9 in May 2017 from 50.3 the previous month, falling below the 50.0

level which separates growth and contraction. The ratio was at 5.8% in early 2015 before rising to 9.5% in August 2016 a month to the rate capping. Post capping, it has been on a general decline hitting a low of 8.9% in January 2017 before rising to 9.6% in February 2017 (CBK, 2016). As a result of the decline in banks profitability due to interest rate capping, the overall corporate tax payment to Kenya Revenue Authority (KRA) has also reduced. A consumer survey dated 22nd March 2017 commissioned by KBA recommended repeal of the law due to lack of growth of credit coupled with a stagnated growth of credit to private sector at single digit levels of circa 4% over the first 6 months (Kangethe, 2017).

1.2 Objectives of the Study

1. To examine the effect of profitability margin on the payment of corporation tax by tier three banks in Kenya.
2. To determine the effects of loan book quality on the payment of corporation tax by tier three banks in Kenya.
3. To establish the effects of cost of bank deposits on the payment of corporation tax by tier three banks in Kenya.
4. To assess the effects of cost of overheads on the payment of corporation tax by tier three banks in Kenya.

2.0 Literature Review

2.1 Theoretical Framework

The study was anchored on the Free Market Theory. Interest rate capping being a curtailing of a free market where prices are left to market forces of demand and supply, Free Market Theory by Milton Friedman becomes the anchor theory in this study. In 1962, Milton Friedman advocated for a free market system indicating that money in circulation would grow as the economy grew as opposed to the situations where circulation of money was controlled by the government. Gelfond (2001) observes that the central bank money is not an exclusive product compared to other goods and services in the market and that the central bank should therefore be allowed the discretion to make a judgement in the setting of policies and removing them when they fail to meet some certain criteria. Spread is the difference between the lending interest rates and the deposits interest rates. According to Chirwa and Mlachila (2004), spreads are determined by the individual financial institutions. The economy of Kenya has been a free market, with the CBK having a role of signaling interest rates charges but not dictating to the financial institutions on what to charge. Historically, the banking sector has had liberty to determine the margins on the spread of interest rates based on the level of expenses and the risk appetite. Banks willing to take higher risks are known to have a higher spread compared to their risk averse counterparts that operate with smaller margins in a bid to retain their clients. The spread is influenced by existing monetary and fiscal policies but should not be dictated (Emmanuelle, 2003).

The tax payment made as a result of the banks making profits is largely dependent on whether the controlling of interest rates result in the banks making more or less money. The argument has been that leaving the market to operate freely would leave the banks with an option of pricing their products according to the perceived risks either in the product or the target clientele. Olaka (2018) on the other hand argues that the regulation of the market is largely motivated by the need to increase credit uptake, particularly for micro and small enterprises and households. This then insinuates that the credit would be more accessible to

borrowers when the market is controlled because they would then be able to afford it. Increased borrowing would be expected to generate more revenue through the interest income thus improving the profitability levels resulting to higher profits.

The study was also supported by Portfolio Theory. This theory supports the relationship between the quality of loan book and the corporation tax. Since the 1980s, banks have successfully applied modern portfolio theory (MPT) to market risk. Many banks are now using portfolio at risk (PAR) models to manage their interest rate and market risk exposures. However, even though credit risk remains the largest risk facing most banks, the practical of MPT to credit risk has lagged (Margrabe, 2007). Banks recognize how credit concentrations can adversely impact financial performance. As a result, a number of banks around the world are actively pursuing quantitative approaches to credit risk measurement, while data problems remain an obstacle. This industry is also making significant progress towards developing tools that measure credit risk in a portfolio context. They are also using credit derivatives to transfer risk efficiently while preserving customer relationships. The combination of these two developments has precipitated vastly accelerated progress in managing credit risk in a portfolio context over the past several years.

Traditionally, banks have taken an asset-by-asset approach to credit risk management. While each bank's method varies, this approach involves periodically evaluating the credit quality of loans and other credit exposures, applying a credit risk rating and aggregating the results of this analysis to identify a portfolio's expected losses. The foundation of the asset-by-asset approach is a sound loan review and internal credit risk rating system. A loan review and credit risk rating system enable management to identify changes in individual credits or portfolio trends in a timely manner.

