

# **EARNINGS' QUALITY OF PUBLIC BANKS IN KENYA: EVIDENCE FROM PERSISTENCE OF EARNINGS**

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## **Abstract**

This longitudinal empirical survey, which covers the 12 year period of January 2001 to December 2012, examines the persistence of earnings among commercial banks in Kenya. It tests two null hypotheses first that earnings among banks are not transitory over time and second that there is no significant difference between the earnings persistence of size based portfolio quartiles. The persistence of earnings of size-based portfolio quartiles is measured by obtaining the coefficient of the autoregressive model of order one of current common size earnings against one financial period lagged common size earnings. The study fails to reject the first null hypothesis for all the size portfolios and finds that the earnings of commercial banks are not transitory and are therefore of a high quality. It however rejects the second null hypothesis and finds that the large size commercial banks have higher persistence coefficients than the small size commercial banks. The findings suggest that the investors in a Kenyan commercial bank can have access to highly predictable earnings data given the high quality of financial reporting by the banks. On the flipside however, the large commercial banks seem to have relatively better quality earnings data than the small commercial banks. The results are however limited by the small size of the commercial banking sector in Kenya which limits the opportunities available for the assessment of earnings' quality inherent in financial reports.

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**Keywords:** Earnings quality, earnings persistence, transitory earnings

## **Introduction**

The futility of the widely held belief of the efficiency of security markets (Kaza, 2000) as evidenced by the now common financial market anomalies (Schwert, 2003) has given impetus to fundamental analysis of

equity securities. One of the central tenets in fundamental examination of financial assets is the evaluation of the earnings' quality of financial reports particularly the statement of comprehensive income. In its general nature, earnings' quality relates to the reliability of the reported earnings in providing information about future earnings. It can be described as the overall reasonableness of reported earnings and it concerns itself with the assessment of the extent to which earnings are repeatable or controllable. This is important because it helps financial analysts evaluate the degree to which earnings reflect the underlying fundamentals of a business. In this respect, earnings quality is perceived as an indicator of information risk for investors (Easley and O'Hara, 2004; Yee, 2006; Kravet and Shevlin, 2009; Armstrong et al., 2011).

In a nutshell, an evaluation of the transitory nature of earnings is a quest to appraise the persistence of earnings over successive financial periods. Schipper and Vincent (2003) indicate that earnings persistence as a measure of earnings quality indicates the sustainability of earnings. From this standpoint, highly sustainable earnings are indicative of high quality financial reporting which points to good earnings quality. Persistence as a method of earnings information quality has been used by Francis et al. (2005) and Mehri et al. (2011) who measure earnings persistence as the slope coefficient of the regression function of a period's earnings per share (EPS) against the previous periods' EPS values. A slope coefficient that has a value closer to 1 points towards high earnings persistence while that whose value is closer to zero indicates a low persistence of earnings. Oei et al. (2008) replicates the Francis et al. (2005) model but modifies it by replacing EPS with the ratio of earnings before interest and after tax to total assets. They show that unreliable accruals quality has great persistence as shown by the slope coefficient in their modified model.

Hypothetically, high quality financial reporting should greatly help reduce the information asymmetry between corporate insiders and the investing outsiders. This should greatly improve the ability of current reported earnings to indicate future actual earnings of the accounting entity. In conventionality with the efficient market hypothesis (EMH) of Fama (1970), security prices should readily incorporate the earnings information of a reporting business entity. Markets react to reported earnings data because the accrual concept of accounting splits earnings into cash earnings and accruals, a condition that is likely to affect the time series consistency of earnings reported by businesses including commercial banks. The accrual related accounting rules in effect introduce opportunities for managers to smooth out reported earnings which essentially compromise the quality of the reported earnings. This is likely to affect the reliability of reported earnings in predicting future earnings by compromising their persistence.

