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CONTENTS

DOES CORPORATE GOVERNANCE MATTER AFTER ALL? GOVERNANCE SCORES AND THE VALUE OF CANADIAN COMPANIES

Eloisa Perez-de Toledo, Evandro Bocatto

Abstract

This study assesses the determinants of governance in the case of Canadian firms and examines the relationship between governance and firm value after the 2008 financial crisis. We estimate the effect of governance on stock return by using different econometric approaches. Our results show that large firms and firms with higher market-to-book value adopt better standards of governance. However, the results show a negative impact of governance on stock return. Therefore, providing important insights to policy makers that have recently proposed changes to the Canadian regulatory system. Our results show a lack of market enforcement, therefore, self-regulation is unlikely to be an effective mechanism for implementation of best practices of governance.***

JEL code: G34

Keywords: Determinants of governance, Firm Value, Endogeneity, Simultaneous Equations

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Introduction

The importance of governance has been emphasized by a myriad of studies, in all areas of management, as an import construct that should be followed by any company that wants to increase its value. The conceptual framework of corporate governance studies was developed over the premise that the problems derived from the separation between ownership and control, as described by Berle and Means (1932), aggravated by the problem of information asymmetry between managers and investors, can lead to the expropriation of shareholders wealth. In this context, corporate governance structures are relevant because they can reduce the degree of information asymmetry between managers and investors as stated by the agency theory (Jensen and Meckling 1976). From an economic point of view, an efficient governance structure should be able to guarantee that the agent will undertake the optimal level of investment and minimize the amount of rent seeking behavior, which in turn affects companies' supply and cost of finance. As summarized by Shleifer and Vishny (1997), corporate governance is as a set of mechanisms relevant to economic efficiency due to its influence over the decision of investors to provide finance to the firms.

According the market efficiency hypothesis, observable improvements in a company's corporate governance system should be immediately reflected in the price of the stock. However, when conducting studies that try to establish a positive relationship between quality of governance and superior stock return, scholars assume that markets are inefficient when their results indicate an absence of such positive relationship. Yet, another possible explanation would be that corporate governance not always matter to investors. The hypothesis of equilibrium should be considered, as corporate governance can be in equilibrium in a given market, therefore no effect would be observed. A third hypothesis derives from the work of Klapper and Love (2004) and La Porta et al. (2000). They show that the degree of investor protection varies from country to country. In countries with a high degree of investor protection, companies have to comply with the law that establishes higher governance standards. Therefore, investors would probably not distinguish companies by their quality of governance but rather by other firm attributes, since all companies have to abide by the higher governance standards imposed by national governance codes. Besides, firms choose their governance structures based on a series of circumstances that make them adopt structure A instead of structure B. These choices are affected and also affect firm value, as well as other firm specific characteristics, such as firm's size, composition of firm's assets and future growth opportunities.

Canada is a country with a tradition of very stringent legislation on corporate governance. Corporate governance disclosure requirements for Canadian public companies are set by the Canadian Securities Administrators (CSA). Since 2005, corporate governance in Canada is regulated by the National Instrument 58-101 *Disclosure of Corporate Governance Practices* and by policy 58-201 *Corporate Governance Guidelines*. The regulation was introduced after the scandals of Enron and World Com, and the guidelines were based on the Sarbanes Oxley legislation in the U.S. The Canadian model is based on the *comply or explain approach* to governance with companies listed on the Toronto Stock Exchange (TSX/S&P) having to comply with the best practices or explain if adoption is not appropriate. Compliance with best practices is voluntary, but disclosure of compliance or explanation of how it failed to comply is mandatory (Salterio, Conrod, and Schmidt 2013). Canada ranks high in all comparative corporate governance rankings. Nonetheless, hitherto the few academic studies that tried to establish a positive relationship between Canadian firms' quality of governance and firm value have found either no relationship or a negative association. The lack of such association can be explained by different hypotheses, e.g. all firms listed on the TSX follow best governance practices as defined by the national Code of Best Practices, consequently there is little difference among firms to be noted by investors or to be statistically significant. However, the 2008 financial crisis has changed this reality, since lax corporate governance systems were blamed as the main cause of the crisis (Dennehy 2012).

Within this framework, the present study has two objectives. First, to investigate what are the determinants of governance in the case of Canadian firms. Second, considering that the financial crisis has dampened investors' confidence (Bernanke, 2009), the second objective of this study is to check whether investors attribute value to corporate governance information after the 2008 financial crisis. Our measure of governance is a governance score released every year by a reputed Canadian newspaper, *The Globe and Mail*, on selected Canadian companies listed on the TSX/S&P.

From a methodological perspective, we use both ordinary least squares (OLS) regressions and simultaneous equations applying 3-stage least squares (3SLS) regressions. The latter method is used to address the problems of endogeneity and reverse causality that plague governance studies (Börsch-Supan and Köke 2002). Our proxy for the quality of governance is *The Globe and Mail*'s Report on Business annual report on Corporate Governance for selected companies listed on the Toronto Stock Exchange TSX/S&P index. The Governance Score (GS henceforth) is an index composed by four components or sub-categories: board composition; CEO compensation; shareholder rights; and governance disclosure. For this study, we use the scores released in 2009 and conduct a cross-section analysis with firm value as well as with possible determinants of governance.

The use of more complex econometric techniques, such as simultaneous equations, is justified due to the specificity of governance studies. Therefore, necessary to test the hypothesis that governance and firm value are endogenously determined. Moreover, good governance is assumed to positively affect firm value. Firm value, however, can positively or negatively affect firms' governance structure. Low performing firms can have the CEO replaced by the board in an attempt to improve performance, similarly well performing firms can improve their quality of governance in order to increase their access to external capital and reduce their cost of capital. The direction of the causality is unknown *a priori*, which takes us to first test the hypothesis of direct causality between governance and performance. For that, we use the cross sectional OLS regressions approach and regress the governance score (GS) along with five control variables (firm size, firm risk, future growth opportunities, ROA and the composition of firm's assets) on four different measures of firm value (average stock return, excess stock return, Tobin's *q* and the Return on Assets). The results show evidence of a negative impact of governance on firm value but a positive impact on firm profitability. In the regressions of GS on stock return, the results show a significant *negative* impact of the governance scores on stock return. Nevertheless, in the regressions of GS on the Return on Assets, the results show a significant *positive* impact of the quality of governance on firm operating profitability. These results are consistent with the results obtained by other Canadian studies (Foerster and Huen 2004; Klein, Shapiro, and Young 2005; Gupta, Kennedy, and Weaver 2009) for previous years that show no significant effect of governance (measured by the Governance Score) on long term stock return (Gupta, Kennedy, and Weaver 2009; Foerster and Huen 2004) or on firm value (Klein, Shapiro, and Young 2005). In all previous studies, the relationship is assessed assuming direct causality between governance and stock return through the use OLS regressions.

The present study gives a step ahead by using a different methodology to assess this relationship. Hence, we assume that governance and firm value are endogenous and that companies have a variety of governance and control mechanisms available, therefore, companies design their governance structures based on specific needs. To test this hypothesis, we design a system of four simultaneous equations with governance and firm value to be estimated simultaneously along with capital structure (financial leverage, an important control mechanism) and Tobin's *q*. This approach allows for the interaction among firm's governance structure, firm's financial decisions, firm's growth opportunities and firm value. The results with 3SLS support the main results obtained with the OLS regressions that the quality of governance, as measured by the Governance Score, has a negative impact on stock return. However, because this methodology allows for simultaneity, we find evidence of a substitution effect between governance and leverage, indicated by the reverse causality between these two variables. To better understand these results, we undertake a series of robustness checks by conducting comparisons and regressions with subsamples to try to map the idiosyncrasies of this relationship in the Canadian context. The results indicate there are significant differences between small and big firms, and investors' behavior towards these two groups of firms seems to be quite different.

The paper is divided as follows. Part 2 reviews the literature and defines the theoretical and methodological approach used in the study. Part 3 describes the data and the methods. Part 4 analyses the empirical results and Part 5 concludes the paper.

Literature Review

The determinants of the quality of governance

La Porta et al. (1998) hypothesize that the legal system is fundamental to corporate governance. In particular, they argue that the extent to which a country's laws protect investors' rights and the extent to which those laws are enforced are the most basic determinants of the ways in which corporate finance and corporate governance evolve in that country. Within this framework, Klapper and Love (2004) provide a cross-country study of firm-level corporate governance practices and they conclude that companies operating in the same level of investor protection show different levels in the quality of corporate governance. They find firms with a high level of corporate governance provisions in countries with weak legal environments and vice-versa, and point out to the fact that there is more variation among firms operating under the same legal and institutional environment than among firms operating in different countries.

This approach was first developed by Himmelberg, Hubbard, and Palia (1999) and later extended by Himmelberg, Hubbard, and Love (2004), Klapper and Love (2004) and Durnev and Kim (2005). It states that investor protection has an external component related to the legal environment and an internal component related to the activity developed by the firm and other characteristics (endogenous protection). Klapper and Love (2004) conclude that corporate governance is likely to be endogenously determined and they point out to three sources of endogeneity that in theory could be associated with firms adopting better governance mechanisms: (1) the composition of a firm's assets; (2) unobservable growth opportunities; and, (3) firm size. The composition of a firm's assets will affect its contracting environment because it is easier to control and harder to steal fixed assets (equipments, etc.) than "soft" capital (intangibles, R&D, etc.). In that sense, a firm with a high level of intangibles may find optimal to adopt a higher level of corporate governance (and avoid possible misuse of these assets). The variable 'unobservable growth opportunities' is related to the fact that firms with good growth opportunities will need capital to finance their expansion process, thus it may be optimal to improve their level of governance in order to reduce the cost of capital. Finally, firm size has ambiguous effects because large firms may have greater agency problems due to destination of their free cash flows and small firms may have better growth opportunities and greater need for external finance, thus, both have incentives to adopt better governance mechanisms. In the same direction, Durnev and Kim (2005) develop a model that identifies three firms' attributes that make them adopt better standards of governance: investment opportunities, the need for external financing and ownership structure. They also find that all three attribute are related to better governance standards and that firms ranking higher in their governance index receive better stock valuations. Their results are stronger in less investor-friendly countries what is evidence that firms adapt to poor legal environments to establish efficient governance practices.

The literature on the determinants of the quality of governance is recent and emergent, although, hitherto the few studies produced are consistent in pointing out to size and future growth opportunities (investment opportunities) as significant factors influencing firms' corporate governance decisions. To the best of our knowledge, it is the first time that a study explores the determinants of Canadian firms' governance choices.

Governance indices and scores

How can we measure the quality of governance? Hitherto the answer to this question remains opened. Many scholars have attempted to capture the quality of governance in one single measure; however, there is no consensus on what should be included in such measure (or which questions to ask, or still which weight should be attributed to each question or dimension). Despite the lack of consensus and the relatively novelty of this practice, the use of indexes and scores in the field of corporate governance is quite widespread, as can be observed by the number of countries and/or regions covered by the following studies: Black (2001) for Russia, Gompers, Ishii, and

Metrick (2003), Brown and Caylor (2006), and Bebchuck, Cohen, and Ferrell (2009) for the US, Klapper and Love (2004) for emerging markets, Silveira (2004) for Brazil, Durnev and Kim (2005) for 27 different countries, Black, Jang, and Kim (2006) for Korea, and Beiner et al. (2006) for Swiss.

The governance score used in the present study is a public score prepared and released by a leading Canadian newspaper, *The Globe and Mail*, in its Report on Business. The information is made available to the general public (basically to anybody who either buys the newspaper or has access to the Internet). The newspaper developed the measures based on a "tough set of best practices culled from the corporate governance guidelines and recommendations of US and Canadian regulators, as well as major institutional investors and associations" (McFarland 2002 p. B6). The data were obtained from public information (the most recent proxy information circular for shareholders released by the companies).

Few studies have previously examined the relationship between the GS released by *The Globe and Mail* and stock performance. Foerster and Huen (2004) find a significant positive association between the GS and the two day window around the release of the report with the governance score, however the coefficient was economically irrelevant and the R^2 was very small (0.0116). The authors also find a negative association between the governance score and both 5-year and 1-year stock return (adjusted for risk), but the coefficient is not statistically significant. Wheeler and Davies (2006) did not find a significant relationship between the GS and shifts in firms' market capitalization. Adjaoud, Zeghal, and Andaleeb (2007)(2007) assess the relationship between firm performance and the GS. They find no significant association between GS and various accounting measures (ROI, ROE, EPS and the market-to-book ratio), but they find some positive association between the GS and value creation measures as the Economic Value Added (EVA) and the Market Value Added (MVA). Finally, Gupta, Kennedy & Weaver (2009) also examine the relationship between the governance scores released by *The Globe and Mail* and firm value, but they look at a series of four years (2002 to 2005), all other studies have looked at the year 2002 report. The authors do not find evidence of an association between GS (or its sub-categories) and any measure of firm value.

The contribution of this research

The present study aims at investigating whether the lack of significance of governance coefficients on firm value regressions reported by previous studies on Canadian firms remains after the 2008 financial crisis. For that we use the governance scores released by *The Globe and Mail* for the year 2009. Additionally, this study aims at contributing to the research on the determinants of governance by offering evidence on the factors that affect companies' decision to adopt better standards of governance in Canada.

In regards to the determinants of governance, we depart from the assumption that companies have a variety of governance mechanisms available and that they build their governance structures depending on an array of conditions, primarily their institutional and legal environment, but also based on some specific firm-characteristics. These characteristics influence companies' decision to adopt better standards of governance and increase their access to external finance at a lower cost. In order to assess the hypothesis that there are some observable factors that make companies adopt different levels of governance under the same contracting environment, i.e. in Canada, we are interested in answering the following research question: *What are the determinants of the quality of governance in Canada?*

We, thus, put forward the following hypotheses to be tested:

H_1: There is a significant relationship between firm size and the standards of governance adopted by the companies.

H_2: There is a significant positive relationship between future growth opportunities and the standards of governance adopted by the companies. And, companies with better future growth opportunities present higher governance scores.

H_3: There is a significant positive relationship between the level of intangibles and the standards of governance adopted by the companies. And, companies with more intangible assets present higher governance scores.

From a theoretical point of view, it is expected that companies that adopt better standards of governance would experience a higher valuation by the markets, *ceteris paribus*. By adopting higher governance standards, good governance companies would reduce the asymmetry of information between shareholders and managers. It would promote the alignment of interests between principal and agent, and also increase the protection of minority shareholders. On the other hand, investors would apply a discount to companies with lower standards of governance in order to offset their higher agency costs. The fourth hypothesis is put forward accordingly:

H_4: There is a significant positive relationship between the quality of governance and the performance of Canadian companies. And, companies with higher quality of governance present both higher stock return and higher profitability.

Methodology

Sample selection and data collection

The sample is composed by 156 companies listed on the Toronto Stock Exchange (TSX/S&P) at the end of calendar-year 2009 for which there is financial information for the last three fiscal years and that was listed on *The Globe and Mail* Report on Business Governance Score. All financial and accounting information (balance sheets, income statements, capital structure, industry/sector, book values, stock prices, etc.) was obtained from the database *OSIRIS* from Bureau Van Dijk. Finally, all right hand variables are lagged one year to ensure exogeneity, and despite the fact that these variables are highly serially correlated it does not significantly affect the explanatory power of the regressions.

Variables definition

We use the end of calendar-year price of the stock and shares outstanding to compute market capitalization and book values are obtained from companies' annual reports for years 2006 to 2009. The measure of firm profitability is the Return on Assets (ROA). Tobin's q (*Q*) is used as a proxy of firm value and is calculated based on the approximation proposed by Chung and Pruitt (1994) (1994) (Tobin's q ≅ (Market value of equity + Book value of debt)/Total Assets), LEVER is the ratio between firm's long-term debt scaled by long-term debt plus market value of equity. LnAssets is used as a proxy for firm size and is calculated as the natural logarithm of book value of the total assets. The measure of future growth opportunities is calculated as the geometric average of the last 3-year sales growth. We also run a robustness check with an alternative variable, the market to book ratio (*M-B*), which is simply the ratio between the market value of common stock to the book value of equity. Table 1 provides a description of all variables included in the analysis and provides the descriptive statistics. Table 2 provides a correlation matrix of all variables.

Table 1. Summary of the research variables and descriptive statistics

CODE	VARIABLE	DEFINITION	Mean	Std Dev	Min	Max
Q	**Tobin's q**	Ratio of the market value of equity plus the book value of debt to book value of total assets	1.576	1.588	0.1230	12.786
Ret	**Stock return**	Average annual return of stock *i*	0.054	0.053	-0.011	0.2371
M/B	**Market-to-Book Ratio**	(Market value of equity)/(Book value of equity)	14.530	1.336	10.640	17.523
r_i-R_i^B	**Stock excess return**	Return of the stock during year *t* less stock's *i* benchmark portfolio return during the same period. The benchmark portfolios were formed on size and book-to-market following Fama and French (1993)	0.0007	0.050	-0.098	0.256
GS	**Corporate Governance Scores**	Index composed by four dimensions released every year by *The Globe and Mail* Report on Business	0.627	0.1509	0.27	0.94
BCom	***Board Composition score***	GS component	0.668	0.149	0.226	0.968
CEO	***CEO Compensation score***	GS component	0.564	0.224	0.000	0.958
ShareR	***Shareholder Rights score***	GS component	0.641	0.194	0.121	1.000
Disclo	***Disclosure score***	GS component	0.609	0.250	0.000	1.000
GROWTH	**Future Growth Opportunities**	Geometric average of 3-year sales growth (2006-2009)	0.2850	1.105	-0.741	11.583
LnAssets	**Firm Size**	Natural logarithm of Total Assets	14.727	1.379	11.112	17.596

CODE	VARIABLE	DEFINITION	Mean	Std Dev	Min	Max
TANG	**Composition of firm's assets**	Fixed assets / Total assets	0.530	0.274	0.000	0.960
INTANG	**Composition of firm's assets**	Intangibles / Total assets	0.124	0.183	0.000	0.819
LEVER	**Capital Structure**	Long Term Debt / Market Value of Equity plus Long Term Debt	0.201	0.186	0.000	0.831
ROA	**Return on Assets**	Net income / Total assets	0.020	0.066	-0.219	0.241
BETA	**Firm risk (beta)**	60-month firm beta (own calculations)	1.045	0.693	0.024	3.867

Table 2. Correlation matrix

	GS	GROWTH	ROA	Ret	LEVER	Q	INTANG	TANG
GROWTH	-0.0872							
ROA	0.2311***	-0.0498						
Return (r_i)	-0.4637***	0.0549	-0.2115*					
LEVER	0.1749**	-0.1196	-0.0731	-0.3330***				
Q	-0.1432*	0.0611	-0.1809**	0.3119***	-0.4066***			
INTANG	0.1047	-0.1020	0.1070	-0.2732***	0.2246***	-0.1491*		
TANG	-0.1307	0.0522	-0.1576**	0.0921	0.0578	-0.1380*	-0.5602***	
LnAssets	0.5680***	-0.1425*	0.2479**	-0.4708***	0.4374***	-0.3953***	-0.1491*	-0.1380*

This table provides Pearson correlations for the main variables used in the study. GS is the Governance Score, GROWTH is the three year compound sales growth. ROA is the return on Assets, Return is the annual stock return, LEVER is LT Debt scaled by LT Debt plus MV of equity, Q is Tobin's *q*, LnAssets is the natural logarithm of total assets (proxy for firm size), TANG and INTANG is fixed assets to total assets and intangibles to total assets respectively. The data refers to the year 2009. ***, **, * denotes statistical significance at the 1%, 5% and 10% level respectively.

Model specification

The determinants of governance to be tested are future growth opportunities (GROWTH), firm size (LnAssets), the composition of firm's assets (INTANG) and firm value (Q). We also test the impact of these factors on each governance sub-category or component (board composition, CEO compensation, Shareholders Rights and Disclosure). Table 3 describes the variables defined as determinants of governance and provides an explanation about its possible influence on the governance of the companies.

The general model for assessing the determinants of governance is the following:

$$GS_i = \alpha + \beta_1 GROWTH_i + \beta_2 SIZE_i + \beta_3 INTANG_i + \beta_4 Q_i + \varepsilon_I \tag{1}$$

The specification described in Equation 1 is intended to capture only the effect of the three possible determinants of governance described by Klapper and Love (2004) and firm value on the quality of governance.

Table 3. Possible determinants of governance

Governance Determinant	Reasoning	Code
Future Growth Opportunities	A growing firm with large needs for outside financing has more incentive to adopt better governance standards in order to lower its cost of capital (Klapper and Love 2004).	***GROWTH***
Firm Size	The effect of size is ambiguous as large firms may have greater agency problems and small firms may have greater need for external finance, so both have incentives to adopt better governance (Klapper and Love 2004).	***LnAssets***
Composition of Firm's Assets	Fixed assets are easier to monitor and harder to steal than intangibles. Hence, the firm operating environment will affect its governance system. (Himmelberg, Hubbard, and Palia 1999).	***INTANG***

Recent research and the extant literature in the field of corporate governance (Beiner et al. 2006; Bhagat and Jefferis 2005; Himmelberg, Hubbard, and Palia 1999; Ødegaard and Bøhren 2004; Barnhart and Rosenstein 1998; Wei-Peng et al. 2010) consider the use of different econometric approaches as very important for capturing the reverse causality between governance and performance and the potential endogeneity among the mechanisms of governance, considering that different mechanisms are often used as substitutes to one another for firms when designing their governance structures. Mainstream corporate governance studies have shown a positive relation between governance and performance assuming that governance is exogenous and as such used as a regressor in cross-sectional OLS firm value regressions. Recent literature has shown that governance is endogenous (Palia 2001; Beiner et al. 2006; Bhagat and Jefferis 2002; Chi 2005; Demsetz and Villalonga 2001; Ødegaard and Bøhren 2004) and related to some observable and unobservable firm and board characteristics (Demsetz and Lehn 1985; Himmelberg, Hubbard, and Palia 1999).

The particularities and specificities of the relationship between corporate governance and firm value and the sensitivity of corporate governance models to model specification associated with the fact that the field of corporate governance lacks a theoretical model that establishes the direction of the causality (Ødegaard and Bøhren, 2004; Barnhart and Rosenstein, 1998), we conducted the empirical analysis in two steps in order to better assess how governance and firm value interact in the case of Canadian companies. We first use ordinary least squares (OLS) cross-sectional regressions that tend to be less sensitive to misspecification errors. In a second step, we use a more robust methodology in order to capture the possible reverse causality among the variables, specifically the three-stage least squares (3SLS) method applied to the following system of four equations:

$$\begin{cases} GOV\text{-}I_i = \alpha + \beta_1\, stock\_ret_i + \beta_2\, Q_i + \beta_3\, LEVER_i + \beta_4 INTANG_i + \beta_5\, SIZE_i + \sum_{j=1}^{9} \delta_j IND_{ji} + \varepsilon_I \\ stock\_ret_i = \alpha + \beta_1\, GS_i + \beta_2\, Q_i + \beta_3\, LEVER_i + \beta_4 INTANG_i + \beta_5\, SIZE_i + \beta_6\, ROA_i + \sum_{j=1}^{9} \delta_j IND_{ji} + \varepsilon_I \\ Q_i = \alpha + \beta_1\, GS_i + \beta_2\, stock\_ret_i + \beta_3\, LEVER_i + \beta_4 INTANG_i + \beta_5\, SIZE_i + \beta_6\, ROA_i + \sum_{j=1}^{9} \delta_j IND_{ji} + \varepsilon_I \\ LEVER_i = \alpha + \beta_1\, GS_i + \beta_2\, stock\_ret_i + \beta_3\, Q_i + \beta_4 INTANG_i + \beta_5\, SIZE_i + \beta_6\, ROA_i + \sum_{j=1}^{9} \delta_j IND_{ji} + \varepsilon_I \end{cases}$$

Results

OLS Regressions

Table 4 reports the coefficient estimates from the regressions of the governance score and all four sub-categories on its possible determinants. Column 1 reports the regression coefficients of the composite index (GS). Columns 2, 3, 4 and 5 report the results for the sub-categories. The results support H_1 only, by showing evidence that larger firms adopt better standards of governance. The cost of adopting a more complex governance structure is high, and bigger firms face higher agency costs, thus they may find optimal to adopt better standards of governance in order to offset these costs. Small firms are mostly family businesses that suffer less from the separation between ownership and control. Future growth opportunities (H_2) and the level of intangibles (H_3) do not appear significant in any specification, albeit the effect is positive.

Tobin's *q* (Q) shows a positive statistically significant effect on the standards of governance in all specifications except for the sub-category *disclosure*. This result is interpreted as evidence that higher market value firms adopt better standards of governance, as it seems that causality runs from Q to GS. However, it is possible that causality runs both ways.

Table 4. Results from OLS regressions of governance score on governance determinants

Dependent variable	***GS***	***Board composition***	***CEO compensation***	***Shareholders rights***	***Disclosure***
Independent variables	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
Q	0.0443** (0.033)	0.0488** (0.037)	0.0361* (0.087)	0.0483** (0.033)	0.0377 (0.114)
GROWTH	0.0067 (0.264)	0.0098 (0.147)	0.0014 (0.818)	0.0088*** (0.177)	0.0035 (0.615)
INTANG	0.0321 (0.771)	0.1163 (0.347)	0.1821 (0.106)	-0.1700 (0.158)	0.0699 (0.581)
LnAssets	0.1279*** (0.000)	0.1180*** (0.000)	0.1350*** (0.000)	0.1264*** (0.000)	0.1434*** (0.000)
Constant	-1.4839*** (0.000)	-1.3170*** (0.000)	-1.6405*** (0.000)	-1.4418*** (0.000)	-1.7180*** (0.000)
Adjusted R^2	0.3409	0.2701	0.2942	0.2942	0.3318
Probability F	0.000	0.000	0.000	0.000	0.000
Companies (N)	154	154	154	154	154

This table reports the results from OLS regressions of the Governance Score (GS) and all sub-categories or components on the determinants of governance. The independent variables are: Tobin's q (Q), Future Growth Opportunities proxy by 3-year sales growth (GROWTH), intangibles to total assets (INTANG) and firm size proxy by the natural logarithm of firm's assets. The definition of the variables is provided in Table 1. The data is for the years 2008 (independent variables are lagged one year) and 2009 (independent variables). The numbers in parentheses are probability values for two-sided F test. ***, **, * denotes statistical significance at the 1%, 5% and 10% level respectively.

Next, we examine the hypothesis of causality between governance and firm value by analyzing the effect of firm's quality of governance on firm value (proxy by Tobin's *q*), firm profitability (proxy by ROA) and stock return (proxy by annual stock return and excess stock return). Following the proposed methodological design, the first part is dedicated to the OLS regressions of the governance scores on firm value and stock return. Table 5 reports the results of the regressions. Panel A reports the coefficient estimates of the composite governance score on all four measures. In regards to stock return, the effect of governance is negative and significant at the 0.1% level. The effect of GS on Q is not statistically significant. However, GS has a positive significant impact on the return on assets (ROA). Previous studies have shown no relationship between GS and various measures of firm value (Gupta et al. 2009). Our results show a negative impact of governance on firm stock return that indicates a shift in investors' perception towards corporate governance. The primary function of governance mechanisms is to control managers' behavior and avoid losses to investors and, in a greater extent, to the society at large. After the financial meltdown and the huge losses suffered not only by shareholders but by all stakeholders, corporate governance came into scrutiny as even the companies that had adopted the best practices of governance were affected by the crisis. The compliance to the best practices of governance was not a deterrent of what occurred.

