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An Analysis of the Impact of Minimum Capital Requirements on Commercial Bank Performance in Zimbabwe

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Abstract

The research sought to determine the role of capital on commercial bank performance in Zimbabwe. Descriptive correlation method was used in this research and the population includes senior commercial bank performance. Twenty executives were selected from each of the chosen banks and interviewed on various issues pertaining to bank capitalization and performance. This was augmented by some regression analysis to determine the magnitude of effect of capital on performance of selected banks. The banks were grouped into strata which were classified as undercapitalized, fairly capitalized and well capitalized as determined by the country's central bank's minimum capital levels of US$12.5 million for commercial banks. Findings revealed that there is a significant and positive relationship between commercial bank capitalization and its performance. The findings of this research cannot be generalized to all financial intermediaries let alone all companies since it had narrowed down to commercial banks. The research managed to elaborate on the relationship between capital levels and bank performance as well as the importance of capital to other bank operations. Other factors affecting bank performances were only highlighted, thus other studies can carried out which looks at those factors in detail for example the impact of internal control systems on bank stability and performance as well as the role played by non-interest income to overall bank profitability.

Keywords: Bank capitalization, bank performance, commercial bank.

1. Introduction

Recent economic crises have revealed the importance of bank regulations to hedge against the high risk attributed to imbalances in banks' statement of financial positions. Nonetheless, excessive regulations may have adverse effects on the operations of commercial banks. On the one hand, they serve as prudential measures that mitigate the effects of economic crises on the stability of the banking system and subsequent accompanying of macroeconomic results. On the other hand, excessive regulations may increase the cost of intermediation and reduce the profitability of the banking industry. Simultaneously, as banks became more constrained, their ability to expand credit and contribute to economic growth will be hampered during normal times. While most analysts would argue for the need to enforce regulations, the question hinged on "what is the right benchmark of regulations?" to enforce without jeopardizing the ability of banks to service the economy. To properly address this question, it has become necessary to thoroughly analyze the effects of capital regulations, namely the capital adequacy ratio, on bank performance. Likewise, in a developing country like Zimbabwe banks play an important and sensitive role, hence their performance directly affects the growth, efficiency and stability of the economy.

2. Literature Review

2.1 Theoretical underpinning of capital regulations

In 1988 the Basel Committee on Banking Supervision introduced a capital measurement system for banks (commonly referred to as the Basel Accord). The system provided for the implementation of a credit risk measurement framework with a minimum capital standard of 8% of risk-weighted assets (on balance sheet and off balance sheet equivalents) by the end of 1992. Since 1988, the framework has been progressively introduced not only in member countries of the Basel Committee, but also in virtually all countries with active international banks (although they are not required to do so by any formal international agreement). A survey conducted for 129 countries participating in the ninth International Conference on Banking Supervision in Stockholm showed that in 1996 more than 90 percent of the 129 countries applied risk-weighted capital adequacy requirements in keeping with the Basel Accord (Padoa-Schioppa, 1996). There has been considerable theoretical debate over incentives for banks to alter the risk profile of their assets under the Basel Accord. One school of thought asserts that capital requirements with differentiated risk weights provide an incentive for banks to shift from high-risk to low-risk assets if, for less-risky assets, the gain associated with the lower capital charge more than offsets the lower yield on these assets. Thakor (1996) and Passmore and Sharpe (1994) demonstrate that an increase in a risk-based capital requirement can cause a bank to shift from loans to securities. Furlong and Keeley (1989) argue that a value maximizing bank will not increase its asset risk under more stringent capital requirements. Furfine (2000) shows that a shift in bank asset portfolios in the United States occurred following the passing of the Accord Banks simultaneously reduced their investment in riskier commercial lending in favor of less-risky government securities, such that the share of total bank credit in commercial and industrial loans fell from 23% in 1989 to under 16% in 1994, while at the same time the share of total bank credit invested in US government securities increased from 15% to 25% over the same period.