It is from this perspective that it is important to evaluate the quality of earnings reported by commercial banks in Kenya. The banks are an important segment at the Nairobi Securities Exchange (NSE) not only because they constitute the most active counter at the market but also because their combined capitalization constitute a significant portion of the entire market value. It is important that this value should correspond to high quality earnings because of the investor interest in the banks. The quality of the reported earnings by commercial banks can easily be evaluated from the level of persistence of these earnings. The dilemma however is that there is a literature breach in this respect such that it is not clear how persistent or transitory the earnings reported by commercial banks in Kenya are. This is critical when considered from the unique regulatory environment in which Kenyan banks operate and prepare earnings reports. Suffice it to note that the existing regulatory framework is shaped by the Capital Markets Authority (CMA), Central Bank of Kenya (CBK), the Institute of the Certified Public Accountants of Kenya (ICPAK) and the NSE.

The NSE (2015) regulations require that for continued listing, the accounting measurement rules and procedures followed by a business must ensure that the resulting financial information is reliable. They further indicate that a business should select and apply accounting policies such that financial statements are consistent with all the relevant and applicable international financial reporting standards (IFRS). This requirement implies that the provision of IAS 18, revenue, with regard to revenue accrual and deferral are consistent with the expectations of NSE for accrual accounting and the International Accounting Standards Board's (IASB) framework of accounting.

The CBK through the provisions of the Banking Act, Cap.488 also has sections 21, 22 and 23 dealing with treatment of financial statements and emphasizes the importance of the International Financial reporting Standards. The relevant sections however apply to the Kenyan banking financial institutions which are regulated by the Central Bank of Kenya. In a nutshell, the regulatory environment in Kenya seems to be very clear with regard to the recognition rules in the financial statements. However, it should be noted that the International Accounting Standards Board framework of accounting has very general accounting provisions and allows individual accounting entities to develop their individual accounting policies. It is this fact that introduces possibilities of managerial opportunism. Coupled with the Kenyan idiosyncratic regulatory environment and capital markets, there arises a need to evaluate how these affect the persistence of earnings in the Kenyan capital markets particularly for banking institutions.

## Research Objectives and Justification

In summary, the problem necessitating this study is two-fold. Firstly, there is lack of knowledge about the level of earnings persistence as a quality of earnings among Kenyan commercial banks. Secondly, with respect to Choi (2008) who shows that corporate size influences the quality of reported earnings, the effect of corporate size on earnings persistence among the Kenyan commercial banks is not yet known. In addition, it is noteworthy that Kenya has a unique regulatory and capital market orientation whose effect on earnings persistence has hitherto not been explored by literature. It is this dilemma that this study aims to resolve by establishing the levels of earnings persistence in general and among the various size based portfolio quartiles formed from commercial banks quoted at the NSE. The study hence seeks to not only establish the quality of earnings reported by commercial banks by using the persistence measure, but also evaluates the effect of bank size on the quality of earnings. We null hypothesize that the earnings of commercial banks in Kenya are transitory that the earnings persistence coefficient ( $\beta$ ) is approximately zero.

$$H_{01}: \beta_i \approx 0$$

If this null hypothesis is rejected, the earnings persistence coefficients are expected to be closer to 1 ( $\beta_i \approx 1$ ) to indicate persistent (high quality) earnings in the banking sector. Accordingly, the null hypothesis is that each of the size based quartile portfolio earnings coefficients are approximately zero. We further present the hypothesis that for the banking sector, there is no significant difference between the qualities of earnings among the various commercial banks which if we fail to reject would point to similar financial reporting quality among the different banks regardless of their size (represented by four size quartiles-  $QTL_i$  ranging from  $QTL_1$  for the small size banks to  $QTL_4$  for the large size banks).

$$H_{01}: \beta_{QTL1} = \beta_{QTL2} = \beta_{QTL3} = \beta_{QTL4}$$

The study is grounded in several theoretical expectations. Firstly is the corporate governance and agency conflict theory which presupposes that the general quality of financial reporting is a function of the managerial incentive to report in their best interests. This may lead to the misreporting of earnings through discretionary reporting actions that skew and reduce the quality of reported earnings. This school of thought advocated by Doyle et al. (2007); Ashbaugh-Skaife et al. (2008); Kent, Routledge and Stewart (2010) and Lu et al. (2011) postulates that managers may use reported earnings to mislead investors about the performance of their firm in an effort to achieve preconceived objectives and/or maintain their managerial status quo. The implication of this is that the kind of corporate governance structures, internal control systems and ownership structures can influence or

curtail the managerial freedom of earnings management and therefore influence the quality of earnings reported in financial statements.