Panel B reports the results for the sub-components. The most important result is the negative effect of CEO compensation on stock return (the only component that shows such result). CEO compensation schemes attached to the stock price (i.e. through stock options) were designed to create an incentive to executives to take on more risk (the alignment of interests hypothesis) and boost firm performance. After the 2008 financial crisis, it became quite obvious that executive compensation schemes had produced the opposite effect. Executives took on excessive levels of risk at the expense of shareholders and prioritized short-term returns at the expense of long-term firm survival. It was clear after the meltdown that CEO compensation was not only a simple co-adjuvant factor but a very *cause* of the crisis. The excessive risks undertaken by executives took many companies, especially banks, to the verge of bankruptcy. The increased cost of bankruptcy is negatively affecting firm value.

Table 5 Results from OLS regressions of firm value on governance score components

	PANEL A. Regressions of stock return/firm value variables on Governance Score			
Dependent variable	***Stock Return (Ret)***	***Excess Return (r_i-R^B)***	***Tobin's q (Q)***	***Ret. on Assets (ROA)***
Independent variables	**(1)**	**(2)**	**(3)**	**(4)**
Gov Score (GS)	-0.077*** (0.000)	-0.010 (0.500)	-0.767 (0.131)	0.067*** (0.004)
Constant	0.087*** (0.000)	0.005 (0.556)	1.927*** (0.054)	-0.003 (0.749)
Adjusted R^2	0.2150	0.0036	0.020	0.052
Probability F	0.000	0.500	0.131	0.004
Companies (N)	156	156	154	156
Independent variables	**(1)**	**(2)**	**(3)**	**(4)**
Board Composition	-0.019 (0.406)	-0.009 (0.754)	-0.045 (0.941)	0.040 (0.308)
CEO Compensation	-0.053** (0.032)	0.033 (0.235)	-2.7350*** (0.000)	0.063 (0.104)
Shareholder Rights	0.014 (0.536)	-0.049* (0.085)	0.473 (0.308)	0.008 (0.817)
Disclosure	-0.019 (0.367)	0.015 (0.472)	0.210 (0.842)	-0.056 (0.087)
Constant	0.085*** (0.000)	0.007 (0.443)	1.891*** (0.000)	-0.004 (0.695)
Adjusted R^2	0.2415	0.0374	0.0371	0.0766
Probability F	0.000	0.1969	0.110	0.013
Companies (N)	156	156	154	156

This table reports the results from OLS regressions of stock return (Ret), excess stock return (measured through the Fama-French methodology) Tobin's q (Q) and Return on Assets (ROA) on the Governance Score (GS) and on each governance score component. The definition of the variables is provided in Table 1. The data is relative to the year 2009. The numbers in parentheses are probability values for two-sided F test. ***, **, * denotes statistical significance at the 1%, 5% and 10% level respectively. Standard errors are adjusted for heteroskedasticity.

Table 6 reports the results for OLS regressions of the governance score on firm value variables. Other variables are introduced to control for observable firm-characteristics known to affect firm value and stock return, specifically firm size (LnAssets), firm risk (BETA), future growth opportunities (GROWTH), operating profitability (ROA) and the composition of firm's assets (TANG and/or INTANG). Column 1 shows the regression of GS on stock return and its significant negative coefficient is an indication that companies with better governance present lower stock return. Columns 2, 3 and 4 report the results for excess return, Tobin's *q* and ROA, respectively. The coefficients are not significant, thus there is no significant effect of governance on Q, ROA or the excess return. The control variables have in general the expected sign, except for GROWTH that show a negative significant impact on stock return.

Table 6 Results from OLS regressions of firm value variables on Governance Score (GS)

Dependent variable	***Stock Return (Ret)***	***Excess Return (r_i-r^B)***	***Tobin's q (Q)***	***Ret. on Assets (ROA)***
Independent variables	**(1)**	**(2)**	**(3)**	**(4)**
GS	-0.0441*** (0.000)	-0.0151 (0.367)	0.3779 (0.425)	0.002 (0.945)
Q	-0.002 (0.925)			
LEVER	-0.0080 (0.660)	-0.0036 (0.894)	-2.7350*** (0.000)	-0.114*** (0.000)
ROA	0.0320 (0.467)	-0.0742 (0.272)	-3.5852* (0.062)	
LnAssets	0.0017 (0.527)	0.0004 (0.909)	-0.1490 (0.219)	0.015*** (0.001)
INTANG	-0.0020 (0.905)	0.0807*** (0.003)	-0.6957 (0.353)	-0.034 (0.306)
BETA	0.0547*** (0.000)	-0.0140 (0.155)	0.9854*** (0.001)	
GROWTH	-0.0058** (0.026)	0.0055 (0.172)	0.0442 (0.698)	0.001 (0.817)
Constant	-0.0106 (0.798)	-1.639† (0.083)	3.4850* (0.054)	-0.159** (0.050)
Industry	Included	Included	Included	Included
Adjusted R^2	0.6465	0.1595	0.3439	0.2234
Probability F	0.000	0.000	0.000	0.000
Companies (N)	154	154	154	154

This table reports the results from OLS regressions of stock return (Ret), excess stock return (measured through the Fama-French methodology), Tobin's q (Q) and Return on Assets (ROA) on governance (Governance Score – GS) along with all exogenous control variables. The definition of the variables is provided in Table 1. Control variables for industry (IND) were included in the regressions. The data is relative to the year 2009. The numbers in parentheses are probability values for two-sided F test. ***, **, * denotes statistical significance at the 1%, 5% and 10% level respectively. Standard errors are adjusted for heteroskedasticity.

Simultaneous equations with 3 SLS estimation

Table 7 reports the results of the estimation using the simultaneous equations approach. This procedure allows for interdependence among the four dependent variables: stock return, the Governance Score (GS), Tobin's *q*, and leverage. The most important result from the estimation of the system of equations is the negative significant impact of GS on stock return, reported in column 1. This result is an indication that better governance is related to lower stock returns. We thus do not find empirical evidence to support H_4, as the results do not support the agency theory. This result is aligned to other studies that show either a negative impact of an increase of firm's quality of governance on firm value or a not significant coefficient (Foerster and Huen 2004; Gupta, Kennedy, and Weaver 2009; Klein, Shapiro, and Young 2005)(Foerster and Huen 2004; Gupta, Kennedy, and Weaver 2009; Klein, Shapiro, and Young 2005). The results with simultaneous equations corroborate the OLS results. However, some relations can be assessed from the estimation with simultaneous equations. The joint significance of LEVER and GS indicate a substitution effect between these two variables. Financial leverage is an important governance mechanism, as described by Jensen (1986)(1986) leverage can discipline managers as an important part of the firm's cash flows would be committed to servicing debt. Leveraged firms can use debt as a substitute of a more complex (and expensive) governance structure, and obtain the same results in terms of control as if it used other governance mechanisms.

Regarding firm size, it has a significant positive effect on stock return, governance and leverage. In light of this evidence, we conducted a series of robustness checks by dividing the sample into sub-samples grouped by firm size. We create a dummy variable that takes the value of 1 if LnAssets is bigger than the median firm and 0 otherwise. In results not reported here we show that large firms present better governance standards (mean GS_{BIG}=0.839 and GS_{SMALL}=0.414), so as leverage (mean $LEVER_{BIG}$=0.28 and $LEVER_{SMALL}$=0.12). The stock return of small firms is significantly larger than the expected return of big firms (7% for small firms and 3.2% for large corporations). We tested all mean differences and they are statistically different. These differences may explain the negative effect of GS on stock return. Moreover, the population of firms that compound the TSX/S&P index are quite different than the population of other indices around the world. The Canadian index is composed 68% by natural resources and financial firms (financial firms represent 34% of the total firms).

Table 7. Results from estimations using 3 SLS regressions

Panel A Relationship between the Governance Score and stock return

	Dependent variables			
Independent variables	***Stock Return***	***GS***	***Q***	***LEVER***
Stock Return		-1.9044*** (0.007)	7.4112* (0.060)	-1.2102 (0.171)
GS	-1.1465*** (0.000)		1.6061 (0.151)	-0.7742*** (0.000)
Q	0.0050* (0.080)	0.0248 (0.185)		0.0251 (0.114)
LEVER	-0.0637** (0.023)	-0.9486 *** (0.000)	-3.1280*** (0.002)	
SIZE	0.0159*** (0.000)	0.1364*** (0.000)	-0.2357 (0.161)	0.1062*** (0.000)
ROA	0.0394 (0.336)		-2.6869* (0.060)	-0.5532** (0.015)
BETA	0.0476*** (0.000)			
INTANG	-0.0147 (0.416)	-0.0272 (0.752)		
TANG				0.0244 (0.655)
Constant	-0.1649*** (0.007)	-	-	-1.0163*** (0.000)
Industry	Included	Included	Included	Included
Adjusted R^2	0.3833	0.2893	0.2310	0.2216
P-value of F-test	0.000	0.000	0.000	0.000

Panel B Relationship between the governance score and firm value

	Dependent variables			
Independent variables	***M-B***	***GS***	***GROWTH***	***LEVER***
M-B		-0.030 (0.504)	0.808*** (0.000)	-1.2102 (0.171)
GS	0.2059 (0.626)		0.4306 (0.662)	-0.3361*** (0.000)
GROWTH	0.1727*** (0.001)	0.0176 (0.506)		0.0289** (0.022)
LEVER	-3.996*** (0.000)	-0.9246 *** (0.000)	3.410*** (0.005)	
SIZE	1.016*** (0.000)	0.1817*** (0.000)	-0.9786*** (0.000)	0.2251*** (0.000)
ROA	-0.2705 (0.681)	-0.3307 (0.316)	0.5107 (0.727)	-0.1826 (0.241)
BETA	0.0325 (0.753)		-0.0604 (0.791)	0.0049 (0.798)
INTANG	0.040 (0.869)	-0.0927 (0.386)	0.1657 (0.786)	
TANG				0.0156 (0.590)
Constant	-0.6651 (0.472)	-1.7828*** (0.000)	-	-1.0163*** (0.000)
Industry	Included	Included	Included	Included
Adjusted R^2	0.8739	0.3019	0.1635	0.5666
P-value of F-test	0.000	0.000	0.000	0.000

This table reports the results from 3SLS regressions of Equations 1-4 of the system of simultaneous equations. The dependent variables are Market-to-Book Value (M-B), Future Growth Opportunities proxy by 3-year sales growth (GROWTH), Governance Score (GS), and Capital Structure (LEVER). Control variables for industry (IND) are included in the regressions. The sample consists of 156 firms listed on the Toronto Stock Exchange (TSX/S&P). The data refers to the year 2009. The numbers in parentheses are probability values for two-sided F test. ***, **, * denotes statistical significance at 1%, 5% and 10% level respectively.

Conclusion

This paper analyzes the determinants of governance in the case of Canadian firms and assesses the relationship between corporate governance and firm value through the use of different econometric approaches. The results on governance determinants provide empirical evidence that large firms and firms with a high Tobin's *q* ratio adopt better standards of governance in Canada. Larger firms may find optimal to adopt better governance structures to offset their agency costs. Similarly, firms with high market-to-book value (high Tobin's *q*) may use the reputational effect of having a good governance "tag" to attract investors.

The relationship between the quality of governance and firm value was first assessed through ordinary least squares (OLS) regressions and next through simultaneous equations using 3SLS. The results with 3SLS support the results with OLS regressions that governance has a significant *negative* impact on firm's stock return. Previous studies with Canadian listed firms ranked by *The Globe and Mail* Report on Business Governance Score show no effect of governance on firm value. Our study show a shift in investors' perception towards governance after the 2008 financial crisis, by showing a *negative* effect of governance on firm value for the year 2009. Our results do not support the agency theory as they indicate that governance negatively affects firm value. Moreover, the results with simultaneous equations show that firms providing higher stock returns adopt lower standards of governance.

Canada is a country with a high degree of investor protection (La Porta, *et al.*, 2000). However, our study is conducted in the aftermath of the 2008 financial crisis. Despite the high degree of investor protection holding in Canada, after the massive losses[1] that average investors experienced during and after the crisis, investors' confidence was deeply affected. Many transferred their investments from equities to fixed income, such as government bonds and real estate. Many investors, not only in Canada, were questioning the value of good governance, as good governance companies had also suffered major losses. There is a generalized sentiment that good governance was not a deterrent to bad performance; therefore why should investors use the quality of governance as a criterion in assets selection? In a certain extent, this reality is being captured by the present study. In addition, small firms, mostly in the natural resources sector, have experienced huge returns in the year 2009, mainly due to the quick recovery of the Chinese economy. These companies rank very low in the Governance Score, therefore our results may be driven by a firm size bias, as smaller firms (mostly from the natural resources sector) present higher stock returns when compared to larger firms (which present higher standards of governance). However, in the aggregate our results show a lack of market reward for the adoption of higher standards of governance.

From the perspective of public policies, this paper offers important insights particularly for policy makers, as Canada has recently proposed changes to its governance regulatory framework from a "comply or explain" approach to a "principles approach". Our study shows there is no reward, in the form of superior stock return, for adopting better standards of governance, which indicates a lack of evidence of market enforcement. Like occurred in other countries, self-enforcement is unlikely to be an effective mechanism for implementation of best practices of governance, particularly without market enforcement, therefore our results provide support for the maintenance of the more stringent "comply or explain" approach as opposed to a change to a more lax, market driven "principles approach".

[1] The TSX composite index (the benchmark for Canadian securities) lost 35% of its value in 2008. By the end of 2009 the TSX had recovered to 11,746 points but still represented a 15% loss in regards to December 31, 2007 (13,833 points) however it represented a gain of 31% in the year (from 8,988 points in December 31, 2008 to 11,746 points by the end of 2009).

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SME PERCEPTION OF GOVERNMENT ASSISTANCE WITHIN SOUTH AFRICA

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Abstract

Small and medium enterprises (SMEs) play a vital role in the economies of countries throughout the world. They contribute to the creation of jobs, economic upliftment as well as the gross domestic product (GDP). It is of great concern however to note that the majority of SMEs fail within their first few years of operation which could be due to many factors such as management skills, finance, access to markets and appropriate technology. With the National Development Plan's objective to create 11 million jobs by 2030, it is crucial that the government provides assistance needed by SMEs to achieve this goal. Although government assistance may be evident, SMEs and their perceptions regarding this assistance is unclear. The purpose of this paper was therefore to investigate the perception of SME owners of the various government assistance and initiatives that are offered to them. The authors feel that the findings will be universally applicable to SMEs in most countries. The study followed a quantitative research approach, whereby a self-administered online questionnaire was used to collect primary data. The results indicate that SMEs feel that local government and municipalities are not doing enough to support and assist them.

Keywords: SME, Development, Government Initiative, Finance, Skills, Regulation, Marketing, South Africa

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1. Introduction

The impact and influence of small and medium enterprises (SMEs) on a country's total economy, as well as the total sphere of the global business environment has proven itself time and time again (Kraja & Osmani, 2013: 76). Establishing SMEs in any country, and even more so in a developing country such as South Africa, does not come without its challenges. Global, national and local governments have taken it upon themselves, through various programmes and initiatives, to bring solutions to the many challenges faced by SMEs which includes socio-economic challenges, access to financing, flexible regulations and skills development (Rogerson, 2008: 61). In many instances governments are of the opinion that they are making valuable contributions to the establishment of sustainable SME's while this may not always be true. This article focuses on the perception of SME owners of the various government assistance programmes and initiatives offered to SMEs. It is assumed that the problems faced by SMEs in South Africa will be similar to ones faced in other countries and that the findings will be universally applicable.

2. Literature review

2.1 Small and medium enterprises (SMEs) defined

According to the National Small Business Act of South Africa of 1996, as amended in 2003, an SME is classified as a "…separate and distinct business entity, including co-operative enterprises and nongovernmental organisations, managed by one owner or more which, including its branches or subsidiaries, if any, is predominantly carried on in any sector or sub sector of the economy" (National Credit Regulator, 2011). The European Commission (2005: 5) defines SMEs as "…the category of micro, small and medium-sized enterprises (that) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding 43 million euro".

The importance of SMEs in the creation of jobs and economic upliftment is clear from the employment created by these businesses. SMEs in the United States of America for example, provide over 50% of employment and enterprises are made up of less than 500 employees (Biondi & Iraldo, 2002). In the European Union, SMEs represent about 90% of all businesses (European Commission, 2015). This figure is quite similar to South Africa whereby SMEs account for approximately 91% of formal businesses, contributing between 51-57% of the country's gross domestic product (GDP) and providing approximately 60% of employment (Kongolo, 2010:2288; Abor & Quartey, 2010:219). The White Paper on National Strategy for the Development and Promotion of Small Business in South Africa highlights the fact that SMEs signify an important means to address the challenges of job creation, economic growth and equity in the country (Department of Trade and Industry, 1995).

It is clear that SMEs are the life line of many local and international economies as they are vital in decreasing unemployment levels, stimulating technological innovation and advancement as well as ensuring long term economic stability (Ardic, Mylenko & Saltane, 2011: 1). SMEs play an even more critical role in developing countries and therefore the South African economy relies heavily on the contributions made by SMEs, and especially those SMEs who are birthed by true entrepreneurs (Business Environment Specialists, 2013: 1). This is evident in the research done by the South African Chamber of Commerce and Industry (2013) which states that "more than 30% of the total gross domestic product of South Africa is attributed to SMEs" (Worku, 2013: 67).

Failure rates of SMEs are however, a point of concern. It is estimated that more than 72% of all SMEs fail in the first 3 to 4 years and in South Africa this is no different. According to Van Scheers (2011:5048), 40% of new SMEs within South Africa fail within their first year, 60% within their second year, and 90% within their first 10 years of operation. Such high failure rates may due to a number of factors including management skills, finance, access to markets and appropriate technology (Kongolo, 2010:2293). It is due to these high levels of failure of SMEs that government assistance is so important – as long as it is used correctly and properly.

South Africa's government can be divided into three domains, namely: the national government, provincial government and local government. Furthermore, the government gear is made up of three parts including legislatures, executive and administration (ETU, 2015). This is represented in table 1.

Table 1. Government domains

Sphere	Legislature	Executive	Administration
National	Parliament	President and Cabinet	Directors General and departments
Provincial	Legislature	Premier and Executive Council	Heads of Department and staff
Local	Council	Mayor and Mayoral Committee	Municipal Manager, HoDs and staff

Source: ETU (2015)

The domains of government have been considered as distinctive, inter-related and inter-dependent. They all however, operate according to the Constitution and laws and policies made by national Parliament (ETU, 2015). The development of SMEs and providing assistance forms an imperative element of all domains to create jobs and ensure a better life for all.

2.2 Government assistance

SMEs operate in a time where there is growing uncertainty in terms of global economic and political stability, accelerating change in technology, new laws and regulations are all obstacles a new SME owner needs to overcome (Abor & Quartey, 2010:224). The assistance provided by national and local governments to SMEs can therefore not be denied and is crucial in not only decreasing the SME failure rate as proposed by Robert (2010), but also ensuring the success of new and growing SMEs. For example, organisations such as the Small and Medium Industries Development Corporation (SMIDEC) in Malaysia, the Soros Economic Development Fund which operates internationally, the World Bank Group and SEDA (Small Enterprise Development Agency) (SEDA, 2013) in South Africa are all focused on providing assistance in developing nations (Hung & Effendi, 2011:50; Gstraunthaler & Cramer, 2012:56; SEDA, 2013).

In South Africa, the government has focused on reducing the gap between rural, micro-enterprises and rich, high-end SMEs by fostering an environment where both can flourish (Nehen, 2012:3368). In 2004, SEDA was founded with the mission to "…develop, support and promote small enterprises to ensure their growth and sustainability in coordination and partnership with other role players" and to focus on nurturing innovation, customer service and ethical behaviour with all the SMEs it comes into contact with (SEDA, 2013). The ultimate goal of SEDA and its New Growth Path is to create 5 million jobs by 2020, and this new strategy sees this organisation focus on SMEs which employ between 21 and 200 individuals whereas the National Development Plan aims to create 11 million jobs by 2030 (SEDA, 2013). While employment in South Africa can be seen as a key driving force for the development of SMEs, this reasoning can be universally seen, for example the UK SMEs have planned to create a record of 737,000 jobs and spend around £37.9 billion by May 2016 (GE, 2015).

Rogerson (2008: 62) explains that three of the most significant areas addressed by governments in terms of SME development include access to financing, training and development as well as creating more flexible laws and regulations. These areas are seen as the ones that contribute largely to SMEs battling to survive and grow. According to Olawale and Garwe (2010:733) a lack of education and training in business in South Africa seems to be the main reason for “low new firm creation and failure”, while insufficient levels of financial support and assistance is a close second. Smit and Watkins (2012:6326) are of the opinion that entrepreneurs who have had managerial and business skills training are more likely cope and overcome the challenges in a changing business environment.

SMEs are finding it very difficult to not only raise capital, but also to get access to debt financing (Fatoki, 2012:22). Herrington, Kew and Kew (2009:90) explain that despite the fact that organisations such as the Khula Enterprise Finance, Small Enterprise Development Agency (SEDA), the Industrial Development Corporation (IDC) and the National Youth Development Agency (NYDA) are committed to assist with financing entrepreneurial activities, they are not reaching their “target markets” as many entrepreneurs are unaware of their existence (Olawale & Garwe, 2010:732). It is therefore crucial that awareness is created and SME owners are made aware of the support available to them (Fatoki, 2012:28). If they do not know about it they cannot use it, and if they do know about it then it must be made possible to make use of the assistance in an effective manner

Finally, according to Herrington *et al.* (2009:90) South Africa suffers from “inefficient government bureaucracy, restrictive labour regulations and a lack of suitable tax breaks for smaller businesses” and this creates colossal barriers for growth. The high cost of taxes and SME licencing fees is another area of key concern (Olawale & Garwe, 2010:732). It is crucial for regulators to create an environment that uplifts new and growing SMEs and this can only be done with equally supportive business and trading laws. Jeppesen (2005:470) points out that national government cannot carry all the responsibility and obligations for SME development, the obligation must be spread amongst local municipalities as well.

Many organisations have stepped in and are offering SMEs the assistance they require in order to succeed, especially in terms of non-financial support such as workshops on entrepreneurial skills development, networking opportunities, mentoring and coaching, advisory services and assistance with regulatory and legal compliance (ABSA, 2015; Malherbe, 2015; Dludla, 2014).

It is essential that the perception of SMEs regarding the available assistance and the regulatory requirements are established in order to clarify and determine where further assistance can be provided to SMEs, which may further influence or change these perceptions to have a more positive approach towards these efforts.

3. Aim and research methodology

The main aim of this study was to investigate the perception of SME owners in South Africa regarding the assistance provided to them by government. It specifically focused on:

- Whether SME owners in South Africa believe that local government/ municipalities are doing enough to assist and support small businesses?
- Which small business issues do SME owners in South Africa believe local government/ municipalities should be assisting with?

A self-administered online questionnaire consisting of quantitative questions was used to collect primary data. The questionnaire was divided into two major sections. The first section is the demographic section which describes the profile of the respondents in terms of position, involvement, level of education, gender and age. The second major section of the questionnaire investigates the perception SME owners have of SME government assistance and what SME owners believe to be the most important issues government should assist SMEs with.

The questionnaire was administered to small business owners operating in the provinces of Gauteng and KwaZulu-Natal who registered their small businesses at an official state institution for SMEs. The combined contribution of these provinces to the national GDP is 50% (Gauteng 33.9%; KwaZulu-Natal 16.1%) (Gauteng Online, n.d) and can therefore be regarded as representative of SMEs in South Africa. The sampling methodology utilised was that of non-probability, convenience sampling, which enabled the researcher to collect data quickly and easily. A sufficient number of questionnaires were distributed to achieve a confidence level of 95% and an error margin of 5% at 50% response distribution. A total of 105 usable responses were received which is an error margin of 9.26%. Given the small sample size, the results will give a general indication as to the perceptions held by SME owners towards the assistance that government offers to them. The quantitative data was analysed using IBM SPSS Statistics V22. The data was checked, coded, corrected and descriptive statistics (frequency counts) were used to describe the findings.

4. Research findings

This section reports on the key findings from the research conducted.

4.1 The demographic profile

The demographic profile of the respondent group is presented in Table 2 below. More than half (56.9%)

of SME owners were older than 40 years of age. The gender split for the respondent group is female dominated (58.62 %). Almost half (46,1%) of the respondents own the business and a third (34,2%) took the role of both owner and manager which implies that the owner is directly involved in the day to day running of the SME. Almost two thirds (63.1%) of the respondents hold a post matric qualification. A large proportion (60,8%) of the respondents' businesses have existed for less than five years. The largest proportion (41,8%) of the respondents reported an annual turnover of less than R100 000.

Table 2. Demographic profile

Demographic Profile of respondents		%of Total
Gender	Female	58.62
	Male	41.38
Age	18-24	8.62
	25-29	17.24
	30-34	6.90
	35-39	10.34
	Older than 40	56.90
Qualification	No matric	7.9
	Matric	28.9
	Certificate/diploma	31.6
	Degree	19.7
	Post-graduate degree	11.8
Position in organisation	Owner	46.1
	Manager	19.7
	Both	34.2
How long has the business been running for?	Less than 5 years	60.8
	6 – 10 years	25.7
	11 – 25 years	9.5
	Over 25 years	4.1
Annual turnover	<R100000	41.8
	R100000 – R200000	16.4
	R200000 – R500000	11.9
	R500000 – R1000000	16.4
	>R1000000	13.4

4.2 Descriptive analysis of the perception of small business owners on whether local government/ municipalities are doing enough to assist and support SME's

The participants were asked whether they believe that local government is doing enough to assist and support SMEs. Frequency analysis of the responses of yes, no and uncertain shows that the majority of the respondents (74.6%) do not believe (coded "2") that local government is doing enough to support SMEs (Figure 1) (M = 1.94, SD = .504). The relative low standard deviation indicates that the responses were very similar with most of the respondents selecting "No" as an answer.

Figure 1. Frequency analysis of the belief of respondents regarding sufficient support to SME's from local government and municipalities

4.3 Descriptive analysis of which small business issues do SME owners in South Africa believe local government/ municipalities should be assisting with

The respondents were asked to indicate their level of disagreement or agreement (from Strongly Disagree (1) to Strongly Agree (5)) with six statements about possible support and assistance areas by local government. From the descriptive statistics for the questions on the importance of the different marketing tools, it is clear that the frequencies are significantly skewed from a normal distribution and therefore non-normally distributed (Table 3). The relative low standard deviations show that the responses to each of the questions were very similar by the various respondents.

Table 3. Descriptive statistics of the level of disagreement or agreement with statement about support and assistance areas by local government

Statement	N		Mean	Median	Mode	Std. Deviation	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
	Valid	Missing								
Government and local municipalities should provide subsidised interest rates to small business owners	89	2	4.24	4.00	4	.798	-1.277	.255	2.615	.506
Government and local municipalities should mentor and provide learnerships to small business owners and entrepreneurs	90	1	4.16	4.00	4	.982	-1.704	.254	3.189	.503
Government and local municipalities should assist small business owners in paying salaries to employees who live in their community	90	1	3.59	4.00	4	1.253	-.574	.254	-.799	.503
Government and local municipalities should assist small business owners to provide jobs to those in their community	90	1	4.16	4.00	4	.898	-1.266	.254	1.643	.503
Government and local municipalities should give small business owners a platform to voice their suggestions and make contributions to the passing of trading laws etc	90	1	4.33	4.00	4[a]	.734	1.141	.254	1.579	.503
Government and local municipalities should assist in training and skills development	83	8	4.46	4.00	5	.570	-.440	.264	-.768	.523

a. Multiple modes exist. The smallest value is shown

The frequency analysis of the level of agreement/disagreement shows that the majority of the respondents (from 62.2% to 96.4%) strongly agree or agree with all of the six areas (Figure 2).

4.4 Descriptive analysis of which is the most important small business issues SME owners in South Africa believe local government/ municipalities should be assisting with

The respondents were asked to rate the six statements regarding support areas from local government from most important (1) to least important (6). From the descriptive statistics for the ratings of the statements, it is clear that the frequencies are not significantly skewed from a normal distribution (Table 4). The relative low standard deviations show that the responses to each of the questions were very similar by the various respondents.