The other school of thought hypothesizes that the risk-based capital requirements associated with the 1988 Basel Accord will result in an increase in bank risk-taking if capital requirements do not adequately reflect the relative riskiness of assets and information on the quality of the specific assets is asymmetric between regulators and ratings agencies on the one hand, and bank loan managers on the other. The basis of this hypothesis is that any category of assets that bears the same proportional capital charge will induce banks to shift towards more risky assets in the category. This arises because banks can earn a higher return on riskier assets within the category because higher earnings on these assets are not offset by a compensating increase in capital. If information on the quality of assets within a given category is not transparent to external parties such as ratings agencies, banks may be able to increase the risk profile of the asset book relatively unchecked. Koehn and Santomero (1980) and Kim and Santomero (1988) show that asset substitution of this form is possible within a portfolio model. The Basel Committee of Banking Supervision has itself recognized that the failure to differentiate sufficiently between credit risks within some asset categories has resulted in the practice of banks shifting their asset portfolios towards lower quality credits:

> *"in this case, the bank's total risk-weighted assets and regulatory capital ratios would appear unchanged, even as its overall riskiness increased."*

The Basel Committee has identified a number of forms of regulatory arbitrage, all of which allow divergences to arise between a portfolio's true economic risks and the Accord's measure of risk, and this in part has instigated recent refinements to the Basel capital adequacy framework. Empirical evidence on the relationship between bank capital requirements and bank risk-taking is mixed. Sheldon (1996) finds that US bank asset volatility rose between 1987 and 1994 and this occurred in banks that increased their capital ratios and those that did not. However, in the case of Japanese banks, higher capital ratios tended to be matched by lower asset volatility. Gennotte and Pyle (1991) find that risk-taking in banks increases when capital requirements are increased. Calem and Rob (1999) quantify the effect of capital-based regulation on a cross section of US banks using banking sector data for 1984-1993. They find a U-shaped relationship between capital position and risk taking: undercapitalized banks take maximum risk and as a bank's capital rises they take less risk. However, as capital continues to rise, they find that a bank will take on more risk again. They find that severely undercapitalized banks take higher risks because costs of bankruptcy are shifted to the deposit insurance fund in the United States. Well-capitalized banks take higher risks because of their higher profitability and low probability of bankruptcy. These mixed empirical findings may, in part,

be a product of the difficulties encountered in measuring risk in bank assets with data that is publicly available and also territorial differences.

2.1.1 Empirical implications

In the period following the implementation of the Basel Accord, across geographic regions, there is considerable variability in both investor returns and the volatility of investor returns in retail bank stock, with annual return ranging between 26.65% and – 1.73% and the standard deviation of monthly returns ranging between 19.6% and 3.12%. On a risk/return basis, banks in the United States, South East Asia and Europe outperformed the weighted world average, while banks in Australasia and the Far East underperformed the weighted world average.

2.2 The need for banks capital regulation

The experience of many countries shows that capital regulation and supervision are essential for stable and healthy financial system and that the need becomes greater as the number and variety of financial institution increase. The banking sector has always received upper attention on protection due to the vital role it plays in an economy. Minimum capital is one of the three "pillars" of macro prudential regulation. Bank capital serves both as a buffer and as a disincentive to excessive risk taking. When general equilibrium effects are taken into account, however, it is not clear that higher capital requirements will reduce the level of risk in the banking system (Gale, 2010). It has become evident that one of the very completing requirements for the success of any business in any economy is the existence of favorable regulatory environment as evidenced from Schmidt (2002), Thatcher (2002), Thatcher and Stone (2002), and Moran (2002) submitting that regulations can either promote or stifle business performance. Empirical evidence from Kerwer (2005), King (2005) and Quaglia (2005) also suggests that environmental regulations deter entry into industries where the requirements for regulatory compliance activities are high.

