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Impact of Transformational Leadership on Organizational Citizenship Behavior (OCB): Mediating effect of Psychological Empowerment:
A study on Apparel Sector Sri Lanka

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Abstract
Employees with optimistic and affirmative feelings and having enthusiasm towards achieving the business objectives are key to sustain and continue in this competitive business world. Hence, leader of an organization is substantial in reaching the highest in the competitive world, as the role of a leader plays a main role in inspiring and guiding the actions of employees. The purpose of this study is to examine how transformational leadership of a leader and psychological empowerment of subordinates are related to OCB demonstrated by employees, where it identified as the voluntary commitment of the employees apart from well-defined duties and responsibilities. 130 employees of apparel sector manufacturing organizations in Sri Lanka were selected as respondents to respond about their boss's leadership, their individual empowerment, and whether they go further from their basic requirements of the job. Self-administered anonymous questionnaire used to collect data, which consist of standard measures. Transformational leadership was significantly positively related with OCB of employees and psychological empowerment act as a partial mediator on the relationship between transformational leadership and OCB of employees. This paper contributes on knowledge areas of transformational leadership and psychological empowerment on OCB while support in creating practices to develop psychological empowerment of employees and direct leaders to emphasis on improving OCB through changing their style of leadership.

Keywords: Transformational Leadership, Psychological Empowerment, Organizational Citizenship Behavior (OCB)

INTRODUCTION
With the emergence of the highly competitive and volatile environment, organizations tend to enhance their performance through innovative practices by motivating the employees to enhance their task performance. However, the question remains is what causes employees to perform by putting extra effort than the formal job requirements (Mayfield & Taber, 2010).
Podsakoff, MacKenzie, Paine, and Bachrach (2000), found that Organizational Citizenship Behavior (OCB) is different job behaviors that perform beyond the job descriptions which has been a popular area of studying during the past twenty years. As per scholars such as Organ, OCB helps to maximize the efficiency and promote the effective and smooth functioning of the organization, which emphasizes that OCB is important for the survival of organizations.
This has been further studied by many scholars and found that OCB has a positive impact on enhancing the organizational performance (Podsakoff & MacKenzie, 1994). Modern psychology researchers also accepted the fact that OCB has a positive effect on the organizational functioning (Wagner & Rush, 2000), and enhances the organizational effectiveness as well (Mayfield & Taber, 2010). It indicates that employees who devote their time energy toward the organization helps the organization to achieve competitive advantage in this volatile business environment, but if an organization is not with such employees will not be able to achieve it (Alizadeh, Darvishi, Nazari, & Emani, 2012).

Leadership style of the supervisor is a significant factor, which affect the subordinate’s behavior. Transformational leadership motivate the followers to work happier under managers (Krishnan, 2012). Also he has found that transformational leadership has significant impact on several aspects of organizational life and employee spirituality. Psychological empowerment is a common factor which present organizations looked for. It is a psychological state shows how employees believe about their work and the extent they believe in their role. Also it influences the organizational outcomes and it causes the employees to feel self confident and have higher probability to get success (Vacharakiat, 2008). When the global competition and the need for organizational change emerge, the organizations need employees who are willing to take risks, who stimulate innovation, and a person who cope up with uncertainty in the business environment which enhances the need of psychological empowerment of employees.

In the Asian context, Dash and Pradhan (2014) found that OCB has positive impact on organizations such as enhancing employee satisfaction, reduce the absentism, turnover and increase the retention. Also it was identified that strategies such as HR practices, job embeddedness and employee engagement can be used to promote OCB in an organization. Same as in the Sri Lankan context managers deliberately develop human resource management strategies in a way that develops the OCB of employees in their organizations (Dhammika, 2013).

Apparal sector in Sri Lanka has boom rapidly after the liberalization of the economy in 1977. It is the highest industrial employment generator in Sri Lanka and also the highest foreign exchange earner of the country. Majority of the apparel manufacturing companies are located in western province of Sri Lanka. (BOI 2015). As the apparel sector is one of major industry in the country, a huge competition exist among the manufacturers.

The companies have to provide best quality products, which meet the customer’s requirements. Hence, top managers of apparel companies have to encourage better performance from employees within the organizations which enhances the organizational performance as well.

OCB is a concept which is not well studies in the Sri Lankan context (Sivalogathasan & Jeyaweera, 2009). Therefore it is difficult to identify what factors are affecting OCB and how it changes in the apparel manufacturing sector in Sri Lanka. According to few preliminary interviews with some line managers of the apparel manufacturing organizations, there are some of problems to be seen on OCB among their subordinates. Accordingly the problem of this study is, ‘why executive level employees in apparel manufacturing organizations do not demonstrate the desired OCB?’

**LITERATURE REVIEW AND THEORETICAL DEVELOPMENT**

Though the factors affecting OCB has extensively studies, there is a need to study variables are that beyond the conventional personality, ability and attitudinal factors (Podsakoff et al., 2000). Several studies have conducted to investigate on antecedents of OCB in cross cultural environment have produced inconsistent and questionable results (Gelfand, Erez, & Aycan,
2007) where is calls the need for more studies in this area. Also according to Avolio, Walumbwa, & Weber (2009 cited in Wijewantha and Kailasapathy 2015) there is a significant process has been carried in developing the transformational leadership, yet there are areas still need further consideration and responsiveness.

**Organizational Citizenship Behavior and Transformational Leadership**

Organizational Citizenship Behavior (OCB) is defined as the individual conduct that is preferred, chosen by themselves where not directly or clearly acknowledged by the formal reward system and cumulatively stimulates the effective functioning of the organization. Also he defined that OCB is a manner that individual behave is a flexible nature that is not involved in the employee’s official job description, but employee contributes to the organization towards its success (Organ, 1988). According to Chen and Kao (2012 cited in Salehzadeh, Shahin, Kazemi, & Barzoki, 2015) OCB is defined as the extra role and pro social behaviors of the employees.

When the management of an organization cares for the employees and relationship of the employer and employee gets personalized. This will make the organization strong and stable as well. Also when an employee feel that the management respect and treat without any biasness employees start to trust the organization (Appelbaum, Bartolomucci, Beaumier, Boulanger, Corrigan, Dore, Girard, & Serroni, 2004). When trust and fairness includes in the employee employer relationship, it enhances the OCB (Aryee Budhwar, & Chen, 2002 cited in Chiang, Yang, Klein, & Jiang, 2013).

According to Organ, Podsakoff and MacKenzie (2006) OCB includes behaviors directly toward people and impersonal behaviors. This includes helping towards each other, carefulness about the workplace, involvement with the work, loyalty towards the organization, adhering to the organizational rules and regulations, creativity, and self-development. These both behaviors enhance the efficiency and effectiveness, which increases the overall productivity of the organization. Podsakoff et al. (2000) have found that there are three antecedents of OCB as individual differences, work attitudes, and contextual variables. Individual differences are defined as traits and values such as personality, knowledge, training, need for autonomy, and ability of the individual. Work attitudes are organizational commitment, supportiveness towards the organization, perceived fairness and leadership that derived from the emotions and perceptions of the working environment of the individuals. Contextual variables are the external influences, which occurred in the job, work group, organization, or environment such as task and group characteristics, limitation of the organizations and its culture, and style of the leadership. But he has found that both work attitudes and contextual factors are more strongly associated with OCB than individual factors.

Robbins (2001) found that OCB is a behavior that is not involved in formal job requirements which a voluntary behavior. Nevertheless, OCB stimulate the smooth and effective functioning of the organizations. Employees, who create positive statements about their team and organization help the members of the team, try to eliminate pointless conflicts within members, perform extra activities of the job voluntarily, obey to the organizational rules and regulations and bear infrequent annoyances of the work are some of the work behaviors, which show by the employees who engaged in ‘good citizenship’.

Leadership is a significant managerial competency that organizations use as it has a positive effect on enhancing the performance of the managerial employees (Jena & Sahoo, 2014). Dumdum, Lowe, and Avolio (2002) have found that transformational leadership has a positive impact on work related attitudes and behaviors of individual employees and organizational level as well. When the management of an organization cares for the employees and
relationship of the employer and employee gets personalized. This will make the organization strong and stable as well. Also when an employee feel that the management respect and treat with any biasness employees start to trust the organization (Appelbaum et al., 2004).

As Bass (1985 cited in Avey, Hughes, Norman, & Luthans, 2008) expressed that generally tranformational leaders transform their followers towards higher performance levels. Nevertheless they promote positive work related outcomes in their followers through charisma, inspirational motivation, intellectual stimulation and individualized consideration. It is explained that tranformational leaders promote the follower’s goals and stimulate their in to high oder values where then the followers understand the organizational vision and mission very clearly and consequently perform better in the job (Avolio, 1999).

According to Bass (1990), transformational leadership develops whenever a leader extends and uplift the comforts and interest of their employees. In addition, he specified that when the leaders produce attentiveness and recognition towards the organizational mission, that develops employees to behave beyond the expectations and employees begin to work with their interest for the sake of the organization. Also traformational leaders express a collective vision where followers act to go beyond their self interests where it shows that the tranformational leadership has a significant imact on positive work related outcomes. (Lowe, Kroeck, & Sivasubramaniam, 1996).

There is a positive relationship between tranformational leadership and organizational citizenship behaviour (Gamage & Herath, 2014). When the leaders display traformational leadership behaviours, it is belived that it has a impact on followers behaviour because followers feel trust and respect towards the leader and they are motivated to do more than they are expected to do Yukl (1989 cited in Podsakof et al. 1990).

Based on the empirical evidence, the first hypotheis of the study is raised as follows to be tested in this reaserch context.

Hi - There is a significant positive impact of transformational leadership on organizational citizenship behaviour.

**Transformational Leadership and Psychological Empowerment**

Spreitzer (1995) defines psychological empowerment as stimulus concept that displayed in in four cognitions: meaning, competence, self- determination and impact. These four cognitions shows active orientations to a work role rather passive. It means that individuals feel that they able to shape up their role and the context. Also psychological empowerment can be defined as where employees and managers share equal responsibility on results and maximizing the employee contribution towards achievement of organizational vision and mission (Jaffee & Scott, 1993). When employees have proper understanding about the responsibilities of the job consequently develops the self-motivation among themselves (Mohrman, Cohen, & Morhman, 1995).

Empowered employees believe in their roles, feel more confident that others and they are excited to be successful by development and growth. When the individuals see their working environment as providing opportunities rather providing limitations, their behaviors become more positive and they are tend to give positive outcomes, which can be explained as psychological empowerment. By empowering psychologically provides employees to feel more confident about themselves and be success in the current scenario and in the future as well (Wijewantha & Kailasapathy, 2005).
Transformational leadership lead to empower the employees (Kark, Shamir, & Chen, 2003), enhance work engagement, autonomy and self-efficacy (Dvir, Eden, Avolio, & Shamir, 2002), and it enhances commitment as well (Avolio, Zhu, Koh, & Bhatia, 2004). Bono and Judge (2003) cited in Avey, Hughes, Norman, & Luthans (2008) found that followers of transformational leaders view their work and more important and self congruent. This supports the idea of followers of transformational leaders are empowered with greater autonomy, meaning and ownership. According to Shamir, House, & Arthur (1993) transformational leaders motivate the followers though enhancing their self efficacy, linking followers social identification with organization and connecting organizational values with the followers values. This helps the follower to feel more independent and enhances the level of empowerment. Also they suggested that transformational leaders enhances the followers self efficacy by communicating high performance expectations and developing self confidence to support in achieving the organizational goals and objectives. Transformational leaders display individualized consideration by being as a coach or a mentor by giving close attention and listening followers attentively towards followers achievement needs and growth while making them inspiring to take more responsibilities to progress (Avolio, 1999).

There were several studies have been conducted and found that there is a positive relationship between transformational leadership and psychological empowerment (Ozaralli, 2003; Jung, Chow, & Wu, 2003). In more Jung et al. (2003) found that transformational leadership is positively associated with group cohesiveness and its effectiveness and a organizational climate where is embrace the innovation.

With the above evidence derived through the literature the second hypothesis is derived to be tested in this study is as follows.

H2 - There is a significant positive impact of transformational leadership on psychological empowerment

**Psychological Empowerment as a Mediator**

OCB is believed that where individuals go out from the frame of the job description and perform beyond the expected requirements (Puffer, 1987). Psychologically empowered employees believed them as someone who delegates and decentralizes the work environment (Kanter, 1983). According to Spreitzer (1995) psychological empowered employees are have positive workrelated behaviours. Transformational leadership enhance the employees performance by developing trust and giving meaningful responsibilities Podsakof et al. (1990). It was found that when the leaders demonstrate transformational leadership characteristics, followers are found to be empowered and that influence their work behaviour (Bass, 1990).

Also it was expressed psychological empowerment is partially mediated the relationship between charismatic leadership and workplace aggression (Hepworth & Towler 2004), where Avolio, Zhu, Koh, & Bhatia (2004) found that the relationship between transformational leadership and follower’s organizational commitment has been mediated by psychological empowerment. Also it has found that psychological empowerment has a direct impact on job performance and OCB has a mediating role between psychological empowerment and job performance (Chiang & Hsieh, 2008 cited in Firozabad, 2013).

Above empirical evidence supports the third hypothesis to be tested, in this study as follows.

H3 - Psychological empowerment mediates the relationship between transformational leadership and organizational citizenship behavior.

Consequently, the theoretical model of the study is shown in Figure 1.
METHODOLOGY

This study is a quantitative study done under deductionism. It is an explanatory research as it tries to explain the problem related to the dependent which is organizational citizenship behavior using the variables transformational leadership and psychological empowerment. The study is based on primary data and follows the survey strategy where a cross sectional study as data is collected only in one point of time. The unit of analysis here is a dyad which is supervisor and subordinator. The population of this study is all executive level employees in the five leading apparel-manufacturing companies and their immediate bosses. Since there is no population frame available as convenience sampling technique was used in selecting the sample. A self-administered anonymous structured questionnaire used to collect data. Bosses (line managers) filled the questionnaire A, which was on subordinates’ organizational citizenship behavior, and the subordinate employees filled the questionnaire B regarding their supervisor’s transformational leadership and their own psychological empowerment. Finally, personal details were collected from each party. 260 questionnaires were distributed among the individuals and 130 were collected and response rate is 50%. All the questionnaires were considered as they all were in a usable condition. As such the final sample of the study is 130.

MEASUREMENT OF VARIABLES

Organizational Citizenship Behavior

Organizational behavior is a variable with five dimensions as presented by Organ (1988) which are Altruism, conciseness, courtesy, sportsmanship and civic virtue. It was measured using a 24 items scale developed by Podsakoff et al. (1990) based on the five dimensions of the Organ (1988).

Line Manager’s Transformational Leadership

A twenty item scale was taken from Multifactor Leadership Questionnaire covering the four dimensions idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Hinkin and Tracey (1999) developed the shorter version which used in the study of the original version of transformational leadership measure developed by Bass and Avolio (1990).

Psychological Empowerment

The twelve item original measure developed by Spreitzer (1995) on seven point likert scale covering four dimensions – meaning, competency, self-determination and impact was used to measure psychological empowerment of subordinates.
SAMPLE DESCRIPTION

When considering the followers, most (62%) of them are in between age of 25-30 years and most (69%) are females. Majority (49%) of the followers had been in the organization for more than 5 years and they have 2-3 years of experience in the current job.

Most (65%) line managers are in between age of 45-50 years. When considering them 70% are males and most (52%) were been in the organization for 8 years. Most (68%) of the line managers have more than 4 years of experience in the current job.

DATA ANALYSES

This section is devoted to describe the data analyses done using SPSS version 21.0. Descriptive statistics, correlation and reliability statistics related to the three main variables in the model are shown in table 01 below.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Correlation</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>OCB</td>
<td>2.83</td>
<td>1.53</td>
<td>0.73</td>
<td>0.73</td>
</tr>
<tr>
<td>Psychological Empowerment</td>
<td>3.47</td>
<td>1.42</td>
<td>0.74(OCB)</td>
<td>0.76</td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>2.45</td>
<td>1.33</td>
<td>0.67</td>
<td>0.78</td>
</tr>
</tbody>
</table>

Hypotheses Testing

Since there is one independent variable the direct relationship between transformational leadership and OCB, and direct relationship between transformational leadership and psychological empowerment were tested using simple linear regression and the mediation effect of psychological empowerment was tested using multiple regression analysis hierarchical regression (Field, 2009).

The summated means of each variable was used to run the regression analyses. There was a positive correlation between the variables and therefore the gradient of the regression equation testing hypotheses is positive. The $B_0$ in the regression equation indicates the level of OCB in the absence of transformational leadership and psychological empowerment.

Measuring the direct relationship between transformational leadership and OCB

A simple linear regression was performed to test the relationship between transformational leadership and OCB. In order for the hypothesis, There is a significant positive impact of transformational leadership on OCB to be true the impact of transformational leadership on OCB should be statistically significant and positive.

Standardized beta for transformational leadership (0.71) indicated that there is a positive impact of of line managers transformational leadership on OCB. In addition the probability of the t-statistics (9.31) for the standardized beta coefficient of the independent variable is significant as the p value was 0.000 (Field, 2009). 43% of the variance in OCB is accounted by the transformational leadership. As there is a statistically significant contribution from line managers transformational leadership towards OCB of subordinates, hypothesis 01 is supported.
Measuring the direct relationship between transformational leadership and psychological empowerment

A simple linear regression was performed to test the relationship between transformational leadership and psychological empowerment. In order for the hypothesis, There is a significant positive impact of transformational leadership on psychological empowerment to be true the impact of transformational leadership on psychological empowerment should be statistically significant and positive.

Standardized beta for transformational leadership (0.65) indicated that there is a positive impact of line managers transformational leadership on psychological empowerment. In addition the probability of the t-statistics (8.52) for the standardized beta coefficient of the independent variable is significant as the p value was 0.000 (Field, 2009). 25% of the variance in psychological empowerment is accounted by the transformational leadership. As there is a statistically significant contribution from line managers transformational leadership towards psychological empowerment of subordinates, hypothesis 02 is supported.

Mediation effect of psychological empowerment

Next hypothesis 03 was established based on the psychological empowerment theory. "Mediation requires significant correlation among all three constructs" (Hair, Black, Babin, & Anderson, 2010). To test the mediation four step three regressions approach proposed by Judd and Kenny (1981).

01. Direct effect was tested using a simple linear regression on line managers transformational leadership and OCB and indicated the existence of a statistical significant direct positive relationship

02. A simple linear regression was used to test the relationship between psychological empowerment and line managers transformational leadership to test whether mediator predicted by the independent variable. Regression results indicated the existence of a statistical significant direct positive relationship between the variables.
03. The third regression is run to test for the indirect effect, when the first two regression shows significant relationships. A two step regression was performed here, where in step one the dependent variable was regressed for the independent variable and in step two for the mediating variable. Subsequently relationship between transformational leadership and OCB was reduced after adding psychological empowerment where the partial mediation is supported. Therefore, hypothesis 03 is supported and accepted.

Table 04 – Mediation effect of psychological empowerment on line managers’ transformational leadership and OCB

<table>
<thead>
<tr>
<th>Reg. 1</th>
<th>Model 01</th>
<th></th>
<th></th>
<th>Model 02</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Independent Variable - TL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>0.69</td>
<td>0.71</td>
<td>9.31</td>
<td>0.57</td>
<td>0.59</td>
<td>4.30</td>
</tr>
<tr>
<td>β</td>
<td>0.45</td>
<td></td>
<td></td>
<td>0.63</td>
<td>0.67</td>
<td>4.39</td>
</tr>
<tr>
<td>t</td>
<td>70.65</td>
<td></td>
<td></td>
<td>64.32</td>
<td></td>
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<tr>
<td>R²</td>
<td>0.45</td>
<td></td>
<td></td>
<td>0.56</td>
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<td></td>
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<tr>
<td>Adjusted R²</td>
<td>0.43</td>
<td></td>
<td></td>
<td>0.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ΔR²</td>
<td>0.45</td>
<td></td>
<td></td>
<td>0.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ΔF²</td>
<td>70.65</td>
<td></td>
<td></td>
<td>64.32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DISCUSSION OF FINDINGS

This study was conducted to investigate why executive level employees in apparel manufacturing organizations do not demonstrate the desired OCB?, where it emphasizes that employees demonstrated less OCB in companies. The descriptive statistics shows that problem discussed in the study is exist as the mean value has a low value (2.83). This depicts that there is a problem associated with OCB of the subordinates.

In addressing that issue the study investigate how the transformational leadership of line managers impact the OCB of subordinates and is was found that it has a significant impact where $R^2 = 0.45, P = 0.000$. This says that when the line managers possess transformational leadership characteristics, that leads the subordinates to perform by going beyond the job description given, where they enhance their performance where it supported by the previous empirical evidences (Gamage & Herath 2014; Yukl 1989; Lowe, Kroeck, & Sivasubramaniam 1996; Avey et al. 2008; Bass 1990) where the H₁ is supported. By considering the previous studies, the present study also confirms that the tranformational leadership of line managers has a significant positive impact on OCB of the subordinates.
Next, the study investigated how the transformational leadership of line managers impact the psychological empowerment of the subordinates. This was found that there is a significant positive impact where $R^2 = 0.28$, $P= 0.000$. This confirms that transformational leadership motivates the subordinates by enhancing their autonomy which consequently enhances their empowerment. In line with the previous studies (Kark, Shamir, & Chen, 2003; Dvir, Eden, Avolio, & Shamir, 2002; Avey et al., 2008; Shamir et al., 1993; Ozaralli, 2003; Jung et al. 2003), the present study also confirm that line manager’s transformational leadership has a impact on the follower’s psychological empowerment, where $H_3$ is supported.