Figure 2. Frequency analysis of the level of agreement of the respondents with six statements on support by local government

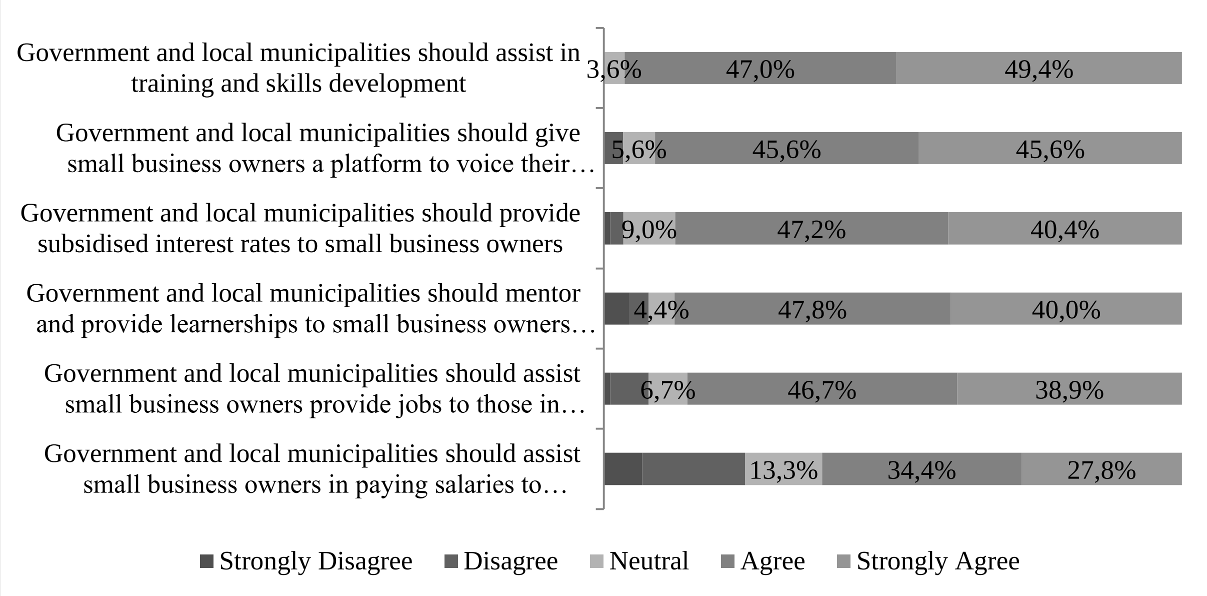


Table 4. Descriptive statistics of the rating of importance of statements regarding support by local government

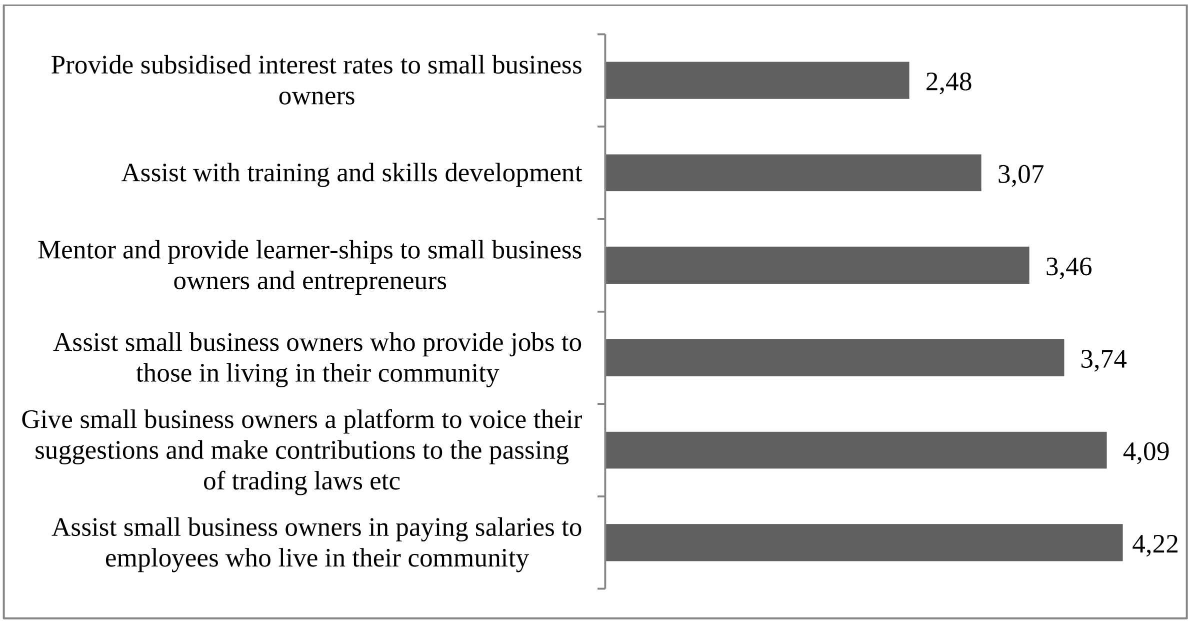
Statements	N		Mean	Median	Mode	Std. Deviation	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
	Valid	Missing								
Provide subsidised interest rates to small business owners	46	45	2.48	2.00	1	1.616	.784	.350	-.558	.688
Mentor and provide learner-ships to small business owners and entrepreneurs	46	45	3.46	3.50	1	1.735	-.030	.350	-1.264	.688
Assist small business owners in paying salaries to employees who live in their community	46	45	4.22	4.00	6	1.413	-.058	.350	-1.295	.688
Assist small business owners who provide jobs to those in living in their community	46	45	3.74	4.00	4[a]	1.527	-.517	.350	-.768	.688
Give small business owners a platform to voice their suggestions and make contributions to the passing of trading laws etc.	46	45	4.09	4.00	5[a]	1.561	-.297	.350	-1.150	.688
Assist with training and skills development	46	45	3.07	2.00	2	1.855	.578	.350	-1.199	.688

a. Multiple modes exist. The smallest value is shown

The mean rating scores was calculated for each of the six areas of support, using the responses from the 90 respondents. The lower the mean rating score, the more important the support area is regarded for SMEs. The order of importance of the issues that local government should address is identified as follow: (Figure 3).

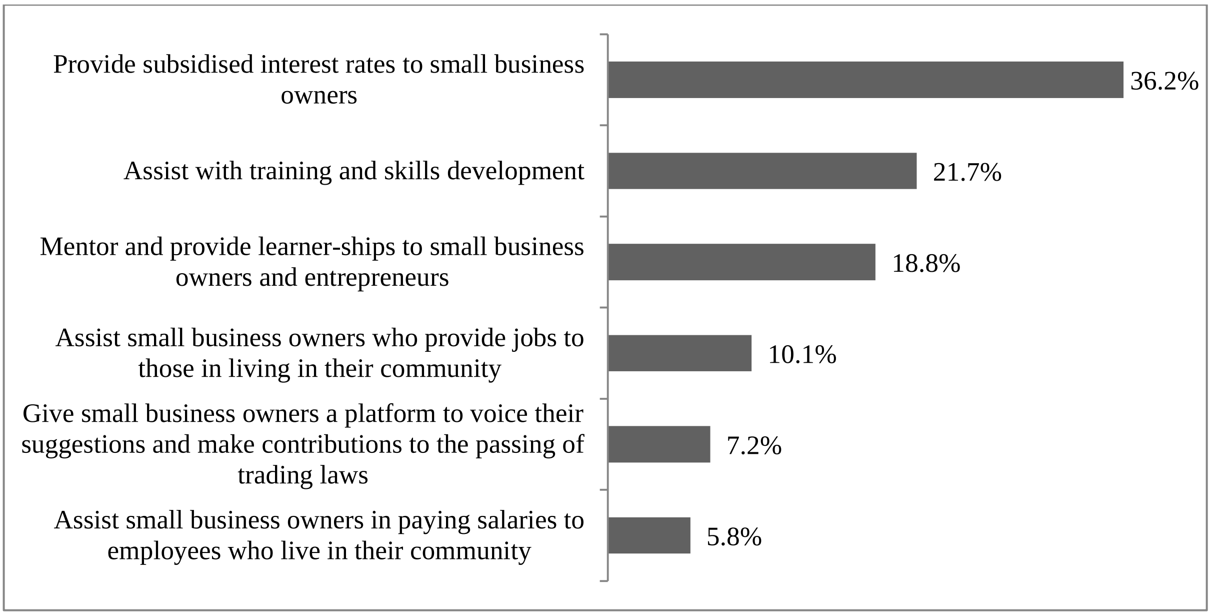
1. Provide subsidized interest rates to small business owners.
2. Assist with training and skills development.
3. Mentor and provide learner-ships to small business owners and entrepreneurs.
4. Assist small business owners who provide jobs to those in living in their community.
5. Give small business owners a platform to voice their suggestions and make contributions to the passing of trading laws etc.
6. Assist small business owners in paying salaries to employees who live in their community.

Figure 3. Mean ranking scores of the six areas of support from local government



The respondents were also asked to select the one most important of the six areas of support. Frequency analysis of the most important support area from local government shows that the order of the most important to least important areas are the same as for the previous question (Figure 4) (M = 2.99, SD = 2.011). The relative high standard deviation indicates that the most important issues selected varied a lot among the respondents. The rating of the most important support area was non-normally distributed, with skewness of -.467 (SE = .289) and kurtosis of -1.439 (SE = .570).

Figure 4. Frequency analysis of the selected most important area of local government assistance



5. Discussion and conclusions

SMEs play a critical role in the growth and development of countries, as it represents an important vehicle to address job creation, to generate sustainable and equitable growth (Department of Trade and Industry, n.d.) In order to stimulate and promote SMEs governments tender assistance in various forms which include preferential procurement and BEE codes, tax incentives, provision of grants and soft funding (Khan, 2014).

The main aim of this study was to establish the perception that SME owners in South Africa have of the assistance provided to them by local government with regard to whether SME owners believe that local government/ municipalities are doing enough to assist and support small businesses, which small business issues do SME owners believe local government/ municipalities should be assisting with and which are the most important small business issues SME owners believe local government/ municipalities should be assisting with.

The study shows that the majority of the respondents are of the opinion that local government and municipalities are not adequately doing enough to support and assist SMEs. The respondents agree with all of the proposed areas of support by local government and rate the areas in the following order of importance:

1. Provide subsidized interest rates to small business owners
2. Assist with training and skills development
3. Mentor and provide learner-ships to small business owners and entrepreneurs
4. Assist small business owners who provide jobs to those in living in their community
5. Give small business owners a platform to voice their suggestions and make contributions to the passing of trading laws etc.
6. Assist small business owners in paying salaries to employees who live in their community.

The contribution of SME to regional and national growth and development shouldn't be taken lightly. It is therefore recommended that the government assistance available to SMEs be aggressively promoted and local government and municipalities mastermind regional and local SME support mechanisms to facilitate local and regional growth. Given the small sample size, the results will give a general indication as to the perceptions held by SME owners towards the assistance that government offers to them.

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DETERMINANTS OF CAPITAL ADEQUACY RATIO IN KUWAITI BANKS

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Abstract

The aim of this study is to identify the effects of seven internal factors of five conventional Kuwaiti banks on capital adequacy ratio (CAR). The five factors are: Loans to Assets, Loans to Deposits, Non-Performing Loans to Total Loans, Return on Assets, Return on Equity, Dividend Payout and Total Liability to Total Assets. The study covers the period from 2005 to 2013. The study shows that under fixed effect model, variables DIVIEDEND, LAR, LDR, NPLLR, and ROE do not have any impact on capital adequacy ratio. However, SIZE has a significant and negative relationship with capital adequacy ratio. Also, ROA shows a significant and negative relationship with capital adequacy ratio. Under random effect model, results indicate that CAR is adversely affected by bank's SIZE (total liability to assets), and ROA has a significant and negative relationship with capital adequacy ratio, However, Loan to Deposit Ratio (LDR) showed a significant and positive relationship with capital adequacy ratio. On the other hand, dividend payout, loans to assets, Non-Performing Loans to Total Loans and Return on equity do not have significant effect on CAR under random effect model.

Key Words: Capital Adequacy Ratio, Kuwait, Banks

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Introduction

Safety of depositors' funds remains the major concern of bank regulators worldwide. It is in this respect the capital adequacy becomes relevant and important. Capital adequacy refers to the amount of equity capital and other securities which a bank holds as reserves against risky assets as a hedge against the probability of bank failure. In a bid to ensure capital adequacy of banks that operate internationally, the Bank of International Settlements (BIS) established a framework necessary for measuring bank capital adequacy for banks in the Group of Ten industrialized countries at a meeting in the city of Basle in Switzerland. This has come to be referred to as the Basle Capital Accord, on Capital Adequacy Standards.

The Basle accord provided for a minimum bank capital adequacy ratio of 8% of risk-weighted assets for banks that operate internationally. Under the accord, bank capital was divided into two categories – namely Tier I core capital, consisting of shareholders' equity, and retained earnings and Tier II supplemental capital, consisting of internationally recognized non-equity items such as preferred stock and subordinated bonds. The accord, allows supplemental capital to count for no more than 50 percent of total bank capital or no more than 4 percent of risk-weighted assets. In determining risk-weighted assets, four categories of risky assets are each weighted differently, with riskier assets receiving a higher weight. Government securities are weighted zero percent, short-term interbank assets are weighted 20 percent, residential mortgages weighted at 50 percent while other assets are weighted 100 percent.

Although operationally effective since 1998, the risk-based, Basle Capital accord was generally criticized by practitioners and scholars for the "arbitrary" nature of its provisions. This and other such criticisms led to the adoption of an amended Basle II accord which addressed most of the areas of concern. The capital adequacy standards under the Basle Accord have been widely adopted throughout the world by bank regulators.

Within the Central Bank of Kuwait's endeavors to upgrade the regulatory methods and instruments so as to cope with the latest developments in the global banking industry, the Central Bank of Kuwait Board of Directors approved at its meeting of 11/12/2005 the application of the revised capital adequacy ratio to local conventional banks, including foreign banks branches operating in Kuwait, with effect from 31/12/2005, by implementing the standardized approach in measuring credit risk and operational risk.

Central Bank of Kuwait urged banks senior managements to develop strategies for measuring capital adequacy to be approved by their boards of directors, as well as appropriate policies and procedures designed for identifying and measuring risks and the process of evaluating capital adequacy versus those risks. The instructions also require the banks to develop the systems and regulatory reports on these risk exposures and their effects on the capital, in addition to enhancing internal control systems, and other relevant requirements under those instructions.

The Central Bank of Kuwait hopes that the implementation of the revised ratio will motivate banks to enhance risk management and control, and maintain adequate capital, in accordance with these regulations, against their risks as capital provides banks with a cushion to absorb losses, without endangering customer deposits, as well as to develop an appropriate method for this purpose, in preparation for implementing more advanced standards in the future, as mentioned in the proposal of Basel Committee on Banking Supervision.

The main objective of this paper is to identify the effects of seven Kuwaiti bank’s internal factors (Loans to Assets, Loans to Deposits, Non-Performing Loans to Total Loans, ROA, ROE, Dividend Payout and Total Liability to Total Assets) on the bank Capital Adequacy ratio. In this study we have considered five Kuwaiti conventional banks; National Bank of Kuwait, Burgan Bank, Gulf Bank , Commercial Bank of Kuwait, and Ahli Bank of Kuwait . We have excluded Islamic banks due to the profound difference in their capital structure from the conventional banks for both Assets and Liabilities. The study covers the period from 2005 to 2013. Capital Adequacy Ratio became officially required by Kuwait Central Bank in 2005 and onward, thus data for CAR is not available prior to 2005. The study is conducted in five Sections. The introduction in section I, followed by literature review in Section II, Section III discusses the Research Methodology and Result Analysis; while Section IV provides the Conclusion.

Literature Review

Empirical and theoretical studies and research on capital structure and capital adequacy have become more and more important especially in the last two decades, which can be attributed to the emergence of the information age and globalization of the financial markets and the stronger correlations between the world financial markets. The recent financial crises are a clear example of the stronger bonds of those financial markets and international banking system.

All authors analyzing financial markets and the banking sector are unanimous in their opinion that banks are the institutions that are specifically important for every country and its economy (Aleksandra). Banks, as financial service providers give a special importance on the level and structure of capital they have and the level and the structure of capital held by banks are also significant for macroeconomic indicators of the countries and for applications of monetary policies (Ali, 2014). Banks importance and vital role in the financial system and in the economy in general, increased the attention of the regulatory supervisors on the banks management and operations, especially on the Capital Adequacy of banks. The connection of bank capital and financial system increased the attention on the capital adequacy of banks to enhance the stability of the financial system (Ali, 2014). One of essential requirements for banks and financial institutions is adequate and sufficient capital and every banks and financial organizations must keep balance between capital and available risk in its assets in order to guarantee its stability (Leila, 2014).

The recent international financial crisis revealed the weakness of the financial sector and the inadequacy of the current supervisory regulations in the international financial institutions and banks, especially at this time of strong correlation between international markets. These events forced regulatory authorities to stress more control procedures and to improve new criteria and methods to avoid bank’s insolvency (Al-Sabbagh, 2004).The connection of bank capital and financial system increased the attention on the capital adequacy of banks to enhance the stability of the financial system. That is why the Basel accord, the rules on minimal risk-based capital required for banks is introduced in 1988 by Bank for International Settlement (BIS) (Ali, 2014). Therefore, in 2011, the Basel Committee on Banking Supervision (BCBS) and the European Commission approved a set of reform measures, Basel III, based on the 60 Fourth capital adequacy directives CRD IV (Aleksandra).

The concept of the Capital Adequacy ration appeared in the middle of the 1970’s because of the expansion of lending activities in banks without any parallel increase in its capital, since capital ratio was measured by total capital divided by total assets (Al-Sabbagh, 2004). Capital adequacy requirements that were originally set to capture different types of risks faced by conventional banks. Capital adequacy has become the keystone for safety that reflects supervisory concerns. CAR test whether firms have sufficient capital to cover the risks that they confront. Therefore regulatory authorities used capital adequacy ratio as a significant indicator of “safety and stability” for banks and depository institutions because they view capital as a guard or cushion for absorbing losses (Abdel-Karim, 1964). Basel II identified three types of risk exposures for conventional banks: credit risk, market risk and operational risk.

The capital adequacy ratio (CAR) determines the ratio of a bank‘s core capital to the assets and off-balance liabilities weighted by the risk (Małgorzata, 2010). Minimum capital adequacy ratios have been recommended by Basel Accord to ensure banks can absorb a reasonable level of losses before becoming insolvent, which will protect depositors and promote the stability and efficiency of the financial system.

Two types capital are measured when calculating Capital adequacy ratio:

1. Tier one: core capital which can absorb losses without a bank being required to cease trading, e.g. paid-in capital, all kinds of reserves and retained earnings.

2. Tier two: supplementary capital which can absorb losses in the event of a winding-up and so provides a lesser degree of protection to depositors, e.g. undisclosed reserves, asset revaluation reserves, subordinated debt, loan-loss provisions.

Ali Polat and Hassan Al-khalaf (2014) found that banks usually maintain a level of capital that is more the required by regulatory bodies as they operate cautiously to survive operation and financial shocks. Ali Polat and Hassan Al-khalaf, in their attempt to empirically investigate some internal factors and their relation with capital adequacy ratio, used fixed effect, robust estimation and least squared dummy regression (LSDR) in analyzing their collected data in Saudi banks and the results shows that loans to assets ratio has negative significant effect on capital requirement ratio while leverage and the size of the banks have positive significant effect in determining that ratio and in generalized linear regression (GLS) estimation they found that, in addition to the mentioned results, the loan to deposit ratio has negative significance and the return on assets has positive significance on capital ratio.

Dickson Pastory & Marobhe Mutaju (2013) found that the banks increase in capital ratios had led to increase in asset quality and an increase in non-performing loans has a tendency to worsen capital ratio. Asset quality, in terms of large exposure to core capital, and Capital Adequacy are inversely related, while Non-performing loans increases the capital adequacy.

Abdelkader Boudriga, Neila Boulila Taktak and Sana Jellouli (2009), in their empirical analysis about the cross-countries determinants of nonperforming loans (NPLs), the potential impact of supervisory devices, and institutional environment on credit risk exposure, used banks specific variables aggregated data on a panel of 59 countries over the period 2002-2006 and other econometric techniques and found that higher CARs and higher provisions ratios are negatively related to the level of bad loans.

Leila Bateni, Hamidreza Vakilifard & Farshid Asghari (2014) have investigated empirically the determinants of CAR in Iranian banks and its effect on the bank financial position, using banks internal factors (SIZE, LAR, RAR, DAR, ROA, ROE, EQR) as independent variables CAR as the dependent variable. They have aggregated data from the annual report for the period from 2006 to 2012. They have concluded that CAR is adversely affected by bank's SIZE, this means that large Iranian banks have low supervisory control on their capital adequacy ratio (CAR), and large banks attain a high risk assets portfolio, represented in a positive relationship between RAR and SIZE, while EQR, ROA, ROE and LAR positively influence CAR, While, RAR and DAR do not have any significant relationship with CAR.

Noor Mohammad Alsabbagh in his thesis (Determinants of Capital Adequacy Ratio) applied in 17 Jordanian banks during the period 1985 to 1994 (before applying Basel committee standard for CAR) and during the period 1995 to 2001 (after applying Basel committee standard for CAR) used correlation coefficient and regression analysis to determine the effect of the banks internal factors (like log SIZE, RAR, LAR, ROE, ROA, DAR, EQR, DR and LPR) on the bank CAR. He found that CAR is adversely affected by banks' size (log SIZE) in the second period, which means that large banks have low supervisory control on their CAR while maintaining low risky assets in their portfolio, as indicated by the negative relationship between RAR and log SIZE. CAR is positively affected by ROA in the first period and positively affected by LAR and EQR in the second period, which explains the decreased shareholder's equity in large banks, which have a significant negative relationship with log SIZE. CAR was positively affected by RAR in the first period and negatively affected by RAR in the second period and that can be attributed to the use Capital to Risk-Weighted Asset ratio in the second period instead of the traditional method of Capital to total asset Ratio used before applying Basel committee standard for CAR. CAR was negatively affected by DAR in the first period and positively affected by DAR in the second period. Finally, CAR was negatively affected by LPR in the second period and banks decreasing CAR in the second period could be attributed to banks increased loan loss reserve.

Jaber et al (2014), investigated the impact of internal and external factors on commercial banks profitability in Jordan. The banks internal factors taken in the study were capital adequacy, the cost to income ratio, liquidity calculated as loans to customers and the accounting value of the bank's total assets. They found out, after using multivariate analysis that the internal factors have a significant impact but not capital adequacy and liquidity ratio for the transformed model, while the size is insignificant for the transformed and untransformed model.

Vatansever et al (2015), analyzed the relationship between non-performing loans and several macroeconomic factors and bank specific factors, such as capital adequacy ratio, in Turkey by using ordinary by using ordinary least square estimation approach with integration analysis and the time series from January 2007 to April 2013. They found out that capital adequacy ratio has a positive effect on non-performing loans ratio. Furthermore; the findings of the positive effect are such a long term not spurious, which have several implications on the banking and credit markets in terms of policy and regulation.

Jasevičienė et al (2014), studied six factors (return on assets, loans over total assts, assets growth, assets assessed according to risk over total assets, impact of bank management and size of the bank) affecting capital adequacy ratio in commercial banks of Lithuania. The author analyzed data from banks for six years from 2008 -2013 on a quarterly basis. Multiple regression analysis shows that return on assts has a statistically significant negative impact on banks' capital adequacy changes.

Al Omar et al (2008) assessed the impact of bank specific determinants of profitability on Kuwaiti commercial banks from 1993 to 2005 by using unrelated regression technique. Their results indicated that equity ratio, loan- assets ratio, operating expenses ratio, non-interest assets ratio, and total assets explain about 67% of the variation in ROA. The results stressed the importance of improving capital adequacy and reducing non-interest assets to improve profitability. The positive impact of the size variable (total assets) reflects scale efficiency, indicating a potential for higher profits as the size of these banks increases.

Balance sheet structure required by Basel Capital Accord did not account for Islamic banks and was designed for the conventional banks, which profoundly differ in structure from Islamic banks structure for both assets and liabilities. However, Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) and the Islamic Financial Services Board (IFSB) is trying to model Capital Adequacy framework suitable for Islamic banks risk profiles.

Islamic banks depositors require less protection than those of conventional banks, because unlike conventional bank that bear all risks associated with investing depositors funds, Islamic banks depositors are not neutral providers of funds and they participate in the bank investment activities through risk-sharing schemes.

Rima and Yolla (2007) Islamic banks are exposed to different types of risks that result from the use of funds than conventional banks. Islamic banks are exposed to new market risk dimension that is applicable to their banking book rather than only in their trading book as in the case of conventional banks. This market risk is emerging from the fact that Islamic financing activities are generally backed by real assets, resulting in a substantial commodity price risk, which will lead to overall higher market risk exposure and consequently risk- weighted assets of Islamic banks are likely to be higher than their peers.

Research Methodology & Result Analysis

The purpose of this paper is to study the Banks's Capital Adequacy Ratio determinants. Because Basel Capital Accord required balance sheet structure was designed based on the conventional bank's financial structure, we have considered Kuwait 5 conventional banks; (National Bank of Kuwait, Burgan Bank, Gulf Bank, Commercial Bank of Kuwait, and Ahli Bank of Kuwait) and excluded Islamic banks due to the profound difference in their capital and financial structure from the conventional banks for both Assets and Liabilities.

In this study we have hypothesized seven specific factors (see table 1) that influence bank's CAR. We have collected bank's CAR and specific variables from the bank's annual reports for 9 years from the period 2005 to 2013. CAR became official requirement by Kuwait Central Bank on 2005 onward, thus we couldn't find data for CAR prior to 2005.

We have employed panel data methodology using STATA software to analyze the relationships among the bank's specific variables (Loans to Assets, Loans to Deposits, Non-performing loans to Loans, ROA, ROE, Dividend Payout, and Total Liabilities to Assets) and their influence on the bank's Capital Adequacy Ratio. We have used Basel Capital Accord standard formula to calculate the banks CAR.

The following table presents our dependent variable (CAR) and our independent variables hypothesis.

Variable	*Hypothesis*
Capital Adequacy Ratio (CAR)	
Loans to Assets (L/A)	H1: (L/A) significantly affect CAR
Loans to Deposits (L/D)	H2: (L/D) significantly affect CAR
Non-performing loans to Loans (NPL/L)	H3: (NPL/L) significantly affect CAR
ROA	H4: ROA significantly affect CAR
ROE	H5: ROE significantly affect CAR
Dividend Payout (DIV PAY)	H6: (DIV PAY) significantly affect CAR
Total Liabilities to Assets (L/A)	H7: (L/A) significantly affect CAR

Table 1. Descriptive Statistics

	LAR	LDR	NPLLR	ROA	ROE	DIVIDEND	Size	CAR
N	45	45	45	45	45	45	45	45
Mean	60.634	72.272	5.937	1.803	12.924	39.614	87.527	17.933
Median	60.040	72.270	4.390	1.800	11.850	47.070	87.500	17.890
Maximum	70.460	84.650	35.070	7.270	26.590	87.930	99.230	27.650
Minimum	49.480	59.690	0.600	0.000	0.000	0.000	82.620	0.600
Std. Deviation	6.481	6.947	6.313	1.313	8.051	27.710	3.167	4.101
Skewness	0.051	-0.055	2.727	1.557	0.141	-0.282	0.953	-1.024
Kurtosis	-1.221	-1.155	9.725	5.401	-1.124	-1.036	2.727	7.196
Jarque-Bera	2.810	2.549	189.059	58.195	2.547	2.646	16.309	81.554
Probability	0.245	0.280	0.000	0.000	0.280	0.266	0.000	0.000

Table 1 includes the descriptive statistics of the under-studying data for using in Regression. According to this fact the statistical data and information were extracted from the data of 5 private banks during 2005 to 2013, so each of the variables can have 45 observations. The observed calculated descriptive statistics consist of minimum, maximum, mean, median, Standard Deviation, skewness, kurtosis as well as the Jarque-Bera statistics and probabilities (p-values). As it can be seen from Table 1, all the variables are asymmetrical. Especially skewness is positive for five series, while LDR, DIVIDEND, and CAR have a negative skewness. Kurtosis value of all variables also indicates that five series are nearly normally distributed, while NPLLR, ROA, and CAR are not normally distributed as their kurtosis values are deviated from 3. The measure of Jarque-Bera statistics and corresponding p-values are used to test for the normality assumption. Based on the Jarque-Bera statistics and p-value, this assumption is rejected for four series, while LAR, LDR, ROE, DIVIDEND follows normal distribution.