In the agency problem setup, managers or owner managers can exploit accruals and reported earnings to expropriate wealth from investors and minority shareholders. On the flipside, where there are concentrated ownership structures, it is easy to institute rigorous monitoring measures that could dampen manager-shareholder agency problems. The assertions of Ashbaugh-Skaife et al. (2008) are corroborated by the empirical evidence of Kent, Routledge and Stewart (2010) who find that effective corporate governance structures are positively related to earnings quality. Doyle et al. (2007) show that internal control weaknesses have an inverse association with earnings quality. This position receives empirical support from Lu et al. (2011) who find an overall negative net effect of internal control weaknesses on earnings quality as reflected by accrual quality. Lu et al. (2011) however suggest that the inherent risk in a weak control system can be overcome by greater audit that would reveal discretionary and innate errors in the financial statements and reported earnings.

Another critical aspect of corporate governance that is likely to impact accruals quality is ownership structure. There are various forms of such structures the most common of which are family ownership, block ownership, institutional ownership, insider or managerial ownership and public ownership (Isenmila and Afensimi, 2012). Bhaumik and Gregoriou (2009) argue that family ownership aligns the interests of managers and owners and that even where the family hires managers to run a family business, the family ownership structure provides sufficient enticements to monitor managers and hence reduce the managerial opportunistic behavior that could compromise earnings quality. Wang (2006) provides empirical evidence in support of this theoretical supposition. Contradictory arguments however point out that a concentrated and block ownership structures akin to that of family ownership may have an undesired entrenchment effect where controlling shareholders may expropriate wealth from their minority counterparts (Prencipe et al., 2008). The findings of Isenmila and Afensimi (2012) suggest that external block and insider/managerial ownership structures encourage earnings management which compromises earnings quality. Besides the effect of family ownership, block ownership and insider ownership, institutional ownership can encourage monitoring of managers and reduce managerial negative effect on earnings quality (Isenmila and Afensimi, 2012).

Secondly is the Sloan behavioural orientation, a theory whose core argument is that investors fail to account for the non-sustainability of growth inherent in the accruals and earnings data of financial statements. It in effect puts to question the concept of investor rationality. This theoretical

rationalization contends that investors can be dichotomized into informed and the unsophisticated (naïve) investor segments. The unsophisticated investors, according to the Sloan (1996) view, usually consider earnings in a cumulative fashion without contemporaneously considering the cash flow and accrual components of such earnings. Ultimately however, if accruals are less accurate in forecasting earnings when compared to cash flows, then investors would have a more than commensurate level of optimism when the accruals component of earnings is high. Hirshleifer et al. (2009) indicate that the excessive and supposedly unwarranted optimism would lead to overvaluation of a firm when the earnings data is taken into account.

Thirdly is the functional fixation hypothesis of Hand (1990) which presupposes that investors interpret accounting data in total disregard of the accounting rules that are used to produce such data. The classical functional fixation outlook is of the view that investors are always unsophisticated such that they fail to decode the true cash flow implications of accounting earnings data. Their fixation with earnings in the accounting data does not allow them to adjust their expectations in tandem with the inherent accrual data in the financial statements (Sloan, 1996). The fixation by investors on earnings implies that some investors ignore the differential valuation connotation of the constituents of reported earnings, but rather adjust their market expectations and trading based on aggregate reported earnings only. In a nutshell, the functional fixation hypotheses seek to shed light on the classical dilemma with regard to whether or not markets are sophisticated enough as not to be fooled by cosmetic accounting changes.

Besides the foregoing earnings, investors' and market postulations, Fama's (1970) efficient market hypothesis (EMH) provides a basis for studying earnings persistence at the NSE given that the market has been shown to be efficient at least in the weak form (Dickinson and Muragu, 1994). The EMH places investor rationality as the central pillar in the investors' decision making process and should therefore see incorporation of earnings quality data into investment decisions. This should have a direct bearing on any size-based differences in the quality of reported earnings by commercial banks in the framework of this study. The downside of the EMH however is that real markets seldom constitute investors with perfect information. Even in very competitive markets, corporate insiders always have the advantage of insider information.

