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EDITORIAL

Dear readers!

The recent issue of the journal Risk Governance and Control: Financial Markets and Institutions pays attention to issues of debt management, innovations and transparency etc. More detailed issues are given below.

Tetiana Vasilyeva, Larysa Sysoyeva and Alina Vysochyna analyze key performance indicators of the Ukrainian banking system, clarify its main problems, identify relevant factors of the stability of the Ukrainian banking system and the character of their influence on the dependent variable. Realization of the mentioned above tasks was ensured by regression analysis (OLS regression). *Fred Amonya* presents a deeper and broader perspective, and it is a distillate of a case study on PPP as a policy phenomenon. It dissects and illuminates the interaction between the forces of state formation and the wave of PPP hitting the continent. The aim of the study carried out by *Virimai Mugobo and Misheck Mutize* was to apply the Ordinary Least Squares (OLS) on 15 SADC member countries' SEZs profit remittance data and draw a multi-linear regression model to establish the relationship between national income and FDI. The results show that there is a not significant relationship between these variables. Hence there is no net benefit accruing to the host country by establishing SEZs. *Solly Pooe, Zeleke Worku and Enslin Van Rooyen* determine whether there is a statistically significant association between the provision of adequate training and development programmes and satisfactory performance at municipal level. A combination of quantitative and qualitative methods of data collection and analyses were used in the study in which data was collected from n=131 respondents (119 questionnaires + 12 in-depth interviews). *Katleho Makatjane and Diteboho Xaba* demonstrate that the proposed EWS model has some potential as a corresponding instrument in the SARB's monetary policy formulation based on the in-sample and out-of-sample forecasting performance. *Ntoung A. T. Lious, Puime G. Felix and Miguel A. C. Cibran* affirm the validity of Altman Z"-Score model as a predictors of the uncertainty regarding financial sector in Spain. *Md. Abdur Rouf* investigates the extant and nature of corporate voluntary disclosure (CVD) in corporate annual reports of Bangladesh. *Adeoye Amuda Afolabi* determines how Microfinance Banks (MFBs) impacts on entrepreneurship development in Nigeria. Data were collected through structured interview from entrepreneurs, Microfinance Bank managers and Regulators. *Jinxin, Zhao and Chongsheng Yang* suggest that employing existing trust companies or establishing SPT based on the cooperation between the government and trust companies should be firstly considered for a better and healthier development of the capital market, as well as to avoid dramatically changing and challenging to the current operating economical and political system. *Lawrence Mpele Lekhanya and Kobus Visser* examine risks and critical factors contributing to the rural entrepreneurial orientation growth of businesses. *Lamlile Ndlovu and Maxwell Agabu Phiri* investigate farming community perceptions and expectations of quality of extension services rendered by the Department of Agriculture and Environmental Affairs (DAEA) within the uMngungundlovu District Municipality. *Tariq Tawfeeq Yousif Alabdullah* presents a solution to fill the gap in the literature concerning the relationship between CG and a firm's performance in such instances when the results of examining such a relationship are found to be inconsistent. *Wadesango Newman, Tasa Edmore, K. Milondzo and Wadesango Vongai Ongayi* note the importance of financial statements prepared under IFRS framework and the importance of compliance with accounting and auditing requirements.

We hope that you will enjoy reading the journal and in future we will receive new papers, outlining the most important issues and best practices of corporate governance!

RISK GOVERNANCE & CONTROL: Financial markets and institutions

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CONTENTS

FORMALIZATION OF FACTORS THAT ARE AFFECTING STABILITY OF UKRAINE BANKING SYSTEM

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Abstract

Intensification of financial development during last decade causes transformation of banking sector functioning. In particular, among the most significant changes over this period should be noted the next ones: convergence of financial market segments and appearance of cross-sector financial products, an increase of prevailing of financial sector in comparison with real economy and level of their interdependent, an intensification of crisis processes in financial and especially banking sector and a significant increase of the scale of the crisis consequences etc. thus, in such vulnerable conditions it is become very urgent to identify the relevant factors that can influence on the stability of banking sector, because its maintenance seems to be one of the most important preconditions of the stability of the national economy as a whole. Purpose of the article is to analyze key performance indicators of the Ukrainian banking system, clarify its main problems, identify relevant factors of the stability of the Ukrainian banking system and the character of their influence on the dependent variable. Realization of the mentioned above tasks was ensured by regression analysis (OLS regression). Analysis of key indicators that characterize current situation in the Ukrainian banking system found out the existence of numerous endogenous and exogenous problems, which, in turn, cause worsening most of analyzed indicators during 2013-2015. Unfavorable situation in Ukrainian banking system determined the necessity of identification of relevant factors of banking system stability to avoid transmission of financial shocks. According to the results of regression analysis on the stability of banking sector positively influence such factors as increase of interest margin to gross income ratio, reserves to assets ratio, number of branches, ratio of non-performing loans to total loans. Meanwhile, negative impact on stability of banking system has an increase of liquid assets to short term liabilities ratio and cost to income ratio. Empirical results of the research found out that grate damage to the stability of banking system has some parameters of banking activity, that's why the main purpose of the regulation by the National Bank of Ukraine should be strengthening of macroprudential supervision and intensification of adaptation of Basel II and Basel III requirements.

Keywords: Bank, Banking System, Macroprudential Supervision, Stability of Banking System

1. INTRODUCTION

The current stage of global economic relations is characterized by intensification of the integration and convergence processes, which in turn causes the transformation of the basic principles of functioning of economic entities. One of the most significant changes of national economies is strengthening the importance of the financial sector, namely the financialization of the economy. In this regard, the interdependence of financial and real sectors of the economy is significantly increased. One of the most destructive consequences of such convergence is the quick transmission of risks between these segments during the financial crisis of 2007-2009. However, taking into consideration that in most countri
es the model of financial sector functioning is banking-oriented, thus banking sector plays the most important role in ensuring the stability of the whole economic system of the country. In this regard, it's become an urgent task to realize a comprehensive analysis of the key tendencies of development of Ukraine banking sector to identify relevant factors affecting its stability that can become the basis for development of measures to decrease potential risks.

2. LITERATURE REVIEW

The problem of the banking system stability measurement becomes very urgent after the global financial crisis. Different aspects of the banking system stability are researched in numerous publications of Ukrainian and foreign scientists. For example, O. V. Dziubliuk (Dziubliuk, 2009) characterizes banking system stability from microeconomic perspective and systematizes different practical tools that are used in different countries for identification of stability of certain bank. The author identifies such groups of assessment methods as coefficient approach; rating systems; comprehensive risk assessment systems; macro- and microprudential analyses. O. V.

Dziubliuk highlighted that each of these approaches is aimed to realize several procedure stages such as: 1) assessment of current financial state of certain bank; 2) forecasting of future financial state of curtain bank; 3) identification of risk category of certain bank; 4) quantitative analyses and statistical procedures realization. It also should be noted that some of the approaches were adopted by the author to assess financial stability level of some Ukrainian banks. Despite numerous positive aspects of this research (fundamental analysis of theoretical aspects and practical tools and its comprehensive characteristic) there also some disadvantages, such as: 1) microeconomic perspective to the banking system stability assessment does not allow to take into consideration cumulative and contingency effects of banks interconnectedness; 2) author has just analyzed existed approaches and then used it to assess financial stability of some banks, but it should be better to develop some approach which will take into consideration pros and cons of researched tools and some specific features of banks functioning in Ukraine.

D. V. Zavadska (Zavadska, 2011) also research banks financial stability from microeconomic perspective. The author characterizes financial stability of the bank as coordination of financial and organizational factors. Among key financial indicators the author highlights equity, assets, liquidity, solvency, profitability and risk. Group of organizational factors of financial stability of the bank consists of such parameters as: organizational structure, staff potential, information technologies, control and banking safety. Monitoring of changes and discrepancies in current to normative meaning of these indicators is the basis for banking stability level identification. The author also identifies factors that affecting stability of the bank: 1) exogenous factors: economic (investment climate, tax policy, balance of payments, overall economic system stability); socio-political; financial (interest rate policy of the central, credit policy, monetary policy, currency market state etc.); 2) endogenous factors: capital stability, stability of the resource base, organizational stability, commercial stability.

Among other Ukrainian scientists that researched the problem of the banking system stability measurement are V. O. Zinchenko (Zinchenko, 2008), (Kovalenko, 2010), R.V. Myhailiuk (Myhailiuk, 2008) and some others. All these papers have both advantages (comprehensive analysis of theoretical and practical aspects of banking stability) and disadvantages (lack of using of empirical approaches to develop unique tool of banking stability assessment and identification of key factors that affected it).Thus, it's necessary to analyze some papers of foreign scientists that are dedicated to the research of the mentioned above problem.

So, P. Hartman, S. Straetsman, C. de Vries (Hartman et al., 2005) in Working Paper of European Central Bank that is dedicated to the question of banking system stability, systematize theoretical background and provide some empirical results of banking system stability assessment that are based on new approach, which became very popular because of the crucial consequences of 2007-2009 global financial crisis. This approach is based on, so call, network analysis and uses as a background assumption about the necessity of regulating not individual, but systemic risks in banking sector. The major reason of risk regulation system transformation is an increase of the level of interconnectedness between banks and other financial institutions. Such interdependence in financial sector (and especially, in banking system) triggers the contagion effect. This effect force to lose financial stability even those banks that were comparatively stable before crisis. Comparison of the empirical results of systemic risk realization in the USA banking system and European banking system allows authors to conclude that systemic risk in the USA is higher than in the euro area. As a conclusion it can be noted that this paper has a great theoretical and practical value, but its adoption for Ukraine is rather complicated, because network technologies need huge amount of statistical information, which, in turn, should be collected very frequently. Besides, network analysis allows to get truth contagion signal in financial sector if there is the only one regulator of the whole financial market or cooperation between sector regulators is really close and effective. Unfortunately, we have no common regulator and it can be complicated to collect an adequate data set about interconnectedness of financial institutions in value scale.

N. Jahn, T. Kick (Jahn & Kick) using the panel regression model try to identify determinants of banking system stability in Germany. The indicator, which illustrates level of stability in banking sector, consists of three parameters: probability of default of certain bank, credit spread and stock market index for the banking sector. Authors confirm the hypothesis that these indicators can be used for finding out signals of banking system destabilization on the base of calculations.

M. Segoviano, C. Goodhart (Segoviano &. Goodhart, 2009) also presented some empirical results that are based on the using of network tools. They developed Banking Stability Index (BSI) as an indicator, which try to predict the amount of banks that become bankrupts as a result of bankruptcy of certain bank. The authors get rather interesting results that allows deepening the impetus and contagion processes while 2007-2009 global financial crisis. But, nevertheless this approach also has the same limitation as others that are based on some network techniques.

Thus, brief literature review allows us to understand the genesis of banking system stability assessment tools both in national and foreign practices. And also is a background of the conclusion that there is an urgent necessity of permanent updating of the key determinants of the stability of the banking system, especially taking into account national specificities of banking sector functioning and some limitations that are caused by it.

Purpose of the research is to characterize current trends of national banking sector development, identify the determinants of banking sector stability and develop recommendations for the regulator to eliminate threats of its violation.

3. RESULTS

Thus, the initial stage of our research is to identify the key trends of the banking system development through the analysis of the key performance indicators of banks (Table 1) and economic standards indicators (Table 2).

The analysis of presented statistical data (Table 1) confirming the reduction in the number of banks (during the period their number decreased by 59 institutions or 33.72%) that brightly illustrates the crisis in the banking sector. In addition, it should be highlighted the tendency to the outflow of foreign capital from the banking system of Ukraine that is evidenced by a significant decrease in the number of banks with foreign capital. During the research period there was more than twofold increase in the value of banks' assets, but the destabilization of the socio-economic conditions led to the deterioration of the assets over 2015.

Table 1. Dynamics of the key performance indicators of banks in Ukraine in 2008-2016 years (at the beginning of the period)

Ratio	Year								
	2008	2009	2010	2011	2012	2013	2014	2015	2016
Amount of banks	175	184	182	176	176	176	180	163	116
including banks with foreign capital	47	53	51	55	53	53	49	51	41
Assets, bln. UAH	599,37	926,09	880,30	942,09	1054,28	1127,19	1278,09	1316,85	1254,38
including loans, bln. UAH	485,37	792,24	747,35	755,03	825,32	815,33	911,40	1006,36	965,09
The share of overdue loans in total loans, %	1,3	2,3	9,4	11,2	9,6	8,9	7,7	13,5	22,1
Liabilities of banks, bln. UAH	529,82	806,82	765,13	804,37	898,79	957,87	1085,50	1168,83	1150,67
ROA, %	1,50	1,03	-4,38	-1,45	-0,76	0,45	0,12	-4,07	-5,46
ROE, %	12,67	8,51	-32,52	-10,19	-5,27	3,03	0,81	-30,46	-51,91

Source: The National Bank of Ukraine

Despite the existence of positive trends in the expansion of lending by Ukrainian banks, it is negative that the scale and intensity of this kind of active banking operations are decreased at the beginning of 2016. The intensification of destructive processes in the economy and the banking sector in particular realized in a significant increase of the share of overdue loans in total bank loans in recent years. The power of crisis processes in the banking sector of Ukraine also clearly illustrates negative trends in the return on assets and the return on equity during past two years. Thus, it can be noted that the analysis of key performance indicators of the bank allows confirming the presence of a number of problems in the banking sector of Ukraine.

In the context of characteristics of compliance the threshold of economic standards by Ukrainian banks (Table. 2), it should be noted that there is a negative trend of reduction the level of regulatory capital of banks in Ukraine in 2015-2016. In particular, the average value of regulatory capital at the beginning of 2016 slightly exceeds the required level (120 mln. UAH. for banks that were registered to 11/07/2014). In addition, there was a significant reduction in the level of regulatory capital adequacy, but the level of this parameter is within regulatory requirements (at least 10%). The level of capital adequacy (at least 4%) during the entire period was in diapason that does not break its critical level (in 2015-16 this indicator was not calculated). Economic standards that concerning the liquidity of Ukrainian bank (N4-N6) were kept within acceptable limits in 2008-2016, and during the last three years there was a significant increase of these indicators, but this trend can't be considered absolutely positive because the existence of excess liquidity among banks could be the reaction on their negative expectations, due to which they retain most of the assets in liquid form. This assumption is also confirmed by the decrease of the level of standards on investment (N11, N12), reflecting the fading of investment activity among Ukrainian banks due to the unfavorable economic and political conditions. Among the indicators that characterize the level of credit risk of banks only standard N7 approaching its critical value (25%), while the remaining parameters are within the determined by regulator limits.

Thus, on the base of the analysis of the key trends in the banking system of Ukraine, we can identify certain problem aspects that can be divided into two parts: endogenous and exogenous destructive factors. So, among the adverse external factors of the worsening of crisis in the banking sector of Ukraine the most crucial ones are the next: unstable economic and political environment, especially war conflict in Eastern Ukraine, Crimea occupation; reduction of public confidence in the banks; reduction of business activity; high inflation and decrease of real incomes; reduction of foreign investment and credit ratings; increase of the budget deficit and the size of public debt etc.

Among the endogenous factors of negative influence on the development of Ukrainian banking system the most significant, from our point of view, are the next ones: significant number of bank liabilities generated in foreign currency (currency risk); high susceptibility to interest rate risk; imbalance between the terms of investment and borrowing; high level of credit risk; insufficient capitalization of banks etc.

Consequently, these problems negatively affect performance of the banking sector of Ukraine. Therefore, taking into consideration the importance of detecting the destructive signals of violation of the stability of the banking sector on the early stage of its germination, it becomes very urgent to clarify key determinants of banking sector stability.

The basis for the realization of mentioned task is regression analysis (in particular, the construction of regression by the method of ordinary least squares). The time horizon of the study covers the period 2005-2015. The statistical base of the study is formed by indicators that characterize different aspects of the Ukrainian banking sector performance.

Table 2. Dynamics of values of economic standards in the banking system of Ukraine

in 2008-2016 (at the beginning of the period)

Ratio	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*
Standard of minimal level of regulatory capital (N1), mln. UAH	72264,7	123065,6	135802,1	160896,9	178454,0	178908.9	204975,9	188948,9	129816,9
Standard of regulatory capital adequacy (N2), %	13,92	14,01	18,08	20,83	18,90	18,06	18,26	15,60	12,31
Standard of capital adequacy (N3), %	8,91	11,82	13,91	14,57	14,96	14,89	13,98	X	X
Standard of instant liquidity (N4), %	53,60	62,38	64,45	58,0	58,48	69,26	56,99	57,13	78,73
Standard of current liquidity (N5), %	75,31	75,16	72,90	77,33	70,53	79,09	80,86	79,91	79,98
Standard of short-term liquidity (N6), %	39,93	32,99	35,88	91,19	94,73	90,28	89,11	86,16	92,87
Standard of the maximum credit risk on one contractor (N7), %	22,56	23,04	21,56	21,04	20,76	22,10	22,33	22,01	22,78
Standard of big credit risks (N8)	171,06	187,36	169,21	161,20	164,46	172,91	172,05	250,04	364,14
Standard of maximum amount of loans, guarantees and warranties to one insider (N9), %	2,01	1,66	0,93	0,81	0,57	0,37	0,36	0,13	X
Standard of maximum total amount of loans and guarantees granted to insiders (N10), %	6,84	5,76	3,31	2,25	2,51	2,41	1,63	1,37	X
Standard of investment in securities by each institution (N11), %	0,58	0,22	0,07	0,05	0,06	0,09	0,04	0,01	0,002
Standard of total sum of investment (N12), %	9,05	5,52	3,12	3,35	3,24	3,48	3,15	2,97	1,10

Source: The National Bank of Ukraine

In particular, as an dependent variable Z-score was selected, because this indicator is developed by the World Bank specialists as a measure of banking sector stability assessment. It was calculated using the formula:

$$z-score=\frac{ROA+\frac{Equity}{Assets}}{sd(ROA)} \tag{1}$$

where *ROA* – returns on assets, %;
Equity – value of equity, mln. UAH;
Assets – value of assets, mln. UAH;
sd(ROA) – standard deviation of *ROA*.

In turn, the set of independent variables were formed by the following indicators: interest margin to gross income ratio (x1); liquid assets to short term liabilities ratio (x2); reserves to bank assets ratio (x3); cost to income ratio (x4); number of banks branches (x5); the ratio of non-performing loans to total loans (x6). The choice of these parameters is due to their relevance regarding dependent variable and considerations to avoid collinearity between the factors of the model (in the regression analysis there were tested much more independent variables, but this set of them was yielded the best results avoiding factors collinearity).

Statistical base of the research is formed on the basis of official data of the National Bank of Ukraine and the World Bank.

Practical realization of the task mentioned above was done with the help of program product Stata 12/SE, in particular, Stata command «reg». The results of regression analysis are presented in Table 3.

Thus, on the base of the presented results we can make the following conclusions:

– the model is adequate, because the value of coefficient of determination (adjusted R^2) is almost 1, that's mean that the real trend of influence of the factors on the stability of banking system in 99.71% could be explained by the model 4;

– all coefficients in the model are effective, because the value of «P>|t|» in each case is lower than 0.1, that proves the significance of the coefficients in 90% confidence level;

– among factors that positively influence on the stability of banking sector are: interest margin to gross income ratio (an increase of this factor by unit will lead to the increase of Z-score in 0.402); reserves to assets ratio (causes the increase of dependent variable on 0.511); number of bank branches (1.607) and the ratio of non-performing loans to total loans (indicator is characterized by weak cohesion with dependent variable and the lowest among all coefficients level of efficiency);

– the group of factors that cause the deterioration of the stability of the banking system include short-term liquidity and cost to income ratio.

Table 3. Results of the regression analysis of determination the impact of factors on the stability of the banking system of Ukraine

Variable	*Coefficient*	*Standard error*	*t*	*P>/t/*
x_1	0,402	0,015	36,41	0,001
x_2	-0,042	0,007	-5,88	0,028
x_3	0,511	0,038	13,38	0,006
x_4	-0,237	0,007	-35,19	0,001
x_5	1,607	0,067	23,91	0,002
x_6	0,006	0,002	3,52	0,072
Cons	-9,551	0,598	-15,98	0,004
R^2	0,9971			

Source: authors' calculations

Overall, the impact of factors on the dependent variable can be described by the following equation:

$$\begin{aligned} z-score &= 0{,}402x_1 - 0{,}042x_2 + 0{,}511x_3 - 0{,}237x_4 + \\ &+ 1{,}607x_5 + 0{,}006x_6 - 9{,}551 \end{aligned} \tag{2}$$

So, summarizing all the above, it should be noted that one of the main destabilizing factors for the banking system is the expansion of the accumulation of high liquid assets that actually serves an indicator of expectations of banks to intensify the destructive processes, especially regarding increased risks of insolvency. In addition, the dependent variable is negatively affected by the growth of the cost to income ratio, which can be possible in several cases: rising of costs and constant income, reducing of income and constant costs or advancing growth rate of expenditure over income (the last option is typical on the current stage of development of the banking system of Ukraine). Thus, realization of one of the defined scenarios will characterize worsening of the efficiency of banks.

However, positive impact of certain factors on the financial stability of banks can be explained as follows: increase in interest margin to gross income ratio shows an increase in basic operations that are realized by bank, while at the present stage of development of the banking system of Ukraine fee revenue increases but not interest income, which is the result of reducing the intensity of realization the function of financial intermediary by banks. The positive influence of the reserves to assets ratio on the stability of the banking system is quite natural, because the growth of reserves creates "insurance cushion" in case of an unfavorable situation. The growth of the branch network of banks positively affects the level of stability because an expand of the number of branches is economically feasible only if favorable market conditions, which, in turn, can be considered as a signal of positive expectation of banks. However, it is fair to note that the last factor refers to the group of positive factors because of the time horizon of the research: at the present stage of banking development the tendency to the virtualization of banking activity becomes more popular, and therefore there will be no need to create additional branches in nearest feature.

CONCLUSIONS

The analysis of the main trends of the development of the banking system of Ukraine helped to identify the negative tendency to the worsening of a range of key performance indicators of the banking sector. Aggravation destructive processes lead to a number of endogenous and exogenous problems that affecting the level of stability of banks.

Evaluation of the factors that ensure the stability of the banking system of Ukraine makes it possible to establish the origin of the determinants of its violation. In particular, if in a certain period of time the dynamic stability of the banking system of Ukraine has been violated, it's possibly would have an objective and endogenous reasons for this.

The National Bank of Ukraine developed a comprehensive program of the development of the financial sector of Ukraine to 2020 (resolution of the NBU № 392 from 18.06.2015), which aims to achieve financial stability and development of the financial sector of Ukraine. However, among the determined in this document quantitative indicators support of sufficient capacity to maintain the financial stability of the banking system of Ukraine is not mentioned, especially taking into consideration liquidity ratios, reserves policy, reduction of problem assets. Thus, it becomes a very urgent task to increase the efficiency of banking regulation and supervision in Ukraine, in particular, according to the vector of the implementation of the Basel II and III requirements, which aimed at the development and implementation of macro-prudential approaches. An important component of macro-prudential supervision is monitoring of changes of a set of banking system' stability indicators. Monitoring of the indicated parameters by the regulator can be the basis for identifying signals of growing risks of large-scale transmission of financial shocks caused by the decline in the stability of the banking sector.

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PUBLIC-PRIVATE PARTNERSHIPS (PPP) ON MOULDING STATE STRUCTURES: THE NON-ERGODIC AFRICA

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Abstract

Public-Private Partnerships (PPP) is a ubiquitous reality. In Africa, the wave of PPP has hit states in their infancy – still moulding following only 50 years since independence. The common perspective of PPP on the realms of scholarship is transactional (focused on the delivery-end of infrastructure). This paper presents a deeper and broader perspective, and it is a distillate of a case study on PPP as a policy phenomenon. It dissects and illuminates the interaction between the forces of state formation and the wave of PPP hitting the continent. The lens of this case study is Institutional Rational Choice (IRC). The tools are a variety, comprising textual analysis, hermeneutics and econometrics – in keeping with the essence of case study (explication of reality in-situ). The product is not the orthodox generalization (claiming 'the way'). Instead, the explication offers a viewpoint (and trigger questions) on public space of Africa, while underpinning the non-ergodic character of that space.

Keywords: Partnerships, the Non-Ergodic Africa, Moulding State Structures
JEL: H1-7, G2 & R5

1. INTRODUCTION

The present wave of Public-Private Partnerships (PPP) is hitting the young states of Africa. Typically, the countries of Africa attained independence just over 50 years ago. Following independence, the countries were embroiled in military conflicts as the nationalist forces of independence fizzled out. Moreover, the socialist charters that typified the aftermath of independence were strained by the military conflicts, and obliterated by Structural Adjustment Programme (SAP) starting the early eighties. Therefore, the state structures of Africa are still nascent – they are moulding.

So, what will be the outcome of the interaction of the two dynamical sets (PPP and state moulding)? That question cannot be addressed using the orthodox Hypothetico-Deductive (H-D) framework. Hypotheses may be attempted but there is no precedent (read, data) for testing the hypotheses and making deductions. On the other hand, scholarship cannot shy away from this question. It is a question that should grip long-term investors and policymakers. The way forward is case study [in an exacting usage]. The case approach dissects reality in-situ, exposing the instant mechanics without pretending a generalisation. In other words, the case approach embraces the phrase that anchors the Hippocratic Oath – 'we don't know'. Still, the case approach exposes the current drivers and mechanics of reality, so decision-makers are informed about the present state-space.

Further, this paper assumes Institutional Rational Choice (IRC). That is, policy decisions succumb to institutional influences (i.e. norms and values of society). On that premise, policy decisions are inherently irrational. Therefore, state-space averages are not constant. It is a non-ergodic world. On that basis, the future calls for continual management. Knowledge of the instant state-space should guide on the starting toolkit.

2. LITERATURE REVIEW

2.1. Challenging Orthodoxy

Literature is traditionally presented as a concentrated piece (section of a paper). That approach suits the H-D orthodoxy of most journals. Literature defines the source of the hypothesis, which is on a specific subject. Case study is different. It dissects [complex, interwoven] reality in-situ. Therefore, the pertinent literature must flow with the dissection of the case capsule (cf. Flyvbjerg 2006).

Moreover, the interdisciplinary demand of case study brings to light two imperatives of any epistemic effort in social science – the vantage point and lens. On the former, in an attempt to emulate physical science, social science has tended to hide the vantage point (*Ibid.*). That way, social science appears context-free [like physical science]. However, how many of the leading social scientists would think the same way had they not attended a particular school? Point made.

As regards the lens, the assumption inherent allows room for the complexity of the case. In this paper, for instance, IRC is used. While the paper introduces IRC, it does not have the space to attempt justification of its usage. Therefore, IRC stands as a fixture (premise).

Subsequently, the two fixtures (vantage point and lens) are a priori determinants that can be presented infused with literature the H-D way (i.e. concentrated in a section). However, the two are also elemental to the case methodology, and therefore they are presented in the section so named. Consequently, the remainder of this Section 2 considers the main terminologies of the case (PPP and state formation), and the framework used to define them (CSF, below).

2.2. Construction-Structure-Function (CSF)

The CSF framework is an axiomatic synthesis [of reality] that this paper uses to dissect the terminology 'public-private partnerships (PPP)'.

Definitions should be delimiting. The CSF framework draws on the fact that every bit of reality or concept is a constitution of elements. Therefore, the describing words (attendant terminologies) should capture the structure of the reality. Moreover, structure cannot exist without a process leading to the existence of the structure. That process is called 'construction' in this paper. Finally, the structure must have a reason for existing. It must have a function.

2.3. Public-Private Partnerships (PPP)

It is a cooperative arrangement between the public and private sectors that aims to mutually manage project risks and share ensuing rewards. Consequently, PPP allocates risk to the party better positioned to manage the risk. Furthermore, risks that appeal to PPP are associated with long-term projects, hence PPP is often long-term.

The construction process of PPP (policy formulation and organisational formation) comprises a variety of paths. Government portals are awash with these empirics (for example: HM Treasury (UK) 2000). Moreover, scholarship on service delivery using PPP is vast (Osborne and Murray 2000 is a good start). This research does not discuss delivery paths, neither does the research examine different approaches to PPP policy-making (for such exposition, see Hodge and Greve 2007, Ghobadian and Others 2004, and Grimsey and Lewis 2004).

The second strand of the definition [of PPP] is structure – the mechanics following policy enactment. To this end, the research identifies the need for public stake (shareholding) in the Special Purpose Vehicle (SPV) as a pivotal cord in the mechanics of PPP. However, practice has not appreciated this cord as UK experience shows (HM Treasury 2012). The rationale for the public sector stake [in the SPV] is straightforward: PPP must be a welding of the public and private sectors. The challenges that accrue from the butting of the two should be managed – but practice seems to escape from these challenges by allowing wholly private shareholding of SPV (thereby losing the value of public-private ownership).

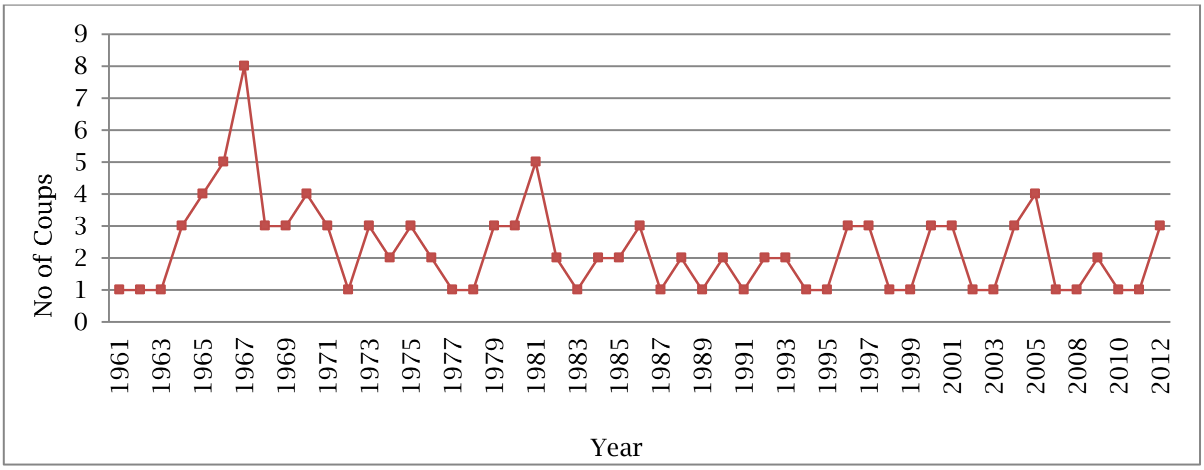
The third strand in the definition of PPP is function. What role does PPP perform? When is it employed? The definition identifies public service as the object of PPP. To that end, PPP has been employed outside the salient delivery of physical and social infrastructure. A unique example comes from the US Treasury Department (see De Palma et al. 2009 and Bebchuk 2009).

2.4. State Formation in Africa

When colonial powers entered Africa in the nineteenth century, the continent was a collage of institutions (i.e. numerous pockets of ethnic groups, representing different values, norms and practices). The lines of division of the scrambling colonial powers paid no respect to that collage. Mazrui (1978) is a decent point of initiation on this history.

When the countries attained independence in the fifties and sixties, the emerging native nationalists at the helm of power soon had to confront tensions resulting from the many of institutions within their countries. These institutional tensions and the tectonic forces of the Cold War led to coup d'états across the continent. See Rothchild (1995), Allen (1995), and Fearon and Laitin (2003), for the history, and Figure 1 for statistics on the coups.

Figure 1. Military Coups in Africa



Source: African Development Bank, Barka and Ncube 2012

In the eighties SAP emerged. The nascent public institutions and the spouting organisations (cf. North 1990) were starved of funding in favour of private sector actors. Under the minimalist state ethos of SAP, subsidies to public entities had to end and be replaced by corporate entities operating at arm's length from policymakers. This change was most evident in the infrastructure sector, under the commercialisation and corporatisation drive (see Amonya and Okello 2014).

Today, the wave of PPP hitting the continent desires the corporate entities of SAP as public sector partners – kindred entities for business. However, Amonya and Okello (2014) present a case of Uganda showing that the SAP drive withered off public sector entities without creating new business-like entities.

However, the mechanics of PPP on the continent is deeper. The reform of public sector organisations is merely the front of a deep moulding of the state that traces back independence. The remainder of this paper seeks to expose that deep mechanics.

3. METHODOLOGY

3.1. Case Study

Our world is guided by physical reality. That is what our senses capture daily. However, the social sphere is also a reality - except, it eludes our senses. However, being accustomed to the deterministic physical world, we are tempted to search for the same determinism [of the physical world] in the social world. Scholarship has not escaped that trap. The dominance of the hypothetico-deductive approach in social science (and particularly economics) traces to that trap (see Flyvbjerg 2011).

The rescue of social research is case study. It allows capsules of reality to be dissected and illuminated without the imperative of generalisation (the crystallisation of the H-D approach). With the capsule opened, subsequent works may attempt intrinsic generalisation (deductions within the context of the case, see Johansson 2003). However, the greater benefit lies in the questions triggered by the illuminated capsule. Those questions will provide a tool for addressing future state-spaces of the evolving social reality. That opportunity of case study underpins this paper.

In addition, complexity requires a variety of tools. Moreover, the tools must not be determined a priori. They must be picked as the case progresses. The paper employs textual analysis and hermeneutics as well as statistical mechanics to navigate the case.

3.2. Institutional Rational Choice

To dissect reality, the worker must wear a lens (albeit, the lens is often implicit in scholarly works). This paper uses Institutional Rational Choice (IRC). This lens is credited [mainly] to Ostrom (1977 and 1991) and North (1992). The lens holds that decision-making is not entirely rational. It argues that individuals are limited by their cognitive capacity (Herbert Simon 1957), but more significantly, the decisions are controlled by the norms, values and practices of the society.

The IRC frame appeals to scholarship on Africa. The continent comprises nascent post-colonial states underpinned by senescence of institutions – some of the oldest in the world (Stein 1994 offers a good rendering on this subject). Therefore, the institutions of Africa are expected to reflect more strongly on the public platform in comparison with the more mature states of the West (for example).

4. EMPIRICS AND ANALYTICS

4.1. The Wave of PPP

Public-Private Partnership is an emerging frontier of policy knowledge. It is innovation. The diffusion of innovation has widely been modelled using the logistic function (for examples, Mahajan and Robert 1985).

Figure 2 plots investment in PPP in the UK and developing world using data from UK Treasury and Public-Private Infrastructure Advisory Facility (PPIAF) respectively. Further, against these plots are three logistic curves. They all represent the model in Equation 4.1.

$$I_t = K \,/\, (1 + Ae\verb|^|(-rt)) \qquad (4.1)$$

Where:
$A = (K - I_0) \,/\, I_0$
I_t is annual investment in PPP
K country's PPP capacity
r rate of investment growth.

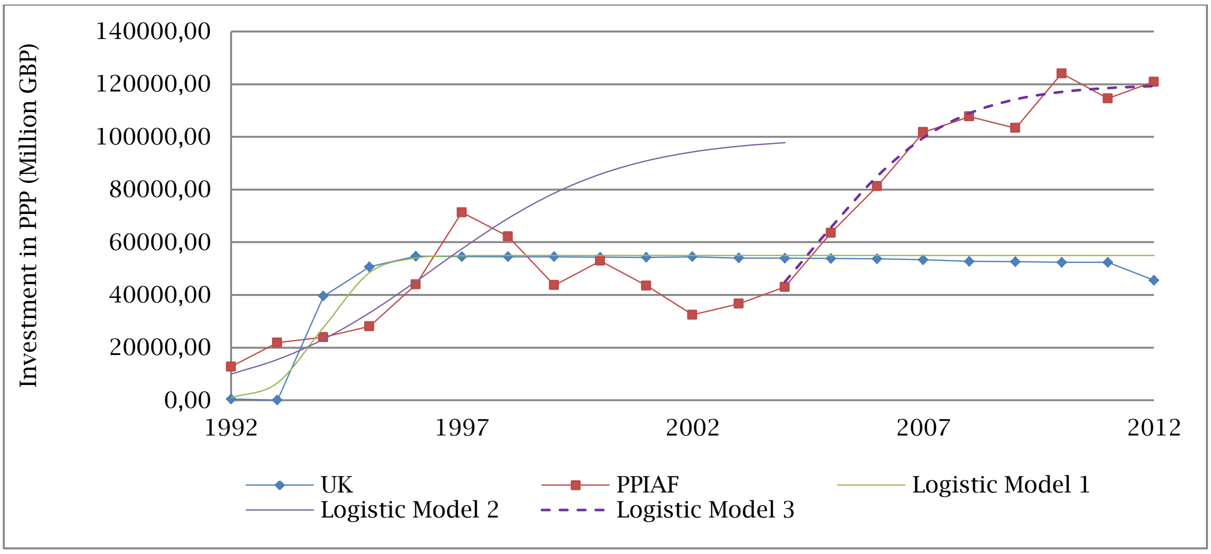
Equation 4.1 above derives from the work of Verhulst (1838) on ceilings of ecological growth (see the worker's delayed publication, Verhulst 1977). The definitional differential takes the form of Equation 3.5.2 below.

$$\dot{I} = rI_t\left(1 - {}^{I_t}/_{K}\right) \qquad (4.2)$$

All notations are maintained and $\dot{I} = dI_t\ /dt$.

The logistic curves are defined in Table 1. Initial investment (I_0) is £1 billion for the UK (Model 1), and £10 billion and £45.00 billion Models 2 and 3 respectively (PPIAF-monitored global portfolio). Parameter K is £55 billion for Model 1, and £100.00 billion and £120 billion for Models 2 and 3 respectively. Growth rate of annual investment is 2.0 for the Model 1, and 0.5 and 0.7 for the PPIAF tracking Models 2 and 3 respectively.

Figure 2. Diffusion of PPP using Logistic Model



Sources: HM Treasury (UK) and PPIAF Database

Table 1. Definition of the Logistics Curves

Logistic	*Model 1*	*Model 2*	*Model 3*
I_o (£m)	1000	10000	45000
K (£m)	55000	100000	120000
r	2	0.5	0.7
A	54	9	1.7

The trajectory analysis of Figure 1 is outside the scope of this paper (covered in Amonya 2015). This paper focuses on the K-parameter.

In the foregoing, the K-parameter is assumed constant. That is a simplification. The K-parameter captures numerous variables, which makes it a variable – particularly in the long-run. The foundational variables (feeding the K-parameter) are axiomatic – they derive from the definition of PPP. The first is state integrity. The other is private sector strength and dynamism.

The core functions of the state are control of the instruments of violence and ensuring property rights. These two axiomatically influence a country's capacity to employ PPP. The ensuing question is whether the two variables can be disentangled and measured within an investment trajectory of PPP. To that end, scholarship on Foreign Direct Investment (FDI) offers insight. Borrowing from Busse and Hefeker (2007), PPP capacity K assumes the following dynamic form:

$$\ln(K_{it}) = \beta_0 + \beta_1 ln(GNI) + \beta_2 ln(GROWTH) + \\ + \beta_3 ln(STATE) + \beta_3 ln(PRV) + e_i \quad (4.3)$$

Where:

GNI Gross national income per capita, capturing the economic depth of the country

GROWTH Growth projections of the country, reflecting the desire for PPP

STATE The core strands of the state (security and property rights) and the effective of agency of the state (government)

PRV Depth and dynamism of the local private sector.

The orthodox H-D framework would quickly jump to testing 4.3. That would be futile. While GNI and GROWTH data are readily available (World Bank, for one source), the others are not. Capacity K should use asymptotes of curves such as in Table 1. However, such data points are too few – the present wave of PPP is hardly 15 years old (see Amonya and Okello 2014).

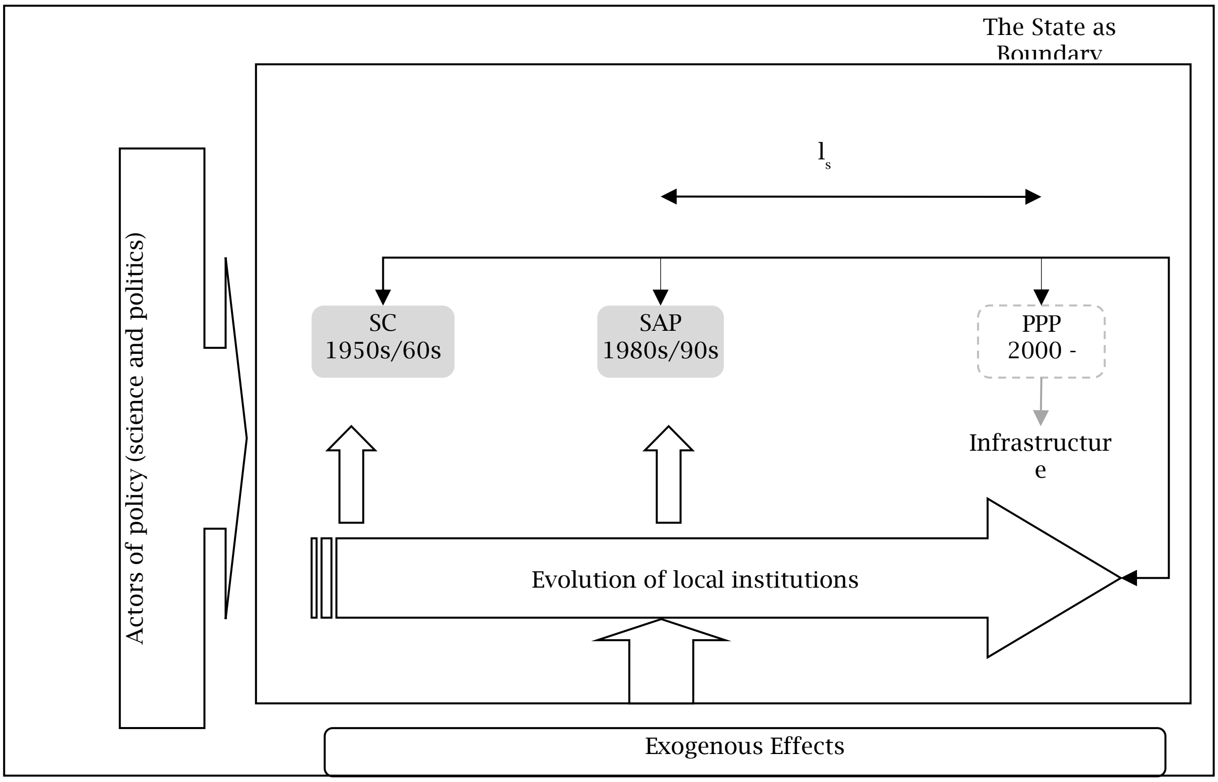
Moreover, the decomposition of STATE and PRV (as well as their potential proxies), must be developed by studying PPP phenomena in-situ and in detail. That case approach, for example, has just forced the UK to change the structure of the SPV. The new policy requires public equity on all PPP projects (see HM Treasury 2012).

In summary, the present wave of PPP intertwines with the structure of the state. In situations of developing state structures ('moulding' ones), the dynamics of PPP becomes more complex. The phenomena demand a dive into history in an attempt to explicate the complex mechanics. That is the motivation of Section 4.2.

4.2. The PPP Wave Hitting Africa

The genesis of PPP policy in Africa is captured in Figure 3. The immediate question facing the policymaker and long-term investor in Africa is the length l_s between SAP and the initiation of PPP. That concern is often fused in proxy terminologies like 'political risk' (cf. Grimsey and Lewis 2004).

Figure 3. A Sketch of Typical Policy Landscape of Africa



Notes: *SC* *Socialist Charters of the fifties and sixties*
SAP *Structural Adjustment Programme of the eighties and nineties*

The length l_s captures the conceptual difference between a SAP-induced wave and PPP at the point of analysis. In Uganda, for example, the present policy stance is against the corporatisation reforms of SAP (see Amonya 2015). In Sierra Leone the SAP reforms lag Uganda's, and hence l_s is shorter (for PPP in Sierra Leone, see Thomashausen and Shah 2014).

Moreover, to the investor, the main concern is the return (Return on Investor, ROI). The emerging formalisation is a dot product of PPP vector (**P**) and the SAP state-space (**S**). That is:

$$\boldsymbol{S}.\boldsymbol{P} = \sum_i^m S_i P_i \qquad (4.4)$$

Equation 4.4 captures the common scholarly works that employ Dephi technique and the H-D framework for generalisation (for example, see Ameyaw and Chan 2015). In that approach, the drivers of the SAP frontal (equivalent to the m-dimensions of Equation 4.4) are identified and processed through a crucible of experts. The approach is appealing to the investment decision-maker. It is simple.

However, Delphi efforts – which trace back to the struggles of the Rand Corporation in the fifties (see Dalkey and Helmer 1963) – are flawed (though not fatally, that is the essence of works like the instant). They premise on the determinism of the m variables (commonly 'critical success factors', see Chou and Pramudawardhani 2015). The socio-economic and political drivers appear at surface of a dynamical system. They are not stable (w.r.t. the long duration of PPP projects, typically 20-30 years). They are effects of evolving historical forces shown in Figure 3.

Therefore, to the long-term investor and policy-maker, the starting point should be an appreciation of the dynamical system that hides in the ubiquitous term PPP. This dynamical system formalises as follows:

$$\dot{\boldsymbol{S}}(t) = A(t)\boldsymbol{S}(t) + B(t)\boldsymbol{P}(t) + C(t)\boldsymbol{U}(t) \qquad (4.5)$$

Where:

$\boldsymbol{S}(t) \in \mathbb{R}^3$ is the state space of the market comprising three interests (private equity, public equity and debt) – the 'real' risk

$A(t) \in \mathbb{R}^{mx3}$ is a matrix of project risks distributed to the three market interests

$\boldsymbol{P}(t) \in \mathbb{R}^3$ is the impetus of PPP (funds seeking investment) - impacting the country exogenously

$B(t) \in \mathbb{R}^{mx3}$ captures PPP risk factors aligned to the three markets

$\boldsymbol{U}(t) \in \mathbb{R}^3$ is the force of technological change [exogenous] attributed to the three interests

$C(t) \in \mathbb{R}^{mx3}$ captures the environment of technological change.

The rate of change of the state-space (S-dot) is the generalised risk (on the three interests) and presented in m risk factors. The conceptual framework of Equation 4.5 challenges the dominant approach to investment decisions – prioritisation of projects based on risk analysis at the outset (see

Grimsey and Lewis 2004). The dynamical system is too complicated for decent estimation of long-term risks of PPP projects. Instead, focus should be placed on the team's ability to analyse emerging risks at any time along the project life. The strategy should be incremental management.