Economists have come to disagree on the level of government intervention in economic and financial activities over the world while some believe that many regulations are necessary in order to protect the depositors funds other believe that the banks are overregulated (Short and Driscol, 1983). For instance the economic theory of regulation postulates that regulation result from the desire of government to eliminate or correct market failure. The public interest theory views that regulation come pressures brought to bear on the government multifarious interest group. Pressure groups in economy such as business, consumers, workers, environmental groups among others lobby government to pass legislation to protect such group. It seems that economy theory of regulation has gained more acceptance among economist as Llewellyn (1986) put it. Regulation is necessary in the case of bank specifically to maintain safe and sound banking system that can meet its obligation without difficulty, hence a high solvency and liquidity level is experience of individual banks than they would ordinarily maintain. Oloyode (1994) observed that the banking Industry is highly prone to volatility and fragility either arising from exogenous or endogenous shocks and are therefore amenable to regulation and supervision. Tougher capital requirements may have positive benefits—they may reduce the consequences of market freezes, they may encourage banks to become smaller to avoid "systemic" capital requirements, and they may reduce contagion—but they may not be relied on to reduce the risk of bank failure (Gale, 2010). This view is in line with Oke (2006) that observed the inconsistency in monetary and regulatory policies as major setback to banks stability as the surveillance and regulatory measures of the Central Bank of Nigeria (CBN) have unfortunately been unable to keep the pace with the rapidity of the charges in the financial system. Mishkin (1997) viewed that forging a strong bank supervision system will be one why out of financial crisis while Ogunleye (2005) summarized the rationale for banks regulation as efficiency, diversity of choice, competition stability of financial system, macroeconomic stability and development and social objective . This view is in line with the World Bank (1986) that good regulation and supervision will minimize the negative impact of moral hazard and price shocks on the financial system there by leading to a reduction in bank distress and failure. Llewellyn (1986) describes presidential regulation as a body of specific rules or agreed behavior, either imposed by the government or external agency or self imposed by explicit or implied agreement with the industries that constrains the activities in the industry. In terms of policy thrust therefore the banking sectors reforms are expected to build and foster a competitive and healthy financial system to support development and avoid systemic distress (Soludo, 2004). Thus Balogun (2007) averred that banking sector reforms is interpreted to mean embarking on comprehensive process aimed at substantially improving the

financial infrastructure, strengthening the regulatory and supervisory framework to address the issue of low capitalization and a structured financing for cheap credit to the real sector and financial accommodation for small and rural credit schemes. Studies have shown that the objectives of financial sector reforms are broadly the same in most countries of sub-Saharan Africa (Balogun, 2007). These are summarized to include market liberalization for promotion of more efficient resource allocation, expansion of savings mobilization base, promotion of investment and growth through market base interest rates. It also means the improvement of the regulatory and surveillance framework, fostering healthy competition in the provision of service and above all laying the basis for inflation control and economic growth (Balogun, 2007). Regulation may also, reduce industry risks through the elimination of weak banks and create better diversification opportunities (Berger, 2000). On the other hand, the opponents argue that consolidation could increase banks' propensity toward risk taking through increases in leverage and off balance sheet operations. In addition, scale economies are not unlimited as larger entities are usually more complex and costly to manage (De Nicoló et al., 2003).

2.2.1 Empirical implications

Soludo (2004) discovered that low capitalization of the banks has made them less able to finance the economy and more prone to unethical and unprofessional practices. These include poor loan quality of up to 21 per cent of shareholders' funds compared with 1–2 percent in Europe and America; overtrading, abandoning the true function of banking to focus on quick profit ventures such as trading in forex and tilting their funding support in favor of import-export trade instead of manufacturing; reliance on unstable public sector funds for their deposit base; forcing their female marketing staff in unwholesome conduct to meet unjustifiable targets in deposit mobilization; and high cost of funds. Aminu and Kola (2004) maintained that increasing the capital base of banks in Nigeria would strengthen them and, in the process, deepen activities within the industry. "Growing the Nigerian economy is about the number of banks that have the capacity to operate in all the states of the federation, fund agriculture and manufacturing concerns, and in the process generate employment for Nigerians." (Ologbondiya and Aminu, 2005),