Just like the theoretic literature, the empirical evidence on earnings quality, earnings persistence and the related variables is confounding. Choi (2008) examines the relationship between the quality of earnings and firm value among the listed firms at Korean Stock Exchange over the period between 2003 and 2005 in a bid to test the hypothesis that earnings quality and firm value are positively related. The study uses two stage multiple

regression analysis having the dependent variable as the firm value measured as Tobin's Q and the independent variable as accruals quality, measured by Dechow and Dichev (2002) approach over the 1,397 firm years in the sample. The findings are in conformity with the hypothesis and high accruals quality firms are valued highly in the stock market. Accrual quality as an aspect of earnings quality is a priced information risk factor in the Korean equity markets. Although the study breaks from the norm of evaluating accruals quality among firms listed in the USA, it relies on a small sample of 1397 firm years alone over a three year period yet the data requirements for evaluating.

Doyle and Ge (2007) examine the relationship between earnings quality as indicated by accruals quality and the strength of internal controls. They test over the August 2002 to November 2005 period whether a weak control environment allows for biased accruals through earnings and unintentional errors in the estimation of accruals in the United States of America. Out of the population of 1210 firms, they select a sample of 705 firms that disclosed at least one material weakness in their internal control system. They test two null hypotheses that firstly material weaknesses in internal controls are negatively associated with accruals quality and secondly that company level material weaknesses have a stronger negative relation with accruals quality than account specific material weaknesses.

Doyle and Ge (2007) measure accruals in four ways using McNichols (2002) volatility measure, average accruals, earnings persistence and the historical restatement of accruals. Their findings indicate that weaknesses are generally associated with poorly estimated accruals that are not realized as cash flows. This indicates that there is a relation between a weak internal control system and lower accruals quality that is driven by disclosures relating to the overall company level controls. This study presents a view to discretionary accruals quality that evaluates the role of the internal reporting and control environment. This enriches literature by looking at control aspects of discretionary accruals quality. It however uses data that places a lot of reliance on self disclosure of material weaknesses. This in itself may not be a good proxy for internal weaknesses because there may be a systematic bias in the choice of the disclosure parameters.

Arising from the evaluation of literature, earnings persistence evaluation is facilitated by interrelating reported market weighted EPS with their market weighted lagged values over the 12 year study period of January 2001 to December 2012. The independent variables are determined as the lagged periods' value weighted EPS as influenced by the component bank returns and the attendant earnings quality. These when looked at together help in determination the current period's value weighted EPS. It is from this interrelationship that it is possible to estimate the earnings persistence

coefficients for each of the various size based portfolios. The methodology is described in the ensuing section.

**Research Data and Methodology**

The longitudinal empirical survey design used in this study relies on the population all the 12 commercial banks that have been quoted in the equity securities market of the Nairobi Securities Exchange for the twelve year period between January 2001 and December 2012 (144 months). Secondary data was obtained from the NSE (company capitalization) and the individual banks’ financial statements (EPS). The annual company capitalization data for determining the size quartiles to which the banks belonged was obtained at the beginning of each of the 12 years. This is because portfolio rebalancing was done at the beginning of each of the years to implement the relevant data cleaning exclusion criteria. For this purpose each bank’s respective size is determined as a quotient of its capitalization and the total quartile capitalization.

Although a census of all the banks quoted at the NSE is used in the study, data cleaning for analysis purposes led to the exclusion of some companies in some of the periods under the study. For this purpose delisting and listing in the course of the study period were identified as the exclusion criteria. Companies delisted or listed in the course of the study period do not have full trend data for evaluation of earnings persistence and determine the transitory nature of earnings. For use of t-test in the regression of earnings against lagged earnings, the EPS is log-transformed on the basis of natural logarithms. To test null hypothesis 1 that the earnings persistence coefficients are approximately zero, the market weighted EPS of respective periods are regressed against the one year-lagged market weighted earnings per share for all the four size quartiles

$$LnWEPS_{i,t} = \beta_0 + \beta_1(LnWEPS_{i,t-1}) + e \text{ ----- (i)}$$

$$WEPS = \frac{\text{Proportionate capitalisation of a bank in the size quartile}}{\text{Total Size Quartile Capitalisation}} * EPS \text{ ---(ii)}$$

Where EPS is earnings per share and WEPS is the market weighted EPS.