Moreover, the complexity of PPP captured in Equation 4.5 is still a simplification. It does not consider the controlling effects of evolving institutions. Institutions as defined by North (1990) are irrational – leading to the IRC frame of Ostrom (1991). Therefore, the state-space at the time of investment does not define future spaces (or character of investment market). That is, not even stochastic considerations can predict future spaces. Time averages are different from ensemble averages – the space is non-ergodic. Formally:

Given a measure space (X, ψ, μ), and let $T: X \to X$ be a measure-preserving transformation (mpt), the transformation is ergodic in respect to μ if:

for $E \in \psi$ and $\mu(T^{-1}E \Delta E)=0$, $\mu(E) = 0$ or $\mu(X \setminus E) = 0$.

Where: X is a set of outcomes, ψ are the events (σ-algebra subsets of X), and μ is the probability function ($\mu: \psi \to [0,+\infty]$).

In the non-ergodic situation described above, the only reliable information is the instant set of market drivers, which are also the risk factors. How then can an investor prioritise opportunities and determine the level of investment? From the public pedestal, how can the nature and extent of PPP be determined? The assumption of ergodicity must be made at the start – but only to the extent that it allows the determination of initial engagement (i.e. the nature and extent of investment, and the initial management and regulatory resources). However, looking ahead, that assumption should be removed, giving way to the reality of non-ergodicity. Now, here is the crux – the most robust preparation for the subsequent uncertainty is to knit an interdisciplinary team. The team must be capable of handling unexpected severe manifolds resulting from the known drivers and the irrationality of institutions. That team is not a collection of disciplinary 'experts'. It is a blend of individual with interdisciplinary [analytical] skills who are capable discerning the emerging manifolds. That approach would not guarantee success but it would be the best shot at it.

CONCLUSION

Non-ergodicity is not unique to Africa. However, the continent comprises the youngest independent states. That fact of age means, typically, the African state is less consolidated than most parts of the world. Consequently, exogenous excitations on policy space (such as PPP) are magnified by the underlying moulding of the state. Meanwhile, the influence of the [Northian] institutions (some of the oldest in the world) remains strong, and divorced from rationality. As a result, non-ergodicity associated with PPP is [and should be] more evident in Africa.

Given the non-ergodicity, the two main investment criteria should be the initial level of investment and the cost of maintaining the requisite team for the project. While a key determinant of the team is the initial set of drivers of change (read, risk factors), the more important determinant should be the interdisciplinarity of the team. Lining up legal, financial and technical 'experts', each absorbed in the empirics of the discipline with limited analytical (trans-disciplinary) capability leads to rigidity. The rigid structure would crack in the face of the dynamical manifolds of PPP – except that the cracks will likely manifest in project distress (often, with the people, ordinary taxpayers) picking the pieces.

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SPECIAL ECONOMIC ZONES (SEZS) IN SOUTHERN AFRICAN DEVELOPMENT COMMUNITY (SADC)

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Abstract

There have been calls on Southern African Development Community (SADC) governments to device strategies to boost economic growth, structural and infrastructural development. Economists have been recommending that Foreign Direct Investment (FDI) would foster long term economic growth rather than borrowing from multilateral institutions, hence Special Economic Zones (SEZs) have been established to attract investments. However, there have been arguments against SEZs on the net benefit accruing to the host nation from SEZs. This study applied the Ordinary Least Squares (OLS) on 15 SADC member countries' SEZs profit remittance data and draw a multi-linear regression model to establish the relationship between national income and FDI. The results show that there is a not significant relationship between these variables. Hence there is no net benefit accruing to the host country by establishing SEZs. However long-term benefits may be realised if the companies operating in these zones construct infrastructures and other structural developments.

Keywords: Economic Growth, Investments, Infrastructure, Development

1. INTRODUCTION

Several governments in SADC have identified the establishment of Special Economic Zones (SEZs) as a strategy to boost economic growth and development. SEZs are designated geographical areas that operate under different economic rules from the rest of the economy. Tax incentives are at the centre of SEZs' aimed at attracting foreign investment. There have been arguments that tax holidays result in benefits accruing to the country of origin of the concerned companies and not the host country. Literally, offering tax incentives to foreign companies is tantamount to surrendering the host country's taxing rights and would negatively impact on socio-economic development. Technically, it is not only giving relief to the foreign companies but also transferring a sovereign's taxing rights to the country of origin of those companies.

2. REVIEW OF RELATED LITERATURE

Special Economic Zones (SEZs) have theoretically been used for many reasons, among them; promoting exports of goods and services, promoting investment from domestic and foreign sources, creating employment, developing infrastructure facilities and generating additional economic activity. In some cases, SEZs also serve as a laboratory to test whether business-friendly policies are worth rolling out on a larger scale. This way, SEZs are useful when introducing economic reforms that may not be possible at national level (Farole, 2011).

China has been leading economic engagement with SADC through SEZs in the recent past. Trade between China and Africa reached $1.06 trillion in 2014, twenty times the 2004 figure (Country Economics, 2014). However, the impact of China's economic engagement in Southern Africa is hotly debated, whether it is positive or negative. Marysse and Geenen (2009) argue that China's engagement in Africa is neo-colonial in nature; it is exclusively about getting access to natural resources. This has been evidenced by the influx of competitive Chinese products, small-scale Chinese traders and Chinese labour force in infrastructure projects. This is in fact a serious threat to Southern African manufacturers, market vendors, and workers. In this view, Marysse and Geenen conclude that Chinese engagement is very unlikely to aide SADC's long-term development goals.

Gayan (2008) concurs with Marysse and Geenen (2009) in challenging the Chinese leaders' view that SEZs are an important measure to help SADC countries to develop their industries and expand local employment. Gavan is of the opinion that, SEZs might be primarily political investments linked to Beijing's long-term geo-strategic ambitions and unlikely to foster sustainable local development.

Kim (2013) defends the opinion of Gayan (2008) that SEZs are merely political investment vehicles. Kim substantiates this view by questioning why these SEZs; do not employ locals or employ them only at the lowest levels and why they are reluctant to transfer or diffuse technology and know-how on how to effectively market the zones to local people; attract industries that are simply more polluting or adopt worker safety standards that are lower than those outside the zones; serve as uneconomic 'prestige projects' offered merely in exchange for other benefits such as access to resources. Another critical issue on SADC SEZs has been the labour market frictions. Instead of creating employment for the host country, they have been importing technical workforce into the host country.

The effectiveness of these SEZs is relative and also subjective because not all of them are created equal. Different countries present different opportunities and challenges. Hence, there is no single SEZ model applicable in all countries because many advantages are country-specific and need to be carefully matched with a specific corporate strategy (World Bank Report, 2011). Their success comes with a well laid fundamental support to the businesses amongst them; constant access to power and conducive investment climate.

On the other hand, the World Bank Report (2012) points out that weak industrial competitiveness in Sub-Saharan Africa have retarded economic growth. Lack of policy stability, poor infrastructure and high indirect costs related to a poor business environment have been at the centre of weakening industrial growth. Also, a number of problems in the wider investment environment in Africa have also hindered development of most SEZ projects on the continent. These problems include infrastructure shortfalls, administrative weaknesses, ineffective management, policy uncertainty, and poor strategic and operational planning.

Having analyzed the intended benefits of SEZs, The Consultancy Africa Intelligence (2014) questioned some grey areas of SEZs. Its report highly criticized the intention of these institutions, raising so many questions on whether the benefits could possibly outweigh their costs. Kadam (2012) argues that, if the SEZs are meant to bring-in all inclusive economic growth, then it is rational that they should pay taxes and make a positive contribution to the growth of the economy. Otherwise the indirect benefits such as stimulating economic activity and employment opportunities may never materialize.

Kadam (2012) also identifies another evil brought about by the existence of SEZs, violation of property rights by governments through land grabbing at very low or zero prices. This has created dark zones for government officials to use SEZs as vehicles for graft, money laundering and inflating exports values for self-benefits. Hence, lack of transparency in most of the SEZs has defeated their purpose and threatened their entire existence. The question remains whether there is a real benefit accruing to the host nation from SEZs or its all economic gambling.

3. METHODOLOGY

The data used in this research includes Gross Domestic Product (GDP), Foreign Direct Investment (FDI), consumption expenditure, government spending and net exports of all the 15 SADC member states obtained from Country Economics and Index Mundi databases for 10 years (2004 – 2014). SEZs capital flow is directly correlated to FDI, hence FDI data was adopted. The effects of FDI to the economy is realised through GDP at factor cost, therefore the factor incomes model was applied. Here GDP is the sum of the incomes earned through the production of goods and services. This is:

$$GDP_{(t,\omega)} = \gamma_{(t,\omega)} + \rho_{(t,\omega)} + \tau_{(t,\omega)}$$

Where:

$\gamma_{(t,\omega)}$ $is\ income\ from\ people\ in\ jobs\ and\ in\ self-employment.$

$\rho_{(t,\omega)}$ $is\ profits\ of\ private\ sector\ businesses.$

$\tau_{(t,\omega)}$ $is\ rent\ income\ from\ the\ ownership\ of\ land.$

This model makes a better estimation of the effect of SEZs income because it only considers those incomes that come from the production of goods and services are included in the calculation of GDP by the income approach. We exclude transfer payments, private transfers, income not registered with the Inland Revenue or customs and excise and other income in the shadow economy. However the issue of unreported income in the SEZs, where the government partnerships don't provide all the right information about their incomes to evade accountability caused disparities in the counting of national income.

A multi-linear correlation regression model was run by the Ordinary Least Squares (OLS) method for the period 2004 to 2014 to determine the coefficient of relationship between the variable of interest (FDI) and the explained variable GDP. The FDI inflows profit remittance data was also plotted against GDP and FDI to analyse if there was any time series relationship for the period considered in this study. The overall performance of three estimates is satisfactory. Values of adjusted R^2 in the three cases were from 71 percent to 85 percent, indicating a strong explanatory power of the models, and the significance level of F test is $p<0.001$, indicating that the significance of the model regression as a whole is high.

4. FINDINGS

In Angola, an economy of $131 billion GDP, SEZs have resulted in net income outflow of 8% in 2014. The SEZs have been remitting an average of $6 million annually in profit, with a maximum of $13.184 million in 2008. Angola's GDP is therefore driven by other variables other than FDI through SEZs. In Botswana, only 0.16% of its GDP is derived from SEZs. In DRC, 31% of its GDP is driven by FDI. The country has experienced a sharp growth during this period under analysis; data shows that without SEZs in DRC, economic growth will be highly retarded. There has been no profit remittances form SEZ for the whole period under study.

In Lesotho, a $2 billion economy, 2,5% of its GDP income comes from SEZs; of which there is a significant growth in profit remittances from SEZs in this country from $158.3 million in 2004 to $406.8 million in 2012. A $10 billion economy, Madagascar, has been remitting no profit from it 8% growth SEZs for the 10 consecutive years. In Mauritius SEZs have been remitting significant profits which has contributed 9.8% of the GDP.

Seychelles, the smallest economy in SADC according to GDP ($1.406 billion), has been remitting a constant profit averaging $20 million annually from its SEZs despite a significant growth in FDI from $38 million in 2004 to $206.1 million in 2014. It however constitutes 3.28% of the GDP income. The largest economy in SADC, South Africa, with a GDP of $350 billion; remitted a maximum of $8.5 billion in 2012 spanning from approximately $4.6 billion

FDI which constituted 3.03% of the national GDP income in the same year. In 2014, 15.31% of Zimbabwe's GDP income was coming from SEZs which invested approximately $429 billion. There was no profit remittance despite $2.158 FDI flowing into the country's SEZs' most lucrative businesses.

CONCLUSION

Quantifying the pure costs of incentives and potential benefits lost in creating SEZs is very difficult. The cost of tax incentives in SEZs is therefore wide-ranging and goes beyond immediate potential revenue loss. Apart from revenue losses, SEZs are causing economic distortions spanning from preferential treatment of foreign investors, mostly Chinese, at the expense of local investors. Offering foreign investors a tax incentive allows them low running costs, hence can afford to sell their outputs cheap. Analysed statistics shows that incentives successfully improved FDI, but on the other hand it also crowds out other investments, so that aggregate investment and growth depreciates or remain constant. The SEZs have also been a hub for graft; fraudulent use of incentives schemes and rent-seeking by government officials, hence, SEZs are not yielding intended benefits.

RECOMMENDATIONS

SADC governments seem to be emotional about taxation and development issues. They should do a cost and benefit analysis in the due diligence process of setting up SEZs, taking stock of what has been achieved and reconcile what has been done in the past. Since the success of SEZs is country specific, granting investment incentives should be done depending sorely on what the government wants to achieve in the medium to long-term. There are a number of local investors who find it very difficult to invest in their own countries; governments should instead put most of its focus on encouraging domestic investment. Currently there are too many inconsistent laws and taxes that are stifling the growth of local companies which governments should get rid of. Instead of SEZs for Chinese entrepreneurs, local individuals should be encouraged to do their businesses and be supported consistently where they need support.

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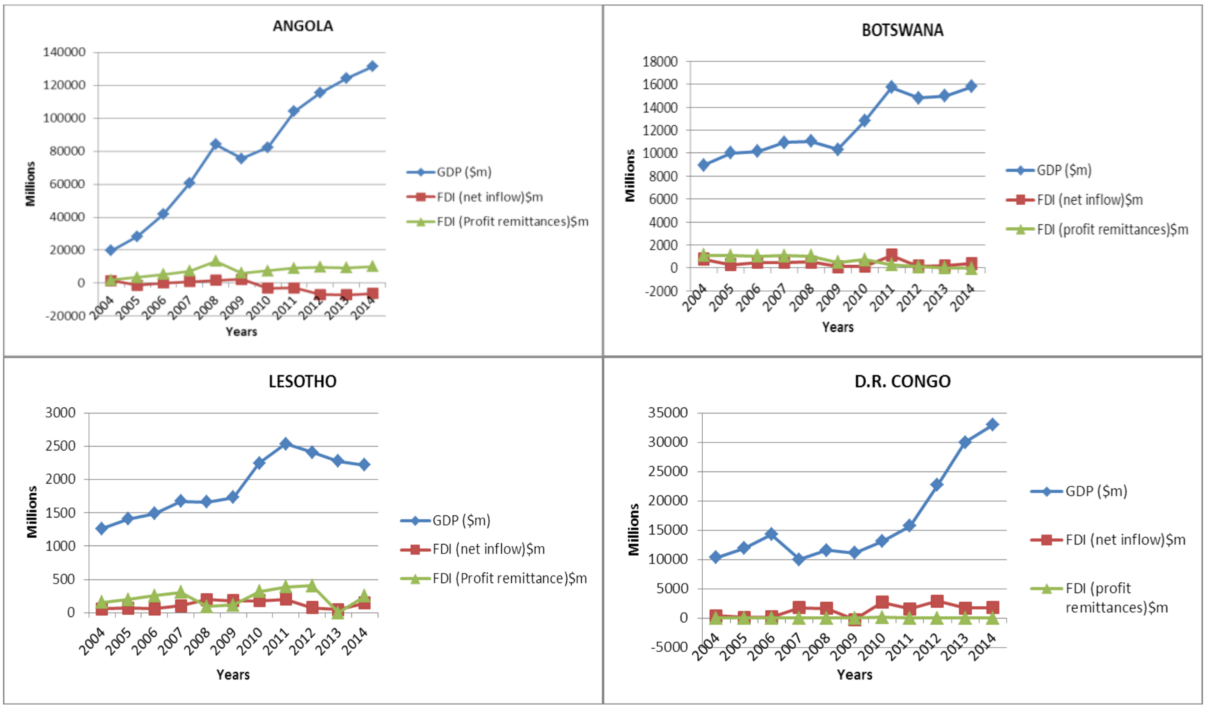
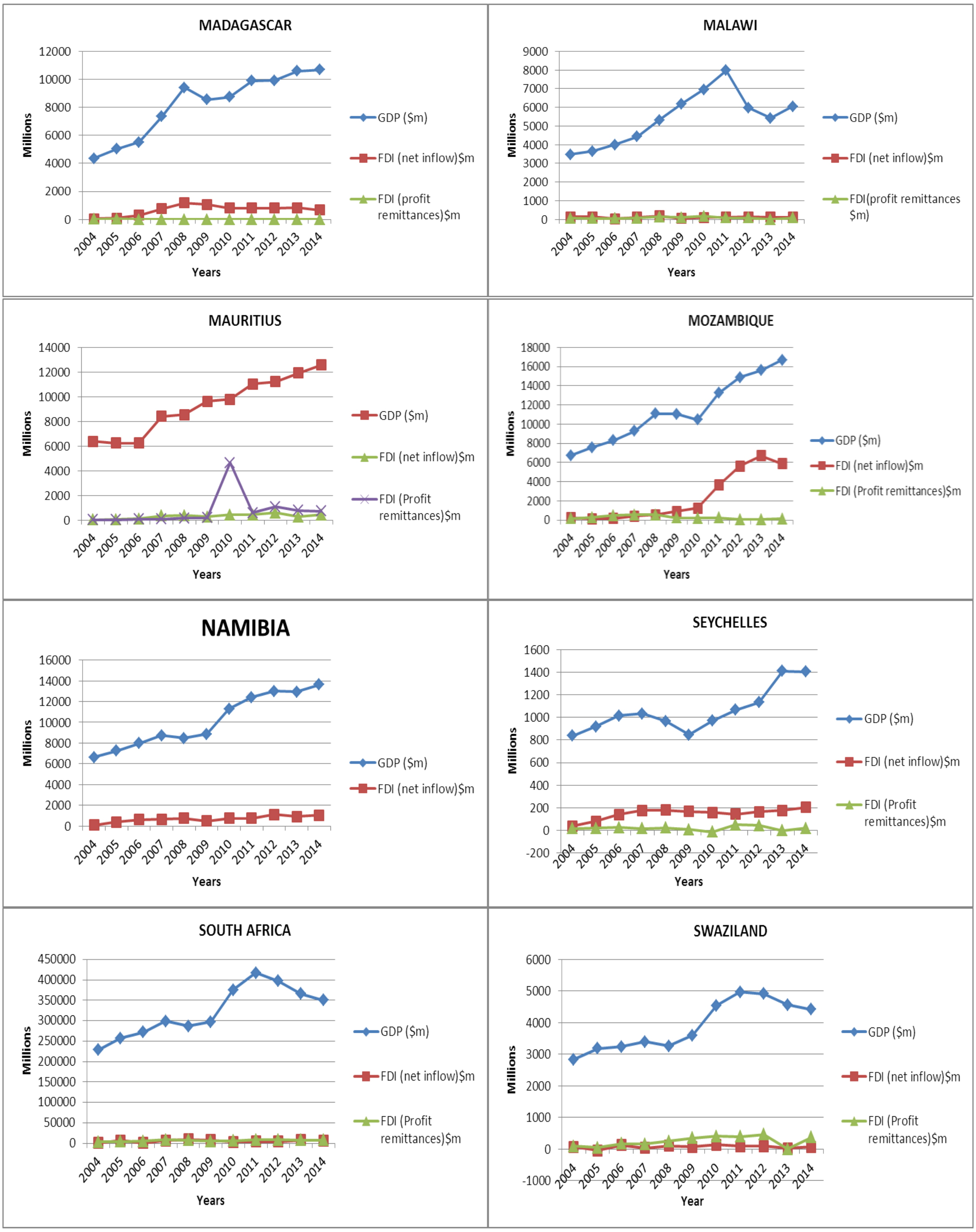
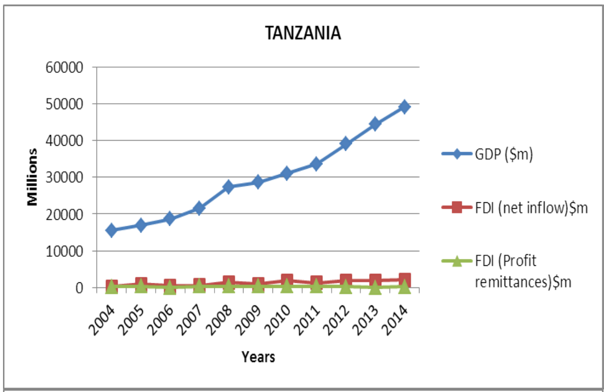
APPENDICES

SADC COUNTRIES' PROFIT REMITTANCE FROM FDI




MADAGASCAR
Millions
Years
GDP ($m)
FDI (net inflow)$m
FDI (profit remittances)$m
MALAWI
Millions
Years
GDP ($m)
FDI (net inflow)$m
FDI(profit remittances $m)
MAURITIUS
Millions
Years
GDP ($m)
FDI (net inflow)$m
FDI (Profit remittances)$m
MOZAMBIQUE
Millions
Years
GDP ($m)
FDI (net inflow)$m
FDI (Profit remittances)$m
NAMIBIA
Millions
Years
GDP ($m)
FDI (net inflow)$m
SEYCHELLES
Millions
Years
GDP ($m)
FDI (net inflow)$m
FDI (Profit remittances)$m
SOUTH AFRICA
Millions
Years
GDP ($m)
FDI (net inflow)$m
FDI (Profit remittances)$m
SWAZILAND
Millions
Year
GDP ($m)
FDI (net inflow)$m
FDI (Profit remittances)$m


TANZANIA
Millions
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2004
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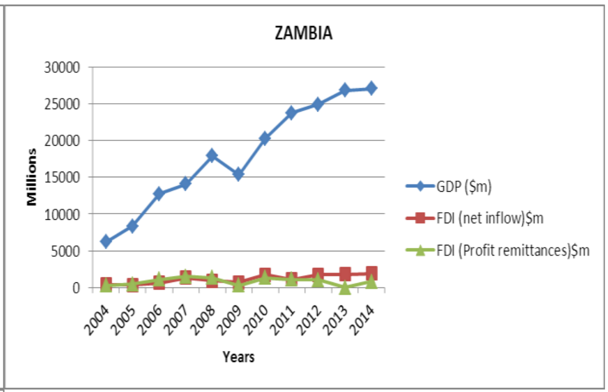
Years
GDP ($m)
FDI (net inflow)$m
FDI (Profit remittances)$m


ZAMBIA
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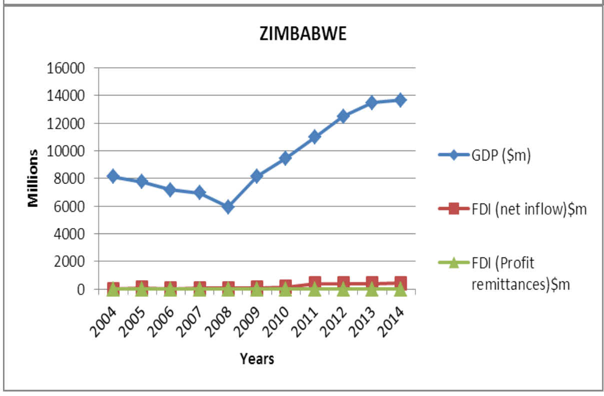
FDI (Profit remittances)$m


ZIMBABWE
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16000
14000
12000
10000
8000
6000
4000
2000
0
2004
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Years
GDP ($m)
FDI (net inflow)$m
FDI (Profit remittances)$m

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THE IMPACT OF TAILOR-MADE SKILLS BASED TRAINING PROGRAMMES ON THE PERFORMANCE OF MUNICIPALITIES: THE CASE OF THE CITY OF TSHWANE

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Abstract

Various South African municipalities are under close scrutiny due to widespread protests over poor quality of municipal services. Prior studies that examined situations in municipalities recommend training and development as the most apposite strategic tool for raising municipal performance. This study aimed to determine whether there is a statistically significant association between the provision of adequate training and development programmes and satisfactory performance at municipal level. A combination of quantitative and qualitative methods of data collection and analyses were used in the study in which data was collected from n=131 respondents (119 questionnaires + 12 in-depth interviews). Purposive sampling was used for selecting eligible respondents. The results showed that 49% of respondents have had past training opportunities. The percentage of employees with satisfactory performance was equal to 52%. The study found a significant association between the provision of training and development programmes and satisfactory performance among municipal employees. At the 5% level of significance, the results show that inadequate performance was significantly associated with lack of training opportunities, low level of formal education, and lack of job satisfaction, in a decreasing order of strength. A model has been proposed for ensuring adequate performance by municipal employees, and for monitoring and evaluating progress on a quarterly basis.

Keywords: City of Tshwane, Skills-Based Training, Performance Monitoring and Evaluation, Odds Ratio

1. INTRODUCTION

The study was conducted in order to assess the potential benefits of tailor-made skills based training programmes to improved performance among employees working in the City of Tshwane. The study was conducted by using a combination of quantitative and qualitative methods of data collection and analyses. A review of the literature shows that there is a significant relationship between providing tailor-made skills based training programmes to employees and improved performance to clients and stakeholders. The City of Tshwane (Khale, 2015) has received qualified audit reports from the Auditor-General in the past several years due to factors that are known to affect service quality in local governments and municipalities.

Studies conducted by Khale (2015) and Marivate (2014) have shown that the quality of municipal services provided to customers, ratepayers and newly established small enterprises is a key predictor of sustained growth and economic development. According to Seeletse (2012) and Henrekson (2014), there is a statistically significant association between the perception held by residents about service quality and overall economic growth and development in the major metropolitan cities of South Africa. The study by Horn (2010) has shown that it is impossible to alleviate unemployment and poverty among the urban population without improving the quality of essential municipal services. Shree and Urban (2012) have found that the rate at which small enterprises grow depends upon the quality of municipal services that are provided routinely.

2. BACKGROUND OF STUDY

Since April 1994, there have been protests over poor service delivery against municipal employees by ordinary residents in municipalities throughout South Africa (Khale, 2015). The City of Tshwane has received qualified audit reports (Khale, 2015) from the Auditor-General since 1994. The underlying cause has been failure to meet the expectations of residents and stakeholders mostly due to lack of capacity and shortage of specialised skills. The key challenges have been caused by failure to monitor and evaluate the degree of satisfaction of clients and stakeholders on the quality of municipal service delivery. Lack of skills and poor service delivery has led to protests, civil unrest, damage to property and infrastructure and financial mismanagement in various parts of South Africa (Mafunisa, 2004; Nel & Rogerson, 2005; Diedericks & Joubert 2006; Phago, 2009). Khale (2015) and Marivate (2014) have listed the most common causes of protests over poor service delivery in the City of Tshwane. In the year

2010, the City of Tshwane has experienced backlogs of 19% for water provision, 32% sanitation services, 27% electricity, and 40% refuse collection (Horn 2010; Snyman & Vorster 2011; Aigbavboa & Thwala, 2013). Between 2008 and 2009, there were about 100 municipal service delivery protests in various South African municipalities (Phago, 2009; Horn, 2010; Snyman & Vorster, 2011; Aigbavboa & Thwala, 2013).

Findings from the study are vital for improving the quality of essential municipal services that are routinely provided to residents, businesses, clients, stakeholders and the general public. The results are vital for developing training and development plans for the City of Tshwane for improving the current quality of municipal service delivery. The study will propose feasible remedial actions for addressing issues such as poor performance and poor service delivery.

3. OBJECTIVES OF STUDY

The research study aims to achieve the following objectives:

- To identify and analyse the different training and development programmes offered in City of Tshwane
- To investigate the relationship between employee training and development on the quality of performance of City of Tshwane
- To establish the benefits of quality employee training and development strategies in the efficient provision of essential basic services within City of Tshwane

4. RESEARCH PROBLEM

The quandary with regards to service delivery performance by municipalities is multifaceted. However, the blame is largely directed at the management and employees' behaviour (Sanderson 2001; Nel and Rogerson 2005; Verbeeten 2008; Phago 2009). The amalgamation of district municipalities to form City of Tshwane was initiated by local government in a bid to monitor, evaluate and better manage public service delivery. Notwithstanding these efforts, inter alia, service delivery challenges are still rife as evidenced by service delivery protests that consistently erupt particularly in township locations (Cameron and Sewell 2003; Cameron 2005; Nel and Rogerson 2005; De Waal and Gerritsen-Medema 2006; Diedericks and Joubert 2006; Phago 2009; Horn 2010; Snyman and Vorster 2011; Aigbavboa and Thwala 2013). It appears that the problem in City of Tshwane lies with the quality of training and development programs offered to heighten employees' skills and attitudes to improve performance and conduct. Indeed, existing literature argues that as staffs skills are appositely trained and developed, they positively impact on or raise productivity and performance. In fact, several scholars concur that training and development are vital tools that assist to improve performance (Nel and Rogerson 2005; Horn 2010; Snyman and Vorster 2011). Thus, this study seeks to examine the relationship between training and development in improving employees' performance in City of Tshwane.

5. LITERATURE REVIEW

Nel and Rogerson (2005) have reported that improving the quality of municipal services is a key requirement for fostering growth in small enterprises and for the creation of jobs. Studies conducted by Worku (2014) and Ladzani & Netswera (2009) have shown that improving the quality of municipal services is helpful for promoting sustained growth in newly established small businesses. According to Khale (2015), in order to improve the quality of routine municipal services that are provided to newly established businesses, it is essential to develop tailor-made skills based training programmes to employees of municipalities such as the City of Tshwane.

Khale (2015) and Verbeeten (2008) have reported that the use of performance monitoring and evaluation tools must be accompanied by the provision of tailor-made skills based training programmes. Both authors have argued that training programmes need to be based on the practical needs of local municipalities as well as small businesses that are meant to grow and develop on a sustainable basis. According to Dierdorff and Suface (2007), it is vital to assess the training needs and key performance areas of employees before rolling out training programmes to employees of local municipalities such as the City of Tshwane. Khale (2015) and Marivate (2014) have both reported that the City of Tshwane needs to roll out tailor-made skills based training programmes to employees who are responsible for providing routine services to the general public as a means of reducing the current rate of failure in newly established small business enterprises.

Golam-Hossan (2007) have found that the provision of skills based and tailor-made training and development programmes is vital for motivating employees in large municipalities such as the City of Tshwane. The authors have shown that one key benefit is that of sound financial management and accounting. Cameron (2005) and Cameron & Sewell (2003) have reported that it is vital to implement monitoring and evaluation systems for monitoring the performance of employees who are required to provide routine and essential services to the general public. According to the authors, it is vital to provide incentives to such employees while monitoring and evaluating their performance on a regular basis. De Waal and Gerritsen-Medema (2006) have also reported a similar finding based on a case study conducted in the Netherlands. Diedericks and Joubert (2006) have shown that the transportation system in Tshwane could be improved significantly by providing sustained training opportunities to employees.

Breetzke & Horn (2006) have reported that performance at local municipal levels depends upon the legacies of apartheid. Studies conducted by Aguinis & Kraiger (2009) and Alegre, Tuhovcak & Vrbkova (2004) have shown that employees of local governments and municipalities must be provided with skills-based and tailor-made training programmes on a sustainable basis as a means of improving service quality standards to the general public. Barnow (2000) and Aragon-Sanchez, Barba-Aragon & Sanz-Valle (2003) have shown that improving service quality at municipal level is vital for fostering sustained growth and viability in start-up business enterprises in large municipalities such as the City of Tshwane.

Mafunisa (2004) and Snyman & Vorster (2011) have reported that skills based training programmes are essential for improving service quality standards in areas such as water and lights, road maintenance, finance, tax collection and waste management. According to Phago (2009) and McNamara (2008), the training of employees must be aligned to key performance areas and indicators. Such a goal could only be achieved by assessing the training needs of employees. In this regard, Sanderson (2011) has proposed a guideline that could be used for aligning the training needs of employees with key performance areas. The author has pointed out that performance monitoring and evaluation should be used as a tool for aligning the training needs of employees with key performance areas of employees.

In 2000, City of Tshwane was formed as a metropolitan municipality. It is located in Gauteng Province and includes Pretoria (Breetzke and Horn 2006). In 2008, the municipality merged with Metsweding, Cullinan and Bronkhorstspruit forming the single-largest metropolitan municipality in Southern Africa. It comprises 7 regions, 105 wards, 210 councillors and residents estimated at 2.5 million (Phago 2009; Horn 2010; Snyman and Vorster 2011; Aigbavboa and Thwala 2013). Because of its size and composition, it is classified as Category A Grade 6 Urban Municipality under the Municipal Demarcation Board in terms of Section 4 of Local Government Municipal Structures Act, 1998 (Act 117 of 1998). Its management comprises an executive mayoral system (Phago 2009; Horn 2010; Snyman and Vorster 2011; Aigbavboa and Thwala 2013).

The formation of the new City of Tshwane was consistent with the Gauteng Global City Region Strategy aimed at reducing the number of municipalities in the province and instituting new structures by 2016. In line with the new structures, the Mayoral Executive System combines with a ward participatory system along with Section 2 (g) of the Determination of Types of Municipality Act, 2000 (Act 1 of 2000). These change processes were geared towards local government transformation and aimed at enhancing the performance of employees in their positions of providing service delivery (Diedericks and Joubert 2006; Horn 2010). In fact, the Constitution of the Republic of South Africa (1996) states that municipalities must structure and manage their administration, budgeting, and planning processes in such a manner as to prioritise the provision of essential needs of communities and promote social and economic development.

The efficient provision of services remains a priority as stated in the municipalities' charter. Yet, municipalities in South Africa are constantly faced with challenges of how best to advance the status quo (Cameron and Sewell 2003; Cameron 2005; De Waal and Gerritsen-Medema 2006; Diedericks and Joubert 2006; Aigbavboa and Thwala 2013). Government and such bodies as South African Local Government Association (SALGA) instituted a number of changes for stepping up the efficient provision of services. Notwithstanding those change processes and prioritisation, municipalities particularly City of Tshwane continue to encounter challenges relating to improving service delivery in their areas of jurisdiction (Nel and Rogerson 2005; Phago 2009). Thus, employees' performance in municipalities is under close scrutiny.

In light of the above, the provision of training and development is one immediate solution that must be embraced in the provision of services to citizens (Golam Hossan 2007). In fact, related prior studies (e.g. Barnow 2000; Aragon-Sanchez, Barba-Aragón and Sanz-Valle 2003; Alegre, Tuhovcak and Vrbkova 2004) assert that it is the responsibility of human resource management to enhance employees' performance through training and development.

Employee training and development is a critical aspect in improving employee performance, which translates into improved organisational performance, growth and profitability. Aguinis and Kraiger (2009) and Dierdorff and Surface (2007) stress the importance of employee training and development and the resultant benefits that organisation receive. The latter authors note that in the future most organisations will depend on well-trained employees who perform key tasks and successfully manoeuvre in the global landscape performing different roles that contribute to the success of their organisations. McNamara (2008) argues that if organisations offer training and development programs, employees will be motivated and thus raises organisational commitment. It is in view of these assertions that this study examines the relationship between training and development and employees' performance in the specific context of City of Tshwane.

6. METHODS AND MATERIALS OF STUDY

The sample size of study was equal to 131. Purposive sampling was used for selecting eligible respondents working for the City of Tshwane in various Departments. A structured, pre-tested and validated questionnaire of study was completed by 119 municipal employees. In-depth interviews were conducted with an additional 11 municipal managers, directors and deputy directors working for the City of Tshwane. Quantitative data analyses were performed by using frequency tables, cross-tab analyses (Hair, Black, Babin & Anderson, 2010), and logit analysis (Hosmer & Lemeshow, 2013). Qualitative data analysis was performed by using coding, tallying, text analysis and triangulation.

7. RESULTS OF STUDY

Table 1 shows the general characteristics of the 131 respondents who took part in the study. The table shows that 49% of respondents have had past training opportunities. The percentage of employees with satisfactory performance was equal to 52%. It can be seen from the table that 60% of respondents have matric level academic qualifications. The percentage of respondents with degree level qualifications is only 14%. The table shows that 60% of residents rent property. The table shows that 61% of respondents earn salaries of 10, 000 Rand or less. It can be seen from the table that respondents who took part in the study are characterized by low level of skills, low level of formal education, and lack of expertise in areas that require advanced operational competence in municipal service delivery.

Table 1. General characteristics of respondents (n=131)

Characteristics of respondents	*Frequency and percentage*
Past training opportunity	Yes: 64 (49%)
	No: 67 (51%)
Performance in most recent quarter	Adequate: 68 (52%)
	Inadequate: 63 (48%)
Job satisfaction	Satisfied: 79 (60%)
	Not satisfied: 52 (40%)
Highest level of education	Matric or below: 71 (54%)
	Certificate or diploma: 30 (23%)
	Bachelor's degree: 22 (17%)
	Master's degree: 4 (3%)
	Doctorate or more: 4 (3%)
Gender	Male: 68 (52%)
	Female: 63 (48%)
Age category	20 years or less: 4 (3%)
	21 to 30 years: 33 (25%)
	31 to 40 years: 49 (37%)
	41 to 50 years: 35 (27%)
	51 years or more: 10 (8%)
Duration of service	Less than 5 years: 16 (12%)
	5 to 10 years: 34 (26%)
	11 to 20 years: 29 (22%)
	21 or more: 52 (40%)
Race	Black or African: 116 (89%)
	White: 8 (6%)
	Coloured: 5 (4%)
	Asian: 2 (2%)
Marital status	Single: 56 (43%)
	Married: 42 (32%)
	Divorced: 5 (4%)
	Windowed: 4 (3%)
	Others: 24 (18%)
Perception of low salary	Yes: 62 (47%)
	No: 69 (53%)
Perception of lack of appreciation	Yes: 29 (22%)
	No: 102 (78%)
Perception of poor career development	Yes: 31 (24%)
	No: 100 (76%)
Perception of low salary	Yes: 42 (32%)
	No: 89 (68%)
Perception of lack of incentives	Yes: 51 (39%)
	No: 80 (61%)
Negative perception of performance evaluation	Yes: 47 (36%)
	No: 84 (64%)
Total	n = 131 (100%)

Source: Results obtained from own study

Table 2 shows results obtained from cross-tab analyses. At the 5% level of significance, the results show that inadequate performance is significantly associated with lack of training opportunities, low level of formal education, lack of job satisfaction, lack of performance monitoring and evaluation, short duration of employment, perception of low salary, perception of poor employee benefits, perception of poor career development, perception of lack of incentives for employees, and perception of lack of appreciation from customers, in a decreasing order of strength.

Table 2. Results obtained from Pearson's Chi-square tests of associations (n=131)

Inadequate performance	*Observed Pearson chi-square value*	*P-value*
Lack of training opportunities	16.9754	0.000***
Low level of formal education	16.2946	0.000***
Lack of job satisfaction	16.0558	0.000***
Lack of performance monitoring and evaluation	14.3888	0.000***
Short duration of employment	13.4939	0.000***
Perception of low salary	13.3229	0.001**
Perception of poor employee benefits	13.3229	0.002**
Perception of poor career development	11.3609	0.004**
Perception of lack of incentives for employees	11.3295	0.007**
Perception of lack of appreciation from customers	10.9430	0.017*

*Legend: Significance levels at * P<0.05; ** P<0.01; *** P<0.001*

Table 3 shows results obtained from logit analysis. At the 5% level of significance, the results show that inadequate performance is significantly associated with lack of training opportunities, low level of formal education, and lack of job satisfaction, in a decreasing order of strength.

Table 3. Results obtained from logit analysis (n=131)

Inadequate performance	*Odds Ratio*	*95% C. I.*	*P-value*
Lack of training opportunities	6.80	(4.87, 8.36)	0.000
Low level of formal education	4.12	(2.89, 6.02)	0.000
Lack of job satisfaction	3.76	(2.28, 5.69)	0.000

The odds ratio of the variable lack of training opportunities is equal to 6.80. This indicates that an employee who is not trained on the job is 6.80 times as likely to underperform in comparison with another employee who is trained on the job.

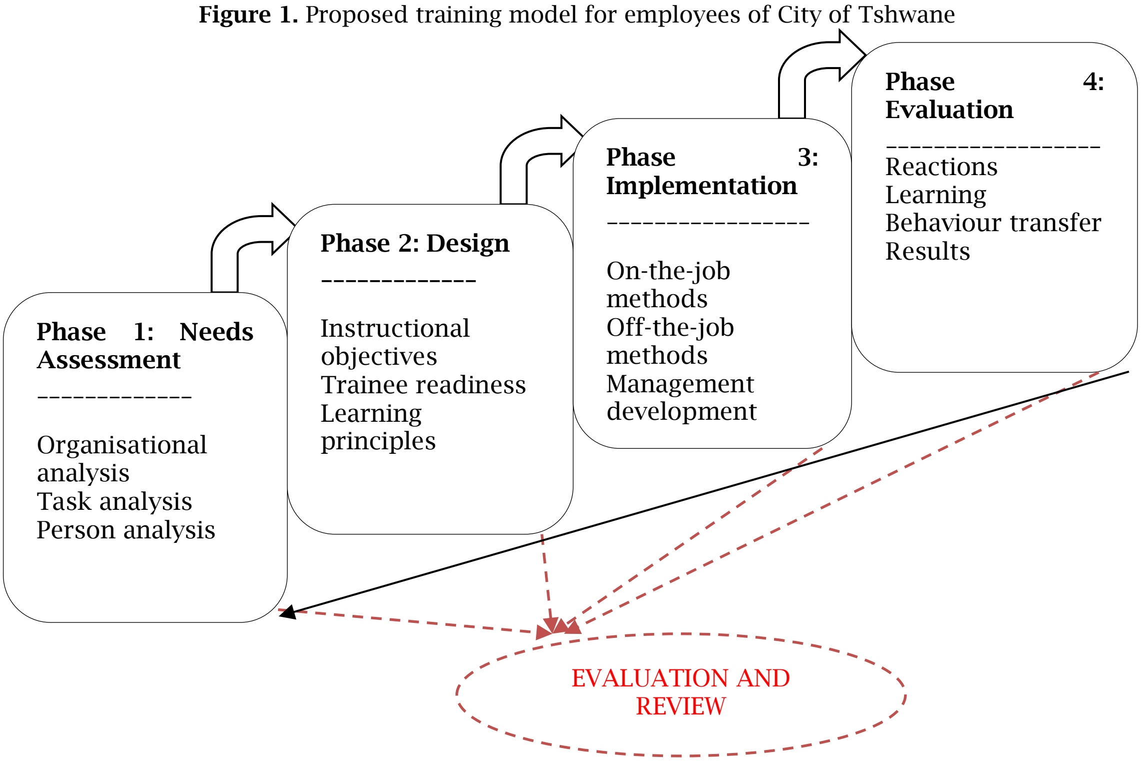
The odds ratio of the variable low level of formal education is equal to 4.12. This indicates that an employee who has a low level of education (matric level or less) is 4.12 times as likely to underperform in comparison with another employee whose level of formal education is high (above matric level).

The odds ratio of the variable low level of job satisfaction is equal to 3.76. This indicates that an employee who has no job satisfaction is 3.76 times as likely to underperform in comparison with another employee who has job satisfaction.

The key findings obtained from in-depth interviews were the following:

- There was a significant association between inadequate performance and lack of training opportunities.
- Employees who had a training opportunity were relatively more productive and better motivated at work in comparison with employees who did not have training opportunities. Training and development opportunities provided to employees by the City of Tshwane were not aligned to the skills needed for performing key performance areas (KPAs). Although the municipality continues to provide training via its respective departments, its training academy and external service providers, there is rampant service delivery protests in City of Tshwane particularly in the townships.
- The evaluation of performance of employees was plagued by the perception of racism, partisanship and political interference.
- There was an acute shortage of adequately trained experts in key areas of service delivery. Although the City of Tshwane has initiated internship and learnership programs that are aimed at offering training and development programmes, such efforts were not implemented vigorously.
- Performance monitoring and evaluation was not done in the context of seeking to improve service delivery but to increase salaries and determine whether bonuses could be awarded.
- There was insufficient follow-up after training and development programs to determine if the performance of trainees has improved significantly.
- Regionalisation was hampered by lack of trained, suitably qualified and dedicated personnel.

Figure 1. Proposed training model for employees of City of Tshwane



RECOMMENDATIONS TO THE CITY OF TSHWANE

It is strategically beneficial for the City of Tshwane to provide employees with career growth paths and development programmes. Tailor-made and skills based training opportunities should be provided to employees as a means of providing them with incentives and motivation at work. The training programmes must be aligned with the operational and business needs and requirements of customers of the City of Tshwane. The City of Tshwane should forge strategic partnerships and collaborations with key stakeholders such as research and academic institutions with a view to acquire suitable training and development programmes. A comprehensive monitoring and evaluation programme is vital for monitoring the progress made in this regard.

AREAS OF FUTURE RESEARCH

This study focused specifically on the relationship between training and development and performance management. Future research could focus on the following:

- The impact of training in specific areas such as communication, computer skills and customer service on the performance of employees in municipalities
- Evaluating the morale of employees as this aspect impacts on the quality of service delivery in municipalities
- The relationship between training and development and performance management in the context of private sector institutions
- Developing frameworks for training and development for municipalities that may be experiencing service delivery problems.

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AN EARLY WARNING SYSTEM FOR INFLATION USING MARKOV-SWITCHING AND LOGISTIC MODELS APPROACH

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Abstract

With the adoption of the inflation targeting by the South African Reserve Bank (SARB) in 2000, the average inflation radically went down. Earlier 2000, the inflation rate was recorded at 8.8% that is January 1999; then a year later went down to 2.65%. What's more, this paper builds up an early warning system (EWS) model for predicting the event of high inflation in South Africa. Periods of high and low inflation were distinguished by utilizing Markov-switching model. Utilizing the results of regime classification, logistic regression models were then assessed with the goal of measuring the likelihood of the event of high inflation periods. Empirical results demonstrate that the proposed EWS model has some potential as a corresponding instrument in the SARB's monetary policy formulation based on the in-sample and out-of-sample forecasting performance.

Keywords: Markov-Switching, South African Reserve Bank Inflation Targeting

1. INTRODUCTION

Price stabilization and low inflation is a common target that is being used by monetary authorities globally. The empirical evidence shows that price stability is crucial because the judgement that consumers make about their living standards has been twisted by the unstable inflation rates. These distortions, in turn lead to market failure which then slows down the rate at which the economy grows. The money available to buy goods and services will gradually wear off due to high inflation, eventually harming the low income households. Therefore, the sustainable economic growth is supported by the monetarises through stabilisation of inflation and keeping it to the low rate.