In this study it was found that psychological empowerment has a partial mediation on the relationship between transformational leadership and OCB. According to Bass (1990) when the organizations consist with transformational leaders, the followers are empowered and it influence to enhance the work behaviour. So that the $H_1$ is supported and it is consistent with literature (Avolio et al. 2004; Firozabad, 2013; Hepworth & Towler 2004). This suggests that transformational leadership is not only contribute to the OCB of the followers, but also creates followers psychologically empowered and also psychological empowerment as a factor that where transformational leadership is differently associated with OCB.

**SIGNIFICANCE OF THE STUDY**

**Theoretical implications**

According to Sivalogathasan & Jayaweera (2009) OCB is a concept, which is not well studies in the Sri Lankan context. Also the studies on OCB in Sri Lanka context with respect to apparel manufacturing companies is very limited, so that the present study fills the gap of the stock of knowledge. This study contributes to the knowledge in areas of organizational behavior, leadership and management.

Most of the managers and leaders of the organizations believes that investment in employee moral will help in enhancing the employee performance (Kossen, 1996), however researches have less confidence regarding this relationship (Murphy, Athanasou, & King 2002). In spite of that, leadership has been hot topic where researches focus on nowadays and this topic has been an interest topic among academia (Elbers, 2007). With that, there is a need more research studies on this area where this study attempt study the area of transformational leadership and this study has focuses on the transformational leadership and OCB with psychological empowerment in the apparel manufacturing organizations in Sri Lankan context which contribute the leadership theory.

Through the previous studies, Spreitzer et al. (1999) found that there is a relationship between leadership and psychological empowerment, but psychological empowerment was not much identified as a factor which impacts to OCB of the followers. This study has focuses on this argument. Also there were less studies to be found using the psychological empowerment as mediator between transformational leadership and OCB and no studies in the apparel sector specially in the Sri Lankan context. So that this study introduces this concept in to a unleash context.

**Practical Implications**

Currently apparel sector manufacturing is the most significant and dynamic contributor to the Sri Lankan economy rather the tea exporting industry. Providing quality and innovative products for the global market is the main strategy of these companies. For that the employees should drive towards for an extra mile where embrace change with the courage. So that the leaders of apparel sector manufacturing organizations always look for new strategies which drives the companies to as competitive edge. According to Dhammika (2013) managers of the
Sri Lankan organizations deliberately develop HR strategies to enhance the OCB of the employees. Thus, the present study pays an attention on how the OCB can be enhanced by the role of the managers. This study shows that if the line managers inculcate their role with the transformational leadership characteristics, will help the followers to an extra step forward that fulfilling the requirements by the job description. Also by enhancing the empowerment psychologically the followers feels independence where finally give more positive outcomes towards the organization. Managers can develop induction programmes for employees to understand the leadership and empowerment practices and go beyond the job requirements, which enhances the effectives of the organization (Jha, 2014). This study helps to energize the efforts of the HR department to look in to these practices with eyes open where it helps in developing more strategies to achieve the vision and mission successfully.

LIMITATIONS OF THE STUDY

Though this research has above contributions, there are some of the limitations, which are stated below. This study is conducted only in apparel sector using five leading companies. These are small and medium level companies in apparel sector where they also focusing on achieving a competitive edge. However, as this study is done with the five leading companies, applying the findings for those small and medium companies is questionable. This study has used the questionnaire methods for data collection. In addition to the questionnaire there are several methods which can be used, but those were not used with the time restriction. So that there is a possibility of misunderstandings to be occur (Zikmund, 2010). Another limitation of the study was that, this study was a cross sectional study, the data was collected only one time. The relationship would be even better if the relationship was tested after the line managers demonstrated their transformational leadership characteristics for a time period. If this could be done the relationship would be more strengthen. The sample size is small, where it used a convenient sampling. Also the sample was collected from only the five leading companies, there is less representation of the whole apparel industry. Also there were only two variables were considered in this study, where there are several factors that affect OCB, which is being another limitation of this study.

DIRECTIONS FOR FUTURE RESEARCH

This study investigates the areas of transformational leadership, psychological empowerment and OCB and more theoretical and empirical work in the Sri Lankan context is clearly needed. Though OCB is more attractive area within the researches, there are much more areas to be revealed as this study only concentrate on two variables. Further researches can be carried out by using more independent and mediating variables. This study has done on five leading apparel manufacturing companies, but there are several companies in small and medium scale where the researches can do their further researches. A comparative analysis between industries using the same variables also can be carried out. Also the sample size of this study is less, so that the data analysis was done only trough SPSS version 21.0. But a further research can be carried out with more sample and the analysis can be done using Structural Equation Modeling (SEM).
CONCLUSION

This research study contributes in different domain, which adds value for knowledge as well as for the practical scenario. This study gives the managers a message that organizations can develop strategies where is enhances the OCB of the followers through transformational leadership and psychological empowerment. It also conveys that the importance of OCB to any organization where it focuses on enhancing the employee performance.

REFERENCES


Elbers, N. (2007). Charismatic leadership, emotional intelligence, and values in
organizations. (Unpublished dissertation, Eramus University, Rotterdam.


http://www.investsrilanka.com/key_sector/apparel/apparelOverview


The Growth Stimulating Role of Economic Globalization on Emerging Countries in Africa: Nigeria in Perspective

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Abstract

This study was carried out due to the varied views on the impact of economic globalization on economic growth in emerging countries. Some scholars are of the view that economic globalization intensify economic growth based on empirical findings and theoretical conjectures; others, albeit, in the minority, hold the view that it increases the gap between the haves and the have not’s between countries. Thus, this study observed these positions and specifically examined the impact of foreign direct investment on agriculture and manufacturing sectors plus the degree of trade openness on real gross domestic product from 1981 to 2016 in Nigeria. Secondary time series data was collated for the analysis and estimation. The ex-post facto research design was adopted to explain the impact of the explanatory variables on the dependent variable in retrospect. The Augmented Dickey Fuller test was employed to solidify the series, which integrated at first difference, Johansen co-integration test for the long run relationship, which reported two long run equilibrium relationship, and the error correction technique for the estimation of the model were adopted. The empirical findings reveal that the measures of capital inflow and trade have a positive and significant impact on economic growth in Nigeria. This study, therefore, offers additional credence to the role economic globalization plays in economic growth. The study suggests that measures should be taken to encourage production of goods in which the nation has comparative and competitive advantage over its trading partners and stabilization policies be implemented to encourage investment sustainability.

Keywords: Foreign direct investments, degree of trade openness, economic globalization, Nigeria

1. Introduction

There is no generally agreed definition of globalisation in economic literature (Alimi & Atanda, 2011). This is understandable because globalisation covers almost all spheres of human endeavour. Thus, every definition of the subject depends on the perspective of the writer. To this end, the World Trade organisation (WTO) in 2008 summed these numerous definitions of globalisation to mean “the integration of capital, investment and labour markets or its integration with world markets.” This implies that globalisation makes the world into a unit
called the “global village” where information and factors of production (like labour, capital and entrepreneurs) can interact almost free of charge irrespective of geographical boundaries. In technical economic sense, this creates more advantages and opportunities for countries who are wholly involved in it. Thus, proponents of economic growth believe that the no border economic configuration breeds economic growth via external trade, interconnect of financial markets and systems, mobility of labour and technical know-how (Kılıç, 2015).

Consequently, the argument for the need for globalisation started squares of years ago. Specifically, it started five decades before World War I (Wan-Wen, n.d). Notwithstanding, between World I and World II, the dependency theorists (who advocate for developing countries not to join foreign markets due to the perceived innate threats and disadvantages) and the revisionist who questioned and challenged the free market theory by positing that it poses a lot of challenges to the proponents of globalisation, the neoclassical thinkers. The neoclassical school of thought holds that free trade without restrictions across boundaries is the best option to solve major economic challenges and serves as the lubricant to stimulate the frontiers of growth (Wan-Wen, n.d). That is, issues relating to lack of local expertise, products and services, development partners, and huge funds needed for gigantic capital projects will be contained in a globalised world, free trade and protectionism and financial restrictions. This implies that there will be flow of external investment, trade openness and free flow of labour across borders (which breed efficiency). This has the ability to reposition economically and technologically backward nations to the path of growth.

In this regard, after World War II, globalisation was wholly embraced by advanced nations first, and much later, followed by developing nations. This was highly necessitated on evidence, the failure of the command and control era before World War II. According to the neoclassical thinkers, globalisation came back stronger due to ease of doing business, low cost of movement (of goods, services and labour) and communication necessitate by new innovative technology that eased merchandise trade and the flow of capital resources across border. They also cited the establishment of General Agreement on Tariffs and Trade (GATT) in 1945 and later World Trade Organization (WTO) in 1995 as reasons for the emergence of globalisation.

The institution of the Bretton Woods institutions; whose focal agenda was to reflate the world economy to the path of growth after the Second World War also added another feather to the globalization. Obviously, this is understandable because money is the chief facilitator of transacts and every growth agenda. Prior to the use of various forms of money as a medium of exchange, trading of commodities was highly constrained due to the many disadvantages of the barter system, hence impeding economic activity. Consequently, colonies were at best operating in closed economic systems (autarchy) with subsistent production. Thus, the establishment of International Monetary Fund (IMF) and World Bank helped to solidify and establish a common denominator of transactions across borders. Consequently, these establishments championed the convergence of world markets, international settlement and propagated economic openness.

For instance, as a precondition for all forms of assistance, developing nations was required to unbundle restrictive trade and finance policy (Palley, 2011). Specifically, developing nations like Nigeria were forced to adopt Structural Adjustment Program (SAP) in 1986 to unbundle government control and deregulate trade and the financial sector.

However, in the 5 years leading to the introduction of SAP in 1986, Nigeria’s trade policies were designed inward to help protect infant industries by way of high tariffs, import licensing and quarterisation (Alum, 2016). Coupled with this era was when financial services were tightly regulated. For instance, the exchange rate (the dollar naira rate) was fixed. This essentially means that the pricing mechanism was not allowed to function freely. Thus, Nigeria was to an extent isolated economically and was eluded with the benefits of globalisation.
The Nigerian experience in the face of globalisation is full with opportunities and threats. It afforded the nation international finance and transnational corporations to the real sector of the economy and other development partners. It has also facilitated free trade across border. This implies that Nigeria can import with little or tariff to meet her shortfall in production. Among others, it has also created huge markets for Nigerian manufacturing concerns. On the other hand, the Nigerian financial system and economy has been affected by various global financial crises due to the integration of world financial markets. It has also seen the death or stunted growth of infant industries due to intense competition from transnational corporations, “loss of cultural integrity, national economic autonomy is undermined or destroyed by open capital markets and flexible exchange rates” (Mutascu & Fleischer, 2011). Among others, Nigeria has also lost funds to capital flight and manpower to brain drain.

Unsurprisingly, all these points are tenable for the rich and developed countries and more especially developing countries if they can fully maximize their strengths and the huge opportunities from globalization by minimize the risks and threats from trading with the world. Thus, this has sanctioned series of studies between globalization and economic growth. The importance of these studies are expedient as it would help validate (or not) the position of the neo-classical school of thought and other alternative thoughts most especially the non-economists who have concerns for the costs and rewards of going global (Dreher, 2005). The findings from these studies are divergent, thus this study contributes to literature by observing current trends and the sector specific impact of foreign direct investments to agriculture and the productive subsector and trade openness on economic growth in Nigeria.

1.2. Contemporary Issues

The dominant theoretical axiom that globalization leads to economic growth in developing countries like Nigeria is highly questionable because the concerns that globalization raises the gap between the “haves and the have not’s” (Awake, 2002) and more especially between developed and developing countries and between the elites and the lower class in developing countries are still there. In other words, the rich countries get richer while poor countries gets poorer, which is a textbook case of Matthew effect. This is even so as empirical results from studies are inconclusive on the growth stimulating premise of globalization in emerging countries like Nigeria. This does not in any way invalidate the impact of globalization on a country but this rather gives credence to the failure of most developing nations to create the necessary conditions to maximize the gains from international trade and capital inflow (Todaro & Smith, 2006).

Consequently, the failure of Nigeria to capitalize on the enormous opportunities from globalization has made the country to have perpetual negative balance of trade and payments due to the excess of imports over exports. According to export-led growth strategists, the growth of an emerging nation is largely dependent on the capacity of the nation to produce goods and services in which they have comparative advantage for its local needs and ultimately for export, and import the produce in which they have comparative disadvantage (Nduka, Chukwu, Ugor & Nwakaire, 2013).

Among other areas, Nigeria has good arable land for agriculture and raw materials for the manufacturing industry. However, until the discovery of crude oil in commercial quantity, the country has failed to maximize the enormous export earning potentials in these sectors. For instance, figures from the CBN Statistical Bulletin reports that the average manufacturing capacity utilization in the country to be 55.45% in 2008, 56.76% in 2009, and 56.82% in 2010. The inability of the nation to produce massively to meet the huge markets for its products in the local and international markets also means that manufacturing concerns have not been able to
capitalize on the economies of scale from large scale production. This is because wholesale production is cheaper than piece mail production. The reason for this is not farfetched – fixed production cost for research, advertisement, and product development are meagre for either small or large scale production. This makes the locally manufactured products to be more expensive. This invariably exacerbates Nigeria’s import demand and over dependence on oil.

Notice that commodity prices like crude oil are highly volatile, thus its appreciation and or depreciation in price has a huge influence on the economic prospects of a country. It is therefore expected that in times of rising prices, the government and its agencies invest and carry out targeted diversification of the economy plus save for the rainy day. The logic behind this notion is that in times of falling prices economic activities declines, prices of goods and services increases as a result of imported inflation and people are downsized.

In addition, transnational corporations are highly sensitive to happenings in their host nations (more especially developing nations). The economic and political environments of developing nations are highly unstable (Waller-Hunter & Jones, 2002) due to lack of continuity in economic policies at the inception of every new administration. For instance, the command and control economic policy of this administration made many foreign setups in the country to close down their operations. Thus, transnational corporations are always motivated to pull their investments and funds at every instance of contrived economic policies (Yaqub, Adam, & Jimoh, 2013).

The intense rate of volatility and mobility of capital from developing countries always results in increase in consumer price index, interest rates, downsizing and declining aggregate demand, which altogether rendered their economies to be impotent and an unattractive investment destination (Obadan & Obioma, 1999). For instance, Nigeria experienced three quarters of negative growth in 2016. Prior to the general elections in 2015, Nigeria was the number one foreign direct investments destination with the largest economy (in terms of GDP) in Africa. However, coupled with the political instability in the polity and the three quarters of negative growth (i.e. recession); Nigeria experienced massive exodus of transnational corporations and their investments.

It is also on record that a good percentage of external direct inflows do not effectively stimulating the growth of key sectors in the country (Ibrahim, n.d). According to economic theory, the real sector is the extraordinary accelerant of economic growth in a nation. Thus, any investment that does not stimulate the real productive sector enough would not lead to any meaningful output growth. In affirming this position, Olusanya (2013) stated that 60% of capital inflows are into the extractive industry (oil and gas subsector), and thus the remaining percentage is too small (Asiedu, 2003) to stimulate the other real sectors of the economy to grow. To this end, this study intends to reassess the impact of economic globalization on economic growth in Nigeria.

2. Empirical Review

There have been several empirical studies concerning the subject of this study; with divergent conclusions, thus giving room for researcher to further study the limitations of previous studies by adopting different methodologies, measurement variables, scope, modifying already existing models or calibrating new ones, all with the aim of building a robust knowledge base for informed economic decision making.

A recent study by Ojo (2018) focused on the impact of globalization on agriculture in Nigeria. To achieve this, the study made use of annual time series data covering 29 years for foreign direct investment (FDI) to agriculture, degree of openness, foreign exchange rate and consumer
price index on agricultural output in Nigeria. The estimation was done using Error Correction Model and the results indicate that foreign exchange, degree of openness and foreign direct investment were not statistically significant in influencing agricultural productivity in Nigeria. However, consumer price index impacted positively on agricultural productivity to a larger extent. The study concluded that globalization has no significant impact on the growth of agriculture productivity in Nigeria.

Similarly, in another recent study by Idoko & Taigai (2018) set out to ascertain the sector specific role on capital inflow to the manufacturing sector in Nigeria. The study found the existence of a long-run nexus between FDI and the manufacturing sector output growth in Nigeria. The study by Ogbokor (2018) investigated whether foreign direct investment affects economic growth in Namibia using quarterly from 1990 to 2014. The results found that there is a long run and direct relationship amongst the independent variables of foreign direct investment, exchange rage, trade openness on the independent variable of gross domestic product in Namibia.

The paper by Belloumi & Alshehry (2018) investigated the causal links between domestic capital investment, foreign direct investment (FDI), and economic growth in Saudi Arabia over the period 1970 to 2015, using the autoregressive distributed lag (ARDL) bounds testing to co-integration approach. The fully modified ordinary least squares (FMOLS), dynamic ordinary least squares (DOLS), and the canonical co-integrating regression (CCR) were employed to check the robustness of the ARDL long run estimates. The results show that in the long term there are negative bidirectional causality between non-oil GDP growth and FDI, negative bidirectional causality between non-oil GDP growth and domestic capital investment, and bidirectional causality between FDI and domestic capital investment. FDI affects negatively domestic capital investment in the short run, whereas domestic capital investment affects negatively FDI in the long run. Both finance development and trade openness affect positively non-oil GDP growth, FDI inflows and domestic capital investment in the long run.

Afolabi, Danladi, & Azeez (2017) studied the nexus between foreign trade and economic growth and the factors determining output growth in Nigeria. To achieve this, ordinary least squares was used and the results reported that government expenditures, interest rate, import and export are all positively significant while exchange rate and foreign direct investment are negatively insignificant to the growth process of the Nigerian Economy.

Similarly, Abiodun (2017), in his award winning paper examined the nexus between trading with the world and output growth in Nigeria. Export volumes, import volumes, trade openness, gross capital formation and exchange rate were used as the predictor variable while real gross domestic variable was used as the measure for economic. The results showed that the explanatory variables have a positive and significant relationship with economic growth in Nigeria.

Lawal & Ezeuchenne (2017) studied to determine the impact of world-wide trade on the economic growth in Nigeria. The study used time series data from 1985 to 2015 on imports, exports, balance of trade and trade openness as proxy for foreign trade and real gross domestic product as a measure for economic growth in Nigeria. Co-integration and Vector Error Correction Model (VECM) was employed to analyse the series. The result reported along run relationship between foreign trade and economic growth. More specifically, import and trade openness are both insignificant in the short run but significant in the long run while export and balance of trade are significant in both the short and long run. The granger causality test showed that economic growth is independent of imports, exports and balance of trade but economic growth is unidirectional with trade openness.
In another country specific study (Stephen & Obah, 2017), studied the influence of foreign trade on economic growth in Nigeria from 1981 to 2015. Numeric values for the study was obtained from the CBN statistical bulletin for gross domestic product, non-oil imports, oil imports, non-oil exports, and oil exports. Gross domestic product was regressed on non-oil imports, oil imports, non-oil exports, and oil exports. The results reported as follows; oil imports have a statistically insignificant impact on output, while non-oil import has a statistically significant influence on output. Oil export reported a linear and significant impact on output whereas non-oil export showed a nonlinear and significant relationship with output in Nigeria. In all, the study suggested that international trade has a positive impact on economic growth in Nigeria.

(Moyo, Kolisi, & Khobai, 2017) seek to ascertain the long run relationship between trade openness and economic growth in Ghana and Nigeria from 1980 to 2016. This study purposed to determine the long run relationship between trade openness and economic growth in Ghana and Nigeria covering the period between 1980 and 2016. The Autoregressive distributed lag (ARDL) model was employed in this study to study the long run relationship between the variables of gross domestic product, trade, investment, exchange rate and inflation. The findings of the study suggested existence of a long run relationship among the variables for both countries. The results further showed that trade openness has a positive impact on economic growth and significant at a single percentage point in Ghana while in Nigeria trade openness has a negative and insignificant impact on economic growth.

In another recent study by Markjackson, Johnny, & Siaisiai (2018), which set out to examined the influence of foreign trade on economic growth in Nigeria found that oil import has a linear but insignificant impact on real gross domestic product in Nigeria, non-oil imports and non-oil exports has a positive and significant impact on economic growth in Nigeria, oil exports has a nonlinear and insignificant impact on real gross domestic product in Nigeria. In all, the study is of the affirmative on the nexus and impact of trade openness on economic growth in Nigeria.

Alimi & Atanda (2011) investigated the effect of globalisation on economic growth in Nigeria between 1970 and 2010 amidst cyclical fluctuations in foreign investment. They employed autoregressive model the analyses revealed that globalisation has positive and significant effect on economic growth in Nigeria, while the positive of business cycle on real output growth was insignificant. The study concluded that globalisation and cyclical movement in foreign investment have significantly enhanced economic growth in Nigeria.

The study observes the challenges aggregate data of foreign direct investments to the private sector and elected to use disaggregate time series data to select sectors. The problem with aggregate data is that it assumes homogeneity – that is it assumes all the sectors that make up the private sector to be similar or the same. This has the tendency of creating error of aggregation due to the fact that all the sectors have their distinctive features that are different from each other. This means results from such studies would not give an accurate picture of the link and effect relationship (Thomas, 2002) between the study variables. We intend to correct this error by using disaggregate data (i.e. sector specific data) to ascertain the impact of the study elements.