2.3 Banks capital adequacy regulation and performance of commercial banks

The setting by regulators of minimum capital standards on banking institution was one of the vital developments in the 20th century. In most cases banks regulators see capital adequacy regulation as a means of strengthening the safety and soundness of the banking industry (Oladejo and Oladipupo, 2011). Basically, there are three arguments for capital adequacy regulation. The first is that capital adequacy regulation is needed for prudential reasons, but most advocates of this position take the argument no further to explain why prudential "need" is there in the first place (Jackson, et al. 1999). The other argument is that capital adequacy regulation is needed to counter moral hazard problems created by the regulator themselves (Benston and Kaufman, 1996). The final argument is that capital adequacy regulation is needed to protect small depositors (Craig and Hardee, 2007). Capital adequacy by definition is seen as a quantum of fund, which a financial institution should have and plan to maintain in order to conduct its business in a prudent manner (Kishore, 2007). Adequate capital is viewed as the amount of capital that can effectively discharge the primary function of preventing banking industries failure by absorbing losses. It is seen as a way of providing the ultimate protection against insolvency arising from the risk in banking sector. It is the least amount necessary to inspire and sustain confidence in the banks, keep it open and operating so that time and earnings can absorb losses without being forced into costly liquidation and enable banking industry to take full advantage of its profitable growth opportunities (Akintoye and Somoye, 2008). It is to be expected that firm value can be enhanced by judicious use of equity and borrowed capital. Thus, the enhanced capitalization of insurance industry been called for by regulatory authorities provides an opportunities for banks to attain desired optimal structure for the purpose of increasing market value and shareholders wealth. Their efforts are geared towards protecting depositors from banks and insurance industry fragility and failure. It should be borne in mind that the type of recapitalization envisaged should improve banks performance by ensuring solvency and profitability as well as enhancing financial intermediation capacity. The various approaches to recapitalization have been identified to be raising additional capital from existing or new owners i.e. using laundered financial resources (capital market) or raising capital using insurance fund; reduce liabilities (write down certain debt); Book value of an asset; right issues for existing shareholders and capitalization of profits; public offer through the capital market and /or private placement,

Merger & Acquisition, and a combination of the identified strategies Adeyemi (2006). However, it is not known currently whether increases in capital levels will improve profitability of bank and the researcher intends to cover this gap.

Despite the many theoretical papers on the subject, the empirical evidence on the value of bank monitoring is quite scant. In a notable exception, Yafeh and Yosha (2003) use firm level data from Japan to examine whether bank monitoring reduces firms' spending on projects with scope for private benefits. They find limited supporting evidence using the share of the largest creditor in a firm's total debt as a proxy for monitoring intensity. The marginal contribution of this paper relative to that literature is to empirically examine the impact of *altered* monitoring incentives on borrower default and bank performance in a manner that circumvents a difficult reverse causality problem.

2.4 Capital and survival of commercial banks

A different strand of the theoretical literature suggests that banks with higher capital may experience lower survival odds. Calomiris and Kahn (1991) show that a capital structure with sufficiently high demand deposits (and by implication lower equity) leads to more effective monitoring of bank managers by informed depositors and hence a smaller likelihood of bad investment decisions. This suggests that a bank with higher capital (and consequently lower deposits) may face a higher probability of bad loans and hence loan default, which may result in a lower survival probability. This paper has spawned a sizeable literature on the market discipline role of bank leverage. Thus, some theories predict that higher bank capital should lead to a higher survival probability for the bank, whereas others suggests that higher capital may worsen the portfolio choices and liquidity of banks and hence lead to a lower survival likelihood.

3. Research Methodology

Descriptive correlation method was used in this research and the population included senior commercial bank performance. Twenty executives were selected from each of the chosen banks and interviewed on various issues pertaining to bank capitalization and performance. This was augmented by some regression analysis to determine the magnitude of effect of capital on performance of selected banks. The banks were grouped into strata which were classified as undercapitalized, fairly capitalized and well capitalized as determined by the country's central bank's minimum capital levels of US$12.5 million for commercial banks. The advantage of a co relational research study is that it can track changes over time and explain the correlation between the variables under study (Cooper and Schindler, 2003). The co relational research study that was chosen in this study was the time series/ trend series one where selected factors (capital levels, profit levels) studied quarterly from 2009 to 2011. However, in order to answer some of the research questions which were qualitative, a descriptive research study was partly adopted through the use of interviews (interview guide assisted that) to probe central bank and other commercial banks executives on the criteria used in establishing minimum capital threshold and challenges posed by capital regulations to commercial banks respectively. On regression a multiple econometric regression model was used to analyze the effects of capital levels on commercial bank performance. Regression analysis according to Gujarati (1997) is concerned with the study of the dependence of one variable, the *dependent variable*, on one or more other variables, the *explanatory variables*, with a view to estimating and/or predicting the (population) mean or average value of the former in terms of the known or fixed (in repeated sampling) values of the latter. The method of ordinary least squares was adopted which is attributed to Carl Friedrich Gauss, a German mathematician. Under certain assumptions, the method of least squares has some very attractive statistical properties that have made it one of the most powerful and popular methods of regression analysis. The model appreciated the existence of other factors which affect bank performance through the inclusion of an error term in the model which is going to capture other variables other than capital which influences capital. The model is given as follows:

$$PROF_t = \alpha + \beta 1\ CAP_t + \beta 2 \Delta RET\ PROF_{t-1} + \varepsilon$$