In the expert system, the credit decision is left in the hands of the branch lending officer. His expertise, judgment and weighting of certain factors are the most important determinants in the decision to grant loans. The loan officer can examine as many points as possible but must include the five "Cs"; character, credibility, capital, collateral and cycle (economic conditions). In addition to the 5 Cs, an expert must also take into consideration the interest rate.

Due to the time-consuming nature and error-prone nature of the computerized expertise system, many systems use induction to infer the human expert's decision process. The artificial neural networks have been proposed as solutions to the problems of the expert system. This system simulates the human learning process. It learns the nature of the relationship between inputs and outputs by repeatedly sampling input/output information. Credit Scoring Systems is where a credit score is used to represent the creditworthiness of a person. A credit score is primarily based on credit report information. Lenders, such as banks use credit scores to evaluate the potential risk posed by giving loans to consumers and to mitigate losses due to bad debt.

Using credit scores, financial institutions determine who are the most qualified for a loan, at what rate of interest, and to what credit limits. In the situation where the interest rates are predetermined and thus cannot form of the credit scoring model, the more often than not decision is to reject all loans that are not considered sufficiently collateralized. The method for the use of credit scoring involves attaching heavy statistical weights to the financial conditions and history of the principal owner given that the credit worthiness of the owner and that of the firm are closely related for most of the small businesses (Drzik, 1995).

2.2 Empirical Review

Laeven (2003) did a study on the capping of interest rates in the United States and found that financial liberalization measures, such as the elimination of interest caps, have positively affected small enterprises' access to finance. The study indicated that investors tend to migrate to countries with fewer restrictions of interest rates. (iff/ZEW, 2010) did further studies still in the United States and concluded that access to credit by high risk borrowers is more when the interest rates are higher. Accessing credit at high costs however was noted to result to high levels of default.

Irresberger et al, (2015) while conducting a study on the impact of interest rates capping on the bank's profitability concluded that capping of interest rates pushed down the banks' profitability and thus influencing the tax revenue collected from the sampled banks in the United States. Financial reports tactics such as capping of the interest rates were however noted to boost investors confidence in countries such as Pakistan (Zaman et al., 2013)

The authorities in South Africa signed an exemption in the usury law to remove small loans from the interest rate ceilings in 1993. Then, after more than a decade with no cap on small loans, a National Credit Act was passed taking effect from 2007 and re imposed a cap on small loans introducing a cap of 5 percent per month on short-term loans as part of an integrated credit framework. In addition, the act recognizes seven credit subsectors with different maximum interest rates linked to a benchmark rate set by the central bank. Fees are also capped (Porteous, 2010).

Kankasa-Mabula (2015) studied the impact of interest rate capping in Zambia that had been introduced by the Bank of Zambia through a circular No. 08/2012 owing to what it considered irresponsible lending practices and unclear pricing of credit products. Consequently, the objective was not met leading to withdrawal of the circular vide another circular No 19/2015 with clear consumer protection measures that the lenders were required to observe including disclosure of the terms and conditions of the credit agreement, disclosure of interest and all related costs of borrowing and the borrowers being required to sign of Key Fact Statement for Consumer credit to signify the borrowers understanding of the credit agreement.

The National Bank of Ethiopia eliminated all interest rate ceilings in the financial sector in 1998 but the Country is still considered to have de facto interest rate ceilings since most microfinance institutions have chosen to maintain a lower interest rate, principally for political reasons. Tunisia has had a microcredit law since 1999 that sets a ceiling on interest rates on loans at 5 percent including all commissions and fees. Because the law applies only to local associations, the cap is not enforced on the international NGO, ENDA-IA (Mohammed, 2011). In Egypt, civil and commercial transactions are subject to a ceiling of 7 percent, while banks can determine their interest rate freely (Allaire, 2009). Algeria and Libya also control interest rates on loans (Porteous, 2010).

Nkwoma (2014) carried out a study on interest rates in Nigeria and concluded that the capping was positively influencing the economy going by consequent improvement of the stock prices. Closer home in Tanzania, interest rates interventions were seen to have a positive impact to the economy. According to studies, reforms on the interest rates influenced financial deepening in the country, though marginally.