3. Research Design

Research design is the overall strategy that is used in integrating the different components of the study in a coherent and logical manner, thereby, giving room to address the major concerns as well as the attainment of the objectives of the study. Consequently, to ascertain the impact of the components of foreign direct investments and the degree of trade openness on economic growth in Nigeria, secondary annual time series data was collated and used for the analyses
and estimation. It is assumed that time series data at level is not stationary, thus, the dataset was first and foremost solidified to avoid spurious results before estimation.

The ex-post facto research design was employed to examine how the independent variables affect the dependent variable. Ex-post facto research design is a quasi-experimental design used in examining how an independent variable affects a dependent variable in retrospect. Consequently, this research design was adopted due to the fact that researcher has no control over the behaviour and numeric values of the variables of the study. Thus, this design enabled the researcher to collate data and use econometric techniques to observe and coagulate the series, ascertain the long run nexus and estimate the direction and magnitude of the independent variables on the dependent variable of the study.

### 3.1. Model Specification Process

The model for this study is built following the AK growth model advanced by Rebelo (1991). The model is expressed as follows:

\[ Y = AK \]

Where Y, A, and K denotes output, technological advancement and capital respectively. The model expresses output as a direct product of capital stock.

This theoretical framework is slightly modified to capture the sector specific impact of foreign direct investment to the manufacturing and agriculture subsectors and the degree of trade openness. The central hypothesis behind this reasoning is hinged on the supposition that developing nations and indeed the real private sector of these countries are constrained of funds and thus capital inflow can stimulate the productive capacity of the nation, and hence trading with the rest of the world.

Therefore national output is a function of changes in foreign direct investments to the manufacturing and agriculture subsectors and trade openness (measured by the degree of trade openness, which is total trade divided by gross domestic product). The modified functional model is expressed as follows;

\[ RGDP = F(FDI_{MAN}, FDI_{AG}, DTO) \]

This is mathematically expressed as follows;

\[ RGDP = b_0 + b_1FDI_{MAN} + b_2FDI_{AG} + b_3DTO \]

The disturbance term (\(e\)) is introduced to capture changes in the dependent variable that could not be explained by the explanatory variables in the model. Thus the model is expressed econometrically as follows:

\[ \text{LnRGDP}_t = b_0 + b_1\text{LnFDI}_{MAN,t} + b_2\text{LnFDI}_{AG,t} + b_3DTO + \epsilon_t \]

Note: if equation (4) above produces any long run equilibrium relationship, there is an econometric ground to carry out the error correction process. Following finance literature, the Engle-Granger Representative Theorem of Error Correction of 1987 was employed to determine the direction and magnitude of the measures of the study. The Engle-Granger approach was employed because the method put forward the use of ordinary least square estimators in estimating the functional relationships, test of stationarity and co-integration that lays the foundation for error correction (Ogege & Boloupremo, 2014). Thus, the error correction model is stated below;

\[ \Delta\text{LnRGDP}_t = b_0 + \sum b_1\Delta\text{LnFDI}_{MAN,t} + \sum b_2\Delta\text{LnFDI}_{AG,t} + \sum b_3\Delta\text{LnDTO}_t - \alpha EC_{t-1} + \epsilon_t \]
Where; $b_0$ is the intercept, $b_1$ – $b_3$ are the coefficients of the explanatory variables, Ln is natural logarithm, which is used to check the effect of co-movement in the explanatory variables, RGDP is Real Gross Domestic Product – a measure for national output growth, FDI<sub>MAN</sub> is Foreign Direct Investments to the manufacturing sector, FDI<sub>AG</sub> is Foreign Direct Investments to the agriculture sector, DTO is the degree for trade openness – a measure for trade openness, $e$ is the disturbances term – Sweeney, William & Anderson (2006) states that the error term capture changes in the dependent variable that cannot be explained by the linear effect of all the independent variables in the model. Finally, EC = Error correction term. The $\alpha$ (coefficient) of the error correction term predicts the speed of adjustment to an equilibrium position. Note; if the coefficient bears a negative sign, then the model is moving towards equilibrium. However, if the sign is positive, then the model is moving away from equilibrium. Economic theory presumes the sign to always be negative.

**A priori Expectation**

$b_1 > 0$, $b_2 > 0$, $b_3 > 0$

This means (1) every increase in capital inflow to the manufacturing and agriculture sectors leads to an increase in national output. (This means that FDI has a direct relationship with economic growth), (2) free trade between countries leads to national output growth. (This means trade openness has a positive relationship with economic growth). The economic reason behind this axiom is that as nations engage in trade with each other based on their comparative advantages, the more they have the tendency to grow.

**3.2. Description of the Variables**

The dependent variable used is real gross domestic product. This measure serves as the barometer for gauging the real rate of economic growth of a country. This variable is preferred because captures the actual value of the national transactions of a country. The independent variables included in the model are foreign direct investment and the degree of trade openness. These measures have been severally used in literature (See Dreher, 2005; Muibi, 2010; Javid & Qayyum 2011; Kargbo, 2012; Ojo, 2018; Ogbokor, 2018; and Idoko & Taiga, 2018).

1. Foreign Direct Investment: this is also known as international finance or capital inflow. Like the name implies foreign direct investments are funds channeled to sectors of a domestic economy with the prospect of making adequate returns. This implies that foreign direct investment to agriculture and the manufacturing sectors are capital investments from foreign nations due to the potential of making high returns on investment. A raising national output level suggests a brighter prospect for international capital inflow to Nigeria. Since capital inflow informs the robustness of the recipient economy, foreign direct investment in the long run would accentuate the productivity. The choice of foreign direct investment as a measure for economic globalization is due to the fact the integration of the world financial markets has as a consequence increased the flow of capital across national boundaries. In addition, foreign capital is considered by many countries (especially developing ones) as a major source of extra fund needed to stimulate economic growth.

2. Degree of trade openness: The rate of economic openness of a country is generally calculated as the proportion of total merchandise trade to national output. The economic openness of a country increases foreign currency revenues and expenditures as the export and import volume increases or decreases. The inclusion of the trade policy variable in the equation is to investigate the well documented argument in literature that trade, may increase competition, permit the realization of comparative advantage, enable countries to purchase goods from abroad, and provide opportunities to gain access to new technology as well as managerial skills. Thus, the degree of trade openness is expected to have a positive coefficient.
4. Econometric Results

4.1. Descriptive Statistics

Descriptive statistics is used to describe the basic characteristics of the data series used in the analyses. The summary results of the descriptive statistics are presented in table 4.1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>DTO</th>
<th>FDIAG</th>
<th>FDIMAN</th>
<th>RGDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.312059</td>
<td>2.981824</td>
<td>68.10591</td>
<td>30.01206</td>
</tr>
<tr>
<td>Median</td>
<td>0.350000</td>
<td>1.209000</td>
<td>32.90055</td>
<td>22.05500</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.590000</td>
<td>14.12830</td>
<td>219.5120</td>
<td>67.15000</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.070000</td>
<td>0.117300</td>
<td>1.705700</td>
<td>13.77000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.130472</td>
<td>4.814731</td>
<td>77.92575</td>
<td>16.45552</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.223536</td>
<td>1.669495</td>
<td>0.825239</td>
<td>0.905548</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.377047</td>
<td>3.893396</td>
<td>1.958470</td>
<td>2.433490</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>0.832921</td>
<td>16.92492</td>
<td>5.395892</td>
<td>5.101416</td>
</tr>
<tr>
<td>Probability</td>
<td>0.659377</td>
<td>0.910211</td>
<td>0.167344</td>
<td>0.378026</td>
</tr>
<tr>
<td>Sum</td>
<td>10.61000</td>
<td>101.3820</td>
<td>2315.601</td>
<td>1020.410</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>764.9939</td>
<td>200389.9</td>
<td>8935.876</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
</tbody>
</table>

The total number of observations is 34. This is indicative that there is no missing value in the considered time period. The average growth rates for the variables are: degree of trade openness (0.312059), foreign direct investments to the agriculture sector (2.981824), foreign direct investments to the manufacturing sector (68.10591), and real gross domestic product (30.01206). The Jarque-Bera statistics specifies that none of the variables departed from normality, thus, the variables are considered to have a normal distribution. All the variables are positively skewed with the exception of the degree of trade openness.

The variability in the distributions is captured by the standard deviation. The results report the following: degree of trade openness (0.130472), foreign direct investments to the agriculture sector (4.814731), foreign direct investments to the manufacturing sector (77.92575), and real gross domestic product (16.45552). The values for degree of trade openness and real gross domestic product are noticeably dispersed around the centre and below the mean values, which indicate there are no wide variations among the data over the years in each distribution. However, the values for foreign direct investments are above their respective mean and the middle values; this is indicative of a benign wide variation.

4.2. Augmented Dickey Fuller (ADF) Unit Root Test

The Augmented Dickey Fuller unit root test was employed to solidify the numeric values of the variables and set the tune for co-integration and error correction. Considering two different series A and B, if both are stationary at level I (0), it gives impetus to regress the series. However, if their levels of integrated are different, for instance one being in its first difference I (1) and the other being at level I (0), one has to transform the model. The least square technique can only be called to bear when the variables are all integrated in the same order. The unit root test results are presented in table 4.2.

<table>
<thead>
<tr>
<th>Variables</th>
<th>ADF Statistics</th>
<th>t-statistics @ 5%</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI(ag)</td>
<td>-6.099326</td>
<td>-3.557759</td>
<td>I(1)</td>
</tr>
<tr>
<td>FDI(man)</td>
<td>-4.578945</td>
<td>-3.557759</td>
<td>I(1)</td>
</tr>
<tr>
<td>DTO</td>
<td>-5.242963</td>
<td>-3.557796</td>
<td>I(1)</td>
</tr>
<tr>
<td>RGDP</td>
<td>-5.204981</td>
<td>-3.548490</td>
<td>I(1)</td>
</tr>
</tbody>
</table>
The table shows the summary of the unit root test for the variables used in the study. The rule of thumb for this test states that a variable is integrated when the ADF statistics is greater than the t-statistics at the chosen level of significance (simply put, ADF Statistics > t-statistics). The results shows that all the variables used in the model are all integrated at first difference, symbolized by I(1), all at 5 percent significance level. This means that the series have been solidified and hence avoiding spurious regression results for the estimates of the model of the study.

The justification for a co-integration test is that the variables have to be integrated. Since all the variables are integrated at their first differencing we move ahead to run the co-integration test and the error correction mechanism.

4.3. Co-integration Test Results

The Johansen multivariate co-integration Trace and Maximum Eigenvalue test results are presented in tables 4.3 and 4.4.

Table 4.3: Unrestricted Co-integration Rank Test (Trace)

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigenvalue</th>
<th>Trace Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.758902</td>
<td>89.81065</td>
<td>63.87610</td>
<td>0.0001</td>
</tr>
<tr>
<td>At most 1 *</td>
<td>0.501397</td>
<td>44.28902</td>
<td>42.91525</td>
<td>0.0362</td>
</tr>
<tr>
<td>At most 2</td>
<td>0.408145</td>
<td>22.01876</td>
<td>25.87211</td>
<td>0.1402</td>
</tr>
<tr>
<td>At most 3</td>
<td>0.150913</td>
<td>5.234978</td>
<td>12.51798</td>
<td>0.5630</td>
</tr>
</tbody>
</table>

Trace test indicates 2 co-integrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Table 4.4: Unrestricted Co-integration Rank Test (Maximum Eigenvalue)

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigenvalue</th>
<th>Max-Eigen Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.758902</td>
<td>45.52163</td>
<td>32.11832</td>
<td>0.0007</td>
</tr>
<tr>
<td>At most 1</td>
<td>0.501397</td>
<td>22.27026</td>
<td>25.82321</td>
<td>0.1376</td>
</tr>
<tr>
<td>At most 2</td>
<td>0.408145</td>
<td>16.78378</td>
<td>19.38704</td>
<td>0.1148</td>
</tr>
<tr>
<td>At most 3</td>
<td>0.150913</td>
<td>5.234978</td>
<td>12.51798</td>
<td>0.5630</td>
</tr>
</tbody>
</table>

Max-eigenvalue test indicates 1 co-integrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Tables 4.3 and 4.4 shows the Johansen unrestricted co-integration rank test results for Trace and Maximum Eigenvalue. The rule of thumb for this test is for the trace statistic and Max-Eigen statistic values to be greater than the critical values at the 5 percent level.
The results indicate the existence of long run relationship in the calibrated model for the study. Specifically, the trace statistics from table 4.2 reported the existence of 2 co-integrating long run relationship at 5 percent level of significance; hence, this implies that there is the possibility of a long run equilibrium relationship between the variables used in the model. Similarly, the Maximum Eigenvalue also reported a single co-integrating equation (s) at the 0.05 level. This invariably invalids the no long run relationship hypothesis and gives the econometric ground to go ahead with the error correction process.

**4.5. Error Correction Mechanism (ECM) Test**

The Error Correction Mechanism (ECM) was adopted following the least square example to estimate and determine the impact of the explanatory variables (foreign direct investment to the manufacturing and agriculture sub-sectors) and the degree of trade openness on the dependent variable (real gross domestic product).

To avoid spurious results, the estimation was done using the solidified data. That is, the procedure observed the order of integration of the variables which was in their first difference. The empirical results from the model were used to test the null hypotheses raised for the study. The results are presented in table 4.5.

**Table 4.5: Impact of Foreign Direct Investments to the Manufacturing & Agriculture Subsectors and the Degree of Trade Openness on Real Gross Domestic Product in Nigeria.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDIMAN</td>
<td>0.129174</td>
<td>0.025835</td>
<td>4.999936</td>
<td>0.0000</td>
</tr>
<tr>
<td>FDIAG</td>
<td>1.512117</td>
<td>0.400427</td>
<td>3.776262</td>
<td>0.0008</td>
</tr>
<tr>
<td>DTO</td>
<td>46.27236</td>
<td>5.021745</td>
<td>9.214398</td>
<td>0.0000</td>
</tr>
<tr>
<td>ECM(-1)</td>
<td>-0.607621</td>
<td>0.21001</td>
<td>-2.893254</td>
<td>0.9878</td>
</tr>
</tbody>
</table>

R-squared 0.851866  Mean dependent var 30.94313
Adjusted R-squared 0.835995  S.D. dependent var 16.52394
S.E. of regression 6.691786  Akaike info criterion 6.756107
Sum squared resid 1253.840  Schwarz criterion 6.939324
Log likelihood -104.0977  F-statistic 239.5497
Durbin-Watson stat 0.707897  Prob(F-statistic) 0.009010

Table 4.5 x-rays the impact of the explanatory variables (foreign direct investment to the manufacturing and agriculture sub-sectors and the degree of trade openness on the dependent variable, real gross domestic product in Nigeria.

The ECM term of -0.607621 indicate that ECM (-1) is well specified and the diagnostic statistics are good. The negative sign depicts the short run adjustment of the variables to the dependent variable. The ECM term also report that approximately 61% fast speed of adjustment towards equilibrium. This implies that 61% of disequilibrium caused by exogenous shocks or short run fluctuations in the previous period was corrected in the current period.
It also emerge that the adjusted coefficient of determination ($R^2$) explained the dependent variable, real gross domestic product by 0.835995. Specifically, this implies that approximately 84% of real gross domestic product growth in Nigeria is explained by foreign direct investment to the manufacturing and agriculture sub-sectors and the degree of trade openness respectively. The test for the overall significance of the model shows that the model is statistically significant because the F-statistics value of 239.5497 is greater than the probability value, which is statistically zero.

Furthermore, the a priori expectation of the coefficients of the variables turned out as expected. Specifically, the results show that foreign direct investment to agriculture (FDIag) has a positive relationship with real gross domestic product in Nigeria. The impact of the nexus is statistically significant at the 5% significant level. Similarly, capital inflow to the manufacturing sector (FDIman) reported a linear relationship with real gross domestic product. The magnitude of the impact is statistically significant at the 5% significant level.

The results for the degree of trade openness specifically reported a positive coefficient value (46.27236). It also emerged that the variable has a statistically significant relationship with real gross domestic product in Nigeria.

5. Discussion of Findings

The empirical findings of this study affirm that there is a significant relationship between economic globalisation and economic growth in Nigeria. This invalidates the concerns that globalization raises the gap between the “haves and the have not’s” in developing countries (Awake, 2002). It rather affords developing nations opportunities to easily access to funds from foreign investors and transnational corporations to the real sector of the economy plus free trade across borders.

The direction and the magnitude of the coefficients of the determinants are similar. Specifically, it emerged that foreign direct investments to the agriculture sub-sector has a positive impact on real gross domestic product in Nigeria. This means that 100 dollar increase in foreign direct investments to business ventures in the agricultural sector improves national output by 151 units. The findings also show that the impact of capital flows to agriculture has a significant role in enhancing the economic growth of the country. This in effect gives credence to the long held position that agriculture, as it was the case before the discovery of oil has the capacity to grow and even be one of the major source of foreign exchange earner for Nigeria. It is imperative to affirm that foreign portfolio investments is a major driver of economic growth in Nigeria. Although capital inflow to agriculture has the capacity to enhance output as a result of the linear relationship it has with real gross domestic, the sector is perceived by investors as a high-risk market for investment (Olokoyo, 2012), thus measured policies must be instituted to ensure its sustainability. Thus protectionist policy measures are not desirable as was the case prior to the adoption of the structural adjustment programme. The goal of which was to improve the country foreign investment climate by eliminating trade and investment regulations, boost foreign exchange earnings by promoting exports, improve production base, reduce government deficits through cuts in spending and to promote economic growth. The findings on this variable are contrary to the conclusion drawn by Ojo (2018), who affirmed in his study that there is no linear and significant impact between capital inflow and output growth in Nigeria.

Similarly, it also emerged that capital inflow to manufacturing concerns holds a positive and direct impact on real gross domestic product in Nigeria. This implies that every increase in the investment of foreign nationals in the manufacturing sector has the potential to enhance real gross domestic product in Nigeria. The results specifically show that FDI to the manufacturing sector enhance the productive capacity of the nation by 13 units. The results further show that
the magnitude of the impact is statistically significant. This shows that foreign direct investments play a crucial role in the manufacturing sector which has fashioned out potential benefits which has spurred economic activities and thus, economic growth by providing additional capital to Nigeria. Foreign direct investment is therefore supplement to domestic funds which helps in the acquisition of equipment and machinery used in the production process and thus the productive capacity of the country. However, economic volatility and change in government has the propensity to encourage divestment especially by foreign investors. For instance, the command and control economic policy of this administration made many foreign operations in the country to close down their operations.

Although theoretical conjecture by Olusanya (2013) posits that capital inflow to the real sector is inadequate. According to him, 60% of foreign direct investments are channelled into into the oil and gas subsector alone, and that the remainder is too benign (Asiedu, 2003) to accentuate real and impactful growth in other sectors. This study holds that foreign direct investments to the productive sector contribute positively national output growth in Nigeria.

The findings on the degree of trade openness has a similar nexus result established in a country specific study by Markjackson, Johnny, & Siaisiai (2018). Specifically, it emerged that the degree of trade openness has positive and significant impact on economic growth in Nigeria. Conversely, the institution of restrictive trade policies is not desirable.

The findings further averred that as the degree of trade openness increase so does its contribute positively to economic growth in Nigeria. This implies that economic openness has enhanced the economic performance of the Nigerian economy. This is so because trade openness increased competition, permit the realization of comparative advantage, enable countries to purchase goods from abroad, and provide opportunities to gain access to new technology as well as managerial skills. The result specifically report that every one percent change in the degree of trade openness leads to 46.27236 unit in gross domestic product growth in Nigeria. The findings on this variable are similar to the findings of Azeez, Dada, & Aluko (2014). Generally, the findings follow closely to what economic theory would have suggested; that is, trading with the world and capital inflows has the capacity to grow the local economy.

6. Summary & Conclusion

The examined the impact of economic globalization on economic growth in Nigeria. This was aimed at ascertaining the generally acclaimed theoretical position that economic globalization (through capital inflow and trade openness anchored by financial integration and trade liberalization) enhances economic growth in emerging economies. Consequently, a robust model was built to achieve this purpose.

It emerged that capital inflow to the manufacturing and agriculture sector and degree of trade openness have a positive impact on real gross domestic product in Nigeria. The findings also suggested that the level of the impact is significant. Consequent on these, the study conclude that economic globalization has a direct significant impact on economic growth in Nigeria. The study, therefore, lends further credence to the plethora of suggestion that economic globalization contributes to economic growth. This is particularly so in the case of Nigeria. The following recommendations are made:

1. Measures should be taken to ensure stability in the polity to circumvent socio-political and economic volatility. This will help contain the incessant capital mobility and divestment from the country.
2. The managers of the economy should put in place the necessary infrastructure to set the pace for a revolution in the agriculture sector, which was a major foreign exchange earner prior to the discovery of crude oil. Measures should also be targeted at investment sustainability.

3. Economic reforms should be aimed at encouraging production of goods that, the nation has comparative and competitive advantage over its trading partners and the export of final goods rather than raw materials. This has the capacity to place Nigeria in a good pedestal to have significant returns from transnational trade.