The regression in equation (i) provides  $\beta_1$ , the measure of earnings persistence. The inferential statistics are used by testing the significance of  $\beta_1$  for all the four size quartiles at 95% confidence interval. By running the regression equation, the value of  $\beta_i$  and their 2-tail statistical significance at 95% confidence interval is determined. To test the null hypothesis II the earnings quality of the different size portfolio are not significantly different,

the single factor ANOVA test is used to test the difference in the variances and means of the various quartile earnings persistence coefficients. This combined with null hypothesis 1 helps infer from the regression and F-test results the relative levels of earnings persistence in the various portfolio sizes of banks quoted at the NSE.

## Results and Analysis

Descriptive statistics provided in Table 1 provide the coefficient of variation (CV) of the various portfolio size market weighted earnings per share. The measure relates the standard deviation of the EPS to the mean EPS. CV hence indicates the size adjusted degree of variability in EPS.

Table 1: Cross Size Comparison of the EPS Descriptive Statistics

	Mean EPS	$\delta$ EPS	Median EPS	CV
<b>QTL 1</b>	3.1778	0.7688	2.5329	0.2419
<b>QTL 2</b>	4.2645	0.8165	3.4192	0.1915
<b>QTL 3</b>	4.8619	0.8150	4.8950	0.1676
<b>QTL 4</b>	6.3818	1.3217	3.7253	0.2071

The results indicate that the small size portfolio has the widest mean variability in EPS (0.2419) alluding to a volatile EPS experience. This is followed by the large size quartile (0.2071), the second quartile (0.1915) and the third quartile (0.1676) respectively. This indicates that the mid size banks have less volatile EPS experiences compared to the large and small size counterparts.

The first null hypothesis tests the proposition that the earnings quality for the four quartile portfolios is transitory. This would be the case if the earnings persistence coefficients are individually each tending towards zero. For the small size banks indicated by quartile 1 (QTL 1), the results from equation (i) are presented in Table 2.

The R square of this estimated regression equation is 0.65497 indicating robust results. The regression output serves two purposes. Firstly it helps estimate the small size quartile earnings persistence coefficient ( $\beta_{QTL1}$ ) as 0.54654. In this case beta is closer to 0.50 indicating a moderate level of earnings persistence. This corroborates the variability values of EPS provided in table 1. Secondly, the output is used to test if  $\beta_{QTL1}$  is statistically significant. In this instance the significance test is taken at 95% confidence interval using the t-statistic. The regression t from the equation is determined as 4.1333. Accordingly we reject the null hypothesis and conclude that the earnings persistence coefficient for the small banks is not zero and that since it is statistically significant and more than 0.50, the earnings quality from the small banks are of a relatively good quality.

Table 2: QTL 1 Size Portfolio Regression Statistics

R Square	0.6550							
Adj. R Square	0.6166							
SE	0.4487							
N	11							
	<i>Coeffs</i>	<i>SE</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0.57751	0.17011	3.39491	0.00794	0.19269	0.96232	0.19269	0.96232
$\beta$	0.54654	0.13223	4.13333	0.00255	0.24742	0.84566	0.24742	0.84566

For the second size quartile (QTL 2) the findings are shown in table 3 the R square of the estimated regression equation is 0.87177 points to a robust model. The earnings persistence coefficient,  $\beta_{QTL2}$ , is 0.81107. This is indicative of higher quality earnings quality than those in the small size quartile.

Table 3: QTL 2 Size Portfolio Regression Statistics

R Square	0.8718							
Adju. R Square	0.8575							
SE	0.2279							
N	11							
	<i>Coeffs</i>	<i>SE</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0.41560	0.13883	2.99354	0.01511	0.10154	0.72966	0.10154	0.72966
$\beta$	0.81107	0.10369	7.82201	0.00003	0.57651	1.04564	0.57651	1.04564

For this size portfolio, we again reject the null hypothesis and conclude that the earnings are not transitory and are indeed of a high quality since  $\beta_{QTL2}$ , is not zero since it is statistically significant given a t-value of 7.82201.