However, Olaka (2018) argues that if the regulation of the market is largely motivated by the need to increase credit uptake, particularly for micro and small enterprises and households then the credit would be more accessible to borrowers when the market is controlled because they would then be able to afford it. He however concludes by observing that all the surveys conducted in the area in the local market revealed the law was not achieving the intended objective but instead precipitating tight conditions of lending, occasioning a two per cent credit expansion in the private sector at the expense of micro and small borrowers.

3.0 Research Methodology

The study employed an explanatory research design. Through this design, the researcher was able to establish the causal effect between the independent and dependent variables. The target population for this study was al 18 third-tier commercial banks in Kenya. The study adopted a census to cover all the 18 third-tier commercial banks in Kenya. Secondary data was obtained from published financial statements for 17 quarters from 2015Q1 to 2019Q1. The study used secondary data from financial statements for all third-tier commercial banks operating in Kenya. Data collected covered 17 quarters from 2015Q1 to 2019Q1. Data was analyzed using regression analysis and descriptive statistics. STATA software was used to generate the results.

4.0 Results and Discussion

4.1 Descriptive Statistics

This section provides statistical summary results in terms of means, minimum, maximum, standard deviation for the study variables: corporate tax payment, cost of deposits, loan book quality and cost of overheads.

Table 1: Descriptive Statistic Results

Variable	No.	Mean	Std.Dev.	Min	Max
Corporate tax	251	30299.56	55875.2	0	525781
Cost of deposits	252	240233.5	171800	0	1085659
Cost of overheads	252	302683.2	241227	0	1398007
Profitability margin	252	48453.96	164297	-577091	887246
Loan Book Quality	251	1246158	1048549	0	4398584

Results in Table 1 indicate that the mean of corporate tax payment by the tier three banks for the measurement period was Ksh. 30299.56 Million, with a standard deviation of Ksh. 55875.2. The minimum value was 0 while the maximum value was 525781.

Results also indicate that the mean of cost of deposits paid by the tier three banks for the measurement period was Ksh. 240233.5 Million, with a standard deviation of Ksh. 171800. The minimum value was 0 while the maximum value was 1085659.

Further, results indicate that the mean of cost of overheads for the tier three banks during the measurement period was Ksh. 302683.2 Million, with a standard deviation 241227. The minimum value was 0 while the maximum value was 1398007.

In addition, findings revealed that the mean of profitability margin for the tier three banks for the measurement period was Ksh. 48453.96 Million, with a standard deviation of 164297. The minimum value was -577091, while the maximum value was 887246.

Finally, results indicate that the mean of non-performing loans for the tier three banks for the measurement period was Ksh. 1246158 Million, with a standard deviation of 1048549. The minimum value was 0 while the maximum value was 4398584.

4.2 Panel Regression Analysis

4.2.1 Hausman Test

In order to determine whether the fixed or random effects model is appropriate Hausman test was used. The Hausman test fundamentally tested whether the unique errors (ui) are correlated with the regressors

Table 2: Hausman Test

	(b) Fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Interest	-0.15069	-0.05854	-0.09216	0.088954
Operational cost	0.227011	0.148542	0.078469	0.086967
Profitability	0.304518	0.315405	-0.01089	0.012055
NPL	0.002659	-0.00443	0.007089	0.01017
Dummy	-3.61214	-3.08364	-0.5285	0.374047
chi2(5)	2.73			
Prob>chi2	0.742			

Table 2 indicates the Hausman test results. A resultant p value of 0.742 was greater than the conventional p value of 0.05 leading to the acceptance of the null hypothesis that the unique errors (ui) are not correlated with the regressors and, therefore, the random effects model was more appropriate.

Following the hausman test results, a random effects regression model was conducted to examine the relationship between profitability margin, loan book quality, cost of bank deposits and cost of overheads with payment of corporation tax by tier three banks in Kenya, with interest rate capping as a control variable. The results are presented in Table 3.