References


The Growth Factor of Money Supply on Economic Growth And Inflation in Nigeria

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Abstract
The study investigated the impact of money supply on macroeconomic variables in Nigeria from 1985 to 2016. The specific objectives of the paper were to ascertain the impact of narrow money supply, broad money supply, inflation rate, and exchange rate on real gross domestic product on one hand, and narrow money supply, broad money supply and exchange rate on consumer price index in Nigeria. The ex post facto research design and descriptive statistics were used to observe the variables in retrospect. To achieve the objectives of the study, two models were built to mimic the tread. To avoid spurious results, the Augmented Dickey Fuller test was used to solidify the data, which integrated at first difference I(1). The ordinary least square technique was employed to determine the magnitude and direction of the variables in the models. It emerged that narrow money supply has a positive and significant impact on inflation and real gross domestic product; conversely, broad money supply does not have any significant impact on inflation and real gross domestic product. Empirical evidence further showed that exchange rate has an insignificant impact on inflation and real gross domestic product. Inflation rate on the other hand, has an inverse and statistically insignificant impact on real gross domestic product in Nigeria. The results suggest that economic growth and inflation is a function of money supply (narrow money supply) and exchange rate in Nigeria. The paper recommends that efforts should be put in place to better the exchange rate between the naira and other currencies. This will help avoid the imported inflationary pressure on goods and services in the country.

Keyword: Economic growth, real gross domestic product, narrow money supply, broad money, exchange rate, inflation

Introduction
It is on record that economic revolution started in England in the late 18th century and gradually spread to other part of Europe and North America. Specifically, economic transformation did not get to other part of the world until in the 1950s when Japan became transformed. This economic growth has spread far and wide in recent times but its spread is highly limited in Africa. This was demonstrated by the World Bank report (2001), which states that out of the 46 poorest countries in the world 35 of them are in Africa.

Nigeria presents a clear liken to a third world economy in which the economy is predominately reliant on crude oil for its economic survival. Nigeria’s economic aspirations have remained
that of altering the structure of production and consumption patterns, diversifying the economic base and reducing dependence on oil, with the aim of putting the economy on a part of sustainable, all-inclusive and non-inflationary growth. The implication of this is that while rapid growth in output, as measured by the real gross domestic product (GDP), is important, the transformation of the various sectors of the economy is even more critical. This is consistent with the growth aspirations of most developing countries, as the structure of the economy is expected to change as growth progresses.

The Nigerian economy has been plagued with several challenges over the years. In spite of many, and frequently changing policies, Nigeria has not been able to harness her economic potentials for rapid economic growth and development (Ogbole, 2010). Today, monetary and fiscal policies are both commonly accorded prominent roles in the pursuit of macroeconomic stabilization in developing countries, but the relative importance of these policies has been a serious debate between the Keynesians and the monetarists. The monetarists believe that monetary policy exert greater impact on economic activity while the Keynesian believe that fiscal policy rather than the monetary policy exert greater influence on economic activity. Despite their demonstrated efficacy in other economies as policies that exert influence on economic activities, both policies have not been sufficiently or adequately used in Nigeria (Ajisafe & Folorunsho, 2002).

Over the years, the question of the existence and nature of the link between money supply and inflation has been a subject of considerable interest and debate. The major problem that triggered off this work is the occurrence of the general feeling that a continuous annual rate of money increase will adversely increase the rate of price level which will directly lead to inflation. Thus inflationary pressures in the country over the years have succeeded in bringing about devaluation of the naira as a result of expansionary measures. Money is more closely related to aggregate level of spending, prices, income production and employment than any other single economic variable. An excess in supply of money results in excess demand of goods and services and in turn lead to price increase and or deterioration of the balance of payment position. Typically, in periods of high inflation, the horizon of the investor is short, and resources are diverted from long term investment to those with immediate returns and inflation hedges, including real estate and currency speculation.

Nigeria has experienced general price increase since the 1970s. The adoption of the Structural Adjustment Programmes in 1986 resulted in increase in inflation rates as well as in exchange rates. The privatization and deregulation policies were among other things aimed at controlling inflation, yet inflation continued to rise.

The upsurge and incessant increase in the prices of goods and services in Nigeria in recent times is worrisome. The heat from the global economic meltdown is yet to cool off; inflationary gap and inflationary spiral are witnessed in our economy (Anyanwu & Kalu, 2015). People are demanded to pay more than they used to pay to purchase goods and services. The rate of inflation in Nigeria today is fast and difficult to predict, the wind of price changes is blowing like never before. Coupled with this is the poor economic growth recorded in the past three decades in comparison with population growth. This could be as a result of failure of monetary policy to maintain price stability.

Considerable scholarly effort have been concentrated on the impact of money supply on economic growth in Nigeria, but the result has been inconsistent and controversial, some recorded positive growth on GDP while other recorded negative impact. The inflation volatility in the process is a major concern. This has created the avenue for further studies to contribute to knowledge building.
Objectives of the Paper

The broad objective of this paper is to scrutinize the impact of money supply on inflation and economic growth in Nigeria. The specific objectives of this paper are;

1. To investigate the impact of narrow money supply on inflation and real gross domestic product in Nigeria.
2. To determine the impact of broad money supply on inflation and real gross domestic product in Nigeria.
3. To determine the impact of exchange rate on inflation and real gross domestic product in Nigeria.
4. To ascertain the impact of inflation on real gross domestic product in Nigeria.

Empirical Literature Review

Several studies have been carried out to ascertain the impact of money supply on economic growth and inflation in developing and developed countries with varying results and conclusions. For instance, Mamo (2012) in a cross country study employed fixed effect panel model and Panel Granger causality to test the effect and causal relationship between inflation and economic growth. The study used strongly balanced panel data which contained 13 SSA countries covering 1969-2009. The estimation results showed that inflation was negatively and significantly related to economic growth. It means that inflation has an adverse effect on economic growth. The Panel Granger causality test showed that inflation Granger causes economic growth for all countries in the sample, while economic growth Granger causes inflation for two countries. Similarly, Chaturvedi, Kumar, & Dholakia (2009) equally used a simultaneous equation model for a panel of 140 countries over the 1970-2005 periods to show that there exists a bilateral causal relationship between the growth and inflation as predicted by recent theories. Most importantly, the results indicated that inflation is harmful to growth whereas the effect from growth to inflation is beneficial. Doroshenko (2001) also considered the relationship between money supply and inflation. The findings confirmed a long-run relationship between money growth and inflation.

A recurring debate in the country specific literature on the effectiveness of monetary policy to stabilize the Nigerian economy in terms of price stability and subsequently stimulating economic growth and stability of money demand function that need not to be ignored in a study of this nature about Nigeria is the “TATTOO DEBATE” put forward by Tomori (1972) which found income, interest rate and real income to be the major determinants of demand for money in Nigeria. Owing to perceived shortcomings of Tomori’s work, Ajayi (1974), Teriba (1974), Ojo (1974) and Odama (1974) questioned that postulation and came up with their own positions. Consequently the debate centred around the significance of income in money demand function for Nigeria, the stability of the function, and the choice of appropriate definition of money in Nigeria.

On the issue of income, in line with Tomori (1972) assertion, Teriba (1974) and almost all the other scholars agreed that income is the most significant determinant of money demand in Nigeria. On interest rate, Teriba (1974) contrasted Tomori (1972) view by arguing that long term interest rate is significant (unstable demand for money) but short term rates are insignificant (stable demand for money function). Those who however, argued that the rate of interest is not significant have two reasons for their argument (Mai-Lafia, 1995). Firstly, the interest rates have remained relatively stable in developing countries so that there is too little variation to allow conventional estimators to capture the effect of interest rates in the demand for money function. Secondly, that owing to the underdeveloped nature of the financial structure of less developed countries, the substitution between money and real assets may be quantitatively more
important than that between money and financial assets. Owoye & Onafowora (2007) found income elasticity of 2.067 for Nigeria and interest elasticity of 0.306. On the appropriate definition of money demand in Nigeria, Tomori concludes that $M_1$ performs better than $M_2$. In contrast, Ajayi (1974) asserts that $M_2$ performs better than $M_1$. In an attempt to mediate between Tomori (1972) & Ajayi (1974), Gwosh (1981) contends that both $M_1$ and $M_2$ can be used as the definition of money in Nigeria. As lively as the debate was, the issue still remains inconclusive. Several studies have been conducted around the globe on the subject matter.

Following this debate, Nwaobi (2002) made efforts to examine the stability of the Nigeria’s money demand function and found it to be stable. Nwaobi (2002) then suggests that monetary policy could be effective and that income is an appropriate determinant in the estimation of money demand in Nigeria. Anoruo (2002) explores the stability of $M_2$ money demand function in Nigeria during the Structural Adjustment Programme (SAP) period. He observed that $M_2$ money demand function in Nigeria is stable for the study period. Again, like Nwaobi (2002), he asserts – using $M_2$ money demand function, that it is a viable monetary policy tool that could be used to stimulate economic activity in Nigeria.

Recently, Gatawa, Akinola, Muftau, & Olarinde (2017) empirically examined the impact of money supply, inflation, and interest rate on economic growth in Nigeria using time series data from 1973-2013. VAR model and Granger Causality test within error correction framework were used. The results of the VEC model provided evidence in support of a positive impact of broad money supply while inflation and interest rate exhibits a negative impact on growth most especially in the long run. The short run parsimonious results revealed that with the exception of inflation, broad money supply and interest rate were negatively related to economic growth. For the test of causality, it was revealed that none of the explanatory variables granger causes economic growth, implying that money supply, inflation and interest rate have not influenced growth.

Chinuba, Akhor, & Akwaden (2015) used time series data to study the impact of money supply on economic growth covering 1981-2008 with simple OLS on the Nigeria economy, the results showed that money supply exerted a considerable positive impact on economic growth. An investigation into the long-run and short-run impact of money supply on economic growth of Nigeria for the period 1986-2006 was carried out by Omotor, (2010) using VAR Model, the results provide evidence in support of the long run positive impact of money supply on growth in income but has no impact in the short-run.

Similarly, Aziakpono (2003) presented and tested a model on money supply and economic growth to determine either or both anticipated and unanticipated money affects real output and growth in Nigeria. The evidence revealed that while anticipated money supply affects real output and growth in Nigeria, the unanticipated money supply did not. Omore & Ugwuanyi (2010) tested the relationship between money, inflation and output by employing co-integration and Granger-causality test analysis. The findings revealed no existence of a co-integrating vector in the series used. Money supply was seen to Granger cause both output and inflation. The result suggest that monetary stability can contribute towards price stability in Nigerian economy since the variation in price level is mainly caused by money supply and also conclude that inflation in Nigeria is to a large extent a monetary phenomenon. $M_2$ appeared to have a strong causal effect on the real output as well as prices.

Abbas & Husian (2006) examines the casual relationship between money and income and money and prices in Pakistan. The co-integration analysis indicates, in general, the long run relationship among money, income and prices. The error correction and Granger causality framework suggest a one-way causation from income to money in the long run implying that probably real factors rather than money supply have played a major role in increasing
Pakistan’s national income, regarding the causal relationship between money and prices, the causality frame work provides the evidence of bi-variate causality indicating that monetary expansion increases and is also increased by inflation in Pakistan. However, money supply seems to be the leader in this case.

Akujobi (2010) studied monetary policy and Nigeria’s economic development using multiple regression analysis, namely; gross domestic product (dependent variable) and independent variables: Cash Reserve Ratio (CRR), Liquidity Ratio (LQR), interest rate, Minimum Rediscount Rate (MRR) and the treasury bill rate and found out that apart from cash reserve ratio, others impacted much on the economic development of the nation.

Similarly, Chimobi & Uche (2010) examined the relationship between money, inflation and output in Nigeria. The study adopted co-integration and granger causality test analysis. The co-integrating result of the study showed that the variables used in the model exhibited no long run relationship among each other. Nevertheless, money supply was seen to granger cause both output and inflation. The result of the study suggested that monetary stability can contribute towards price stability in the Nigerian economy since the variation in price level is mainly caused by money supply and concluded that inflation in Nigeria is to an extent a monetary phenomenon.

Usman & Adejare (2014) empirically examined the effect of money supply, foreign exchange on Nigeria economy with secondary data covering the period of 1988 to 2010. Multiple regressions were employed to analyze the variables; gross domestic product (GDP), Narrow Money, Broad money, exchange rate and interest rate. The results found that all the variables have significant effects on the economic growth with the adjusted R² showing that about 97.3% variation in the GDP from 1988 to 2010 is due to NARM.

Similarly, Aminu & Amono, (2012) conducted an empirical investigation into the effect of inflation on the growth and development of Nigeria economy. The work employed Cobb Douglas Production function with ordinary least square method and concluded that inflation possess a positive impact on economic growth. Osuala, Osuala, & Onyeike (2013) carried out an empirical study on the impact of inflation on economic growth over a period of thirty-one years. The VAR results revealed a statistically significant positive impact of inflation on economic growth in Nigeria while the causality test showed that there is no causality in between the two variables. In the same vein, Taiwo (2011) investigated the impact of inflation and investment on economic growth in Nigeria with the use of ordinary least square (OLS) method and annual secondary data from 1981 to 2006, the investigation based on inflation-GDP revealed that inflation has negative and insignificant impact on economic growth, meaning that as inflation increases economic growth falls.

Ifionu & Akinpelumi (2015) examined the effect and implication of selected macroeconomic variables on money supply (M₂), using derived secondary data gotten from the Central Bank Statistical Bulletin (2013). Coupled with the application of econometric technique such as; O.L.S., causality test and Co-integration of time series data to estimate the long and short run relationship and causality of employed variables. The results revealed that all variables were stationary at various lags and there exists a long run relationship between variables employed and it was discovered that apart from inflation had an inverse significance with money supply (M₂) and exchange Rate (EXR), all other variables such as gross domestic Product (GDP) were found to have a positive impact on money supply.

Malik (2006) studied the effects of monetary policy actions on inflation using Near-VAR approach. His results showed that effect of monetary policy transmits into inflation with a lag of half year and then take another year to reach the peak. This study suggested the
identification of variables that are most important in explaining inflation in Pakistan by considering monetary policy actions, supply side factors and foreign inflation.

Kenneth, Yuni, & Ihugba (2016) investigated the relationship between inflation and economic growth in Nigeria using a two stage least square estimation to examine the simultaneous models of the study. The study showed that inflation is beneficial to growth though not significantly while growth is significantly beneficial to inflation; given the positive relationship between inflation and growth and the negative relationship between growth and inflation. The results further showed that money supply and trade openness are significant determinants of real GDP for all three estimation techniques under consideration. While, real GDP, money supply and interest rate are significant determinants of inflation.

Furthermore, Femi (2014) the study examined the effect of economic variables such as inflation, income; interest rates, price level and exchange rate have on demand for money, by applying regression analysis with an Error Correction Model (ECM) on various economic variables, covering a period of thirty-three years (1970-2003). The study revealed that inflation was not affected by trend but by Nigerian government policies and that inflation does not exert any significant influence on demand for money.

Adedaye & Fakiyesi (1980) estimated and tested the hypothesis that the main factor responsible for instability of prices and inflationary tendencies in Nigeria was government expenditure. Working with annual time series data spanning 1960–1977, they tested the hypothesis that the rate of inflation in Nigeria is linearly related to the rate of growth of money stock, government expenditure, especially deficit, and growth of government revenue, especially monetization of foreign exchange from oil export. The result established some significant positive relationships between inflation rate and growth in bank credit, growth of money supply and growth in government expenditure, while the relationship with growth of government revenue was uncertain.

Baghelo & Ebibai (2014) empirically examined the impact of monetary policy on selected macroeconomics variables such as gross domestic product, inflation, and balance of payment in Nigeria from (1980-2011) using ordinary least square (OLS) regression analysis. The error correction method is used to ascertain if there is a static long run equilibrium relationship among the explanatory variables and subsequently derive an adequate dynamic model of the short run relationship. The study showed that the provision of investment friendly environment in the Nigerian economy will increase the growth rate of GDP.

Nwaobi (2002) used data from 1960 through 1995 and the Johansen co-integration framework found that money demand, real GDP, inflation and interest rate are co integrated in Nigeria. He also found stable money demand in the period under study. Fatukasi (2004) investigated the determinants of inflation in Nigeria between 1981 and 2003. The study made use of non-linear multiple regression models. He posited that the causes of inflation in Nigeria are multi-dimensional and dynamic, requiring full knowledge at any point in time to be able to proffer solutions to the inflationary trends in the country. Also, Omoke (2010) tested the causal long-term relationship between budget deficit, money growth and inflation in Nigeria. Augmented Dickey-Fuller (ADF) and Philip-Perron (PP) test were carried out to test the stationarity of the variables used. The result of the study pointed to a close long-term relationship between inflation and money supply.

In another country specific study, Olusanya (2009) analyzed the main sources of fluctuations in inflation in Nigeria. Using the framework of error correction mechanism (ECM) it was found that the lagged CPI, expected inflation, petroleum prices and real exchange rate significantly propagate the dynamics of inflationary process in Nigeria. Bakare (2011) conducted a study on the determinants of money supply growth and its implications on inflation in Nigeria. The
study employed quasi-experimental research design approach. The results showed that credit expansion to the private sector determines money supply growth and inflation in Nigeria. He therefore concluded that changes in money supply are concomitant to inflation in Nigeria.

Anyanwu & Kalu (2015) examined the correlation that exists between money supply and economic growth using time series data for 18 years (1994-2012) on money supply, CLBA and output. The findings showed that change in money supply (M2) has significant effect on variables such as CBLA and output in Nigerian economy within the period under review. It also showed that there is a significant strong multiple correlation among Real GDP, money supply and commercial banks’ loans and advances (R²= 95.1%). The coefficient of Determination (R²) reveals that 90.5% of variations in RGDP were explained by the selected explanatory variables.

Abdulazeez (2016) using time-series data covering 1990 to 2010, investigated the impact of monetary policy on economic growth in Nigeria. With the aid of multiple regressions analysis technique on money supply, interest rate, and financial deepening on gross domestic product, the study found that all the variables have marginal impact on the economic growth of Nigeria.

**Significance of the Paper**

Judging by the foregoing, it can be seen that so many studies have been carried out about the impact of money supply on macroeconomic variables in Nigeria. We note from the review that several scholars used broad money supply as one of the measure for money supply while neglecting narrow money supply. This study added narrow money supply plus a combination of broad money, inflation rate, and exchange rate to ascertain their impact on real gross domestic product in Nigeria; this is aimed at contributing to knowledge building. The researcher also used current time series data on narrow and broad money supply, and exchange rate to ascertain the impact of these variables on the general price level in Nigeria; this is aimed at building on the current empirical knowledge base of this topic in Nigeria.

**Research Design**

The Ex-Post Facto research design was adopted to examine the impact of money supply on some macroeconomic variables in Nigeria. This design was adopted to enable the researcher to use time series data to explain the impact of narrow and broad money supply, inflation rate, and exchange rate on real gross domestic product on one hand, and narrow and broad money supply and exchange rate on consumer price index in Nigeria in retrospect.

In addition to this design, the author used descriptive statistics and empirical analytical methods like Augmented Dickey-Fuller (ADF) test to solidify the data, Johansen co-integration test to determine the long run relationship in the variables, and multiple regressions to determine the impact of the variables on the explanatory variables in the study.

**Model Specification**

The study imitated finance literature and adopted the Multiple Regression using the Ordinary Least Squares like Usman & Adejare (2014), Baghelo & Ebibai (2014), Ifionu & Akinpelumi (2015) to examine the impact of narrow and broad money supply, inflation rate, and exchange rate on real gross domestic product on one hand, and narrow and broad money supply and exchange rate on consumer price index in Nigeria in retrospect in the other hand. The Ordinary Least Squares (OLS) technique is used because it is the most unbiased estimator, consistency, minimum variance and efficiency.

Consequently, the study assumed that real gross domestic product is a function of narrow and broad money supply, inflation rate, and exchange rate, and that consumer price index is a function of narrow and broad money supply and exchange rate in Nigeria. Thus, the
mathematical and econometric model follows the augmented technique used by McCallum (1991) and Kohn (1999).

The functional models are stated as follows;

\[ RGDP = f(M1, M2, INFR, EXR) \]  
\[ INFR = f(M1, M2, INFR, EXR) \]

This is expressed econometrically as follows;

\[ RGDPGR = \beta_0 + \beta_1 M1 + \beta_2 M2 + \beta_3 INFR + \beta_4 EXR + u \]
\[ INFR = \beta_0 + \beta_1 M1 + \beta_2 M2 + \beta_3 EXR + u \]

Where;

RGDP = Growth rate of real Gross Domestic Product
INFR = Inflation rate
M1 = Narrow money supply
M2 = Broad money supply
EXR = Exchange Rate
u = Stochastic term
\( \beta_1 \) to \( \beta_4 \) - Parameter estimates

**A priori Expectations**

\( \beta_1 > 0, \beta_2 > 0, \beta_3 > 0, \beta_4 > 0 \).

The implication of this is that all the coefficients of the explanatory variables are expected to have a linear impact on the dependent variables.

**Operational Description of the Variables**

1. **Narrow Money Supply (M1)** - Currency outside bank plus demand deposits of commercial banks.
2. **Broad Money Supply (M2)** - M1 plus quasi money. Quasi-money is defined as the sum of savings and time deposits with commercial banks.
3. **Inflation** - general increase in prices of goods and services over a period of time in Nigeria.
4. **Gross Domestic Product** - the total market value of all final goods and services produced in Nigeria annually.
5. **Exchange Rate** - the value of the naira against other currencies.

**Methods of Data Analysis**

The Augmented Dickey-Fuller (ADF) test was employed to solidify the data to avoid spurious results that are misleading. The researcher further employed the Ordinary Least Squares (OLS) technique to estimate and evaluation of the models of the study.