The inflation targeting (IT) framework has been adopted by the South African Reserve Bank (SARB) since the year 2000 as part of monetary policy formulation. Monetary authorities take modern ideas and calibrate rates of their policy to manage variance of expected inflation in the future. The future path of assessment on pressures of inflation had been provided to the monetarists with reliable forecasts through the utilisation of statistical models (Cruz & Dacio, 2013). In addition, to control and contain the inflation rate within the chosen interval, the SARB had previously used the repo rate instrument. However, the defaults of this method of combating inflation have not been criticized neither in the SA context but also internationally.

However, Svensson (2010) contends that a fruitful approach may be portrayed by 1) a publication of numerical expansion target, 2) the usage for fiscal strategy that provides for a significant part on the expansion forecast, 3) a selection from claiming short-run enthusiasm rates similarly as the best fiscal strategy instrument, but more importantly; 4) a secondary level for transparency and also its responsibility. Proponents of the inflation targeting, include many studies such as of Mishkin and Schmidt-Hebbel (2007); and Corbo *et al.* (2002); de A. Nadal-De Simone (2001) and Hyvonen (2004) which showed those experimental outcomes about that expansion which, may be connected with a change of generally financial execution.

Predictive models that quantifies the likelihood of the future occurrence of inflation crisis like the warning system that are being developed in this paper, will be used to supplement the current toolkit of the SARB in the assessment of inflation environment and the risk of inflation outlook. This will also provide policy makers with a warning indicator shifts in inflation regime which in real time is possible and finally forecast for the occurrence of the high inflation or low inflation for the period of 5 years. This empirical analysis is arranged in to four sections. The remaining part of the following paper is as follows: section two presents data and material used. Section 3 presents the empirical results as well as the evaluation of the proposed model; while section 4 outlines discussion and recommendations.

2. DATA AND MATERIALS

The study is based deeply in describing the key variable of interest for the inflation targeting framework (IT) by the SARB. The period that was sampled is from 2000q1, which is a year SARB has adopted the IT until 2014q4. The time series dataset was accessed from Quantec database. To maintain the assumption of normality, Mordkoff (2011) implied the distribution of the sample mean approaches normality as the sample size (n) increases through central limit theorem regardless of the shape of the distribution. Chen *et al.* (2010) explicitly bargained for Mordkoff's view by suggesting a sample size as big as 30 or more observations in order to protect the assumption of normality. Furthermore, in order to alleviate the variance factor of the series, Sadowski (2010) put forward the log transformation as an optimal procedure with the standard deviation that increases linearly with the mean of the series. This transformation as highlighted by Montgomery *et al.* (2015) follows the form:

$$Y_t = \left[\frac{(X_t - X_{t-1})}{X_{t-1}}\right] * 100 \quad (1)$$

Pre-differencing transformation as proposed by Bruce *et al.* (2005), should sometimes be engaged so as to stabilize the properties of the series. Oxmetrics 6 and Eviews 9 are used for data analysis.

2.2. Material Used

Normality Test

The study firstly examines the data by the use of exploratory data analysis through the implementation of the descriptive statistics. And for the normality test of the data the Jarque-Bera statistic is used.

Jarque-Bera (JB) test is used in this study to test the speculation about the fact that a given sample X_s is a specimen from a normal distribution and the error term form the estimated model is normally distributed with mean zero and variance 1. The JB test of normality performs better when used on samples in excess of 50 observations. From the power computations, the JB test is found to have a large empirical alpha test of normality for both small and large samples hence it is the best over the other normality tests. The JB test is estimated using the following formula:

$$JB = \frac{n-k}{6}\left(S^2 + \frac{1}{4}(K-3)^2\right) \sim \chi^2, 2df \quad (2)$$

where S is the skewness, K is the number of regressors from the regression model, n is the sample size and $2df$ is the number of degrees of freedom. The test follows a chi-square distribution with 3 degrees of freedom for sample size of 2000 and above. But when the sample is less than 2000, the JB test follows a normal cumulative distribution (NCD). The tested hypothesis is:

$$H_0: E[X_s] = 0$$
$$H_0: E[X_s] \neq 0$$

The null hypothesis is rejected if the calculated probability value of the JB static is less than the observed probability value or if the calculated JB statistic is greater than the critical value obtained from chi-square distribution with two degrees of freedom for small samples.

Nonlinearity test

To test for nonlinear effects in the SA inflation rate, the study uses the nonparametric method which is known as BDS. The method was used by Wang *et al.* (2006), to test serially independent series and nonlinear plan in a time series. The test is based on the integral correlation of the series and is defined as follows:

$$BDS_{m.M}(r) = \sqrt{M}\,\frac{C_m(r) - C_1^r(r)}{\sigma_{m.M}(r)} \quad (3)$$

Where M is the embedded points of the space with m dimension; r is the radius of a sphere centred on X_i, C is the constant and $\sigma_{m.M}(r)$ is the standard deviation of $\sqrt{M}C_m(r) - C_1^r(r)$.

Markov-Switching Model

Markov Switching models (MSM) have turned out to be progressively the mainstream in economic studies of industrial production, interest rates, stock prices and unemployment rates. So far there is no study that has showed in any subtle element of the moments that these models produced (Timmermann, 2000). The model was developed by Hamilton (1989a). Hamilton outlined that his algorithm can also be seen as a time series statistical identification of turning points procedures.

Furthermore, Calvet and Fisher (2001, 2004) point out that the assets returns by the MSM are been joined by the stochastic instability segments of heterogeneous durations. According to Lux (2008), MSM is able to determine the outliers, volatility and power in financial returns. Standard instability of the models in currency and equity series are shown differently by an MSM. For example, an out-of-sample models such as GARCH (1,1) and fractionally integrated GARCH (FIGARCH) is unsteady for the task. Due to these shortcomings of these models and others, researchers utilise an MSM as a part of the financial industries with the aim to forecast volatility and also to compute the risk and price derivatives.

Two Conditional independence assumptions are the ones that characterises a Markov Switching autoregressive (MS-AR) process. This includes in them, (1) the conditional distribution of laten series given the estimations of $\{S_t\}$t` < t what's more, $\{Y_t\}$ t` < t just relies upon the estimation of the one lag of the laten series. In different terms, the first order Markov Chain (MC) which its development is autonomous of the past series conditions is expected to be a series type of $\{S_t\}$. In the current study, the series condition is the inflation rate (CPI). (2) The conditional spreading of Y_t given the estimations of $\{Y_t\}$ t` < t and $\{S_t\}$t` < t just relies upon the estimations of S_t *and* Y_{t-1}, Y_{t-p}. Respectively. For a specific application, this implies that the inflation rate is an AR procedure of an order $P \geq 0$ with the coefficients advancing in time with the sequence of the inflation type.

Calvet and Fisher (2004) moved to the other series such as of exchange rate volatility. The GARCH (1,1) that they had compared, clearly showed that there are significant gains in forecasts of exchange rate volatility on the horizon of 10 days to 50 days (See also the work of (Klaassen, 2002a). Nonetheless, similar results were also obtained by Lux (2008) when using linear predictions. An empirical study of four daily exchange rate series revealed that when comparing the MSM with student-GARCH (1,1) of Bollerslev (1987), the

Markov-Switching GARCH (MS-GARCH) of Klaassen (2002b) and the FIGARCH of Baillie *et al.* (1996), then MSM is said to give precise results over all the stated models.

MSM fit in mainly with a class of mixed distributions. Econometricians enthusiasm for this class of distributions takes into account their capacity functions and create a more extensive scope of qualities for the skewness and kurtosis than its realistic through utilization of a single distribution (Timmermann, 2000). Vargas III (2009) added to the existing literature by emphasizing that MSM is a creative instrument to go with currency traumas and in addition, deciding the variables that lead the economy starting with one state then onto the next, say, from conventional period to a turbulent period.

The uses of MSM however, were started by Engel and Hakkio (1996). Engel and Hakkio in their study of currency crises established these models which eventually gained popularity in the use of the studies of the EWS models. The MSM in Brunetti *et al.* (2008); Abiad (2003) and Mariano *et al.* (2002) deals with wrong classification of crises when future disturbing periods in the data are included.

On the other hand, it is however, showed by Ailliot and Monbet (2012) that the MS-AR is the generalization of the Hidden Markov Models (HMM) and autoregressive (AR). Different AR models are combined and this leads to the process at different time and the transition between these AR models are being controlled by a hidden MC such as that of HMM. Numerous regime with lower AR models have been proposed in the literature for modelling meteorological time series see (Parlange & Katz, 2000).

The MSM of Hamilton (1989, 1990) offered an ascent investigation of the dynamics of exchange rate movements and one territory is the study of currency crises. According to Vargas III (2009), modelling of EWS for currencies by the implementation of the Markov switching Regression (MSR), where two regimes are considered together with stable and volatility as a mixture distribution of two normal, was first modelled by Engel and Hakkio in 1996. Then, again, utilization of the time varying transition probability (TVTP) of the MSR model shows a proof of contagion in an Asian financial crises where an ISP of Thailand and Korean enhanced the estimation of the conditional likelihood of the crisis in Indonesia.

Also, Abiad (2003) and Mariano *et al.* (2003) utilized an MSR with TVTP to build up an EWS and they utilized the MS of the adjustment in nominal exchange rate with three classifications of early warning indicators. Brunetti *et al.* (2008) further improved the model of Marino and others by accounting for large variances over time in periods of crises by building a conditional variance GARCH model.

Therefore, Hamilton (1989b) presented the MS-AR which follows the form:

$$Y_t - \alpha(S_t) = \Phi_1[Y_{t-1} - \alpha(S_{t-1})] + \cdots + \Phi_p[Y_{t-p} - \alpha(S_p)] + \varepsilon_t \quad (4)$$

In which, when re-parameterised yields: $Y_t = C + +\varphi_1 Y_{t-1} + \varphi_2 + \cdots + \varphi_p Y_{t-p} + \varepsilon_t$

Which it is further simplified to

$$Y_t = \sum_{i=1}^{p} \varphi_i Y_{t-1} + \varepsilon_t \quad (5)$$

where the $AR(p)$ process coefficients are $\varphi_1, \varphi_2, \ldots, \varphi_p$ and the $\varepsilon_t \sim iid(0, \sigma_t^2)$ and $\alpha\ and\ (S_t)$ are the regime or states depended constants S_t and represent α_1 if the process is in state or regime 1 ($S_t = 1$), α_2 if the process in state or regime 2 ($S_t = 2$) and α_R if the process is in state or regime R ($S_t = R$) the last state or regime. The process of one regime changing to the other and vice versa, is been administered by the first order MC R state with the flowing transition probability:

$$\begin{aligned} p(S_t = 1 \mid S_{t-1} = 1) &= P_{11} \\ p(S_t = 1 \mid S_{t-1} = 2) &= P_{12} \\ P(S_t = 2 \mid S_{t-1} = 1) &= P_{21} \\ P(S_t = 2 \mid S_{t-1} = 2) &= P_{22} \end{aligned} \quad (6)$$

and $P_{11} + P_{12} = P_{21} + P_{22} = 1$ which are also known as the transition probabilities and are estimated from the two-regime MS-AR model. The underlying MS-AR (p) model is then given by:

$$\begin{gathered} Y_t = \alpha(S_t) + \left[\sum_{i=1}^{p} \beta_i(y_{t-1} - \alpha(S_{t-1})\right] + \varepsilon_t \\ \varepsilon_t \sim iid(0, \sigma^2(S_t)) \\ S_t = j, S_{t-i} = i \ldots i, j = 1 \end{gathered} \quad (7)$$

Whereas $S_t$is the latent state component that takes the values of 1 for high regime period or 0 for low regime period.

The MS-AR permits one to make inference about the observed regime value S_t , through the behaviour of the exogenous Y_t.This inferences follows the filtered probabilities, which when estimated, the simple iterative algorithm is used to compute both the probability function repeatedly and the conditional filtered probability on the accompanying set of observations $\xi_t = (X_{t,}X_{t-1}, \ldots, X_0)$ till to time t which are defined as $P(S_t = i|\xi_t)$. On the other hand, smoothed probabilities are obtained if the data set is used as a whole. These probabilities however, are conditionally estimated on the whole sample size n observation. i.e. $\xi_t = (X_t, X_{t-1}, \ldots, X_0)$. The most important information which is extracted from the transition matrix is the expected duration of the i^{th} regime and additionally the normal duration of the i^{th} regime. Meanwhile, $\frac{1}{P_{ij}}$ is a reciprocal of the expected duration of the process to stay in i^{th} regime. The value of P_{ij} for $i \neq j$ when it is small it reveals that the process takes a longer time in regime i while the corresponding $\frac{1}{P_{ij}}$ reveals the duration in which the process stays in the regime i. The assumption that Hamilton made is that $MS - AR \sim N(0,1)$ and the state is assumed to be a discrete state of the Markov process.

Logistic Regression

In order to fit the logistic model, James *et al.* (2013) indicated that maximum likelihood estimates (MLE) is an optimal procedure to fit the best model; and the model always give out an S shaped curve regardless of the value of X. Furthermore, sensible results will always be obtainable. In many literature such as of Cimpoeru (2015), there are three methodologies for developing an EWS for banking crisis being the bottom-up methodology, the aggregate methodology and the macroeconomic methodology. In the first method, the likelihood of bankruptcy is addressed for every bank and the systemic volatility is activated and signed if the likelihood of bankruptcy becomes significant for a high extent of the resource in the banking sector of a certain economy. For the second method, the model is applied to data other than individual banking data. On the third method, the focal point is centred in building a relationship between economic variables with the review that various macroeconomic variables are required to affect the financial system and reflect their own condition.

In the binary models study of Moysiadis and Fokianos (2014), more emphasis was made to a time series that follows a categorical setting by showing that it is pushed by an inactive procedure or system input and kinds of models are very close in resembling GARCH models. But for them they to replace conditional variances, they are been described in terms of conditional log-odds.

The application of logistic regression analysis in the prediction of bankruptcy has been pioneered by Ohlson (1980). He described the logit model as a non-linear change of the linear regression and a system that weighs the covariates and then assigns a score. The logit methodology joins together the nonlinear changes and make use of the cumulative distribution function from the logistic to maximise the joint likelihood of default for the firms' upset and also, the non-failure likelihood for the sound organizations in a sample. A great part of the early research in the region of financial suffering, concentrated on Multiple Discriminant Analysis (MDA) and after that in later years on logistic analysis (LA).

To reduce randomness in assigning the observed time category in a time series, Fokianos and Kedem (2003) proposed that t^{th} observation of categorical time series nevertheless the measurement scale should be defined as a vector. For example, variables that are nominal. In this case, the multinomial logit model that is defined by Agresti (2013) is mostly used in analysing a nominal scale time series.

Because of the small samples and the need to keep the degrees of freedom, Kolari *et al.* (2002) added to the work of EWS for bank crises by estimating the stepwise logistic regression in order to identify the subset of the covariates that are needed in the model through their power to discriminate. Even though, Demyanyk and Hasan (2010) conducted the similar study to that of Demirgüç-Kunt and Detragiache (2005) where they both reviewed signal approach and multivariate probability model. However, with the Kunt and Detragiache's multiple logit method, the likelihood of occurrence of a crisis is thought to be a vector of explanatory variables. To estimate the probability of the crisis, Demirgüç-Kunt and Detragiache (1998) developed an econometric logit model which is fitted to the data and maximised the likelihood function.

More formally, neither the country is encountering a crisis nor is it not in every period. As needs be, the response variable is set to zero if there is no crisis and set to one if there is a crisis. The likelihood that in a certain country at a specified time a crisis will occur is said to be a vector component of n explanatory variables $X(i,t)$.

While building the EWS model for inflation, the study uses a logistic regression model to model the probability of high inflation regime. Being guided by the discussion of Tong (2012), the study then design a binary series outcome with values 0 or 1 respectively denoting a low inflation and high inflation regimes. Then again the corresponding P-dimensional vector of the past covariates $t = 1,2,3\ldots,T$ comes from the set series of say $W_{t-1} = (W_{(t-1)1},\ldots,W_{(t-l)p})$ and represents the process as W_t .The main focus of the study is a successful likelihood conditional estimation which is represented by

$$P_\beta(Y_t = 1|S_{t-1}) \tag{8}$$

where β is a p-dimensional vector, and S_{t-1} represents the observed components to the researcher at time $t-1$ of the time series and the covariate information.

In guaranteeing that $P_\beta(Y_t = 1|S_{t-1})$ produce proper probability estimates, a suitable inverse link $h \equiv F$ is chosen and employed in such a way that it maps both real line and the interval [0,1]. Finally, denoting the probability of success given F_{t-1}asΠ_t, then it is obvious that the model is demonstrated as:

$$\Pi_t(\beta) = \mu_t(\beta) = P_\beta(Y_t = 1|S_{t-1}) = F(\beta^{`} Z_{t-1}) \tag{9}$$

F is continuous and strictly an increasing function, and returns values ranging between 0 and 1, the column vector of the parameters from the same p-dimension is denoted by β this comes from the covariate process W_{t-1}. Thereafter, the logit model is determined by the choice of F which has the standard cumulative logistic function that leads to the generalisation of the logistic regression model presented by:

$$\Pi_t(\beta) = P_\beta(Y_t = 1|S_{t-1}) = \frac{1}{1+e^{\left(-\beta^{`} Z_{t-1}\right)}} \tag{10}$$

where the column vector of parameters of the same p-dimension from the covariate process W_{t-1} is given by β. Furthermore, the inverse link is been defined by $F \equiv \Phi$, with Φ being a cumulative function from a standard normal distribution. In the study of Nyberg (2010), the same results were obtained while using the logit and probit models.

Hosmer Jr *et al.* (2013) provided a large discussion using maximum partial likelihood estimation (MPLE) for estimating β. They however indicated that when $N \to \infty$, then $\hat{\beta} \to \beta$ in probability because the MPLE of $\hat{\beta}$ is surely unique for sufficiently large N.

Model Selection

For model selection, the study employs the of Akaike Information Criterion (AIC), and likelihood ratio. According to Pan (2001), Akaike Information

Criterion (AIC) is most powerful and recently widely used by most researchers and it was proposed by Akaike (1973) as:

$$AIC = -2L(\beta; D) + 2p \tag{11}$$

Likelihood ratio test is one of the methods that are recently employed to select the model. The test is thought to test the goodness of fit between models of which null model is unique from the other which is the alternative. This test has been popularized by Bevington and Robinson (2003).

$$T_{LTR}(x) = -2logR(x) \tag{12}$$

where $R(x) = \frac{SUP_{\theta e \Theta_0} L(\theta|x)}{SUP_{\theta e \Theta} L(\theta|x)}$ with $L(\theta|x)$ denoting the likelihood function.

The model with the least AIC is the favoured model. Granger and Jeon (2004) made a comparison study between the AIC and SBC. They discovered that on average, AIC reformed models though SBC fitted parsimonious AR models and out-performed AIC. SBC performed better than the AIC regarding minimizing the mean squared estimates. But with the likelihood ratio, the favoured model is the one with the highest likelihood ratio. The current study uses both AIC and likelihood ratio.

3. EMPIRICAL ANALYSIS

This section provides and discusses the preliminary and primary analyses results.

3.1. Exploratory Data Analysis

The study begins by exploring the data through the use of descriptive statistics to assess the behaviour the inflation rate. For the assumption of normality, the JB test is established and the results are presented in table 1.

Table 1. Descriptive Statistics

Statistic	*Inflation*
Mean	6.112942
Median	6.056707
Std Deviation	0.985579
Skewness	0.066392
Kurtosis	2.95683
JB	0.045488
P-Value	0.977513

The mean value of inflation reveals that, on average the SA economy has inflation rate of 6.11% per quarter. On the other hand the median value also indicates that, SA inflation takes 6.1 quarters to increase or decrease. One other important result is the Skewness, and kurtosis. Both the values of kurtosis and skewness implies that the data is normally distributed hence the JB statistic confirms that the data is normally distributed with a probability value of 0.977513.

3.2. Nonlinearity test

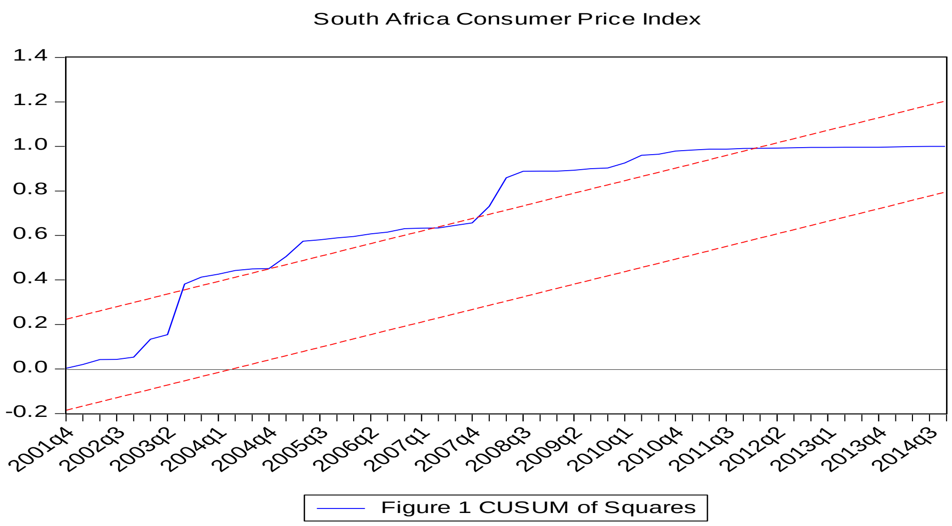
In this part of the paper, the linearity test by the use of the BDS test is conducted and reported results are in table 2.

Table 2. BDS Test for Nonlinearity

Dimension	*BDS Statistic*	*Std. Error*	*Z-Statistic*	*Prob*
2	0.13492	0.009686	13.92983	0.0000
3	0.161693	0.009016	17.93356	0.0000
4	0.149425	0.006304	23.70191	0.0000
5	0.126663	0.003864	32.7822	0.0000
6	0.103706	0.002194	47.27753	0.0000

The BDS results in table 2 indicates that there is some nonlinear effects in the inflation rates series hence the data can be model using a nonlinear model. Confirming the BDS results, an $AR(2)$ model was estimated and examined for the stability of the model coefficients by employing the CUSUM of squares which was proposed by Brown *et al.* (1975) and the results are presented in figure 1 which indicates that the SA CPI is unstable because the series is out of the control bends of the graph.

Figure 1. CUSUM of Squares



Still in-line with the nonlinear testing, the study continues by employing a Bai-Perron structural breakpoint test. From the results in table 3, there are only three structural breaks identified with the period of 2001q1 to 2014q4. The procedure used to select the number of breaks is the Bayesian information criterion (BIC). According to Bai and Perron (2003), the best information criterion to select the number of breakpoints is the BIC criterion (Also see (Bai and Perron 2003b, Paye and Timmermann 2006 and Timmermann 2001).

Table 3. Multiple Breakpoint Test

Breaks	*Number of Coefficients*	*Sum of sqrd Residual*	*Log-likelihood*	*BIC*	*LWZ*
0	2	107814.3	-286.5145	7.726553	7.818475
1	5	89446.25	-281.3783	7.758363	7.990875
2	8	67598.33	-273.6768	7.69689	8.073598
3	11	43669.54	-261.6611	7.478539	8.003527
4	14	39409.34	-258.8383	7.594473	8.272399
5	17	39284.42	-258.751	7.80988	8.646113

Table 4 presents the periods of the structural break points that have been detected. The first break point occurred in 2003q2 and followed 2005q3 then 2008q1 and 2010q1. Periods on 2008q1 and 2010q2 are associated with the financial crisis that hit the global markets.

Table 4. Periods of Structural Breaks

Number of breaks	*Break dates*		
1	2003Q2		
2	2003Q2	2005Q3	
3	2003Q2	2008Q1	2010Q1

All over again, table 5 presents the estimated AR (2) model. From this model, at 5% level of significance, all the estimated AR parameters are found significant. Then misspecification of the model is examined by the RESET test. The main purpose of the Ramsey RESET test is to test the instability of model variance or misspecification of the model. In this case, the F statistic of the RESET test is significant with a probability value of 0.0463, hence the results conform to the CUSUM test and BDS test that there is a nonlinear cases in the data set.

Table 5. Estimated AR Model with Nonlinearity test

Variable	*Coefficient*	*Std. Error*	*Test Statistic*	*Prob.*
Φ_0	6.068751	0.533497	11.37543	0.0000
Φ_1	0.879985	0.055843	15.75815	0.0000
σ^2	0.192842	0.024323	7.928264	0.0000
RESET TEST	2.857062			0.0463

3.3. Model Estimation and Selection

Six two regime MSM, which are $MS(2) - AR(1)$ *to* $MS(2) - AR(6)$ are been estimated The best model is selected based on the AIC of each model because AIC is said to be more powerful in detecting the best model compared to likelihood ratio test as Posada and Buckley (2004) and Bozdogan (2000);Pan (2001) and Posada (2003) have highlighted in their work. In reference to table 6, the best model is selected to be $MS(2) - AR(2)$ because the AIC associated with the model is found to be 9.942339 which is the smallest of all other estimated $MS(2) - AR(P)$ models. Nevertheless, based on the parsimony principle, and also looking at the statistical significance of the lags, the study then chooses $MS(2) - AR(1)$ as the final model.

All the estimated coefficients of $MS(2) - AR(1)$ are found to be significant at 5%. The other interesting part of the analysis is the transition probability metrics which is presented as $p(S_t = 1|S_{t-1} = 1) = 0.95053$, $p(S_t = 2|S_{t-1} = 2) = 0.90268$, this suggests that the probability of low inflation is higher than that of high inflation. When the process is in regime 0, there is a low probability that it switches to regime 1 (high inflation) and the probability of switching to high inflation $P(S_t = 2|S_{t-1} = 1) = 0.04947$. The average duration of each regime also support this. Based on the expected duration, the low inflation regime has 11.67 approximately 12 quarters while the high inflation has only 10 quarters respectively. This denotes that SA economy will be in state one (low inflation for an average of 12 quarters and high inflation to an average of 10 quarters).

The probabilities of the smoothed, filtered and forecast for each regime are reported in Figure 2. It can be observed that the low inflation regime dominates the counter part of the high inflation regime. This coincides with results reported earlier in table 7 that there is high expectation of a low inflation regime in SA. In addition to that, from 2001q2 to 2001q4, 2005q1 to 2007q4 and lastly 2010q1 to 2014q4, the fluctuations for inflation rate is extremely high which forces the process to be in regime 0 with $0.5 \leq P \leq 1$ and on the remaining quarters of the frequency which is 2002q1-2004q4 and 2008q1 to 2009q 4 are the episodes of high inflation.

Table 6. Model Estimation and Selection

Models(MS-AR)	*Number of states*	*Number of lags*	*log likelihood*	*AIC*
1	2	1	-266.84216	9.9942603
2	2	2	-258.44315	9.942339
3	2	3	-267.18838	10.535411
4	2	4	-245.36920	9.9757386
5	2	5	-251.14978	10.437246
6	2	6	-236.46173	10.178469

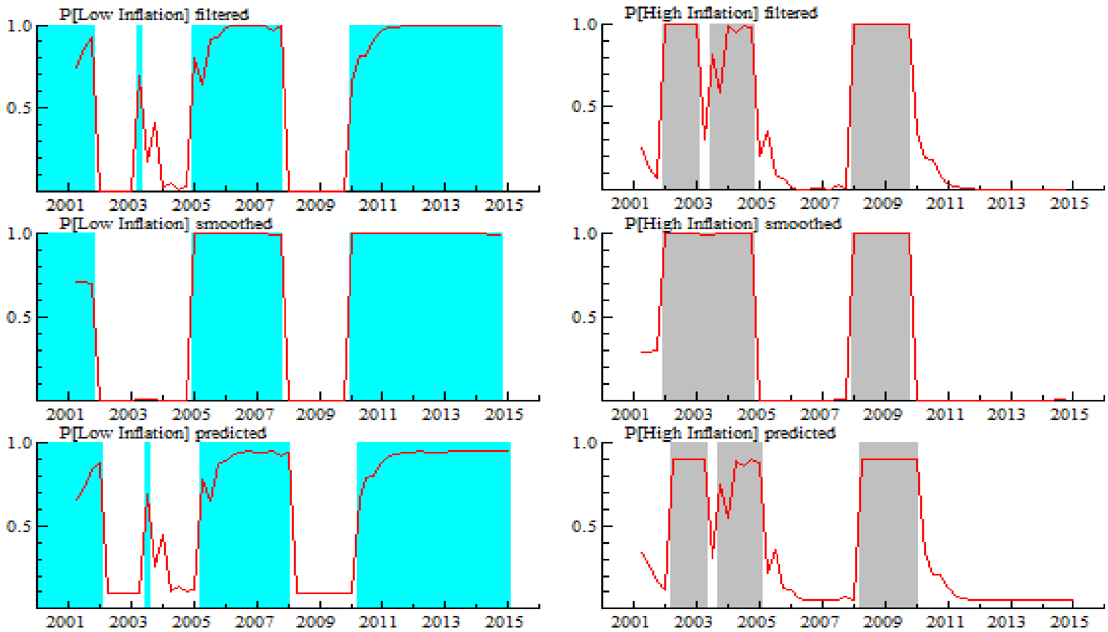
$Estimated\ MS(2) - AR(1) Coefficients$

Table 7. Markov-Switching parameters

Parameter	*Coefficients*	*Stand Error*
C_1	575.174	20.34
Φ_1	0.871363	0.03501
σ_1	14.8421	1.845
C_2	688.274	20.4
Φ_2	1.11463	0.08675
σ_2	54.5374	8.86
Regime 0 [Low inflation]	**Regime 1[High Inflation]**	
0.95053	0.097318	
0.04947	0.90268	

The causes of high inflation episodes in 2002 to 2004 are the results of the adjustment made to sudden reversals of capital and its difficulties in attracting foreign direct investment and also the reflection of the macroeconomic policy for the maintenance of stability and improvement of growth rates by trying to avoid the overheating and appreciation of real exchange rate by the SARB. In the period 2008 to 2009, the high inflation was caused by the financial crisis that started in the United States (U.S). According to Moroke *et al.* (2014), most of the developing countries such as SA also suffered the effects of this crisis because there is much evidence that this crisis is still lingering and in many cases the crisis is still on-going.

Figure 2. Filtered, smoothed and forecast probabilities for each regime



The results of MSM can be useful to cluster the quarters into low inflation or high inflation as per table 8. To identify the periods of low and high inflation, the smoothed probabilities are used and the results indicate that from 2001q2-2001q4, 2005q1-2007q4 and from 2010q1-2014q4 are periods of low inflation, while the other remaining quarters within the same frequency are periods of high inflation.

Table 8. Episodes of High and Low Inflation

Low Inflation	*High Inflation*
2001(2)-2001(4)	2002(1)-2004(4)
2005(1)-2007(4)	2008(1)-2009(4)
2010(1)-2014(4)	

3.4. Model Diagnostic Test

After model estimation, the best model was then checked for diagnostics. For all of the statistical diagnostic tests, the assumptions of the error term were found not have been violated. For Normality test, the residuals were found to be normally distributed. Moreover, the study tested for correlation of the error term. Godfrey serial correlation test of the error term concludes that the error term is not serially correlated. On the other hand, the ARCH test is used to test the homogeneity of the variance of the error term. The results reported that there is no problem of the homogeneity in the variance of the error term. Table 9 presents the diagnostics test results.

The Performance Assessment of the Logit based EWS Model

The following scenarios are provided by the logit model after the probability estimates:

1) Incident A presents the time the model indicates a crisis when a high inflation event indeed occurs.

2) Incident B is an event of a wrong signal from the model.

3) Incident C reports the probability of missing signal from the model

4) Incident D indicates a situation in which the model does not predict a crisis and no crisis occurs.

In addition to that, the study uses the standard value of 0.5 to discriminate the probabilities of crisis signals.

Table 9. Model Diagnostic Checking

Test	*Test Statistic*	*Prob*
Normality	2.0316	0.3621
ARCH 1-5	1.1113	0.3712
Serial Correlation	15.781	0.2015

3.5. Logistic Regression Model

In building the SA's EWS for high inflation, the LRM is considered. The likelihood from the logit model provides a reasonable assessment about the feasibility of SA inflation crisis. Through the classification of the MSM, 1 is given to the scene of high inflation while that of low inflation is named 0.

Table 10 reports the logit model results. The coefficient signs of the indicators to the crisis are found consistent with the expectations from the theory. The negative constant is related to the inflation, hence inference of surge in the value of the constant degreases the likelihood that the country will enter in high inflation period.

Table 10. Estimated Logit Model

Variable	*Coefficient*	*Std. Error*	*t-statistic*	*prob*
Constant	-0.510826	0.276	-1.85	0.07
AIC	1.35884076			
LR statistic	29.959			
Prob(LR statistic)	0.0000			

To evaluate the EWS model performance, the study utilizes the following performance criteria which were proposed by Kaminsky *et al.* (1998)

a) Percent of crisis correctly called (PCCC) : $\frac{A}{B+C}$

b) Percent of non-crisis correctly called (PNCCC) : $\frac{D}{B+D}$

c) Percent of observations correctly called (POCC): $\frac{A+D}{A+B+C+D}$

d) Adjusted noise-to-signal ratio (ANSR): $\frac{B}{B+D}/\frac{A}{A+C}$

e) Probability of an event of high inflation given a signal (PRGS): $\frac{A}{A+B}$

f) Probability of an event of high inflation given no signal (PRGNS): $\frac{C}{C+D}$

g) Percent of false alarms to total alarms (PFA): $\frac{B}{A+B}$

Table 11. Forecasts of the EWS model

In-ample		*High Inflation*		*Low-inflation*		*Total*
	High	21.88	(63%)	7.87		30
	Inflation					
Predicted	Low					
	inflation	13.12		13.13	(63%)	26
	Total	35		21		56
Out-sample		High Inflation		Low-inflation		Total
	High					
	Inflation	5.04	(46%)	7.04		12
Predicted	Low					
	inflation	5.96		5.96	(46%)	12
	Total	11		13		24

The results demonstrated in table 11 suggest that the model has some EWS potential. In view of the in-sample estimates, the model has the capacity to accurately predict 63% of high inflation and 63% of low inflation occasions. Overall, 63% of observations are correctly identified by the model. Moreover, the proportion of a high inflation event given a signal is relatively high at 63% while the proportion of false alarms is relatively low at 37%.

A satisfactory performance of the in-sample of the model does not link a great performance of the out-of-sample. In assessing the out-of-sample inferences, the EWS model is re-estimated by utilising the sample period of 2015 to 2020.

Results in Tables 12 indicate that there is 46% chance of high inflation incidence which is lower than the 63% from the in-sample. In addition, the proportion of false alarm is 46% which rose slightly from the 37% of the in-sample.

Table 12. Forecasting Performance of the EWS model

	In-Sample	*Out-of-sample*
PCCC	63	46
PNCCC	63	53
POCC	63	46
ANSR	59	1.17
PRGS	63	46
PRGNS	37	54
PFA	37	46

4. DISCUSSION AND CONCLUSION

The following paper has developed a EWS model for predicting the occasion of inflation crisis in SA to supplement the SARB's present suite of inflation policy framework models. Scenes of high and low inflation have been recognized by a Markov-Switching model. At that point, by the utilization of results from the regime classification, a logistic regression model was then considered with the objective of measuring the probability of the occasion of episodes of inflation crisis.

The paper had publicised that SA inflation can be modelled as a two state $MS(2) - AR(1)$, with episodes of high inflation being lower than that of low inflation. In addition, the duration of low inflation is more twice than that of high inflation. Overall, the results of the MSM lend support the effectiveness of the SARB's monetary policy instruments in monitoring inflation in SA. The plots of the smoothed probabilities of the two regimes clearly demonstrated the fluctuations of the SA inflation rate and also indicated that episodes of low inflation took more time (11 quarters) than their counter part which took only (10 quarters).

The warning signals from logistic regression model indicated that from 2015-2020 there is only 54% chance that SA will face an inflation crisis therefore the monetary policy committee will have to safeguard the crisis by preparing for the problem in revaluating the current monetary policy.

4.1. Recommendations

Even though the EWS model has been revealed as a potential reciprocal of the SARB current monetary tool, the new policies regarding the inflation crisis can be formulated based on the in-sample and out of sample forecasting performance. There is a high likelihood that the preliminary analysis covered by the univariate modes will behave poorly in macroeconomic variable forecasting, but introducing models like Markov-Switching vector autoregressive (MS-VAR) models for macroeconomic variables might enhance the short-term performance forecasting of these models. MS-VAR can also provide a promising framework for analysing the contagion effects of an inflation crisis and other financial crisis. Other than using a single equation models for modelling the inflation rate and its determinants in SA, the SARB can use this warning system to identify the danger zone of the high inflation rates where the monetary policy committee can be able to see when the inflation rate will be below or high above the targeted interval of 3%-6%, since the warning signals indicated that there is only 54% chance that the SA will phase the inflation crisis. Even though this likelihood seems to be uncertain, the MPC must not take chances, but only safeguard the problem in time by revaluating the current monetary policy by increasing the prime rates which will eventually decreases the money circulation in the economy in the short-run level. Therefore the SARB will be in the position to monitor the inflation and its determinants in the long run through the use of several monetary transmission mechanisms which include the interest channel, other assets channel and credit channel.

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THE EFFECTIVENESS OF THE SPANISH BANKING REFORM APPLICATION OF ALTMAN'S Z-SCORE

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Abstract

The recent financial crisis which causes bankruptcy around the world, Spain was placed at the top list because of the crucial state of its banking. This lead to a call to ensure adequate bank capitalization and reduce uncertainty regarding the strength of their balance sheets. In the light of recent event, the important of knowing the financial position of banks is imperative to shareholders. Thus, the aim of this study is to affirm the validity of Altman Z"-Score model as a predictors of the uncertainty regarding financial sector in Spain. This study takes into consideration two periods: before the banking reform and after the banking reform. It requires 30 financial institutions in Spain both big as well as small. Ratio analysis was carried out on the 30 banks before and after the reforms for five years prior to their bankruptcy or nationalisation as the Z" Score model has predictive power of up to five years before the reforms.

Keywords: Z"- Score, Bankruptcy, Banking Reform, Financial Crisis

1. INTRODUCTION

After the 2008 financial crisis, the performance of financial service has become the number one priority of most government officials. It is because banks and other financial institutions are known as the most important activity since their strategies affect economic development, employment, prices and national income (IMF, 2014). Thus, any positive or negative events encountered in this sector, is possible to impose threat to the entire economy. In other word, financial crisis encountered by countries primarily have its effect on the banking sector which is later being spread on the others sectors in the economy (Cibrán et al., 2008; Pison et al., 2014).

According to the recent financial crisis which causes bankruptcy around the world, Spain was placed at the top list because of the crucial state of its banking system which makes its economy vulnerable (Carbó-Valverde, 2011), unsustainable fiscal deficits, rising borrowing cost, rapid job loss and severe financial turmoil (IMF, 2014). Before the crisis, the presentation of the income statements of Spanish banks 2007 reveal more traditional banking crisis, consisting of excess leverage and excess mismatch of the timing of assets and liabilities which was materialized under the shadow of an unregulated and unsupervised banking system.

Following the diagnosis of financial stability forum, evidence shows that low real interest rates and abundant liquidity; and a wave of financial innovation with little or no supervision by the authorities in charged were the core stimulus of the Spanish banking crisis. Thus, the spin off effect of the global financial crisis on Spanish banking sector makes Spain in collaboration with the European Financial Stability Facility (EFSF) developed a supported program aimed to gear the financial sector´s participation to these forces by requiring weak banks to more decisively clean their balance sheet and by reforming the sector´s policy framework (FSF, 2008).

According to Altman and Loris, 1976) an economic is characterised with business failure as firms enter and exist in a function of the over business and expectation. The first empirical study that verifies the prediction of bankruptcy was carried by Beaver (1966). The study shows that corporate failure is the sequential conclusion due to systematic and non-systematic factor. However, in 1968, Altman shows that certain ratio analysis forecasts potential corporate failures. Thus, this study verifies the validity of the Altman Z-Score as a prediction of financial institution's failures in Spain. The study illustrate if truly the Z-Score can be used as an efficient and effective indicator for failure in the banking sectors.

2. LITERATURE REVIEW

In broad term, financial service firm refers to any firm that is able to produce financial products or services. In Spain especially, when referring to financial service firms, more reference can be seen from the evolution of the Cajas de Ahorros Españoles (Pison Fernández, & Feijóo Souto, 2003). In fact, financial sector has been one of the most innovation and dynamic in the last 20 or 30 years (Huarte et al., 1989). It was precisely this intense innovation alone side with under-regulated financial system which incubated the 2008 financial crisis. Speaking of Spanish banks, creditable legislation was passed even though the separation between banks, insurance companies, investment banks and firms was always seemed artificial (Pison et al., 2014).

According Real Decreto-Ley11/2010, banks were giving a wide range of choosing the legal form they wish to develop specific financial activity. Recently, even though the financial crisis has marked a decline in the Spanish financial system, it is certain that is only part of the European financial system and as such demonstrate the continue need for external funding, integration and unification of the European financial system. Thus, the financial service sector has been the foundation of the Spanish economy (Pisón Fernández, 1980); banks providing much of the capital for growth and foreshadow both equity and bond markets as pioneers in risking sharing. Table 1 below summarizes the market capitalization of publicly traded banks, insurance companies, brokerage houses, investment firms and thrift in Spain after the reforms in the financial sector.

The main objective of the banking sector reforms was to ensure adequate bank capitalization and reduce uncertainty regarding the strength of their balance sheets; legal framework for a swift and orderly process of financial sector restructuring and sound operating environment with the ultimate goal of improving the allocative efficiency of resources through operational flexibility, improved financial viability and institutional strengthening (RGS, 2012). Furthermore, the reforms have focussed to re-establish its access to the market, ensuring credit starts to flow into the real economy, removing financial repression through reductions in statutory pre-emption, while stepping up prudential regulations at the same time (RGS, 2012). The banking sector reform was strategized in two approaches.

First, clean up and protecting order of the balance sheets of financial entities (IMF, 2014) was approved under an initiative from the government, with two separate external assessment reports. In particular, a special emphasis was placed on improving credibility of the Spanish financial system and clarifies any doubts regarding the bank´s balance sheets, thus creating flexibility for recapitalisation of about 100 billion Euros from its European partners with a proportion of 16 and 26 billion Euros at best and of between 51 and 62 billion Euros at worst (RGS, 2012).

Second, active step were taken by the Spanish government to established legislation assumed under the *memorandum of understanding* for the recapitalisation of the banking sector and strengthens the crisis resolution instruments available to credit entities, thus, reducing the probability and seriousness of future economic crises. Also, the supervisory system was revamped in view of the crucial role of supervision in the creation of an efficient banking system.

Measures to improve the performance of the Spanish banking system have included (i) early stage risks are identify and address through continued pro-active monitoring and supervision in order to ensure adequate provisioning; (ii) banks are encourage bolster capital in ways that do not irritate already - tight credit condition; (iii) restructuring corporate debt and reducing impediments to assets disposal; (iv) the use of more complete banking union and more monetary easing by the ECB to further reduce funding cost and easing of credit condition through swift progress; (v) institutionalisation of a mechanism facilitating greater coordination for regulation and supervision of financial conglomerates; and (vi) mitigation of conflict of interest through enhance of FROB´s checks and balances as well as maintaining corporate governance and internal control strategy for the loss of control over saving and commercial banks (RGS, 2012 & IMF, 2014).

2.1. Bankruptcy

The research of bankruptcy forecast, and especially using the Altman Z-Score model is vast. The focus of most research is the useful aid of accounting information in predicting bankruptcy across non-financial industries. Moreover, the origin of the methodology used in predicting bankruptcy can derived from Altman's 1968 model, who reformulated the Beaver (1966) univariate analysis, comparing financial ratios of 79 failed firms and 79 non-failing firms. In Altman's (1968) model, he incorporated four more variables into the model of Beaver's work to give an overall more precise bankruptcy prediction of manufacturing firms.

The major difference between the Beaver's (1966) model and Altman's (1968) model was that the former only allows for one ratio used at a time, thus, making it inconsistent to capture the financial complexity by relying on one ratio, meanwhile, the later employed twenty-two ratios that have been used in the prior literature and finds that five ratios are best at discriminating between bankrupt and non-bankrupt firms. The poor nature of these ratios in the Beaver univariate model, but it does not reject the fact that these variable boosted the discriminating power of the function. The choice of variable regarding company bankruptcy was based on four balance sheet and income statement variables: profitability, leverage, solvency, liquidity and activity. The result of the combination of ratios gives rise to a discriminants score otherwise called the Z-Score. The ratios are X_1 = Working Capital/Total Assets, X_2 = Retained Earnings/Total Assets, X_3 = Earnings Before Interest and Taxes/Total Assets, X_4 = Market Value of Equity/Book Value of Total Debt, and X_5 = Sales/Total Assets. In 1995, Altman redefined his model by excluding X_5 (sales/total assets) to forecast corporate failure for non-manufacturing firms in Mexico. The weighted coefficients thus have different values:

$$Z'' = 6.5X_1 + 3.2X_2 + 6.72X_3 + 1.0X_4$$

Source: Altman, Hartzell and Peck (1995, pge3)

To forecast the Z" Score, a constant (+3.25) was added in order to normalise the results so that the scores that equal or less than zero would be equivalent to the default situation (Altman, Hartzell and Peck, 1995). Finally, in order to check the bankruptcy situation of these firms, Altman and Hotchkiss (2006) matched a corresponding between the Standard and Poor's rating and the score, which make the model reliable and consistent as shown in Table 1.

Table 1. Correspondence between Z"-Score and Standard & Poor Rating

<table>
<tr><th></th><th>Rating</th><th>Z" - Score Threshold</th><th>Rating</th><th>Z" - Score Threshold</th><th></th></tr>
<tr><td rowspan="10">Safe Area</td><td>AAA</td><td>>8.15</td><td>BB+</td><td>5.65</td><td rowspan="4">Grey area</td></tr>
<tr><td>AA+</td><td>8.15</td><td>BB</td><td>5.25</td></tr>
<tr><td>AA</td><td>7.60</td><td>BB-</td><td>4.95</td></tr>
<tr><td>AA-</td><td>7.30</td><td>B+</td><td>4.75</td></tr>
<tr><td>A+</td><td>7.00</td><td>B</td><td>4.40</td><td rowspan="6">Distress Area</td></tr>
<tr><td>A</td><td>6.85</td><td>B-</td><td>4.15</td></tr>
<tr><td>A-</td><td>6.65</td><td>CCC+</td><td>3.75</td></tr>
<tr><td>BBB+</td><td>6.40</td><td>CCC+</td><td>3.20</td></tr>
<tr><td>BBB+</td><td>6.25</td><td>CCC-</td><td>2.50</td></tr>
<tr><td>BBB-</td><td>5.85</td><td>D</td><td><1.75</td></tr>
</table>

Source: Altman and Hotchkiss (2006, page, 314)

Lastly, other group of research used a wide range of statistical method to predict bankruptcy of companies in the 70s, 80s and 90s (Deakin, 1972; Moyer, 1977; Kez, 1978; Booth, 1983; Hennaway and Morris, 1983; Fryman et al., 1985; Gombola et al., 1987, McGurr and DeVaney, 1998; Yang et al., 1999, Dimitra et al., 1999).