Table 3: Random-effects Regression Model

Corporate tax	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
Cost of deposits	-0.05854	0.0692304	-0.85	0.398	-0.194227 0.077151
Cost of overheads	0.148542	0.0617952	2.4	0.016	0.027426 0.269658
Profitability Margin	0.315405	0.0187016	16.87	0.000	0.278751 0.35206
Loan book quality	-0.00443	0.0170246	-0.26	0.795	-0.037797 0.028938
Dummy	-3.08364	1.26832	-2.43	0.015	-5.569505 -0.59778
_cons	11.30669	3.547851	3.19	0.001	4.353032 18.26035
R square	0.6479				
F statistics	323.13				

Prob > chi2 0.000

Model

Corporate Tax Payment = 11.30669-0.05854 Cost of Deposits+0.148542 Cost of Overheads+ Profitability Margin-0.00443 Loan Book Quality-3.08364 interest rate capping

Results in Table 3 indicate that cost of deposits have a negative but insignificant relationship with corporation tax payment by tier three banks ($\beta=-0.05854$, $p=0.398$) at 5 percent level of significance. This implies that cost of deposits have no significant effect on corporate tax payment by tier three banks in Kenya.

Results also reveal that cost of overheads have a positive and significant relationship with corporation tax payment by tier three banks ($\beta=0.148542$, $p=0.016$) at 5 percent level of significance. This implies that a unit increase in cost of overheads is associated with 0.148542 units increase in corporate tax payment by tier three banks in Kenya.

Further, findings showed that profitability margin has a positive and significant relationship with corporation tax payment by tier three banks ($\beta=0.315405$, $p=0.000$) at 5 percent level of significance. This implies that a unit increase in profitability is associated with 0.315405 units increase in corporate tax payment by tier three banks in Kenya.

In addition, results revealed that loan book quality has a negative but insignificant relationship with corporation tax payment by tier three banks ($\beta=-0.00443$, $p=0.795$) at 5 percent level of significance. This implies that loan book quality has no significant effect on corporate tax payment by tier three banks in Kenya.

Finally, the findings indicated that the control variable (interest rate capping) had a negative and significant relationship with corporation tax payment by tier three banks ($\beta=-3.08364$, $p=0.001$) at 5 percent level of significance. This implies that movement from pre to post interest capping era has reduced the corporation tax payment by tier three banks in Kenya.

The overall model was found to be significant (Prob > chi2=0.000<0.05) implying that profitability margin, cost of overheads and interest rate capping are good predictors of corporation tax payment by tier three banks in Kenya.

In addition, the R squared was 0.6479 implied that that profitability margin, cost of overheads and interest rate capping accounts for 64.79% of variations in corporation tax payment by tier three banks in Kenya.

4.3 Hypothesis Testing

From the regression findings in Table 3, the following null hypotheses were tested.

H₀₁: Profitability margin has no significant effect on the payment of corporation tax by tier three banks in Kenya was rejected. Therefore, profitability margin has a significant effect on the payment of corporation tax by tier three banks in Kenya.

H₀₂: Loan book quality has no significant effect on the payment of corporation tax by tier three banks in Kenya was not rejected. Therefore, loan book quality has no significant effect on the payment of corporation tax by tier three banks in Kenya.

H₀₃: Cost of Bank deposits has no significant effect on the payment of corporation tax by tier three banks in Kenya was not rejected. Therefore, cost of bank deposits quality has no significant effect on the payment of corporation tax by tier three banks in Kenya.

H₀₄: Cost of overheads has no significant effect on the payment of corporation tax by tier three banks in Kenya been rejected. Therefore, cost of overheads has a significant effect on the payment of corporation tax by tier three banks in Kenya.

H₀₅: Interest rate capping has no significant effect on the payment of corporation tax by tier three banks in Kenya was rejected. Therefore, interest rate capping has a significant effect on the payment of corporation tax by tier three banks in Kenya

5.0 Conclusion

Based on the findings, the study concluded that the introduction of interest rate capping had a negative and significant effect on corporation tax payment by tier three banks in Kenya. This means that following the introduction of interest rate capping, the amount of corporation tax paid by tier three banks to the government has significantly reduced. Further, the study concluded that profitability margin and cost of overheads have a positive and significant effect on corporation tax payment by tier three banks in Kenya. This implies that an increase in profitability margin and cost of overheads increases the corporation tax payment by tier three banks in Kenya. In addition, the study concluded that loan book quality and cost of deposits have a negative albeit insignificant effect on corporation tax payment by tier three banks in Kenya.

6.0 Recommendations

From the findings, the study established that introduction of interest rate capping has negatively affected the amount of corporation tax paid by tier three banks in Kenya. The study therefore, recommends that the government through the National Assembly should reconsider removing the interest rate capping. This is because it has adverse effects to all stakeholders including the government, banks and customers.

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