The evaluation consists of deciding whether the parameters are meaningful and statistically satisfactory (Iyoha, 2004). The coefficients of the parameters were validated on theoretical a priori criteria - that is, the signs and size of the magnitude of the estimated parameters are judged based on what economic theory postulates. Note in some cases, the signs and magnitudes may not always reflect a priori expectation.

Furthermore, we used the statistical criteria to read meaning to the OLS outputs. The statistical measures are the correlation coefficient of the adjusted \( R^2 \), standard error (SR), and standard deviation of the estimates, t-statistics and f-statistics. It should be noted that the \( R^2 \) gave us the
insight or measure of the extent of degree to which the explanatory variables are explained the changes in the dependent variables.

The standard deviation, as the name implies measures the rate of dispersion of the estimates around the true parameters because the higher the standard deviation (standard error) of the parameter, the less reliable it is, and vice versa.

The t-test is an offshoot of the standard error test. The t-test estimates the sample value of the by determining the critical region in a two tailed test (n-k) degree of freedom. The t-statistics was used to determine the significance of the explanatory variables in the OLS outputs. The parameter was further used to test the hypotheses of the study. F-test was further used to determine the joint significance of the estimates in the equation.

Finally, the economic criteria determine the reliability of the first order test and the standard errors of the estimates. We firstly assumed that there is no autocorrelation or serial correlation of the random variables. To test the validity of the assumption of non-auto correlated disturbances, we compute the Durbin Watson statistics.

**Descriptive Statistics**

The following report the mean, median, and standard deviation of the variables of the study

<table>
<thead>
<tr>
<th></th>
<th>RGDP</th>
<th>M1</th>
<th>M2</th>
<th>INFR</th>
<th>EXR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.943667</td>
<td>24.73533</td>
<td>25.89433</td>
<td>20.49333</td>
<td>76.61592</td>
</tr>
<tr>
<td>Median</td>
<td>5.100000</td>
<td>20.22000</td>
<td>22.62000</td>
<td>12.10000</td>
<td>94.07500</td>
</tr>
<tr>
<td>Maximum</td>
<td>11.36000</td>
<td>62.24000</td>
<td>57.78000</td>
<td>76.80000</td>
<td>158.6200</td>
</tr>
<tr>
<td>Minimum</td>
<td>-0.690000</td>
<td>-5.230000</td>
<td>1.320000</td>
<td>0.200000</td>
<td>0.999600</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>3.060835</td>
<td>18.51544</td>
<td>15.34671</td>
<td>20.00498</td>
<td>62.04927</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.196472</td>
<td>0.406838</td>
<td>0.426843</td>
<td>1.502732</td>
<td>0.010971</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>0.368799</td>
<td>1.527061</td>
<td>1.567908</td>
<td>12.60757</td>
<td>3.957230</td>
</tr>
<tr>
<td>Probability</td>
<td>0.831604</td>
<td>0.466018</td>
<td>0.456597</td>
<td>0.001829</td>
<td>0.138261</td>
</tr>
</tbody>
</table>

*Source: Author's Computation using E-view 9.1*

*Note: RGDP = real gross domestic product, M1 = narrow money supply, M2 = broad money supply, INFR = inflation rate, EXR = exchange rate*

From the descriptive statistics results, the mean real gross domestic product growth rate over the period of the study is 4.94, while M1 (narrow money), M2 (broad money), INFR (inflation rate) and EXR (exchange rate) are: 24.73, 25.89, 20.49, and 76.61592 respectively. The standard deviation of real gross domestic product growth rate, M1, M2, inflation rate and exchange rate reveals that the values in the data set are close to the mean. Thus reflects a small amount of variation of the data of the variables. All the variables positively skewed as indicated by the positive skewness coefficients.

**Augmented Dickey Fuller (ADF) Unit Root Test**

The ADF unit root test in this study was employed to solidify the numeric values of the variables. This helped us ensure that the regression outputs were not spurious. The results of the unit root test at level and first difference are presented in table 4.2.
Table 4.2: Unit Root Test for RGDP, M₁, M₂, INFR, and EXR

<table>
<thead>
<tr>
<th>Variable</th>
<th>Level</th>
<th>1st Difference</th>
<th>Order of integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGDP</td>
<td>1.3774</td>
<td>1.9889</td>
<td>I(1)</td>
</tr>
<tr>
<td>M₁</td>
<td>-1.5581</td>
<td>-2.9116</td>
<td>I(1)</td>
</tr>
<tr>
<td>M₂</td>
<td>-1.0345</td>
<td>-2.2293</td>
<td>I(1)</td>
</tr>
<tr>
<td>INFR</td>
<td>-0.2942</td>
<td>-2.6030</td>
<td>I(1)</td>
</tr>
<tr>
<td>EXR</td>
<td>-1.9395</td>
<td>-2.8639</td>
<td>I(1)</td>
</tr>
<tr>
<td>Critical Value @ 5%</td>
<td>-1.9583</td>
<td>-1.9592</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s Computation using E-views

Table 4.2 show the summary of the unit root test of the variables used for the study. The results shows that all the variables used in the model are all integrated at first difference, symbolized by I(1), all at 5 percent significance level.

OLS Results for Models I & II

The Ordinary Least Square (OLS) is used in this study to estimate and determine the impact of the explanatory variables on the dependent variables of the study. The results are presented in tables 4.3 and 4.4 respectively.

Table 4.3: Regression Outputs for Model I

Dependent Variable: RGDP  
Method: Least Squares  
Sample: 1985 2016  
Included observations: 30

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>5.378644</td>
<td>1.485134</td>
<td>3.621656</td>
<td>0.0013</td>
</tr>
<tr>
<td>M₁</td>
<td>0.158868</td>
<td>0.074099</td>
<td>2.143991</td>
<td>0.0419</td>
</tr>
<tr>
<td>M₂</td>
<td>-0.162466</td>
<td>0.082949</td>
<td>-1.958629</td>
<td>0.0614</td>
</tr>
<tr>
<td>EXR</td>
<td>0.023757</td>
<td>0.099586</td>
<td>2.385576</td>
<td>0.1637</td>
</tr>
<tr>
<td>INFR</td>
<td>-0.059128</td>
<td>0.033224</td>
<td>-1.779659</td>
<td>0.0873</td>
</tr>
</tbody>
</table>

R-squared | 0.509574    | Mean dependent var | 4.943667  |
Adjusted R-squared | 0.491106 | S.D. dependent var | 3.060835  |
S.E. of regression | 0.836677    | Akaike info criterion | 5.074155  |
Sum squared resid | 201.1684    | Schwarz criterion | 5.307688  |
Log likelihood | -71.11233   | Hannan-Quinn criter. | 5.148864  |
F-statistic | 5.191085    | Durbin-Watson stat | 1.648027  |
Prob(F-statistic) | 0.009167    |                      |          |

Source: Author’s Computation using E-view

The results showed that narrow money supply (M₁) possess a positive and significant impact on RGDP. Broad money supply (M₂) possesses a negative and insignificant impact on RGDP growth rate. Exchange rate has a linear and insignificant impact on RGDP growth rate; while
for inflation rate (INFR), the results predict a nonlinear and insignificant impact on RGDP growth rate in Nigeria.

Further results show that the coefficient of determination ($R^2$) explained approximately 51% of the variation/changes in the dependent variable (RGDP growth rate). The test of the aggregate significance of the model also unveils that the model is statistically significant because the F-statistics (5.191085) is greater than the F-prob(0.009167) which is statistically zero. The Durbin Watson statistic of 1.648027 is greater than the $R^2$ output of 0.509574. This shows the absence of first order autocorrelation. The Akaike info criterion of 5.07 indicates that the model is correctly specified. The standard error of regression reveals that in about two-third of the time the independent variables explained the dependent variable by exactly 84 percent.

**Table 4.4: Regression Outputs for Model II**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>4.988841</td>
<td>0.399780</td>
<td>12.47895</td>
<td>0.0000</td>
</tr>
<tr>
<td>$M_1$</td>
<td>0.158364</td>
<td>0.056476</td>
<td>2.804075</td>
<td>0.0187</td>
</tr>
<tr>
<td>$M_2$</td>
<td>0.106232</td>
<td>0.109901</td>
<td>0.966615</td>
<td>0.1024</td>
</tr>
<tr>
<td>EXR</td>
<td>0.650081</td>
<td>0.140658</td>
<td>4.061743</td>
<td>0.9520</td>
</tr>
</tbody>
</table>

| R-squared | 0.689006 | Mean dependent var | 6.380007 |
| Adjusted R-squared | 0.681310 | S.D. dependent var | 0.336225 |
| S.E. of regression | 0.045966 | Akaike info criterion | -3.020716 |
| Sum squared resid | 0.021129 | Schwarz criterion | -2.624995 |
| Log likelihood | 35.18644 | Hannam-Quinn crit. | 8.508300 |
| F-statistic | 2.103845 | Durbin-Watson stat | 1.648007 |
| Prob(F-statistic) | 0.009167 |

*Source: Author's Computation using E-view*

The results showed that narrow money supply ($M_1$) has a linear and significant impact on inflation rate (INFR). This means that every 1 percent increase in narrow money supply led to about 0.16 percent increase in the rate of inflation. Similarly, broad money supply ($M_2$) also has a positive and statistically insignificant impact on inflation rate. Also, exchange rate has a linear and statistically insignificant impact on inflation in Nigeria.

The results further revealed that 68 percent of the variation/change in the dependent variable, inflation rate was explained by the explanatory variables in the model. The results also predict that the overall model is statistically significant because the F-statistic is greater than the F-prob (i.e. $2.103845 > 0.009167$). Finally, the Durbin-Watson statistic value of 1.648007 is greater than the $R^2$ value of 0.689006; this suggests the absence of first order autocorrelation.

**Conclusion**

The paper evaluated the impact of money supply on varied macroeconomic variables in the Nigerian economy from 1985 to 2016. To achieve the objectives of the study, the ex post facto research design and descriptive statistics was used to observe the variables in retrospect. The Augmented Dickey Fuller test was used to solidify the data and the ordinary least square
technique was employed to determine the magnitude and direction of the variables in the models. The empirical results showed that narrow money supply and exchange rate has a significant impact on economic growth and inflation whereas, this is not the case for broad money supply and the rate of inflation on economic growth in Nigeria. Ceteris Paribus, the results suggest that economic growth and inflation is a function of money supply (narrow money supply) and exchange rate in Nigeria.

Recommendations
The following recommendations were made;

1. Accelerate efforts should be put in place to better the exchange rate between the naira and other currencies. This will help avoid the imported inflationary pressure on goods and services in the country.

2. Concerted effort should be made to ensure that efforts aimed at ensuring price stability do not stifle aggregate demand and hence economic growth.

3. Measure should be put in place to improve domestic production. This will reduce demand pull inflation and enhance economic growth.

References


Currency Fluctuations, Inflation And Stock Market Prices: Evidence From Nigeria

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Abstract

The role of currency fluctuations and inflation rate volatility in determining stock market prices cannot be overrated by all standards. This study examines the effect of the fluctuations in these selected macroeconomic factors on the stock market prices in Nigeria from 1999 to 2018 using data obtained from the Nigerian Stock Exchange, World Bank and CBN statistical bulletin. The regression result reveals that real exchange rate fluctuation has a significant positive influence on Nigerian stock market prices while the inflation rate volatility exerts no significant impact on stock market prices. The study recommends that the market players and the relevant authorities should put in place policies that will enable investors to hedge against the effect of the fluctuations in the macroeconomic factors which are inevitable and could be adverse on the market if precautionary measures are not taken on time.

Keywords: Exchange rate volatility, inflation rate, stock market prices, Nigerian Stock Exchange, Currency fluctuations.

1. Introduction

The Nigerian Stock Exchange (NSE) came into existence in 1960 and was then referred to as Lagos Stock Exchange. Following some innovations in the country, the name was eventually changed from the Lagos Stock Exchange to the present Nigerian Stock Exchange in 1977 (NSE, 2018). The Nigerian Stock Exchange is presently a member of the World Federation of Exchanges (WFE), a pioneer member of the African Stock Exchanges Association (ASEA) and a viewer at meetings of International Organization of Securities Commissions (IOSCO). In October 31, 2013, Nigerian Stock Exchange joined the United Nations Sustainable Stock Exchange (SSE) initiative (SSE, 2019). It was a collaboration that was aimed at promoting sustainability among listed companies and also an effort to create sustainable value for investors.

Presently, the Nigerian Stock Exchange (NSE) is the third largest Stock Exchange in Africa. There are 29 stock exchanges in Africa which represent 38 nations’ capital markets, 21 out of the 29 are members of the African Securities Exchanges Association (ASEA). Out of the 21 members
ASEA, Johannesburg Stock Exchange South Africa founded in 1887 is the largest and has about 388 listed companies. The second largest is the Egyptian Exchange which was established in 1883 and currently has about 265 listed firms, the NSE comes third and it is followed by Stock Exchange of Mauritius found in 1988 with about 170 listed companies. The NSE all-share index was formulated in January 1984 with a base value of 100. It is only the ordinary shares that are used for the computation of the index which is daily and value-weighted. The NSE share price index is a total market index, reflecting a total picture of the behaviors of the common shares quoted on the Nigerian Stock Exchange. It is calculated on a daily basis to reflect the movement in stock prices in the capital market (NSE, 2018).

![Figure 1: Trend of Nigeria share price index from 1999 – 2018.](image)

Source of Data: CBN statistical bulletin and NSE website.

The performance of stock market in Nigeria is determined by some macro-economic factors which are common economic phenomenon globally. These determinants include: the Gross Domestic Product (GDP), inflation, interest rates, exchange rates and government regulations among others. Gross domestic product (GDP) gives a comprehensive score card about the overall health of an economy. Thus, investors are very much concerned about a nations GDP report in every investment decision. Positive economic growth of a country is usually shown in the size of the GDP which helps to boost corporate profits as well as stock market performance (Mburu, 2015). This implies that a dwindling economic growth leads to a negative effect on stock market performance.

An increase in the interest rates does not have a positive influence on stock market returns. More especially, as the Banks keep increasing their rates, thereby raising the finance cost of the quoted firms and reducing their profits. The implication is that, while the investors consider the reduction in profits of the quoted companies, it leads to less demand on the stocks, thus the stock market performance is negatively affected.

Similarly, inflation affects some stocks positively while some others are negatively affected. During inflation, investors make wise investment decisions which tend to boost or demean stock market performance. The effects of inflation on an economy can be both negative and positive depending on the situation. However, inflation generally increases prices of goods and services which may be favorable or adverse to stock market returns of a country.
In Nigeria, the inflation rate was at its peak in 2001 followed by 2005 and 2017. On the other hand, exchange rate is the value of one currency for the purpose of conversion to another. Exchange rate movements greatly affect the stock market returns due to its information content to the investors. Currency volatility affects stock returns and when it appreciates, especially if it is an export-oriented country, it makes the exports less attractive thereby harming the domestic stock market. Under this scenario, the quoted companies doing the export in the country become less profitable and less attractive to investors, thus the stock market loses (Muthike & Sakwa, 2012). The frequency of exchange rate fluctuation has a major impact on the financial market (Mechri, Hamad, Peretti & Charfi, 2019). Though the reverse is the case in a situation where the country’s currency depreciates.

The exchange rate was too high in 2014 and 2015, which adversely affected the stock prices. Though from 1999 to 2004 the rise in exchange rate did not give much cause for worry, but the situation became unbearable from 2005 when the fluctuation continued without stopping.

Government regulation is another factor that affects stock market prices. For instance the introduction of certain taxes such as capital gain tax on share prices by the government affects investors who may likely look for other countries with less tax burdens on investors to do their invest their capital. Therefore, government regulations that are not favorable to investors affect
stock market performance. These determinants affect stock market prices, but for the purpose of this study, the inflation and exchange rates volatility are considered more hurting to stock market prices in the Nigerian investment environment and have been utilized as the predictor variables.

2. Literature review

2.1. Theoretical review

The theories supporting this study are the purchasing power parity theory and the flow oriented model.

2.1.1. Purchasing power parity (PPP) theory

Madura (2000) advocated purchasing power parity theory which holds that currency fluctuation is a product of different inflation rates among countries. When a country’s inflation rate increases, the demand for its currency declines as well as its exports due to their high prices. Consequently, the consumers and firms in that country increase their imports. Under this situation, stock prices of the listed companies involved in export in that country are affected because investors will shift attention to countries where there is relatively price stability which helps to have value for their money. PPP theory states that goods and services should have the same cost everywhere after conversion to a common currency. That means, the ratio of price level and exchange rate between two countries must be equal. PPP follows the “law of price” which maintains that a competitive markets will equalize the price of an identical product in two different countries which is expressed in a common currency. PPP is a theoretical exchange rate that allows you to buy the same amount of goods and services in every country, but the existence of inflation in a particular country, leads to decline in stock market prices in that country.

2.1.2. Flow oriented model

The model upholds that an underlying association between the exchange rate and stock prices. In other words, exchange rate fluctuations influences the stock prices (Mlambo, Maredza & Sibanda, 2013). The variations in the exchange rate impacts on the attractiveness of firms by affecting both their input and output prices (Joseph, 2002). For instance, when the exchange rate rises, exporters are adversely affected because the currency appreciation will cause their goods and services to be more expensive in the international market, thereby leading to serious decline in their export. It will also reduce their competitive strength globally. As a result, their profits will reduce and investors who want to gain more returns from their investment will lose interest in those firms. This interaction establishes negative relationship between domestic currency and stock prices.

2.2 Empirical review

Muhammad and Rasheed (2011) assessed the relationship between stock prices and exchange rates in four South Asian Countries which comprise: Bangladesh, India, Pakistan and Sri-Lanka from 1994 to 2000. The study used Vector Error Correction model, co-integration and granger causality tests to establish a long and short run relationship between the variables. The findings indicated a long run relationship between stock prices and exchange rate for Pakistan and India while a bi-directional causality was found for Bangladesh and Sri-Lanka. Sekmen (2011) employed Auto-regressive moving average (ARMA) models to investigate the effects of exchange rate volatility on stock returns in the US from 1980 to 2008. The findings revealed that exchange rate volatility negatively affect US Stock returns. Mlambo et al. (2013) studied the effects of exchange rate volatility on the stock market in South Africa from 2002 to 2010 using
GARCH model. The study found a weak relationship between exchange rate changes and stock market prices.

Mburu (2015) used descriptive research design and data covering a period from 2011 to 2015 to examine the relationship between exchange rate volatility and stock market performance in Kenya. The study found no significant relationship between stock market performance and exchange rate volatility and as a result no significant impact was established. Kennedy and Nourizad (2016) applied GARCH (1,1) model exchange rate volatility on US stock market from 1999 – 2010. The study took into consideration other controlling variables and established that exchange rate volatility had a positive and significant influence on stock returns. Nkoro and Uko (2016) examined the impact of exchange rate and inflation volatility on stock prices in Nigeria from 1986 to 2012 using GARCH (1,1)-S models as an extended GARCH-X models. The study revealed among others that stock market prices had a negative relationship with exchange rate and inflation volatility.

Worlu and Omodero (2017) did a comparative study on the effect of macroeconomic variables on stock market performances in Africa using four (4) giant African countries which include: Nigeria, Ghana, Kenya and South Africa. The study covered a period from 2000 to 2015 and the findings revealed that GDP, inflation and real exchange rate had negative impacts on Nigerian stock market performance. In the case of South Africa, GDP and inflation showed negative impacts while real exchange rate revealed no impact. For Ghana, GDP impact was negative, the other variables did not affect the stock market. In the case of Kenya, the real exchange rate had negative influence while other variables did not have effect on stock market performance. The varying findings were attributed to different economic environment the stock markets are operating as well as the rate of inflation and exchange rate variability within the periods covered. Zubair and Aladejare (2017) studied exchange rate volatility and stock market performance in Nigeria using data from 1986 – 2015 and Generalized Auto-regressive conditional heteroscedasticity technique for analysis. The study found a weak relationship between exchange rate and stock market performance proxied by stock market capitalization.

Kwofie and Ansah (2018) used Auto-Regressive Distributed Lag (ARDL) co-integration technique and the error correction parametization of the ARDL model to investigate the effect of inflation and exchange rate on stock market returns in Ghana from 2000 to 2013. The findings revealed a long run significant relationship between stock market returns and inflation while short run relationship was not established. In the same vein, the findings indicated a significant long and short run relationship between stock market returns and exchange rate returns. Mechri et al. (2019) employed GARCH model to investigate the impact of exchange rate volatility on stock market returns in two countries of the Middle East and North Africa (MENA) which are Turkey and Tunisia. The study covered a period of 15 years and found that exchange rate volatility had a significant impact on stock market returns.

2.3. Gap in literature

Studies on exchange rate volatility and stock market performance cannot be exhausted. The studies above were carried out in different countries and at varying periods and so the results may not be similar. However, despite the various macroeconomic factors that determine the performance of stock market internationally, this present study focuses on the impact of changes in exchange and inflation rates on stock market prices in Nigeria and covers a period from 1999 to 2018. The aim is to statistically establish an empirical evidence with a more recent data set on how these factors affect stock market prices in the country.
3. Methodology

The study makes use of a descriptive research design which seeks to establish the kind of relationship existing between the predictor variables and the response variable in the selected area of research. This choice is motivated by the fact that all the variables are quantitative in nature and are numerically gathered for statistical analysis. Descriptive research design allows the researcher to statistically measure and analyze data in order to draw an empirical evidence from a study. The study is on the impact of exchange and inflation rates volatility on stock market prices. The dependent variable is the Nigerian share price index (NSPI) while the independent variables are the real exchange rate (REXG) and inflation rate (INFR). The data set on NSPI are obtained from the Central Bank of Nigeria (CBN) statistical bulletin and the Nigerian Stock Exchange while the REXG and INFR are collected from the World Bank. The data cover a period from 1999 to 2018. These data have difference values and thus were all expressed in logarithm form to achieve uniformity and for analysis. E-views version 9 is used to perform the regression analysis.