Table 2. The pairwise- correlation matrix for dependent variable (CAR) and explainatory variables

	LAR	LDR	NPLLR	ROA	ROE	DIVIDEND	Size	CAR
LAR	1							
LDR	0.9315	1						
NPLLR	0.4055	0.2995	1					
ROA	-0.0999	-0.1321	-0.2025	1				
ROE	-0.3115	-0.2395	-0.4127	0.5505	1			
DIVIDEND	-0.3597	-0.2027	-0.5093	0.5145	0.7883	1		
Size	0.2595	-0.0184	0.4425	0.1864	-0.1208	-0.4511	1	
CAR	0.0255	0.2852	-0.1781	-0.4438	0.0097	0.1836	-0.7336	1

The dependent and independent variables are examined for multicolinearity based on a simple correlation matrix. As shown in Table 2, all of them are have no colinearity problem. Having concluded that none of the bank specific variables are highly correlated and no multicolearity among these variables exists.

Table 3. Panel regression results (dependent variable CAR) Fixed effect model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	141.1386	22.4321	6.2918	0
DIVIDEND	-0.013852	0.0248	-0.5584	0.5803
LAR	0.087546	0.2621	0.3340	0.7405
LDR	-0.041143	0.2098	-0.1961	0.8457
NPLLR	0.004175	0.0571	0.0732	0.9421
ROA	-0.74553	0.3333	-2.2365	0.0322
ROE	0.092431	0.0752	1.2290	0.2278
SIZE	-1.426603	0.2499	-5.7083	0

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R2	0.858178			
Adj. R2	0.810904			
F-stat.	18.15329			0
Durbin- Watson	0.724086			

The effect of bank specific bank variables on the capital adequacy ratio is examined by the Panel data estimation. The regression results of fixed effect regression are reported in Table 3 mentioned above. The dependent variable (CAR) is the Capital Adequacy Ratio. Model corresponds to cross-section fixed effects. The model is estimated using a panel of 45 observations for the period 2005 to 2013 derived from 5 private banks. The estimated coefficients are also assigned for the banks with the aim of capturing the influence of specific characteristics of each individual bank. As shown in Table 3 Adj. R-squared value (0.8109) suggests that model serves its purpose in determining the impact of specific variables on Capital Adequecy Ratio. In other words, 81.09% variability of the capital adequacy ratio can be explained by the DIVIDEND, LAR, LDR, NPLLR, ROA, ROE, and SIZE. Before analyzing the coefficients, one should look at the diagnostics of regression. In this manner, Durbin-Watson (DW) statistic can show us the serial correlation of residuals. As a rule of thumb, if the DW statistic is less than 2, there is evidence of positive serial correlation. The DW statistic in our output is 0.7241 and this result confirms that residuals are serially correlated. With computed F-value of 18.1533 ($p<0.000$) for the panel data regression, we reject the null that all coefficients are simultaneously zero and accept that the regression is significant overall. Further, coefficients estimate in Table 3 shows that- variables DIVIEDEND, LAR, LDR, NPLLR, and ROE do not have any impact on capital adequacy ratio. SIZE has a significant and negative relationship with capital adequacy ratio. This result represents that large banks have lower regulations than small size banks. ROA has a significant and negative relationship with capital adequacy ratio. The coefficient of ROA indicates that a unit increases in profitability decreases the banks' capital by (-0.7455) units and coefficient of Size indicates that a unit increase in bank's Size decreases CAR by -1.4266. To sum up our regression results, SIZE and ROA seem to affect capital adequacy ratio. On the other hand DIVIDEND, LAR, LDR, NPLLR, ROE do not appear to have significant effects on capital adequacy ratio.

Table 4. Hausman test for correlated random effects

Correlated Random Effects - Hausman Test				
Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Period random		2.603195	7	0.9191

Now, in order to conform whether there exist any random effect in the dataset, we performed a test to choose better model between; fixed effect or random effects model. One common method for testing this assumption is to use a Hausman (1978) test to compare the fixed and random effects estimates of coefficients. Null hypothesis of Hausman's test states that- random effect model is appropriate, and alternate states that fixed effect model is appropriate. The purpose is to find out whether there is significant correlation between the unobserved individual specific random effects (α_i) and the regressors. The result of Hausman test is indicated in Table 4. Results indicate that the corresponding effect is statistically insignificant; hence the null hypothesis is accepted by our data and random effects model is preferred.

Table 5. Panel regression results (dependent variable CAR) Random effect model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	59.8484	18.8187	3.1803	0.0030
DIVIDEND	-0.0091	0.0272	-0.3342	0.7401
LAR	-0.4559	0.2285	-1.9950	0.0534
LDR	0.5491	0.2044	2.6869	0.0107
NPLLR	0.0162	0.0686	0.2356	0.8151
ROA	-1.2322	0.3614	-3.4099	0.0016
ROE	0.1158	0.0771	1.5026	0.1414

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SIZE	-0.6052	0.2042	-2.9632	0.0053
R2	0.751195			
Adj. R2	0.704124			
F-stat.	15.95872			0
Durbin- Watson	0.690088			

The regression results of random effect regression are reported in Table 5 mentioned above. The dependent variable (CAR) is the Capital Adequacy Ratio. As shown in Table 5 Adj. R-squared value (0.7041) suggests that model serves its purpose in determining the impact of specific variables on Capital Adequacy Ratio. In other words, 70.41% variability of the capital adequacy ratio can be explained by the DIVIDEND, LAR, LDR, NPLLR, ROA, ROE, and SIZE. The DW statistic in our output of random effect model is 0.6901 and this result confirms that residuals are serially correlated. With computed F-value of 15.9587 ($p<0.000$) for the panel data regression, we reject the null that all coefficients are simultaneously zero and accept that the regression is significant overall.

Coefficients estimate in Table 6 shows that- variables DIVIDEND, LAR, NPLLR, and ROE do not have any impact on capital adequacy ratio. Liability/ assets (SIZE) has a significant and negative relationship with capital adequacy ratio. This result represents that large banks have lower regulations than small size banks. ROA has a significant and negative relationship with capital adequacy ratio, and LDR has a significant and positive relationship with capital adequacy ratio. The coefficient of ROA indicates that a unit increases in profitability decreases the banks' capital by (-1.2322) units, coefficient of LDR indicates that a unit increases in LDR increases the banks' capital by (0.5491) units and coefficient of Size indicates that a unit increase in bank's Size decreases CAR by -0.6052. To sum up our regression results, SIZE, LDR, and ROA seem to affect capital adequacy ratio. On the other hand DIVIDEND, LAR, NPLLR, ROE do not appear to have significant effects on capital adequacy ratio.

Conclusion

The main objective of this paper is to investigate empirically the determinants of CAR in five conventional Kuwaiti banks. This study used secondary data from annual reports of the sample banks. Time study period was nine years, from 2005 to 2013, due to the fact that CAR became officially required by Kuwait Central Bank in 2005 and onward. Panel data regression is used in this study and analyzes relationships between bank specific variables: (Loans to Assets, Loans to Deposits, Non-Performing Loans to Total Loans, ROA, ROE, Dividend Payout and Total Liability to Total Assets) and a dependent variable which is CAR.

The study shows that under fixed effect model, variables DIVIEDEND, LAR, LDR, NPLLR, and ROE do not have any impact on capital adequacy ratio. However, SIZE has a significant and negative relationship with capital adequacy ratio. This result represents that large banks have lower regulations than small size banks. Also, ROA shows a significant and negative relationship with capital adequacy ratio.

Moreover the results under random effect model indicates that CAR is to be adversely affected by bank's SIZE (total liability to assets), which means that large banks have low supervisory control on their capital adequacy ratio (CAR). Also, ROA has a significant and negative relationship with capital adequacy ratio, which suggests that the higher the profits of local banks the lower the need for more capital to absorb losses. However, LDR showed a significant and positive relationship with capital adequacy ratio, which suggests the cautionary move of local banks towards lending by maintaining more capital to overcome sudden losses.

Finally, we can argue that findings of our study reflect the actual status of commercial banks in Kuwait under study; also they suggest the urgent need and high importance of conducting more research in the future to observe and determine the exact effect of these ratios after allowing a long period of time of reporting capital adequacy ratios in Kuwaiti banks since the implementation of capital adequacy ratio is considered a new requirement by Central Bank of Kuwait. Furthermore future studies should include other variables not included in this study as financial leverage multiplier, and return on deposits ratio, as well as working on measuring capital to deposits ratio or capital to debts ratio along with variables of the current study. Lastly, final report of financial statements and data should include rules and basis on which capital adequacy measurement is based, which will lead to raising banking and finance awareness that will enhance banks competitive positions with regional and international banks.

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DEVELOPMENT OF THE SHADOW BANKING SYSTEM IN ZIMBABWE: A BLESSING FROM THE SHADOWS?

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Abstract

The rising of shadow banking institutions in Zimbabwe has been very quick for formal banking institutions and regulators to strategise against the threats that came with their development. This study applied qualitative data analysis and find that, the growth of a shadow banking system was market driven. Lack of confidence and financial innovation on the mainstream banking system to structure financial products that improve intermediation gave space for shadow banking growth. In response to this development, the researcher recommended that regulatory focus should be on the functions of shadow banks rather than institutions; this will be more inclusive and efficient in avoiding innovative creation of new entities that perform the same shadow banking functions. Also, the Zimbabwean formal banking system should be innovative in-line with the development of the international banking models.

Key Words: Shadow Banking, Intermediation, Regulators, Monetary Aggregates

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Introduction

The shadow banking sector has fast become an integral part of the global financial system. This research sought to explore the development of shadow banking and how its growth has affected the operations of the traditional banking system. The architects of the shadow banking system are constantly seeking new avenues to evade regulatory oversight and controls. It is vital therefore, that regulators ascertain the driving forces behind the development of shadow banking and its implications to the formal banking system. Professional bankers, finance geeks and lawyers have been devising banking products and transactions that easily bypass any new rules and regulations passed. This shows the magnitude of the challenges faced by regulators and policy-makers in regulating the shadow banking sector. To this background, shadow banking has become a burning issue that should be pro-actively addressed to avoid regulators coming up with post-crisis policy reforms, because the shadow bankers are likely to have found a way to bypass them.

The recent shift in the banking paradigm in Zimbabwe has seen a sudden boom in shadow banking entities. These have been characterized by lack of disclosure of information about the nature and value of their assets, ownership structures and their opaque governance. Shadow banks offer bank-like products which have threatened the operations of the traditional banking system. Since they have been subjected to little or no prudential regulatory and supervisory authorities, there have been a number of policy initiative to improve monitoring and regulation. The coming of shadow banking institutions has been very quick in Zimbabwe, leaving formal institutions with little time to strategise for the threats that this development comes with. It was therefore imperative to assess and analyse the threats and the possible strategic response measures that the formal banks will have to adopt.

The general objective of this study was to examine the threats posed by the shadow banks to the formal banking system. In pursuit of this general objective, the following specific objectives were drawn; firstly, to determine the drivers behind the development of shadow banking over the years; secondly, to examine the strategic response measures by the formal banking institutions to the development of shadow banking; and lastly, to evaluate regulatory responses to the development of shadow banking.

Literature Review

The activities, institutions and vehicles that compose the shadow banking system constantly evolve over time and from one economy to another. The shadow banking intermediation process involves huge networks of investment banks, finance companies, money market funds, hedge funds, credit rating agencies, pawnbrokers and micro-credit.

The birth of the shadow banking system can be trace back to the development of money market funds in the 1970s, when the money market accounts functioned largely as bank deposits whilst they were not regulated as banks (Schwarcz, 2012). Shadow banks first caught the attention of many experts because of their growing role in turning home mortgages into securities in the USA prior to the Global Financial Crisis (GFC). The securitization chains which started with the origination of a mortgage that were then bought and sold by one or more financial entities revealed the how complicated shadow banking institutions could be (Rick, 2010). Almost all the stages, from creation of the mortgages to sale of the securities took place outside the direct view of regulators.

The term ‘shadow banking’ is believed to have been coined by economist, Paul McCulley in his 2007 Annual Financial Symposium speech hosted by the Kansas City Federal Reserve Bank in Jackson Hole, Wyoming (Pozsar, 2010). However shadow banking elements has always been existent both locally and globally. According to Pozsar (2010), the shadow banking system is a web of specialized unregulated institutions that channel funding from savers to investors through a range of securitization and unsecured funding techniques. Although shadow banks and all the institutions that constitute the shadow banking system conduct credit and maturity transformation similar to that of traditional banks, they do so without the direct and explicit public sources of liquidity and risk insurance available through the central bank (Pozsar and Adrian, 2010).

These definitions are infact relative and subjective because the composition of the shadow banking system tends to differ depending on the banking environment of an economy. Pozsar’s shadow banking definition included mutual funds, stock exchanges, hedged funds, broker-dealers, microfinances and any other institution that securitise assets. In this study, any financial institution that is formally registered and monitored by a regulatory authority is excluded from the shadow banking bracket.

Goodenough (2012) pointed that shadow banks are regarded as non-depository institutions, they have been subject to less prudential regulation than traditional banks, therefore there was no guarantee whether they kept high financial reserves relative to their market exposure or not. Shleifer and Vishny (2013) argues that, lack of prudence in these institutions left them with very high level of financial leverage and a high ratio of debt relative to the liquid assets available to pay immediate claims. High leverage magnified profits during boom periods and losses during downturns. This high leverage would not be visible to investors which meant shadow institutions would be able to create the appearance of superior performance during boom times by simply taking greater pro-cyclical risks. Though money market funds had zero leverage, they did not pose this risk feature of shadow banks.

The European Central Bank (2013) stated that, since these unregulated institutions use a lot of short-term deposit-like funding but did not have deposit insurance like mainstream banks; their downside exposure to loss of confidence could lead to extreme runs which might destabilise the whole financial system. Krugman (2013) support this view, further citing that a run on shadow banks was the core cause of the global financial crisis of the late 2000s. Shadow banks' collateralized funding was also considered a risk because it could also lead to high levels of financial leverage. By transforming the maturity of credit, such as from long-term to short term, shadow banks fuelled real estate bubbles in the mid 2000s that caused the global financial crisis when they burst.

Ghosh (2012) asserts that shadow institutions were being sponsored and guaranteed by commercial banks who borrowed from investors in short-term, liquid markets so that they would have to repay and borrow again at frequent intervals. On the other hand, they used the funds to lend to corporations or to invest in longer-term, less liquid and toxic assets. Gorton (2010) present evidence that shadow banking assets declined significantly in value as housing prices declined and foreclosures increased in all developed economies during the 2007–2009 crisis.

The literature envisages that risks in the shadow banking system are unavoidable and highly contagious. It can quickly spread to regular banks, which are linked to shadow banks in several ways in the ownership and provision of credit lines. In other instances, it is evident that some banks are dependent on the shadow banking system for their own funding requirements. For example, Dutch banks resort to the financial markets to finance their loan portfolios, as the volume of Dutch savings is too small to meet traditional mortgage funding (FSB report, 2013). The development of securitised complex shadow structured products becomes inevitable to enable loans to be sold or used as collateral for alternative financing structures.

Research Methodology

To achieve the aim of this study, a broad range of data was required which could possibly be gathered through a survey. The study adopted a cross sectional descriptive survey research method; interviews and questionnaires. All unclear and hanging issues in the questionnaires were clarified in interviews. Since the research was centered on analysing threats of shadow banks, the research had statistical analysis of the monetary aggregates and total formal bank loan-to-deposits balances.

The researcher targeted shadow banking participants such as unregistered moneylending companies, well known loan sharks, unregistered lending clubs and pawn brokers who directly affected formal banks in their daily trading. Hence they were in a position to comprehend and appreciate the level of financial market dynamics. Economic consultants and analysts were also targeted because they had knowledge about the banking system and were likely to provide informed views and opinions. A number of finance scholars were also consulted since many of them could comprehend how the shadow banking system operates.

Considering that there was limited comprehension of the shadow banking by the general masses, a sample of knowledgeable individuals was randomly drawn. Amongst them were; twenty economic analysts, twenty finance and credit analysts, ten pawnbrokers, ten lending club members, five unregistered moneylending managers and ten other knowledgeable scholars was used in this analysis. On the distribution of research questionnaires, greater consideration was put on how active they were in the shadow banking market. A total of ten interviews were held; four commercial bank analysts, four shadow banks clients and two shadow bank managers. The same questionnaire with nine short, precise and skilfully designed questions was used as interview guide.

Results

Results of the qualitative study show that there was no particular pattern or trend in the growth of shadow banking system. However interpreting the fundamental elements of shadow banks, their development have no negative impact on amounts held by the institutions save for the slow growth noticeable in virgin money activities during this period. The slow growth in traditional banks could not be attributed to shadow banking boom but rather to depletion of disposable income in Zimbabwe's economic downturn.

Unregistered moneylenders became very popular due to lack of feasible alternative investment options for the working class with surplus funds wanting inflation indexed investments. This could be the evidence of the 95% boom in virgin money coming into the shadows. Lending clubs remained popular during this period as they proved to be a better option to raise capital for new or struggling small businesses. They also proved to be a safe way to earn some secured interests for members with surplus cash. The high interest rates charged by shadow banks averaging 25 % per month attracted more investors into the shadow banking market to fund these lucrative businesses. However the short term loan durations means high risk as borrowers had high chances of defaulting on repayments.

Evidence from Zimbabwe showed that regulatory arbitrage and formal banks deposits growth was irrelevant to the growth of shadow banks. Attention could be drawn to the need for small business capital to people viewed to have insufficient creditworthiness and negative credit history. This researcher found out that the majority of shadow banking clients were financially illiteracy and were often unable to analyse the real cost of borrowing and the default risk parameters associated with borrowing as well as lending funds to shadow banks. They were also unable to quantify non-monetary costs, putting into consideration only literal rates presented to them by shadow bankers.

The study also found out that a number of shadow bankers were formal banks' customers which shows that the formal banking system has been a victim of its own child. They borrowed from the banks for onboard lending. Since they had knowledge of the bank lending process and also with the assistance of insiders, they borrowed large sums of capital from the bank at subsidized rates and lend for a profit. The most cited example was the owner of Hamilton Finance Pvt Ltd, Mr. Frank Buyanga, who received a US$100 million from a local bank to kick-start his micro lending business.

Conclusion

The development of shadow banking was made possible due to the banking market conditions in Zimbabwe. The interrelation between the supply and demand in banking markets facilitated the price formation using the information available from both sides of the market participants. The financially excluded; small businesses and individuals with negative credit history who were viewed as insufficiently creditworthy, were the major drivers of shadow banking. Their product invention techniques have been one driving force behind their growth. Shadow banks have served well the banking niche, making them a necessary element of the banking system. Also lack of confidence in the traditional banking system has led to deposit flight into the thriving shadow banks.

Formal banks responded to the growth of shadow banks through establishing their own divisions that offer banking services to the previously unbanked markets. They were also lobbying for the introduction of laws to govern the shadow banking operations in order to control systemic risk in times of banking crisis. A number of foreign oriented banks have also been innovative to attract deposits and to gain lost confidence in the traditional banking system again after the 2003 banking crisis.

The growth of an alternative banking system signaled problems and lack of financial innovation on the mainstream banking system to structure financial products to improve intermediation. Qualitative analysis in this research showed that shadow banks were directly a result of poor services offered by mainline banks. The fact that shadow banks remained favored regardless of high interests they charge borrowers and high risk profiles on savers shows that there was something that formal banks were missing. The shadow banking system continued to structure financial products from thin airs for which regulatory controls on them has failed; this means the formal banking system was also prone to systemic risk that can destabilize the whole financial system.

Recommendations for Further Study

Further research may evaluate the threats of shadow banking across borders since the financial markets are globalised; there are financial ties among countries. When the one country's financial environment becomes risky and less profitable, speculative savings fly to other havens. Therefore, regulation of the shadow banking sector in each country should be concerned about harmonizing regulatory measures across borders. Also, further research can consider financial strategies to adapt to new challenges, responses to new developments in the financial market, designing mechanisms of assessment and evaluating the effectiveness of adopted models of regulation and actions. Systemic risk across the borders occurred in 2008 when the US investment bank, Lehman Brothers collapsed, triggering the financial crisis which developed and spilled over to the entire global economy.

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IMPACT OF BANKING INSTITUTIONS ON NATIONAL ECONOMY AN EMPIRICAL STUDY OF TIME SERIES ANALYSIS IN PAKISTAN

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Abstract

This paper examines the long and short term relationship of financial sector development on economic growth of Pakistan where development of financial sector is detected by the variables truly depicts the efficiency of financial sector i.e. Money Supply, size of Advances, Private sector Credit growth and Bank's equity with economic growth which is pronounced by Gross Domestic Product in this study. Data of almost 22 years ranges from 1992 to 2013 of overall banking industry is taken to obtain results by employing Johnson and Jusellious co integration technique to detect long run association while Granger Casualty test is used to determine cause and effect relationship and to measure short term dynamics Vector Error correction model is used. The result shows that both long and short run relationship exists between growth of financial sector and economy of Pakistan.

Key Words: Net interest income (NII), Non performing loans (NPL), Advances (AD), Equity (EQ), Gross Domestic Product (GDP) and Co integration Johanson and Jusellious

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1. Introduction

A Financial system that operates in a global, regional and at a firm specific level in an economy allows transferring money between investors and borrowers (Sullivan 2003). Gurusamy 2008 describes financial system as "a set of complex and closely interconnected financial institutions, markets, instruments, services, practices, and transactions." Banking company's ordinance 1962 Pakistan describes banking as to accept money for the purpose of lending or investment. Banks at one side helping government to meet its fiscal deficit and on the other side Banks provide loans to consumers and business for meeting their operating expenses and to enhance their scope of business. It is obvious that in any country an efficient financial system is a guarantee of quick economic growth. Likewise, previous studies reveals that there is strong link existed between an efficient financial system and economic growth of different economies.

In Pakistan since partition in 1947 Government owned financial institutions that had been ruling the overall banking industry, fulfilling financial needs of government, public and private enterprises (Khan 1995). It is witnessed in many other parts generally but particularly in Pakistan government owned banks leads to an inefficiency in banking sector on account of concentrated ownership of financial assets, undiversified portfolios of consumer and mortgage financing, limited product line, high taxes (Haque 1997). As banks are the credit generating machinery in any economy which is witnessed in Pakistan's scenario as inefficient resultantly led to low savings and investment which further results low growth in Private sector (Khan 1995).

A number of studies also revealed that there is the significant relationship exists between financial sector development and reformation with the economic prosperity and stability. It is rule of thumb a nation carries a good financial system have a greater likelihood of economic development. It is also evident that a financial system in any country is relatively highly regulated sector. In Pakistan State bank is acting as central bank and regulating nearly the whole financial system.

To avoid systemic risk and overall recession it has pivotal importance that the banks may generate sufficient amount of credit to provide liquidity to private sector on the similar time they overcome the perils associated to sanction this liquidity. It is guaranteed that for an efficient functioning of financial markets a strict supervisory and secure regulatory system may prevail (Caprio and Klingebiel, 1997). Similarly the reformation of financial system in consonance of the market based risk and to overcome distortion in market is very important (Mavrotas and Kelly, 2001). Financial sector in Pakistan remained under a continuous reformation process since early nineties, the objectives of these reforms were to maintain efficiencies, gearing up growth and to remove inefficiencies of financial institutions (Faruqi, 2007). In order to improve the financial system of Pakistan, Government took multiple steps at Macro level for economy and restructuring program for financial system in consonance of advice, technical support and Banking sector adjustment Loan (BSAL) in 1996 of international agencies such as World Bank, IMF and Government of Japan.

The reforms in banking sector starts with the birth of Central Bank State bank of Pakistan from 1st July 1948 when Reserve bank of India has been serving as central bank of Pakistan right after the partition. State Bank of Pakistan Act was passed from Parliament in 1956 later Baking companies ordinance 1962 lay the foundation of regulatory requirement of financial institutions in Pakistan in short span of time of Pakistan's independence.

Ishrat Hussain (2005) Before current spell of banking reforms that started in early nineties Banks in Pakistan nourishing only basic needs of government organization, serving only those corporations influenced by politicians, there was no concentration on SMEs, agriculture sector which is the biggest sector in terms of employing people and likewise housing sector of Pakistan. Banks in Pakistan were fallen prey of administrative distortions and regulatory weaknesses. The main reason was that the banks were used to concede loan to government because it was the safest mode of lending that brings good returns resultantly banks were making good profits, Secondly government owned most of the banks which were overstaffed and victim of less staff productivity and bureaucratic approach. Thirdly recovery rate was slow loans had not been sanctioned on merit but on political influence and fourthly a high tax rate 58 Percent were charged to banking industry irrespective of 35 were being charged to corporate sector is also one of the major reason of inefficiency consequently low deposit and high lending rates charged to customers which also add NPLs and discourage new entrants in market. The reforms which changed banking sector Pakistan were privatization of Nationalized commercial banks (NCB)except one i.e. National Bank of Pakistan hence domination of banking sector by NCB were reduced from 100 % in 1991 to 20 % in 2004 even the only nationalized bank National Bank is also floated for its equity in stock exchange up to 23.5 %, Restructuring of corporate governance of banks, Capital requirement were reset to ensure an adequate amount of capital must be acquired by the bank to absorb anticipated shocks that was raised from 500 million to 1 billion and it was raised again up to 2 billion till Dec 2005 at present capital requirement is revolving around 10 billion till 2014, Quality of assets were improved, foreign exchange regime was liberalized i.e. Pakistani corporations were allowed to acquired their capital to move abroad and FDI was being received in consideration that the repatriation of capital, profit and dividends are allowed, Consumer , SME and Micro financing was promoted and revamped, Tax rate was reduced from 58 % to 41 % and thereafter it had to be matched with corporate tax rate, Agriculture sector was reorganized by enhancing scope from production loans of inputs the entire value chain, Islamic Banking as a secure piece of financial system commenced again as parallel to the conventional banking so that the people can't compromise their religious bindings, E banking was introduced the network of ATMs were enhanced and state of the art technology were used to develop for new products, best Human resource were injected and culture of nepotism was eradicated, requirement of credit rating with approved credit rating agency was kept as mandatory, supervision was enhanced, New payment system with the name of real time Gross settlement (RTGS) was introduced.

Roughly in Pakistan financial system was reformed in different phases since 1991 after amendment in Nationalization act of 1974. There is the need to ascertain the fact that what type and level of association exists between the era when financial system was revamped and its impact of national economy of Pakistan. There are many studies available which traces the impact of financial sector development and reform on national economy but particularly in reference of Pakistan no significant work is carried out.

The objectives of the study are to analyze the long and short term relationship between financial sector development and economic growth in Pakistan during the period of 1994 till 2013 and to facilitate other researchers and regulators to set their direction in light of the outcomes of the study. This study is further divided into 5 parts the second part of the study right after introduction covers the literature review afterwards the methodology is discussed in third part. Fourth part illustrates different tests and discussion of results after employing these test and last part comprises of conclusions of study.