3. METHODOLOGY

The aim of this study is to illustrate an application of the most suitable bankruptcy model (Altman Z-Score) to financial sector in Spain over the period 2005 to 2012. Corresponding to Diamond and Rajan, (2001), financial institutions in Spain are considered as the centre of financial crisis due to the frasil capital structure of banks to provide liquidity to both leaders and borrowers. During the reforms, financial institutions with poor performance were forced to merge with other banks with good performance. Thus, the purpose of this study is to show how effective Z-Score in predicting bankruptcy and can be used to verify if the Spanish banking reform was effective or not. The Z-Score model is a discriminant analysis which was applied by many social and physical scientists, and became applicable in the business field (Beaver, 1966).

3.1. Data

The list of financial firms was obtained from the the SABI of the Bureau Van Dijk. The list includes financial institutions that were under sever banking crisis from 2005 to 2012. The subsample of financial institutions that were not experiencing financial distressed after the banking reform, over 2013 to 2014. The accounting ratios for all firms are obtained from the SABI database. Lastly, the financial institutions for this study must meet the following characteristics: each financial institution must have full record of financial statements publicly available in SABI for five years priors to the financial crisis; financial institutions must be active for at least five years before the Spanish banking reform; and must be a Spanish based financial institution. In order to confirm the Altman's Z-Score can predict bank failure five year prior to the Spanish banking reforms, it is important to consider that financial institutions examined had to be of going concern at least five years prior to the reforms. The election of the five year period is based on a similar study carried by Altman et al., (2013) for large non-financial firms in Italy. To discriminate between the depressed banks and safe banks, comparable banks were required to identify any similar or dissimilar trends.

4. EMPIRICAL RESULTS

The Altman Z"- Score applied to all financial institutions before and after the Spanish banking reform, over the period 2005 to 2014 as illustrated in Table 2. First, a critical look at the Z"-Scores' board rating equivalent for five year prior to the banking crisis in Spain, 63.33% were classified in the distress area in 2005 and 57.14% by 2014. The Standard and Poor's rating categories of most financial institutions approaching bankruptcy with the letter "D", meaning default. For instance in year 2005, before declaring bankruptcy 33.33 % of Spanish banks had scores in that area, meanwhile 63.33% fell the Standard and Poor's rating of 4.50% for the distressed area. However, in year 2008 and 2009, 75.00% and 74.1% of the financial institutions were classified in category D of the Standard Poor's rating, and 87.87% and 83.33%of them were classified as scoring below the rating 4.50%. This result illustrated the situation of banking sector in Spain before the banking reform.

With regard to the grey area, 3.37% of Spanish financial institutions were classified as scoring above 4.5%.These banks were better off than those in the distress area. However, our study show that very few banks were found in this area. Consistent with the classification Table 1 above and the Standard and poor's rating; we argue that the results provide true evidence of the Spanish banking sectors before the reform. Notice that in the grey area where banks futures are uncertain as to whether they will fail or recover, is reduced to 3.37% in 2005 and 0.0% in 2008 and 0.03% in 2009. As we move from 2005 to 2008 and 2009, the average aggregate of banks in the grey area diminishes.

Besides the distress and grey areas, we found some banks doing extremely well. These banks were found in the safety area even though very few. According to our result, 6.31% and 9.44% score above the Standard and Poor's rating of 5.85%. These banks fell under the zone of safety. Contrary to year 2005 and 2006, with the large proportion of financial institutions were classified under the safe zone.

Table 2. Z”-Score Results

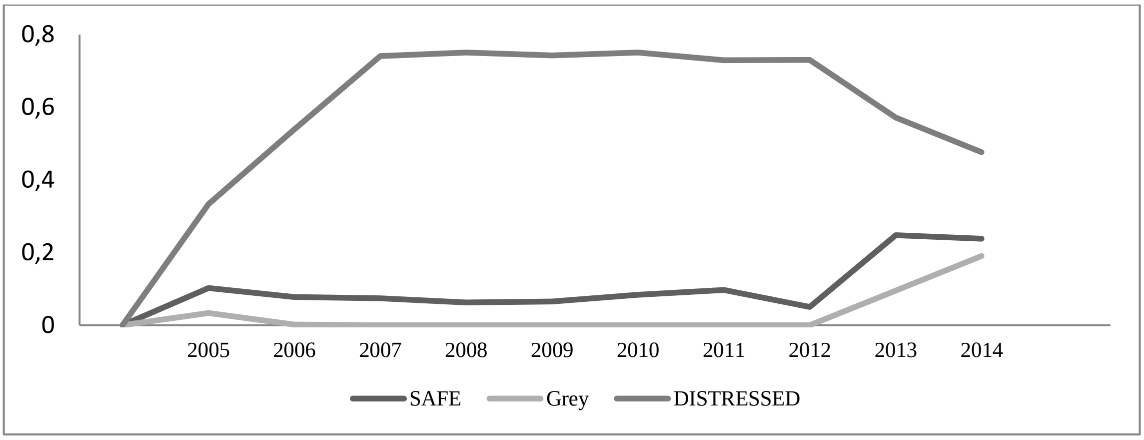
			2005		2006		2007			2008	2009		2010		2011		2012		2013		2014		
	Rating	**Threshold**	**n.**	**%**	**n.**	**%**	**n.**	**%**	**n.**	**%**	**n.**	**%**	**n.**	**%**	**n.**	**%**	**n.**	**%**	**n.**	**%**	**n.**	**%**	**Average values**
SAFE AREA	AAA	>8.15	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	2	0,08%	0	0,00%	0	0,00%	0	1,00%	0	0,00%	0,11%
	AA+	8.15	1	3,33%	1	3,85%	1	3,70%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	1	1,00%	1	4,76%	0	0,00%	1,66%
	AA	7.60	2	0,07%	0	0,00%	0	0,00%	2	6,25%	2	6,45%	1	4,17%	0	0,00%	0	0,00%	0	0,00%	3	14,29%	3,12%
	AA-	7.30	2	6,67%	1	3,85%	1	3,70%	0	0,00%	0	0,00%	0	0,00%	1	3,13%	0	1,00%	1	4,76%	0	0,00%	2,31%
	A+	7.00	0	0,00%	0	0,00%	0	0,00%	1	0,03%	1	0,03%	1	4,17%	0	0,00%	0	0,00%	0	0,00%	1	4,76%	0,90%
	A	6.85	3	0,10%	1	0,04%	0	0,00%	1	0,03%	0	0,00%	0	0,00%	0	0,00%	0	1,00%	1	4,76%	1	4,76%	1,07%
	A-	6.65	0	0,00%	0	0,00%	0	0,00%	0	0,00%	1	0,03%	0	0,00%	1	3,13%	0	1,00%	1	4,76%	0	0,00%	0,89%
	BBB+	6.40	1	0,03%	1	0,04%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	1	3,13%	0	1,00%	1	4,76%	0	0,00%	0,90%
	BBB+	6.25	0	0,00%	0	0,00%	1	0,04%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0,00%
	TOTAL		**9**	**10,20%**	**4**	**7,77%**	**2**	**7,41%**	**4**	**6,31%**	**4**	**6,52%**	**4**	**8,42%**	**3**	**9,38%**	**1**	**5,00%**	**5**	**24,81%**	**5**	**23,81%**	**10,96%**
GREY AREA	BBB-	5.85	1	3,33%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	1,00%	1	4,76%	0	0,00%	0,91%
	BB+	5.65	0	0,00%	0	0,00%	1	0,04%	0	0,00%	0	0,00%	0	0,00%	1	0,03%	1	1,00%	1	4,76%	3	14,29%	2,01%
	BB	5.25	0	0,00%	4	0,15%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0,02%
	BB-	4.95	1	0,03%	1	0,04%	0	0,00%	0	0,00%	1	0,03%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	1	4,76%	0,49%
	B+	4.75	0		0		0		0		0		0		0		0		0	0,00%	0	0,00%	0,00%
	TOTAL		**2**	**3,37%**	**5**	**0,19%**	**1**	**0,04%**	**0**	**0,00%**	**1**	**0,03%**	**0**	**0,00%**	**1**	**0,03%**	**1**	**2,00%**	**2**	**9,52%**	**4**	**19,05%**	**3,42%**
DISTRESS AREA	B	4.40	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	1	4,76%	0,48%
	B-	4.15	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	1	3,13%	1	0,00%	0	0,00%	0	0,00%	0,31%
	CCC+	3.75	3	0,10%	1	0,04%	1	0,04%	1	0,03%	1	0,03%	1	0,04%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0,03%
	CCC+	3.20	5	16,67%	0	0,00%	2	7,41%	1	3,13%	1	3,23%	1	4,17%	0	0,00%	1	2,00%	2	9,52%	1	4,76%	5,09%
	CCC-	2.50	1	0,03%	2	0,08%	1	0,04%	2	0,06%	1	0,03%	0	0,00%	1	3,13%	0	0,00%	0	0,00%	0	0,00%	0,34%
	D	<1.75	10	33,33%	14	53,85%	20	74,07%	24	75,00%	23	74,19%	18	75,00%	26	81,25%	25	86,21%	12	57,14%	10	47,62%	65,77%
	TOTAL		**19**	**63,33%**	**17**	**65,38%**	**24**	**88,89%**	**28**	**87,50%**	**26**	**83,87%**	**20**	**83,33%**	**28**	**87,50%**	**27**	**0,8821**	**14**	**66,67%**	**12**	**57,14%**	**77,18%**
	TOTAL		**30**		**26**		**27**		**32**		**31**		**24**		**32**		**29**		**21**		**21**		

Source: authors’ elaborations

From the Figure 1 below, you can see that great number of financial institutions in Spain were already showing distress signals between the year 2007 and 2012 classified according to the Standard and Poor's rating. These had taken a deep plunge from 33.33% to 73.0%. Considering a Z" Score of less than 1.75 signals insolvency, most of these banks under this area were already very much on the road to bankruptcy. This shows the Z" Score could predict a high risk of bankruptcy five year prior to collapse. However, after the banking reform in Spain, Figure 1 show how the insolvency situation of the firms has reduces drastically.

The Z" Score encompasses the four ratios gives the best prediction of corporate failure, due the fact that after the reform, 23.81% de banks were classified in the safe area and 19.05% banks fell on the grey area in year 2014. This shows a reverse situation. The Z" Score provide an accurate prediction capabilities in term of banking failures. With regard to the distress area, we found that by year 2012 after the reform, the distress line fall drastically to the end of 2014, from 73% to 47.62%. Finally, we have able to proof that the Altman Z" Score is a trustworthy indicator for verifying the state of financial institution in Spain. Lastly Table 3a and 3b below illustrate the analysis of banks before and after the banking reform over the period 2005 to 2007.

Figure 1. Z"- Score trend for financial sector in Spain



Source: authors' elaborations

Figure 2 shows before the banking reforms approximately 63% of the financial institutions in Spain ware in the letter "D". This means that the average classification of the banks reflect a state of bankruptcy. However, after the banking reform, we found that 23.81% of Spanish banks were classified in the safe area. Most of the banks in the safe area from 2013 to 2014 have an extremely good rating equivalent of AA+ or AA. In our option, this shows that the Z"-Score model is well suited for the predicting the effectiveness of the Spanish banking reform in the Spanish economy.

CONCLUSION

The empirical results suggest that Altman Z"- Score model is a reliable predictor of Spanish bank failure before and after the banking reforms. In this study, we show how the Altman's Z" Score can be effectively apply to the Spanish banking sector, and how it have resulted to 100% prediction of bankruptcy before the Spanish banking reform. Before the reform, applying the indicator to the sample from 2005 to 2012 shows that a relatively high proportion of Spanish banks were classified in the distress area. The so-called grey area is relatively narrow compared to the Z" – Score model, at least in term of the average classification.

The bond rating equivalents allows analysts to understand the nuances regarding the state of health of a bank. Meanwhile, the grey area enable us to get a greater clarity on what will be the short-term future for a banks: insolvency or recovery. As in the case of Spanish banks, due to the rescue process in the reforms, majority of the banks moved from the distress area to the grey area while those who are previously in the grey area moves to the safe position. For this reason, we conclude that the application of the Z"-Score in the Spanish banking sector context is extremely informative, but not without it complications. We are convinced that such models can be extremely helpful to investors, regulators and even political decision makers to evaluate if the goal of the Spanish banking reforms is archived.

Table 3a. Before the Spanish Banking reform

		RATING	2005		2006		2007		2008		2009		2010		2011		2012	
			n.	**%**	**n.**	**%**	**n.**	**%**	**n.**	**%**	**n.**	**%**	**n.**	**%**	**n.**	**%**	**n.**	**%**
SAFE ZONE	AAA	>8.15	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	2	0,08%	0	0,00%	0	0,00%
	AA+	8.15	1	3,33%	1	3,85%	1	3,70%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	1	1,00%
	AA	7.60	2	0,07%	0	0,00%	0	0,00%	2	6,25%	2	6,45%	1	4,17%	0	0,00%	0	0,00%
	AA-	7.30	2	6,67%	1	3,85%	1	3,70%	0	0,00%	0	0,00%	0	0,00%	1	3,13%	0	1,00%
	A+	7.00	0	0,00%	0	0,00%	0	0,00%	1	0,03%	1	0,03%	1	4,17%	0	0,00%	0	0,00%
	A	6.85	3	0,10%	1	0,04%	0	0,00%	1	0,03%	0	0,00%	0	0,00%	0	0,00%	0	1,00%
	A-	6.65	0	0,00%	0	0,00%	0	0,00%	0	0,00%	1	0,03%	0	0,00%	1	3,13%	0	1,00%
	BBB+	6.40	1	0,03%	1	0,04%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	1	3,13%	0	1,00%
	BBB+	6.25	0	0,00%	0	0,00%	1	0,04%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%
	TOTAL		**9**	**10,20%**	**4**	**7,77%**	**2**	**7,41%**	**4**	**6,31%**	**4**	**6,52%**	**4**	**8,42%**	**3**	**9,38%**	**1**	**5,00%**
GREY ZONE	BBB-	5.85	1	3,33%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	1,00%
	BB+	5.65	0	0,00%	0	0,00%	1	0,04%	0	0,00%	0	0,00%	0	0,00%	1	0,03%	1	1,00%
	BB	5.25	0	0,00%	4	0,15%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%
	BB-	4.95	1	0,03%	1	0,04%	0	0,00%	0	0,00%	1	0,03%	0	0,00%	0	0,00%	0	0,00%
	B+	4.75	0		0		0		0		0		0		0		0	
	TOTAL		**2**	**3,37%**	**5**	**0,19%**	**1**	**0,04%**	**0**	**0,00%**	**1**	**0,03%**	**0**	**0,00%**	**1**	**0,03%**	**1**	**2,00%**
DISTRESS ZONE	B	4.40	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%
	B-	4.15	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	0	0,00%	1	3,13%	1	0,00%
	CCC+	3.75	3	0,10%	1	0,04%	1	0,04%	1	0,03%	1	0,03%	1	0,04%	0	0,00%	0	0,00%
	CCC+	3.20	5	16,67%	0	0,00%	2	7,41%	1	3,13%	1	3,23%	1	4,17%	0	0,00%	1	2,00%
	CCC-	2.50	1	0,03%	2	0,08%	1	0,04%	2	0,06%	1	0,03%	0	0,00%	1	3,13%	0	0,00%
	D	<1.75	10	33,33%	14	53,85%	20	74,07%	24	75,00%	23	74,19%	18	75,00%	26	81,25%	25	86,21%
	TOTAL		**19**	**63,33%**	**17**	**65,38%**	**24**	**88,89%**	**28**	**87,50%**	**26**	**83,87%**	**20**	**83,33%**	**28**	**87,50%**	**27**	**0,8821**
	TOTAL		**30**		**26**		**27**		**32**		**31**		**24**		**32**		**29**	

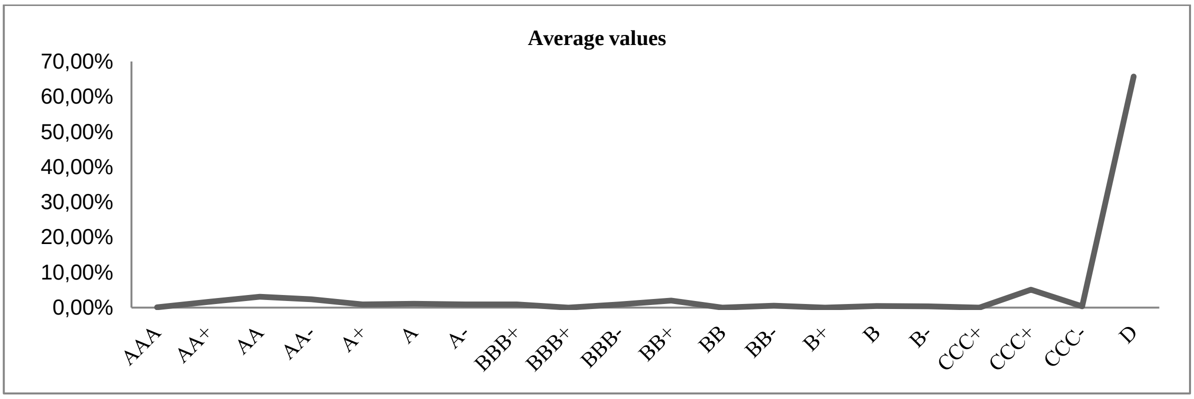
Source: authors' elaborations

Table 3b. After the Spanish Banking reform

	Rating	Threshold	2013		2014	
			n.	%	n.	%
SAFE ZONE	AAA	>8.15	0	1,00%	0	0,00%
	AA+	8.15	1	4,76%	0	0,00%
	AA	7.60	0	0,00%	3	14,29%
	AA-	7.30	1	4,76%	0	0,00%
	A+	7.00	0	0,00%	1	4,76%
	A	6.85	1	4,76%	1	4,76%
	A-	6.65	1	4,76%	0	0,00%
	BBB+	6.40	1	4,76%	0	0,00%
	BBB+	6.25	0	0,00%	0	0,00%
	TOTAL		**5**	**24,81%**	**5**	**23,81%**
GREY ZONE	BBB-	5.85	1	4,76%	0	0,00%
	BB+	5.65	1	4,76%	3	14,29%
	BB	5.25	0	0,00%	0	0,00%
	BB-	4.95	0	0,00%	1	4,76%
	B+	4.75	0	0,00%	0	0,00%
	TOTAL		**2**	**9,52%**	**4**	**19,05%**
DISTRESS ZONE	B	4.40	0	0,00%	1	4,76%
	B-	4.15	0	0,00%	0	0,00%
	CCC+	3.75	0	0,00%	0	0,00%
	CCC+	3.20	2	9,52%	1	4,76%
	CCC-	2.50	0	0,00%	0	0,00%
	D	<1.75	12	57,14%	10	47,62%
	TOTAL		**14**	**66,67%**	**12**	**57,14%**
	TOTAL		**21**		**21**	

Source: authors' elaborations

Figure 2. Z"- Score for average distribution in financial sector in Spain



Source: authors' elaborations

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BOARD DIVERSITY AND CORPORATE VOLUNTARY DISCLOSURE (CVD) IN THE ANNUAL REPORTS OF BANGLADESH

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Abstract

This is an exploratory study designed to investigate the extant and nature of corporate voluntary disclosure (CVD) in corporate annual reports of Bangladesh. Specifically, examine the relationship between board diversity and corporate voluntary disclosures. The paper is based on a sample of 106 listed non-financial companies in Dhaka Stock Exchanges (DSE) from the period 2007-2011 and all the companies are selected by Judgment Sampling. The study is used ordinary least squares regression model to examine the relationship between explanatory variables and voluntary disclosure. Using an unweighted relative disclosure index for measuring voluntary disclosure, the empirical results indicate that Percentage Female Director (PFD), Board Leadership Structure (BLS) and Total Assets (TA) are positively association with corporate voluntary disclosure (CVD). In contrast, the extent of corporate voluntary disclosure is negatively associated with a Percentage of equity owned by the insiders to all equity of the firm higher management ownership.

Keywords: Female Director, DSE, CVD, Non-Financial Companies

1. INTRODUCTION

The board of directors is an important mechanism in the financial reporting of modern firms.

Many studies focus on corporate governance and its features in different countries (Aktaruddin and Rouf, 2012; Rouf and Harun, 2011; Rouf, 2011). In recent, the topic of board diversity has been thoroughly analyzed. According to Van der Walt and Ingley (2003), board diversity refers to the variety in the composition of the board of directors. Within this definition, there are two categories of board diversity, namely, demographic diversity and cognitive diversity. Demographic diversity relates to the observable or readily detectable attributes of directors that includes race or ethnicity, nationality and gender, whereas, cognitive diversity relates to the unobservable or less visible attributes of directors, such as educational, functional and occupational backgrounds, industry experience, and organizational membership (Milliken & Martin 1996).

Board diversity research has evolved into a challenging research issue in academia for the most recent decades. Most of this investigate has commenced from the fact that there are increasing numbers of women in top management as well as on corporate boards (Singh et al., 2001). Related to the above is confirmation from prior literature on the existence of differences between men and women regarding decision-making, risk taking, managing, leading, communicating and general performance in business enterprises (Rose, 2007; Peterson and Philpot, 2007; Walt and Ingley, 2003; Burke, 1999; Chell and Baines, 1998). Board diversity literature emphasizes that diversity may benefit the board's decision making process as new perceptions on various issues are presented and combined with a mutual exchange of ideas stemming from board members with dispersed backgrounds and experience (Rouf, 2015). It is also argued that diversity leads to a greater knowledge base, creativity and innovation, and therefore becoming a competitive advantage (Watson et al., 1993). It is from this background that, prior research has concluded an influence of board diversity on a number of corporate issues like firm performance and corporate governance.

To investigate the study objective, the study uses a sample of 106 companies listed on the Dhaka Stock Exchange during the fiscal year 2007-2011. In this study board diversity as measured by female director, Independent non-executive directors, Board leadership structure, Board size and Ownership structure.

2. OBJECTIVES OF THIS STUDY

The aim of this study is to examine the factors that influence companies to disclose corporate voluntary information in their annual reports. The specific objectives of the study are:

(a) to measure the level of corporate voluntary disclosure made by the companies in Bangladesh.

(b) to examine the association between board diversity and corporate voluntary disclosure level of listed companies in Bangladesh.

3. LITERATURE REVIEW AND HYPOTHESES DEVELOP

3.1. Female Directors

A board of directors is a body of elected or appointed members who jointly oversee the activities of a company or organization. A board is generally composed of inside and outside members. Inside members are selected from among the executive officers of a firm. Outside directors are members whose only affiliation with the firm is their directorship. Board diversity is namely, demographic diversity and cognitive diversity. Demographic diversity For the purpose of this study, one important dimension of board diversity is examined; namely gender diversity. This dimension is chosen because of their benefits offered to firms. For examples, a female director may bring not only different perspectives, valuable skill and knowledge to share, but also share different values, norms and understanding, which may consequently increase the quality of strategic decision making and promote better governance in firms (Ruigrok et al. 2007). According to Rouf, M. A. (2015) found that boards with a larger proportion of female directors are significantly and positively associated with higher levels of voluntary disclosure in Bangladesh. In this view, it is argued that a firm may have higher level of disclosure if the boards consist of more female directors. These observations suggest the following hypothesis:

***H_1**: A higher proportion of female directors on a board are positively related to the level of corporate voluntary disclosure.*

3.2. Independent Directors

A board is generally composed of inside and outside members. Inside members are selected from among the executive officers of a firm. They either belong to the management group or are the family that owns the firm. Outside directors are members whose only affiliation with the firm is their directorship.

Patelli, L., and A. Prencipe (2007) reported that composition of the board is one of several factors that can mitigate agency conflicts within the firm. Akhtaruddin and Rouf (2012) argument is that independent directors are needed on the boards to monitor and control the actions of executive directors who may engage in opportunistic behavior and also to ensure that managers are working in the best interest of the principal. Cheng and Courtenay (2006) found that boards with a larger proportion of independent directors are significantly and positively associated with higher levels of voluntary disclosure in Singapore. In addition, Chen and Jaggi (2002) examined the association between independent directors and corporate disclosure. They found a positive relationship between a board with a higher proportion of independent directors and comprehensive financial disclosure.

Haniffa and Cooke (2002) argue that an independent board serves as an important check and balance mechanism in enhancing boards' effectiveness. Support for these assertions is further provided by Akhtaruddin and Rouf(2012); Simon and Kar (2001); Rouf (2011) and Eng and Mak (2003). Ho and Wong (2001) do not find association between the proportion of outside non-executive directors and the extent of voluntary disclosure. Aktaruddin, M. et al.(2009) and Obeua S Persons (2009)find that firms can expect more voluntary disclosure with the inclusion of a larger number of independent non-executive directors on the board. A firm may have higher level of disclosure if the boards consist of more outside directors. These observations suggest the following hypothesis:

***H_2**: A higher proportion of independent directors on a board is positively related to the level of corporate voluntary disclosure.*

3.3. Board Leadership Structure

Within the context of corporate governance, the central issue often discussed is whether the chair of the board of directors and CEO positions should be held by different persons (dual leadership structure) or by one person (unitary leadership structure). According to agency theory, the combined functions (unitary leadership structure) can significantly impair the boards' most important function of monitoring, disciplining and compensating senior managers. It also enables the CEO to engage in opportunistic behavior, because of his/her dominance over the board. Rouf (2011), Aktaruddin and Rouf(2012) finds that firms can expect more voluntary disclosure with the dual leadership structure. Forker (1992) empirically studied the relationship between corporate governance and disclosure quality, and presented evidence of a negative relationship between disclosure quality and 'dominant personality' (measured as CEO and board chair combined). Hence, to the extent that the combined chair/CEO positions "signals the absence of separation of decision management and decision control" (Barako, D.G. et al. (2006) , the following hypothesis is examined:

***H_3**:The extent of corporate voluntary disclosure is positively related for firms with a dual leadership structure.*

3.4. Board Size

Board size may influence the level of voluntary disclosure. The level of disclosure is a strategic decision made of the board of directors. As a top-level management body, the board of directors formulates policies and strategies to be followed by managers. It has been argued that a greater number of directors on the board may reduce the likelihood of information asymmetry (Chen and Jaggi, 2000; Rouf, 2011). Research emphasizes the importance of strategic information and resources in a highly uncertain environment. The size of the board is believed to affect the ability of the board to monitor and evaluate management and small board encourages faster information processing (Zahra, et al., 2000). Aktaruddin, M. et al., (2009) finding of their study is a positive association between board size and level of corporate voluntary disclosure. Further, the ability of directors to control and promote value-creating activities is more likely to increase with the increase of directors on the board. With more directors, the collective experience and expertise of the board will increase, and therefore, the need for information disclosure will be higher. The following hypothesis is examined:

H_4*: *The number of directors on a board is positively related to the level of corporate voluntary disclosure.

3.5. Ownership Structure

Ownership structure is another mechanism that aligns the interest of shareholders and managers (Akhtaruddin, M. et al.2009; Wang, K. et al., 2008; Rouf and Harun,2011; Haniffa and Cooke, 2002; Chau and Gray, 2002). The agency theory suggests that where there is a separation of ownership and control of a firm, the potential for agency costs arises because of conflicts of interest between contracting parties. It is believed that agency problems will be higher in the widely held companies because of the diverse interests between contracting parties. By utilizing voluntary disclosure, managers provide more information to signal that they work in the best interests of shareholders.

In this study, ownership structure is proxied by management ownership. Using agency theory, it is argued that firms with higher management of ownership structure may disclose less information to shareholders through voluntary disclosure. It is because the determined ownership structure provides firms lower incentives to voluntarily disclose information to meet the needs of non-dispersed shareholders groups. In Australia, McKinnon and Dalimunthe (2009) note that companies with a single ownership structure disclose more voluntary information. Rouf and Harun (2011) suggested a negative association between management ownership structure and the level of voluntary disclosure by Bangladeshi listed firms. Akhtaruddin, M. et al.(2009) find that a higher proportion of outside share ownership is positively related to the level of voluntary disclosure. In addition, Hongxia, Li & Ainian, Qi (2008) shown that higher managerial ownership have high level of voluntary disclosures. Eng and Mark (2003) reported that lower management ownership and significant government ownership are associated with higher disclosure among listed firms in Singapore. Haniffa and Cooke (2002) indicate that the extent of family control in a firm is negatively associated with the amount of voluntary disclosure. Their evidence suggests that family controlled firms do not require additional information because the owner managers could access the information easily, thus leading to low agency costs and low information irregularity. The management entrenchment hypothesis could also explain the negative association and its effects could negate the positive effects of the agency cost explanations. The significant role of management ownership in influencing voluntary disclosures practices of firms from the prior researcher. So it is expected that ownership structure will influence the voluntary disclosure information. The hypothesis is formally stated as:

H_5*: *The extent of corporate voluntary disclosures is negatively associated with a higher management ownership.

3.6. Firm Size

Most of these studies found that size of the firm does affect the level of disclosure of companies. Hossain, M. & Hammani, H.(2009); Jilnaught & Norman(2009); Hossain & Mitra(2004); Akhtaruddin and Rouf(2012); Barako et al.(2006) investigated that the larger the firm, the more likely they will make voluntary disclosures. Based on the study done world wide, for example (Aripin, N., et al.,2008;Watson et al., 2002; Da-Silva & Christensen, 2004; Wallace et al.,1994; Samir, M. et al.,2003; Ho and Wong, 2001); they suggested the underlying reasons why larger firms disclose more information. In this study, total sales and total assets will be used as the measures of company size. The following specific hypotheses have been tested regarding size of the firm:

H_6*: *The extent of corporate voluntary disclosures is positively associated with the total assets.

H_7*: *The extent of corporate voluntary disclosures is positively associated with the total sales.

4. DESIGN OF THE RESEARCH STUDY

4.1. Framework

Considering all factors of the independents and dependent variables, the model of the study is depicted the following section-4.2

4.2. Measurement

Dependant variable	**Definition**	**Measurement**
TVDE	Total Voluntary Discloser score	Total number of points awarded for voluntary discloser, i.e strategic, non-financial and financial information (coding one "1" if the company disclose and Zero "0" otherwise)
Independent variables	**Definition**	**Measurement**
PFD	Female Director	Percentage of female directors to the total directors on board a firm.
IND	Independent director	Percentage of independent directors to the total directors on board a firm.
BLS	Board Leadership Structure	1 for duel or 0 non-dual
BSZE	Board Size	Total Number of member on each board
OS	Ownership structure	Percentage of equity owned by the insiders to an all equity firm.
TA	Total Assets	The value of the total assets of a firm
TS	Total Sales	The value of the total sales turnover of a firm

4.3. Sample Selection and Data Collection

At the end of 2011, 270 companies are listed on Dhaka Stock Exchange (DSE). Sample is taken from annual reports of listed companies on Dhaka Stock Exchange (DSE) and all the companies are selected by Judgment Sampling. The criteria for selecting the sample firms are: (i) the Company must be a firm (Non-financial Company), (ii) annual reports must be available on the Dhaka Stock Exchange and (iii) the firm must have been listed for the entire period of the study from 2007 to 2011. The total 106 companies are fulfilled the above three criteria. The companies are mainly classified into two categories, Financial and Non-financial. Out of 270 companies, 150 companies are Non-financial and the others are Financial. Among the 150 Non-financial companies, annual report of 44 companies is not available on DSE from the period of 2007 to 2011.The selected companies listed on the DSE which fulfilled the judgment criteria are classified as cement & ceramics, engineering, food & allied, fuel & power, pharmaceuticals & chemicals, textile, tannery, Jute and miscellaneous. The annual reports of the sample companies are collected from the DSE seminal library. Firm-specific characteristics and Corporate-governance attributes is collected from the annual reports of listed companies on DSE. According to the classification of the Non-financial companies the distribution of the sample companies are given in Table 1.

Table 1. Distribution of sample by industry types

Industry Types	Population		Sample	
	Number	%	Number	%
Cement & Ceramics	12	8.00	9	8.49
Engineering	25	16.67	18	16.98
Food & Allied	18	12.00	12	11.32
Fuel & power	15	10.00	11	10.38
Pharmaceuticals & Chemicals	25	16.67	16	15.09
Textile	32	21.33	21	19.81
Tannery	5	3.33	5	4.72
Jute	3	2.00	3	2.83
Miscellaneous	15	10.00	11	10.38
Total	150	100.00	106	100.00

Sources: Dhaka Stock Exchanges Library

4.4. The Selection of Index- Weighted vs. Un-Weighted

Cooke (1989) mentions that there are two methods for determining the index of level of corporate disclosure namely, weighted and unweighted. This is mainly because of the fact that not all the items mentioned in different disclosures are equally important. The relative importances of different items are different to different users. The unweighted method treats all the discloseable items are equally important (Akhtaruddin, 2005). Moreover, Rouf (2011) finds that all disclosure items are equally important to average users. Although there are different levels of users of disclosure items, the market trying to cope with the changing world should consider all the mandatory items equally. If there is no provision in relevant laws regarding the relative importance, segregating is not possible. The prior experiences of weighted approach Akhtaruddin (2005) states that weighted approach has, in fact, encountered several problems pointing out that unweighted approach also has some limitations such as giving nil score for an item to company which is not applicable for that company. However, the unweighted approach has got superiority supported by the research works done by Owusu-Ansah (1998) Wallace and Naser (1995). That is why this research is also carried out by unweighted index and this is here after known as VDI (Voluntary Disclosure Index)

4.5. Development of a Corporate Voluntary Disclosure Index

Previous research has examined the disclosure behavior of firms using a disclosure checklist. The disclosure checklist developed by Meek, Roberts and Gray (1995) was used to examine the voluntary disclosure of firms in developed countries. Chau and Gray (2002), and Ho and Wong (2001) have also used this disclosure checklist with some modifications to examine the voluntary disclosure of Hong Kong and Singapore firms. The level of voluntary disclosure of the sample firms in this study was measured using a disclosure index that was developed in consultation with the disclosure checklist used by Akhtaruddin, M. (2009), Chau and Gray (2002), Akhtaruddin and Rouf(2012), and Rouf and Harun (2011).

A total of 91 items were identified in compliance with voluntary disclosure items provided by listed firms in Bangladesh. These items were then compared with listing requirements for Dhaka stock exchange (DSE) and a mandatory disclosure checklist prepared by Akhtaruddin, M. (2005) in Bangladesh. Since the focus of this research is voluntary disclosures, the preliminary list of 91 items was subjected to a through selection to eliminate those that are mandated. This list was sent to various experts (professor, professional chartered accounted & Cost and Management accounted etc.) for selection and as a result of their feedback, the initial list of 91 items was reduced to 68 items. The disclosure items are classified into thirteen categories: general corporate information, corporate strategic information, corporate governance information, financial information, financial review information, foreign currency information, segmental information, employee information, research & development information, future forecast information, share price information, social responsibility information and graphical information.(A list of the final 68 items is included in Appendix-1)

I employed an unweighted approach for this study. This approach is most appropriate when no importance is given to any specific user-groups (Rouf et al.,2014; Akhtaruddin, M. et al., 2009; Hossain, M. and Hammami, H., 2009). The items of information are numerically scored on a dichotomous basis. According to the unweighted disclosure approach, a firm is scored "1" for an item disclosed in the annual report and "0" if it is not disclosed. The total voluntary disclosure index (TVDX) is then computed for each sample firm as a ratio of the total disclosure score to the maximum possible disclosure by the firm. The disclosure index for each firm is then expressed as a percentage.

One potential problem with this approach is that a firm may be penalized for not disclosing an item of information although there is no information to disclose on it. In order to overcome this problem, an information item was coded as "not applicable" when no similar information could be found in any part of the annual report. For firms having not applicable items, the use of a relative index is suggested (Owusu-Ansah, 1998).

The relative index approach is the ratio of what a firm actually disclosed to what the firm is expected to disclose (for example, if the maximum possible disclosure score for a firm is 64 and the firm did disclose 48 out of the 64 items in the annual report, then the TVDX is = 48/64 = 0.75). This approach has been used in several prior studies (Rouf and Harun,2011; Ho and Wong, 2001; Chau and Gray, 2002; Akhtaruddin, M., et al.2009). Typically the extent of voluntary disclosure depends largely on the items of information included in the disclosure checklist. Selection of information items is thus a very critical factor in the measurement of corporate disclosure. A disclosure checklist incorporates significant items of information that managers are expected to provide in corporate annual reports (CARs) in order to satisfy the information needs of different user-groups (Ho and Wong, 2001; Chau and Gray, 2002). The employment of the disclosure index approach is therefore considered effective to capture voluntary disclosures by the sample firms.

4.6. Model Specification and Multiple Regression

The multiple regression method is used to examine the relationship between Firm-Specific Characteristics and Corporate Governance with the Voluntary disclosure in annual reports of Bangladesh.

The result of regression analysis is an equation that represents the best prediction of a dependent variable from several independent variables.

This method is used when independent variables are correlated with one another and with the dependent variable.

The following regression equation is estimated as follow:

$$TCVD_{ij,t} = \sum_{t-1}^{Nij} Xij$$

Where,

TCVD = total corporate voluntary disclosure score for j^{th} firm at the time t,

$N_{ij} = i^{th}$ item for j^{th} firm

t = year

$$TCVD = a + \beta_1 PFD + \beta_2 PINDI + \beta_3 BLS + \beta_4 BSZE - \beta_5 PEOI + + \beta_6 TA + + \beta_7 TS + \varepsilon$$

Expected sign (+) (+) (+) (+) (-) (+) (+)

TCVD = Total corporate voluntary disclosure score received from each company

PFD =Percentage of female directors to directors on board.

PIND =Percentage of independent non-executive directors to directors on board.

BLS = Board leadership structure, 1 for duel or 0 non-dual

BSZE = Total number of member on each board.

PEOI =Percentage of equity owned by the insiders to all equity of the firm.

A = total constant, and ε= the error term

In this model, all independent variables enter the regression equation at once to examine the relation between the whole set of predictors and the dependent variable.

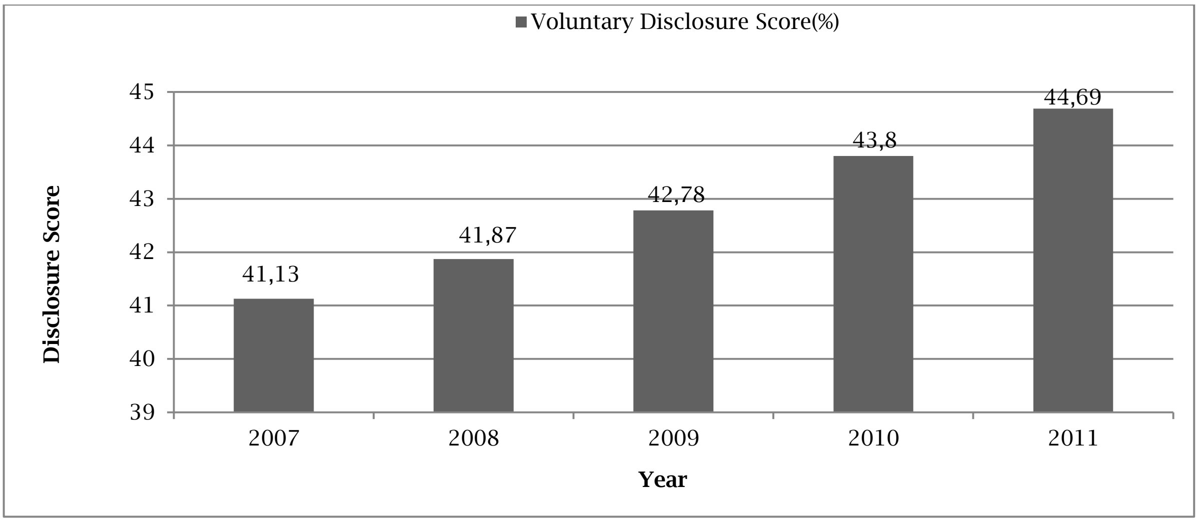
7.1. Descriptive Statistics

Table 3. Descriptive Statistics for Independent Variables

Variables	N	Minimum	Maximum	Mean	Std. Deviation
VD	106	18.24	72.35	42.8530	13.94820
PFD	106	0.00	56.00	12.7643	14.74514
IND	106	0.00	20.00	10.5666	6.17946
BLS	106	0.00	1.00	0.66	0.45
BSZE	106	4.00	13.00	7.36	1.67
PEOI	106	8.00	86.00	40.87	17.91
TA	106	32.74	590787.60	35858.58	96828.14
TS	106	19.78	1056253.30	31075.36	125927.34

Table 3: presents descriptive statistics for the sample firms from 2007 to 2011. The results from the disclosure index indicate (TVD) that the level of average voluntary disclosure in the sample companies is 42.85%. The highest score achieved by a firm is 72.35% and the lowest score is 18.24% with a standard deviation of 13.94%. It seems that the firms are widely distributed with regard to voluntary disclosure. It is consistent with Hossain and Hammami (2009) in Qatar (36.84%), Akhtaruddin *et al.,* (2009) in Malaysia (53.20%) and Al-Shammari (2008) in Kuwait (46%). The average Percentage of Female Director is 12.76 with a standard deviation is 14.74. The mean of the proportion of independent non-executive directors (PIND) to the directors on the board is 10.56% with a standard deviation is 6.18%. The average board leadership structure (BLS) is 0.66 with a standard deviation 0.45. The average board size (BSZE) is 7.36 with minimum and maximum sizes of 4 and 13 respectively. Percentage of equity owned by the insiders to all equity of the firm is 40.87 with standard deviation is17.90.The average firm size is (Taka Bangladeshi) Tk.35858.58 lakh and Tk.31075.36 lakh respectively in terms of total assets (TA) and total sales (TS).

Figure 1. The Year-wise disclosure score of sample companies



The figure 1: shows that the average voluntary disclosure items of the listed companies are 41.13% in the year 2007. Consequently, 41.87% disclose in 2008; 42.78 % disclose in 2009; 43.8% disclose in 2010 and 44.69% disclose in 2011. An aggregate, the voluntary disclosure items are gradually increased.

7.2. Pearson Correlation analysis

Table 4. Pearson Correlation analysis results (N=106)

	VD	FD	IND	BLS	BSZE	OS	TA	TS
VD	1.000							
PFD	.297(**)	1.000						
IND	-.016	.112	1.000					
BLS	.407(**)	.136	.051	1.000				
BSZE	.314**	.059	-.222*	.256**	1.000			
PEOI	-.548(**)	-.144	.055	-.273(**)	-.206*	1.000		
TA	.407(**)	-.105	-.017	.077	.286**	-.090	1.000	
TS	.231(*)	-.151	.049	.058	.192*	.039	.763(**)	1.000

*** Correlation is significant at the 0.01 level (2-tailed).*
** Correlation is significant at the 0.05 level (2-tailed).*

Table 4 provides the Pearson product-moment correlation coefficients of the continuous explanatory variables as well as the dependent variable included in the year of average data for 2007-2011.The result of Pearson product-moment correlation exposed that percentage of female director, board leadership structure, board size and total assets are positively related to voluntary disclosure (P<0.01, Two- tailed), but Percentage of equity owned by the insiders to all equity of the firm is negatively related to voluntary disclosure (P<0.01, Two- tailed). Total BSZE is positively related to the board leadership structure at the level of (P<0.01, Two- tailed). Percentage of equity owned by the insiders to all equity of the firm is negatively related to BLS (P<0.01, Two- tailed) and BSZE (P<0.01, Two-tailed).

7.3. Multiple Regression Analysis

Table 5. Multiple Regression Results (N=106)

Variables	Coefficient	Standard Error	Bata t Values	Significance
PFD	0.245	0.066	3.509	0.001***
IND	-0.024	0.155	-0.357	0.722
BLS	0.233	2.179	3.294	0.002***
BSZE	0.049	0.643	0.634	0.528
PEOI	-0.410	0.056	-5.690	0.000***
TA	0.406	0.000	3.804	0.000***
TS	-0.038	0.000	-0.351	0.726

R Square = 0.549; Adjusted R squire = 0.522
F value =20.084; F significance = 0.000
**P<0.1, two-tailed, **P<0.05, two-tailed, *** P<0.01, two-tailed*

Table 5 shows the association between voluntary disclosure index and experimental variables. The coefficient of coordination R-square, F ratio, beta coefficients and t-statistics for the regression model and summarized results of the dependent variable on the explanatory variables can be seen in the Table-5. The result indicates an R-square of 0.549, and an F value of 20.084, which is significant at the 0.000 levels. Both of these values suggest that a significant percentage of the variation in voluntary disclosure can be explained by the variations in the whole set of independent variables.

The percentage of the female directors to the directors on the board is a significant corporate governance variable. The hypothesis of the variable is: H1: A higher proportion of female directors on a board is positively related to the level of voluntary disclosure. The regression coefficient for the variable is 0.245, which is positive and statistically significant at the level of 0.001 (P<0.01, two-tailed). The result indicates that the percentage of female directors to the total directors on board of a firm is positively associated with the level voluntary disclosure of information which supports the hypothesis.

The significant corporate governance variable is the board leadership structure. The regression coefficient for the variable is 0.233 and significance at the 0.002. The result suggests that firms have a board leadership structure is positively associated with voluntary information at the level of 1% significant.

The significant corporate governance variable is the ownership structure. The regression coefficient for the variable is -0.410, which is negative and statistically significant at the 0.000 level (P<0.01, two-tailed). This result suggests that the extent of voluntary disclosure is negatively associated with a Percentage of equity owned by the insiders to all equity of the firm higher management ownership

Concerning the firms' specific variables, this study suggests that firms that are larger in size in respect to total assets. The hypothesis of the variable: The extent of voluntary disclosures is positively associated with the total assets. The regression results for firm size by total assets are positively significant at the 0.000 level (P<0.01, two-tailed).