Therefore the model specification adopted for the study is stated as follows:

\[
\text{LOGNSPI} = \alpha + \beta_1\text{(LOGREXG)} + \beta_2\text{(LOGINFR)} + \epsilon
\]

Where,
- \(\text{NSPI}\) = Nigerian Share Price Index
- \(\text{REXG}\) = Real Exchange Rate
- \(\text{INFR}\) = Inflation Rate
- \(\alpha\) = Constant
- \(\beta_1, \beta_2\) = Coefficients of the regression
- \(\epsilon\) = Error term

A Priori economic expectation:
- \(\beta_1, \beta_2 > 0\)

The a priori economic expectation is that REXG and INFR should be greater than zero indicating positive influence on NSPI.

4. Data analysis and interpretations

<table>
<thead>
<tr>
<th>Table 1: Regression result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable: LOGNSPI</td>
</tr>
<tr>
<td>Method: Least Squares</td>
</tr>
<tr>
<td>Date: 03/02/19  Time: 14:23</td>
</tr>
<tr>
<td>Sample: 1999 2018</td>
</tr>
<tr>
<td>Included observations: 20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOGREXG</td>
<td>2.274005</td>
<td>0.502009</td>
<td>4.529810</td>
<td>0.0003</td>
</tr>
<tr>
<td>LOGINFR</td>
<td>0.053254</td>
<td>0.281439</td>
<td>0.189221</td>
<td>0.8522</td>
</tr>
<tr>
<td>C</td>
<td>0.887934</td>
<td>1.037497</td>
<td>0.855842</td>
<td>0.4040</td>
</tr>
</tbody>
</table>

R-squared 0.547075  Mean dependent var  5.425646
Adjusted R-squared 0.493790  S.D. dependent var  0.262952
S.E. of regression 0.187086  Akaike info criterion -0.377015
Sum squared resid 0.595020  Schwarz criterion -0.227655
Table 1 above depicts the regression result of the study which shows the existence of a very strong correlation (R) between NSPI and the predictor variables (REXG and INFR). The value of R is 74% (square root of R²), this implies a significant and robust relationship between the dependent and the independent variables. However, the value of R-squared is 54.7% which shows the extent to which REXG and INFR volatility explain the variability in the NSPI, while 45.3% is associated with other factors that are not considered in the model. The Durbin-Watson if approximately 1 which does not give cause for concern. The F-statistic is 10.26692 while the p-value is 0.00 < 0.05 level of significance. This result indicates that the model is statistically significant and appropriate for the study. In other words, the independent variables jointly influence the dependent variable significantly and positively.

The T-statistic reveals the individual performances and influences of the independent variables on the dependent variable. From table 1 above, REXG t-statistic is 4.530 while the p-value is 0.00 < 0.05 level of significance. This result indicates that REXG has a significant positive impact on NSPI. There is a synchronization with this result and the findings of Kennedy and Nourizad (2016) who found that exchange rate exerted positive and significant influence on the US stock market prices. On the other hand, there is a discrepancy between this result and the findings of previous studies such as (Sekmen, 2011; Nkoro & Uko, 2016; Worlu & Omodero, 2017). The result for INFR indicates insignificant positive impact which implies that inflation has not affected stock market prices within the period under review.

5. Conclusion and recommendation

Stock market of a nation is a major arm of the economy that helps to drive growth and development. In Nigeria, stock market is where capital is traded and obtained for businesses in the country, thus, closing assessment of its activities is very vital. This study covers a period from 1999 to 2018 using data from reliable sources to investigate the effect of two major macroeconomic factors on stock market prices. The findings reveal that inflation rate volatility within this period has not actually impacted on share prices while the exchange rate fluctuations has positive and significant impact. The REXR met the a priori expectation while the inflation rate though does not have any impact, but fell below the economic a priori expectation.

Therefore, the study recommends more stringent measures on the part of the stock market players and other relevant authorities. They should help to put in place policies that will help investors hedge against the fluctuations of the macroeconomic factors and still keep the stock market prices in the country from falling. The improvement of the stock market behavior is a very important economic decision that the government should give attention for a better economic progress.
References


Assessing The Use of E-Commerce in Heritage Tourism Marketing: Case of National Theatre And National Museum, Lagos, Nigeria

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Abstract
The increased commercialization of tourism through E-commerce is now being used to attract and serve relevant target groups. Because of the competitive challenges in today’s tourism business, heritage tourism and E-commerce have to work together in order to make the industry stand the test of time. Study was conducted in National Theatre (NT) and National Museum (NM), Lagos Nigeria to evaluate the use of E-commerce by the two destinations. Data were analysed using qualitative descriptive analysis, One-way Analysis Of Variance, and multivariable linear regressions. Results of the study showed that 96.6% of the respondents in NT and 96.4% in NM agreed that the use of internet established interactive relationship between customers. In NT, 96.7% of the respondents agreed that it is possible to book online packages using E-commerce, while 99.3% agreed to this in Nm. In NT, five constructs out of eleven were significant in enhancing the use of E-commerce in the destination, while none was significant for NM. The overall strengths of relationship between educational statuses of tourists were weak in predicting efficient use of e-commerce for both destinations. However, NM was able to better predict the efficient use of e-commerce than NT. The F-test overall showed that the relationships between educational status and efficient use of e-commerce in NT and NM were not statistically significant. The result of multivariable linear regressions further showed that for the two destinations, the educational status of tourists predicted that the use of e-commerce was not efficient in the marketing of their tourism products and services. The managements of NT and NM, and by extension all other heritage attractions should therefore fashion out strategies on the adoption and efficient use of e-commerce in marketing their institutions in order to enhance service delivery, improve efficiency, maximize and maintain long-term profitability.

Keywords: E-commerce, Heritage, Lagos, Marketing, Museum, Theatre
Introduction

Background

The heritage tourism industry is a tool that can be used to turn around the economic fortunes of any region or nation by its capacity to attract visitors from outside a host community through the arrays of historical, artistic, scientific or lifestyle/heritage that the industry has to offer (Silberberg 1995). To remain competitive in today’s business environment, there is the need for heritage tourism firms to go extra miles in expanding their customer base. This to a large extent is hinged on ability to acquire and utilize up to date information in the management and marketing process. Tourism depends largely on the amount of information that tourists are about to gather about any tourist destination (Buhalis, 1998).

It is not a farfetched fact that the use of internet is rapidly growing day by day with millions if not billions of people being online 24hours. Therefore, the internet can be exploited as a tool promoting and opening up competitive opportunities for the tourism industry through the application of e-commerce (Alsarayreh, M. N., Jawabreh, O, A. A., Alkharabsheh, K. and Eldahamsheh, M. 2011). E-commerce, a process of exchanging financial and informational transactions through computerized electronic network with internet access can enable the transactions of networked economy around the world, as well as empower organizations to collaborate virtually (Kalakota and Whinston, 1997; Timmers, 1999; Kalakota and Robinson, 2001; Turban, E., King, D., Lee, J. K., Liang, T. and Turban, D. C., 2015). Use of internet has expanded tourism global customer reach and has hitherto created a more competitive environment with greater propensity for tourism business development (Paraskevas, 2005; Berné, C., García-González, M., García-Uceda, M.E. and Múgica, J.M., 2015). Tourism businesses without access to the internet may likely not benefit from the provisions from e-services and could gradually edge out of global markets (Pimenidis, E., Bolissian, J.M., Iliadis, L. and Andreopoulou, Z., 2006, cited in Stiakakis and Georgiadis, 2011). Tourism businesses not utilizing e-commerce tools could be gradually driven out of competition from global markets (Pimenidis et al., 2006 cited in Stiakakis and Georgiadis, 2011).

There has been calls for the attention of policy makers to give priority to business-oriented heritage organizations in order to drive the tourism industry for national economic development (Gilmore and Rentschler, 2002; Hall, 2005; Bramwell, 2011; Manzuma-Ndaaba, N. M., Harada, Y. and Islam, A., 2014). Hoffman and Novak (1997) asserted the uniqueness of the Web as it stands out from traditional marketing channels. The managements of many tourism firms are, however, not aware of the numerous opportunities offered by e-commerce through the internet in reducing cost of advertisement, boosting sales, and getting new customers. The major challenge in today’s business with regards to communication and customer satisfaction indicates that there should be a synergy between the tourism industry and use of e-commerce (Gratzer, M., WINIWATER, W. and Werthner, H., 2002). There are quite a number of tools embedded in ICT that can enable tourism organizations to manage and market their businesses effectively and efficiently (Buhalis, 2003; O’Connor and Murphy, 2004). Heritage tourism is certain to become reliant on e-commerce for marketing of products and services. National Theatre and National Museum as part of their marketing strategies has not put into full practice the use of e-commerce in getting to their customers. This study is therefore aimed at the assess the use of e-commerce platform in the marketing of heritage tourism industry in National Theatre and National Museum Lagos, Nigeria.

The specific objectives of the study are to:

1. Asses the use of e-commerce platform in managing National Theatre and National Museum.
2. Compare the use of e-commerce between National Theatre and National Museum.

**Hypotheses**

The following hypotheses were formulated in line with statement of the problems:

1. \( H_0 \): The marketing of heritage tourism destination is not significantly enhanced by the use of e-commerce

2. \( H_0 \): Efficient use of e-commerce is not significantly predicted by the educational status of tourists

**LITERATURE REVIEW**

E-commerce is a term that is used in describing the process of buying, selling, transferring, or exchanging products, services, and/or information through computer networks, principally the internet (Singer, P., Ferri, M. A., Aelillo, L. and Cacia, C., 2010; Turban et al. (2006). Getting to know about any tourist destination is a function of the amount of information a tourist can access about the destination. As “confidence goods”, tourists’ decision can only be informed by the information that they get (Werthner and Ricci, 2004). This information is right at the centre of the tourism product (Zhou and DeSantis, 2005). These days, tourism is being enveloped in a web of electronic environment, where only the knowledge of ICT can help in serving customers with greater efficiency in order to maximize profits (Buhails, 1998).

The use of e-commerce can give tourists the chance to get information about new tourism services and products. A lot of other opportunities and advantages come with the use of e-commerce in tourism. Among these are the speed and ease with which tourists can access destinations and get relevant information about price and facilities (Werther and Klein, 1999). Widened market base is another of such advantage (Metzger, 2004) which will give the tourism industry an opportunity to grow at relatively low cost (Singer, P., Ferri, M. A., Aelillo, L. and Cacia, C., 2010). Apart from this, distribution, marketing and operational benefits are also realizable from e-commerce (Hoffman and Novak, 1997). The relatively little cost attached to online transactions can also help to reduce transaction costs (Kiggundu, 2002). E-commerce according to the finding by MCIvor et al. (2000) can assist in developing collaborations with key suppliers in product development as the tourism firms share cross-functional information on a wide range of issues. The time used in searching for information as well as for transaction can also be drastically reduced with the use of e-commerce (Schaeffer, 2003). E-commerce also enhances bookings of tourism products and services, and how tourists communicate and interact with one another (Saleh et al., 2011).

Among many other factors that can facilitate individualistic and specialized forms of tourism such as cultural heritage tourism owing to its high level of attractiveness as embedded in the travel experience (Boyd, 2002) is information technology (Rayman-Bacchus and Molina, 2001), particularly the use of e-commerce in accessing tourism products and services. If properly harnessed the heritage tourism industry can enhance the economic development of the area where it is located (Silberberg 1995). Such travel is focused upon experiencing cultural environments, including landscapes, the visual and performing arts and special lifestyles, values, traditions, and events.
METHODOLOGY

Data collection

Qualitative method was used to evaluate the use of e-commerce by the two destinations. Quantitative method was, however, used to test hypotheses for the efficient use of information technology and e-commerce by tourism firms.

The perception of heritage tourists in Lagos Nigeria were measured using structured questionnaire. The sample size of the respondents was determined using the Yamane formula (1967) as used by Israel (2010). The sample size of 150 was obtained using the formula to calculate the size from extrapolated figure of 240 visitors that visit National Theatre on weekly basis. The 240 figure was arrived at during reconnaissance survey of the two destinations on average weekly visitations to the destinations. A random sample of tourists who visited National Theatre and National Museum was carried out. A total of 300 copies of questionnaire with 150 copies in each of the destinations were administered on tourists of both destinations. Close-ended questions were used to gather data on demographic characteristics and efficiency of use of information technology by tourists. Efficiency of use of e-commerce was evaluated using a four-point Likert scale of strongly agreed to strongly disagree, which was later scaled down to the levels of agreement and disagreement for ease of presentation.

Simply because of tourism growth and its contribution to economic boom in many regions, many studies have been directed only to simple economic variables (Dwyer et al., 2000; Dwer et al., 2001; Kayar and Kozak, 2010; Zhang et al., 2011; Candela, 2012, Chou, 2013), which has downplayed the significance of other variables particularly predicting destination performance by using demographic variables. Dang and Huang (2014) used demographic characteristics to compare overall satisfaction and it was found that nationality, age, occupation and monthly income has no significant impact on it, but, significant difference in satisfaction was found by education. Therefore, for this study, in the regression analysis hypothesis was formulated about the means of the groups on the dependent variable of educational status of tourists. The dependent variable differentiated individual tourists on some quantitative (continuous) dimensions.

The Yamane formula is given as: -

\[ n = \frac{N}{N + Ne^2} \]

Where

\( n \) = corrected sample size, \( N \) = population size, and \( e \) = Margin of error (MoE), \( e = 0.05 \) based on the research condition.

Data Analysis

Qualitative descriptive analysis was used to verbally summarize information on demographic profile. Multivariable regression analysis was carried out to predict the efficiency of use of e-commerce by the educational status of respondents in National Theatre and National Museum.

This tool was used so as to study the effect of multiple variables on the dependent variable instead of using a single independent variable which is not alone sufficient to explain the dependent variable \( Y \). In the multivariable regression model, the dependent variable is described as a linear function of the independent variables \( X_i \), as follows: \( Y = a + b_1 \times X_1 + b_2 \times X_2 + \ldots + b_n \times X_n \). The model permits the computation of a regression coefficient \( b_i \) for each independent variable \( X_i \).

Regression line for multivariable regression
\[ Y = a + b_1 \times X_1 + b_2 \times X_2 + \ldots + b_n \times X_n \]

Where;

- \( Y \) = dependent variable
- \( X_i \) = independent variables
- \( a \) = constant (y-intersect)
- \( b_i \) = regression coefficient of the variable \( X_i \)

**RESULTS AND DISCUSSION**

**Demographic Profile of Tourist to National Museum**

The Demographic profile of respondents in National Museum revealed that male respondents were 50.7%, while females were 49.3%. Most respondents (83.3%) had tertiary education, 8.7% had secondary education, while 2.7% had primary education, as 5.3% had other qualifications. The age distributions of respondents showed that majority (40.0%) was within 26-35 years, 18-25 years (30.7%), 36-45 years (18.0%), 46-55 years (6.7%), 56-65 years (3.3%), while 1.3% were above 65 years in age. Most respondents were Nigerians (99.3%) while foreigners were just 7%.

**Demographic Profile of Tourist to National Theatre**

The Demographic profile of tourists revealed that most respondents were males (58.4%). Most of them (75.5%) had tertiary education, 14.8% had secondary education, while 1.3% had primary education, as 9.4% was recorded for others. The age distribution of respondents showed that majority (36.2%) were within 26-35 years of age, 28.9% within the age range of 18-25 years, 22.8% within 36-45 years, 10.1% within the age of 46-55 years, while 2.0% was within the age of 56-65 years. Most respondents were Nigerians (99.3%), while 7% were foreigners.

Men participated more in heritage tourism than women in National Theatre and National Museum which agreed with the findings of Mason and Cheyne (2000) and Harrill and Potts (2003) who found more women opposed to tourism development. Data on educational background of respondents revealed that in the two destinations under consideration, most of the respondents had tertiary education. This implies that most of the respondents were well educated. This finding agreed with that of Ayeni (2013) on the educational background of respondents in a social survey as well as the finding of Bello et al. (2017) in which education was found as one of the limiting factors affecting community participation in ecotourism.

**Use of E-Commerce by Heritage Tourism Firms**

The result in Table 1 showed the level of agreement by respondents on the use of E-commerce in NT and NM. Almost the same number of respondents in NT (89.2%) and NM (97.3%) agreed that the destinations had their own websites, as about the same number of respondents in National Theatre (88.6%) and NM (99.3%) also agreed that e-commerce provides better information through the internet. Also, 96.6% of the respondents in National Theatre and 96.4% in National Museum agreed that the use of internet establishes interactive relationship between customers. In National Theatre 92.6% of the respondents agreed that the internet saves time for providing tourism services, while only 96.7% agreed to this in National Museum. Agreement by respondents on possibility of booking online packages using e-commerce was 96.7% in National Theatre, while it was 99.3% in National Museum, even though as 24.8% and 19.3% of the respondents respectively in National Theatre and National Museum agreed that getting services through the internet wastes a lot of time. Notwithstanding, 90.0% and 95.3% of the respondents respectively in National Theatre and National Museum agreed that the internet
saves cost on accessing information with the use of e-commerce. On getting services from destination, 85.9% of the respondent in National Theatre agreed that the process was simplified using online means, while 96.0% agreed to this in National Museum. But, only 79.2% of the respondents agreed that the process of booking accommodation online was more convenient than through travel agents in National Theatre, while it was 96.0% in National Museum. Furthermore, 87.9% of the respondents agreed to the possibility of accessing new products from the website of the destination, while 99.3% agreed to this in National Museum. In National Theatre and National Museum, 91.3% and 98.6% of the respondents respectively agreed to introduce their friends to e-commerce for tourism products and services.

With the exception of the variable that “getting services through the internet waste a lot of time” that did not get majority agreement from the respondents, the remaining variables enjoyed considerably high level of agreement from the respondents. This in other words implies that the variables were to a large extent used in accessing e-commerce in both heritage tourism destinations. This may open quite a number of opportunities for the heritage tourism industry.

The prediction by Carlsson (2010) that social media will be the order of the day for branding and onward integration into organizations cannot be waved aside. This is apt to say that tourism destinations should begin to lay much emphasis on web design for their sites as a way of getting customers and communicating with them (Webber, 2007). Widened market base is one of such (Metzger, 2004) which will give the tourism industry an opportunity to grow at relatively low cost. Apart from this, distribution, marketing and operational benefits are also realizable from e-commerce (Hoffman and Novak, 1996). The relatively little cost attached to online transactions can also help to reduce transaction costs (Kiggundu, 2002). E-commerce according to the finding by MCivor et al. (2003) can assist in developing collaborations with key suppliers in product development as the tourism firms share cross-functional information on a wide range of issues. The time used in searching for information as well as for transaction can also be drastically reduced with the use of e-commerce (Schaeffer, 2003).

<table>
<thead>
<tr>
<th>S/No</th>
<th>National Theatre</th>
<th>National Museum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level of Agreement</td>
<td>Level of Agreement</td>
</tr>
<tr>
<td></td>
<td>Agreement</td>
<td>Disagreement</td>
</tr>
<tr>
<td>1</td>
<td>This tourism destination has its own website</td>
<td>89.20</td>
</tr>
<tr>
<td>2</td>
<td>E-commerce provides better information through the internet</td>
<td>88.60</td>
</tr>
<tr>
<td>3</td>
<td>Use of internet establish interactive relationship between customers</td>
<td>96.60</td>
</tr>
<tr>
<td>4</td>
<td>The internet saves time for providing tourism services</td>
<td>92.60</td>
</tr>
<tr>
<td>5</td>
<td>It is possible to book online packages</td>
<td>96.70</td>
</tr>
</tbody>
</table>

Table 1. Use of E-commerce By National Theatre and National Museum
The efficiency of use of e-commerce by National Theatre and National Museum was evaluated using the following 11 constructs (Table 2):

1. Tourism destination has its own website;
2. E-commerce provides better information through the internet;
3. Use of internet establishes interactive relationship between customers;
4. The internet saves time for providing tourism services;
5. It is possible to book online packages;
6. Getting services through the internet wastes a lot of time;
7. The internet saves cost on accessing information;
8. The process of getting services from destination is simplified using online means;
9. The process of booking accommodation online is more convenient than through travel agents;
10. It is possible to access new products from the website of this tourism destination and;
11. Tourists will introduce friends to e-commerce for tourism products and services.

For National Theatre, the result of ANOVA showed that the p–value for the following constructs were greater than 0.05, and so their null hypotheses were accepted (not significant) and it was concluded that the group means of the constructs were not statistically different, and so were not significant in marketing of tourism products and services in the destination: the tourism destination has its own website ($F(6, 142) = 0.651, P = 0.689$); use of internet establish
interactive relationship between customers (F(6, 146) = 2.610, p = 0.0200); the internet saves time for providing tourism services (F (6, 142) = 1.094, p = 0.369); it is possible to book online packages (F(6, 142) = 0.887, P = 0.506); the process of booking accommodation online is more convenient than through travel agents (F (3, 142) = 1.569, P = 0.161); it is possible to access new products from the website of this tourism destination (F (6, 142) = 0.915, p = 0.486).