2. Literature Review

Din and Khawaja (1995) used generalized least square method on pool data to determine the interest spread. Their findings were interest spread doesn't influence the performance of banking sector even no significant impact was calculated on other financial sectors being served as other alternative to banks for small savers like development financial institutions and investment funds. They compiled their results by using non performing loans, administrative cost, GDP growth, inflation, interest rate, market share and equity.

Khatib et al (1999) determined the association between performance of commercial banks and economic stability of Qatar by using the variables i.e. profitability of bank, Foreign interest rates, equity of banks, GDP, Government revenues and expenditures. He used conventional technique Ordinary least square to run regression analysis and Granger Causality to find out the cause and effect relationship. As per opinion sought from research work, there is the positive relation exists between banks and economic growth.

Demig Kunt and Levine (1999) compiled a diversified study covering 150 countries and observe that financial sector of richer countries depicts a unique proposition where stock markets behave more actively than banks. They used aggregate index of financial system in different countries and prefers to compile their study without analyzing the relationship between variables directly which depicts financial soundness and economic growth instead they tried to be focused on cross country interrogation of performance of relative bank and market based growth structure. They were unable to find a relationship between financial structure and economic growth.

Poshakwale and Qain (2007) examined the impact of financial reforms on efficiency of banking sector growth and assertiveness. He also found the long and short run relationship of financial reforms on economic growth of Egypt during 1992 to 2007. Results produced suggested that there is a positive and significant impact of reforms on economic growth. His further findings were domestic banks or government banks have been working more expeditiously than private or foreign banks.

Ozturk, Ilhan (2008) studied financial development and economic growth of Turkey for the period of 1975 till 2005. They investigated causality analysis and used co integration technique to compile research results. Their findings were there is no long run relationship exists between financial development and economic growth in Turkey.

Bitzenis (2008) used surveys in Serbians banking industry to examine pre and post performance factors of reformation of banking system, efficiency and quality of management. He concluded that there is the positive relation exists between reformation of banking system and its contribution for economic growth. He also added problems and challenges confronted by the current system.

Gabriel et al (2009) used quarterly data of seventeen years pertains to information on all loans sanctioned to different non financial firms of Spain and found that both adverse economic conditions and contractionary monetary policy reduced loan supply particularly for the banks being operated with low liquidity to total assets and capital.

Inekwe, Murumba (2009) finds that in developing economies like Nigeria a significant relationship exists between in real GDP and Non performing Loans, Government should take measures to revise GDP growth i.e. infrastructural development, moderate interest and exchange rate and improve regulatory role of related agencies.

Mwenda and Mutoti (2009) investigate the effects of market-based financial sector reforms on the competitiveness, efficiency of commercial banks and economic growth of Zambia by using the variables such as per capita income, GDP and inflation. The results provided that an endogenous growth model pronounces industrial production is a key for GDP growth. In first stage the results shown that structure adopted maximize the regulatory and monitory role, payments and remittances and other financial operations of banking sector. Thereafter in next stage a comprehensive financial sector development regulations were employed which had significant and positive effects on banking cost efficiency. In last stage it was revealed that degree of economic freedom and rate of inflation were significantly impact on economic growth.

Malik (2010) studied in a similar fashion but in opposite direction that the impact of recent global recession and its consequences. He concluded that banking industry in Pakistan is facing a number of challenges and its further extension is a question mark. Global financial crises, cost of borrowing, devaluation of Rupee, low profit margins, Bad law and order and risk on investment are the basic causes which is prohibiting investors to take challenge in Pakistani markets

Kayode et al (2010) curtailed the scope of his work up to the credit sanctioned by Nigerian's bank for manufacturing sector and determined the impact of manufacturing output on economic growth. He used Vector Error Correction Model (VECM) and co integration technique to detect the short and long term relationship of time series data spread over a period of 36 years from 1973 to 2009. It is transpired that although there is a strong association exists between bank lending and production growth of manufacturing but he urged the role of central bank to implement monetary policy for capping upper limit of borrowing rate and to create competitive environment.

Yazdani (2011) examined the impact of private banks on economic growth of Iran. He used variables like cash, investment, profitability and economic growth to run analysis. He made different hypothesis and determine the significance of hypothesis which further reveals the performance of private banks on economic stability of Iran. He used Spearman and Pierson correlation on secondary data of private banks. The Hypothesis results confirmed that a positive correlation exists between the variables.

Aurangzaib (2012) used data of 30 years pertains to 10 commercial banks of Pakistan, the results he produced with the help of ordinary least square and Granger causality, investigating the impact of performance of banking sector on economic growth. He indentified that banks performance in shape of deposits, interest earnings, advances, profitability and investment on economic growth has a bidirectional casual relationship between banks performance and economic growth. It confirms that banking sector influence economy directly and policy makers must focus on enhancement of banking sector in Pakistan.

Abubakar and Musa Gani (2013) brought another point of view that the only reforms in banking sector couldn't bring the desired results. In Nigeria, commercial bank holds 90 % of the financial assets. Bank credit is not being utilized by private sector due to high cost of borrowing, concentration of bank credit to a limited scale of business mix i.e. communication and oil and gas in particular. The main buyer of bank credit is government as 50 % of this credit is sold to government to meet fiscal needs. They compile the results by using the data of 40 years from 1970 to 2010 by using Johansena dn juselius 1990 approach of co integration and VECM. They found that a long run relationship exist between financial development and economic stability. The other part of his work covers the aspect that two element are the main reason of crowding out.

Zafar Iqbal et al 2012 compiled a study to monitor the impact of credit to private sector and found that increase in gross domestic product is greatly influenced by increase in savings and credit to private sector, he uses ARDL approach of co integration to detect long and error correction model for short rum association between economic growth and private sector credit and savings. He studied particularly in Pakistan's scenario and trace the period of 1973 to 2007.

3. Data and Methodology

On the basis of our literature review it is presumed that the five variables can precisely trace the overall efficiency of financial sector and economy. Here, we choose growth of financial sector in terms of Money Supply (M2), Equity (CAP), Private Sector Credit (PSC) and Investment made by Banks (INV) with economic growth where Gross Domestic Product (GDP) is taken as proxy as an indicator of economic growth. In this study the post era since 1991 of amendment in nationalization act 1974 of Pakistan is kept as the period of study. Hence data is gleaned on semiannual basis since 1992 to 2013 and compile for obtaining results with the help of the software E views to captures the short and long term association of development of financial sector and economic growth. This study is meant to discover relationship between developments in financial sector with economic prosperity where conventional estimation Ordinary Least square is routinely used to find the strength of the relationship but produce spurious results if regressed for a non stationary series, a series is said to be stationary if revolved around its mean value with a tendency to converge towards its mean value (Engle and Granger1987).

Unit Root Test is used to check the stationary of a series here in this study Augmented Dickey Fuller test is used to test unit root is frequently used to check stationary of a complicated series. It is based on the presence of auto regressive mode in unit root is a condition of Dickey fuller. As regards co integration it is based on the analysis to find the presence of an equilibrium relation between variables because an economic time series may wander with passage of time and there is the likelihood that a linear combination of variables converges to equilibrium. If the condition persist is called variables are co integrated. The Johansen (1988, 1991), Johansen and Juselius (JJ) (1990) tests are used to find the maximum likelihood ratios while Engle-Granger (1987) test is used to evaluate the residual based long run relationship between variables. JJ test is used to find the no of co integration relationship between the variables.

Value of null hypothesis of co integration vector is represented by Eigen value used to explore the existence of co integration in comparison of alternate hypothesis or in other words maximum Eigen values are derived through E views software which should be greater than critical value if is supposed to be vectors are co integrated. Lag length is chosen before employing JJ co integration. In this study Granger Causality is also employed to direction and association between or among the variables and it also provides that whether one time series is helpful to forecast other. Likewise to determine short run dynamics Vector error correction model is used which adds error correction features to a multi factor model such as VAR vector auto regression. In VAR each variable has an equation explaining its evolution based on its own lags and the lags of all the other variables in the model. VECM is allowed to consider overall co integration without normality and specification of dependent and independent variables to determine misspecification and short run relation.

$$GDP = \beta_0 + \beta_1 M2 + \beta_2 CAP + \beta_3 PSC + \beta_4 INV + \mu t \qquad (1)$$

Here,
GDP = Real Income
M2 = Money Supply
CAP = Capital introduced by Banks
PSC = Private Sector Credit
INV = Investment made by Banks
μt = Random Error

The β's are the elasticity of Money Supply (M2), Capital (CAP), Private Sector Credit (PSC) and Investment (INV) and μt is error term.

There are several authors suggested there is positive and long term relationship exists between the growth of financial sector and economy because the loan conceded by commercial banks provide convenience and equity to expand their size of business which ultimately increase income that adds on economy.

4. Discussion of Results

Table 1. Variables of the research

Variable	Augmented Dickey Fuller	
	Level	1st Difference
Cap	-0.857788	-6.44215*
GDP	-1.494805	-3.819775*
INV	1.47976	-5.280734*
M2	4.047247	-5.382983*
PSC	-0.835404	-2.726472**

Note: The * indicates significance at 1%, ** at 5% and *** at 10%

After being carried out the Unit Root Test through Augmented Dickey Fuller for all variables, it was assessed that the variables were not stationary and showing trend of different levels therefore 1st difference is applied and results depicted that the variables are integrated on the same order after 1st difference. As a prerequisite of Johansan and Jusellious co integration test where by all the variables should be integrated on the same order long run relationship is test between economic growth i.e. Gross domestic Product (GDP) and growth of financial sector.

Table 2. Multivariate Co integration Analysis Trace Statistics

Hypothesis	Eigen value	Trace Statistic	Critical Value 5%	
r = 0*	0.744512	120.1542	69.81889	**Vectors**
r ≤ 1*	0.511519	62.84183	47.85613	
r ≤ 2*	0.455318	32.75075	29.79707	**(CAP, INV, PSC and M2)**
r ≤ 3	0.158034	7.233496	15.49471	
r ≤ 4	0.000211	0.008846	3.841466	

After establishing the fact that all the variables are integrated on the same level, the next step is preceded which purported to find the long run relationship where the test called Johansen and Jusellious co integration test is applied between economic growth Gross domestic product and financial sector growth translated by Money Supply (M2), Capital (CAP), Private Sector Credit (PSC) and Investment (INV) which further interpreted by two test statistics i.e. trace statistics and maximum Eigen value. Multivariate cointegration analysis of trace statistics is used to evaluate the null hypothesis of *r* vector of cointegration against the *r* or other vectors of cointegration proposed by maximum likelihood.

Table 3. Multivariate Co integration Analysis Maximum Eigen Value

Hypothesis	Eigen value	Max-Eigen	Critical Value 5%	
r = 0*	0.744512	57.31236	33.87687	**Vectors**
r ≤ 1*	0.511519	30.09108	27.58434	
r ≤ 2*	0.455318	25.51726	21.13162	**(CAP, INV, PSC and M2)**
r ≤ 3	0.158034	7.224650	14.26460	
r ≤ 4	0.000211	0.008846	3.841466	

It is revealed from the results sought after applying co integration through E views that three co integration vectors are found on table 2 displaying the figures compiled for multivariate co integration analysis of trace statistics where trace statistics are greater than critical value at 5 % level of significance. Likewise for further elaboration Eigen values are assessed on Table 3 which also provides that three co integration vectors are formed by virtue of maximum Eigen values are greater than critical value at 5% level of significance. This further confirms that a long run relationship exist between economic growth and a growth in financial sector.

Table 4. Bi Variate co integration test

Pair wise co integration	Hypothesis	Eigen value	Trace Statistic	Critical Value (5%)	Remarks
GDP - CAP	r = 0*	0.459307	25.82598	14.26460	**Co integration**
	r ≤ 1*	0.003224	0.135626	3.841466	
GDP - INV	r = 0	0.333297	17.02727	14.26460	**Co integration**
	r ≤ 1*	0.013443	0.568429	3.841466	
GDP-M2	r = 0*	0.554924	33.99945	14.26460	**Co integration**
	r ≤ 1*	0.078637	3.439838	3.841466	
GDP-PSC	r = 0	0.236623	11.34012	14.26460	**No Co integration**
	r ≤ 1*	0.003355	0.141160	3.841466	

Table 4 shows a further detailed co integration on one to one basis where long run relationships are assessed between GDP the dependent variable in our study and each independent variable Capital, Investment. Money Supply and Private sector growth exclusively at 5 % level of significance, while 'r' is taken as co integration vector to ascertain null and alternate hypothesis. The results obtained in Table 4 describes that there is bivariate co integration exist between GDP with Capital, investment and Money supply as trace statistics are greater than critical value where as no co integration found between GDP and private sector credit as trace statistics are less than critical value.

Table 5. Pair wise Granger Causality Tests

Null Hypothesis:	F-Statistic	Prob.	Conclusion
INV does not Granger Cause GDP	0.28284	0.8868	Accept Ho
CAP does not Granger Cause GDP	0.73734	0.5737	Accept Ho
PSC does not Granger Cause GDP	2.32742	0.0782	Reject Ho
M2 does not Granger Cause GDP	0.54249	0.7057	Accept Ho

After detecting long run relationship it is further helpful to analyze cause and effect relationship to unfold unidirectional association. Table 5 represents the results complied through Granger Causality within the sample where $\chi 2$- Statistics and probability values shows presence of one unidirectional causality in GDP with money supply which describes that GDP can be predicted with money supply. However, a lacuna exists while using Granger causality that it can only be suitable to test causality within the sample period.

Table 6. Vector Error Correction Estimates

Error Correction:	D(GDP)	D(CAP)	D(INV)	D(M2)	D(PSC)
CointEq1	0.023246	6.07E-05	0.000408	0.333840	-0.069879
	(0.02234)	(1.5E-05)	(0.00013)	(0.09194)	(0.05580)
	[1.04037]	[3.92034]	[3.06905]	[3.63105]	[-1.25229]

Hence Error correction model brought in further assessment of date which provides short run dynamics of model. Table 6 provides that there is a considerable short relationship exists between GDP with capital, investment and money supply.

Conclusion

The study traces the period since 1992 to 2013 when financial industry is reformed and revamped, overall growth of GDP is progressed with a blend of precipitousness and stagnancy, on the other hand financial sector has also grown in numbers multiple times during the last 20 years. Modern banking and a highly competitive environment is evolved there are 36 schedule banks have been working till the end of 2013.

Our empirical results describes that a long run relationship exists between Gross domestic product and the components of growth in financial sector i.e. Capital, investment, private sector credit growth of commercial banks and money supply verified by the results generated by using Johansen multivariate co integration. Likewise pair wise bivariate cointegration confirms that long run relationship is also exists between GDP with money supply, investment and capital. Short run dynamics is also confirmed by vector error correction model describes a short run association exists between GDP with Capital, investment and money supply. Investment in Financial sector and implementation of monetary measures in a right direction can bring short and long run economic prosperity in country.

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IS THE MARKET SIZE HYPOTHESIS RELEVANT FOR BOTSWANA? VECTOR ERROR CORRECTION FRAMEWORK

Kunofiwa Tsaurai *

Abstract

The current study investigated the relevancy of the market size hypothesis of FDI in Botswana in Botswana using the VECM approach with data ranging from 1975 to 2013. The study used FDI net inflows (% of GDP) as a measure of FDI and GDP per capita as a proxy of market size. The findings of the study are threefold: (1) observed that there exists a long run uni-directional causality relationship running from GDP per capita to FDI in Botswana, (2) there is no long run causality running from FDI to GDP per capita in Botswana between 1975 and 2013 and (3) failed to establish any short run causality either from GDP per capita to FDI or from FDI to GDP per capita in Botswana.
Although, GDP per capita of Botswana was a conditional characteristic that attracted FDI, Botswana did not economically benefit from FDI net inflows during the period from 1975 to 2013. The findings defied the theory that mentions that FDI brings into the host country an improvement of human capital development and technology improvement among other advantages which boost economic growth. Possibly, there are other host country characteristics that Botswana needs to address if it hopes to benefit from FDI. The current study recommends further research to find out which are the other conditional characteristics that Botswana authorities need to put in place in ensure that FDI inflows is translated into economic benefits for the country.

Key Words: FDI; Market Size, GDP; VECM; Botswana

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1. Introduction

Quite a number of studies have so far investigated the determinants of FDI in the host countries. For example, investigating the determinants of FDI using annual time series data from 1960 to 2005, Ang (2008) observed that real GDP significantly attracted FDI whilst the growth rate of GDP negligibly positively influenced FDI in Malaysia. Other Malaysian factors that were found to have played a critical role in influencing FDI location decisions include financial development, trade openness and infrastructural development.

Using VECM approach and quarterly time series data from 1998 to 2009, Shaik and Shar (2010) observed a feedback effect between FDI, economic growth and exports in Pakistan. The same study also noted that higher levels of imports played a critical role in boosting FDI inflows and economic growth in Pakistan.

List (2001) employed the two step modified count data model to investigate the California of U.S. firm –level determinants of inward FDI with annual data ranging between 1983 and 1992. The study found that size of the market and land area to a greater extent influenced FDI inflows into the U.S. whilst higher input costs inhibited FDI inflow into the U.S. Yet stringent environmental regulatory framework had a negligible influence on FDI inflow into the U.S. (List, 2001: 969).

Larger size of a region's market and good infrastructure positively influenced FDI inflow in all Chinese regions whilst high labour cost achieved exactly an opposite effect (Cheng & Kwan, 2000: 396). Cheng & Kwan (2000) investigated FDI determinants in 29 Chinese regions during the period between 1985 and 1995 using the dynamic panel regression using regional income as a proxy for the size of a region's market and density of all roads as a measure of infrastructure.

However, literature that specifically focused on examining the relevance of the market size hypothesis of FDI is very scant. In particular, the author is not aware of any study that tested the relevancy of the market size hypothesis in Botswana.

The whole study is structured as follows: Section 2 reviews literature whilst section 3 discusses the trend of the relationship between foreign capital flows and market size (proxied by GDP per capita). Section 4 explains the research methodology, do data analysis and provide the findings of the study. Section 5 summarises the study whilst section 6 shows a reference list.

2. Review of Related Literature

The output and market size hypothesis was originated by Jorgenson (1963). The hypothesis mentions that foreign investment is lured by higher output levels of the multinational enterprise and gross domestic product of a country. In other words, a surge in the output and sales of a particular multinational enterprise already operating in the host country attracts additional foreign investment into that multinational enterprise. Higher levels of GDP of a host country attract foreign investment, according to the market size hypothesis.

A number of empirical studies agreed with the output and market hypothesis. For example, a panel data analysis study by Frenkel et al (2004) that examined the host and home country determinants of FDI inflow into 22 emerging economies found results that reinforced the output and market size hypothesis. Frenkel et al (2004: 297) observed that market size, GDP growth rate and risk profile determined FDI inflow in emerging economies.

Hsiao & Hsiao (2004) investigated the determinants of FDI inflow into China from the U.S, Japan, Hong Kong, Taiwan and Korea using panel data analysis. Their study showed that large market size was instrumental in attracting FDI inflows into China from the US, Japan, Hong Kong, Taiwan and Korea. Moreover, the size of the market attracted more FDI into China from the US and Japan, low labour cost attracted more FDI inflows into China from Hong Kong, Taiwan and Korea (Hsiao & Hsiao, 2004: 666 & 667).

Using cross section and provincial panel data analysis, Zhang (2002) analysed the impact of location characteristics and government policies on FDI inflow into China with data ranging between 1987 and 1998. "Huge market size, high labour quality, good infrastructural facilities, liberalised FDI regime, FDI incentive policies and historical-cultural connections with foreign investors attracted FDI inflow into China thus supporting the market size hypothesis"(Zhang (2002: 56).

Jensen & Rosas (2007) examined the causal relationship between FDI and income inequality in Mexico with ten year annual data ranging between 1990 and 2000 using the instrumental variables methodology which reduces problems of endogeneity and omitted variable bias. They found that a decrease in the income inequality gap was the chief main factor responsible for attracting FDI into all the thirty two states of Mexico as this ensured the majority of the people's purchasing power and demand of products increases (Jensen and Rosas, 2007:484). The same study also observed that FDI inflows into Mexican states contributed to a decline in the inequality gaps (Jensen & Rosas, 2007:481).

Janicki & Wunnava (2004) investigated the bilateral FDI between 15 European Union members (United Kingdom, Greece, Germany, Ireland, Italy, Spain, Portugal, Sweden, Finland, Belgium, Austria, Denmark, France, Luxemburg and Netherlands) and nine central and east European economies (CEEE) awaiting accession into the European Union which included Bulgaria, Czech Republic, Estonia, Hungary, Poland, Slovakia, Slovenia, Romania and Ukraine). Their study used total quantity of imports as a percentage of GDP of the host country as a measure of trade openness and log value of the host country GDP adjusted for the purchasing power parity (PPP) as an indicator of the size of the economy. They found that FDI inflows into the CEEE were influenced by trade openness, size of the economy, labour cost and the level of risk of the host countries, a finding consistent with the market size hypotheses.

Their study also observed that larger market size as proxied by GDP, infrastructural quality as measured by the total roads paved and human capital development as measured by student-teacher ratio were other variables that influenced the FDI location decisions in Turkey regions (Deichmann et al, 2003: 1772-1773).

Tekin (2012) in a study of the relationship between FDI and economic growth found out that GDP positively influenced FDI in Burkina Faso, Gambia, Madagascar and Malawi, a result that supports the market size hypothesis. The same study GDP was Granger caused by FDI in Togo and Benin.

On the contrary, quite a number of studies argued that it is FDI that have a positive impact on economic growth (size of the market). For example, Lucas (1988) stipulated that FDI is accompanied by the transfer of technology, know-how and the training of labour, all of which contributes to the accumulation of human capital and induce technological progress that helps the host country to achieve sustained and long-run economic growth.

"FDI brings along to the host country a bundle of resources that include organizational and managerial skills, market know-how, market access, technology and capital" (Kumar & Pradhan, 2002: 5). This was echoed by Romer (1986) who noted that FDI inflow is accompanied by technology transfer, know-how and improvement of labour skills.

Nath (2005) used the following cross-sectional regression model with time series data ranging from 1989 to 2003 to investigate the relationship between trade, FDI and economic growth in transition economies.

$$g_{i,t} = \mu_i + \beta' X_{it} + \gamma' Z_{it} + \varepsilon_{it} \quad (1)$$

Where $g_{i,t}$ represents real GDP per capita annual growth rate for country $\boldsymbol{i}$ in year $\boldsymbol{t}$; μ_i stands for the country-specific fixed effect; X_{it} represents a vector of variables of interest such as FDI, trade and domestic investment; Z_{it} is a vector of control variables.

According to Nath (2005:15), when the influence of FDI and trade combined on economic growth was estimated, the study showed that the two variables had a negligible effect on growth in transition economies. Yet, when trade was excluded to form a linear relationship, FDI significantly impacted on economic growth in transition economies through increasing capital accumulation and total factor productivity (Nath, 2005:16).

When the influence of FDI and trade combined on economic growth was estimated, the study showed that the two variables had a negligible effect on growth in transition economies (Nath, 2005:15).

Bogahawatte & Balamurali (2004) examined the influence of FDI on economic growth in Sri Lanka using the unrestricted vector auto-regression (VAR) to test for co-integration and the vector error correction model (VECM) to examine the causality direction between the two variables. The generic specification model that they used is represented in equation.

$$LY_t = \alpha_0 + \alpha_1 LFDI + \alpha_2 LDIN_t + \alpha_3 LOPEN_t + \varepsilon_t \qquad (2)$$

Where Y denotes aggregate real output; DIN stands for the gross fixed domestic investment less net FDI inflows (a proxy for capital stock); L represents the natural logarithms of the variables whilst FDI is a proxy for the quantity of FDI inflow. Ɛ is the error term.. OPEN is a proxy for trade openness defined as total exports and imports as a ratio of GDP.

Their study observed that FDI alongside trade openness exerted a strong positive influence on economic growth and economic growth in turn Granger caused FDI in Sri Lanka (Bogahawatte & Balamurali, 2004:47).

Feridun (2004) examined the impact of FDI on economic growth in Cyprus using the vector error correcting model (VECM) approach. Johansen multivariate co-integration framework was used to estimate the existence of a long run relation whilst Granger causality test was used to determine the causality direction between FDI and economic growth. The study showed not only a unidirectional Granger causality running from FDI to economic growth but that economic growth and development heavily relied on the quantity of FDI inflows into Cyprus (Feridun, 2004:656).

According to Li & Liu (2005) used the following basic model specification to investigate the impact of FDI on economic growth in 21 developed and 63 developing countries with data ranging from 1970 to 1999.

$$g_{i,t} = \beta_0 + \beta_1 \ln y_{i,65} + \beta_2 \mathrm{POP}_{i,t} + \beta_3 \mathrm{SCH}_{i,65} + \beta_4 \mathrm{INV}_{i,t} + \beta_5 \mathrm{FDI}_{i,t} + \mathrm{BX}_{i,t} + \varepsilon \qquad (3)$$

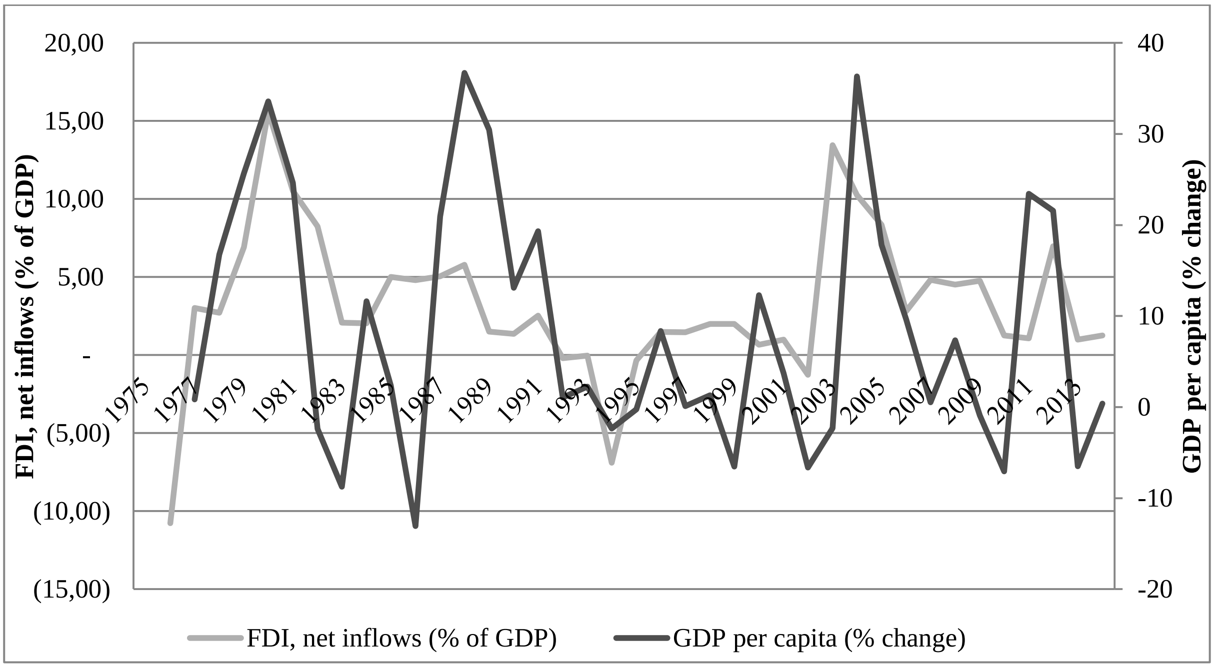
Where $g_{i,t}$ stands for real GDP per capita growth of country i; $y_{i,65}$ represents real GDP per capita in 1965; $\mathrm{POP}_{i,t}$ denotes population growth; $\mathrm{SCH}_{i,65}$ stands for the level of secondary school education in 1965; $\mathrm{INV}_{i,t}$ is the gross domestic investment to GDP ratio; $\mathrm{FDI}_{i,t}$ is the FDI inflow to GDP ratio; X represents the country dummies and policy factors that are normally included in the cross-country growth studies.