CONCLUSION

The objective of this study is to examine the board diversity and their influence on voluntary disclosure in annual reports of Bangladesh. These factors include percentage of female directors, proportion of independent non-executive directors on the board, board leadership structure, board size of the firm, percentage of equity owned by the insiders to all equity of the firm, total assets and total sales. In particular, the study aims to determine which of these factors are significantly related to increased voluntary disclosure. The study used the disclosure index to measure voluntary disclosure on a sample of 106 listed companies of Dhaka Stock Exchange in Bangladesh. The finding of this study has contributions for the regulators and enforcement agencies such as Institute of Cost and Management Accountants of Bangladesh (ICMAB), Institute of Chartered Accountants of Bangladesh (ICAB), the Securities and Exchange Commission (SEC) and the Dhaka Stock Exchange (DSE). First limitation of the study is used only non-financial companies as a sample. So, the results may not extend across all listed companies in Bangladesh. Second, the researchers' constructed disclosure index that has been used in the study. The index is very sensitive and can affect the results if the selected items of information improperly.

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MICROFINANCE BANK AND ENTREPRENEURSHIP DEVELOPMENT IN AN EMERGING MARKET

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Abstract

We determine how Microfinance Banks (MFBs) impacts on entrepreneurship development in Nigeria. Data were collected through structured interview from entrepreneurs, Microfinance Bank managers and Regulators. The finding revealed that non-financial services of Microfinance Banks contribute to the survival of entrepreneurs and there is indication that Microfinance Banks enhance the productivity of entrepreneurship. This finding supports the evidence from the Central Bank of Nigeria (CBN) that there is an increase in total assets, Investment and Deposit Liabilities of MFBs in recent times. Beside this, respondents claimed that influence and control over entrepreneurships financing by Microfinance Banks should be view as partially effective. This result suggest that although Microfinance Banks in Nigeria are trying their best, there is need to put more effort in order to meet total demand of financing the entrepreneurships in Nigeria. We recommend that MFBs should assist their clients by providing training on credit utilization and the government should urgently tackle the problem of infrastructure development and maintenance.

Keywords: Loan, Regulator, Bank Managers, Entrepreneur, Government, Structured Interview

1. INTRODUCTION

Entrepreneurial organization in the private and public sectors has been the subject of increased attention in the developed countries over the last four decades (Georgellis et.al, 2000). Looking at the Schumpeterian view that careful management alone does not address the requirements of a competitive system (Georgellis et.al, 2000), previous studies focused on innovation as offering the best prospect of theorizing an entrepreneurial organization. However, this paper examines the relationship between Microfinance Bank and entrepreneurship development in a emerging market such as Nigeria. This because a vibrant entrepreneurial climate provides new jobs, increases competitiveness, and produces novel goods and services, also economic growth hinges upon entrepreneurship. However, in order to create a set of attitudes and skills in the populace that is conducive to entrepreneurship, a dearth of entrepreneurial and managerial skills is a major impediment that developing economies such as Nigeria is facing (NISER, 2004, Nwanyanwu, 2011).

Moreover, the importance of Microfinance Banks (MFBs) to entrepreneurial development made the Central Bank of Nigeria adopt it as the main source of financing entrepreneurship in Nigeria. Despite this, finance is still considered as one of the major hindrances to entrepreneurial development in Nigeria ((Acha, 2008). The government and Non-Government Organizations (NGOs) have been engaging a number of programme and policies to encourage entrepreneurship in Nigeria. However, unemployment rate still rising alarmingly. This may be likely due to a low level of development, especially in terms of number of jobs, wealth and value creation. This is because 65% of the active populations, who are majorly entrepreneurs, are not being able to accesses loan from other financial institutions (Udom, 2003). The author revealed that the establishments of Microfinance institutions in the country were not able to adequately address the gap in terms of credit, savings and other financial services.

Furthermore, Microfinance Bank has proven to be one of the ways of bridging the resource gap created in the Nigerian economy, there are still some undesirable problems experienced against its proper execution (Bamisile, 2006, Adeyemi, 2008). The indispensable role of financing the growth of entrepreneurship development and the adoption of Microfinance Bank as the main source of financing entrepreneur in Nigeria therefore makes it imperative to study the extent to which Microfinance can enhance the survival of entrepreneurship.

Against this background, it is pertinent to examine the relationship between Microfinance Bank and entrepreneurship, to assess the growth of entrepreneurship influenced by the financing capacity of Microfinance Banks and to ascertain the role of non-financial services of Microfinance banks on the performance of entrepreneurship. The research questions is that to what extent does microfinance enhanced the entrepreneurship development and how does the growth of entrepreneurship influenced by the financing capacity of Microfinance Banks?

The reminder of the study is organized as follows. Section two provides the literature review necessary to establish the gap for this study. Section three discusses methodology, while the data analyses are described in Section 4. Finally, Section 5 and 6 provides conclusion and recommendation for the study respectively.

2. LITERATURE REVIEW

2.1. Concept of Microfinance and Entrepreneurship

Entrepreneurship remains one of the most reviewed topics in literature especially as its impact on all kind of economics cannot be overlooked. Worldwide, they are accepted as the engine of economic growth and fox promoting equitable development and major advantage of the sector is its employment potentials at low capital cost (Nwankwo, 2008). The author further argues that labour intensity of the small scale enterprises constitutes over 90% of total enterprises in cost of the economies it is credited with generating the highest rate of employment growth and account for major share of industrial production and exports. The rapid expansion of small scale enterprises in economies of developed countries in the 1980s and 1990s has created a widespread conviction that small, new ventures are the most important source of entrepreneurship and as dynamic and innovative factor, they contribute directly to economic growth. (Pioty and Rekowski, 2008).

However, the unwillingness or inability of the formal financial institutions (commercial Banks) to provide financial services to the urban and rural people, coupled with the unsustainably of government sponsored development financial schemes contributed to the growth of private sector-led micro finance in Nigeria. Before the emergence of formal microfinance institutions, informal microfinance activities flourished all over the country. Informal microfinance is provided by traditional groups that work together for the mutual benefits of their members. These groups provide savings and credit services to their members. The informal microfinance arrangements operates under different names: “esusu” among the Yorubas, “”efoto” for the Igbos in the East and “adashi” in the North of the Hausas (Acha, 2009, Ojo, 2007).

2.2. Microfinance Banks in Nigeria

Microfinance banks were founded because of the perceived deficiencies in the existing financing schemes for the poor and small businesses. They were licensed to begin operations in 2007 and existing community banks and NGO microfinance institutions that met the conditions spelt out by CBN for licensing were allowed to transform into Microfinance Banks. To qualify for a microfinance license an existing community bank was required to increase its paid-up capital from N5m to N20m. Unlike the community banking policy framework which compulsorily confined all community banks to unit banking, the microfinance banking guideline permitted the branching of microfinance banks within a state. For the microfinance banks intending to open branches within a state their paid-up capital was put at N1 billion (CBN, 2000). Another point of divergence between the community banks and their microfinance successors is in those which the regulatory guideline allows to own them. In addition, individuals, group of individuals, community development associations, private corporate entities which could own community banks, foreign investors and commercial banks, foreign investors could also own Microfinance Banks. However, changes in the policy framework establishing Microfinance Bank were due to the perceived failure of the existing Microfinance framework (Mohammed and Hassan, 2009).

2.3. Entrepreneurship Development

Entrepreneurs are characterized by the need to be independent, to create value, to contribute to family and society, to become rich or quite often, not to be unemployed (UNDP, 2010). Potential entrepreneurs display initiative and ambition, have business sense and foresight, and are decisive. They are agents of change who accelerate the generation, application and spread of innovative ideas. Entrepreneurship is the process of using initiative to transform business concept to new venture, diversify existing venture or enterprise to high growing venture potentials (Acha, 2009).

2.4. The Challenges of Microfinance Banks in Nigeria

The failure of community banking scheme and many previous government’s micro financing schemes was predicated on the challenges they faced. Many of these challenges are still bedeviling microfinance banking. This section discusses some of these; one of the most fundamental difficulties Microfinance Banks in Nigeria have is absence of basic infrastructure. Unfortunately, these banks are also forced to incur additional costs to provide themselves with electricity and water. The absence of good roads especially in the rural areas also distorts their outreach (Bamisile, 2006). Also Nwachukwu (2008) found the main problems of microfinance institutions as follows:

a) Nonproductive loans and procedural delays for productive loans: Since most of the poor and needy are illiterate and prefer loans for consumption rather than productive purpose, majority of the poor find it hard to get loans.

b) Inflexibility and delay: The rigid systems and procedures for sanctioning loans and disbursing them to the beneficiaries result in a lot of delay in time for the borrowers, which de-motivate them.

c) Social obligation, not a business opportunity: They believed that microfinance has been seen as a social obligation rather than a potential business opportunity.

d) Lack of training: In most of the cases, it has been found that members of a group take up a certain economic activities for their sustenance which are not preceded by relevant training. After the pioneering efforts of the last few years by the government, Banks and NGOs the microfinance scene is reaching the take-off point.

2.5. Prospects of Microfinance Banking in Nigeria

A lot of opportunities exist in the Microfinance subsector in Nigeria is unarguable. Some scholars are unanimous revealed that there exist a large untapped market for Microfinance Banks. Olaitan (2006), Oluyombo, and Ogundimu, K. M (2006) posited that about 70% of the Nigerian population are engaged in the informal sector or agricultural production. Going by the country's population of over one hundred and fifty million people we can deduce that about one hundred and five million are in this sector. Contrarily, Mohammed, and Hassan (2009) argue that Microfinance Banks in Nigeria only serve less than one million people against the over 40 million that require their services. The gap in this subsector was further demonstrated by CBN (2005) when it showed that microcredit facilities in Nigeria account for about 0.2 percent of GDP and less than one percent of total credit to the economy.

2.6. Role of the Entrepreneur in Economic Development in Nigeria

These theories consider differences in attitudes and abilities among individuals as critical issues in determining why some small firms grow and others do not. Two schools of thought, the Austrian School and the Classical Economist were the first to acknowledge the role of the entrepreneur in small business development; they recognize the entrepreneur as an individual with special characteristics. Knight (1921) describes an entrepreneur as someone that has the willingness and superior ability to make decisions, raise capital and assume the risk of failure. In the same vein, Schumpeter (1951) argued that an entrepreneur has the superior ability to perceive new market opportunities and author believed the entrepreneur as an innovator.

Consequently, this study contributes to the literature by highlighting on the relationship between the activities of Microfinance Banks on the entrepreneurship development in Nigeria.

3. METHODOLOGY OF THE STUDY

3.1. Sources of Data

Data were obtained through the use of structured interview. The questions were done in simple and clear language to avoid ambiguity. The structured interviews were intended to generate responses that assist this study to address the research questions. 400 respondents were interviewed; this comprises 200 Entrepreneurs, 100 Micro-finance Bank Managers and 100 Micro-Finance Regulators (CBN). In order to support the evidence from the respondents that were interviewed secondary data were also collected from Central Bank of Nigeria (CBN).

3.2. Sample of the Study

Four hundred respondents were chosen based on the following; stratified random sampling technique was used because the stakeholders on the issue of Micro-finance and Entrepreneurship include entrepreneurs, Micro-finance Managers (MFMs) and regulators of Micro-finance which is Central Bank of Nigeria (CBN). Nigeria is divided into six Geo-Political Zone; the stakeholders are more in the South-Western part of Nigeria than the other Geo-Political Zone. Chosen four-hundred respondents are based on the concentration of each of the stakeholders in each Geo-Political zone. The distributions of respondents across the geo-political zone in Nigeria are shown below.

Table 1. Illustrate the Distribution of the respondents from the Interview across Geo-Political Zone in Nigeria

Geo-Political Zone	*Entrep-reneurs*	*Micro-finance Managers (MFMs)*	*Micro-finance regulators (CBN)*
North-Central	25	15	15
North-East	10	5	5
North-West	30	15	15
South –East	45	20	20
South-South	35	15	15
South-West	55	30	30
Total Sample	200	100	100

4. RESULTS OF THE DATA ANALYSIS FOR THE STUDY

In this section we describe the analysis of the data collected through structured interview questions from the respondents across Nigeria. In addition, the study support the results by showing the data collected from Central Bank of Nigeria (CBN) indicating the entrepreneurs' structures and Micro-finance Bank activities.

4.1. Results of the Data Collected Through Structure Interview

Below are the Tables showing structured interview questions and the analysis of the data from the respondents across Nigeria.

Table 2. What do you think is the role of microfinance bank in the survival of entrepreneurs?

	No of Respondents				
Responses	*Managers(MFBs)*	*Entrepreneurs*	*Regulators(CBN)*	*TT*	*%*
Advisory service	10	20	10	40	10
Pre-loan training	10	10	10	30	7.5
Group membership	10	5	6	21	5.2
All of the above	70	165	74	309	77.3
Total	100	200	100	400	100

Table 2 shows that 40 respondents (10%) of the respondents indicate that advisory service is being provided in their banks, 30 respondents (7.5%) believe in Pre-loan training, 21 respondents (5.2%) percent show in Group membership and 309 respondents (77.3%) percent indicate that all the above service such as advisory service, pre-loan training, group membership are role of microfinance

Bank. This finding suggests that all of the non-financial services of microfinance mention above contribute to the survival of entrepreneurs in Nigeria.

Table 3. To what extent do microfinance banks enhance the survival of entrepreneurship development?

Responses	*No of Respondents*				
	Managers (MFBs)	*Entrepreneurs*	*Regulators(CBN)*	*TT*	*%*
High	50	35	20	105	26
Moderate	45	120	65	230	58
Low	5	45	15	65	16
Total	100	200	100	400	100

From Table 2 above 16% of the respondents are of the opinion that microfinance banks enhance the survival of entrepreneurship development is low, 58% of the respondents are of the view that microfinance banks enhance the survival of entrepreneurship development is moderate and 26% indicate that it is high. This evidence show that majority of respondents have the opinion that Microfinance Banks are moderate in enhancing the survival of entrepreneurship development in Nigeria.

Table 4. How would you rate the level of microfinance banks contribution on entrepreneurship development in Nigeria?

Responses	*No of Respondents*				
	Managers(MFBs)	*Entrepreneurs*	*Regulators*	*TT*	*%*
Excellent (100-80%)	20	20	10	50	12
Very Good(79-61%)	5	10	13	28	7
Good (60-41%)	75	165	74	314	79
Poor (40-0%)	-	5	3	8	2
Total	100	200	100	400	100

In Table 4 fifty (12%) percent of the respondents are of the view that microfinance banks contribution on entrepreneurship development in Nigeria is excellent, twenty-eight (7%) percent believe that it is very good, three hundred and fourteen (79%) percent indicate that it is good and eight (2%) percent rated it as poor. Based on the above findings, it shows that microfinance banks enhance contribution of entrepreneurship development in Nigeria is good.

Table 5. To what extend do that microfinance banks contribute to the survival of entrepreneurship development?

Responses	*No of Respondents*				
	Managers(MFBs)	*Entrepreneurs*	*Regulators(CBN)*	*TT*	*%*
A large extend	45	27	16	88	22
A little extend	55	163	66	284	71
Not all	-	10	18	28	7
Total	100	200	100	400	100

The Table 5 illustrate that, 88 respondents representing 22% show that microfinance banks contribute to the survival of entrepreneurship development to a large extend and two hundred and eighty-four respondents representing 71% argue that microfinance banks contribute to the survival of entrepreneurship development to a title extend. However, twenty-eight which is 7% indicate that micro-finance bank does not contribute to the survival of entrepreneurship. This result suggests that the micro finance bank contribute a little in the survival of entrepreneurship.

Table 6. Does micro finance bank has the capability to influence the expansion capacity of entrepreneurs?

Responses	*No of Respondents*				
	Managers (MFBs)	*Entrepreneurs*	*Regulators(CBN)*	*TT*	*%*
Yes	53	44	25	122	31
No	-	42	10	52	13
To some extend	47	114	65	226	56
Total	100	200	100	400	100

Out of 400 which is the total number of respondents, 122 representing 31% indicate that microfinance bank have the capability to influence the expansion capacity of entrepreneurs. While 52 respondents representing 13% did not believe, however, 226 respondents representing 56 % are of the opinion that micro finance to some extend have the capability to influence the expansion capacity of entrepreneurs in Nigeria.

Table 7. How does the injection of microfinance funds into small business operations affect the productive capacity of entrepreneurs?

Responses	***No of Respondents***				
	Managers (MFBs)	***Entrepreneurs***	***Regulators (CBN)***	***TT***	***%***
Skills training	5	14	20	39	9
Profitability	35	25	10	70	18
Acquisition of modern Equipment	55	151	55	261	65
All of the above	5	10	15	30	8
Total	100	200	100	400	100

From the above Table 7 there is evidence that 9 percent agreed injection of microfinance funds into small business operations affect the productive capacity of entrepreneurs in the area of skill training, 18 percent believe that it is Profitability, 65 percent responded that it is acquisition of modern equipment. However, 8 percent show that skill training, profitability and acquisition of equipment are all attributed to the injection of microfinance funds into small business operations affect the productive capacity of entrepreneurs.

Table 8. What is your opinion on productivity level of entrepreneurs with the involvement of microfinancing?

Responses	***No of Respondents***				
	Managers(MFBs)	***Entrepreneurs***	***Regulators (CBN)***	***TT***	***%***
Excellent (100-81%)	12	15	10	37	9
Very Good (79- 61%)	19	25	16	60	15
Good (60-41%)	60	150	56	266	67
Poor (40-0%)	7	10	18	35	9
Total	100	200	100	400	100

In Table 8 9% of the respondents are of the view that productivity level of entrepreneurs with the involvement of microfinancing is excellent, 15% indicate that it is very good, 67% believe that it is good and 9% percent rated it to be poor. This affirms that productivity level of entrepreneurs with the involvement of micro financing is good in Nigeria.

Table 9. Which category of business do microfinance banks support in entrepreneurship development?

Responses	***Category***				
	Managers (MFBs)	***Entrepreneurs***	***Regulators***	***TT***	***%***
Sole Proprietorship	8	20	10	38	9.5
Family Business	2	-	-	2	0.5
Partnership	10	20	10	40	10
All of the above	80	160	80	320	80
Total	100	200	100	400	100

Table 9 shows that thirty-eight of the respondents indicate 9.5 % of the respondents are of the view that sole proprietorship and two respondents believe that it is family business showing 0.5%. Forty respondents indicate that partnership (10%) are being supported by microfinance banks, three hundred and twenty respondents (80%) are of the view that is sole proprietorship, family business and partnership are supported by microfinance banks in entrepreneurship development.

Table 10. To what extent do you consider the operations of microfinance on the entrepreneur's productivity?

Responses	***No of Respondents***				
	Managers (MFBs)	***Entrepreneurs***	***Regulators(CBN)***	***TT***	***%***
70% and above	30	50	25	105	26
50% and above	55	140	57	252	63
35% and above	15	10	18	43	11
Others specify	-	-	-	-	-
Total	100	200	100	400	100

Table 10 illustrate that 105 respondents (26%) agree that productivity level of entrepreneurs that are involve with microfinancing is 70% and above; while 252 respondents (63%) are of the view that productivity is 50% and above and 43 respondents (11%) agree that productivity level is 35% and above. From this result, it can be deduced that productivity level of entrepreneurs who are involve in business with micro finance banks is 50% and above.

Table 11. How does non-financial services of microfinance banks affects entrepreneurship business performance?

Responses	No of Respondents				
	Managers (MFBs)	Entrepreneurs	Regulators(CBN)	TT	%
Greatly	53	15	17	85	21
Partially	47	135	73	255	64
Not at all	-	50	10	60	15
Total	100	200	100	400	100

The above Table indicates that eight-five respondents representing 21% agree that non-financial service of microfinance banks affect entrepreneur's business performance greatly, two hundred and fifty-five respondents representing 64% show non-financial service of microfinance banks affect entrepreneur's business performance partially. However, sixty respondents representing 15% believe that non-financial service of microfinance banks doesn`t affect entrepreneurship business performance.

The above finding suggests that non-financial services by microfinance banks may likely affect entrepreneurship activities in a partial level in their performance.

Table 12. Influences and control over entrepreneurial financing by microfinance banks should be viewed as:

Responses	No of Respondents				
	Managers (MFBs)	Entrepreneurs	Regulators(CBN)	TT	%
Effectively	57	30	15	102	25.5
Partially effective	43	152	65	260	65
Ineffective	-	18	20	38	9.5
Total	100	200	100	400	100

In Table 12 one hundred and two respondents representing 25.5% are of the opinion that Influences and control over entrepreneurial financing by microfinance banks should be viewed as effective. While two hundred and sixty respondent representing 65% indicate that influences and control over entrepreneurial financing by Microfinance Banks should be viewed as partially effective. Nevertheless, thirty-eight respondents show that the influence and control over entrepreneurial financing by microfinance banks is ineffective.

4.2. Results of the Data Analysis from the Central Bank of Nigeria

Table 13. Indicates the Classification of SMEDAN for National Policy on SMEs

1	Micro enterprises	Less than 10	Less than 5
2	Small enterprises	10-49	5- less than 50
3	Medium enterprises	50-199	50- less than 5000

Source: SMEDAN, 2014

The National Policy on SMEs adopts a classification based on the dual criteria: of employment and assets (excluding land and buildings) as shown in the table above.

Table 14. Showing the Structure and Limits for Borrowers

Enterprise	%	% Enterprise Groupings		Loan Maximum per Application
		Others	Female	
Micro	50	20	30	500,000
SMEs (Financed by other PFIs)	50	20	30	5,000,000
SMEs (funded by DMBs & DFIs)		40	60	5,000,000

Micro, Small and Medium Enterprises Development Fund Guidelines 2014 (CBN)

On-lending to clients shall be based on the assessment by the Participating Finance Institution (PFIs). The structure and limits for borrowers are as shown in the table above. The facility shall have a maximum tenor of one (1) year for micro enterprises and up to five (5) years for SMEs with option of moratorium. PFIs shall access the fund as many times as possible upon full repayment.

The table above shows the maximum loan amount per cycle of wholesale lending as indicated above or 50% of Shareholder's Fund unimpaired by losses for MFBs and Finance Companies.

Table 15. Provides the maximum loan amount per cycle of lending

S/No.	Financial Institution	Facility Limit
1	Unit Microfinance Bank	N10 million
2	State Microfinance Bank	N50 million
3	National Microfinance Bank	N500 million
4	NGO-MFIs N10 million	N10 million
5	Financial Cooperatives	N10 Million
6	Finance Companies	N10 Million

Micro, Small and Medium Enterprises Development Fund Guidelines 2014 (CBN)

Table 16. Describes the Microfinance Banks' Annual Report from 2009-2013 (N' Million)

Item	*2009*	*2010*	*2011*	*2012*	*2013*
Number of Licensed CBs/MFBs	828				
Number of Reporting CBs/MFBs	828	801	873	879	820
Number of Non-Reporting CBs/MFBs		801	474	566	820
Capital and Reserves	45,258.60				
Total Assets	158,795.90	43,997.50	20,094.80	53,282.13	72,963.74
Deposit Liabilities	72,750.60	170,338.90	117,872.10	222,766.59	270,896.14
Loans & Advances (Net)	55,818.90	75,739.60	58,375.90	132,154.70	135,918.73
Investments	7,750.60	52,867.50	50,928.30	96,971.56	129,026.97
Average Loan/ Deposit Ratio	76.73	8,674.20	8,959.80	14,529.43	14,703.04
Percentage Change (%)		69.80	85.85	87.85	94.90
Number of Reporting Banks	11				
Capital and Reserves	35.66	-3	-41	19	45
Total Assets	37.93	-2.79	-54.33	165.15	36.94
Deposit Liabilities	24.40	7.27	-30.80	88.99	21.61
Loans & Advances (Net)	32.82	4.11	-22.93	126.39	2.85
Investments	5.96	-5.29	-3.67	90.41	33.06
		11.92	3.29	62.16	1.19
Sectorial Distribution of Loans & Advances					
(i) Agriculture and Forestry	5,957.80	5,102.90	4,679.22	4,511.68	4,803.12
(ii) Mining & Quarrying	491.98	520.40	329.44	490.52	603.25
(iii) Manufacturing	2,624.97	2,172.80	1,728.85	2,318.02	2,937.27
(iv) Real Estate and Construction	2,411.45	2,257.40	1,725.45	4,047.36	2,616.01
(v) Commerce	25,036.66	23,333.77	32,873.24	48,811.69	50,008.04
(vi) Transportation/Communication	3,357.01	2,642.10	3,241.71	3,245.49	3,401.44
(vii) Others	20,554.89	16,957.00	12,118.47	21,848.46	48,257.09

Central Bank of Nigeria Annual Economic Report (2014)

According to table 16 above, the total assets of MFBs increased from N222, 766.10million in 2012 to N270, 896.14Million in 2013, representing an increase of 21.61 percent. The major components of the total assets in 2013 were loans and advances N129, 026.97million and Investment N14, 703.04 million representing 47.63 percent and 5.43 percent. The sectorial allocation of loans advances (credit) between commerce and agriculture and Agriculture and forestry showed an increase from N48, 811.69million in 2012 to N50, 008.04million in 2013 and N4,511.65million in 2012 to N5,803.12million in 2013. An increase in microfinance banks' lending to others sectors increased from N21, 848.46million in 2012 to N48, 257.09million in 2013. The table show that most of the entrepreneurs were into commerce (trading) and other services.

In addition, finance is well known determinant of the growth of entrepreneurship and development activities, hence the establishment of microfinance banking system has a proved financial succor to these activities. From the table above, microfinance loan was found to be improving, thus implying that microfinance has a relationship with entrepreneurship development in Nigeria.

Table 17. Showing the summary of Microfinance Banks' Annual Report 2009-2013 (N' Million)

Capital and Reserves	45,258.60	43,997.50	20,094.80	53,282.13	72,963.74
Total Assets	158,795.90	170,338.90	117,872.10	222,766.59	270,896.14
Deposit Liabilities	72,750.60	75,739.60	58,375.90	132,154.70	135,918.73
Loans & Advances (Net)	55,818.90	52,867.50	50,928.30	96,971.56	129,026.97
Investments	7,750.60	8,674.20	8,959.80	14,529.43	14,703.04
Average Loan/ Deposit Ratio	76.73	69.80	85.85	87.85	94.90

Central Bank of Nigeria Annual Economic Report (2014)

The table above shows summary of microfinance banks' capital and reserves, total assets, deposit liabilities, loan and advances (net), investments and loan/deposit ration activities from 2009 to 2013 in millions of naira. 2013 activities show an improvement over the previous years.

Figure 1. Illustrate the Microfinance Banks' Annual Report 2009-2013 (N' Million)

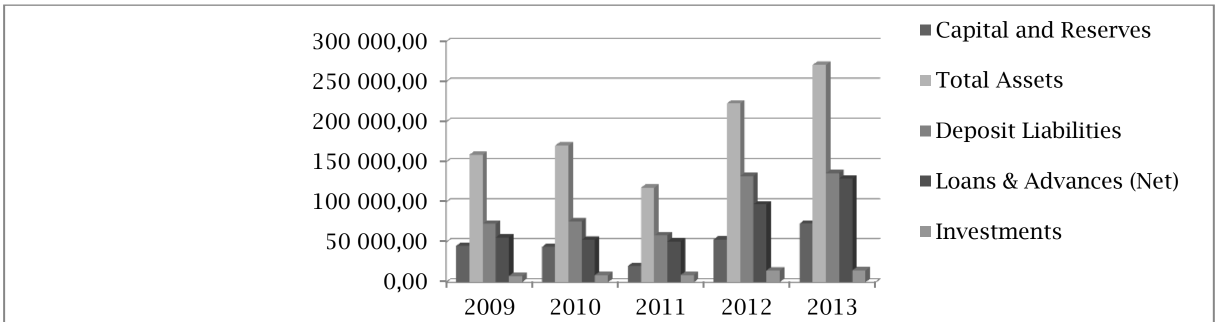
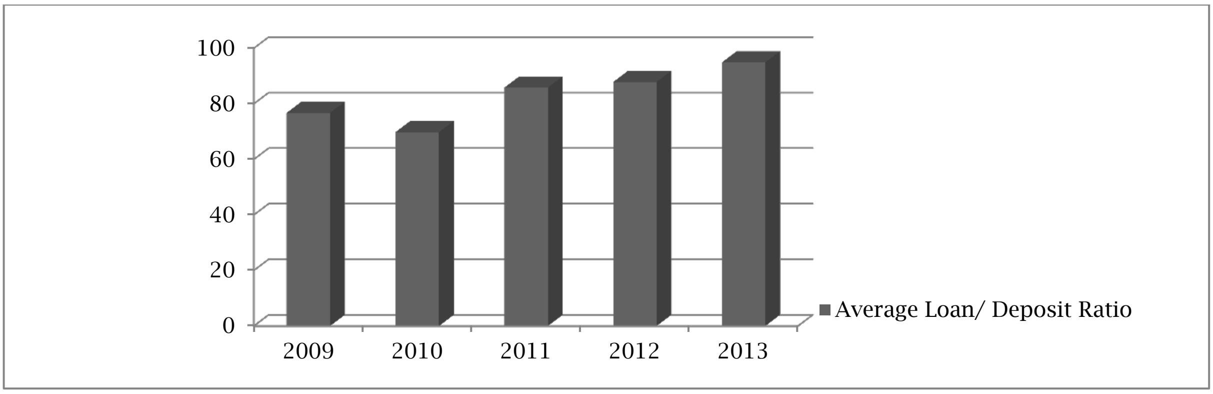


Figure 2. Describes the Average Loan/Deposit Ratio from 2009-2013 (N' Million)



The chart above shows summary of microfinance banks capital and reserves, total assets, deposit liabilities, loan and advances (net), investments and loan/deposit ratio activities from 2009 to 2013 in millions of naira. 2013 activities show an improvement over the previous years.

Table 18. Provides the summary of Microfinance Banks' Annual Report 2009-2013 in percentage Change (%)

Number of Reporting Banks	11	-3	-41	19	45
Capital and Reserves	35.66	-2.79	-54.33	165.15	36.94
Total Assets	37.93	7.27	-30.8	88.99	21.61
Deposit Liabilities	24.4	4.11	-22.93	126.39	2.85
Loans & Advances (Net)	32.82	-5.29	-3.67	90.41	33.06
Investments	5.96	11.92	3.29	62.16	1.19

Central Bank of Nigeria Annual Economic Report (2014)

The above Table indicate the summary of microfinance banks capital and reserves, total assets, deposit liabilities, loan and advances (net), investments and loan/deposit ration activities from 2009 to 2013 in percentage changes.

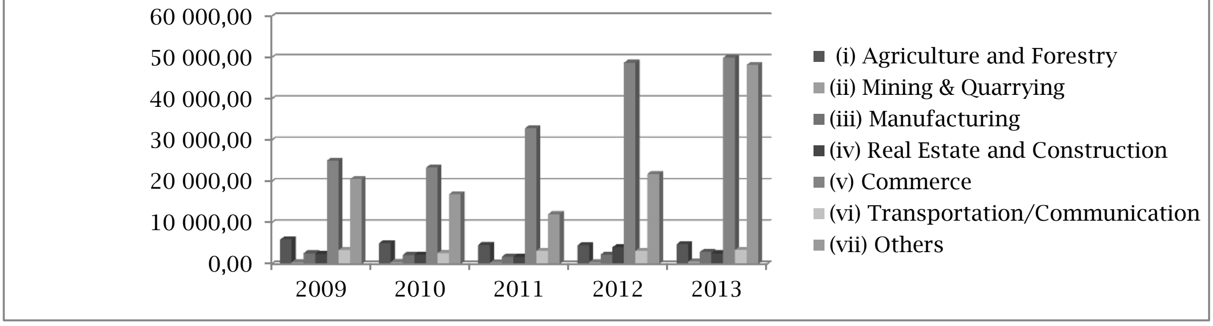
Table 19. Indicate the Summary of Microfinance Banks on Sectorial Distribution of Loans & Advances from 2009-2013 (N' Million)

Item	2009	2010	2011	2012	2013
(i) Agriculture and Forestry	5,957.80	5,102.90	4,679.22	4,511.68	4,803.12
(ii) Mining & Quarrying	491.98	520.40	329.44	490.52	603.25
(iii) Manufacturing	2,624.97	2,172.80	1,728.85	2,318.02	2,937.27
(iv) Real Estate and Construction	2,411.45	2,257.40	1,725.45	4,047.36	2,616.01
(v) Commerce	25,036.66	23,333.77	32,873.24	48,811.69	50,008.04
(vi) Transportation/Communication	3,357.01	2,642.10	3,241.71	3,245.49	3,401.44
(vii) Others	20,554.89	16,957.00	12,118.47	21,848.46	48,257.09

Central Bank of Nigeria Annual Economic Report (2014)

The table above shows summary of agriculture and forestry, mining & quarrying, manufacturing, real estate & construction, commerce, transportation/communication, and others sector distribution of loans & Advances in millions of naira by microfinance banks from 2009 to 2013 in millions of naira.

Figure 3. Provides the Summary of Microfinance Banks on Sectorial Distribution of Loans & Advances from 2009-2013 (N' Million)



The above chart illustrates the effect of Microfinance Banks on agriculture and forestry, mining & quarrying, manufacturing, real estate & construction, commerce, transportation/ communication. Also with distribution of loans and advances in millions of naira by Microfinance Banks from 2009 to 2013 in millions of naira, this suggest that Microfinance Banks have a strong significant relationship with entrepreneurship such as mining and quarrying, manufacturing, agriculture, real estate construction transportation, commerce and communication in Nigeria.

4.3. Discussion of the Findings for the Study

In Table 2 there is evidence from the respondents that non-financial service of Microfinance Bank contribute to the survival of entrepreneurship development in Nigeria. In addition, Table 3 and 4 also indicates that Microfinance Banks are moderate in enhancing the survival of entrepreneurship development and the rate of contribution is good. The respondents show that Microfinance Banks have the capability to influence the expansion of entrepreneurship. Moreover, the respondents believe that the injection of fund from Microfinance Banks to entrepreneurship are used in acquisition of equipments and the level of productivity of entrepreneurships are good. This result suggests that the acquisition of modern equipments enhanced the productivity level of Entrepreneurship and the productivity level is 50% above.

Furthermore, Table 9 provides the evidence from the respondents that Microfinance Banks are supporting sole proprietorship, family business and partnership. This finding indicates the Microfinance Banks does not discriminate and Microfinance Banks always support difference categories of entrepreneurship business in Nigeria. The respondents also indicate that non-financial services by microfinance banks may likely affect entrepreneurship activities in a partial level in their performance. Beside this, respondents claimed that influence and control over entrepreneurships financing by Microfinance Banks should be view as partially effective. This result shows that although Microfinance Banks in Nigeria are trying their best, there is need to put more effort in order to meet total demand of financing the entrepreneurships in Nigeria.

Beside this, the Central Bank of Nigeria (CBN) Annual Economic Report (2014) as shown in table 4.16 above, the total assets of MFBs increased from N222, 766.10million in 2012 to N270, 896.14Million in 2013, representing an increase of 21.64 percent. The major components of the total assets in 2012 were loans and advances N129, 026.97million, Investment and Deposit Liabilities representing 33.06 percent, 1.19 percent respectively. Sectorial allocation of loans advances (credit) among others, commerce and agriculture showed an increase and most of the entrepreneurs were into commerce (trading) and other services.

Finance is well known determinant of the growth of entrepreneurship and development activities, hence the establishment of Microfinance Banking system have assisted the entrepreneurial activities. From table 4.16, Microfinance loan was found to be improving, thus implying that microfinance has a relationship with entrepreneurship development in Nigeria.

5. CONCLUSION

Based on the finding on the finding from this study there is evidence that Microfinance Banks enhances the expansion capacity of entrepreneurship development in Nigeria. The study also assesses the impact of microfinance on entrepreneur‘s productivity there is indication that Microfinance Banks enhance the productivity of entrepreneurship. In addition, the non – financial service of Microfinance Banks and business performance the respondents believe that this services enhance the survival of entrepreneurs in Nigeria. Moreover, respondents agreed that regular participation in Micro financing enhanced their business. This finding supports the evidence from the Central Bank of Nigeria (CBN) that there is an increase in total assets of MFBs to 21.64 percent in 2013. Also Investment and Deposit Liabilities increase to 33.06 percent, 1.19 percent respectively. In Furthermore, sectorial allocation of loans advances (credit) among others, commerce and agriculture showed an increase and most of the entrepreneurs were into commerce (trading) and other services in 2013. Microfinance loan was found to be improving, consequently, this imply that microfinance has a significant relationship with entrepreneurship development in Nigeria.

6. RECOMMENDATIONS

We recommend that in order to encourage technology acquisition for small business expansion, Micro-finance Banks (MFBs) can categorize their loans into low and high interest loans. The conventional loans to clients can be maintained as high interest loans, while loans for capital assets or technology acquisition should be low interest loans, which can be secured by a mortgage over the fixed asset so acquired by the micro-borrower. To achieve this, the Microfinance Banks (MFBs) can be recapitalized. Micro-fiance Banks (MFBs) should increase the duration of their clients' asset loans, or spread the repayment over a longer period of time, or increase the moratorium. This will enable the clients to have greater use of the loan over a longer period for the acquisition of capital assets and technology.

In terms of policy to support services MFBs should assist their clients by providing training on credit utilization and provide information on government programmes to entrepreneurs operators in the country. MFBs can partner with relevant technology enterprise development organizations/skills training institutions to provide client-focused skills training to their clients.

Moreover, the government should urgently tackle the problem of infrastructure development and maintenance. These include electricity, water and efficient transportation system which impact greater on entrepreneurship development. The bureaucratic bottleneck involved in small business registration should also be removed.

Finally, the government should establish relevant well adapted and appropriately structured institutions and organizations to provide support for entrepreneurs in such aspect as; procurement, supply and distribution of raw material, supply of local/imported machines for use on concessional terms, training in several technical grades, and create favourable market conditions.

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A FEASIBLE SPECIAL PURPOSE VEHICLE MODEL IN CHINA: DESIGN AND IMPLEMENTATION

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Abstract

In China's current capital market, the assets securitization is not acclimatized to the economy and legal system, and thus not being widely implemented. This paper discusses two possible models' feasibilities of special purpose vehicle in China's market. We found that the special purpose trust is likely to be the optimum choice for the assets securitization in China. We suggest that employing existing trust companies or establishing SPT based on the cooperation between the government and trust companies should be firstly considered for a better and healthier development of the capital market, as well as to avoid dramatically changing and challenging to the current operating economical and political system.

Keywords: Asset Securitisation, Special Purpose Vehicle, Special Purpose Trust
JEL: G23, G28, K11

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1. INTRODUCTION

The essence of the asset securitization (hereinafter AS) is to achieve the optimum of the original asset liquidity through a securitized mechanism. For example, the mortgage loan in commercial banks is an asset but with low liquidity; however, after a process which consists of pooling, tranching, credit enhancement, credit rating and insurance, commercial banks are capable of developing and issuing tradable bonds (Fabozzi and Kothari, 2008). The original assets, in this way, are securitized, and this promotes the asset liquidity[1].

For financial institutions, AS can help improve the asset liquidity and accelerate the cash flow, so as to loan out more funds to demanders. In the capital market, the increase of the funds supply decreases the market financing prices, and this solves the problem that the cost of financing is currently high. Asset securitization, however, has some problems itself. It is difficult to protect the investors' benefits for two reasons: first, moral hazard, which means some original owners tend to sell their bad assets to shift the risk of their owns'; second, AS bonds and the operational risks from the original owners cannot be effectively removed. To solve this, the concept of bankruptcy remoteness must be introduced and implemented.

The main difference between AS and other financing instruments is the bankruptcy remoteness (Gorton 2007). It is the key to ensuring the efficient financing of AS and investors' returns. SPV is utilised to accommodate original assets for lowering the risks and promoting the true sales of the asset. SPV, which builds a firewall between the sponsor (sometimes referred to as issuer or originator) and the investor, is crucial to asset securitization transactions[2].

As a Western financial import into China, AS has been researched from multiple academic perspectives in western countries. A comprehensive system has been designed and developed with clear standards and abundant cases based on AS practice. There are mainly two models of SPV: special purpose corporation (hereinafter SPC) and special purpose trust (SPT). These two models may have various manifestations according to the different legal system crossing countries, which means the model varies with regions and the practices: some countries adapt one of them; some may modify models by considering reality for better practice. The selection of the SPV model in critical as it strongly influences the cost of AS operation and its efficiency. For China, which SPV model should be selected depends on two elements: the model, first, should not only meet the needs of future financial development, but also work for the current market; second, the local economy and legal system. Only taking these elements into account, the SPV can efficiently work to protect investors' rights and interests.

The paper aims to illustrate an in-depth analysis of the two models of SPV under the context of the real practice in China in accordance with its economic and legal system. We found the special

1 The enhancing liquidity, as a corollary of asset securitization, means to convert future cash flow into current cash flow, or to convert illiquid assets into the liquid one.

2 See Steven L. Schwarcz (1994), The utilisation of SPV and bankruptcy mechanism differentiates AS from other forms of financing, through SPV from the originators to take stock of the original assets and issuance of asset-backed securities to ensure sponsor's bankruptcy will not affect the normal operation of SPV, will not affect the cash flow the asset pool, make the bond paid less under the influence of basis of asset liquidity for all.

purpose of trust (SPT) is the optimum model for China at present, and this model does not require a radical modification of the current operating system. It is difficult to introduce data model and statistic methodology for further analysis as the AS practice is still on the rudiment stage, and not many data sources can be detected.

The following sections are as below. Literature review introduces some different voices of the AS model selection in China; section three first tells the differences between two SPV models and then indicates that SPT is the best and highly practical model while considering the economic and legal system situation. Section four lists some barriers of the implementation of SPT model, and the last section analyses which financial institution is suggested to be the SPT in China and some recommendations are also made.

2. LITERATURE REVIEW

Many studies have already discussed the optimum selection of AS model. Kanda (1997) indicates that offshore SPC model is utilised in Japan, to reduce costs and eschew regulation. Ashman (2000) and Belmontes (2004) suggest SPC agencies should be established in the Cayman Islands for reducing taxes and costs. Gorton (2007) mentions a purpose trust (called a STAR trust in the Cayman Islands) is a trust set up to fulfill specific purposes rather than for beneficiaries. For many transactions, there are benefits if the SPV is domiciled offshore, usually in Bermuda, the Cayman Islands, or the British Virgin Islands. Tien and Seow (2004) note that securitisation of housing mortgage loan in Singapore utilised offshore ABN model.

No consensus explores the most suitable AS model in China because of the rare practice in the past decades. Wang (1999) indicates that large banks or brokerages should take the role of SPV based on his observation on the early stage of AS in China while Wu (2001) thinks the Chinese government should set up an SPV institution for AS of commercial banks. Both of them, however, only draw a possible framework from a more macro-level perspective but the lack of detail description of why the selection should be made.

As the core of AS is bankruptcy remoteness under the protection of the legal system, more studies focus on analysing the legal mechanism in China to try to explain the AS model selection. Yin (1999) states that the China's current legal system cannot effectively protect SPV institutions such as securities companies and commercial banks. Zhao (2004) further analyses bankruptcy remoteness of SPC confronts with legal obstacles under the current legal system. Yu and Wang (2010) argues that SPT would work better in China from a legal perspective and thinks that reconstructing the existing trust companies and improving the legal system can meet the requirement of bankruptcy remoteness. Luo (2013) considers SPT as the optimum model in the following decade, but more focus should be put on the construction of SPC system.

Most of the previous studies discussed the option of AS model from a legal or theoretical perspective but the lack of consideration of the practice and applicability of AS model. This is the key point in this article.

3. THE SPV MODEL CHOICES IN CHINA

The core of AS is whether SPV can efficiently play its role of bankruptcy remoteness. The design and construction of the legal form of SPV are strongly influenced by a nation's legal system, taxation system and the developmental process of the securities market. Hence, which SPV model should be adopted is based on a multiple consideration including economy, laws, and institutional policies. These considerations can help to create a sustainable environment for the AS system and ensure bankruptcy remoteness fully functional.

The legal form for an SPV, based on the current practice and relevant legislations in different countries, may be a corporation, a trust, or a limited partnership (Gorton 2007). A corporation means a legal entity - a special purpose corporate (hereinafter SPC) - which is created in the legal form of a company. The main advantage of SPC is to securitise the underlying assets of one or a group of originators, enlarge the asset pool, and dilute the high cost of initial issuing of securitisation transactions. However, it is difficult for an SPC to deal with the double taxation problem[3]. Special purpose trust (hereinafter SPT)is most commonly taken by the SPV in securitization, which is created in the legal form of a trust[4]. Once the original owner transfers his/her securitised assets to an SPT, the fiduciary relationship is formed. The SPT, as the issuer of asset-backed securities, can issue the certificate of trust income to investors. The third legal form is a limited partnership. The general partner purchases underlying assets from the partner and finish the AS, but the general partner only bears limited liability for the debts. Currently, only some countries (such as the United states) choose the legal form of a limited partnership for their SPV model, such as the United States; however, this model is not working in China as its legal system does not recognize this form of corporation. First, we will discuss the feasibility of SPC model in china.

SPC is a shell company which is specially set up for AS. In China, its registration and operation are strictly limited by s series of laws and regulations including Companies Law of the people's Republic of China, The Enterprise Bankruptcy Law of the people's Republic of China and others. There is no feasibility in China to adopt SPC model for several reasons.

First, the concept of capital credit is embodied in the whole Companies Law of PRC system. From the capital company system to the form of shareholders' contribution, there is a strong focus on the capital credit. Considering the underlying conditions and requirements of establishing a company, Company Law regulates the minimum

3 An investment trust that issues pass-through certificates is tax neutral. To maintain this tax-neutral status, it is important that the SPV not be reclassified as a corporation. To avoid such reclassification, the trustee must have no power to vary the investments in the asset pool, and its activities must be limited to conserving and protecting the assets for the benefit of the beneficiaries of the trust. See Kramer (2003).