For the third size quartile banks (QTL 3), the results from equation (i) are presented in table 4. The R square of this estimated regression equation is 0.58747 indicating robust results. The regression output provides an earnings persistence coefficient ( $\beta_{QTL3}$ ) of 0.61202. In this case beta is higher than 0.50 indicating high level of earnings persistence, albeit not as high as that of the second size quartile.

The output is also used to test if  $\beta_{QTL3}$  is statistically significant. In this instance the significance test is taken at 95% confidence interval using the t-statistic. The regression t from the equation is determined as 3.58003. Accordingly we reject the null hypothesis and conclude that the earnings persistence coefficient for the third quartile banks is high and that those earnings are not transitory but are of a relatively good quality.

Table 4: QTL 3 Size Portfolio Regression Statistics

R Square	0.58747							
Adj. R Square	0.54163							
SE	0.41955							
N	11							
	<i>Coeffs</i>	<i>SE</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95%</i>	<i>Upper 95%</i>
Intercept	0.68434	0.26166	2.61545	0.02802	0.09244	1.27625	0.09244	1.27625
$\beta$	0.61202	0.17095	3.58003	0.00593	0.22529	0.99874	0.22529	0.99874

Similar conclusions are arrived at for the large size portfolio (QTL 4) where the null hypothesis is rejected after the regression output provides an earnings persistence coefficient of 0.71738 at a statically significant t-value of 3.61223 as indicated in table 5. This indicates that the earnings in all the four size segments are of a high quality for the banks quoted at the NSE.

Table 5: QTL 4 Size Portfolio Regression Statistics

Multiple R	0.76929							
R Square	0.59180							
Adju. R Square	0.54645							
SE	0.43402							
Observations	11							
	Coeffs	SE	t Stat	P-value	Lower 95%	Upper 95%	Lower 95%	Upper 95%
Intercept	0.34386	0.35814	0.96015	0.36206	-0.46630	1.15403	-0.46630	1.15403
B	0.71738	0.19860	3.61223	0.00564	0.26812	1.16664	0.26812	1.16664

To test the null hypothesis II that there is no significant difference between the earnings persistence coefficients for the four size bank categories, the segmental betas and their respective means are subjected to a single factor ANOVA test at 0.05 level of significant. The results are indicated in table 6. The resulting F value of 24.97892 is greater than the critical F of 5.98739 hence the study rejects the null hypothesis and concludes that the earnings persistence coefficients of the different size portfolio quartiles are different from each other at 95% confidence interval.

Table 6: Single Factor ANOVA

Groups	Count	Sum	Average	Variance		
B	4	2.68701	0.671753	0.013579		
Mean LnEPS	4	5.4155	1.353875	0.06093		
ANOVA						
Variation Source	SS	df	MS	F	P-value	F crit
Between Groups	0.930582	1	0.930582	24.97892	0.002457	5.987378
Within Groups	0.223528	6	0.037255			
Total	1.15411	7				

Combining this with the findings from the tests of hypothesis I imply that the magnitudes of the earnings persistence coefficients as indicated in table 7 can be used to rank the relative earnings quality of the various sizes of banks quoted at the NSE.

Table 7: Cross Comparison of Size-based Portfolio Earnings Persistence Coefficients

Rank	$B_{OTLi}$	Standard Unitary $\beta$	Variance
1. QTL 2	0.81107	1	0.18893
2. QTL 4	0.71738	1	0.28262
3. QTL 3	0.61202	1	0.38738
4. QTL 1	0.54654	1	0.45346

The nature of earnings persistence coefficient as a measure of earnings quality is such that when the coefficient is 1, the reported earnings are persistent and therefore are of a high quality. If the value is zero, the earnings are transitory and therefore of a poor quality. All the four size portfolios register earnings persistence coefficients that are closer to 1 than zero indicating highly persistent earnings among the commercial banks and therefore high quality reported earnings. When compared with each other however, the small size portfolio shows a variance of 0.4535 from 1 reflecting the least earnings quality among the four size portfolios of banks. The second size quartile on the other hand records the highest earnings quality as reflected by the lowest variance of 0.1889 between the portfolio  $\beta$  and the standard 1. Quartile 4 and quartile 3 follow respectively in the order of their earnings qualities.