However, the p-value for the following constructs were less than 0.05, thus their null hypotheses were rejected (was significant) and so it was concluded that the constructs were significant in marketing of tourism products and services in the destination: e-commerce provide better information through the internet (F (6, 142) = 2.610, p = 0.020); getting services through the internet wastes a lot of time (F (6, 142)= 2.947, p= 0.010); the internet saves cost on accessing information (F (6, 142) = 1.450, P = 0.0200); the process of getting services from destination is simplified using online means (F (6, 142) = 2.534, P = 0.023); tourist will introduce friends to e-commerce for tourism products and services (F(6, 142=3.149, p=0.006).

However, for National Museum none of the constructs had p-value that is less than 0.05, so their null hypotheses were accepted (not significant) and so it was concluded that the constructs did not significantly enhance the use of e-commerce. So, e-commerce has not been efficient in the marketing of tourism products and services in National Museum.

The value of destination websites as a distribution channel in meeting the demands of customers in the tourism industry can never be over emphasized. As people interact on the e-commerce platform, they develop closer relationship (Buhalis, 2003). The e-commerce platform has also been recognized as a medium for selling tourism products and services (Morgan et al., 2001; Corbitt, 2003), and so there is the possibility of booking online packages for the two heritage destinations using the platform. Using the internet to sell tourism products and services is becoming more interesting and useful than through agents. Tourists have come to realize that it is possible for them to open up more on what they desire as they access tourism products through e-commerce which was attested to in the finding of (Noti, 2016). This is possibly why the electronic intermediaries are now being seen as potential threat to the services of traditional distributors (Madasu, 2013). When these intermediaries are eliminated, there could be a reduction in distribution costs.

Result of this study has thus revealed that in National Theatre, e-commerce provide better information through the internet, the internet saves cost on accessing information, the process of getting services from destination is simplified using online means, tourist will introduce friends to e-commerce for tourism products and services. However, getting services through the internet wastes a lot of time. The finding of this study on provision of better information through the internet is in tandem with that of MCivor et al. (2000) in which e-commerce was found to provide cross-functional information for visitor needs through collaborations. On cost reduction in accessing information, this study has revealed that the use of e-commerce is cost effective which is in tandem with the finding of (Afuha, 2003; O’Connor). Also, this study has shown that respondents recognized that the process of getting services from destination is simplified using online means. This is in agreement with the finding of Lee and Lin (2005). This according to them makes the sales of tourism products and services to get the necessary boom if the use of e-commerce is internalized by the tourism firm. This study has shown that getting services through the internet wastes a lot of time. This according to Findings of Kartavianus and Napitupulu (2012) may be attributed to infrequent use of e-commerce, which always resulted into waste of time at those intermittent periods of use of e-commerce. Time wasted during these periods of use may lead to loss of revenue (Enz, 2003). The readiness of respondents to introduce friends to e-commerce for tourism products and services may be attributable to the various advantages inherent in the use of e-commerce which this study and the respondents
have recognized. This finding on willingness to introduce friends to e-commerce agreed with that of Murphy et al. (2007) that friends and relatives have been recognized as promotion agents for destination selection through word-of-mouth marketing in the context of online communities.

**Table 2. Efficiency of Use of E-commerce by Tourism Firms**

<table>
<thead>
<tr>
<th>S/No</th>
<th>Difference</th>
<th>National Theatre</th>
<th>National Museum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SS</td>
<td>Df</td>
<td>Mean Square</td>
</tr>
<tr>
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<td>Between Groups</td>
<td>1.64</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>59.49</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>61.13</td>
<td>148</td>
</tr>
<tr>
<td>2</td>
<td>Between Groups</td>
<td>5.70</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>51.66</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>57.36</td>
<td>148</td>
</tr>
<tr>
<td>3</td>
<td>Between Groups</td>
<td>1.32</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>43.87</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>45.20</td>
<td>148</td>
</tr>
<tr>
<td>4</td>
<td>Between Groups</td>
<td>2.41</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>52.13</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>54.54</td>
<td>148</td>
</tr>
<tr>
<td>5</td>
<td>Between Groups</td>
<td>1.61</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>42.98</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>44.59</td>
<td>148</td>
</tr>
<tr>
<td>6</td>
<td>Between Groups</td>
<td>9.73</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>78.14</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>87.87</td>
<td>148</td>
</tr>
<tr>
<td>7</td>
<td>Between Groups</td>
<td>3.88</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>63.25</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>67.13</td>
<td>148</td>
</tr>
<tr>
<td>8</td>
<td>Between Groups</td>
<td>6.13</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>57.20</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>63.33</td>
<td>148</td>
</tr>
<tr>
<td>9</td>
<td>Between Groups</td>
<td>5.19</td>
<td>6</td>
</tr>
</tbody>
</table>
Efficient Use of E-Commerce As Predicted By Tourists’ Educational Status

The results of multivariable linear regressions used in testing hypotheses for predicting the use of e-commerce by the educational statuses of tourists to National Theatre and National Museum are as presented in Table 3. When all 11 factors that predicted efficiency of use of e-commerce were regressed with the dependent variable which was educational status at tolerance limit of 0.00 when all predictors in the model were set to zero, (Table 3). The overall strengths of the relationships were weak for both National Theatre (R = 0.282) and National Museum (R = 0.240). The percentage variance of prediction was explained by only 7.8% and 55.8% of the independent variables respectively in National Theatre and National Museum. The F-values stood at 1.063 in National Theatre, and 0.670 in National Museum. The F-tests overall for both destinations showed that, the relationships between educational status and efficient use of e-commerce were not statistically significant. This implies that the F-test has determined that the proposed relationship between the response variable, i.e., educational statuses of tourists and the set of predictors was not statistically significant, and so predicted that the use of e-commerce was not efficient.

The result of multiple regression showed that for National Theatre and National Museum, the p-values for the following constructs were greater than 0.05, and so their null hypothesis were accepted (not significant), and so it was concluded that the educational status of tourists in the destinations did not significantly predict that: the tourism destination has its own website; e-commerce provides better information through the internet; use of internet establishes relationship between customers; the internet saves time providing tourism services; it is possible to book online packages; getting services through the internet waste a lot of time; the internet saves cost on accessing information; the process of getting services from destination is simplified using online means; the process of booking accommodation online is more convenient than through travel agents; it is possible to access new products from the website of this tourism destination; tourists will introduce friends to e-commerce for tourism products and services.

The model for this study revealed that the gaps between the observed value for prediction and each of the expected values for prediction are wide. This implies that the variables that were not significant and so not good enough to predict the efficient use of e-commerce. The overall strengths of relationship in this study which were weak are a poor measure of the strength of relationship between the models of this study and the dependent variables. The very low values of $R^2$ in the regression model also indicate that the variables that were not significant cannot predict the efficient use of e-commerce with high precision and validity. These variables
according to the finding of Ekinci and Hosany (2006) provide evidence for the predictive validity of the efficient use of e-commerce by the educational statuses of tourists.

The result of this study showed that the overall strength of the models for predicting the efficient use of e-commerce was weak for both destinations, but, National Museum was able to better predict the efficient use of e-commerce than National Theatre. Therefore, the use of educational variable could be seen as a significant factor in evaluating the use of e-commerce especially in National Museum. This result therefore is in tandem with the finding of Dang and Huang (2014).

The educational status of respondents in both destinations predicted that the use of e-commerce was not efficient in the two destinations, and this may not be unconnected with the high level of knowledge and experience of the educated elites who mostly had tertiary educations. The educational qualifications of the respondents have thus put them in vantage positions to better interpret the perceived benefits derivable from the use of e-commerce. According to Connelly et al. (2016), measures of education as part of many sociological analyses are powerful predictors of a diverse range of social outcomes.

**Table 3. Educational Status of Tourists and Its Impact on Efficient Use of E-commerce**

<table>
<thead>
<tr>
<th>S/No</th>
<th>Model</th>
<th>Coefficients* (National Theatre)</th>
<th>Coefficients (National Museum)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Unstandardized Coefficients</td>
<td>Standardized Coefficients</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td></td>
<td>(Constant)</td>
<td>2.34</td>
<td>-0.30</td>
</tr>
<tr>
<td>1</td>
<td>This tourism destination has its own website</td>
<td>-0.01</td>
<td>0.09</td>
</tr>
<tr>
<td>2</td>
<td>E-commerce provide better information through the internet</td>
<td>-0.11</td>
<td>0.11</td>
</tr>
<tr>
<td>3</td>
<td>Use of internet establish relationship between customers</td>
<td>-0.12</td>
<td>0.10</td>
</tr>
<tr>
<td>4</td>
<td>The internet saves time for providing tourism services</td>
<td>0.08</td>
<td>0.12</td>
</tr>
<tr>
<td>5</td>
<td>It is possible to book online packages</td>
<td>-0.17</td>
<td>0.12</td>
</tr>
<tr>
<td>6</td>
<td>Getting Services through internet</td>
<td>-0.07</td>
<td>0.07</td>
</tr>
</tbody>
</table>
The process of getting services from destination is simplified using online means.

The process of booking accommodation is more convenient than through travel agents.

Possible to access new products from the website of this tourism destination.

Introduce my friends to e-commerce for tourism products and services.

a. Dependent Variable: Educational status
b. All requested variable entered.
Source: Researcher’s field survey, 2018.

**Conclusion**

E-commerce was reasonably adopted for accessing services from National Theatre and National Museum. But, e-commerce was more efficient in the marketing of tourism products and services in National Theatre than National Museum.

In National Theatre “e-commerce provides better information through the internet”. “The internet also saves cost on accessing information”, as “the process of getting services from destination is simplified using online means” and, tourists will introduce friends to e-commerce for tourism products and services. However, getting services through the internet wastes a lot of time.

The educational status of respondents in both destinations predicted that the use of e-commerce was not efficient in the two destinations.

**Recommendations**

The variables that enhanced efficiency of marketing of tourism products and services in National Theatre should be leveraged upon in improving e-commerce transaction in the destination.

---

<table>
<thead>
<tr>
<th>Question</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>p Value</th>
<th>R</th>
<th>R²</th>
<th>R² adjusted</th>
<th>Std err of the estimate</th>
<th>F-Value</th>
<th>F sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet saves cost on accessing information</td>
<td>-0.10</td>
<td>0.09</td>
<td>0.13</td>
<td>0.25</td>
<td>0.09</td>
<td>0.11</td>
<td>1.06</td>
<td>0.29</td>
<td></td>
</tr>
<tr>
<td>The process of getting services from destination is simplified using</td>
<td>-0.01</td>
<td>0.09</td>
<td>0.17</td>
<td>0.87</td>
<td>-0.02</td>
<td>0.10</td>
<td>-0.24</td>
<td>0.82</td>
<td></td>
</tr>
<tr>
<td>online means</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The process of booking accommodation is more convenient than through</td>
<td>-0.06</td>
<td>0.08</td>
<td>0.08</td>
<td>0.51</td>
<td>0.13</td>
<td>0.11</td>
<td>1.13</td>
<td>0.26</td>
<td></td>
</tr>
<tr>
<td>travel agents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possible to access new products from the website of this tourism</td>
<td>-0.15</td>
<td>0.09</td>
<td>0.12</td>
<td>1.13</td>
<td>0.26</td>
<td>-0.01</td>
<td>-0.08</td>
<td>0.94</td>
<td></td>
</tr>
<tr>
<td>destination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduce my friends to e-commerce for tourism products and services</td>
<td>-0.03</td>
<td>0.12</td>
<td>0.04</td>
<td>0.04</td>
<td>0.78</td>
<td>-0.09</td>
<td>-0.87</td>
<td>0.39</td>
<td></td>
</tr>
</tbody>
</table>

R, 0.282
R² 0.078
R² adjusted 0.005
Std error of the estimate 0.536
F-value 1.063
F sig. 0.395

R, 0.240
R² 0.558
R² adjusted 0.417
Std error of the estimate 0.495
F Value 0.769
F sig. 0.670
Visitors should be dissuaded of the notion that “getting services through the internet wastes a lot of time”. They should be encouraged on the constant use of e-commerce. At the same time, management of the destination should carry out serious overhaul of the e-commerce platform especially in the areas of the constructs that were not significant, so that it can contribute meaningfully to the marketing of services in the destination. For National Museum, management should endeavor to make a paradigm shift from the traditional method of getting customers and marketing to e-commerce in the light of present day internet use.

Other demographic variables such as income, age, gender, etc, should also be used in predicting heritage tourism destination performance vis-à-vis use of e-commerce.

References


Factors Influencing Performance of Pension Funds: Evidence From Lapf in Tanzania

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Abstract
Pension funds are an important incentive to capital markets in most countries where they exist through financial intermediation. Pension funds complement and stimulate development of capital markets while acting as substitutes for banks as they generate returns themselves. The returns they realize depend on several factors that vary from country to country and from time to time. The purpose of this study was to determine factors influencing performance of pension funds in Tanzania specifically at the Local Authority Pension Fund (LAPF). This study used a quantitative research approach where questionnaires were employed to collect data. Probability sampling was used as well to select a representative sample from each stratum. Descriptive statistics such as percentages and frequencies were used to analyze data collected from respondents. SPSS version 20 and excel Microsoft application were ultimately used to process the data.

Findings from this study indicate that economic hardships faced by many companies result in firms winding up their businesses with arrears of members’ contributions and this results into delay in benefit processing.

Additionally, late submission of collected contributions from employers’ delays benefits processing. The study further reveals that employers who default in making contributions as legally required hamper benefits payments. The study equally exposes the fact that arrears in contributions result in delayed payment. The results also demonstrate that businesses with arrears contribute to delay of benefits processing. The study recommends that LAPF should devote more time in enlarging its membership frontiers to ultimately increase members’ contributions.

Keywords: Pension Fund

1.0 Background to the Study
In the recent past, many countries around the globe have experienced rapid establishment and growth of pension funds. The growth of these institutions is one development that countries have given considerable attention to because of the sensitivity of the transactions involved in pension funds. Pension funds act as an important incentive to capital markets in most countries where they exist through financial intermediation. Pension funds tend to complement and stimulate development of capital markets while acting as substitutes for banks. The growth of
pension funds is highly considered a consequence of a number of non-financial and demand-side features (Davis, 2000).

The need for better managed pension funds in many countries has been necessitated by population increase around the world. Most developed and developing countries are experiencing increasing longevity in life expectancy and reduced fertility rates that seem to threaten the sustainability of traditional pay-as-you-go pension systems. Pension contributions from the working population are insufficient to support the elderly. In response, countries are increasingly shifting their pension systems toward partial or full funding. In addition to the main purpose of coping with demographic pressures and unsustainable fiscal positions, other motivations for countries to reform their pension systems often include the hope that funded pensions will contribute to economic development by promoting national savings and capital market development (Meng and Pfau, 2010).

Pension funds perform diverse activities that are beneficial to both individuals and the economy at large. For instance, the funds induce capital and financial market development through their substituting and complementary roles with other financial institutions, specifically commercial and investment banks. As competing intermediaries for household savings and corporate financing (Impavido, Musalem, and Tressel, 2002), pension funds foster competition and may improve the efficiency of the loan and primary securities markets. These results in a lower spread between lending rates and deposit rates and lower costs to access capital markets. On the other hand, Davis (2000) argues that pension funds may complement banks by purchasing long-term debt securities or investing in long-term bank deposits. Other potential impacts from the growth of pension funds include an inducement towards financial innovation, improvement in financial regulations and corporate governance, modernization in the infrastructure of securities markets, and an overall improvement in financial market efficiency and transparency (Davis, 1995). Such impacts should ultimately spur higher long-term economic growth.

The performance of pension funds depend mainly on the growth of members, amount of contributions collected, returns from investments, and payments made to beneficiaries. Performance of funds based on member registration depends on an increase in the number of members to meet the target set by an organization. For stance, if LAPF sets and achieves its target of registering 24,000 new members then the pension fund has performed well.

It should be noted that for some reason an organization may not meet its set target. Among other reasons, low employment rates within both the government and private sector may enormously affect any pension fund’s set target. Additionally, if a country has various pension firms, competition for clients greatly reduces the membership margin of every pension firm.

Another performance indicator is the increase in contribution which is commensurate to increase in membership and increase in salary levels of members. It goes without saying that the more clients a pension firm has, the wider the contribution margin. The contribution margin is equally affected by increase in the salaries of clients.

Contribution also largely depends on the compliance rate of employers. When employers diligently adhere to contribution policies set by pension firms, contributions are bound to increase. In sum, challenges facing increment in contributions in LAPF including low rate of members registered, insignificant or no salary increase of members, unawareness among stakeholders, and low level of employer-compliance all lead to underperformance of LAPF.

The income from investment depends also on the intensity of investment. It is important to note that 75% of the amount collected from members is invested. The income from investment is
used to meet the organization’s expenditures and create the value for money of members’ contribution. The economy poses a challenging investment climate due to limitations in investment choices as the stock market is still underdeveloped. This is further exacerbated by onerous fiscal policies. In response thereof, the Fund has continued to rely on Government-guaranteed projects. Bank deposits on real estate remain a major alternative investment avenue.

The Fund spends the greatest share of its income on benefit payment. LAPF is ranked second in the country because of the number of benefits offered. Currently, the fund offers six types of benefits including retirement benefit, survivorship benefit, invalidity benefit, withdrawal benefit, maternity benefit, and funeral benefit. The positive cash flow from the Fund enables timely payment of benefits. This signifies the financial stability of the fund and the ability to meet members’ obligations for the foreseeable future. The big challenge facing benefit payment is how to maintain a positive cash flow relative to increase in benefit payment.

Despite the aforementioned challenges facing LAPF, there are no studies that have attempted to establish the key factors that affect the performance of pension funds. These factors greatly affect the milestones that pension firms can achieve and the lump sum pensioners eventually receive. This study establishes the determinants of performance of pension funds in the Tanzanian context in order to bridge the mentioned gap.

2.0 Literature Review

2.1 Age of Members and Performance of Pension Funds

The retirement age is an important aspect that determines the performance of pension funds. More specifically, when the accumulation period is shorter in countries that allow individuals to retire earlier, individuals are likely to receive lower retirement income. As a consequence, governments in some countries have been raising the official retirement age or have introduced incentives to delay retirement. The capacity of funded individual account systems to deliver retirement income will be further challenged in this respect as life expectancy continues to increase in virtually all countries. Moreover, the age of an investor has a significant impact on the performance of the pension fund as it is obvious that younger members automatically make more contributions compared to their older counterparts (Kiplagat, 2014).

Puttonen (2005) empirically examined the strategic asset allocation and the asset/liability issues in the Finnish defined benefit pension funds in Finland. His study focused on the pension funds of the income-related defined benefit TEL-scheme. Benefits of the income-related scheme are a structure of number of years of employment, age-weighted accrual rate, and wage. Data were collected by using both questionnaires and documentary review. Similarly, regression analysis was employed to analyse the data. Therefore, at the end of the study, findings revealed that liability structure of a pension fund affects its asset allocation. The correlation and regression analyses provide evidence that there is a relation between age structures and the strategic asset allocation of pension funds. The average age of employees seems to better explain the proportional equity investment than the proportional fixed income investment. When the solvency variable is added to the proportional equity investment model, the coefficient of determination improves.

2.2 Assets and Performance of Pension Funds

Omondi (2013) carried out a study titled “Relationship between asset allocation and performance of pension funds in Kenya”. The quantitative data was collected by using questionnaires and analysis was done by employing correlation and regression models. The analysis of the findings was that the weight of immovable property scheme was strongly correlated to pension schemes financial performance. The study also noted that the weight of
unquoted equities was strongly correlated (Pearson correlation coefficient = .727) to pension scheme financial performance. A (Pearson correlation coefficient = .601) was established between the weights of quoted equities in pension schemes financial performance.

Ammann and Ehmann (2014) carried out a study to establish the relationship between governance, asset allocation, and performance of pension funds in Switzerland. Data were collected from both primary and secondary sources. For secondary data, information on assets owned by the fund were obtained from financial statements and for primary data questionnaires were used. Regression and Correlation were employed to analyze the data obtained from the study. The findings of the study were that asset allocation weights of Swiss pension portfolios are primarily related to non-governance-related factors such as size, legal form, and the ratio of active plan members to pensioners. Since larger pension funds have more investment opportunities and more comprehensive internal risk management structures, they are able to invest in riskier asset classes that promise higher returns. Large pension funds in Switzerland hence “buy” a significant part of their superior performance with higher volatility as indicated by the analysis (Moses, 2013).

Nguthu (2009) in his research to establish how much asset allocation policy contributed to the returns level retirement benefit fund in Kenya found that the variation in returns over time for pension schemes is explained up to 62.4% by investment policy adopted by the trustees of the scheme. Other factors such as securities selection, timing of investments and managers’ selection explained the remainder. The study was conducted on 40 segregated occupational schemes in Kenya and returns analyzed using regression analysis and descriptive statistics.

Despite the studies carried out locally on portfolio allocation and performance of pension funds, there are no studies that have attempted to explain the effect of asset allocation on the financial performance of Pension funds in Tanzania. The current study intends to address this research gap by posing the following research question: What is the effect of asset allocation on the performance of pension funds in Tanzania?