Where PROF represents profit levels

α Represents autonomous return ie not influenced by capital levels

$\beta 1$ Represents the responsiveness of profit levels to changes in capitalization

CAPt represents capital levels

β2 responsiveness of current profit levels to changes in previous year's retained earnings

ΔRET PROFt-1 change in retained earnings for the previous year

ε Error term to capture other variables which may influence profitability

3.1 Data collection and analysis procedures

The data collection method comprised of face-to-face interviews with the bank executives. The data were collected over the period of two months in April and June 2012. Multiple site visits were carried out for conducting interviews with the venture owners. Each interview lasted on an average for about two hours. During the interviews, detailed notes were taken.

Thematic analysis of interview transcripts was performed in order to highlight common themes which facilitated to categorize and examine the interviewees' cognitions and actions. Thematic analysis allowed in-depth examination of data and revealed patterns of common themes (Gifford, 1998). Thematic analysis also helped in comparing the responses of the respondents towards different questions.

4. Results and Discussion

A total of 15 structured interviews were conducted with officials in the banking sector and the response was overwhelming. Meetings were arranged and data collected. The demography of the respondents is given and explained as below. The majority of the respondents were male executives 16 (57%) while only 5 (43%) were female. This shows that male were dominating their male counterparts and this can be attributed to few females in the top hierarchy of governance of most organizations. A further look at the gender distribution across the various departments within a bank revealed the following: The spread of the respondents was drawn from various sections of banks such as treasury 3 (13.6%), retail banking 6(27.3%), compliance 4 (18.2%) and investment and economic analysts 5 (22.7%) and operations 4 (18.2%). It was observed that investment and economic section as well as retail banking dominated interviewee followed by compliance and operations. This can be attributed to the fact that the study was on commercial banks and as such retail operations dominate other operations. The research findings revealed four major reasons for bank capital regulations. Topping the list was protection of creditors and depositors of the bank in the event of a bank failure with 16 (42%), followed by maintaining bank safety and soundness with 9 (24%), and disincentive to excessive risk taking by banks being the least unpopular reason (16%). The figure 1 summarized this information:

It would appear that most bank executives in the study concurred that a bank should hold capital which is in line with the risks the bank exposes itself to through its lending and investment as shown by a 17 (80%) response rate in its favor. The rule according to the research findings meant that the greater the risks the bank was exposed to, the greater the amount of capital the bank need to hold to safeguard its solvency and overall economic stability. The remainder thinks otherwise (vice versa). The findings showed that bank capital should be determined by the risk profile of the bank, this is possibly so to ensure that in the event of shocks the capital can absorb shocks without problems. This position was supported by Basel 11 (2005) prescription that it was the risk profile of an individual organization which determined the capitalization level of that organization. Out of 21 interviewees a cumulative number of 16 respondents were agreeing that there is a positive relationship between the two (with only 6 expressing some reservations on the strength of the positive relationship). However, two (2) were not sure of the effect and the remaining three (3) suggest that there was no relationship. The findings pointed out to a positive relationship between capital levels and bank profitability. A further look at the hypothesis testing indicated that the null hypothesis is rejected at 5% as indicated by the P value of 0.04., thus accepting the alternative hypothesis that capital contributes positively to commercial bank performance. These findings were supported by Berger and di Patti (2006). Table 1 show results of Hypothesis testing using Pearson Correlation.

Further regression analysis of the three selected banks confirmed responses from interviewees as indicated by the following results extracted from SPSS package for the data from three banks namely CBZ, FBC, ZABG confirms interviewee's responses as in indicated below.