Their study found out that FDI positively influenced economic growth in a significant manner whilst the interaction of FDI and school attainment level also positively impacted on economic growth in both developing and developed countries. The study observed a strong complementality between FDI and economic growth in both developed and developing countries. The promotion of human capital, technological capabilities and economic growth would lead to more FDI inflows and this in turn promotes further economic growth and competitiveness, argued (Li & Liu, 2005:404).

3. Foreign capital flows and market size trends in Botswana

The current section describes the trends in FDI and market size (represented by GDP per capita) for Botswana between the period 1975 to 2013. FDI, net inflows (% of GDP) went up by 21.29 percentage points, from negative 10.77% in 1975 to 10.51% in 1980 whilst GDP per capita increased by a massive 146% (from US$431.66 in 1975 to US$1 063.51 in 1980 (refer to Figure 1). Furthermore, GDP per capita plummeted by 11.52%, from US$1 063.51 in 1980 to US$941.02 in 1985 whilst FDI, net inflows (% of GDP) declined by 5.71 percentage points during the same time frame to end the year 1985 at 4.81%.

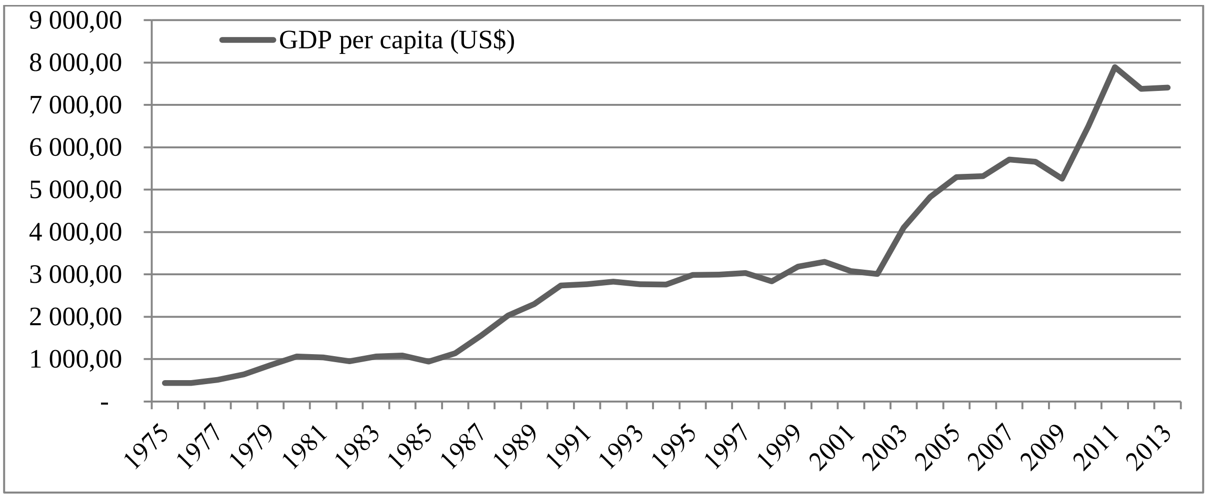
Figure 1. FDI, net inflows (% of GDP) and GDP per capita (% changes) trends for Botswana - 1975 to 2013



Source: World Bank (2014)

The subsequent five year period saw GDP per capita going up by 191.08% to end the year 1995 at US$2 739.07 up from US$941.02 in 1985. On the other hand, FDI, net inflows slightly went down by 2.28 percentage points, from 4.81% in 1985 to 2.53% in 1990 before marginally losing another 1.04 percentage points during the subsequent five year period to end the year 1995 at 1.49%. GDP per capita however gained by 9.07%, from US$2 739.07 in 1990 to US$ 2 987.52 in 1995 before further going up by another 10.38% (from US$2 987.52 in 1995 to US$3 297.48 in 2000 (see Figure 2).

Figure 2. GDP per capita (US$) trends for Botswana from 1975 to 2013

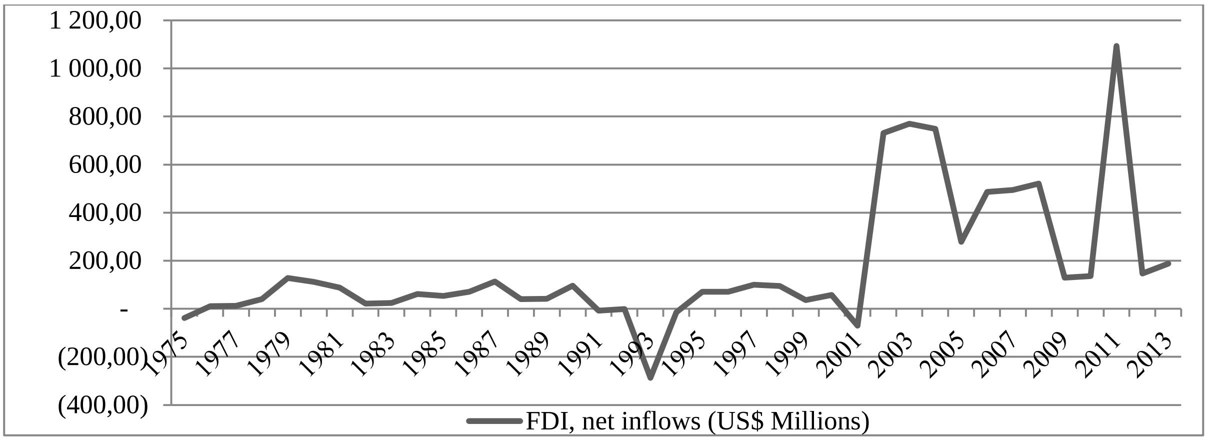


Source: World Bank (2014)

FDI, net inflows (% of GDP) slightly went down by 0.50 percentage points, from 1.49% in 1995 to 0.99% in 2000 before experiencing a rebound of 1.82 percentage points to close off the year 2005 at 2.81%. Furthermore, FDI, net inflow (% of GDP) declined from 2.81% in 2005 to 1.06% in 2010, representing a 1.74 percentage points fall. This was before FDI, net inflows (% of GDP) marginally gained by 0.20 percentage points, from 1.06% in 2010 to 1.26% in 2013.

GDP per capita further increased by 60.56% during the five year period ranging between 2000 to 2005. This represented a surge from US$3 297.48 in 2000 to US$5 294.38 in 2005. The GDP per capita gained by a further 22.64%, from US$5 294.38 in 2005 to US$6 492.87 in 2010. Last but not least, the three year period from 2010 to 2013 saw GDP per capita gaining another 14.15%. It increased from US$6 492.87 in 2010 to US$7 411.30 in 2013.

Figure 3. FDI, net inflows (US$ Millions) trends for Botswana from 1975 to 2013



Source: World Bank (2014)

4. Research Methodology, Data Analysis and Research Findings

This section dealt with data sources and proxies of the variables used, unit root tests, Johansen Test for Co-integration and Granger causality tests under the VECM framework.

Data Sources and Proxies

The study used time series annual data from 1975 to 2013 obtained from the World Development Indicators. The study used FDI net inflow as a ratio of GDP as a measure of FDI whilst GDP per capita was used as a proxy for market size. The auto-correlation which was found in the data at level was dealt away at first difference. The study employed E-Views 8 software package for data analysis purposes.

Unit root tests

FDI and market size data as measured by GDP per capita were non-stationary at level. However, both data variables were found to be stationary at first difference (see Table 1).

Table 1. Stationarity Tests of Variables on first Difference

Variable	Test Statistic – Trend &Intercept	Critical Values	
Stationarity Tests of Variables on first Difference - Augmented Dickey-Fuller - Test			
DFDI	-5.4703	-4.2627*	-3.5530**
DGDPPERCAPITA	-9.0509	-4.2436*	-3.5443**
Stationarity Tests of Variables on first Difference – Phillips-Perron (PP) Test			
DFDI	-27.4595	-4.2350*	-3.5403**
DGDPPERCAPITA	-20.3066	-4.2350*	-3.5403**
Stationarity Tests of Variables on levels – Dickey-Fuller GLS (ERS) Test			
DFDI	-8.6739	-3.7700*	-3.1900**
DGDPPERCAPITA	-9.2613	-3.7700*	-3.1900**

Note:
1) * and ** denote 1% and 5% levels of significance, respectively.
2) * MacKinnon critical values for rejection of hypothesis of a unit root.
3) The truncation lag for the PP tests is based on Newey and West (1987) bandwidth.
4) Critical values for Dickey-Fuller GLS test are based on Elliot-Rothenberg-Stock (1996, Table 1).

In other words, both FDI and market size data (GDP per capita) are integrated of order 1. Before running the Johansen-Juselius maximum likelihood test for co-integration to find the number of co-integrating vectors(s), both the two variables are supposed to integrated of the same order and this requirement was satisfied (refer to Table 1).

Johansen Test for Co-integration Test

The results of the AIC (Akaike Information Criterion) and SIC (Schwarz Information Criterion) tests indicate that the optimal lag of both FDI and GDP per capita is 1 (see Table 2).

Table 2. VAR Lag Order Selection

Criteria						
Endogenous variables: FDI GDPPERCAPITA						
Exogenous variables: C						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-428.1363	NA	81877501	23.89646	23.98443	23.92717
1	-362.6129	120.1261	2685876.*	20.47850*	20.74242*	20.57061*
2	-362.4638	0.256772	3336043.	20.69244	21.13230	20.84596
3	-355.3769	11.41790*	2828379.	20.52094	21.13675	20.73587

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

The Johansen co-integration test under Vector Auto-Regressive (VAR) environment is represented by the following equation.

$$\Delta X_t = \sum_{i=1}^{p=1} r_i \, \Delta X_{t-i} + \text{n}\,\Delta X_{t-1} + \varepsilon_t \qquad (4)$$

Where $X_t = 2 \text{ x } 1$ vector (FDI, GDP per capita) respectively. Δ = first difference operator, Ɛt stands for the 2 x 1 vector of residuals. The VECM model contains the long and short run information on the adjustment to changes in X_t through estimated parameters n and r_i respectively.

n ΔX_{t-1} is the error correction term. β stands for the vector of the co-integrating parameters whilst α is the vector of error correction co-efficient measuring the long run relationship.

Johansen co-integration test under Vector Auto-Regressive (VAR) environment uses the maximum eigen-value test and trace test) to examine the number of co-integration vectors (Johansen & Juselius, 1990).

Trace statistic examine the null hypothesis of *r* co-integrating equations against the alternative *n* co-integrating relations, where *n* is the number of variables in the system for r = 0, 1, 2…n-1. The equation for the null hypothesis of the trace statistic is given below.

$$LR_{tr} = -T * \sum_{i=r+1}^{n} \log(1-\lambda) \qquad (5)$$

The maximum Eigen value is represented by the following equation.

$$LR_{\max}(r/n+1) = -T * \log(1-\lambda) \qquad (6)$$

It tests the null hypothesis of *r* co-integrating equations against the alternative of *r-1* co-integrating relations for r = 0, 1, 2…n-1.

Where λ is the Maximum Eigenvalue and T is the sample size.

Table 3 and 4 shows the Trace statistic and Maximum Eigen value results.

Table 3. Unrestricted Co-integration Rank Test (Trace)

Eigenvalue	Trace Statistic	5% Critical Value	Hypothesized No. of CE(s)	Probability**
0.0021	0.0775	3.8415	At most 1	0.7807

**MacKinnon-Haug-Michelis (1999) p-values

The at most 1 null hypothesis says that there is at least one co-integrated equation in the relationship between FDI and GDP per capita. The trace statistic is less than the critical value at 5% significance level and probability is also more than 5%. Therefore the study cannot reject the null hypothesis meaning FDI and market size (GDP per capita) are co-integrated. In other words, the two variables share a common stochastic trend and they grow proportionally in the long run.

Table 4. Unrestricted Co-integration Rank Test (Maximum Eigenvalue)

Eigenvalue	Maximum Eigen Statistic	5% Critical Value	Hypothesized No. of CE(s)	Probability**
0.0021	0.0775	3.8415	At most 1	0.7807

**MacKinnon-Haug-Michelis (1999) p-values

The maximum-Eigen statistic is less than the critical value and probability is more than 5%. Therefore the study cannot reject the null hypothesis which says there is at least one co-integrated equation. This means that FDI and market size (GDP per capita) are co-integrated and they have got a long run relationship.

Granger Causality Tests

Although the Johansen co-integration test shows whether or not there exists a long run relationship between the two variables, it does not tell the direction of causality between FDI and GDP per capita. The VECM approach addresses this. In the current study, a VECM can be represented by the following two equations.

$$\Delta GDPPERCAPITA_t = \sum_{i=1}^{p=1} \beta_i \, \Delta GDPPERCAPITA_{t-i} + \sum_{i=1}^{p=1} \alpha i \, \Delta FDI_{t-i} + Z1^{*}EC1_{t-1} + \varepsilon_{1t} \quad (7)$$

$$\Delta FDI_t = \sum_{i=1}^{p=1} M_i \, \Delta GDPPERCAPITA_{t-i} + \sum_{i=1}^{p=1} N_i \, \Delta FDI_{t-i} + Z2^{*}EC2_{t-1} + \varepsilon_{2t} \quad (8)$$

Where: β_i, αi, M and N are the short run co-efficients whilst EC1 and EC2 are the long run co-efficients. The residuals in the equations (7) and (8) are represented by ε_{1t} and ε_{2t} respectively. $EC1_{t-1}$ is the lagged value of the residuals derived from the co-integrating regression of GDP per capita on FDI (Equation 7) whilst $EC2_{t-1}$ is the lagged value of the residuals derived from the co-integrating regression of FDI on GDP per capita (Equation 8).

Uni-directional short run causality from FDI to GDP per capita happens in the equation (7) if the set of estimated co-efficients on the lagged FDI (αi) are non-zero. Long run causality relationship running from FDI to GDP per capita happens if the error correction co-efficient (Z1*) of ECT1 is significant.

In the same manner, the short run causality running from GDP per capita to FDI occur in the equation (8) if the set of estimated co-efficients (M) are non-zero. Long run causality running from GDP per capita to FDI happen if the error correction co-efficient (Z2*) of ECT2 is significant.

FDI as a dependent variable whilst GDP per capita is an independent variable

Table 5. Dependent Variable: D(FDI)

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.501493	0.169353	-2.961234	0.0056
C(2)	-0.006265	0.141866	-0.044165	0.9650
C(3)	-4.38E-06	0.001700	-0.002577	0.9980
C(4)	-0.045023	0.704603	-0.063899	0.9494
R-squared	0.266222	Mean dependent var		-0.047838
Adjusted R-squared	0.199515	S.D. dependent var		4.243169
S.E. of regression	3.796356	Akaike info criterion		5.607766
Sum squared resid	475.6065	Schwarz criterion		5.781920
Log likelihood	-99.74368	Hannan-Quinn criter.		5.669163
F-statistic	3.990912	Durbin-Watson stat		1.958260
Prob(F-statistic)	0.015713			

C(1) is the error correction term or long run co-efficient or the residual of the one period lag residual of the co-integrating vector between FDI and GDP per capita. C (2) to C (4) stands for the short run co-efficients. The long run co-efficient C (1) is negative whilst the p-value is less than 5%. This means there exist a significant long run causality running from GDP per capita towards FDI.

Does a short run causality running from GDP towards FDI exist?

Using the Wald statistic, the null hypothesis is: there is no short run causality from GDP per capita to FDI. Table 6 shows that p-value of the Chi-square is 99.79% which is greater than 5%. This means that the study cannot reject the null hypothesis. In summary, there is no short run causality running from GDP per capita to FDI.

Table 6. Wald Test

Test Statistic	Value	df	Probability
t-statistic	-0.002577	33	0.9980
F-statistic	6.64E-06	(1, 33)	0.9980
Chi-square	6.64E-06	1	0.9979

Checking the efficiency of the model in which FDI is the dependent variable

Table 7. Checking the efficiency of the model

Normal distribution test	Heteroskedasticity test	Serial correlation test
Jarque-Bera = 26.73907	Observed R-squared	Observed R-squared
P-value = 0.000002	P-value =0.6725	P-value =0.5809

The model does not have serial correlation, using the ARCH test the model does not have heteroskedasticity and the residual of this model is not normally distributed. Generally, the model meets the majority of characteristics of an efficient model.

GDP per capita as a dependent variable whilst FDI is an independent variable

Table 8. Dependent Variable: D (GDPPERCAPITA)

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	0.010817	0.013282	0.814452	0.4212
C(2)	0.075870	0.183991	0.412355	0.6827
C(3)	2.895176	15.35074	0.188602	0.8516
C(4)	173.3703	76.24232	2.273938	0.0296
R-squared	0.046292	Mean dependent var		188.5419
Adjusted R-squared	-0.040408	S.D. dependent var		402.7326
S.E. of regression	410.7889	Akaike info criterion		14.97584
Sum squared resid	5568668.	Schwarz criterion		15.15000
Log likelihood	-273.0531	Hannan-Quinn criter.		15.03724
F-statistic	0.533934	Durbin-Watson stat		1.926755
Prob(F-statistic)	0.662238			

The co-efficient of the long run relationship C(1) is positive, the p-value is greater than 5%. This means the long run causality running from FDI towards GDP per capita does not exist.

Does a short run causality running from FDI towards GDP per capita?

The null hypothesis says that there is no short run causality from FDI towards GDP per capita. The p-value of the Chi-square is more than 5% which suggests that null hypothesis cannot be rejected (see Table 9). The short run causality running from FDI to GDP per capita does not exist.

Table 9. Wald Test

Test Statistic	Value	df	Probability
t-statistic	0.188602	33	0.8516
F-statistic	0.035571	(1, 33)	0.8516
Chi-square	0.035571	1	0.8504

However, the model in which GDP per capita is a dependent variable is not an efficient model because the study found it to have a serial correlation, heteroscedasticity and not normally distributed.

Table 10 provides a summary of the short and long run causality relationships between FDI and market size (GDP per capita) in Botswana.

Table 10. Long and short run causality in the VECM framework for Botswana – FDI and GDP

	GDP per capita→ FDI	FDI→GDP per capita
Long run	Yes	No
Short run	No	No

Conclusion

The current study investigated the relationship between FDI and market size (proxied by GDP per capita) in Botswana using the VECM approach with data ranging from 1975 to 2013. The study observed that there exists a long run uni-directional causality relationship running from GDP per capita to FDI in Botswana. Furthermore, the study noted that there is no long run causality running from FDI to GDP per capita in Botswana between 1975 and 2013. The same study failed to establish any short run causality either from GDP per capita to FDI or from FDI to GDP per capita in Botswana.

Although, GDP per capita of Botswana was a conditional characteristic that attracted FDI, Botswana did not economically benefit from FDI net inflows during the period from 1975 to 2013. In other words, the study supports the output and market size hypothesis of FDI in the case of Botswana. The findings defied the theory that mentions that FDI brings into the host country an improvement of human capital development and technology improvement among other advantages which boost economic growth. Possibly, there are other host country characteristics that Botswana needs to address if it hopes to benefit from FDI. The current study recommends further research to find out which are the other conditional characteristics that Botswana authorities need to put in place in ensure that FDI inflows is translated into economic benefits for the country.

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PUBLIC ADMINISTRATION REFORM IN CENTRAL AFRICAN COUNTRIES: THE WAY FORWARD

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Abstract

The paper observes the transformation of the political system from a single political to a multi-political party. The essence of this transformation was to accommodate another political culture within the system of governance in the country. This article analyses public sector administration reform in three countries of the Central Africa Region (Republic of Cameroon, Democratic Republic of Congo, and Republic of Congo. This paper will endeavor to respond to the following question: Why public sector reform in these three countries? Furthermore, the paper will also attempt to validate the need for public sector reform which should be undertaken when the government realises that there is a problem which needs to be resolved in the government institutions. The methodology used in this paper is solely based on the qualitative research approach which will help to understand the applicability of public administration reform in the Central Africa Region. The paper will argue that reform is extremely slow paced in each country. The situation in Cameroon is very complex due to decentralisation being legislated in 2004. However, there have been challenges with the implementation of the legislation governing decentralisation. The State President has personally appointed the majority of the governors and senior government officials in the various provinces. Since the new ministry in the Cameroon presidency assumed accountable public procurement, the 'other' reforms have been implemented and meeting the needs of the communities. The reform in the Democratic Republic of the Congo (DRC) also represents its own difficulties. Despite the enactment of the constitution in 2006, there is a distinct lack of reform in the public service. One of the key reforms for the current government is the decentralisation of government institutions. However, local government elections have not been held since 2006. Consequently, reformation has been extremely slow paced with limited reform in the last 8 years. The delegation of absolute autonomy to the provincial government with regard to the management of the provinces was a bold act by the DRC government which was well received by the citizens. In terms of public finance, central government has been faced by numerous challenges especially with the release of the provincial budget. Reformation in Congo Brazzaville has encountered many difficulties because of the lack of qualified human capital in the government institutions. Another critical factor which has contributed towards reformation is the authoritarian system of government. One can infer that a democratically elected regime could contribute positively towards a transformed society in all the above-mentioned countries.

Key Words: Public Sector Reform, Decentralization, Political Transformation And Democratic System

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Introduction

In the last two decades, the Central Africa Region has experienced transformation from a single political party system to a multi-political party system. The essence of this change was to consent to another political culture in the political system in the country. The transformation of the political system has an impact on the effective and efficient management and administration of public service delivery. There are eight countries in the Central Africa Region, namely: Cameroon, Gabon, Equatorial Guinea, Chad, Congo Brazzaville, Democratic Republic of Congo, Central Africa Republic, and Sao Tome and Principe. The paper will provide a brief overview of Public Administration Reform (PAR) in this sub-region. The paper will endeavor to assess whether the afore-mentioned countries have reformed the public sector in their respective countries.

The first aspect this paper will address why PAR or public sector reformation in the afore-mentioned countries? The answer to this question will be addressed by analyzing Pollit and Bouckaert (2000:13) argument that "public management is continuously thought of as a mean to end, not an end for itself" but "to a multiple end". Stringent budgetary control with regular checks and balances could ensure improved quality service delivery to its citizens. Moreover, a government with adequate funding could implement the policies thereby ensure effective and efficient public administration. Another aspect raised by Pollit and Bouckaert (2000) believe that public sector reformation provides the officials and politicians an opportunity to reveal to the public that their daily actions are for the public good.

A government should, through public administration reform endeavor to provide effective and efficient service delivery through, *inter alia,* citizen participation, consultation, transparency and probity. The afore-mentioned change could be propagated for several African countries by international institutions such as the World Bank to ensure quality public service delivery. Despite implementing several public service delivery reformations in the majority of the Central African countries, the quality of service to the public is still regarded as poor. Another key definition of public sector reform is: "… deliberate changes to the structure and process of public sector organization's with the objective of getting them to run effectively" (Pollit and Bouckaert: 2000). Another question this paper will attempt to establish is whether the countries of the Central African Region have achieved their objectives through change in the public sector. This paper will also endeavor to assess the implication of the above definition of public sector reformation.

For the purpose of this paper, Cameroon, Democratic Republic of Congo and Congo Brazzaville from the Central Africa Region have been selected to assess the implementation of PAR in the region.

An overview of public administration reform

The practicality of public administration reformation takes place when a government takes a decision to change the approach in the provision of services to its communities in conjunction with the private sector. It can be inferred that cultural diversity among the public officials could inhibit effective and efficient service delivery. Bouckaert (2007:29) argues that, "there are a macro, a meso, and a micro approach to culture in reforms in general and public sector reforms in particular". In a "macro culture", society is perceived in general while in the "meso culture" reference is made to public administration and the body of the professionals. In the "micro culture" focus is on the work cluster offices in government institutions. Some scholars perceive public administration reform as: "the outcomes of administrative reform by identifying it as the means to make the administrative system a more effective instrument for social change, a better instrument to bring about political equality, social justice and economic growth" (Samonte, 1970: 288).

Another argument concerning public sector reform is an explanation provided by Pollit and Bouckaert (2011:8) who state that: "public management reform consists of deliberate changes to the structures and processes of public sector organisations with the objective of getting them to run better". One of the principles is to perceive the government institution and the local municipality as responsible to improve the quality of service across the country. One could infer that a new transformed political system in a country could have the potential to impact on public sector reform in a country.

According to experts Muccio and Mauri (2012:7), "the modernisation of public administration has developed similar reform effort that is strongly related to the principle of efficiency and effectiveness promoted by the New Public Management (NPM) approach and currently, good governance". This change from the centralisation of power in the capital to a decentralised system could have implications. Hammerschmid, Meyer and Demmke (2007:150) state that "national specificities and different administrative cultures and traditions makes public administration a unique, path dependent product of history and local traditions, leading to diverging reform paths and implementation." One can infer that public administration is linked to the political transformation of one particular country while other aspects such as social and economic factors will have an implication on public sector reform.

Wollmann (2003:3) provides a general overview from an international perspective of public sector reform which has already taken place in several countries. He states that there are three phases of public sector reform namely: the first phase covers the period between 1960 and 1970 where there were wide spectrums of reform which addressed the reorganisation of the government and the ministerial structure. The same phase also included the decentralisation and deconcentration of political and administration functions, territorial reforms as well as the introduction of policy evaluation as an instrument of policy making.

The second phase or period covered mid-1970 to 1980. During this particular period institutional changes were achieved under deregulation and privatisation of government assets. Another aspect which was introduced during that particular period was the evaluation of cost reducing procedures such as cost benefit analyses and task scrutiny (Wollmann, 2003:3). It was also a period when a large number of personnel were retrenched in the government institution. Many African countries experienced this unfortunate challenge of retrenchments in the public sector.

The third phase commenced during the latter part of 1990. This phase was considered as the 'birth' of New Public Management (NPM) which was guided by institutional reforms, such as downsizing, angencification, contracting, outsourcing and performance management. Performance monitoring, measuring and controlling was introduced (Wellman, 2003:3). This paper will briefly clarify the NPM reformation which took place in various countries with each country having to adjust according to its circumstances. A success of one particular reform in one country cannot be generalised to another country which means that the political and administrative culture of one country cannot be the same with that of another country. Pollitt and Bouckaert (2000:13) support the latter statement when they state that: "these differences are problematic because, to put it colloquially, we are constantly in danger of comparing apples and pears. Different countries start from different places, have different histories and pursue different trajectories". A common language many countries can speak in unison is, for example, good governance, accountability, honesty and efficiency.

Latin American countries were colonised by the European countries. Eighteen are Spanish speaking countries, Haiti a French speaking nation while Brazil was colonised by the Portuguese. The regimes in the Latin Americans are based along colonial lines which implies that "from colonial times, that continent had been subjected to a kind of state society relationship based primarily on five principles namely: bureaucratism, centralism, formalism, fiscalism and authoritarism" (Monteiro, 2001:182). For any reform to take place in the Latin America countries, the five principles must be taken into consideration. These principles might be considered as a stumbling block to change within the country.

Administrative reform in Latin America has been in most part characterised by external factors. This argument is supported by Nef (2012:651) who states that the introduction of NPM with Structural Adjustment Programme (SAP) is a strong example. Nef further asserts that "the initiative of administrative reform from within have been feyer, piecemeal, discontinuities". The external force in terms of administrative reform in Latin America plays a huge role. This could be as the result of the International Monetary Fund (IMF) and the World Bank. The two financial institutions are the main drivers of the Structural Adjustment Programme (SAP) who also recommend that the country implement administrative reform. This is usually the procedure followed by the IMF and World Bank when they are approached for financial assistance.