4 A trust is usually considered as a legal construct in which a fiduciary relationship is created with respect to some property. A trustee then has duties to perform for the benefit of third party beneficiaries…often the SPV is a charitable or purpose trust. These traditional trusts have been transformed into a vehicle with a different economic substance than what was perhaps contemplated by the law.

capital of setting up a company[5]. This aims to confirm first, that a company is capable of being well-operated and well-obliged based on its real capital, and second, to protect creditors' interests. Additionally, the Securities Law of PRC rules that funds which are raised for publicly issuing corporation bonds must be used for the approved purpose instead of covering the deficit and non-productive expenditures[6]. As the shell structure of a standard SPC, an SPC is not permitted to acquire the status of the legal person and impossible to be qualified to issue securities and bonds.

Second, in accordance with the international practice, the business scope of an SPV is limited in securitization activities, which is a part of the financial sector, but the relevant financial regulations in China strictly limit financial businesses in registration capital and licensing, and separated operation. This causes the current commercial banks, securities investment companies, and insurance companies having no qualifications to establish an SPC. Moreover, looking at the fiscal and taxation systems, current-using accounting standards and tax system in China, in comparison with the AS-related systems in developed countries, are different. The primary distinction between these two systems is a lack of financial and tax policy preferences for setting up an SPV in China.

Last, according to The Enterprise Bankruptcy Law of PRC, once a company is declared bankrupt, all of its assets must be used to pay off the debt owed[7]. If a company whose main business is not focusing on AS acts as an SPC, the securitised assets are strongly influenced by its financial and operational performance and the effects of bankruptcy risk. This means the bankruptcy remoteness cannot be ensured, and the benefits of investors and creditors will be damaged (Chen 2005). Therefore, the SPC model, when being utilised to work effectively within the current legal system, the financial institutions and enterprises in China, is facing many obstacles and changes and is not feasible (Sun 2001).

For SPT model, trust system with the embodied functions of bankruptcy remoteness and rights reconstructing – must obey the principle of "being trusted, complying with the promise, and financing for the trustor", to provide a reassuring system for managing the external property for investors. This can meet the essential requirements of the bankruptcy remoteness in AS. The trust system first segments the properties of asset management and interests and second remotes the properties of rights and interests. Accordingly, there is no need for beneficiaries to undertake the responsibility of property management and they can benefit from the future profits of the property. A trust system, if feasibly utilised, can meet the needs of bankruptcy remoteness and true sales of AS, which is the essence of an advanced property management system (Schwartz 2003). In China, although the Trust Law does not explicitly regulate how to deal with the issues of setting up an SPV in a form of trust. Considering the current legal system and practice, SPT model should be a highly possible option.

According to The Trust Law, trust property differs from the inherent property of the trustee; meanwhile, the law also requires the trustee to manage and finish accounting of the entrusted property separately. Trust property, as an independent property, can help to complete bankruptcy remoteness[8]. Furthermore, Article 15 and 52 in Trust Law regulate that once the originating institution establishes SPT, trust property will be independent of both trustor and trustee's property. This removes the risk which may arise from the sponsor and the trustee. Under this condition, the creditor has no request rights for the securitised assets while beneficiaries' interests are protected (Chen and Zhang 2003). The SPT, in this process, plays as a protector which sets up a firewall between the sponsor and the beneficiary, to prevent the latter from the risk[9]. Finally, Trust Law also regulates that trust property cannot be enforced and set off, which further strengthens the isolation between the underlying assets and the trustor and trustee[10]. Hence, separation of securitised assets by using the trust can enable specific assets to be with individuality, exclusiveness, and long-term planning function, this can improve the implementation of SPV and promote the AS operation. Considering the existing legal system in China, SPT is suggested to be implemented for bankruptcy remoteness of AS (Liu 2007).

In addition to effectively achieving the objectives of bankruptcy isolation, the establishment, existence and termination of an SPT are easy and convenient - which helps to reduce the cost of financing. According to China's Trust law, as long as there is a legitimate purpose, specific trust property and being expressed in writing form, the trust can be established[11]. The establishment does not need administrative approval but registration. The internal governance structure of a trust is simple; after the establishment, there is no requirements for audit and annual inspection; when the trust terminates, there will have already agreed or legal ownership of the property and no need to liquidate. In addition, under China's tax system, if the SPC model is selected, the problem of double taxation will arise, but using the SPT model can effectively avoid this. Under China's tax system, using SPT model only needs to levy revenues from the trust beneficiary; the SPC model, however, levies company income tax from the SPC institutions. Therefore, under the legal system in China, the SPT is the optimal model of AS.

4. LEGAL ISSUES OF SPT MODEL IN CHINA

The central concept which legislation of AS follows in China is "piloting and regulating while legislating", but as a sophisticated structured financing, the effective operation of AS must be reliant on a well-designed legal system. The SPT model is not suggested in China for two main

5 Company Law of the People's Republic of China (2013 Amendment), Article 23.2 and Article 27.
6 Securities Law of the People's Republic of China (2005), Article 16.6.
7 Enterprise Bankruptcy Law of the People's Republic of China (2006), Article 30.
8 Trust Law of the People's Republic of China (2001), Article 2.
9 Trust Law of the People's Republic of China (2001), Article 15 and Article 52.
10 Trust Law of the People's Republic of China (2001), Article 17 and Article 18.
11 Trust Law of the People's Republic of China (2001), Article 8.

reasons. First, the trust property ownership is not clear. The issue that Trust Law cannot clarify the property owner has extended into the AS practice in China. According to the Trust Law, the behaviour of transferring the trust property from the trustor to the trustee is described as "entrust"; meanwhile, Administrative Measures for the Securitization of Credit Assets (hereinafter AMSCA) also uses the word "entrust" to identify the behaviour of promoter institution transferring the credit assets to a trustee institution. Generally speaking, "entrust" does not result in a transfer of property ownership, but when describing the transfer of credit assets in securitisation, "entrust" is still used. This indicates that the transfer of credit assets is somehow secretive in China's relevant legislation.

AMSCA regulates that trust property is the trust assets which the trustee institution takes by funding the trusts, it is independent of self-owned assets of SPT. When SPT is clearing up accounts, SA assets cannot be liquidated and putting into SPT assets. These provisions determine the independence of SA assets from certain aspects but do not specify the ownership of SA assets right. When analysing the responsibilities of securitization participants, the SA assets owner still cannot be specified[12]. However, according to the "Trial Notice Concerning for Relevant Issues of Registration of Mortgage Change in Securitization of Individual Housing Mortgage Loan" issued by Ministry of Construction of the PRC (now renamed as "Ministry of Housing and Urban-Rural Development of the PRC (MOHURD)") in 2005, the creditor of credit assets of trust property is the owner of the credit assets of trust property.

Although Trust Law and AMSCA have been avoiding regulating the ownership of trust property in China, when putting into practice, the owner of trust property needs to be identified in securitization transactions, and thus, this requires a thought that practice resolves the theoretical problems. Such "forced practice" help clarify the owner of trust property for a special purpose and this terminates the academic debate of the ownership of trust property. The phenomenon mentioned above has partly met the need of asset transfer of securitization but not in accordance with the requirement of Trust Law. These different – sometimes conflicting or contrary – policies from several government departments are not conducive to the development of China's asset securitization (Yin 1999).

The second issue of the current securitization system in China is there is no established regulation system focusing on asset credit (Xudong Zhao 2003). The securitization, which is innovative and differs with the traditional financing methods like stocks and bonds, is not based on the synthetic credit of a company but the credit of securitised assets. Non-superiority assets of enterprises with good synthetic credit may not be able to be securitized while superiority assets of enterprises with relatively poorer credit could be securitised. The corresponding legal regulations, therefore, should be designed according to asset credit instead of still using the traditional financing methods which put the synthetic credit of the company as the primary consideration. Looking at China's present laws and regulations of asset securitization, it does not establish a credit-based regulation system yet. According to Measures for Supervising and Administrating the Pilot Securitization of Credit Assets by Financial Institutions (MSAPSCAFI), the sponsor's institutions for the securitization of credit assets is required to have good social credit standing and operational performances, no major illegal or irregular act within the latest three years, and a good corporate governance structure, as well as a risk management and internal control system. The emphasis on the sponsor's credit, for one, is likely to mislead investors to focus too much on the synthetic credit of the sponsor and take this as the guarantee of Asset-Backed securities. This apparently does not meet the securitization trading structure. For the other, this may also lead the dilution of regulating the underlying assets. The underlying asset of the sponsor is the core of the whole securitization process, if focusing more on the synthetic credit, attention to the poor quality of the underlying assets would be distracted to some extent.

Additionally, the existing legal system is often likely to hinder the financial innovation, but the law would accept the reality of economic reform and later legitimizes and promote its development. Asset securitization in China has been introduced over 10 years, but so far there is no relevant legislation instead of many administrative regulations. China is in the period of financial system reform and development, if rushing to enact the statute law of securitization, it would be hard to commensurate with the financial markets because of the time lag. However, it would be detrimental to the development of the asset securitization if there is no law for regulating.

5. SELECTION OF THE VEHICLE

It is the key to ensuring the smooth implementation of asset securitization to select which financial organization can act as the SPT. There are some different views on this issue at present. First is that SPT can be established by the sponsor itself, for the sponsor has a better understanding on its asset and this form helps to improve the efficiency of the transfer of assets and reduce transaction costs. But there are two problems by doing so: one is that because of the relation between the parent and subsidiary companies, the authenticity of the transfer of the assets ownership is likely to be questioned, as financing could be identified as "secured" and in accounting it is also considered as the on-balance sheet financing, which is not involved in the "true sale." The other issue is because the strict financial license management system in China, the registration of trust companies is severely restricted. Secondly, the role of SPV could be taken by a trust company or establishing a trust institution; this is the way with least legal obstacles at present, and both advantages and disadvantages have been discussed above. Third, if the government departments cooperate with the trust company to set up SPT of asset securitisation to function as SPV, the issue of "true sale" can be avoided and the authenticity of asset quality can also be guaranteed. This methodology can help to prevent investors

12 Administrative Measures for the Securitization of Credit Assets (2005), Article 17.2.

from being deceived by the collusive fraud between the sponsor and the agency, and to increase the confidence of investors while to decrease the cost of the sponsor. The last view is that securities companies or other financial agencies establishing SPT with the collaboration with trust companies. Due to the corporate system in China cannot solve the issues brought by bankruptcy remoteness, and securities companies have to rely on the existing trust companies to establish an SPT. However, this situation cannot be observed so far as the fierce competition in the industry.

Accordingly, a trust company or an SPT established by a trust company which is entrusted by the government acts as an SPV is highly possible and to some extent, practicable. On the according to the legal provisions in China, registration or establishment of an investment trust company needs at least 300 million RMB as the registered capital[13]. The vast amount of the registration capital has greatly limited the entry of many small or medium companies. The sponsor, however, may establish a temporary entity, and then under the guise of trust company channel, can pay the slotting allowance for later operation.

During the pilot practice of asset securitisation in China, trust investment companies, which is authorised to operate, act as SPT[14]. Trust companies, as financial institutions supervised by the China Banking Regulatory Commission (CBRC), dedicated to trust investment services, have gained a wealth of experience in entrusted asset management and thus help accelerate to from a relatively sophisticated trust management system with potential to be an SPT. According to the Article 16 of AMSCA, "A trust institution shall be a lawfully established trust investment company or any other institution approved by the CBRC."[15] Additionally, Article 8 of MSAPSCAFI states that "The term "trustee institutions for special purpose trusts" refers to the institutions that promise the trusts and thus take charge of managing special purpose trust assets and issuing asset-backed securities during the course of the securitization of credit assets. A trustee institution shall be an investment trust company established according to law or any other institution approved by the CBRC," this is also a market admittance for the trust to carry out assets securitisation.

However, some problems are arising when adapting SPT model into the real AS practice in China. For instance, New China Trust Co., Ltd (NCT) and Shenzhen Commercial Bank (SZCB) jointly developed "The Trust Mortgage Loan Program of NCT" in 2002. In this program, the underlying assets – that is, the real estates – are the object of the sale contract between NCT and SZCB, this design does not meet the legal logic of AS. Another example is that China Huarong Asset Management Co. Ltd (CHAM) launched "Trust Program of Toxic Asset Management", with the cooperation with CITIC Trust Co., Ltd in 2003. Compared to the last example, Huarong transferred the underlying asset in a form of trust to CITIC Trust and the latter subsequently issued trust beneficiary certificates to raise funds for covering the payment of Huarong's asset transfer. In this case, the trust property is the underlying assets, which is in line with the design of the law logic of AS. Due to the lower credit rating of the bad assets, however, Huarong bought back a significant proportion of subprime securities for the credit enhancement; the issuance of the excess mortgage, therefore, cannot help to remove the risk of underlying assets and also cannot meet the criteria of "true sale" (Shen 2008 and Chen 2005).

There has made some progress of the asset transfer operation in the later practice of securitisation in China. "Kaiyuan" (first issue) and "Jianyuan" (first issue), issued in 2005 by China Development Bank (CDB) and China Construction Bank (CCB) respectively, showed the flexibility in the utilisation of the trust system. They reserved the rights of subprime benefits on a small scale for the credit enhancement, which comparatively completed the actual sale of assets and bankruptcy remoteness (Lei Zheng 2014 and Wu 2001). The operation of "Kaiyuan" and "Jianyuan", to some extent, is not entirely well-performed – they empowered the trustee the right to decide whether to buy back. This means the trustee takes the responsibility to inspect the quality of underlying assets. In this circumstance, the trustee, as the third-party agency, undertook the supervision obligation, which is not conducive to protecting investors' benefits and profits.

Another reason that the practice of bankruptcy remoteness of the securitization of credit assets in China is less efficient is the securitization in China in the past years has been strictly enclosed and only limited to the Bank's credit assets, and transactions are only permitted among inter-bank market instead of offering to general investors. Some issues may arise by utilising the qualified credit assets of banks for AS purpose and by the limited operations in the interbank market. For the general design of the AS, there can be seen no concept of quality matching in assets selection. And if bonds can only be traded between large institutions, the bonds could be less liquid, which means AS loses its meaning while transferring the illiquid assets into the illiquid securities. This would pose a risk of accumulation, leading to a systematic risk. Additionally, promoting securitization transactions between banks with national endorsement will not raise the awareness of issuers' risk management and thus cannot effectively use the bankruptcy remoteness mechanism. These potential issues are likely to constrain the AS development in China.

The top priority for China's securitization is to resolve the conflicts between the administrative Rules, the relative trust laws, and practical securitization market development. A comprehensive and mutually supportive (and internally consistent) legal framework for the SPT model is quite essential. Good frameworks ensure market certainty and investor confidence. China also needs to develop monitoring and regulatory vehicles to ensure the integrity of any credit rating system. This cannot rely on the market to regulate and evolve itself automatically. China's tradition of a planned economy and the central government's close control on the banking and financial sectors might be beneficial (Hu. M 2001).

13 Measures for the Administration of Trust Companies (2007), Article 10.
14 Measures for the Administration of Trust Companies (2007), Article 2.
15 Administrative Measures for the Securitization of Credit Assets (2005), Article 16.

In May of 2015, China government decided to increase 500 billion RMB for the pilot scheme of securitization of credit assets, and simultaneously to improve the institutions, simplify the procedure for supporting securitised products traded on an exchange, but compare to the total sum of the bad loans at China's commercial banks is pretty tiny, which swelled to a decade-high 1.27 trillion yuan in 2015 (Feng 2015). As we can see, the future of China's securitization market is quite promising. In the past decade, policy banks, state-owned banks, joint-stock banks, financial automobile companies, and asset management companies are the regular issuers of asset securitization; at this stage, city commercial banks, rural commercial bank, finance leasing corporations and foreign banks will become a new crop of asset securitization.

CONCLUSION

After analysing several SPV models China and their cons and pros, in the context of the current legal environment and financial system in China, the specific purpose trust (SPT) model is optimal for China's asset securitization practice. We suggest that employing the existing trust companies or establishing SPT based on the cooperation between the government and trust companies should be firstly considered. Only making full use of the unique bankruptcy remoteness mechanism of trust and effectively functioning trust tunnels to ensure the standardised and regulatory operation for a healthy development of asset securitisation, the fundamental trust product design and issuing can be safe, effective, regulated and normative. For China, the legal system on AS is required to be quickly updated, to follow the various changes in its current market.

Additionally, it is necessary and urgent for the government to fill the legal gaps and improve the regulations of asset securitisation. The most distinct difference between the laws and regulations of asset securitisation in other developed countries and China is that the mature market in those countries tended to take the legislative priority first and the implementation of the asset securitization second; in China, the pilot experiment is in the parallel with the legislation. Although experience can be gained via the practice, issues cannot be ignored. In this case, based on the Trust Law, specific legislation on asset securitization must be enacted. Some issues, arising in the past practice, including the ownership of trust property and the credit of underlying assets, also must be thoroughly inspected. Only by doing so, the problem of China's asset securitisation could be addressed in following years.

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RISKS AND FACTORS CONTRIBUTING TOWARDS RURAL ENTREPRENEURIAL ORIENTATION GROWTH OF BUSINESS IN AN EMERGING ECONOMY

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Abstract

This paper examines risks and critical factors contributing to the rural entrepreneurial orientation growth of businesses. The concept of entrepreneurial orientation and various factors influencing the rural entrepreneurial orientation growth are still not well known. The study aimed to assess risks and critical factors affecting rural entrepreneurial orientation growth of businesses. Questionnaire was developed and used to collect primary data from 127 rural entrepreneurs. The sample was made with small and medium entrepreneurs operating in rural places. They were selected using quota sampling, with respondents completing a questionnaire with the assistance of an interviewer. The study used quantitative technique for data collection. SPSS (23.0) version was used for data analysis and scientific statistical significance level found to be (.000*) at the Cronbach's alpha (.791*) reliability. Results of the survey reveal that majority indicates competition as a big challenge for them. Findings further indicate that competitor is due to the small market and lack of products differentiation. This study introduces an additional literature in the field of entrepreneurship with specific reference to rural entrepreneurship. The paper will benefit rural entrepreneurs, entrepreneurial marketing managers, potential young entrepreneurs, business consultants, policymakers, financial institutions, government agencies and all affiliated stakeholders by introducing a new understanding of risks and various critical factors causative into rural entrepreneurial orientation growth of business in an emerging economy. Most work on the entrepreneurship development has concentrated in the urban areas with little emphasis on the rural places. The findings of this study limited by study's exploratory, small sample and quantitative nature. Therefore, generalisation of results should be done with care and further research is encouraged and should aim at the development of technical skills that will empower and encourage entrepreneurial orientation growth culture among rural and young entrepreneurship in the developing and emerging economies countries.

Keywords: Rural Entrepreneurship, Emerging Economy, Business Orientation, Risks

1. INTRODUCTION

The development of rural entrepreneurship and its growth obstacles does not depend only on the internal and external factors only, but entrepreneurs' orientation to grow plays a fundamental role in the survival and growth of the business (Amoah-Mensah, 2013). The risks and various environmental factors contributing to the performance of an individual entrepreneur should identified and considered in order to elevate the survival and growth as well as entrepreneurial orientation growth for rural SMEs (Aruwa, 2013). According to Dragnić, (2014) combination of various factors effect seems to play an important role in determining the survival and growth of the SMEs. These factors include the state of the economy, sector, and type of customers, market roles, and technology and product innovation. Entrepreneurial orientation which is perceived to have impact on the firm performance (Algre and Chiva, 2013) needs to be clearly understood by all stakeholders as this is the phenomena presenting an individual orientation of a person searching for new business opportunities and then, as processes, practices and decision –making activities, on the level of enterprise (Elenurm, 2006).

Therefore, the overall aim of this study is to determine the risks and examine critical factors influencing the entrepreneurial orientation growth of small businesses operating in rural places with specific reference in the Southern Region of KwaZulu – Natal province. This overall aim is guided by the following objectives:

- Identify critical factors affecting entrepreneurial orientation growth of business in southern region of rural in KZN; and
- To examine to what extent these factors influence entrepreneurial orientation growth of business in southern region of rural in KZN.

1.2. Research Problem

Most new, small-scale industries in SA do not grow beyond the survival stage (Olawale and Garwe, 2010; Chimucheka and Mandipaka, 2014).This problem also stated by Estrin and Mickiewicz (2011) that entrepreneurship and SME creation still remain lower in transition economies such as South Africa than in other developing countries despite the fact of been more than 21 years of democracy. Martin (2013) adds that small business growth is the challenges for SME owner/managers include expansion, management and business practices. Roper and Hart (2013) maintain that among SMEs high growth is often episodic and not sustained. This problem seems to be the act caused by lack of knowledge and an understanding of the factors that affect the growth and survival of enterprises in rural areas. Fakoti and Asah (2011) state that one of the factors limiting the survival and growth of SMEs in SA is non-availability of debt financing. Zhou and De Witt (2009:34) add that, although the determinants of firm growth have been studied in various disciplines, an integrated analysis is still lacking. SA's entrepreneurial activity is improving but still lags behind some international countries, such as India and Brazil (Entrepreneurial dialogues, 2011). Henderson (2006); Carree and Thurik (2015).

1.3. Aims and Objectives

Aim

The study aimed to determine critical factors examining and describing the impact on the rural entrepreneurial orientation growth of business in Southern Region of KwaZulu – Natal province.

Objectives

- To identify critical factors affecting entrepreneurial orientation growth of business in southern region of rural in KZN;
- To examine to what extent these factors influence entrepreneurial orientation growth of business in southern region of rural in KZN; and
- To suggest the steps that should be taken to improve entrepreneurial orientation of rural SMEs in South Africa.

2. LITERATURE REVIEW

2.1. Rural entrepreneur

Rural entrepreneurs refer to those who carry out the business in rural areas with the utilisation of local resources. In so doing they increase the standard of living and purchasing power of the people, by offering employment opportunities to people in the villages (Gandhi and Mohan, 2014). They are those people who perform the entrepreneurial activities, in establishing industrial and business units in the rural sector of the economy. In simple terms, rural entrepreneurship can be defined as rural industrialisation (Bad, Patel, Patel and Tare, 2013; Ahamad and Pandey, 2015; Korsgaard and Müller, 2015). Cabus (2009) states that rural entrepreneurship exists, leading to an economy in rural areas that is far from being ignorable. The rural entrepreneur is engaged in a variety of activities, much broader than agriculture, resulting in an economic portfolio that mainly consists of activities in other sectors. Moreover, rural entrepreneurs are dynamic, but the importance of ambitious start-ups remains rather low, indicating that many start-ups have to be considered as a type of 'out of necessity' entrepreneurship. Gupta, Guha and Subramanian (2013) articulate that the history of the enterprise, the entrepreneur's characteristics, and different agencies, such as market and government, as well as geography, are some of the factors influencing enterprises' growth.

2.2. Rural entrepreneurship

Rural entrepreneurship is that type of entrepreneurship which ensures value addition to rural resources in rural areas, engaging largely rural humans (Bad, Patel, Patel and Tare, 2013). Many communities in rural SA are still living in poor conditions (Van der Walt, 2006:2),with SMEs operating in most rural and lagging areas, constituting an integral part of the local economy and a major source of employment as argued by Meggheri and Pelloni (2006). Africa's economies today are becoming more dynamic, and agricultural growth is catalysing broader rural growth (Willebois, 2011) and on that basis Wright and Stigliani (2013) suggest there is a greater need to understand the processes that underlie entrepreneurial growth.

Rural entrepreneurship implies emerging entrepreneurship in rural areas, in other words, establishing industries in rural areas. This means rural entrepreneurship is synonymous with rural industrialisation (Saxena, 2012; Patel and Chavda, 2013). The field of entrepreneurship is widely acknowledged to lack a single unified and accepted definition for the term "entrepreneurship" (Gedeon, 2010). Entrepreneurship is considered to be a dimension of strategic posture, and, thus, all manner of organisations may behave entrepreneurially. This strategic posture encompasses a firm's risk-taking propensity, its ability to be competitively aggressive, proactive manners, and product innovation (Covin and Slevin, 1991). Rural entrepreneurship represents the informal sector of the economy, characterised by small-scale businesses, involving petty traders and artisans (Ibukunoluwa and Oluwadamilola, 2012). Rural entrepreneurship can be considered one of the solutions to reduce poverty, migration, economic disparity, and unemployment and to develop rural areas and backward regions (Raghurama, 2012).

However, rural entrepreneurship today is a major opportunity for those who migrate from rural areas or semi-urban areas to urban areas. On the contrary, it is also a fact that the majority of rural entrepreneurs are facing many problems due to unavailability of primary amenities in rural areas of developing countries. Lack of education, financial problems, insufficient technical and conceptual ability make it difficult for rural entrepreneurs to establish industries in rural areas (Gowrishankar, Raja and Prasad, 2014).

Colette and McElwee (2014) argue that there is little difference between a rural and non-rural enterprise, in terms of structure, or how the business is organised/managed, or how the characteristics of the individual entrepreneur are exhibited. Thus, it would appear that there is no specific category for, nor definition of, a rural entrepreneur, beyond that of 'an individual who manages a venture in a rural setting'. However, according to Bosworth (2013), rural areas are no longer dominated by agricultural employment and productivity farming; they are, instead, a mosaic of economic activity that increasingly mirrors more urban areas.

2.3. The Importance of Smes in a Country's Economy

Entrepreneurial activities not only enhance national productivity and generate employment, but also help to develop economic independence, as well as strengthen personal and social capabilities among rural communities (Sarma, 2014; Ramukumba, 2014; Gutha, 2015). SMEs are generally regarded as the engine of economic growth and equitable development in developing economies. They are labour intensive, capital saving and capable of helping create most of the one billion new jobs the world will need by the end of the century (Lalkaka, 1997 in Agwu and Emeti, 2014). SMEs often offer specialised services or products in a more efficient manner, as opposed to larger companies (Gjini, 2014). Mazumdar and Ahmed (2015) state that small scale businesses play an important role in ensuring the survival of poor household and in building up women's confidence, skills and socio economic status. This also supported by Saxena (2012) who discusses the benefits of rural entrepreneurship as follows:

- **Provide employment opportunities:** Rural entrepreneurship is labour intensive and provides a clear solution to the growing problem of unemployment. Development of industrial units in rural areas through rural entrepreneurship has high potential for employment generation and income creation.
- **Check on migration of rural population:** Rural entrepreneurship can fill the big gap and disparities in income between rural and urban people. Rural entrepreneurship will bring in or develop infrastructural facilities such as power, roads, and bridges and so on, while also helping to check the migration of people from rural to urban areas in search of jobs.
- **Balanced regional growth:** Rural entrepreneurship can dispel the concentration of industrial units in urban areas and promote regional development in a balanced way.
- **Promotion of artistic activities:** The age-old rich heritage of rural India is preserved by protecting and promoting art and handicrafts through rural entrepreneurship.
- **Check on social evils:** The growth of rural entrepreneurship can reduce the social evils, such as poverty, growth of slums, pollution in cities, and so on.
- **Awaken the rural youth:** Rural entrepreneurship can awaken the rural youth and expose them to various avenues to adopt entrepreneurship and promote it as a career.
- **Improved standard of living:** Rural entrepreneurship will also increase the literacy rate of rural populations. Their education and self-employment will prosper the community, thus increasing their standard of living.

The EU Rural Review (2011) indicates that enterprise and entrepreneurship are the drivers of economic growth in Europe's rural areas. The report highlights that, with the ongoing challenges facing traditional rural sectors, the future success of the rural economy is inextricably linked to the capacity of rural entrepreneurs to innovate, and to identify new business opportunities that create jobs and income in rural areas. In Vietnam, entrepreneurship development, in the form of SMEs, has emerged as a strong agent for socio-economic diversification (Benedikter, Waibel and Birtel, 2013).

The role of economic enterprises has recently become more prominent, with SMEs in particular, contributing significantly to the creation of new jobs (Johari, 2012). According to Thaddeus (2011), SMEs are the business model often used by entrepreneurs to participate in economic development of their environment, such as the employment rate and poverty alleviation. SMEs represent the basis of economic development. It has been noticed that because of their characteristics, SMEs are far more flexible and responsive to the frequent changes that occur in the contemporary, global environment, than large enterprises (Stefanović, Milošević and Miletić, 2009). In addition, SMEs played an important role in the development of several countries, as they constitute a major part of the industrial activity, both in developed and developing economics, such as SA (Pandya, 2012).

2.4. Conceptual Framework of Rural Entrepreneurial Orientation

Two primary theoretical conceptualisations form the basis of the study of entrepreneurial orientation (EO), namely, a uni-dimensional or a multi-dimensional approach, with the method shaped by how the individual concepts of EO are appraised. EO is viewed as a unified, conceptual entity in the uni-dimensional approach (Miller, 1983), where the dimensions of entrepreneurial orientation, although different, ovary with each other. Miller (1983) states that high levels of all the dimensions have to immediately be reduced by entrepreneurial firms. EO is the development of entrepreneurial skills, effective and efficient application of the skills in the management of business to create a significant difference from other business, and recognising the skill, as well as allowing it to function effectively (Ogundele, Akingbade and Akinlabi, 2012). EO is concerned with the firm-level, strategic process, used to obtain a competitive advantage (Zulkifl and Rosli, 2013). According to Jesselyn (2012) only a small fraction of SMEs are successful in achieving exceptional performance and sustainable growth, due to the lack of a conceptual framework, with regard to innovative performance and capacity, organisational search, market orientation and EO. It has further been found that entrepreneurial orientation, environmental factors, human capital and organisational characteristics impact entrepreneurial performance and growth (Hosseini and Eskandari, 2013; Tadić, Barać and Plazonic, 2015; Muchiri and Adela, 2015). According to Barmon and Chakraborty (2013) the EO to rural development accepts entrepreneurship as the central force of economic growth and development; without entrepreneurship, other factors of development will be wasted or frittered away. However, should entrepreneurship really be encouraged in rural areas, it would, of course, be instrumental in changing the face of rural areas by solving the problems of unemployment, poverty, economic disparity, poor utilisation of rural capacity, and a low level of living standard (Saxena, 2012).

2.5. SME Industry Development from an International Perspective

All over the world, SMEs are shown to play crucial roles in a variety of different economies (Almutairi and Sathiyanarayanan, 2015). According to Witbooi, Cupido and Ukpere (2011), entrepreneurial activities around the world account for, on average, about 70 percent of the global Gross Domestic Product (GDP). However, in SA, entrepreneurial activities only share 40 percent of the country's GDP. With an unemployment rate of approximately 25 percent, accelerating entrepreneurial activity becomes crucial in a developing country, such as SA. In a study conducted in Turkey, on the intensity of small business owners and the environmental difficulties they encountered, as predictors of growth intentions, it is highlighted that financing problems and the lack of know–how have a significant relation to growth plans (Eniola and Entebang, 2015).

Bangladesh Prime Minister (2010) suggests that, since SMEs are the biggest employer of industrial workers in that country, and also suggested at the small and medium enterprises (SMEs) the fair now requires to be formulated as policies and implemented efficiently, to attain various goals that would essentially include a balanced development of the country. The OECD Economic Survey (2012) indicates that, to encourage the formalisation of small firms, lessening red tape, through simplification of the licensing process, and lowering tax compliance costs, would help to enhance the quality of human resources in Indonesia and would benefit the SMEs.

A study conducted in Indonesia by Tulus (2007) points out that the main limitations small entrepreneurs face are insufficient working capital and marketing difficulties, along with low support of SME development from government programmes. In addition, Agwu and Emeti (2014:101-114) maintain that major challenges in SMEs' performance are comprised of poor financing and inadequate social infrastructure, as well as the lack of managerial skills and multiple taxation.

According to Nyang'ori (2010) in the enlarged European Union (EU) of 25 countries some 23 million SMEs provide around 75 million jobs and represent 99 percent of all enterprises. SMEs in the European Union's (EU) share of total employment, between 2002 and 2010, was 80 per cent and these small enterprises accounted for 99.8 percent of the 20.8 million non–financial enterprises in 2010 (EIM Business and Policy Research, 2011). In Britain, for instance, SMEs are considered the backbone of the British economy (Rowe, 2008). According to the Department for Business, Enterprise and Regulatory Reform's (BERR) Enterprise Directorate Analytical Unit, the United Kingdom's (UK) economy is 99 percent SMEs, employing 14.23 million people, out of a working population of approximately 30 million. In terms of UK turnover and GDP, the UK SMEs account for 1.48trillion sterling (British Pounds). SMEs (with at least one employee) outperform the large UK Corporations in terms of productivity, despite having minimal resources, little support and being largely ignored. Large UK Corporations of 250 employees and over account for 52 percent of employment but only 50.8 percent of the UK's turnover (ibid). Thus, the UK economy is supported by SME performance, and improving performance will have a substantially, positive effect on the entire UK economy.

Similarly, SMEs are the backbone of Singapore's economy, contributing 47 percent of the country's GDP and generating 62 percent of available jobs (SMU, 2008 in Nyang'ori, 2010). SMEs in the United States of America (USA) employed about 60 million of non-farm, private sector workers in 2006,further constituting 99.9 percent of the 27 million employer and non–employer, private non-farm businesses (United States International Trade Commission, 2010). A report from the Asian Pacific Economic Cooperation member countries shows that 90 percent of all enterprises are SMEs, employing 32to 84 percent of the population (Desouza and Awazu, 2006). In Africa, a study, conducted by Okpara (2011) in Nigeria, reveals that a lack of financial support, poor management, corruption, lack of training and experience, poor infrastructure, insufficient profits, and low demand for product and services are the most common constraints hindering small business' growth and survival. SMEs in Ghana account for only 15.55 percent of the total labour force and contribute six percent to the GDP (Kayanula and Quartey, 2000).

Gao and Banerji (2015) stipulate that, by the end of 2012, 80% of China's employment and 60% of the country's GDP had been provided by the 13 million SMEs that constitute more than 99% of all the country's enterprises. In addition, the sector had also produced 60% of exports, while contributing 50% of the total taxation revenue. Since the start of market-oriented reforms in 1978, and even though most SMEs in China only came about in the last 30 years, Li (2013) states that these small enterprises have been vitally operative in helping the Chinese economy soar and are seen to be fundamental to the successful attainment of the new 'Five-Year-Plans'. Chinese SMEs are, however, facing a series of external and internal factors that, after a period of rapid development, have substantially effected their growth adversely.

2.6. Understanding the Entrepreneurial Orientation Concept

Researchers of entrepreneurship use the term 'entrepreneurial orientation' (EO) to describe the entrepreneurial, key decision-makers' strategy-making processes. These processes aid in maintaining organisational purpose, achieving their vision and creating competitive advantage (Rauch, Wiklaund, Lumpkin and Frese, 2009). Early literature on this subject affirms that EO is a construct that has its origin in strategy-making processes (Mintzberg, 1973) and encompasses preparation, forecasting and planning, along with analysis and decision-making, as well as several cultural, value system, and mission-related aspects of an organisation(Hart, 1992). Thus, EO is representative of practices and policies that produce the subsequent entrepreneurial decisions and actions (Rauch et al, 2009).

2.7. Individual Entrepreneurial Orientation

EO is basically, as defined earlier, representative of entrepreneurial behaviour displayed in conducting business. Literature review studies in this field show that it has been applied at an individual level, whereby the behaviour of business owners and managers are assessed on a personal level or it can apply at an organisational level, by measuring the firm's entrepreneurial actions through their policies and practices (Goktan and Gupta, 2015).According to Lechner and Gudmundsson (2015), there are different impacts of individual entrepreneurial orientation dimensions on competitive strategy and the effects of cost leadership as well as differentiation on performance. This means that SMEs owner/manager leadership style contribute the overall percentage of business performance including its growth.

2.8. Differentiating Entrepreneurship from Entrepreneurial Orientation

According to Lumpkin and Dess (1996), EO and entrepreneurship are distinguishable from each other. In the context of new venture creation, EO is recognised as a process construct, which relates to the method, practices and decision-making styles managers use, effectively addressing how it is achieved. Entrepreneurship, however, is related to the content of entrepreneurial decisions by addressing what is undertaken and is based on decisions, for example, the type of business to be undertaken. This differentiation leads to the reasoning that EO is essentially related to how entrepreneurs implement entrepreneurship in order to achieve their career ambition (Hun and Deschoolmeester, 2003).

EO has received much conceptual and empirical attention from entrepreneurship academics (Rauch, Wiklund, Lumpkin and Frese, 2009), while it is encouraged by researchers as an effective means to improve business performance because of the key elements it encompasses (Fatoki, 2012). EO, as evaluated along the constructs of pro-activeness, innovativeness and risk-taking, is also associated with the improved competitive advantage of organisations. Business owners of smaller companies influence their firms' EO directly because of their close involvement in most of the businesses' operating aspects (Covin and Slevin, 1989). This is, therefore, particularly relevant to SMEs due to their firm size. Higher actualisation of EO can be simply achieved by the owner embracing attitudes that will encourage business growth.

2.9. Determinants of Survival and Growth of Rural SMEs

Many researchers, such as Sarani, Shahpasand and Savari (2013), stress that the most important barriers to entrepreneurship, in general, are personal and physiological, cultural, social and economic factors. Zalkifli and Rosli (2013) state that determinants of business success are diverse in nature. It is, therefore, difficult to attribute the success or failure of a small firm to a universal set of measurements used to gauge business successes. Although measurements are suitable for large corporations, they may, sometimes, not be appropriate for small businesses, such as rural businesses (Coy, Steven and Omer, 2007). Thus, the actual root of success may lie in a combination of internal and external factors, within which the small business operates. Papzan, Zarafshani, Tavakoli and Papzani (2008) highlight that some of the factors determining the success of rural entrepreneurs are causally related to innovativeness, need for achievement, lack of bureaucracy, internal locus of control and marketing opportunities.

Peters and Brijlal (2011) find a relationship between the owner's/manager's level of education and the businesses' ability to grow, by increasing its labour force and annual turnover. Furthermore, Chachar, De vita, Parveen and Chachar (2013) show that family background, age of entrepreneur and management style, in relation to owners/managers education, contribute to SME development, and are seen as determinants correlating to the growth of the industry. The skills of leadership, creativity and innovation, networking and trust, time management and goal setting, as well as commitment, are confirmed as important for the success of SMEs (Mbuya, 2011).

Clover and Dorroch (2005) echo the sentiment that, in KZN, a lack of access to services; funding constraints at start-up; lack of management capacity in the enterprise; access to tender constraints; compliance costs associated with VAT and labour legislation; liquidity stress; lack of collateral; and the lack of institutional support are the main dimensions of constraints for the survival and growth of SMEs. Poor infrastructure, poor management and poor recordkeeping are also principal constraints to business survival and growth (Okpara and Pamela, 2007). McPherson and Rous (2010) indicate that access to credit is not a significant determinant of small firm growth. Hamelin (2009) argues that firm growth is not limited only by financing constraints but also by family–related attitudes and increasing firm growth requires policies that shape incentives in small family businesses. Firm growth is found by Mateev and Anastotason (2010) to be determined, not only by the traditional characteristics of size and age, but also by other firm-specific factors, such as indebtedness, internal financing, future growth opportunities, process and product innovation, and organisational changes.

Khan and Siddiqi (2004) find that internal and external sources of financing business; the marketing orientation of an entrepreneur; volume of sales; market size; risk taking attitude of the entrepreneur; industry potential growth; entrepreneurship experience; networking abilities; innovations (in terms of introduction of new products); new processes and major improvements in existing systems; diversification (in terms of products); on-the-job training activities; utilisation of unique know-how; and price adaptability, are found to be important factors affecting a firm's growth.

Philip (2010) adds that characteristics of SMEs, management and know–how, and products and services, as well as the way of doing business and cooperation also influence business success, along with resources, finance and the external environment.

2.10. Rural Entrepreneurship Industry as Determinant for Growth

Hansen, Rand and Tarp (2010) indicate that classical determinants of firm dynamics include that of firm size, location, innovative capacity, owner's prior experience, as well as state institutions. These are for both survival and growth, while receiving government support during start-up had a separate and positive influence on long-run growth, especially for rural and non-household enterprises. In a study conducted in KZN by Wynne and Lyne (2003), government policies are highlighted as a potential focus for absorbing some of the transaction costs, by improving education, physical infrastructure and technology transfer. Other important interventions include the provision of mentoring and training services for new managers, including institutions, along with legal and financial management instruction. Clover (2004) believes that public-private sector institutions can identify policies and strategies to increase the survival and growth rates of SMMEs, if they have more information about the factors that constrain business performance, and the link between entrepreneurial quality and enterprises.

The significant importance of the location factor in the development of entrepreneurship and small business performance is argued by Minai and Lucky (2011), who suggest that the location factor should be given urgent consideration as a vital factor that would positively affect small business performance. South African rural economic development has been impeded by poor infrastructure and unemployment, with little or no access to vibrant markets characterising many South African rural communities (Ladzani, 2003). According to Agbenyegah (2013), the key challenges facing the South African rural industry area lack of assistance, an unfriendly business environment and the lack of collateral.

2.11. Rural Entrepreneurial Resources

Harrison and Gibson (2006) show that the inability of small business owners to match their products or services with the demands of the external environment is a major challenge for their strategic growth. SME owners'/managers' level of formal education, access to and use of new technologies and weak management skills also limit the SMEs' survival and growth (Mensah, 2004). Lyons (2002) supports the idea further that SMEs' owners/managers themselves are lacking in the necessary skills and capabilities required for business start-up and operations.

The Sustainable Agriculture and Rural Development (SARD) policy (2007) draws attention to rural enterprises being characterised by many difficult factors, such as limited resources and because of their small size, scattered nature and remoteness, the transaction costs of rural activities are high, mostly the result of the time required to ensure that standards are met. Rural enterprises face business risks that range from managing the power imbalance they find themselves in versus larger firms, to buyers that can influence terms, conditions and standard requirements. In addition, rural enterprises have limited access to timely market information, mainly due to the country's weak transport and communications infrastructure, specifically in rural KZN. SARD policy (2007) states that make it very difficult for rural enterprises to participate in a high value market.

Ghisett, Mazzant, Mancinelli and Zoli (2015) point out that the growth of SMEs has been hampered by a variety of barriers, erected directly or indirectly by the state of the environment. Due to fiscal policy constraints, more specifically high tax rates, financial constraints in the institutional environment are major barriers for SMEs, which have a huge influence in encouraging many SMEs to conduct their activities in the informal sector of the economy. Beck and Demirque–Kunt (2005) explain that many SMEs are survivalists who need continuation of existence and growth beyond their start–up phase. However, the authors believe that this sector is often faced with difficult challenges, such as market deficiencies and institutional faintness, which hinder their growth. Booyens (2011) offers policy recommendations, stating that the government should encourage the growth of "knowledge networks" that will offer SMEs the opportunity to more easily exchange information with domestic and large, international firms.

2.12. Rural Enterprise Networks

De Klerk and Saayman (2012) indicate that networking plays an important role in the managerial skill of SME owners/managers operating in an informal setting, such as that of the rural entrepreneur, and, thus, strong relationships are built with other business people to survive and enhance their competitiveness. The improvement of networking between business leaders has been suggested as an appropriate business structure that can improve business in the rural areas of SA (Pooe and Mafini, 2012). Besser and Miller (2011) find business networks, through which formal arrangements between independent businesses are established to enhance member success, to be generally accepted as an important strategy in helping small businesses survive and prosper. Smith and Lohrke (2007) continue that, through networking, entrepreneurs can make a significant contribution to social capital which, in the long–term, returns to increase a new venture's likelihood of success. According to Jamalzadeh, Behravan, Espahbodi and Masoudi (2012), location of the business was, in the past, considered as an important factor by business owners when launching a business. However, this was done only in highly populated areas, such as urban townships, and not in some other geographical areas, such as rural, where networking is entirely dependent on word- of- mouth for referrals and patronage increase, due to the lack of internet connectivity (Nelson, 2004). This is to say that rural entrepreneurs need to change their business practices with regard to marketing promotional strategies in order to increase their business networking. They should start using Morden technologies such as social media as their business networking tool.

3. RESEARCH METHODOLOGY

The study was conducted in different rural places in rural KwaZulu – Natal areas, which include north and south of province of KwaZulu–Natal. A comprehensive literature was conducted and used as sources of questionnaire formulation. 127 SMEs were asked to complete 10 page questionnaires to get empirical data for this survey. A Closed – ended questionnaire with 5 likert scale were distributed to the SMEs owners/managers business premises with the aid of research assistants. Prior appointments were made through telephone. The respondents were giving 14 days to complete questionnaire. Data was purely quantitative, and it was analysed by the use of Statistical Package for the Social Sciences (SPSS) program (version) 23.0 to test the significance of the results and later presented in the figures.

Table 1. Summary of statements key questions

There are many businesses selling products similar to my products
I do have a business plan that assists in guiding me how to keep my business operational
The business has the capacity to cope with environmental uncertainties
The primary goal of the business is to increase market share through product improvement strategies

Target population: The target population of this study was 127 SME owner/managers operating in selected rural areas of the south region of KZN

Questionnaire administration: The study used closed-end structured questionnaire as a measuring instruments to make the results valid and reliable as per the content and predictability of research. The questionnaire was used to measure the variables across the South Africa rural SMEs in KZN.

Data collection: The study used closed-end questionnaire for data collection. Primary data was collected from 127 SMEs operating in rural KZN. This research was quantitative in nature and a questionnaire was used to collect data from SMEs owners/managers in rural KZN.

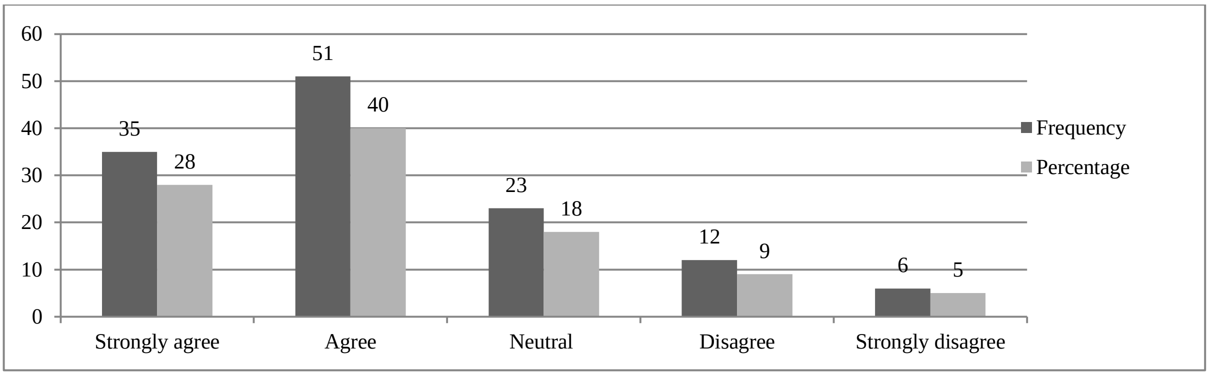
Analysis of research data: Frequencies were used to determine how often a respondent made a certain response to particular question, and were also used to check the coding of data. The descriptive statistical analysis method was used to determine extent of factors influence on the survival and growth of rural SMEs in KZN. A chi-square test analysis was also done using the correlation analysis; Spearman rho test was applied to determine the relationship between the variables, Cronbach's coefficient alpha was performed for internal consistency tests to confirm the validity and reliability of the results; and the Mann-Whitney U test was done to identify non-parametric variables

Reliability and validity: 127 SMEs were selected as the respondents for this study to ensure that the results will be reliable and trustworthy. Further face validity and construct validity were done prior to the interviews for this study.