### **Discussion**

The coefficient of variation (CV) that relates the market weighted EPS with the variability of the EPS identifies that the dispersion of the earnings per share across various bank sizes in Kenya is not very wide. This implies that holding the quality of earnings as given, then investors in Kenya are face similar returns irrespective of the bank size they invest in. In a nutshell however, the variability of the earnings among the small banks is higher than that of the larger banks. This could easily be attributed to the relatively small size of the Kenyan banking sector compared to other developed markets. The relative small size has largely limited the opportunities available to the Kenyan investors.

The study fails to reject the first null hypothesis with the findings that the earnings in the banking sector are not transitory. This is reflected in the reasonably high earnings persistence coefficients across all the four size portfolios. This can easily be attributed to the strict regulatory requirements from the Capital Markets Authority, the Central Bank of Kenya, The Nairobi Securities Exchange and the Institute of the Certified Public Accountants of Kenya (ICPAK). In fact ICPAK organizes annual competition, financial reporting (Fire) award, which aims to recognize the best financial reporting practices in the banking industry. This is likely to have contributed to the observed high quality of reported earnings in the banking industry.

It is noteworthy however that the second null hypothesis is rejected by the study which finds that the earnings persistence coefficients vary widely among the different bank size portfolios. The findings suggest that the smallest banks in Kenya have the least persistent earnings coefficient (0.54654) over successive per share while the larger banks have higher earnings persistence coefficients ranging between 0.61202 to 0.81107. The

implication is that smaller banks have less reliable earnings data from their financial statements than the larger banks.

This can easily be attributed to the audit and accounting resources available to the different banks relative to their sizes. It is reasonable to expect that small banks may not allocate greater resources for internal control, auditing and financial reporting services than their larger counterparts. The degree of competition in the capital markets among the large banks is likely to force the managers of such banks to provide high quality financial information which basically puts to check the agency conflict with investors. Regardless of the above finding, it is noteworthy that all the bank size portfolios have earnings persistence coefficients of less than 0.82. This indicates that there is still room to improve the quality of financial reporting in the banking sector. Greater efforts are particularly necessary for the small sized banks in the market.

## **Conclusion**

The study rejects the first hull hypothesis and fails to reject the second one and concludes that firstly the quality of earnings in the Kenyan banking sector is high as evidenced by the moderately to high earnings persistence coefficients. In rejecting the second null hypothesis, it is found out that the earnings quality though high, is varied among the different bank sizes. The conclusion from the findings is that small banks have less reliable earnings data than larger banks and that the quality of earnings is lowest among the small banks in Kenya.

The study shows that the various banks have their own unique challenges presented by their relative sizes. This also shows that each of the banks in the market have unique reporting idiosyncrasies and that the small banks have the largest challenges in the portrayal of their earnings in their financial statements. It can also be concluded that that medium and large size banks have more persistent earnings that point to the high quality of the earnings they reflect in the financial statements. Investors are likely to experience reduced uncertainties in their returns if their portfolio has higher weightings of large and medium size banks. It is also instructive that the small banks are relatively risky as evidenced by the volatility of earnings per share and the corresponding coefficient of variation.

Despite the above conclusions, the study faced some limitations that may require further studies to bridge the gap in the current knowledge about earnings quality in the Kenyan financial markets. The first limitation relates to the differences in the sizes of the various banks. Whereas the large portfolio included the largest multinational banks in Kenya, the small one included local banks that are not as heavily endowed financially. This affects

the market weighting of the respective banks since this is a function of the market prices of the equity securities of the respective banks.

The second limitation is mainly structural emanating from the fact that the number of quoted companies is very few such that the banking segment at the NSE barely has a dozen banks. This heavily limited the size of the portfolios and it may be necessary to expand a similar study to the non quoted banks. In addition, the twelve year period for the study, deemed necessary since it corresponds to the time the financial reporting regulatory regime has been tight, is not long enough. Despite this, it is taken that a study for 12 years is nonetheless long enough to generate acceptable earnings persistence data.

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