Latin America scholars Adie and Poitras (1974:250) explained some of the realities those countries are facing. They state that "historically, the administrative experience of Latin America has been shaped by numerous failed attempts at modernization and cyclical crises". The problem is that the political reality of Latin America plays a major role because of the model of governance which was implemented in some countries. Some countries, such as, Chili, Brazil and Argentina adopted a military regime which could not implement the recommended administrative reform. Martner (1984:62) quoted in the Nef (2012) argues that "without political and institutional development, addressing real issues such as poverty, unemployment or lack effective citizenship, administrative reforms-even couched in the current rhetoric of public sector modernisation are mere epiphenomena". The paper highlights that even though reform had taken place in Latin America, much still needs to be done by many of the countries in that particular continent to improve the quality of service. Furthermore, many Latin American countries have embraced the democratic system of government, and reforms of public institutions are taking place across the Latin American continent.

The experience of public sector reformation in Central and Eastern Europe (CEE) is different. The beginning of public administration reform in the CEE countries started during early 1990 which focused on building a system of public administration rooted in the democratic foundation. The major focus for the CEE was to modernise government machinery. A group of European academics provided some findings concerning PAR in CEE. According to Lancu, Junjan and Devries (2013:3), for Central Eastern Europe and Central Asia, "the transition in PAR tried to move from one extreme (which is the state) to the other (market) and, eventually ended somewhere in between administrate market". The reform within public institutions in the CEE reveals the private management theory in practice.

Nevertheless, the reforms in those countries which they took from the Organisation for Economic Cooperation and Development (OECD) (Suwaj, 2012:664) were relatively similar. CEE received financial support from OECD member states such as Canada and the United of America to implement administrative reform. The majority of the afore-mentioned countries decided to join the European Union (EU) to ensure that public administration responds to the standards prescribed by the EU member states.

Methodology

The research method for this paper is based on the qualitative approach which would facilitate to understand the applicability of public administration reform in the Central Africa region. The researchers focus primarily on secondary data which highlights the development of public administration in the selected countries. Moreover, to assess the change, most governments decided to implement reform in terms of transformation of the public service. A qualitative research method provides a comprehensive interpretation of concepts, constructs and opportunities which brings the research nearer to "social reality" (Bless and Higson, 2004). The qualitative research method is defined as "situated activity that locate observer in the world where researcher are attempting to make sense of, or interpret, phenomena in terms of the meaning of people bring them in natural settings" (Gabrielian, Yaung and Spice, 2012:143). Qualitative research can also be linked to a study which focuses on analysing a specific case study in one's community. For the purpose of this paper, each country will be considered as a particular case study. The purpose of the study is to establish whether any particular change has taken place in the Central Africa Region (CAR) in terms of public sector reform. The researcher is aware that most of these countries went through several reforms, however, the purpose is to determine whether the reform has been successful. This question will be developed by assessing each particular country *vis-a-vis* with the African Development Bank report which was released in 2014.

Sub-Saharan African experience: public sector reform

Public administration in most of the African states has encountered various problems since independence. The majority of the governments were advised by the international community to effect reform in the government structures. One of the leading international institutions, the World Bank, recommended to the African states in 1980 to transform public administration in their respective countries. Three plus decades later, there is another series of public administration reform in the form of "New Public Management". Under the new vision, public administration should be more efficient when the government provide services to the community. The Africa Economic Commission (2003:8) argues that "the core paradigm which can be discerned as influential in the development of public sector reform in the 1980 and 1990 was that the public sector provision was inefficient and often ineffective that led neither to cost containment nor quality improvement". Olowu (2012:609) argues that "the negative impact of the public service in the Sub-Saharan Africa, the first generation of African leaders wanted to have a direct control of the state apparatus, an orientation that encourage the evolution of a patronage based system of administration". The consequence hereof has been nepotism and tribalism in the public service in many of the African countries.

The impact of the afore-mentioned situation after independence brought the implementation of public sector reform in every single state in the Sub-Saharan Africa. The earlier public sector reform which took place in Africa was based on making public administration more developmental by changing is structures and procedures (Olewu, 2012: 610). During this particular period, the majority of the governments in Africa hired international experts to advise senior government officials. The public servants were duly informed to serve the community with care and respect. Mutahaba and Kiragu (2002:2) argue that the reform which took place over more than two decades form part of the global phenomena that has touched all the countries, that is, the developed and less developing countries. Kiggundi (1998) asserts that the World Bank report revealed that from 1986 to 1997, 64% of the entire public sector reform operation was executed in Africa.

The majority of the countries are struggling to improve the quality of service to its citizens despite the implementation of reform more than two decades ago. Olefeni and David (2010) assert that in Nigeria, public sector reform has been on the government agenda for many years. Former Nigerian State President, Obasanjo, stated in 2005 that "*the reform of the civil service is one of the central themes of government agenda. Without a transparent and effective public service, government business and service delivery, to the public will be crippling and mired in dishonesty and graft. I am convinced that an efficient transparent and accountable civil service should be the hallmark of our democratic transformation and development. The Nigeria people deserve nothing less".* According to Gboyega and Abubakar (1998:3), the period after independence, the public sector in Nigeria was considered as one of the most important legacies the British colonial master had left behind. Observing the structure left by the colonial master, Nigeria thought that the socio-economic development of the country would evolve at a faster pace. However, that scenario was difficult to realise because of the political stance adopted by the regime.

Public sector reform was implemented in Uganda as soon as the "National Resistance Movement (NRM) took power in 1986. The argument introduced by the Museveni government was to change the way service was provided by the previous regime. They wanted the government to become accountable, transparent and efficient in the provision of services to the citizens.

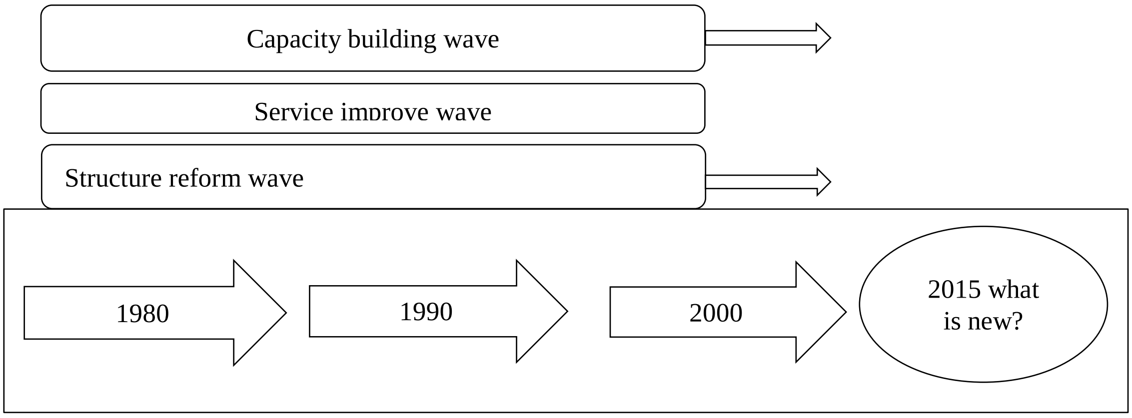
The Ghanaian case is totally different to that of Uganda. The World Bank advised the Ghanaian government to retrench 15 000 civil servants under the reform programme which took place on 31 October 1987. The World Bank would compensate the Ghanaian government and retrain some of the civil servants. Davis (1990) criticised the Ghanaian reform as unsuccessful for several reasons. He claimed, for example, that the retrenchment of civil servants from the ministries did not help the government to reduce the number of public officials because the civil servants who were retrenched from one ministry simply found employment in another ministry. Davis maintained that the reforms introduced in the public sector in Ghana were by no means successful.

Reform in Kenya and Zambia also did not provide a positive result. According to Olefeni and David (2010:7), "in Kenya, the retrenchment of public servants through voluntary early retirement scheme, between 1994 and 1996 was, reversed through the hiring of teachers. Observing the Zambian government experience, the World Bank in

1997 recommended the country to retrench 37 000 civil servants". The number of civil servants dropped from 139 000 to 102 000.

According to Kiragu (2002:9), in both Kenya and Zambia "their macroeconomics and fiscal adjustment driven reform remained high on the agenda of public sector reform, despite the fact that the SAP driven reform initiative were formally launched in 1990". One needs to take cognisance that when the government downsizes the number of civil servants, this would not remain consistent for several years. The recruitment of civil servants would have to be re-introduced in the near future which implies that the solution is not the retrenchment of civil servants. It is imperative that African governments understand the reason for the implementation of public sector reform. The figure below illustrates the passage of public sector reform in Africa from 1960 which was the year many African countries got their independence.

Figure 1. Illustration of the three waves of Public Sector Reform in Africa



Source: Mutahaba and Kiragu (2002)

Figure 1 above illustrates the passage of reform many governments undertook to improve government institutions in their country. According to Olefemi and David (2010:6), quoted by Mutahaba and Kiragu (2002) state that these reforms took more than 20 years as part of the structural adjustment programme imposed by the Word Bank in Africa. Moreover, the researcher includes another element in the figure above: the year 2014; what is new? What are the probable changes the three countries have achieved specifically in the Central Africa Region? Has public service delivery become effective or more transparent when they deliver services to the community? Since the new wave of reform in 2014, the afore-mentioned governments are either improving or failing to implement reform. The research would highlight how far these countries have progressed with regard to reform of public administration. Cameroon will be the first country the paper will try to analyse the impact of PAR in the Central Africa Region.

Republic of Cameroon

The paper will assess the public sector reforms in the former French-speaking colony, the Cameroon in the past five decades. It is also imperative to note that the political situation in the Cameroon has been marked by a relative political stability in the recent past.

A brief administrative history of the Cameroon provides evidence that it is unique among former French colonies in Sub-Saharan Africa. It has faced three historical sequences of colonial administration. The first phase was German colonisation which began in 1884 and lasted until the outbreak of the First World War in 1914. The second and third phases involved French and British colonisation in the period between 1919 and 1960 (Mawhood, 1983:189). For this reason Cameroon's public administration shows the influence of both English and French traditions. Cameroon now has a unitary governmental system which was introduced in 1972 to replace the previous federal arrangement, namely: the former French-administered territory of Cameroon in the east; and the former British administered Southern part of Cameroon (Republic of Cameroon: 2014).

The current system of public administration in the Cameroon was created by following the Weber-based administrative model. Corkery, Daddah, O'Nuallian and Land (1998:109) indicate that the head of the administration in the various ministries is a director general. Each of these ministries comprises different divisions, services and departments. There is also a provincial administration which includes provincial offices that are responsible for services in that province. This is also divided into a number of departments. There are ten provinces in the Cameroon, and the governors of each of the provinces are appointed by presidential decree. There is no elected governor in these provinces.

There is a decentralised system of local government in the Cameroon. The Cameroon country profile (2014: 37) states that "following the provisions of the 1996 constitution, legislation on decentralisation was adopted by the National Assembly and signed on 22 July 2004". The law on decentralisation was supposed to be implemented between 2004 and 2007. The pieces of legislation which recognise the power of local government are the following:

- Law No 2004/017 of 22 July 2004, on decentralisation.
- Law No 2004/018 of 22July 2004, on councils.
- Law No 2004/019 of 22 July 2004, on regions.

The above three pieces of legislation are the foremost laws defining the decentralisation of local government in the Cameroon. They replaced the previous legislation on local government and decentralisation. There are five types of local authorities or local councils. According to the Cameroon (Country Profile, 2014), there are a number of such bodies (the numbers are indicated in brackets):

- Rural (306)
- Urban (11)
- Special status urban councils (9)
- City councils (2), namely Yaoundé and Douala
- Sub-divisional urban councils (11) which are sub-units of Yaoundé and Douala. Yaoundé has six sub-units and Douala has five.

Administrative reform in Cameroon

The reform of the public service in Cameroon was and still is very complex. One first needs to understand the national context within which the country functions. The main goal facing the government was to change the inherited colonial civil service to a national civil service. It is emphasised by Corkery *et al.* (1998: 110), that "the statutory change was marked by a particular characteristic in Cameroon in that the inherited product was the consequence of four different types of administrative cultures (pre-colonial, German, French and British)". The government decided to unite the country incorporating the four cultures and to have a single civil service. Many Cameroonian politicians and scholars are of the view that "the public service has always been characterised by the existence of a great deficiency in the machinery of their internal operations, and with regard to their original conception as a support for all development activity" (Corkery *et al.*, 1998: 112). Below is a discussion of two of the major reasons why administrative reform was necessary in the Cameroon. Corkery *et al.* (1998:111), discuss under two blanket terms, namely: "subjective blockages" and "objective blockages".

One of the major changes the government wanted to implement was to resolve the problem of language differences in the Cameroonian public institutions. The southern parts of Cameroon are Anglophone and the eastern part is Francophone. Corkery *et al.* (1998:112), describe this issue as one of several "subjective blockages" and maintains that "linguistic differences (a cultural colonial legacy, the inequality in the use of bilingualism, various national languages), disparities in the training of officials (some training at home, others training overseas)" had to be addressed. Government needed to take a specific decision to remedy this divisive tendency. Corkery *et al.* (1998), also use the term "objective blockages" to describe the unequal distribution of government officials in the different departments, and the allocation of facilities which do not conform with acceptable principles of sound governance.

Public administration in the Cameroon is a centralised system, regardless of Law No. 2004/017 of 22 July 2004, on decentralisation. For example, there is no doubt that the hiring of public officials is a fully centralised process in the Cameroon. To emphasise this particular statement, it is argued by the African Development Fund (AFD) (2006: 26) that "The systems of recruitment, promotion and remuneration of the government officials in Cameroon are not governed by precise rules, and this significantly affects transparency in the administration". Below is a brief discussion of the political, socio-cultural and economic aspects of the public service in Cameroon.

Political factors

The political chronology of post-colonial Cameroon can be divided into two periods. The first period began in 1960, when the country gained its independence and it ended in 1990. In this first period was there was a one-party, non-democratic government as was the tendency in many Sub-Saharan African states immediately after independence. The second period began in 1990 and is currently still in place. In 1990, with the birth of democracy, there was a change of state leadership and President Ahidjo was replaced by President Paul Biya who is still in power. Corkery *et al.* (1998: 113), explain that the political system in the Cameroon is characterised by a concentration of political power in the hands of an executive president. This system of governance places the seat of power and the centralisation of government services in the capital.

Socio-cultural factors

Ethnicity, that is tribal affinities, play a major role in running government institutions across the country. Provisions to deal with this element of Cameroonian society have been included in the constitution.

Economic factors

Holding a position in government institutions at whatever level should be open to all citizens of that particular state if they possess the necessary skills. However, the payroll of the Cameroonian public service has increased year by year without improvements being apparent in the provision of efficient services, which smacks of social distribution rather than running a sound public administration.

In 2013, the Cameroonian government introduced another series of reform in the government institutions. That particular reform targeted the creation of a new Ministry for Procurement which purchases the necessary materials for the government and other government agencies. According to Africa Development Bank (2014:16) "the Cameroonian public sector is highly fragmented resulting in powers overlapping between one ministry and another, as well as wasted resources and limited effectiveness". The decentralisation of Cameroon is still going to strength the application of reform which started several years ago while other responsibilities have been delegated to the local authorities. This reality still has to be realised because some Cameroonian scholars believe that the power base lies in central government.

In terms of "Public Finance" there is a new law to improve transparency and admissibility in the government institutions. Moreover, the Africa Development Bank (2014:17) reported that *"there are institutions in charge of internal and external of control concerning public account in Cameroon. There is an inspectoral general for each ministry, the inspectorate general of the Ministry of Finance, the Audit Bench, the Supreme State Audit Office (CONSUPE) and the National Anti-Corruption Commission (NACC*)". The Audit Bench assists the government and parliament to enforce the law of the public account.

The government decided to release at the end of each year a report identifying the country's debt. This was a wise decision taken by the government to act in a transparent manner by revealing to the public the level of borrowing from international financial institutions. This act is an element of good governance by the Cameroonian government.

In addition, the Cameroonian government joined the Extractive Industries Transparency Industrials (EITI). These countries produce mineral resources. In 2013, the government achieved the status of compliance with the requirement of (EITI). Under those particular circumstances, the government must release EITI reports every financial year. The 2012 report is expected to be released by the government by the end of December 2014. The EITI report of 2013 was published in July 2014. The Cameroonian civil societies and other stakeholders are part of the Cameroonian EITI. These processes provide transparency with regard to the financial flows of the extractive industries of Cameroon (ADB: 2014). Public sector reform in Cameroon has not met the expectations of the citizens. There are numerous challenges which the government needs to take seriously. The Ministry of Procurement which is based in the presidency is a contentious issue among the citizens. It is recommended that the procurement ministry be placed under the control of the Premier Ministry Office. The latter Office could establish checks and balance mechanisms to reduce corruption and nepotism which is still destroying some of the ministries in the Cameroon.

Democratic Republic Of Congo

The DRC is a French-speaking country which was colonised by Belgium. It is the largest French-speaking country in Sub-Saharan Africa and presents a different reality from the situation in the Cameroon. The discussion which follows will be based on the transformation of public administration in the DRC since it became independent.

Brief history of public administration in the DRC

The implementation of public administration in the DRC began with the arrival of the European (Belgian) colonisers. There is evidence that as early as the fifteenth century, long before the arrival of the Europeans, the so-called Kingdom of Kongo was well governed, although the European type of public administration was unheard of. However, after the Berlin Conference of 26 February 1885, Belgium established the l'Etat Independent du Congo (EIC) which ruled the Congo from 1885 to 1908. This period saw the establishment of public administration in the country. As soon the EIC was formed, the Belgian government set up a two-tier structure of governance comprising a central government (with its headquarters in Brussels) and a local government with its headquarters in Vivi (Boma), now in the Bas-Congo Province (Ndaywel and Nzieme, 1997:35).

Historians claimed that public administration in the DRC began in 1888 when the central government based in Belgium reorganised the management of the colony. This was inaugurated by royal decree on 1 August 1888. In terms of this decree, the colony was divided into eleven districts (Ndaywel and Nzieme, 1997: 36).

Each district was managed by an administrator who had one or two deputies to assist him in the daily running of the district. All the administrative institutions were operated primarily for the benefit of King Leopold II of Belgium. During that period the administrative entities worked with private companies such as the Anglo-Belgian Indian Rubber Company, for the exploitation of rubber.

Public administration in the DRC underwent many transformations, the details of which will not be provided in this article. An overview will be provided to allow for a comparative analysis with the other three SSA countries as far as public administration is concerned. Public service in the DRC is relatively unsatisfactory and the government needs to make a great deal of effort to overhaul and improve the public service.

When the DRC attained its independent status in 1960, the system of governance was centralised in the capital. The provincial authorities merely implemented the decisions taken in the capital. This system of management is still enforced by the current government. The DRC's constitution which came into being on 18 February 2006 with the introduction of the first democratic government, recommended a decentralisation of governance in the country. Unfortunately, till today, decentralisation has been implemented at a pedestrian pace by the Congolese politicians.

The pros and cons of decentralisation in the DRC is a matter of debate. In terms of political and administrative control, central government wants to continue taking the final decisions on all matters of governance. According to the World Bank and European Commission (2008:2), the implementation of decentralisation in the country would essentially be a political process and would bring an element of broader peace and stability. It would also be a reflection of the reconciliation process that has taken place in the last five years. In this perspective decentralisation is part of the process of seeking a new equilibrium and national consensus that provides a wider acceptance of sharing resources while maintaining the national integrity of the country. This sets the procedure apart from the donor-driven decentralisation process that has often been seen in other African states. It also requires the current government to organise local elections in 2015. After the local elections there is a possibility of proceeding towards decentralisation of governance across the country.

DRC reform

The new constitution which was promulgated in 2006 recommended the government to implement consistent reform in Congolese public administration. The first reform which took place in the DRC was the election of a premier of the province and members of the provincial council. The members of the provincial council consist of those who eligible to elect the premier of the province (DRC constitution, 2006). Another reform undertaken by the DRC government was to delegate total management autonomy to the provincial government. Another key element stipulated in the new constitution is the financial autonomy of the province. According to the DRC constitution, 40% of the provincial revenue must be returned to the province. That public finance budget would assist the province to implement various projects in the province. The African Development Bank (2014:45) states that "*since 2006 the country took decision to decentralise management to improve public policy. Despite the implementation of a strategic plan for public finance reform, local authorities faces several problems in managing their public finance. This is because of the interference with the central government, both in the collection of some the revenue and in implementing investment budgets*". One of the major problems many of the provinces face is the lack of good infrastructure in the province. In terms of the public management procurement process, it has not as yet been implemented across the province. The provincial authorities are not to be blamed for the non-implementation. This blame is located in the central government. The government is delaying the implementation of some of the policies which were had been taken in parliament.

Republic Of Congo

The Republic of the Congo is the third Central Africa Region country which this paper analyses the impact of public administration reform. This country has experienced political instabilities for the past several years. Nevertheless, this does not form part of this papers discussion. According to Bertelsmann Transformation Index (BTI: 2012), "the transformation of the Republic of Congo (also referred to as Congo-Brazzaville) was marked by continuous political and economic consolidation after years of civil war and violence". This was first a Soviet Marxist country and after several military coups, the government decided to embrace a democratic system. The political transformation in most of the countries in Sub-Saharan Africa does have an impact on the administrative system of the country. This situation can be demonstrated where there is political instability in the country. However, this is not the case in Congo Brazzaville.

Public administration in Congo Brazzaville is under performing because of corruption within the government spheres. Public Administration is considered ineffective and worsened by the poor service delivery provided to the community by the civil servants (BTI, 2012). The latest report released by the African Development Bank (2014) reveals that reform is taking place in the country. However, the implementation of the reform is problematic in Congo Brazzaville because the government has failed to implement decentralisation in its entirety. It is argued by the African Development Bank (2014:63) that "the satisfactory implementation of these reforms is hindered by an insufficiency of human and financial resources in the newly created structures". The implementation of service delivery is hampered by ineffective and poor governance. Another factor is limited expertise in the public institutions. There is a complete lack of public sector reform because the country still not abolished the authoritarian style of governance and power is still vested in the presidency.

Lesson to be learned relating to Public Administration Reform in the Central Africa Region

The reform reviewed in the three selected countries presents its own realities because of the political culture each country has adopted. It can be argued that public administration reform is taking place in each of the selected countries but at a painstakingly slow pace. The circumstances in the Cameroon are exceptionally complex despite legislation being adopted to decentralise in 2004. The biggest challenge to date has been the lack of political will to implement the legislation. The State President is holding onto power by personally appointing the governors of the provinces as well as the senior government officials. However, certain reforms, *albeit* limited, are in place in the Cameroon which is an indication that the government is implementing the reform process. There is a new ministry in the presidency which is responsible for all government procurement.

Reform in the DRC also represents its own challenges. The new constitution was enacted in 2006. However, complete reformation is still lacking till today. The decentralisation of government institutions which is one of the key objectives of the current regime is extremely slow. Local government elections have not taken place since the adoption of the new constitution in 2006. Furthermore, the government has failed to make any progress towards decentralisation in the last eight years. However, the government delegated total autonomy to the provincial government. Unfortunately, there are numerous challenges central government is facing in terms of releasing a feasible budget to the provincial sphere to enable them to provide effective and efficient service delivery.

The implementation of reform in Congo Brazzaville has encountered many difficulties because of the lack of qualified human capital in the government institutions. The government has adopted an authoritarian system of government which has had a negative impact on its citizens.

Conclusion

Finally, the way forward for the three countries is to rise above their political system and provide the appropriate techniques for the transformation of the country**.** In the case of Cameroon, it is very complex due to the political system they have adopted. Although legislation recommends a total transformation of the administrative system, there is a distinct lack of implementation. The executive, which is the power base in the capital, is holding onto political power. However, the limited reform which has been implemented reveals the willingness of the government to provide change and become more accountable to the Cameroonian people.

Observation of the DRC reveals that government also needs to react boldly to implement a complete decentralisation programme as stipulated in their constitution. Local elections need to be held which would prevent central government from making political appointments at the local sphere. The decentralisation of the fiscal must be reinforced by central government which could provide the provincial authority with improved governance.

The political system in Congo Brazzaville is exceedingly complex a political will is required by the politicians to effect public sector reform. A democratic and transparent government needs to be established before any public sector reform can be implemented. Unfortunately, the current political system impedes all possibilities of political change. Political change could result in the reformation of the countries approach to a transformed / liberated public administration.

To close the discussion of public sector reform in the Central Africa Region, these countries will require political transformation with a total democratic system in the three countries the paper analyses. Without this some of the reform in the public institution will continue to face difficulties as the paper try to highlight.

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HABIT AS A MODERATOR AND EXOGENOUS PREDICTOR OF SOCIAL NETWORKS: THE CASE OF ONLINE SOCIAL NETWORKING

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Abstract

This paper tests the factors likely to impact continuance intentions through the medium of online social networks (OSN) for business transactions. The expectation-confirmation theory (ECT) from the consumer behaviour literature is made use of; to forward a set of theories that validate a prior model from IS usage research. Eight research hypotheses, after a field survey of OSNs participants for business transactions were conducted are empirically validated. 300 useable responses from LinkedIn and Twitter social networking platforms users for business transactions were analysed with the WarpPLS 4.0 bootstrapping technique. The study results provide significant evidence in support of perceived trust and user satisfaction, as determinants of the continuance intention of people using OSN platforms for business transactions. Above all, the research model was tested for the moderating effects of usage habit, which was found to impact relationships between continuance intention and perceived trust, resulting in an improved predictive capability of (R2=0.55) as compared to base model of (R2=0.52). The moderating result indicates that a higher level of habit increases the effect of perceived trust on continuance intention.

Key Words: Financial Crises, Canada, Regulatory System

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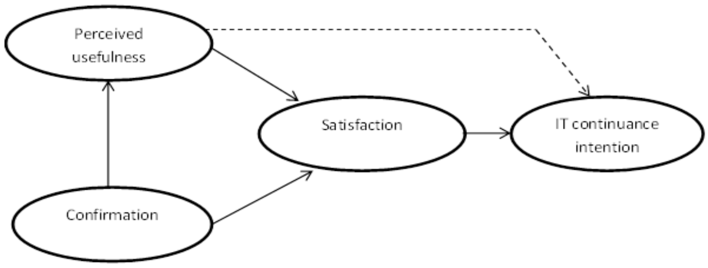
Motivation for the study

The quest to understand consumer behavioural intentions with regards to information systems (IS) and IT usage have attracted a great deal of research, hence presenting a daunting task for researchers to uncover the predictive factors. Many have deployed various theories to try to comprehend this philosophy of continuance intention, especially on IT post-adoptive behaviours. From early researchers (e.g., Bhattacherjee, 2001; Bhattacherjee and Premkumar, 2004; Jasperson 2005; Ahuja and Thatcher, 2005) to the present lots, these researchers of IT continuance have examined different factors and/or processes that motivate continued usage or discontinuance of products and services that are offered through technological means to users after the initial acceptance. The dominant theory used to explain this phenomenon of IT continuance/discontinuance behaviours include the expectation-confirmation theory (ECT) (Bhattacherjee, 2001), which propound that individual's satisfaction with IT usage is positively influenced by the degree to which their original expectations of the IT usage was confirmed or disconfirmed after using the said IT.