4. RESEARCH FINDINGS

The literature review done was broadly discussed in a previous section. Completed questionnaires were received from 127 respondents from five rural places (n=127) with key findings of this research revealing the following results:

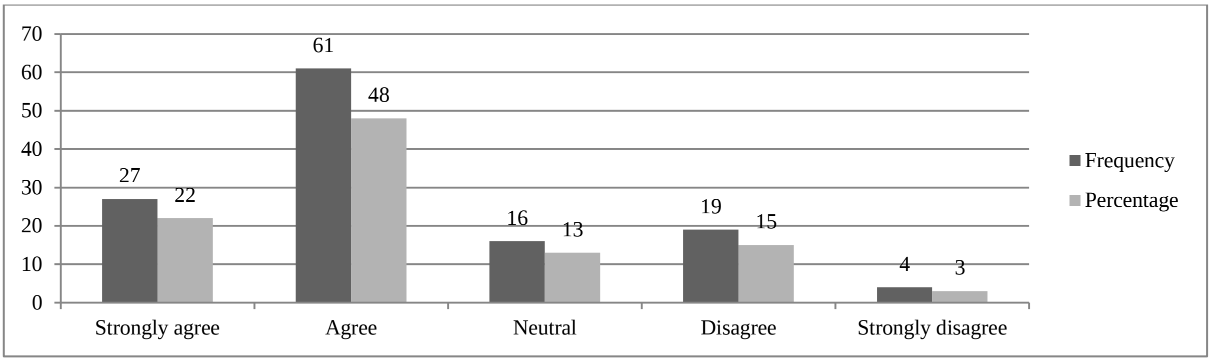
Figure 1. Many businesses sell products similar to my products



From the above the results it can be seen that 35 (28 percent) and 51 (40 percent) of the respondents strongly agreed and agreed, respectively, with the statement that there are many businesses selling similar products, with 23 (18 percent) being neutral. A small number of the respondents 12 (nine percent) and six (five percent) disagreed and strongly agreed respectively, with the statement

A correlation analysis of the results was performed to determine whether the selling of similar products has an impact on the business survival and growth. The question was based on the null hypothesis of uniformity of expected responses to questions. The results (X^2 = .615; do=1.654; P = .000) indicated that the observed findings were significantly different from expected frequencies. In other words, this result was statistically significant and was not due to chance.

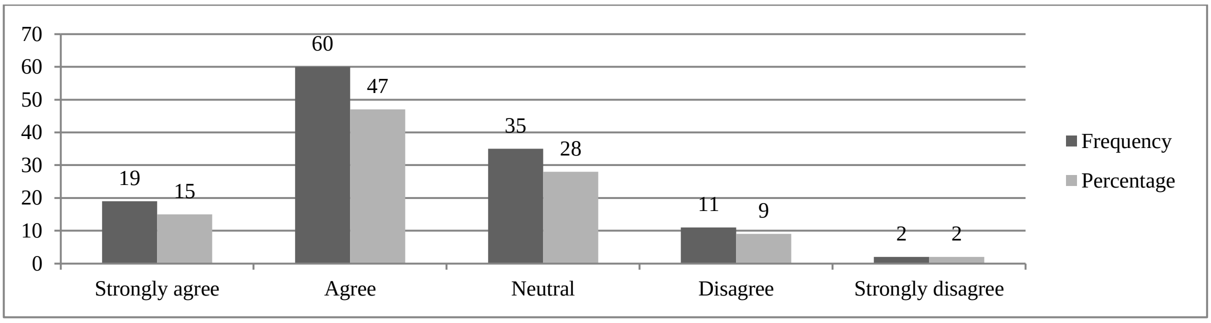
Figure 2. Availability of a business plan as a guide



Therefore, it was important to look at this at the rural set-up as well. Regarding the statement that they do have business plans that assist in guiding them how to keep their business operations going, 27 (21 percent) and 61 (48 percent) strongly agreed and agreed, respectively, only 16 (13 percent) remained neutral, while a small number of respondents, 19 (15 percent) and four (three percent) disagreed and strongly disagreed, respectively, with the statement.

A correlation analysis of the results was performed to determine whether the availability of a business plan assists rural SME owners/managers to do day-to-day business operations, in order to sustain or meet growth. The question was based on the null hypothesis of uniformity of expected responses to questions. The results (X^2 = .506; df= .894232; P = .000) indicated that the observed findings were significantly different from expected frequencies. In other words, this result was statistically significant and was not due to chance.

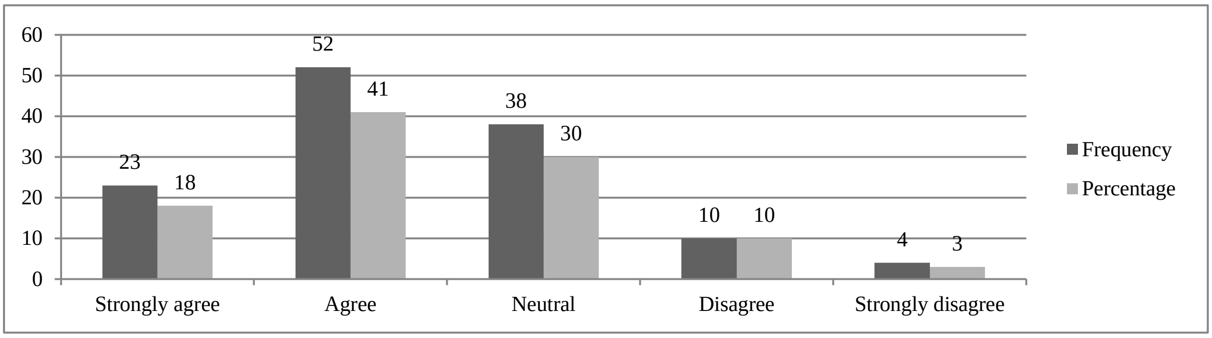
Figure 3. Business capacity to cope with environmental uncertainties



The majority of the respondents, 19 (15 percent) and 60 (47 percent) strongly agreed and agreed, respectively, that their businesses have the capacity to cope with environmental uncertainties. Less than half of the respondents, 35 (28 percent), remained neutral, while very few respondents, 13 (11 percent) disagreed and strongly disagreed, respectively, with the statement.

A correlation analysis of the results was performed to determine whether the SME owners'/managers' business capacity to cope with environmental uncertainties has an influence on rural SMEs' survival and growth. The question was based on the null hypothesis of uniformity of expected responses to questions. The results (X^2 = .553; df=, 97430; P = .000) indicated that the observed findings were significantly different from expected frequencies. In other words, this result was statistically significant and was not due to chance.

Figure 4. Primary goal of the businesses



Most respondents, 23 (18 percent) and 52 (41 percent) strongly agreed and agreed, respectively, that the primary goal of their businesses is to increase market share through product improvement strategies. However, 38 (30 percent) were neutral and 10 (eight percent) and three (four percent) disagreed and strongly disagreed, respectively.

A correlation analysis of the results was performed to determine whether the primary goal of the business is to increase product share through product improvement strategies and has an influence on the survival and growth of the business. The question was based on the null hypothesis of uniformity of expected responses to questions. The results (X^2 = .632; df=1.18229; P = .000) indicated that the observed findings were significantly different from expected frequencies. In other words, this result was statistically significant and was not due to chance.

Limitations: This study used a closed-end, structured questionnaire, which limited respondents in saying more about their attitudes, with regard to the constraints that affect survival and growth of their businesses. These include limiting respondents to explain other business networks they use, other motivating factors to start their businesses and other factors influencing their entrepreneurial orientations.

Research implications: Rural SMEs' owners/managers need to be encouraged to implement new, suggested growth theories. This study suggests that a theoretical framework for rural SME growth should adopt the intention of growth theories and growth models suggested by previous authors, such as Mappigau and Maupa (2013); Davidsson, Achtenhagen and Naldi (2010); Achtenhagen, Naldi and Melin (2010); Wiklund, Patzel and Shepherd (2009); Dutta and Thornhill (2008), Delmar and Wiklund (2008).

5. CONCLUSION

It was found that many rural SMEs sell similar products. However, they do indicate that they use business plans to guide them on day-to-day business operations. In addition, they do have the intention to grow their market share through product improvement. Where entrepreneurial characteristics of rural SMEs in KZN are concerned, it is concluded that there is a positive attitude among the respondents that they do set goals, and also have the drive and willingness to spend money, in order to achieve the survival and growth of their businesses. It is further concluded that the respondents believe they have the capacity to respond positively in uncertain situations. However, the respondents also believe that the growth of their businesses requires them to be result oriented, in order to succeed. As regards the external environment, for example institutional environments, which have an effect on the survival and growth of rural SMEs in KZN, it is concluded that environmental regulation requirements remain a challenge for rural SMEs' business growth, while strict government policies make their expansion difficult, and public procurement regulations and requirements to obtain a licence affect their business growth. As far as the financial and infrastructural environment is concerned, it is concluded that most banks ignore SME's for bank loans, with high bank charges for those who would have succeeded to secure/obtain a bank loan, high collateral requirements, and the time factor before a loan from the bank is approved also becoming a contributing factor. In addition, there were a considerable number of respondents who indicated that the preparation of a business plan is too costly and also affects the growth and development of their businesses. With reference to the socio - cultural environment, it is concluded that a lack of trust among the society, with regard to quality of goods and services, has an impact on business growth, as does a lack of support from business associations, with a lack of support from business consultants, and communities as major factors affecting business growth.

6. RECOMMENDATIONS

There should be entrepreneurial skills development and training for rural SMEs operators. This implies that some entrepreneurial theories and practices need accurate insight. For example entrepreneurial orientation factors, entrepreneurial networking strategies, entrepreneurial innovation strategies as well as entrepreneurial marketing promotional strategies with specific reference to the rural areas, remote and under-developed rural places. Policy-makers at all levels of government (e.g. national, provincial and local) review the rural development policy framework, in order to include a rural SME monitoring policy that will allow government to do monitoring and follow-up through local and regional municipalities in all provinces, with specific reference to KZN. This study also recommends private sector and government should improve rural economic conditions and start balancing economic development in rural districts and local municipalities, in order that business investors will be attracted to establish and do business in rural places. This will, in turn, encourage young, educated people to stay and start businesses in their birth places.

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GOVERNANCE OF THE MUNICIPAL SERVICES TO THE POPULATION: THE CASE OF AN EMERGING ECONOMY

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Abstract

The purpose of this study was to investigate farming community perceptions and expectations of quality of extension services rendered by the Department of Agriculture and Environmental Affairs (DAEA) within the uMngungundlovu District Municipality. In order to achieve the article's objective, the researcher used a SERVQUAL questionnaire and collected and analyzed the data using Statistical Package for the Social Sciences (SPSS). The results have shown that the customers perceive that they receive superior service from the extension staff. However the negative differences need to be eliminated to exceed the expectations of customers.

Keywords: Customer Satisfaction, Expectations, Marketing Mix, Perceptions, SERVQUAL

1. INTRODUCTION

Zeithaml and Bitner (2006:4) define service as "deeds , processes, and performances" whilst Blem (1995:6) explains that service refers to all the activities which create bonds between organizations and their customers. Cant et al. (2006:282) describe service as any act or performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything.

The service sector in South Africa consists of a wide variety of organizations, for example South African government departments and parastatal organizations such as Eskom and the South African Broadcasting Corporatins (SABC), which make up a large proportion of the service sector. Services are an important part of the future of government and a Batho Pele (people first) programme has been instituted. This programme is based on 11 principles such as courtesy, access, service standard, consultation, value for money, redress, openness, transparency, information encouranging innovation and rewarding excellence,customer impact and leadership and strategic direction Cant et al. (2006:282).

According to Curry and Sinclair (2002: 199) sited in Moletsane, de Klerk and Bevan-Dye (2014), service delivery and service quality, determined by the disparity between the expectations of the community and its perceptions of the service actually delivered can provide an organisation with a lasting competitive advantage, Van der Wal, Pampallis and Bond (2002). The quality of services provided by organisations can mean the difference between success and failure. Service quality, customer satisfaction and customer value have become the main concerns in service organisations and, as a result, many organisations are paying more attention to improving service delivery and service quality Wang, Hing-Po and Yung (2004).

The agricultural sector is crucial to rural development and has a significant impact on reducing poverty. For this reason there is a great need for strong extension and advisory services, led by government's operations working hand- in- hand with relevant role -players. The Agricultural Extension Services are the most important link in the chain of development between the Department of Agriculture and Environmental Affairs, hereafter, the DAEA, and farming communities. As such, the extension services have a key role to play in increasing agricultural production, which is the basis of rural development.

Hence, the primary aim of the study reported in this article is to determine the farming community's expectations and perceptions of the quality of extension municipal services rendered by a South African municipality, situated in the Kwa-Zulu Natal province, in order to identify potential service quality gaps.

2. LITERATURE REVIEW

2.1. Characteristics of Services

All products have a characteristic that defines the nature of the offering. The special characteristics for services are intangibility, heterogeneity, inseparability and perishability Gabbott and Hogg (1998:26).

2.1.1. Intangibility

Services are performance that cannot be seen, smelled, tasted or touched Zeithaml and Bitner (2006:22). This makes the perception of a service highly subjective and an abstract concept for the customer. The inability to inspect or touch service means that in any pre-purchase situation the product remains abstract until it has been consumed. Services are difficult to patent ,resulting in new service concepts being easily copied. The lack of tangible a product makes advertising difficult.

2.1.2. Inseparability

Service is sold first, then produced and consumed simultaneously, whereas goods are produced first, then sold and consumed Zeithaml and Bitner (2006:23). Gabbott and Hogg (1998:22) states that there are equipment based and people based services. Equipment based services ,such as ATM and telephone, deliver the same service to whoever consumes them. The opposite is true of people based service, where an involvement of a human service provider inevitably means that individual customer experience a variation in service delivery. The result of this variation is that people based services tend to be less standardized than equipment based services.

2.1.3. Variability

Variability is a function of human involvement in the delivery and consumption processes Gabbott and Hogg (1998:28). It refers to services that are delivered by humans and no two services are exactly the same. This depends on the service provider, as well as on when and how services are provided.

The implication of variability is that service delivery and meeting the need of the customer depend on the actions of the employee. There is no knowledge if the service which was delivered is what was planned and promoted Zeithaml and Bitner (2006:23).

2.1.4. Perishability

Perishability describes the real- time nature of the product Gabbott and Hogg (1998: 28). It means that the service cannot be stored, saved, resold or returned. Kotler (1996:60) states that perishability of the service is a problem when demand is steady. The main challenge is that when the service is improperly performed, it cannot be returned. As a result ,strong strategies are necessary in case something goes wrong. For example, if the service cannot be repeated then apologies are the only means of recource for customer satisfaction.

2.2. Service Marketing Mix

Marketing mix are sets of tools that the organizations can utilize to shape the nature of the offering to customers Baker (2003:598). Service marketing mix (SMM) is a tool used in marketing for making characteristics service product offer to consumer. According to Zeithaml et al. (2013) marketing mix is defined the elements an organization controls that can be used to satisfy or communicate with customers. This services marketing mix is also called the 7P model, this service marketing mix strategy extends the original marketing mix model from four to seven elements, Rifai (2015).

Zeitmal and Bitner (2006:25) define the marketing mix as the elements an organization controls that can be used to satisfy or communicate with the customer. The key to long-term profitability for any professional firm is the creation of a service that satisfies the needs and wants of the clients and facilitates the exchange of those services in such a manner that provides value and satisfaction to the client. Marketing mix is a set of tools that can be used to create these services Kotler (1997:9). Traditional marketing mix consist of four Ps : product, price, promotion and place.

The notion of the mix means that all the variables are interrelated and depend on each other to some extent Zeitmal and Bitner (2006:25). Because of the nature of services, modification of the four Ps is necessary. Services are usually produced and consumed at the same time, customers often interact directly with the firm's personnel and are directly part of the service production process. Because services are intangible , customers often use people attributes such as attitudes of staff to help them understand the nature of the service experience. The three Ps added to traditional marketing mix , are people, physical evidence and process, (Table 2.1).

Table 1. Expanded Marketing Mix for services

<table>
<tr><th>Product</th><th>Place</th><th>Promotion</th><th>Price</th></tr>
<tr><td>Physical good features
Quality level
Accessories
Packaging
Warranties
Product lines
Branding</td><td>Channel type
Exposure
Intermediaries
Outlet Locations
Transportation
Storage
Managing channels</td><td>Promotion blend
Salespeople
Selection
Training
Incentives
Advertising
Media types
Types of ads
Sales promotion
Publicity, Internet</td><td>Flexibility
Price level
Terms
Differentiation
Discounts
Allowances</td></tr>
<tr><th>People</th><th>Physical Evidence</th><th colspan="2">Process</th></tr>
<tr><td>Employee
Recruiting
Training
Motivation
Rewards
Teamwork
Customers
Education</td><td>Facility design
Equipment
Signage
Employee dress
Other tangibles
Reports
Business cards
Statements</td><td colspan="2">Flow of activities
Standardized
Customized
Number of steps
Simple
Complex
Customer involvement</td></tr>
</table>

Source: Zietmal and Bitner (2006:26).

2.2.1. Product

Product is an organization's offering to potential customers and can be either tangible or intangible Jobber (1995:625). Product definition in the marketing mix covers items such as brand name, packages, quality design, features, sizes, product variety and warranties Kotler (2000:10).

Product decisions for services are not the same as goods, due to the fact that services are intangible. Palmer (2001:20) mentioned that the customer does not buy the product, they actually buy the benefits that the product provides. As a result, people, physical evidence, processes and elements play a vital role in influencing the customers' perception of service quality.

Service customers suffer a higher perceived risk in their decision- making. The more intangible the service the more it needs to be defined in terms of the process descriptions rather than a tangible description of outcome McColl-Kennedy et al. (1998:19).

2.2.2. Price

Price is the sum of money the customer has to pay to obtain the product, along with non -financial costs such as time, trouble and inconvenience Kotler et al. (2000:10). It is influenced by four factors:

1.The cost of producing a service.

2.The amount customers are willing to pay.

3.The price that competitors are charging and

4. The regulations imposed by the government which affect pricing McColl-Kennedy et al. (1998: 333).

The price that customers are willing to pay has the greatest impact on sales. When customers buy a product they exchange something of value to receive something of value. If the price is high, it could be perceived as high quality or high risk Kotler (2000:351).

Price is also a key marketing tool, for three reasons :

1. It acts as an indicator of perceived quality, since it is difficult to evaluate a service before purchase.

2. It is an important tool in controlling demand, since matching demand and supply is critical for services, as they cannot be stored.

3. Price sensitivity is an important segment variable that can be used with Services, since some customers are willing to pay higher prices than others Jobber (1995:678).

2.2.3. Place

Place means everything that the organization does to make its services available to target customers Kotler (2000:10). Distribution channels for services are more direct than those for physical goods, since services are consumed at the point of production Jobber (1995:658). Due to increase in technology, changes in distribution channels have made it possible to meet customer demands. For example, telephone or internet banking allows customers to conduct their business at their homes, 24 hours a day Woodruffe (1995:331).

2.2.4. Promotion

Promotion is a tool used as an ongoing process of communication between the organization and the customers. It consist of four elements :advertising, personal selling, sales promotion and public relations Kotler (1996:471).

Promotion adds significance to the services. There are a number of distinctive promotional needs to be considered Baker (2003:602):

1. Because of the intangible nature of the services, the promotion elements of the marketing mix will need to overcome customers' perceptions of high risk level during the buying process.

2. Since customers cannot sensibly evaluate intangible, high risk services without knowing the identity of the service provider, it is important to promote the service provider.

3. Where service production processes are inseparable from their consumption, visible production processes such as people are becoming part of the promotion effort.

4. Promotion of services is generally more constrained by the legal controls because there is a higher possibility of fraud due to the intangibility of the services.

2.2.5. People

People are human actors who play a vital role in service delivery and thus influence the buyer's perceptions Zeitmal and Bitner (2006:26). How people conduct themselves, their personal appearance and attitudes have an impact on the customer's perceptions. For professional services such as extension services, the provider is the service. That is why it is critical for organizations to set standards to improve the quality of the services provided by their employees and have measurement criteria to assess their performance, as training and control procedures aid in reducing the variability of the quality of the serviceprovided Jobber (1995:679).

2.2.6. Physical evidence

Physical evidence refers to the environment in which the service is delivered and where the firm and customer interact, as well as any tangible components that facilitate performance or communication of the service Zeitmal and Bitner (2006 :27).

Physical evidence sends a strong message about the organizational purpose and the nature of the service.

The service's nature means that customers cannot judge a service before it is consumed and this increases risk of purchase decision. Customers tend to look for clues to the likely quality of the service by inspecting tangible evidence such as brochures, letterheads, business cards and report formats Baker (2003:605).

2.2.7. Process

Process refers to actual procedures, mechanisms, and flow of activities by which the service is delivered Zeitmal and Bitner (2006:27). The direct involvement of customers in the production of most services, and the perishability of these services, places a greater emphasis on the process of the transaction for the services, for example menus, promptness of service and waiting to pay the bill Jobber (1995:678).

The task for service marketers is that they must examine the processes involved in the service delivery to identify ways in which service may be better provided to a customer. This could include the removing of bottlenecks in order to streamline the service delivery process McColl-Kennedy et al. (1998:22).

It is important for organizations to understand the service chain, since all aspects of the service mix are part of the service encounters. Service chain are elements which affect the customer experience and finally the customer satisfaction. All elements of the marketing mix are equally important and the organization needs to have a proper marketing mix to ensure or achieve a competitive edge.

2.3. DAEA Extension Service Marketing Mix

The marketing mix is a set of tools available to an organisation to shape the nature of its offer to customers Palmer (2005:10). The four Ps of product, price, promotion and place have been found to be too limited in their application to services. As a result, seven Ps were proposed, with people, process and physical evidence being added.

2.3.1. Product

Lamb et al. (2004:222) explain that "a product is anything, both favourable and unfavourable that a person receives in an exchange- normally for money. It can be tangible (a pair of shoes), a service (a haircut), an idea ("do not litter") or any combination of these three. The DAEA extension services teach farmers about new farming ideas in their own farming needs and problems.

2.3.2. Price

The DAEA is a public sector. Services are delivered to farmers without a price being charged. The cost of providing the services is borne by the Department.

2.3.3. Promotion

The DAEA use a combination of public relations, advertising and personal selling in creating a positive word of mouth message for its services. Events such as Imbizo,the Sunday slot on Radio Ukhozi, where the Ministry announces success stories are means to convey a positive message about the department.

2.3.4. Place

There are more than three hundrend extensionists situated in the regional and district offices throughout the province. The extension staff visit farmers in their wards on a daily basis and farmers are welcome to call the districts office for assistance.

2.3.5. People

Extension staff act as messengers between the Department and the farming communities. Extension staff have a high level of contact with farmers. The extention staff work closely together with Departmental scientists in ensuring that up-to-date information is transferred to farmers.

2.3.6. Physical evidence

Due to the nature of the extension services, the only physical evidence that most of the farmers are exposed to is contact with the extension staff, pamphlets and KZN motor vehicles.

2.3.7. Process

" No two service providers are the same "; service delivery can be varied because of the heterogeneity of the service Mclean (1994:199). In this context , the Department produces the various training manuals that are written in IsiZulu and English, to assist in the transfer of technology to farmers. Ad hoc services are available, responding to the requests of farmers as they arise.

2.4. Relationship Marketing

Relationship marketing is a philosophy of carrying out business and strategic orientation that focuses on keeping and improving relationships with the current customers rather than on acquiring new ones Zeithaml and Bitner (2006:177). Nevin (1995) also points out, the term relationship marketing has been used to reflect a variety of themes and perspectives. Some of these themes offer a narrow functional marketing perspective while others offer a perspective that is broad and somewhat paradigmatic in approach and orientation Sheth et al. (2015). The purpose of relationship marketing is to build a long -term relationship or connection between the organization and its customers, as well as developing brand and firm loyalty Kurt (1998:151). A relationship marketing and service marketing mix can be used as a tool to shape the nature of the service offered to customers. Customer relationship is important, because it is cheaper to keep current customers than to attract new ones Zeithaml and Bitner (2006:178).

The following are the factors that influence the development of strong customer relationships :

1. The customer's overall evaluation of the quality of a firm's core service offering.
2. The switching barriers that the customer encounters in leaving the relationship.
3. The relationship bonds established with customers by the firm.

By establishing strong relationships with customers and by focusing on factors that have an impact on customer relationships, the organization will accurately understand customers' expectations over time Zeitmal and Bitner (2006:207).

2.5. Service Quality

What is service quality? According to Zeithaml and Bitner (2006:108), service quality is a focused evaluation that reflects a customer's perception of reliability, responsiveness, empathy, assurance and tangibles.

Why do customers prefer one organisation over another? It is because the one organisation meets their needs in some way: ease of use or ability to do what it promises to do. Service quality is considered as a viable strategy for marketers who want to differentiate their service offerings, develop customer values and satisfy customer needs Ozment and Morash (1994:352).

If all other factors are constant, price is the deciding factor. If there is little difference in price, quality will decide and if price and quality are the same, service quality wins Morea (1996 :18).

2.5.1. Service quality dimensions

Research indicates that customers judge service quality using many criterias. There are five dimensions of service quality namely:

Reliability

Reliability is defined as the ability to deliver the service as promised. This means that organization honours its promises, delivers the service right first time, keeps records accurately, bills accurately and delivers timeosly. Reliability is the most important dimension to the customers. All organizations need to be aware of customers' expectation of reliability Zeithaml and Bitner (2006:117).

Responsiveness

Responsiveness is the willingness or the readiness of the employees to provide the service. It involves:

Promptness in dealing with the customers' requests or complains.

Calling the customer back immediately.

Assisting in solving the customers' problems.

Organizations are advised to view the process of service delivery from the customers' point of vie rather than the from organizations point of view. By doing this the organization will excel as the provider of quality service and responsiveness Zeithaml and Bitner (2006:117).

Assurance

Assurance is defined as the employees' knowledge and courtesy and their ability to inspire trust and confidence. It is a critical driver of quality, especially of services which customers perceive as high risk, such as insurance, medical and legal services Zeithaml and Bitner (2006:118).

Empathy

Empathy is defined as the caring , individualized attention that the organization provides its customers. Organizations who value empathy, call their customers by name and establish a relationship that reflects their personal knowledge of the customer requirements Zeithaml and Bitner (2006:120).

Tangibles

This is the appearance of the physical facilities, equipment and staff. Tangibles provide image of the services, especially to first time users. Tangibles can be used by the organization to

Enhance their image.

Provide continuity.

Signal quality to customers.

Tangibles can be used with another dimension, for example providing efficient service and comfort Zeithaml and Bitner (2006:120).

2.5.2. Measuring service quality

One of the first measures to be developed to measure service quality is SERVQUAL survey . SERVQUAL scale involves a survey consisting of 21 service attributes, grouped into the five service quality dimensions as discussed above. The survey ask customers two different ratings for each attribute, one representing corresponding expectation and the other representing corresponding perception. Negative differences between the expectation and perception inform the organization about their deficiencies and identify areas that need improvements, whereas positive differences indicate that the organization is exceeding customer expectations.

The SERVQUAL instrument can be used in commercial and public sector organizations

Parasuraman et al. (1988:167). The relative importance of each dimension to customers can be limited to industry, individual business unit, branch and department.

2.5.3. The gaps model of service quality

The gaps model of service quality serves as a framework for service organizations attempting to improve the quality of service and service marketing. The gaps model is based on the idea that customers evaluate services by comparing their expectations of what will happen during the service delivery with their perception of the performance of the service. Zeithaml and Bitner (2006:33) have identified four potential gaps which can exist in the process of service develivery.

Gap 1: Not knowing what customers expect

This gap is between the customer's expectation of superior service and the management' perception of customer's expectation Gabbott and Hogg (1998:106).

The main cause of this gap is that management lacks accurate understanding of what the customers expect. This occurs when there is :

Lack of interaction between management and customers.

Inadequate use of market research.

Lack of encouragement to listen to customer complaints.

Gap 1 can be minimized by implementation of multiple market research strategy with an aim of understanding customers needs and by building a long- term customer relationship Zeithaml and Bitner (2006:201).

Gap 2: Not having the right service quality designs and standards

This is the difference between the organization's understanding of customer expectations and development of customer driven service design and standards Zeithaml and Bitner (2006:38). Causes of this gap could be:

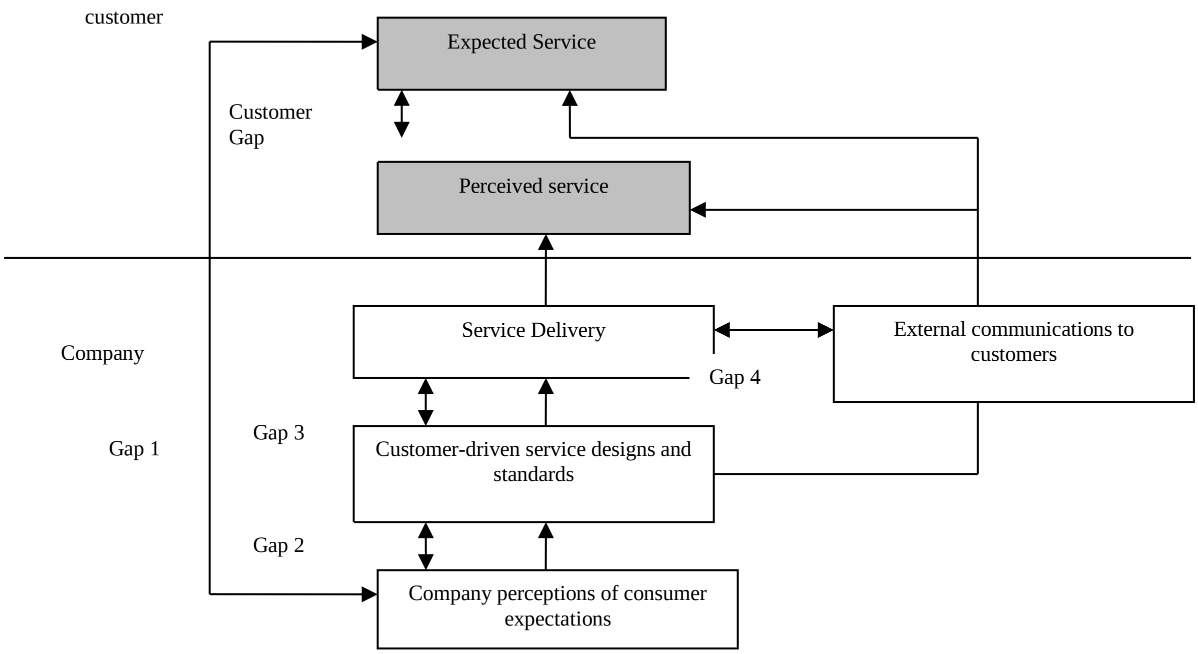
Poor service design.

Lack of customer-driven service standard.

Failure to develop tangibles in line with customer expectations.

Gap 2 can be minimized by designing services without oversimplification, incompleteness, subjectivity and bias.

Figure 1. Gaps Model of Service Quality



Source: Zeithaml and Bitner (2006:33)

Gap 3: Not delivering to service designs and standards

This gap is between the service quality specification and service delivery Gabbott and Hogg (1998:106). Even when guidelines for performing services are well strucutred and exist, high-quality service performance is not guaranteed. It is crucial that standards be backed by appropriate resources in the form of; people, systems and technology. The human error and mechanical breakdown cannot be ignored. Adequately trained staff are needed to deliver the quality that is necessary.

Gap 4: Not matching performance to promises

This is the gap between the service delivered and the service provider's external communications Zeithaml and Bitner (2006:42). When service quality is not delivered as promised, broken promises occur. The causes of broken promises could be:

Absence of a strong internal marketing programme

Over-promising in advertising

Differences in policies and procedures across business units.

Gap 4 can be minimized by increasing horizontal communication by opening channels of communication between the human resource and operation, to promote understanding between the relevant business units.

Organizations should develop communications that deal with the quality dimension and features that are most crucial to the customer and accurately reflect what customers actually receive in the service encounter Zeithaml and Bitner (2006:43).

2.6. Customer Satisfaction

What is customer satisfaction? Morea (1996:17) explains customer satisfaction as a "means of meeting not only the wants and needs of our customer, but the customer expectation as well" .

Brink and Berndt (2004:315) describe customer satisfaction as "the degree to which an organization's product or service performance matches up to the expectations of the customer ".

Cant et al. (2006:315) define customer satisfaction as "an outcome of a consumption activity or experience and it can represent a process".

Despite plethora of research on customer satisfaction, non unanimous definitions of customer satisfaction have been developed, yet inspite of its antecedents and consequences. Many definitions are either basically or to some extent, not consistent with one another, even all of these have similar components, Butt et al. (2015). Customer satisfaction is considered as a response which the customers gives after evaluating and is expressed during the purchase consumption process. Customer satisfaction with respect to service quality has been found to significantly contribute to customer loyalty in service industries (Kitapci et al. 2013; Butt et al. 2015).

The focal point here is that customers are the only true assets of an organization and customer satisfaction is the only justification for an organization's existence.

2.6.1. Factors that shape customer satisfaction

The factors that shape customer satisfaction are product or service features, perceptions of the products or service quality and price. Personal factors such as customer's mood or emotional state and situational factors such as family member opinions will also shape satisfaction Zeithaml et al. (2006:111).

Product and service features
The customer's evaluation of the product or service features has a significant impact on customer satisfaction. For example, important features in a hotel include room comfort and cleaniness, friendliness of staff, access to golf facilities, beaches, mountains, room price etc. Zeithaml et al. (2006:111) states that customers will make trade-offs among different service features,for instance price compared with courtesy of staff compared with customization depending on the kind and the nature of service being evaluated .

During a customer satisfaction survey, most organisations will determine, through focus groups, what the dominant features and attributes are for their services and then measures these features ,as well as overall service satisfaction.

Customer emotions
A positive (happy) or negative (sad) state of mind has an impact on how one feels or responds to the service received or experienced. The customer can either overreact or respond badly to any minor problem. The point is, positive emotions can develop customer satisfaction, whereas the negative emotions can destroy customer satisfaction. In 2007, Han conducted a study of the hospitality industry. He found that negative emotion had a greater influence on the customer satisfaction and customer repeat visit intentions than positive emotions.

Attributions for service success or failure
Attribution theory means how people explain things. This theory suggests that when an outcome is not as expected, people tend to look for reasons. Their assessments on why things turned out this way can influence their satisfaction, for example, if a farmer has planted a new maize cultivar and it has disappointed him by achieving a lower yield than expected. The farmer may think that the cultivar that was recommended by extension officer was not suitable for his/her climatic conditions. The farmer makes many external attributions Zeithaml et al. (2006:112).

Perceptions of equity or fairness
There are questions that arise in customers' minds regarding fairness or equity. "Have I been treated fairly compared with other customers? Did the other customers get a better attention, a better price or superior service quality?" Notions of fairness are central to customers' perceptions of satisfaction with products or services Zeithaml et al. (2006:112).

Reference group, family members and co-workers
Customer satisfaction is often influenced by other people, for instance, with a new maize cultivar on the market, farmers will be influenced not only by individuals' personal experiences with the new seed itself, but also by what other farmers say about it on farmers' day, how others feel about it and how widely it is adopted by the organization.

2.6.2. Steps to attain customer satisfaction

There are five steps that assist in the attainment of customer satisfaction:
- communicate with your customer
- manage the overall experience
- handle difficult situations with empathy and in a dignified manner
- cultivate a service culture with employees and task teams and
- learn how to implement and control service processes.

2.7. Difference Between Service Perception and Service Expectation

Service perceptions are generated during and after exposure to the service, whereas service, expectation is usually generated at the beginning of the services Brink and Bernt (2004:59).

Expectation changes from person to person and culture to culture, meaning what is expected today is not the same as what is expected in the future. This influences the perceptions of the customers. Customers perceive services in terms of the quality of the service provided and the level of the satisfaction attained. Organizations can differentiate themselves with respect to service quality and improved customer satisfaction.

3. RESEARCH METHODOLOGY

3.1. Research Design

A descriptive study was undertaken to measure extension service quality delivery within the uMngungundlovu District. Descriptive research occurs where a specific situation is studied either to see if it gives rise to any theories or to see if existing general theories are borne out by the specific solution.

The advantages of descriptive research is that it provides information about the relevant characteristics of the study group and allows associations among those characteristics Parasuraman (1991:135).

3.2. Research Instrument

According to Kotler (1994:41), most business companies conduct customer satisfaction surveys using questionnaires. Zeithaml and Bitner (2003:135) state that service quality is generally abstract and thus dimensions of services are best captured by surveys that measure customer evaluation of services. One such survey instrument developed to measure service quality is SERVQUAL scale Zeithaml and Bitner (2003:135).The SERVQUAL scale was first developed in 1988 and has since undergone numerous improvements. There are now different formats widely in use in commercial and public sector organizations. It consists of 21 service attributes, which are grouped into the five service quality dimensions (i.e. reliability, responsiveness, assurance, empathy and tangibles) Zeithaml and Bitner (2003:135, 138).

The SERQUAL survey questionnaire is structured in such a way that two different ratings are provided for each attribute or dimension of service quality. One rating reflects the level of service clients would expect from service providers in the sector and the other reflects their perception of the service delivered by a specific service provider within that sector. The difference between the expectation and perception ratings constitutes a quantified measure of service quality. The SERVQUAL predetermined survey questionnaire was used for collecting and analyzing the primary data for this study.

Discussion of the questionnaire

The SERVQUAL questionnaire has two sets of 22 questions each. Section A deals with the customers' expectations of the quality of the extension service that best oganisation should offer. Section B deals with the cutomer service perception received from uMngungundlovu District Extension Services. A five-point Likert format, ranging from 1 to 5, was used.

There are five dimensions of service quality being measured :

- Empathy- the provision of caring individual attention (statements 1-4)
- Responsiveness – the willingness to help the customer (statements 5-9)
- Assurance – the knowledge and courtesy of the employees (statements 10-14)
- Reliability – the ability to perform the promised service reliably and accurately (statements 15-18)
- Tangibles –the appearance of physical facilities, equipment, communication materials (19-22)

Questions 1-5 define background information of a customer.

3.3. Sample Design

The process of selecting a sample involves seven stages Zikmund (1995:417) These are discussed as follows:

3.3.1. Defining the target population

Zikmund (1995:417) states that it is vital to carefully define the target population, so that proper sources from which the data are to be collected can be identified. The target population for this research were farming communities in the uMngungundlovu District Municipality. Since it is impractical to obtain information from the entire target population a specific sample was selected to actually participate in the surve.

3.3.2. Select a sampling Frame

According to Zikmund (1995 :418), the "sampling frame is a list of elements from which the sample may be drawn." This research focused on the farming community that have receive extension services from DAEA under uMngungundlovu District Municipality. The Umngungundlovu District Municipality consists of seven local municipalities:

- Richmond
- uMshwati
- Camperdown
- uMngeni
- uMsunduzi
- Impendle
- Impofana

The above local municipalities were believed to be representative of the farming communities living in the uMngungundlovu District Municipality.

3.3.3. Sampling method chosen for the research

There are two types of sampling method, probability and non - probability sampling methods. Probability sampling is a sampling technique in which every member of the population will have a known, non-zero probability of selection . Non - probability sampling is a sampling technique where the probability of any particular member of the population being chosen is unknown Zikmund (1995:423).

A non- probability sampling method was selected for the purpose of this study. There are four types of non-probability samples: convenience sampling, judgment or purposive sampling, quota sampling and snowball sampling Zikmund (1995:424).

Respondents were selected purposively by extension officials in the areas where they performed their duties. With purposive sampling, the sample obtained is regarded as non-representative of the relevant population, but was typical and ensured that the research issues were addressed from different perspectives. Purposive sampling is also less complicated and more economical in terms of finance and time spent Welman and Kruger (2001).

3.3.4. Sampling Size

With the help of Extension Officers from the KZN Department of Agriculture and Environmental Affairs, farmers who received extension services were identified. Farmers were selected purposively by Extension Officials who know the areas where they performed their duties.

To gain entry to the local municipalities, the researcher contacted the District Heads where research was conducted and requested that the Extension Officers be part of research.

The research was carried out by interviewing 160 participants at seven local municipalities (Representative sample = 160, population = 280) Refer to Table 1. This sample was found to provide adequate representation of Umngungundlovu farming communities.

Table 2. Determining sample size

Population (N)	Representative sample(n)
40	36
80	66
120	92
160	113
200	132
240	148
280	162

Source: Krejcie and Morgan (1970:608)

3.4. Data Collection

In order to collect the data the researcher met with Extension Officers from seven municipalities. The aim of the meeting was to introduce the study and help Extension Officers gain a clear understanding of their responsibilities within the study. Extension staff were responsible for inviting farmers to participate and introducing the researcher in their wards. The researcher handed out the questionnaire to the farmers. Farmers who could not read and write were assisted by the researcher and extension officers . The questionnaire was to be completed by farming community which had received agricultural services from the DAEA.

3.5. Data Analysis

Data was collected using questionnaires. The tool used for the research was quantitative and allowed the researcher to collect a large quantity of data from a sizeable population. Data was collected and coded, entered into a spreadsheet (Microsoft Excel) and analyzed using the Statistical Package for Social Sciences (SPSS) computer programme. From the SPSS analysis , tables, means, and frequencies in percentages were drawn.

4. RESULTS AND DISCUSSIONS

Determining the service perceptions of the farming communities with regards to extension service delivery.

Perception is our sensory experience of the world around us and involves both the recognition of environmental stimuli and actions in response to these stimuli. Through the perceptual process, we gain information concerning properties and elements of the environment that are critical to our survival. Perception not only creates our experience of the world around us; it allows us to act within our environment Van Wager (2008 :1)

4.1. Perception Concerning Empathy

Giving the farmers individual attention has the highest score (4.74) in this dimension. This statement proves to be extension's strongest point and is probably the key to customer satisfaction. Solomon and Stuart (1997:380) state that people like to feel that they are receiving personal attention and this enhances the quality of the service in the customer's mind.

The lowest recorded value was 4.14 for the statements related to the business hours of the extension service. Respondents raised concerns that when they try to reach the extension staff, especially during the weekend , their cellphones are off. The department needs to address this issue by providing the official with company phones.

The overall average score for this dimension is 4.57 and this represents the second lowest score of the five service quality dimensions.

4.2. Perception Concerning Responsiveness

The highest average perception on responsiveness dimension was 4.78, related to the willingness of staff to help. This indicates that customers regards extension staff as friendly and helpful.

The lowest average score of 4.41 was recorded for statements that the extension offices are slow to respond to issues. The Department needs to take this statement into consideration as the responsiveness perception diminishes when customers wait for assistance. To excel in responsiveness dimension, company must be certain to view the process of service delivery from a customer's point of view Zeithaml and Bitner (1996:121).

The overall average for this dimension was 4.68 and represents the second highest score of the five service quality dimensions.

4.3. Perception Concerning Assurance

The highest average perception on assurance dimension was 4.77, related to the knowledge the extension staff have. This indicates that farmers have a positive experience when dealing with the extension staff as far as knowledge and skill is concerned. Blem (1996:33) states that customers jugde an organisation by its staff.

The overall average for this dimension was 4.69 and this is the highest average of all dimensions.

4.4. Perception Concerning Reliability

The highest average perception on reliability dimension was 4.75. This was recorded for the statement that information provided by Extension Officers are easy to understand. This indicates that the respondents like the fact that the extension information is easy to use .

The statement that received the lowest average of all the 22 statement is that extension is a good investment of public funds.

The overall average for this dimension was 4.47. It is the lowest average score of all five dimensions. The Department needs to be aware of customers' expectations on relaibility. Firms that do not provide the core service that customers think they are buying fail their customers in the most direct way. Of all the five dimensions of the service quality, relaibility has shown to be the most important determinant of perceptions of service quality among U.S. customers Zeithaml and Bitner (1996:119) .

4.5. Perception Concerning Tangibility

The highest average perception on tangible dimension was 4.79. This was recorded for the statement that extension materials (training modules, pamphlets) which are associated with the service are visually appealing. This is the highest of all 22 statements, indicating that farmers are satisfied with the extension materials. The training modules are designed is such a way that even an illerate person can see and learn from them. These training modules are full of pictures. We know the saying that a pictures is worth a thousand words.

Tangibles are often used by service companies to enhance their image Zeithaml and Bitner (1996:122) . The overall average for this dimension was 4.58.

4.6. Determinining the Service Expectations of the Farming Communities with Regard to Extension Service Delivery

Zeithaml and Bitner (1996:76)explained that customer expectations are beliefs concerning service delivery that function as standards against which performance is judged.

Expected service is a critical component of the perceived service quality and is seen as being influenced by word of mouth communication, past experience with the business and by the personal believes, attitudes and values of the customer Muller et al. (1994:7).

4.6.1. Expectation concerning emphathy

The highest expectation on empathy dimension was 4.97, related to staff having the best interests of the customers at heart. This indicates that the customers expect extension staff to treat them with diginity.

The overall average score for this dimension was 4.86 and is rated fourth highest of the average five dimensions.

4.6.2. Expectation concerning responsiveness

Responsiveness is the willingness to help customers Bergman and Klefsjo (1994:267). It concerns the readiness of the employees to provide service and involves timeous of service, calling the customer back and giving prompt service Parasuraman et al. (1988:47)

The highest expectation on the responsiveness dimension was 4.97, related to the ability of extension to help customers to make informed decisions.

The overall average score for this dimension was 4.93. This is the same as the expectation score related to the statement that the best Extension Officer will be quick to respond to issues. No business can afford to keep the customer waiting and farming community expects extention officers to respond to their needs quickly.