4.1 CBZ regression results

PROFIT= -1 683.68 + 0.91RETAINP + 0.102CAPITAL

The error term collapsed to zero, Thus from this model a loss 1 683.68 thousand was expected assuming that no profits from the previous profits had been retained and also no capital. The t statistics as indicated above were significant as they were all above 1, which implied that the explanatory variables in the model were all relevant. Further analysis of the signs indicated that capital had a positive impact on CBZ bank performance though in this case its influence was weak as evidence by the coefficient 0.102 (ie 1 unit change in capital led to a 0.1 change in profit levels. The explanatory power of the model was also high as evidenced by a high coefficient of determination R (0.96) and the adjusted R (0.93) which showed that more than 90% fluctuations (changes) in CBZ Bank profits could be explained by changes in capita and retained earnings. A further look at Analysis of Variance as shown on appendix 2, showed that variances were significant. The data for CBZ for the period was stationary as shown by the DW test and thus there was no need for vector error correction model.

4.2 FBC regression results

Likewise, FBC results show the constants, coefficient, R, t statistic, standard errors as well as confidence intervals as generated by the SPSS package and the full data is attached on the index. The model generated can be summarized as below:

PROFIT = 1242 + 1.002 RETAINP - 0.049 CAPITAL,

The error term decomposed away. Assuming no capital and retained earnings, the overall profit level of FBC bank is 1 242 thousand, this was accounted for by other variables that influenced bank performance but were not captured by the model. A closer look at the model shows that for FBC Bank capital level was negatively related to bank performance, a 1 unit change in capital caused a 0.049 decrease in profit levels. However, according to the model there was a strong positive relationship between retained earnings and bank performance and hence cumulatively the overall effect of capital levels to bank profitability was positive taking retained profits as capital. The explanatory power of the model was strong as reflected by a coefficient of determination of 65%, which signifies that only 35% variation in FBC bank profits could not be explained by changes in variables in the model. Once again all explanatory variables included in the model are relevant as reflected by their individual t statistics which were all greater than one (1). A further analysis on the variables showed that they were positively related. A further look at the ADF results from the index shows that $\dot{\rho}$= 1.8 is greater than 1 which showed that the data was stationary. Once again a closer look at the serial correlation showed that they were all relatively low as indicated by coefficients 1, 4, 12 respectively and as such there was no need for undertaking Phillip Perron non parametric tests used to control higher order correlation. The times observed were not co integrated as shown on the indices and as such there was no need for Error Correction Mechanism and Variance decomposition.

A further look at ZABG regression results gives the following results as shown by the regression model below:

PROFIT = - 49.82 + 1.96 RETAINP + 0.019 CAPITAL

The error tem decomposed away. Assuming no capital and retained earnings, the overall profit level of ZABG bank is -$49.82 thousand, this was accounted for by other variables that influence bank performance but were not captured by the model. Once again a closer look at the model showed that for ZABG Bank capital level was positively related to bank performance, a 1 unit change in capital caused a 0.019 increase in profit levels. Similarly, according to the model there was a strong positive relationship between retained earnings and bank performance and hence cumulatively the overall effect of capital levels to bank profitability was positive taking retained profits as capital. The explanatory power of the model was strong as reflected by a coefficient of determination of 78%, which signified that only 22% variation in ZABG bank profits could not be explained by changes in variables in the model. Once again all explanatory variables included in the model were relevant as reflected by their individual t statistics which were greater than one (1) serve for retained profits with a t value approximately equal to1 (0.999). A further analysis on the variables showed that they were positively related. A further look at the ADF results from the index showed that $\dot{\rho}$= 1.8 was greater than 1 which showed that the data were stationary. Once again a closer look at the serial correlation showed that they were all relatively low as indicated by coefficients 1, 1.2, 0.11 respectively and as such there was no need for undertaking Phillip Perron non parametric tests used to

control higher order correlation. The variables observed were not co integrated as shown on the indices and as such there was no need for Error Correction Mechanism and Variance decomposition.

Overly, the statistics showed a strong relationship between capital levels and bank performance, this possibly explained the hard stance being taken by the Central bank RBZ to force banks to adhere to set capital levels. This was in line with findings by other authorities cited in the review of related literature, notably Mehran and Thakor (2011), as well as Berger (2000) who were regressed US data, capital ratios on return on equity and discovered a strong positive relationship. However, findings on FBC bank that there is a negative relationship between the two variables (capital and profitability) is not peculiar in the subject since studies by Morufu (2011), partially concurred to that which he explained is driven by banks' s appetite to take unnecessary risks.