The proponents of this theory posit that users' IT continuance intention is based on two factors: their prior IT usage experience and their expectation of future benefits from continued IT usage, capturing this argument diagrammatically as below:

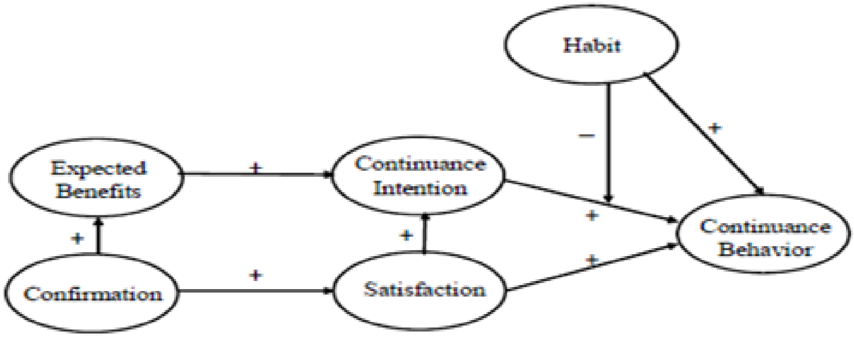
Figure 1. An ECT-based Model of IT Continuance



Source: Bhattacherjee, 2001

The above lines of reasoning have attracted researchers for more investigations. For instance, Bhattacherjee after his initial study in 2001 has maintained that factors that motivate continuance usage are not the same as those of initial acceptance (Bhattacherjee and Bafar, 2011) in the online purchases. The two authors (Bhattacherjee and Bafar, 2011) have suggested an investigation of IS continuance investigation after imposing habit as a moderator on a five construct model of post acceptance continuance as shown in figure 2 below.

Figure 2. Extended ECT Model of IT Continuance



In other words, little is known even after determining the likely factors that influence continuance intention, of IT usage, how habit as an exogenous predictor affect this intention of continuance usage.

In line with the above suggestion, this paper imposed habit on one of the determinants of OSN continuance factors to find out how habit influence the effects of perceived trust (PT) on OSN continuance intention (CI). This was done after substituting CI in figure 2 (the proposed model) with PT and continuance behaviour with CI, in order to contribute a more scientific knowledge to the research community. For it is noted that, neglect of moderating effects leads to a lack of relevance (Henseler and Fassott, 2010), assuming that relationships that hold true, regardless of the context factors, are perfect and work under all conditions. This could be really misleading.

Recently, doing business online has become complex with new models aside e-commerce emerging. Known among such phenomenal is the OSNs concept where both buyers and sellers establish a personal profile in a community of friendship to share, discuss, comment, and listen to others before deciding to do business on this platforms. The OSN phenomenon has not only been a medium for socialising but business as well. Organisations have managed to use it to lead to sales and continued sales. For instance, working with the Medill IMC Spiegel Digital and Database Research Initiative at Northwestern University in Chicago and the Ivey School of Business at the University of Western Ontario, LoyaltyOne study (which was believed to be the first published study of its kind) demonstrates that positive social media interaction can and does lead to a significant and sustained increase in transaction volume from participating customers. Specifically, the study isolated and confirmed a direct and positive link between consumer social media activity with a major, well-known Canadian brand and increased transaction volume for that brand (Everett and Sullivan, 2012).

The evidence that OSN can lead to actual business is beyond any controversy as there exist abundance prove to that effect. The below snapshot attest to a real life scenario where a deal was made between a participant and a sales executive of a company on the Twitter OSN:

Figure 3. A snapshot of a Twitter follower who has decided to buy

Source: Collinkromke.com/ford-twitter

All that the company had to do to earn the business of the above participant was to join his community of networks, respond to his tweets and continue engaging him for all his queries to enable a business to take place. The evidence from the snapshot in figure 4 below is a testimony:

IT continuance was referred to as sustained use of an IT by individual users over the long-term after their initial acceptance (Bhattacherjee, 2001). This paper agrees with the above author that, the topic of continuance intention is important for research because the expected benefits of a given IT cannot be realized and its implementation cannot be considered successful if its usage is not sustained over a long-term by the users who are expected to benefit from its usage (Bhattacherjee, 2001), in this case OSNs. OSN is an IT platform that is used these days to perform business. It success therefore depends on the continuance usage of its participants.

Figure 4. A snapshot of a Twitter follower confirming his wiliness to buy

Source: Collinkromke.com/ford-twitter

According to a sales expert, Colleen Francis (2014), she has seen salespeople pursue leads using social media and end up with sales of between $30,000 and $250,000. "The biggest sales have come from salespeople using Twitter to find opportunities and LinkedIn to find the names of the true buyers inside organizations."

In investigate continuance purchases in line with the above assertions, the goal of the current study is to investigate the continued intention of OSN participants using OSN to buy as against initial acceptance, and how habit moderates this intention after having used it to buy once.

Theoretical Extension and Background

The Expectation-Confirmation Theory (ECT)

In continuance intentions studies, the expectation-confirmation theory (ECT) in IS is often used and the objective is to find consumer satisfaction and repeat behaviour for transactions. The basic logic of the ECT is stated by Oliver (1999), Bhattacherjee (2001) and Kim et al. (2009) and postulate that: first, a consumer shapes an expectation of the special goods or services form to a contract. After a time of use, the consumer shapes the senses about his/her transaction behaviour. Second, the consumer calculates his/her perceived deed, compared to initial expectation, and decides the measure to which the expectation is met. Consequently, the consumer accumulates the satisfaction decision, based on the degree of validation and expectation on which that validation was built. In the end, the consumer forms the repeat purchase or continuance intention and behaviour, built on the degree of satisfaction.

Examining the influence affecting users intentions to continue or not to continue participating in OSN synthesizes the above theory and could be of great interest to the research community, especially that of the IS (Bhattacherjee, 2001; Bhattacherjee and Premkumar, 2004). Infact some of the OSNs have been in existence for quite a long time yet not much is known about its continuity potential, not forgetting that some have emerged but never succeeded (i.e. post-adoptive behaviour). Successful OSN therefore depends primarily on the continuance usage and engagement of its participants. All constructs in ECT, other than expectation, are repurchase variables (Limayem et al. 2007) and the evaluation is found in the consumer's actual experiences with an online vendor, of which OSN is no exception. In as much as this research study agrees with Limayem et al. (2007), it contends that consumers' perceived trust is another important factor that will act as a 'reminder' whenever consumers think of repurchase, hence the inclusion of this construct. Behavioural control such as habit will always consolidate any decision arrived at and cannot be taken for granted.

This paper, in a bit to synthesis the popular theory of ECT believes that there is a need to understand users' continuance interaction and participation of OSNs at a deeper level (Nolker and Zhou, 2005), but more so the continuance intention.

Following this line of conviction, this study adopts perceived trust, satisfaction, expected benefit, and confirmation, to validate figure (2) above as suggested by Bhattacherjee and Bafar (2011) to explain the continuance intention of people using OSN for business transaction. Habit is thereafter superimposed on the arrived model to determine any moderating effect.

Past e-commerce studies have found that online shopping behaviour has been studied using constructs such as users' continuance, acceptance decisions, online shopping intention and purchase behaviour (Gefen et al. 2003; Hsu et al. 2006). These terminologies are these days, seen in the OSNs communities as followers, Tweets and the likes to generate participants' interest of continuance usage. This leads to the conclusion that the online consumer-vendor relationship becomes stronger when both the vendor's 'before-and-after' performance, is felt to be trustworthy, satisfactory, sociable then participants can be trusted to continue using OSN platforms for business.

3. Hypothesis Developments

3.1 User satisfaction and Confirmation

There are studies that have investigated online shopping intention with constructs such as user continuance, acceptance decisions and purchase behaviour (Gefen et al. 2003; Hsu et al. 2006). Bhattacherjee and Premkumar (2004) particularly, made a substantial contribution in using ECT to study user satisfaction and continuance behaviour whiles many others established the relationship between user satisfaction and continuance intention as a well-supported research findings (Bhattacherjee, 2001; Liao et al. 2009; Yusliza and Ramayah, 2011; Akter et al. 2013; Shiau and Luo, 2013). User satisfaction is in turn influenced by their confirmation of expectation from prior IS use and perceived usefulness.

This premise leads us to the following hypothesis of OSN continuance intention:

H1: Users' satisfaction with OSNs will positively influence their continuance intention to use OSNs for business transactions.

H2: Users' satisfaction with OSNs will positively influence their level of trust for OSN use for business transactions.

H3: A customer`s confirmation of OSN site positively affects a customer`s OSN shopping satisfaction

3.2 Expected benefits and trust

Expected benefit is a term suggested to replace perceived usefulness in his new model (Bhattacherjee and Barfar, 2011) and defined it as "user`s perception of expected benefit of IS use" In the context of OSN for business transactions, expected benefit refers to the extent to which a participant perceives that doing business on OSN will improve his or her business experience. This expectation is anticipated to impact the level of trust in doing business on OSN.

The following hypothesis is therefore stated:

H4: Confirmation of expectations positively affects expected benefit of OSN usage.

H5: A customer`s Expected benefit of OSN positively affect his level of trust for OSN usage

Trust

Trust, according to Bianchi and Andrew (2012), "makes consumers comfortable sharing personal information, making purchases, and acting on web vendor advice, all of which are behaviours essential to widespread adoption of e-commerce". The issue of trust is very important when it comes to business, let alone conducting such business in an environment where participant do not see each other. Therefore, an understanding of the influence of trust is critical to both researchers and practitioners (Palvia, 2009; May, 2011). Several studies have focused on various issues of trust in e-commerce (Kim and Benbasat, 2009; Luo et al., 2010; Chai and Kim, 2010; Riedl et al., 2010) and evidence appears to suggest that consumer trust in the online vendor has a positive relationship with attitudes towards purchasing on OSN, hence, the below hypothesis:

H6: A customer`s perceived trust in OSN will strongly affects a customer`s OSN continuance intention.

3.3. Habit

Prior research in IT usage indicates that Habit determines much of IT continued usage (Kim and Han, 2009; Kang et al., 2009; Cho et al., 2009). Defined as "a well–learned action sequence, originally intentional, that may be repeated as it was learned without conscious intention, when triggered by environmental cues in a table context" (De Guinea and Markus, 2009). When IT use is habitual, it ceases to be guided by conscious planning and is instead triggered by specific environmental cues in an unthinking or automatic manner (Bhattercherjee and Barfar, 2011). Guinea and Markus. (2009) asserted that the mere presence of IT or a specific task that a user is confronted with, say to communicate with a colleague about writing a report, are important cues that may trigger habitual IT usage. Previous research has found a strong relationship between habit and continuance behaviour in IS, and many efforts have been made by different researchers in showing how habit influence IT usage and the conclusion is almost invariable the same. Understanding the IS feature that develops habitual behaviours among OSN participants is crucial in promoting habitual use of OSN in the long run. In light of the above, we hypothesize that:

H7: A customer`s habit has a direct positive effect on IT continuance intention.

H8: A customer`s habit moderates the relationship between trust and continuance intention

4. Research Methodology

4.1 Research method

After three months of hosting the assessment model on the researcher`s online social network, for friends to fill in, the survey responses were very poor, which led the researcher to seek the assistance of the online survey agent 'SurveyMonkey', to collect data on the web by sending the model to respondents in their database. The questions were formulated in such a way, that only people using OSN to transact business would find it meaningful to answer, as it addresses key and technical concepts not common to unfamiliar persons.

The survey model asked, the participants a series of pre-established questions with a limited set of response categories, meant to disqualify intruders. A 5-point Linkert scale rating, as indicated earlier on, was used, ranging from (1) strongly disagree to (5) strongly agree, to measure the relative importance of constructs.

Through this agent, who has a database of respondents specifically for this targeted sample, qualify clients were targeted for such an assignment, sending them the web address for the model. The survey, whiles on the web and through the web link address, allowed the researcher to monitor respondents through the IP address accompanying all responses, ensuring respondents were within the targeted group.

4.2 Respondents and sampling procedure

Data were collected from online buyers and sellers who have accounts with Twitter and LinkedIn, and are members of Survey Monkey's panel of networks. A sample population of 317 (Bearden et al. 1980) was collected, with 17 disqualified due to various inconsistencies. Physical evidence, in the form of printouts of responses, was collected and filed for reference during analyses and write ups. The advantages of such data collection are:

(1) Faster responses, (2) Lower cost, and (3) A geographically unrestricted sample (Bhattacherjee, 2001). This method was deemed appropriate to solicit information from people who visit Social Networking Sites (ONSs) because such users of OSNs are widely dispersed but can be reached with technology such as Web 2.0.

4.3 Data Analysis and Results

Construct validity for the five measurement scales (IS continuance intention, satisfaction, perceived trust, expected benefit and confirmation) was assessed through structural equation modelling analysis (SEM) using WarpPLS 4.0. (Kock, 2010) each scale item was modelled as a formative indicator of its hypothesised latent construct allowing them to covary in the SEM program. The estimation of the model was performed using the maximum likelihood method with the item correlation matrix used as input. Table 2 and 3 present the results of the SEM analysis.

4.4. Measurement Reliability

Data analysis was performed to validate the research model and because constructs in this study are formative, the assessment of the measurement model sought to estimate internal consistency, the convergent and discriminant validity7 (Bollen 1990; Chin and Gopal, 1995). This was done using Cronbach's alpha and Fornell's composite reliability (Fornell and Larcker, 1981). Accordingly, the composite reliability should be greater than the cut off 0.7 to be considered adequate (Fornell and Larcker, 1981). The composite reliabilities of constructs have values higher than the thresh hold 0.7, making it reliable (Nunnally, 1978). The study shows all constructs have AVE of at least 0.5 (Fornell and Larcker, 1981). This means more than 80% of the variance of the measurement items was explained and can be accounted for by the latent variables associated with a given construct (Table 2). The Cronbach reliability coefficients of all variables are higher than the minimum cut off score of 0.60 (Nunnally, 1978).

4.5. Construct validity

The measures shows construct validity. This was examined by convergent validity and discriminant validity, which is defines as the measure of constructs that theoretically should be related to each other and the measure of constructs that theoretically should not be related to each other respectively. Both of them work together as subcategories; neither of them is sufficient for establishing construct validity (Chin, 1998). The acceptable level of convergent validity is when all item loadings are greater than 0.50 (Wixom and Watson, 2001), and the items for each construct load onto only one factor with an eigenvalue greater than 1.0; this is an indication of convergent validity (Table 2).

Table 1. Normalized pattern loadings and cross-loadings

	ExpBen	PerTrus	UserSat	Habit	ConFm	ContInt	P- value	VIF	WLS	ES
EB1	0.887	0.329	-0.213	0.003	0.224	0.097	EB1	0.128	0.000	0.000
EB2	0.925	0.262	-0.167	-0.076	0.205	-0.022	EB2	0.130	0.000	0.000
EB3	0.961	0.121	-0.078	-0.144	0.120	-0.143	EB3	0.135	0.000	0.000
EB4	0.979	0.155	-0.123	0.027	0.037	-0.004	EB4	0.126	0.000	0.000
EB5	0.988	-0.021	-0.051	0.017	-0.132	0.052	EB5	0.125	0.000	0.000
EB6	0.988	-0.057	0.073	0.109	-0.020	-0.048	EB6	0.130	0.000	0.000
EB7	0.945	-0.285	0.106	0.117	0.024	0.025	EB7	0.125	0.000	0.000
EB8	0.949	-0.146	0.171	0.012	-0.219	0.033	EB8	0.131	0.000	0.000
EB9	0.977	-0.138	0.121	-0.048	-0.090	0.039	EB9	0.129	0.000	0.000
EB10	0.990	-0.104	0.069	0.016	-0.057	0.007	EB10	0.128	0.000	0.000
PT1	-0.113	0.971	0.068	-0.010	0.199	0.012	PT1	0.000	0.234	0.000
PT2	0.010	0.994	-0.028	-0.087	0.064	-0.007	PT2	0.000	0.247	0.000
PT3	-0.033	0.998	-0.030	-0.032	-0.044	-0.003	PT3	0.000	0.254	0.000
PT4	0.057	0.985	-0.019	0.019	-0.159	-0.009	PT4	0.000	0.247	0.000
PT5	0.095	0.979	0.040	0.175	-0.019	0.015	PT5	0.000	0.221	0.000
SA1	0.016	0.003	1.000	0.003	-0.006	0.003	SA1	0.000	0.000	0.272
SA2	-0.003	-0.018	0.999	-0.001	-0.015	-0.028	SA2	0.000	0.000	0.286
SA3	-0.035	0.007	0.997	-0.019	-0.056	0.016	SA3	0.000	0.000	0.287
SA4	0.033	0.012	0.994	0.025	0.102	0.012	SA4	0.000	0.000	0.268
HB1	-0.061	0.444	-0.222	0.815	0.291	-0.025	HB1	0.000	0.000	0.000
HB2	-0.049	0.346	-0.195	0.903	0.152	-0.027	HB2	0.000	0.000	0.000
HB3	-0.130	0.029	0.062	0.989	-0.030	-0.016	HB3	0.000	0.000	0.000
HB4	0.036	-0.133	0.140	0.953	-0.222	-0.062	HB4	0.000	0.000	0.000
HB5	0.090	-0.244	0.068	0.937	-0.219	0.038	HB5	0.000	0.000	0.000
HB6	0.019	-0.188	0.081	0.968	-0.110	0.092	HB6	0.000	0.000	0.000
HB7	0.010	-0.012	0.046	0.999	0.007	-0.011	HB7	0.000	0.000	0.000
HB8	0.053	-0.004	-0.139	0.881	0.450	-0.000	HB8	0.000	0.000	0.000
CF1	0.035	0.044	-0.232	0.195	0.951	0.006	CF1	0.000	0.000	0.000
CF2	0.024	-0.126	-0.033	0.029	0.985	0.106	CF2	0.000	0.000	0.000
CF3	-0.007	-0.031	0.070	-0.162	0.984	0.001	CF3	0.000	0.000	0.000
CF4	-0.003	0.070	0.129	-0.085	0.978	-0.120	CF4	0.000	0.000	0.000
CF5	-0.055	0.071	0.050	0.083	0.991	0.001	CF5	0.000	0.000	0.000

Note 1: Loadings and cross-loadings shown are after oblique rotation and Kaiser normalisation.
Notes 2: P values < 0.05 and VIFs < 2.5 are desirable for formative indicators; VIF = indicator variance inflation factor; WLS = indicator weight-loading sign (-1 = Simpson's paradox in l.v.); ES = indicator effect size.
Note 3: ExpBen = Expected Benefit, PerTrus = Perceived Trust, UserSat = UserSatisfaction, Habit = Habit, ConFm = Confirmation, ContInt = Continuance Intention

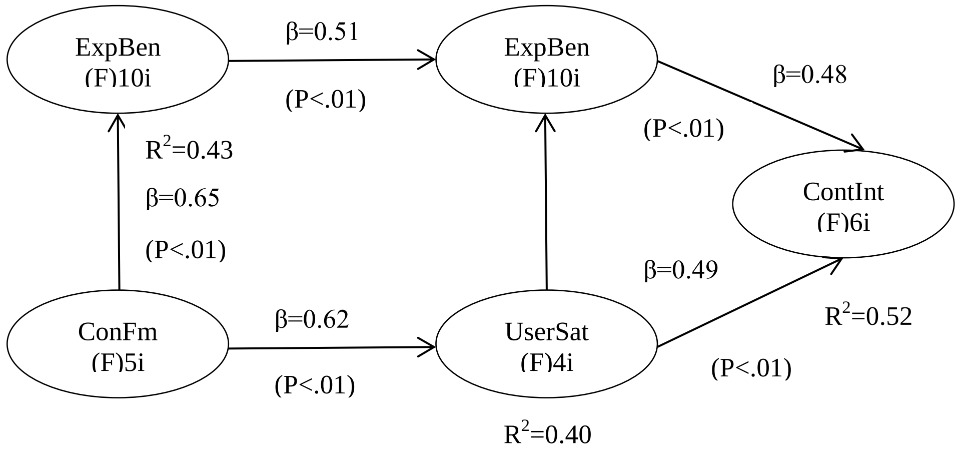
Table 2. Scale Properties and Correlations

Construct	Number of items	Reliability	AVE	Factor Correlations EB	PT	SA	HB	CF	CI
EB	10	0427	.926	0.776					
PT	5	.552	.887	0.680	0.831				
SA	4	.394	.920	0.656	0.608	0.898			
HB	8	-	.905	0.672	0.703	0.612	0.775		
CF	5	-	.896	0.610	0.594	0.578	0.642	0.840	
CI	6	0521	.895	0.651	0.651	0.611	0.666	0.666	0.810

Note: Square roots of average variances extracted (AVEs) shown on diagonal.

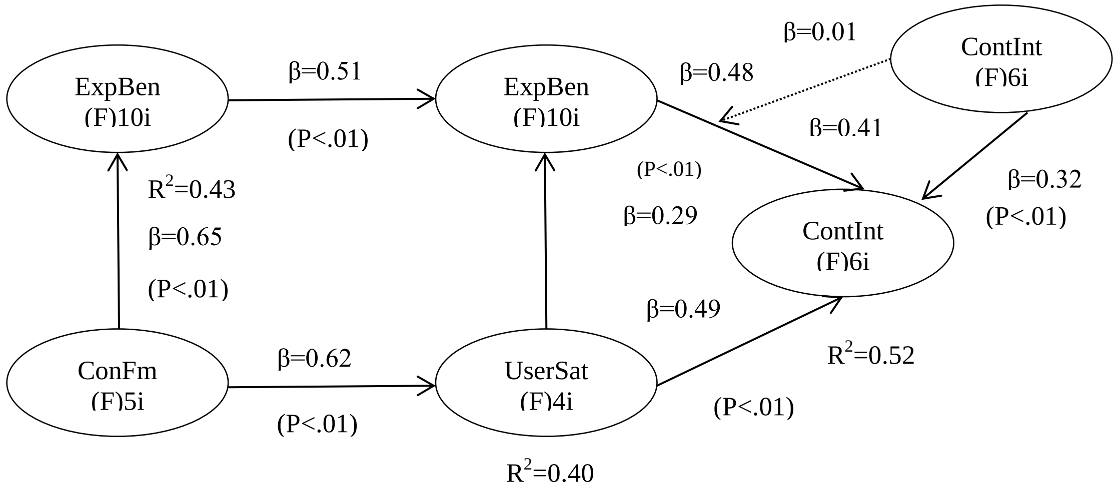
The structural model after running the SEM came up as shown below:

Figure 1. Post acceptance structural model



Habit as a moderator was imposed on the base line model to investigate it effect. There is an improvement from (R^2=0.52) to (R^2=0.55). Figure 2 displays the new results.

Figure 3. After moderation of base model



After moderation, it is clear that the predictive power of the research model increases from 0.52 to 0.55. This is a clear indication that habit actually influences the continuance intention of OSN participants to use it to buy.

5 Empirical findings

This result of this paper confirms the theoretical argument that the strength of trust to predict continuance intention is strengthened by usage habit. Generally this has practical implications for individuals who desire to offer commercial services on online social networking technologies.

5.1 Habit

Prior research in IS usage indicates that habit determines much of IS continued usage (Limayem et al. 2007) and using it to investigate the possible roles of moderation is common in this domain of study. However, this study result has taken us to another level of knowledge discovery which really emphasise the importance of habit. By increasing the predictive power of the study model, habit of using OSNs for purchases when formed leads to the continuance and sustainable business transaction. A study, of the roles of habit and website quality in e-commerce, found that habit has a significantly positive effect on trust, among others (Liao et al. 2006; Shiau and Luo, 2013). Nevertheless, this study on the contrary has proved a negative effect from (β = 48 to β =29). The reason being that, as habit is formed regarding the usage of a particular OSN to transact business, trust plays less crucial role whenever participants decide to buy because their buying process is done with less conscious intention. Guinea and Markus (2009) define habit as "a well–learned action sequence, originally intent that may be repeated as it was learned without conscious intention, when triggered by environmental cues in a table context" (Guinea and Markus, 2009) and this is exactly what this study has discovered.

When IS use is habitual, it ceases to be guided by conscious planning and is instead triggered by specific environmental cues in an unthinking or automatic manner (Bhattacherjee and Barfar, 2011). Guinea and Markus (2009) maintain that the mere presence of IS, or a specific task that a user is confronted with, for instance, to communicate with a colleague about writing a report, are important cues that may trigger habitual IS usage.

Previous research has found a strong relationship between habit and continuance behaviour in IS and many efforts have been made by different researchers in showing how habit influences IT usage. The conclusion is almost invariable the same. For instance, habit refers to "the extent to which people tend to use IS automatically, as a result of prior learning" (Limayem et al. 2007), it is a set of 'situation-behaviour sequences' that is or has become automatic, resulting from prior experience (Gefen et al. 2003). This study has validated this strong relationship by increasing the predictive power of the model.

Understanding the IS feature that develops habitual behaviour among OSN participants, in addition to showing how it moderates these feature(s), is therefore crucial in promoting habitual use of OSN in the long run. Past research reports that habit is a major driver of affect (Limayem and Hirt, 2003) and an 'emotional response to the thought of the behaviour' (Limayem and Hirt, 2003). By giving rise to a favourable feeling towards behaviour, habit can affect continuance intention directly. In other words, this study believes that a customer is likely to be more trusting and more influenced by behavioural factors of OSNs stores, when the habit of shopping online has been acquired.

5.2 Continuance Intention

Current research (e.g. Choi et al. 2011; Zhou 2011) argues that studies on continuance behaviour are becoming increasingly important, particularly for firms seeking to achieve profitability and sustainable, competitive advantage, through online business activities. The understanding of the factors that influence continuance behaviour, at this stage of the Internet's diffusion as a business avenue, is important. Online participant retention will ensure OSN continuity. Both IS continuance intention and repurchase intention are influenced by the initial use or purchase experience. Nevertheless, IS continuance intention in an OSN context is slightly different from the online repurchase intention as demonstrated by this study. What will make a participant to continue using OSN is the continuance engagement of vendors to answer all queries. OSN continuance emphasizes the continued usage of OSN sites, for business, instead of the use of physical stories; while online repurchase underlines consumer behaviour (Wen et al. 2011).

Continuance intention has been shown to have correlation with actual IS continuance (Bhattacherjee, 2001) and is used as the endogenous construct in many models, including this study. The phenomenon becomes more important for OSN systems because, such systems, being a Web 2.0 system of cloud computing, typically have some benefits that could only be realized in the long run. For instance, the issue of trust in OSN can build up because of familiarity with a member of one`s network and the continuance visit of a particular OSN. Furthermore, Limayem et al. (2007) suggests that IS continuance behaviour or IS continuous usage described behavioural patterns; reflect the continued use of a particular IS. How to enforce the habitual behaviour and participation in Web 2.0 systems, therefore, contributes greatly to an OSN's continued existence. This is an area worthy of pursuit because of the business value of OSN as a tool of both leisure and convenience, a way of communication and a new business venture.

In summary, it is worth mentioning that consumer satisfaction/dissatisfaction is not dedicated to modeling IS continuance per se, but is a general model for describing a person's reiterative behaviour, in performing certain tasks (Oliver 1980) such as continuance buying from OSNs.

5.3 Limitations

Various issues impacting on the study includes mode of data collection. The collection of only 300 responses could be considered to be somehow small looking at way this study intends to generalize its findings. Reviewing relevant literature proved to be quiet difficult as Social Networking literatures in the field if IS is still growing given the fact that they are quite recent development. Academic literature and peer reviewed materials have not explored all aspects, making most of the fact used here vulnerable for criticism. Many sources of reference came across are not academic based and thus could not be used. This resulted in a time consuming search for relevant literature. However the rapid collection of research data was a pleasant result.

6 Conclusions

Social networking and related matters are gaining research interest in the field of IS research. In line of this, the aim of this paper was to identify the noticeable impacts of habit on IS continuance intention through OSN, in addition to understanding the determinants factors and how they influence the dependent variable (OSN continuance intention). To this end, ECT was adapted from the consumer behaviour literature and integrated with other IS use research to theorize a model of OSNs continuance intention. Data collected from a survey agent was used to support the analysis and research model which was adopted from prior IS research proposal. The outcome really points to the fact that, anytime researchers refuse to moderate outcomes to provide an alternative insight to a discovery, they do a great disservice to the research community because, such outcome assume only a one dimensional result.

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