4.6.3. Expectations concerning assurance

Assurance dimension includes competence, courtesy, credibility and security Bergman and Klefsjo (1994:269) :

- Competence is the possessing of the required skills and knowledge to perform the service.
- Courtesy refers to the supplier's behaviour, for example, consideration, politeness and kindness.
- Credibility means trustworthiness, honesty of the service provider.
- Security means freedom from danger, risk and doubt.

The highest expectation on the assurance dimension was 4.94, related to extension help in solving farmer's problems. This implies that farming communities have high expectations with regards to the ability of the extension staff to solve their problems.

The overall average score for this dimension was 4.92. This is the second highest score of all the five dimensions of service quality.

4.6.4. Expectation concerning reliability

Bergman and Klefsjo (1994:267) state that reliabilty involves the consistency of the performance and dependability, i.e. punctuality and the correctness of the service information.

The highest expectation on reliability dimension was 4.92, related to the best extension officer never too busy to solve farmers problems.

The overall average score for this dimension was 4.83. Although this is the lowest score for all five quality dimensions, it is still a high score.

4.6.5. Expectation concerning tangibility

Tangibles refer to the physical environment in which the service is presented, i.e the organisation, the equipment , the personnel and their clothing Bergman and Klefsjo (1994:267).

The highest expectation on the tangible dimension was 4.96, related to extension office being approachable. Much the service quality is realised when the farmer and the extension staff meet face to face. This is called "the moment of truth" "or" "moment of possibilities", since the supplier can convince the customer of service excellence. The Department must consider setting a dress code to ensure uniformity, as employee image is part of the custmer's impression of the quality of the service.

The overall average score for this dimension was 4.89. This is the third highest score of the five dimensions and does not seem to be as the most critical element for farming communities, the reason being very few farmers visit the local office. The extension staff visit farmers in their ward of operation, using KZN or subsidized transport.

4.7. Determining the SERVQUAL Gaps that Impair Extension Service Delivery

A good service quality is one which matches or exceeds customer expectations. Judgement of high and low service quality depend on how cutomers perceive the actual service performance in the context of what they expected Bergman and Klefsjo (1994:274).

The average gap score between the extension service perception and expectation for each of the service quality dimensions are empathy (-0.23), responsiveness (-0.25), assurance (-0.23), reliability (-0.36) and tangibles (-0.31). There is a narrow gap between the extension services'perception and expectation for all five dimensions. The negative difference implies that the expectation scores have exceeded the perception scores. This calls for some level of improvement.

The results have shown that the customers perceive that they receive superior service from the extension staff. However the negative differences need to be eliminated to exceed the expectations of customers.

5. RECOMMENDATIONS

Improve communication modes between the field officers and the farmers.

The study revealed that farmers wait for too long before they receive assistance from the field workers, the governement should solve this problem by putting modern communication modes in place that will shorten the waiting period for the farmers.

The field workers should respond to the problems of the farmers with haste.

The farmers complained that field workers take too long before they can respond to the problems being faced by the farmers. An improvement in this area will lead to more confidence in the field workers by the farmers and this will improve the relationship between the two parties.

CONCLUSION

Nowadays government organisations are operating in a new environment of accountability. Funders want more than accurate record keeping and summary of what was done with their appropriations. They want information that communicates value of programs. Therefore, more attention is being paid to customer satisfaction as funding decisions are made. Even when an organisation meets its performance goals, few taxpayers want to finance an organisation if its programs are viewed as irrelevant or officials are perceived ineffective.

The major aim of this study was to measure farming community perceptions and expectations of quality of extension services rendered by Department of Agriculture within UMngungundlovu District. Findings from this study indicates that customers judge service quality based on multiple factors such as:-

- Emphathy- the provision of caring individual attention
- Responsiveness – the willingness to help the customer
- Assurrance – the knowledge and courtesy of the employees
- Reliability – the ability to perform the promised service reliably and accurately
- Tangibles –the appearance of physical facilities, equipment, communication materaials

These five dimensions of customer satisfaction were used as framework for both the collection and presentation of data. The results of the study have shown that all five dimensions of service quality are significantly important as far as extension work is concerned in the Department.

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CORPORATE GOVERNANCE FROM THE PERSPECTIVE OF THE PAST AND THE PRESENT AND THE NEED TO FILL AN INTERNATIONAL GAP

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Abstract

Corporate governance (CG) emerged many centuries ago, despite the debate on this subject and the widely-held view that it commenced in the 2000s. Thus, CG is not a new practice and over time it has become a precise system. In this study, the origins of CG are examined by the author in order to shed light on the underlying facts concerning the roots of this discipline and its history. By introducing such facts, it provides the background of the emergence of CG as clear principles and mechanisms. In the organizational sense, this study is considered important for both investors and organizations in applying the principles of CG and its mechanisms in all countries worldwide. The objective of this paper is to provide useful information to both researchers and practitioners in relation to CG including the fundamental principles and its history. This paper will present a solution to fill the gap in the literature concerning the relationship between CG and a firm's performance in such instances when the results of examining such a relationship are found to be inconsistent. A number of factors have contributed to this author's desire to research the relationship between a firm's performance and CG and that includes the author's experience and understanding of accounting over the years especially in the CG discipline, and also further to an in-depth literature review.

Keywords: History; Agency Theory, Corporate Governance, a Firm's Performance, Non-Financial Measurements, Jordan

1. INTRODUCTION

The practice of corporate governance (CG) in organizations has developed rapidly in recent times, and worldwide its significance has been increasingly highlighted. It has even been noted by countries which have yet to adopt CG in their organizations, and where possible CG is adopted and implemented in those countries. The rationale for the worldwide interest in CG is that CG underpins a firm's operating framework. Therefore, adoption and implementation of the practice of CG is expected to the benefit the owners. With the owners being committed to using CG principles and mechanisms, in the widest sense this can equate to an effective monitoring of a firm's activities particularly when disclosure and transparency principles are adopted. Accordingly, by adopting and implementing CG in firms, this decision can positively impact on the current and potential investors' investment-related decisions, on the one hand, and on the value of the firm on the other (Brennan & Solomon, 2008; Hebble & Ramaswamy, 2005).

The bankruptcy and subsequent collapse of large corporations in the United States of America (U.S.), such as Worldcom, Enron and Adolphia and the public awareness of these financial disasters has led investors to become increasingly aware of organizations that are characterized as having reputable CG systems in place; in other words there is an orientation for investors to gravitate to companies which adhere to the best practice of CG. Furthermore, as information is readily available, decisions can be accessed and assessed on a daily basis by shareholders and owners, in addition to the assessment made by investors and analysts (Alabdullah, 2014).

A clear and important role is revealed regarding the effect of CG mechanisms on performance(Alabdullah, 2016). Nonetheless, several previous studies tested the relationship between CG and firm performance but the results were inconsistent; some of which led to positive results, and others were mixed: negative and positive on firm performance (Alabdullah et al., 2016). This research fills an international gap regarding what has been done in the previous studies, through suggesting a solution that lies in investigating the relationship between CG and the firm performance from a new perspective. In that, there should be studies testing this relationship by taking into account both financial and non-financial measurements to measure a firm's performance rather than just focusing on financial ones as the majority of previous studies have done.

The remainder of this study is prepared in the following way. Section 2 reviews the literature review. This is followed by Section 3 which discusses corporate governance and agency theory. Section 4 deals with corporate governance and firm's performance. Finally, Section 5 is the conclusion of the study.

2. LITERATURE REVIEW

2.1. The Development of Corporate Governance

In general, worldwide in the current business environment and in particular in the discipline of accounting there is a widely held view and a clear understanding of the principles and mechanisms of CG. Accordingly, there has been much debate on the topic of CG amongst a range of parties and this includes academicians, regulators, and members of the business community worldwide. However, currently there is no distinctive definition which describes specifically the meaning of CG by taking into consideration the CG system's comprehensive characteristics. Therefore, there is some contention and confusion concerning the definition of CG (Windsor, 2009). Notwithstanding this, the general and traditional definition of CG is that held by the Organization of Economic Cooperation and Development (OECD, April 1999) which has provided the following definition: *"corporate governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs"* (Hebble & Ramaswamy, 2005).

Furthermore, other definitions of CG can be found in the body of existing literature. For example CG is a system which aims to provide control and direction for organizations as described by Cadbury (1992). Shleifer & Vishny (1997) gave another definition in that CG is a process in which a corporation's financiers expect to get a return on their investment.

2.2. History and Origin of Corporate Governance

Historically, the first big debate regarding CG came about in the Netherlands in 1602. By way of background the Netherlands is known as having the oldest stock market in the world. At that period of time managers persisted in the view that a firm's work should be continual and as a result a profit should ensue. In France, it was the failure of the Mississippi Company in 1720 that provided the momentum to go down the path of CG (Morck & Steier, 2005). In the U.S. CG appeared in Canal Companies which was one of the early enterprises. A stockholder review committee influenced the development of CG and the processing of financial reporting in the instance of the Canal Companies (Russ *et al.*, 2006). However, there is a different school of thought (Bai *et al.*, 2004; Giroud & Mueller, 2010) in that the concept of CG might have been derived from Adam Smith's thesis written well over three hundred years ago as part of his book entitled *The Wealth of Nations.* Smith made reference to possible problems relating to the absence of corporate ownership when he raised the issue in joint-stock corporations of the separation of power between stewardship and ownership. He claimed that a manager of someone else's money cannot be expected to oversee the operations with as much care and consideration as an owner may, therefore, there is a need for an efficient mechanism control to oversee the operations which will resolve any conflict between the managers and the owners. Economists have long held the belief that ineffective management is predominantly an issue for companies in those industries which are deemed to be non-competitive.

Furthermore, economists Berle and Means (1932) explicitly claimed there is a necessity for requiring there to be control on any potential gap between the managers and the shareholders to safeguard against a manager's negative or inappropriate practices such as the improper use of the company's resources for the purposes of taking full advantage at the expense of the interest of the shareholders (Brennan & Solomon, 2008). The work by Berle and Means confirms the above argument by perceiving that the firms' managers may not take into consideration the interests of the shareholders in the first instance and instead may look after their own interests (Bai *et al.*, 2004). A study undertaken by Yuka (2010) indicated that in the six years since the study of Berle and Means much debate has been had and there is a call for central governance in firms along with the separation of control and ownership which will be of benefit to the shareholders Furthermore, the pioneers of the management theory perceived that it is the responsibility of the management of firms to not only look after the shareholders, but to look after the interest at all other stakeholders (Jensen & Meckling, 1976). It is the concern held by a firm's stakeholders that is a driving force for the introduction and implementation of CG to account for the strong influence of the senior-level of management and a lack of a strategic direction. Without effective CG there is the potential for administrative corruption, which is likely to damage a firm's reputation, such as the case of corporations such as account auditing company Arthur Andersen and Enron, the 7th largest corporation in the U.S. which before its downfall won an award six times for being the most innovative company by Fortune Magazine (Nelson *et al.,* 2008; Alabdullah *et al.,* 2014). However, conflict can arise between shareholders and managers due to the separation between control and ownership causing agency problems. Accordingly, the collapse of corporations such as Enron was the catalyst for the introduction, implementation and transformation of CG, which included reforms such as the Sarbanes–Oxley Act of 2002 (SOX) (Stigliano 2011).

3. CORPORATE GOVERNANCE AND THE AGENCY THEORY

The agency theory makes reference to an existing relationship that arises between two parties: on the one hand there is the management-level comprising the firm's executives; and the owners as principals and shareholders on the other hand in accordance with the study of Jensen and Meckling (1976) and with the agreement of later studies (Tate *et al.,* 2010). They contend that this relationship is founded on contractual conditions which are implicit and explicit for the purpose ensuring all parties can operate as efficiently as possible in order for the owners to maximize their wealth by the delegation of authority and the allocation of certain activities to a firm's management-level as the owners are not sufficiently skilled to manage and undertake the tasks required.

Therefore, the agency theory and its hypotheses have an effect on CG. Tirole (2010) supported this stance by showing that the widespread academic thinking on CG is due to the prevalence of research which is based on the premise of the underlying principle that the agency theory focuses on the problem of the issue of separation between a firm's management and its ownership. As referred to in the early study undertaken by Berle and Means in 1932 in the U.S., there is a wide deviation in the interest of managers and owners and hence their motivations differ. It is a widely held view that effective CG mechanisms can reduce the agency costs and thereby benefit the shareholders.

4. CORPORATE GOVERNANCE AND A FIRM'S PERFORMANCE

According to Chen *et al.* (2009), recent empirical evidence in the literature demonstrates the ability of CG to limit the agency cost, and this aligns with the opinion that with improved levels of CG, a firm's performance is improved as is the value of the firm. A substantial body of literature published over the last few decades has examined the performance of firms and their value. This literature provides empirical evidence as Table 1 below indicates. What is prominent in the literature is the existence of relationships which are linked to the mechanisms of the CG system and the multiplicity of views leading to different results observed from these relationships. Despite the fact that studies have been undertaken in different parts of the world the literature supports the notion that CG is crucial, and positive, and has significant relationship with a firm's performance.

Table 1. Summary of the previous literature's findings show the relationship between Corporate Governance (CG) mechanisms and a Firm's Performance

Corporate Governance Mechanisms	Previous Studies	Relationship with Performance
Size of the Board of Directors	Abor & Biekpe, 2007b; Adams & Mehran, 2003, 2005; Alnaif, 2014; Belkhir, 2009; Berger et al., 1997; Bhagat & Black, 2001; Dwivedi & Jain, 2005; Fauzi & Locke, 2012; Grove et al., 2011; Jackling & Johl, 2009; Kajola, 2008; Tirole, 2010; Tornyeva & Wereko, 2012, Alabdullah, 2016.	Positive
	Adnan et al., 2011; Eisenberg et al., 1998; Grove et al., 2011; Haniffa & Hudaib, 2006; Jensen, 1993; Klein, 1998; Kumar & Singh, 2013; Mak & Kusnadi, 2005; O'Connell & Cramer, 2010; Yermack, 1996.	Negative
	Andres & Vallelado, 2008.	Inverted U-Shaped
	Al-Hawary, 2011; Bhagat & Black, 2002; Chaghadari, 2011; Ehikioya, 2009; Vo & Nguyen, 2014; Yoshikawa & Phan, 2003.	No Relationship
Independence of the Board	Abor & Biekpe, 2007b; Al-Hawary, 2011; Balasubramanian et al., 2009; Bhagat & Black, 2001; Fama & Jensen, 1983; Jackling & Johl, 2009; Kumar & Singh, 2013; O'Connell & Cramer, 2010; Tornyeva & Wereko, 2012; Vo & Nguyen, 2014; Zheka, 2006.	Positive
	(Agrawal & Knoeber, 1996; Bhagat & Black, 2001; Klein, 1998; Vo & Nguyen, 2014; Yermack, 1996.	Negative
	Andres & Vallelado, 2008.	Inverted U-Shaped
	Adams & Mehran, 2005; Adnan et al., 2011; Bhagat & Black, 2002; Chaghadari, 2011; Ehikioya, 2009; Heracleous, 2001; Hermalin & Weisbach, 1991; Mehran, 1995; Yermack, 1996; Yoshikawa & Phan, 2003.	No Relationship
CEO Duality	Abor & Biekpe, 2007b; Al-Hawary, 2011; Balasubramanian et al., 2009; Fama & Jensen, 1983; Grove et al., 2011; Kajola, 2008; Tornyeva & Wereko, 2012.	Positive
	Bai et al., 2004; Chaghadari, 2011; Jackling & Johl, 2009; Rechner & Dalton, 1991; Yermack, 1996; Zheka, 2006.	Negative
	(Adnan et al., 2011; Al-Amarneh, 2014; Chaganti et al., 1985; Fosberg, 2004; Heracleous, 2001; Rechner & Dalton, 1989; Yoshikawa & Phan, 2003.	No Relationship
Managerial Ownership	Abor & Biekpe, 2007b; Al-Khouri, 2005; Bai et al., 2004; Berger et al., 1997; Fauzi & Locke, 2012; Fosberg, 2004; Friend & Lang, 1988; Gedajlovic & Shapiro, 2002; Hiraki et al., 2003; Klein, 1998; Kumar & Singh, 2013; Vafeas & Theodorou, 1998.	Positive
	Acharya & Bisin, 2009; Al-Khouri, 2005.	Negative
	Benson & Davidson, 2009; McConnell & Servaes, 1995.	Inverted U-Shaped
	Adnan et al., 2011; Al-Khouri, 2005; Chaghadari, 2011; Demsetz & Villalonga, 2001; Ehikioya, 2009; Grove et al., 2011; Mak & Kusnadi, 2005.	No Relationship
Foreign Ownership	Abor & Biekpe, 2007b; Bai et al., 2004; Balasubramanian et al., 2009; Chhibber & Majumdar, 1997; Gedajlovic & Shapiro, 2002; Gurunlu & Gursoy, 2010; Kang & Shivdasani, 1995; Tornyeva & Wereko, 2012; Yoshikawa & Phan, 2003.	Positive
	Konings, 2001.	No Relationship

All such efforts by the previous studies resulted in inconsistent results thus the current study suggests a solution rests in investigating the relationship between CG and the performance of firms from a new perspective. In other words, there should be studies testing this relationship by taking into consideration both financial and non-financial measurements to measure a firm's performance rather than just focusing on financial ones as the majority of previous studies have done as mentioned in the table above and also for other studies in the literature review.

CONCLUSION

In spite of an increased awareness and interest in corporate governance (CG) from the beginning of the 2000s, use of the principles of CG has be traced back to hundreds of years ago to the 1600s though there was no direct application at that time nor had it been given a specific name or law or legislative requirement that led to an application of the concept in the businesses. Further to the examination of the agency theory, significant importance has been placed on the application of the mechanisms and principles of CG as one of the main objectives of CG is an extension of the agency theory's purpose which lies in providing a solution to the eternal problem of conflict between the shareholders and a firm's management-level. Applying CG has been brought about by pressure from an awareness and a real desire from internal stakeholders such as shareholders and from external stakeholders such as members of society including customers, consumers and suppliers. CG is a source of much interest worldwide as it is a useful tool to reduce or mitigate any business crises on the one hand, and on the other CG can be utilized as a building block for the firms to maximize their value by creating a competitive advantage, enabling their performance to be enhanced and thereby leading to an overall improvement in a country's economy.

This paper also contributes to the existing body of literature by analyzing the effects of the CG mechanisms on the performance and the value of firms by discussing and comparing the results of the previous studies. This paper acknowledges that the findings of the previous studies were diversified due to shortcomings of using traditional methods to measure financial performance such as ROA, ROE, etc in most of the previous studies, whilst the modern contemporary trends ought to focus on both financial and non-financial performance measurements. Also the current paper shows that the empirical findings of previous studies confirm that theories related to CG such as the agency theory provides some support to illustrate the relationship between the mechanisms of CG and a firm's performance and its value.

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A LITERATURE REVIEW ON THE IMPACT OF IAS/IFRS AND REGULATIONS ON QUALITY OF FINANCIAL REPORTING

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Abstract

The International Accounting Standards Board (IASB) in its objectives and preamble, presume that IFRS adoption and perceived compliance to regulatory framework is associated with increased financial reporting quality. Based on these assumptions, this desktop study reviewed several documents to determine whether the IFRS adoption has led to increased financial reporting quality in Zimbabwe. The researchers reviewed literature on how the IAS/IFRS and regulations affect the financial reporting quality of listed companies. The factors around IFRS adoption were identified (mandatory, voluntary and convergence) and discussed in relation to the financial reporting quality. Evidence from previous studies conducted in line with this same issue shows that there is no conclusive evidence on how IFRS and regulations affect the financial reporting quality. Issues to be addressed in further studies include the importance of financial statements prepared under IFRS framework and the importance of compliance with accounting and auditing requirements.

Keywords: Reporting Requirements Compliance, IAS, IFRS, IASB, Reporting

1. INTRODUCTION

In this theoretical study, academic materials about the impact of the IAS/IFRS and regulations on financial reporting quality are examined, summarized and reviewed. The principle intention was to ascertain how prior literature attempts to address the following research objectives (i) the relationship between IAS/ IFRS and financial reporting quality (ii) the relationship between regulatory framework and financial reporting quality (iii) the relationship between regulations, IAS/IFRS and financial reporting quality. The study systematically analyzed prior literature, described and justified what has been done in this present study and the experiences of other countries. Bases of agreements and disagreements between various scholars, institutions, schools of thought and the relationship between the IAS, regulations and financial reporting quality according to past studies as well as the basic principles of quality financial reporting as purported by various schools of thought were discussed. The study also disclosed the research gap. Also in addition, studies similar to this one were evaluated and methodologies used were examined to inform this research work. Insights from literature were also highlighted.

1.1. Structure of the Paper

The authors firstly presented arguments towards relevance of the study. Thereafter the study systematically scrutinized relevant literature looking at critical issues such as: accounting standards and financial reporting quality. Under this section authors of this study looked at issues such as: Financial reporting quality changes around voluntary IAS/IFRS adoption, financial reporting quality changes around mandatory IAS/IFRS adoption and financial reporting quality changes around IFRS convergence. This was followed by a detailed discussion on regulatory framework and financial reporting quality. Relationship of IAS/IFRS, regulations and financial reporting were also discussed in detail.

1.2. Significance of the Study

The study begins by positing that the association between financial reporting quality and investment efficiency relates to a reduction of information asymmetry between firms and external suppliers of capital. Such information is of paramount importance to the survival of any business. For example, higher financial reporting quality would allow constrained firms to attract capital by making their positive net present value (NPV) projects more visible to investors and by reducing adverse selection in the issuance of securities. Alternatively, higher financial reporting quality as shall be discussed in this study would curb managerial incentives to engage in value destroying activities such as empire building in firms with ample capital. This could be achieved, for example, if higher financial reporting facilitates writing better contracts that prevent inefficient investment and/or increases investors' ability to monitor managerial investment decisions.

2. LITERATURE REVIEW

2.1. Accounting Standards and Financial Reporting Quality

Following the IASB goal to develop the global acceptable set of high quality IAS/IFRS that consider current and potential investors as the primary users of financial statements (IASB, 2010) which are often described as principle based system (Chen et al 2010; Atwood et al 2011; Sun et al 2011; Dimitropoulos et al, 2013) are anticipated to ensure a high level of transparency of financial reporting to get better quality financial reporting. It is then expected that IFRS earnings management must be of better quality than local standards.

Consistently prior studies prop up the economic merits of the IAS/IFRS adoption. The expected benefits are based on the premise that the use of IAS/IFRS enhances transparency and limit the options available to managers to manipulate the financial reporting and then improve the quality of financial reporting. Worldwide, researchers in the academic arena suggest that the implementation of IAS/IFRS enhances the increase of quality financial reporting (Bruggermann et al, 2013). Most researchers document substantial economic benefits following voluntary IFRS adoption. However most prior literature often produces mixed results, therefore it is not surprising that the benefits are either implicitly or explicitly attributed to the adoption of IAS /IFRS (Christensen et al. 2013).

Conceptually there are reasons to be skeptical that the benefits documented around voluntary /mandatory IAS/ IFRS adoption can be attributed to the change in accounting regulations. The early IAS/IFRS, which voluntary adopters complied with, prior to mandatory adoption settings comprised of delegations from up to 14 countries. The delegation for the most part of the policy included free choice in IAS among the various national accounting rules that existed at that time (Zeff, 2012). The choices gave firms the opportunity to continue using local accounting practices after adopting IAS/ IFRS, for example IAS 16 (Christensen et al. 2013). The debating question is how effective are the accounting standards in promoting accounting quality? It also seems self-evident that it must depend on the reporting incentives or regulatory framework in which the firm operates from. Therefore this theoretical study wanted to establish how IAS/IFRS influence quality of financial reporting of listed companies in a regulatory capital market like Zimbabwe Stock Exchange.

2.1.1. Financial reporting quality changes around voluntary IAS/IFRS adoption

In spite of the conceptual reasons to doubt the ability of IAS/IFRS to improve the financial reporting quality, Daske et al (2009) pointed out that the decision to voluntarily adopt IAS/ IFRS reporting is one element of broader strategy that increases a firm's overall commitment to quality financial reporting. In this context, (Barth et al 2008; Hung & Subramanyam, 2007) document financial reporting quality improvements around voluntary IAS/IFRS adoption and both Gassen and Sellhorn (2006) and Hung and Subramanyam (2007) reached similar conclusions. In this context Christensen, (2012), Daske et al (2009) found an improvement in quality of financial reporting following voluntary IAS/IFRS adoption. Correspondingly Pascan &Turcas (2012) assert that the impact of IAS/IFRS adoption on listed companies depend on the condition of adoption– voluntary or mandatory, with an increased financial reporting quality on voluntary and vice-versa on mandatory. In the same vein, Christensen et al (2013) found an improvement in the quality of financial reporting for German listed companies following voluntary adoption of IAS/IFRS.

More recently, Christensen et al (2013) pointed out that since IAS/IFRS limit the options available to managers, the adoption of IAS/ IFRS could positively impact the quality of financial reporting. In line with this reasoning, IASC and its later IASB have eliminated alternatives available to management under IAS/IFRS regime since the beginning of Comparability and Improvements project in 1989 (Christensen et al 2013). They concluded that many of the accounting principle changes that occurred upon IAS/IFRS adoption are voluntary in the sense that IFRS do not require the changes therefore voluntary adoption of IFRS just correlates with management motives of increased quality. Following (Daske et al. 2009; Li 2010, Byard et al, 2011)'s findings that IAS/IFRS eliminate accounting alternatives that were opportunistically used by managers, elimination of these alternatives would improve the quality of financial reporting. Consistently Chen et al (2010) evidenced improved financial reporting quality in Europe.

In the middle of the debate, Li (2010) asserts that IAS/IFRS is not a considerable factor in the determination of financial reporting quality, as other aggressive factors come into play. This was after the examination of the impact of IAS/ IFRS voluntary adoption on the financial reporting quality of listed companies in Kenya between 1995-2004. These findings were mixed with 3 out of 8 metrics of qualitative results indicating that quality has marginally improved while 5 out of 8 indicated that quality declined slightly. In the same vein, Paananen (2008) did a similar study in Sweden and went on to advise that it is dangerous to draw conclusions using this kind of measure. Further, Paananen and Lin (2008) pointed out that IFRS adoption does not necessarily lead to improved financial reporting quality. Subsequent, Chen et al (2010) also argue that IAS/IFRS adoption would not generate accounting information with same quality across countries as other factors come into play. In the same way (Godwin et al 2008) assert that it is difficult to draw general conclusions from voluntary IFRS adoption since it is being affected by several factors. Equally, Daas (2014) also concluded that voluntary adoption is influenced by several factors; therefore it is biased to draw conclusions on how it affects reporting quality.

Contrary, Armstrong et al (2010) found that the pervasiveness of earnings management did not decline after the introduction of IFRS and in fact increased in France. Therefore they concluded that sharing rules is not sufficient in itself to create a common business language and to enhance improved financial reporting quality. In addition, Daske (2008) pointed out that voluntary adoption of IAS/IFRS lead to decrease in financial reporting quality. On the same note, Christensen et al (2013) assert that although IAS/IFRS are higher quality standards, the effects of features of the financial reporting system other than the standard itself for example enforcements and litigations, can eliminate any improvement in financial reporting quality arising from IAS/IFRS adoption. The study by Ball (2006) analyses earnings management of German firms that have adopted IAS/IFRS voluntarily, providing evidence that firms audited by the Big four demonstrate large discretionary accruals and lower correlation between accruals and cash flow, which is an indicator of large earnings management and therefore decreased quality of financial reporting.

Zimbabwe had voluntarily adopted IFRS in 1993 and was legally put into practice in 1996 with the publication of legal instrument. Owing to the inconclusive/contrasting results on whether voluntary adoption of IFRS improves the quality of financial reporting, the different results could have been due to the different regulatory framework, economic, and political set up among the countries where the researches were done.

2.1.2. Financial reporting quality changes around mandatory IAS/IFRS adoption

Although prior studies on voluntary adopters provide contrasting facts about how IAS/IFRS impact on the quality of financial reporting, these results may not be generalized in the current mandatory settings (Daske et al. 2009). It is expected that the findings from IAS/IFRS mandatory adoption should be different from those documented for voluntary IAS/ IFRS adopters (Hail et al 2010) since the former group is essentially forced to adopt IAS/ IFRS compared to the latter that chooses to adopt. In this context, several recent studies document favorable economic consequences associated with mandatory IFRS adoption (Byard et al, 2011). These studies argue that these benefits of IFRS adoption could result from improved financial reporting quality. Nevertheless the study by Ahmed, Need (2013) argues that improved accounting quality is unlikely to be an explanation for these favorable economic consequences.

Kang (2013) examines the impact of mandatory adoption of IAS/IFRS on the reporting quality in 13 European countries by comparing the earning management in the pre–and post–IFRS mandatory adoption in 2005 and their conclusion is consistent with prior literature that concluded that mandatory IAS/ IFRS improves the financial reporting quality. In the same way, Chua et al (2012) found less earnings management and improved financial reporting quality in Australia following the mandatory adoption of IAS/IFRS. Furthermore, Li (2010) found improved financial reporting quality in Peru from IAS period to early IFRS period (from 1999-2001 to 2002-2004 when the IASB took over the IASC, and worsened from the early IFRS period to the current IFRS period (from 2002-2004 to 2005-2007) when more accounting standards started to reflect IASB preferences. On the same grounds, Armstrong et al (2010) found evidence consistent with investors expecting increased financial reporting quality from mandatory IFRS adoption. In this context Chen et al (2010) show that after mandatory IFRS adoption, the quality of the financial reporting increased significantly more for mandatory adopters relative to non-adopters and voluntary adopters.

While Armstrong et al. (2010) assert that even if the quality of financial reporting does not improve, it is possible that the financial information will become more useful with the mandatory adoption as it enhances comparability of financial data across firms from different markets or countries. It was also argued that movement towards IFRS may facilitate cross boarder investments and the integration of capital markets. Making foreign investments easier could also improve the liquidity of the capital markets and enlarge firm's investor base, which in turn could improve risk-sharing and lower the cost of capital. Similarly, Muller (2014) supports with evidence the increased quality in consolidated statements after the mandatory adoption of IFRS. Muller's claim tallies with that of Armstrong et al (2010), who also found that the mandatory standards enhance confidence of investors as they perceive the accounting information to have better quality reporting.

Neutrally, Sun et al (2011) found no variations in the financial reporting quality from pre-to post IFRS period of listed companies in U.S following an analysis of the impact of mandatory IAS/IFRS on earnings management quality. More recent study by Christensen (2013) concurs with Sun et al., as they found no accounting quality improvements following mandatory IAS/IFRS adoption. Similarly, Christensen et al (2013) demonstrate that other simultaneous regulations, for example changes in the enforcement, are responsible for financial reporting quality. Further they pointed out that it is difficult to separate the effects of IAS/IFRS adoption on its stand-alone basis. In addition, they claim that as a result it is difficult to point out the effects of IAS/IFRS. It is therefore not clear whether the detected economic benefits resulted from the IFRS adoption or regulations for firms that resist IFRS reporting until it became mandatory in 2005. They concluded that the mandatory adoption of IFRS neither increase the quality of financial reporting nor decrease it. In the same way, DaasAbudula (2014) evidenced no systematic evidence that IAS/IFRS results in improved financial reporting quality for mandatory adopters from (2006-2014).

Conversely, Landsman et al (2011) suggests that financial reporting quality may decrease after mandatory IAS/IFRS adoption because principle–based standards are looser than local standards therefore they may be difficult to implement. In addition, Christen et al (2008) and Ahmed (2010) assert that the application of principle based accounting standards, like IFRS, involve considerable judgment and many measurements used in IFRS accounting are to a large extend, based on managers private information. Similarly Li (2010) found evidence that financial reporting quality has not increased but worsened after mandatory adoption using a sample of German listed companies. Similarly, Tsalavoutas et al (2010) also assert that earnings smoothing increased after mandatory adoption of IFRS. Also Ahmed et al (2010) found that mandatory adoption of IAS/IFRS results in smoother earnings and decreased in timelines of loss recognition, and concluded a decreased quality of financial reporting. Consistently Christensen et al (2013) found a decrease in earning management for the firms that voluntarily adopted IFRS but increase in earnings smoothing for those firms that waited until IFRS became mandatory in Germany.

In this context, Zeghal et al (2011) examined the impact of mandatory IAS/IFRS adoption on financial reporting quality in France and found that mandatory adoption of IAS/IFRS is linked with increased earnings management and therefore decreased accounting quality. Similarly Christensen et al (2013) investigated voluntary and mandatory adoption of IAS/IFRS in Germany where most firms were to voluntarily adopt IAS/IFRS before the mandatory regime and concluded that voluntary adoption is linked with an improved financial reporting quality, measured earnings management and timely loss recognition while such an increase was not observed in mandatory regime. Their research concluded that higher quality accounting standards like IAS/IFRS do not necessarily lead to increased financial reporting quality at least firms do not perceive net benefits from IAS/IFRS adoption. Daske et al (2009) were consistent with these findings; they also concluded that changes in the countries' regulations and incentives have an important bearing in the determination of quality of financial reporting. Tough firms which adopted the IAS/IFRS still have an important discretion on the implementation. Some of them make very few changes and adopt IAS/IFRS more in name than as a strategy to enhance the commitment to increase the financial reporting quality (Daske et al. 2009).

More recently, Zicke (2014) asserts that the mandatory adoption of IAS/IFRS lead to no improvement in quality of financial reporting. Christensen et al (2013) as well also analyzed whether the adoption of IAS/IFRS lead to increased financial reporting quality. Consistent with previous studies they found that voluntary adoption was associated with a reduced earnings smoothing and more timely loss recognition. In contrast, they found no evidence of such financial reporting quality improvements in the mandatory settings. Daske et al (2009) were also cautious to attribute the capital markets effects for mandatory adopters sorely or even primarily to the IFRS mandate while Christensen (2013) found that improvements in earnings management and timely loss recognition behavior among IFRS adopting firms are confined to firms with incentives to adopt suggesting that incentives dominate IFRS in determining financial reporting quality. Wagenhofer & Ewart (2015) also concluded that mandatory adoption of accounting standards does not necessarily lead to an increase in financial reporting quality. The reason was that making accounting earnings more informative about the underlying events, on average reduces the smoothness of earnings across periods. Managers who are interested in smooth earnings engage in earnings management to mitigate this effect, though it is too costly to eliminate it completely.

The focus on Zimbabwe is motivated by the fact that there are comparable differences in legal and political settings between Zimbabwe and the countries already studied and prior studies had generated contrasting and interesting on–going results. The contrasting results are due to the differences in the legal and regulatory framework between countries. Since both regulatory framework and IFRS impact the quality of financial reporting in either way, this study tie them together in order to determine how they all impact the quality of financial reporting.

2.1.3. Financial reporting quality changes around IFRS convergence

There are a number of studies that show strong evidence of an improvement in the quality of financial reporting following IFRS convergence. (Barth et al. 2008) assert that significant improvement has been done via less earnings management, more timely loss recognition and more value relevant accounting information of specific accounting items such as goodwill, research and development expenses and asset revaluation. Li (2010) also conducted a research on Chinese listed companies mandated to report with substantially IFRS convergent accounting standards, they also support that the quality of financial reporting, in particular reported earnings, substantially improves with the compulsory adoption of IFRS convergent standards. Similarly Dimitropoulos et al (2013) concluded that adoption of IFRS results to less earnings management as compared to Greek accounting standards. In this context Hung et al (2007) found that the adoption of IAS/IFRS has resulted in decreased levels of earning smoothing compared to what occurred to Greek GAAP.

Wen Qu (2012) used a sample of 309 listed companies in China on determining whether IFRS convergence improves the financial reporting quality, they found that earnings per share, relative to book value of equity is a strong explanatory factor of market return in both the pre-and post-IFRS convergence periods, suggesting that investors rely heavily upon earnings released by listed companies when making security price decisions in the capital market. The results also suggest that investors' reliance on the financial information for investment decisions becomes greater in the post-IFRS convergence period. These findings were consistent with (Chalmers et al. 2011) who found that IFRS adoption and convergence increase the information usefulness of earnings. Gordon (2012) also found less in earnings smoothing in the post–convergence than in the pre-convergence period for Chinese listed entities indicating a positive impact of the IFRS on the quality of financial reporting.

Barth et al (2008) as well, examined accounting quality before and after the mandatory introduction of IFRS for a sample of 327 companies that voluntarily adopted IAS from 1994-2003. They found evidence of lower earnings management, higher value relevance and more timely recognition of losses after the mandatory introduction of IFRS, compared to the pre-transition local GAAP accounting. Their results are consistent with higher financial reporting quality after the IFRS introduction across countries. It is also expected that the IFRS convergence will increase disclosure and adoption of more internationally accepted accounting practices, assist in reducing a significant amount of risk in foreign investment and eliminating a major source of uncertainty associated with the comparison of financial reporting from China and other countries (Ryan, 2008)

Nevertheless in comparing domestic standards to IFRS, some studies have shown that there are no significant differences in accounting results with the implication that the adoption of IFRS does not result in better accounting quality. Studies in Germany by Tendeloo and Vanstraelen (2010) and Hung and Hung Subramanyam (2007) did find similarities in earnings management and value in comparing results of the national and international standards. Paananen (2008) reports no quality increases in Swedish case and Elbannan (2011) reports mixed findings in Egypt.

In contrast, other studies such as Lin et al. (2012) found evidence that adoption of IAS/IFRS resulted in reduced financial reporting quality as compared with the U.S GAAP. Similarly Wang and Campbell (2012) concluded that IFRS implementation does not result in decreased in earnings management for the Chinese listed companies. Following, Bartov et al (2005), Paananen and Lin (2009), Karampinis and Heva (2011) reported a decreased value relevance of IFRS over German GAAP. In regards to studies comparing accounting information prepared under Australia GAAP and IFRS by companies listed on the Australian Capital market during the periods before and after the adoption of IFRS, Chalmers et al (2008), Goodwill et al (2008) and Clarkson et al (2011) report that the adoption does not enhance the quality of financial reporting and firm value. Chalmers et al (2011) later extends their investigations by adopting a longitudinal study that differentiates pre–IFRS, transition and post–IFRS periods to track changes in value relevance of accounting information as a result of IFRS adoption from 1990-2008. The findings suggests that earnings become more value–relevant at the adoption of IFRS and suggest that even for a country characterized by strong investor protection, high–quality financial reporting and strict regulatory. Bruggerman (2012) also asserts that the mandatory adoption of IAS / IFRS is not a guarantee for improved quality of financial reporting for listed companies.

This study contributes to the literature above by examining whether the findings from the prior literature are applicable in Zimbabwe context. Since past research yielded conflicting results ,this study then attempts to builds recent advances in comparative in accounting literature and extend such literature by studying where IAS evidence acceptable benefit in the regulated market.

2.2. Regulatory Framework and Financial Reporting Quality

In Zimbabwe like any other country the corporate world is governed by the various regulations that oversee the general operations and financial reporting of firms. Public listed companies on the Zimbabwe Stock Exchange are governed by the Companies Act (Chapter 24:03) and are required by Section 140 to keep proper books of accounts and to have them audited according to Audit Office Act. The listed companies are also required to comply with Securities Act (Chapter 24:25) that promulgated in 2004 and operationalized in 2008, repealed the Zimbabwe Stock Exchange Act (Chapter 24; 18) thereby demarcating an end of self –regulation in capita market. At the helm of Zimbabwe's capital markets regulation is the Securities and Exchange Commission (SECZ) as the apex regulator.

In line with the Securities Act, the Zimbabwe Accounting Board (ZAPB) which is the national standard setting body and the Public Accountants and Auditors Board (PAAB), which is the statutory regulatory and oversight board for the accounting profession in Zimbabwe, formally adopted IFRS for listed companies in Zimbabwe as the second accounting reporting framework in the country (Institute of Chartered Accountancy Zimbabwe (ICAZ, 2011) with the intention to enhance the financial reporting quality. Lalin and Sabir (2010) conclude that regulations are the main drivers why firms prepare financial statements. The association of all the above pieces of regulations works together with an objective to enhance the quality financial reporting of listed firms at the capital market.

Gordon (2012) evidenced that regulatory framework influences earnings management practices as firms from strong and stricter regulatory environments are seen to be tolerant to certain earnings manipulations suggesting that regulations are the key determinant of the financial reporting quality. Therefore the association of the above national regulations to a greater extent determines the contents and disclosure requirements of the financial statements. This is supported by Bruggermann, Hitz & Sellhorn (2012), who concluded that accounting regulations have a 'supranational nature" and seen as a higher–level of regulation (Leuz 2010) that will add value in channeling information to externalities as investors. The impact of the financial regulations is therefore assessed based on the flow on effects to investors as the major player in capital markets. Therefore, the impact of financial regulations on overall market reaction with positive reaction indicates that investors have more confidence in financial reports quality and therefore put more investments to fund the capital markets.

Horton, Sarafeim & Sarafeim (2012) also assert that and have future confidence that financial regulations can inevitably improve the quality of financial reporting and will continue in the capital market. Their measures of the quality like forecast accuracy indicated improvements in the information environment due to mandatory standards. They also found the slim gap between the Local GAAP and IFRS, the more improvements for forecast accuracy which indicates common impacts on the quality of financial reporting. Brugggerman, Hitz and Sellhorn (2012) also acknowledged the fact that there is vast amount of common evidence that financial regulations correspond with capital market and other flow on economic benefits proving that financial regulations generate overall higher quality of financial information. They also argued that the role of legal settings and firms incentives vary the impact of financial regulations on the quality of reporting. However recent research by Ahio (2015) concluded that there is conflicting evidence on the impact of financial regulations on the value of financial reporting quality and its impacts may varies according to the influences of firm's overall institution settings.

With the ongoing liberation of the Zimbabwe economy and the increasing competitive business

Environment around the world, the need for Zimbabwean firms to ensure greater efficiency and improve the quality of financial reporting have become understandable very high (SECZ, 2013). Though prior literature gives inconclusive evidence on how regulations impact the financial reporting quality, it is evidenced that they affect the reporting quality in either way.

2.3. Relationship Of IAS/IFRS, Regulations and Financial Reporting

A number of previous researches have analyzed the relationship between the enforcement, use or compliance with international accounting standards, regulations and the quality of financial reporting (Hope, 2003; Burgstahler et al, 2004; Ewert and Wagenhofer, 2005, Barth et al 2008). The main question for the suggestion of a link between the accounting standards, regulations and quality of financial reporting is that more enforcements and prosecution of companies that do not comply should lead to more compliance which then leads to the provision of better financial reporting quality information (Sunder, 1997; Kothari, 2000). Hope (2003) used a sample of firms from 22 countries to investigate whether enforcement of accounting standards is associated with higher forecast accuracy by financial analysts. He found evidence consistent with the hypothesis that enforcement encourages managers to follow prescribed accounting rules, which in turn, reduces analysts' uncertainty about future earnings.

Inchausti (2007) investigated the influence of the regulations on the quality of financial reporting in Spain. His sample consisted of 49 companies over a three year period from 1989 to 1991. The results of the panel data analysis indicated a strong influence of the legal framework in the disclosure of information even before being compulsory. Nkundabanyanga and Korutaro (2013) also suggested a positive association between perceived compliance with the regulatory framework and the quality of financial reporting. Their results were consistent with the reasoning that quality of financial reporting should be enhanced by the extent to which IAS /IFRS and regulations are enforced and prosecuted (Hope, 2003; 2005)

On the contrary to the results showing a significant relationship between the standards, regulations and quality financial reporting, Larrinage et al's (2002; 2007) results indicated that approximately 80 percent of the companies examined did not disclose any environmental information at all despite a requirement. They found that companies that included some environmental information disclosed a mean of 1.8 items, for a total of seven possible items. This evidence seems to suggest no direct link between a legal requirement and information reported.

It is evident from the preceding literature review that the results of the association between accounting standards, regulation and the financial reporting quality are mixed. The review also shows that the relationship between accounting standards, regulations and financial reporting is generalized to the whole private sector with many studies from the developed countries.

CONCLUSION AND RECCOMMENDATIONS

Considering the results from literature review, it has emerged that this area is a well researched area, however the debate is still unresolved, and many organizations, regulators and policy makers are yet to get answers on how IAS/IFRS and regulations impact on their quality of financial reporting. The poor quality of financial reporting by Zimbabwean listed companies encouraged the researchers to analyses the existing literature and evaluate it. It would therefore appear that many public trading entities will continue to suffer poor quality of financial reporting. As indicated in literature review, quality of financial reporting depends on variety of factors such as IAS/IFRS and regulations.

Conversely to the expectations, this desktop study was unable to find systematic evidence that mere adoption of IFRS results in improved financial reporting quality for mandatory adopters. However, the study found evidence of increased earnings management for firms that mandatorily adopted IFRS and decreased quality of financial reporting for firms that mandatorily adopted IFRS compared to firms that voluntarily adopted IFRS. The study did not find any change in meeting earnings expectations for firms that converge IFRS with local standards. The results consistently indicate decreased quality of financial reporting over time for firms that mandatorily adopted IFRS and consistent less earnings management for firms that voluntarily adopted IFRS. However it is also possible that a strong regulatory framework compensate for higher quality of financial reporting. The study also acknowledges that IFRS may not be superior to local standards. With these concluding remarks, it is recommended that:

Top management, external auditors and regulators being the key players in standards, need to work together and tighten compliance so that impact of IFRS could be felt more.

The policy makers should also consider communicating the objectives of IFRS to all stakeholders.

They should also carry out the awareness campaign to ensure that the corporate world fully implement IFRS.

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INTERNATIONAL WORKSHOP IN PARIS, NOVEMBER 24, 2016 - WORKSHOP

During past two decades the world has witnessed the growing importance and visibility of a range of initiatives led by businesses, social organizations and governments that was aimed at pressuring companies to behave in more socially responsible and accountable ways. This is a new development for many parts of the business world. Previously, the state was assumed to lead standard setting and behavioral norms for businesses in relation to most categories of stakeholders. When community organizations and interest groups wanted to change business behavior, they focused on changing the law. From the 1990s the focus changed, reflected in the emergence of new alliances and regimes of influence over business norms, linking together consumers, communities, workers and producers. Nowadays the issue of sustainability and accountability of business entities received a complex form and is continuingly changing. It is important to trace these changes, follow regulatory developments, business practice to identify stable fundamentals in corporate accountability and management practices and distinguish emerging trends that are going to occupy practitioners, regulators and academics minds in nearest future.

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