The research findings on challenges of bank capital regulations point towards governance challenges (39%), followed by technology integration (26%), HR realignment – job losses (22%). The respondents strongly agreed that the reforms associated with bank capital management normally result in large banks, the following extract from an executive in one bank helps this:

> *"Creation of large banks as a result of reforms associated with bank capital regulations normally creates governance problems, with one enlarged bank's management ..... (name supplied) ended up misusing company funds and purchases themselves top of the range cars, houses at the expense of the bank....."*

The statement showed governance challenges associated with capital reforms. Moreover, job losses as a result of realignment of human resources in newly formed banks; a case in mind is that of ZABG. Recapitalization has created board room wrangling among the top hierarchy of the merged banks. The need to forestall or manage customers' flight might also be a necessary caution in the post consolidation banking era as observed in the study of Jervey (2005) that the post consolidation is characterized by customer flights. The results also show the post consolidation challenges as possibility of bank failure where Merger and Acquisition (M&S) failed thus run the risk of liquidation. Other challenges are the inadequate executive capacity as to the need for deposit protection insurance to ensure the effective merging of information technology system, business lines, products, culture and people by the new mega banks, weak corporate governance that will put pressure deposit protection board and other regulators to ensure probity, transparency and accountability. There is also the supervisory approach that would need to be broadened, closing information gap between banks and investing public and the need to establish asset Management Company. This phenomenon confirms the reservations of some authors like Craig and Hardee (2007). These findings are similar to propositions by Morufu (2011) and Berger (2000).

Conclusion

This research study came up with conclusions which were based on the sub problems stated earlier on. The major reasons for bank capital regulations were to maintain bank safety and soundness, protect bank creditors and depositors in the event of a bank failure, create a disincentive to excessive risk taking by banks and provide a buffer against losses for banks. The results showed that protection of depositors and creditors in the event of a bank failure is the most popular and provision of a buffer for bank being least popular, the reason being mainly to protect the defenseless customers. The basis for capitals levels to be held by a bank should be in line with the risks a bank exposes itself to, thus the larger the risk profiles the larger should the capital base be. Findings points out to a revamp of the current capital limits based on different clusters of banks- a bank may fall into a commercial bank cluster, but at times a closer look at its risk profile may reflect that of a merchant bank, thus the conclusion is capital levels should be bank specific.

A close association between high capital level and better bank performance was also established. The good results could be attributed to abundance of resources for business development i.e. loans and other bank placements. While the problem of inability by some banks to raise the required minimum capital levels remains, it was also observed that nothing is being done by the central bank to align its set capital levels to the risk profiles of individual banks. The study found out that although capital is a dominating factor in affecting overall bank performances, other factors such governance of banks, bank to population ratios, operating costs; asset quality as well as religious beliefs also do affect overall bank performance. In the

same vein, the study found out that despite the importance of capital reforms, many challenges are associated with these reforms and they include governance challenges, human resources realignments which may result in job losses, technology integration and overall supervision by RBZ. Such challenges need to be properly dealt with for capital reform success. The research study rejected the null hypothesis that there is no relationship between bank capitalization and profitability and accepted the alternative hypothesis as the results pointed towards a strong relationship between the two variables.

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Figure 1

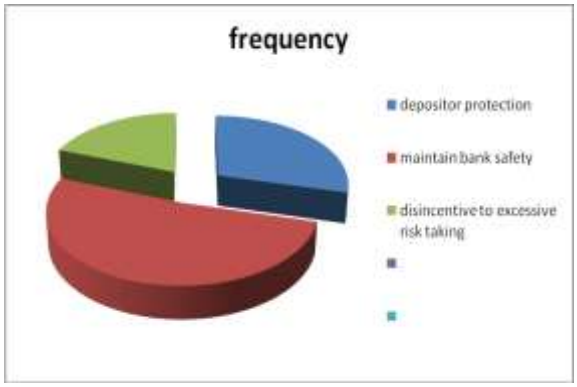

Table 1: Results of Hypothesis

	Value	df	P values
Pearson Chi- square	4.641	2	0.48
Likelihood ratio	3.556	2	0.169
association	2.768	1	0.096
No of valid cases	3		