Moreover another study titled “Effects of assets allocation on financial performance in Kenya” was conducted by (Kiplagat, 2014). The main objective of this study was to determine the effect of assets allocation on the financial performance of pension schemes. This research was conducted through a descriptive survey and utilized secondary data available from RBA and Fund Managers. From the study, it was found out that there is a linear correlation between fund performances and the returns of the various asset classes with the strongest correlation being between overall fund performance and returns in equities, fixed deposit, and Government securities. From a population of 1297 schemes in Kenya, the findings of the study showed that asset allocation explained 89.5% of the variability of fund performance and that 10.5% was due to other factors such as the manager’s selection, timing of investments, and securities selection within as asset class and the management style adopted by the fund managers of the fund. The study recommended that a related review should be carried out replacing actual weights of assets with a departure/deviation from the weights recommended by RBA to determine if the same conclusions of the study will still hold.

2.3 Members Contributions and Fund Value Influence Performance of Pension Fund

Sawick and Ong (2000) conducted a study titled “Evaluating Managed Fund Performance” in Australia. The study used conditional models (based on the semi strong form of market efficiency model of Fama). Regression and correlation analysis were conducted to analyse these data. Findings revealed that sound fund value enables pension funds to increase lump sum to retirees and also ensure invalidity and survival. The study further pointed out that a sound fund value which is obtained from members’ contributions enables the fund to carry out more
investment. The study clarified that funds hold stocks that outperform the market by 1.3 percent per year but their net returns underperformance of nonstick holdings, which was 1.6 percent was due to expenses and transactions costs. Thus, funds pick stocks well enough to cover their costs.

Again, Walker and Iglesias (2010) in their study titled “Financial Performance of the Pension Funds” established that members’ contributions increase liquidity of the fund which facilitates timely payment of pensioners. The study further revealed that the fund value of the pensions fund enables them to pay tax for all investments and enables them to expand not only membership but also branches to accommodate services offered. The study further clarified that fund value encourages investment and highly benefits members of the pension fund.

All in all, literature reviewed suggests that there are contradictory views on the factors affecting the performance of pension funds which implies that the question of performance of pension fund services is debatable and yet to be fully clarified in terms of dimensions that truly associate with pension funds’ performance.

However, much as there are yardsticks used to determine the performance of pension funds, it is clear that most pension funds are still at their infancy and this makes it difficult to create any meaningful trend analysis on their performance. Studies linking performance of pension funds for most developing countries are also scarce since they do not have well-structured pension plans due to inadequate regulations.

---

**Figure 2.1 Conceptual Framework Showing the Relationships between Variables**

Source: Researcher, 2018
Table 2.2 Variables and their Measurements

<table>
<thead>
<tr>
<th>Type of Variable</th>
<th>Description of Variables</th>
<th>Variable Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fund Value</td>
<td>Actuarial Valuation</td>
<td>• Assets and liability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Current values of assets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Present value of the projected cash flows from investments</td>
</tr>
<tr>
<td></td>
<td>Actuarial Value Assets</td>
<td>• Actuarial value of assets exceeds accrued liabilities (actuarial surplus)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Actuarial value of accrued liabilities exceeds actuarial value of assets (actuarial deficit)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Actuarial value of assets matches accrued liabilities.</td>
</tr>
<tr>
<td>Assets</td>
<td>Asset allocation</td>
<td>• Number of investment in real estate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Number of shares (dividends)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Fixed deposits</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Government securities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Outstanding loan amount</td>
</tr>
<tr>
<td>Categories of Assets</td>
<td>Asset categories are Properties, Equities, and Fixed Income Assets</td>
<td></td>
</tr>
<tr>
<td>Investment policy</td>
<td>Rules, principles, guidelines proposed by an organization, and BOT on investment.</td>
<td></td>
</tr>
<tr>
<td>Investment Valuation/Analysis</td>
<td>Assessing of investment opportunities in order to determine their technical and financial viability or to compare and choose between alternatives</td>
<td></td>
</tr>
<tr>
<td>Age of the contributor</td>
<td>At what Age the Member Joined the Fund</td>
<td>• Period of contribution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Amount contributed by members</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• The younger people who joined the fund will contribute for a longer period compared to those who joined the fund at an older age.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Excess contribution/cash invested.</td>
</tr>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pension Fund Performance</td>
<td>Member registration, Contributions from members and investment Income.</td>
<td>• Number of members</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Number of pensioners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Level of investment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Fund value</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Timely payment of pensioners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Number of benefits</td>
</tr>
</tbody>
</table>

3.0 Research Methodology
This study used a quantitative research approach whereby questionnaires were employed to collect the data. The study adopted a case study design to determine the influence of fund value, age of investor, members’ contribution, and assets on pension fund performance. Questionnaires were used as a survey instrument. Data were collected by using structured questionnaires. Descriptive statistics were used to analyze data collected from the respondents and SPSS version 20 and excel Microsoft application was used to process the data.

4.0 Results

4.1 Demographic Characteristics

In this study, in order to have a better understanding of the demographic characteristics and specifications of the respondents, frequency analysis was used. The samples of the questionnaires were taken to LAPF employees whose sample size was 66 respondents. In total, five questions gave a brief overview of the demographic attributes of respondents as presented below:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Male</td>
<td>42</td>
<td>63.6</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>24</td>
<td>36.4</td>
</tr>
<tr>
<td>Age</td>
<td>18-24</td>
<td>15</td>
<td>22.7</td>
</tr>
<tr>
<td></td>
<td>25-34</td>
<td>34</td>
<td>51.5</td>
</tr>
<tr>
<td></td>
<td>35 and above</td>
<td>17</td>
<td>25.8</td>
</tr>
<tr>
<td>Education Level</td>
<td>Certificate level</td>
<td>3</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>Diploma level</td>
<td>8</td>
<td>12.1</td>
</tr>
<tr>
<td></td>
<td>Degree level</td>
<td>34</td>
<td>51.5</td>
</tr>
<tr>
<td></td>
<td>Others(CPA, PSPTB)</td>
<td>21</td>
<td>31.8</td>
</tr>
<tr>
<td>Working Experience</td>
<td>1-5 years</td>
<td>31</td>
<td>41.8</td>
</tr>
<tr>
<td></td>
<td>6-10 years</td>
<td>19</td>
<td>28.8</td>
</tr>
<tr>
<td></td>
<td>11 and above</td>
<td>14</td>
<td>21.2</td>
</tr>
</tbody>
</table>

Source: field data (2018)

The study involved a sample of 66 (100%) respondents who filled in the questionnaires. 42 (63.6%) of the respondents were male and 24 (36.4 %) were female. The results in the table above reveal that there was a slight difference between male and female respondents. Therefore, gender was seriously taken into consideration to collect data from the respondents (Table 4.1).

The study findings show that 15 (22.7%) respondents were aged between 18 and 24 years. 34 (51.5%) respondents were from the ages between 25 to 34 years. The statistics signify that all age groups were considered for employment by the selected organization. However, a large number of employees who were more than half were from the age group between 25 to 34 years. This implies that employees aged between 25 and 34 years cover the production level and are available in the labor market.

Lastly, 34 (51.5%) of the respondents were university graduates and 21 (31.8%) were holders of Masters Degrees, CPA or PSPTB. Therefore, the statistics indicate that all categories of academic qualifications or awards were considered by the selected organization during recruitment.
4.2 Influence of Fund Value on LAPF Performance

In the current study, the researcher was interested in establishing how fund value influences pension fund performance. The researcher therefore posed seven questions to respondents who were requested to point out issues they agree with or disagree with.

Table 4.2 shows the findings as follows:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excess fund encourage more investment</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>6.0(4)</td>
<td>66.7(44)</td>
<td>27.3(18)</td>
</tr>
<tr>
<td>Excess fund leads to more members benefits</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>13.6(9)</td>
<td>65.2(43)</td>
<td>21.2(14)</td>
</tr>
<tr>
<td>Excess fund value enables LAPF to grant loans to its customers at a reasonable interest rate.</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>25.8(17)</td>
<td>39.4(26)</td>
<td>34.8(23)</td>
</tr>
<tr>
<td>Sound fund value enables LAPF to increase lump sum to retirees, invalidity and survival</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>24.2(16)</td>
<td>53(35)</td>
<td>22.7(15)</td>
</tr>
<tr>
<td>Fund value enables LAPF to grow in terms of number of branches and services</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>12.1(8)</td>
<td>51.5(34)</td>
<td>36.4(24)</td>
</tr>
<tr>
<td>Fund value enables LAPF to develop employees in terms of skills and knowledge</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>31.8(21)</td>
<td>47(31)</td>
<td>21.2(14)</td>
</tr>
<tr>
<td>Fund value enables LAPF to pay tax for all its investment</td>
<td>1.5(1)</td>
<td>0(0.0)</td>
<td>19.7(13)</td>
<td>54.5(36)</td>
<td>24.2(16)</td>
</tr>
</tbody>
</table>

Source: Field data (2018)

Findings on the influence of fund value on performance revealed that majority of respondents who were 94% commented that excess fund enables LAPF to conduct more investments, 86.4 % agreed that excess fund leads to more benefits for members, 74.2% agreed that excess fund enables LAPF to grant loans to its customers at a reasonable interest rate, 75.7% quantified that excess fund enables LAPF to pay lump sum to retirees, invalids, and survival. Moreover, the respondents stated that fund value enables LAPF to grow in terms of number of branches and services, 68.2% also pointed out that it enables LAPF to develop its employees in terms of skills and knowledge whereas 78.7% specified that fund value enables the fund to pay for tax for all its investments. The findings contradict with the findings of Bodie, Detemple, and Rindisbacher, (2009) who argued that fund value has a strong bearing on the financial performance of pension funds in the long run. This study did not a find strong relationship between fund value and the returns of the pension funds indicating that fund value does not
affect performance of the pension funds. This study found that fund size does not have a significant effect on performance.

4.3 Relationship between Assets and Performance of Pension Fund

The Researcher posed a number of questions to assess the relationship between assets and the performance of the pension fund. The findings are indicated in Table 4.3 below:

### Table 4.3 Relationship between Assets and Pension Fund Performance

<table>
<thead>
<tr>
<th>Description</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent obtained from LAPF assets enable it to cover operational costs</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>9.1(6)</td>
<td>48.5(32)</td>
<td>40.9(27)</td>
</tr>
<tr>
<td>Rent obtained from LAPF assets are used to pay interests to members annually</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>21.2(14)</td>
<td>57.6(38)</td>
<td>21.2(14)</td>
</tr>
<tr>
<td>Rent obtained from assets are re-invested</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>19.7(13)</td>
<td>51.5(34)</td>
<td>28.8(19)</td>
</tr>
<tr>
<td>Rent from assets are used to improve services through use of technology in service provision</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>22.7(15)</td>
<td>59.1(39)</td>
<td>18.2(12)</td>
</tr>
<tr>
<td>Fixed deposits enable them to get interests</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>18.2(12)</td>
<td>37.9(25)</td>
<td>43.9(29)</td>
</tr>
<tr>
<td>Dividends obtained from shares enable LAPF to invest more</td>
<td>0(0.0)</td>
<td>1.5(1)</td>
<td>6.1(4)</td>
<td>63.6(42)</td>
<td>28.8(19)</td>
</tr>
<tr>
<td>Government securities such as bonds and tertiary bills enable LAPF to get interests</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>12.1(8)</td>
<td>53(35)</td>
<td>34.8(23)</td>
</tr>
</tbody>
</table>

Source: Field data (2018)

Results in table 4.3 show that; 89.4% of the respondents agreed that rent obtained from LAPF assets enable it to cover operational costs, 78.8% stated that rent obtained from assets are used to pay interests to members annually. Correspondingly, 80.3% of the respondents confirmed that rent enabled LAPF to re-invest, 77.3% pointed out that obtained rent is used to improve LAPF performance specifically improving services by using technology. Moreover, 81.8% agreed that fixed deposits enable LAPF to get interest, 91.6% agreed that dividends obtained from shares enable LAPF to invest more and 87.8% believed that government securities such as bonds and tertiary bills enable the fund to get interest as well. The foregoing findings are contrary to the study carried out by Kagunda (2011) which show that asset allocation can explain a significant amount of difference in returns across time and hence a primary determinant of return performance of unit trusts in Kenya.

4.4 Influence of Members’ Contributions towards Pension Performance

The study also assessed the influence of members’ contributions on pension performance and the results are indicated in Table 4.4 below as follows:
Table 4.4 Members’ Contribution influence Pension Fund Performance

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Members contribution enable LAPF to conduct more investments</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>7.6(5)</td>
<td>50.0(33)</td>
<td>42.4(28)</td>
</tr>
<tr>
<td>More investment from contributions enable LAPF to increase its number of assets</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>7.6(5)</td>
<td>71.2(47)</td>
<td>21.2(14)</td>
</tr>
<tr>
<td>Members contributions increase liquidity of the fund which facilitate payment of pensioners</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>21.2(14)</td>
<td>45.5(30)</td>
<td>33.3(22)</td>
</tr>
<tr>
<td>The density of contribution influences the number of benefits</td>
<td>0(0.0)</td>
<td>3(2.0)</td>
<td>30.3(20)</td>
<td>56.1(37)</td>
<td>19.6(7)</td>
</tr>
<tr>
<td>Members contributions ensure fund sustainability/survival</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>12.1(8)</td>
<td>53(35)</td>
<td>34.8(23)</td>
</tr>
<tr>
<td>Members contributions enable LAPF to cover some operational costs</td>
<td>0(0.0)</td>
<td>6.1(4)</td>
<td>7.6(5)</td>
<td>65.2(43)</td>
<td>21.2(14)</td>
</tr>
<tr>
<td>Members contributions facilitate quick payment to pensioners</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>21.2(14)</td>
<td>57.6(38)</td>
<td>21.2(14)</td>
</tr>
</tbody>
</table>

Source: Field data (2018)

Findings in table 4.4 above reveal that 92.4% of the respondents were of the view that members’ contributions enable LAPF to conduct more investments, 92.4% agreed that more investment from contributions enable LAPF to increase its number of assets. 78.8% were of the opinion that members’ contribution increase liquidity of the fund which facilitates payment of pensioners. 75.7% agreed that the density of contribution influences the number of benefits, whereas 86.4% opined that members’ contributions enable LAPF to cover some operational costs. 87.8% of the respondents mentioned that members’ contributions ensure fund sustainability/survival and 78.8% agreed that members’ contributions facilitate quick payment to pensioners.

4.5 How the Age of the Investor affects Performance of a Pension Fund.

It is believed that the age of the investor largely affects performance of the pension fund. Therefore, the Researcher resolved to set questions in order to confirm this assertion. Results as indicated in table 4.5 below.
Table 4.5 The Age of Investor affects Performance of a Pension Fund

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Perc (Frq)</td>
<td>Per (Frq)</td>
<td>Per (Frq)</td>
<td>Per (Frq)</td>
<td>Per (Frq)</td>
</tr>
<tr>
<td>Longer period of contribution increase more contribution</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>9.1(6)</td>
<td>62.1(41)</td>
<td>28.8(19)</td>
</tr>
<tr>
<td>which facilitates investment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longer period of contribution increases liability</td>
<td>0(0.0)</td>
<td>1.5(1)</td>
<td>18.2(12)</td>
<td>66.7(44)</td>
<td>13.6(9)</td>
</tr>
<tr>
<td>Younger members contribute for a longer period of time compared</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>7.6(5)</td>
<td>54.5(36)</td>
<td>37.9(25)</td>
</tr>
<tr>
<td>to older members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longer period of contribution ensures survival of the Pension</td>
<td>0(0.0)</td>
<td>0(0.0)</td>
<td>9.1(6)</td>
<td>60.6(40)</td>
<td>30.3(20)</td>
</tr>
<tr>
<td>fund</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longer period of contribution ensures the liquidity of the fund</td>
<td>0(0.0)</td>
<td>1.5(1)</td>
<td>10.6(7)</td>
<td>51.5(34)</td>
<td>36.4(24)</td>
</tr>
</tbody>
</table>

Source: Field data (2018)

Results in table 4.5 above shows that 90.9% of the respondents agreed that a longer period of contribution increases more contribution and facilitates investment. 80.3% of the respondents were of the view that a longer period of contribution increases fund liability and likewise 92.4% agreed that a younger members contribute for a longer period compared to their older counterparts. Moreover, 87.9% of the respondents agreed that a longer period of contribution ensures the liquidity of the fund.

4.6 Regression Analysis

Upon measuring the influence of fund value, assets, age of investors and members’ contributions on performance of pension fund by using regression analysis and the aggregate figure, the results exposed the fact that members’ contributions have a weak relationship with a coefficient of 0.761, followed by the age of investors which was found to have a positive significant effect with a value of 0.601. The fund value had a coefficient value of 0.591 while assets had a weak coefficient value of 0.070.

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.538</td>
<td>.290</td>
<td>.243</td>
<td>6.12956</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), AGE, AS, FV, CN

ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>920.260</td>
<td>4</td>
<td>230.065</td>
<td>6.123</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>2254.294</td>
<td>60</td>
<td>37.572</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3174.554</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: PERF
b. Predictors: (Constant), AGE, AS, FV, CN
Table 4.6 Regression output on the Factors influencing Performance of Pension Funds

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-32.708</td>
<td>12.065</td>
<td>-2.711</td>
<td>.009</td>
</tr>
<tr>
<td>FV</td>
<td>.591</td>
<td>.356</td>
<td>.195</td>
<td>1.657</td>
</tr>
<tr>
<td>AS</td>
<td>.070</td>
<td>.179</td>
<td>.044</td>
<td>.388</td>
</tr>
<tr>
<td>CN</td>
<td>.761</td>
<td>.394</td>
<td>.263</td>
<td>1.931</td>
</tr>
<tr>
<td>AGE</td>
<td>.601</td>
<td>.370</td>
<td>.214</td>
<td>1.624</td>
</tr>
</tbody>
</table>

a. Dependent Variable: PERF

4.7 Reliability and Validity of the Study

4.7.1 Reliability of the Study

The reliability of data instruments was evaluated through the Split-Half Reliability test that can be calculated through the reliability index by coefficient alpha, Kuder-Richardson formula 20 (KR-20) or the Spearman-Brown formula to determine how much error in a test score is due to poor test construction. In this regard, the coefficient alpha or Cronbach’s Alpha was used to evaluate the reliability of the study because “If you administer a Likert Scale or have another measure that does not have just one correct answer, the preferable statistic to calculate the split-half reliability is coefficient alpha or called Cronbach’s alphas” (Korb, 2013). Table 4.7 shows the value of the coefficient alpha or Cronbach’s alpha as the research scale is 0.878 or 87.8%. This is over 80%, which is an extra good value for the internal consequence of the conceptual construction of the investigated scale.

Table 4.7 Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.878</td>
<td>40</td>
</tr>
</tbody>
</table>

Source: Field data

4.7.2 Validity of the Study

The validity of the study was measured using the Kaiser-Meyer-Olkin (KMO) and Bartlett’s Test of sphericity through the SPSS. Results extracted from SPSS are presented in table 4.8 below regarding the two hypotheses of factor analysis. From table 4.8, the researcher found a sample sufficiency index of KMO by Kaiser-Meyer-Olkin, which compares the sizes of the observed correlation coefficients to the sizes of the partial correlation coefficients for the sum of analysis variables which is 0.762 or 76.2 %, and is reliable because it is above 0.5 or 50% which is the cut-off. In addition, the supposition test of sphericity by the Bartlett test (Ho: All correlation coefficients are not quite far from zero) is rejected on a level of statistical significance p<0.0005 for Approximation, so that the second acceptance of factor analysis is satisfied.

Table 4.8 KMO and Bartlett’s Test

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</th>
<th>.762</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td></td>
<td>df</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
</tr>
</tbody>
</table>

Source: Field data
5.0 Conclusion
From the findings of this research, a number of conclusions can be made. Firstly, the relationship between the fund value, the age of investors, members’ contributions and assets, and fund performance funds in LAPF are not strong. This means that improvement in the value of pension funds is not used as leverage for higher profitability. Improvement in fund values does not translate to higher returns. The study concluded that the age of investors and members’ contributions has a higher coefficient value to pension performance. The relationship between assets and returns is also weak. This leads to the conclusion that the assets acquired by the pension scheme do not translate into higher returns. If the relationship was strong, then it would mean that the assets available in the pension funds are used to generate income for the benefit of the contributors. However, this is not the case.

REFERENCES
An Investigation of Factors Influencing Tax Evasion in Tanzania: A Case Study of Iringa Municipality

Emmanuel Hamis Mwandambo
Ruaha Catholic University

Abstract

Tax evasion is among the major societal problems inhibiting development in developing countries. Literature reveals that tax evasion also denote some of the difficulties in raising revenue in Tanzania and it generates inequity between the evaders and the honest taxpayers. The main purpose of this study was to investigate factors influencing tax evasion practices in Tanzania specifically in Iringa Municipality. Specifically, the study sought to examine the influence of multiplicity of tax to tax evasion, to identify how high tax rate leads to tax evasion, furthermore, to identify the manner in which tax revenue is spent contributes to tax evasion and finally, to determine whether the level of education/awareness of tax payers on tax influences tax evasion.

The study employed both quantitative and qualitative approaches (Mixed method) in the collection of relevant information. The study used descriptive research design while simple random and purposive sampling design were used in collecting data to a total of 100 respondents derived from a total population of 49,253 tax payers. Questionnaires used to obtain primary data while books, journals, dissertations and internet were used to obtain secondary data. Data was analyzed by using Statistical Package for Social Sciences (SPSS) software version 20 and Microsoft excel, while the results were summarized in tables of frequencies percentages and charts.

The results of the analysis showed that multiplicity of tax, high tax rate, the manner in which tax revenue is spent and education level have significant positive relationship with tax evasion. The study recommends that there should be an increase in education and counseling to tax payers; to educate the young who are the future taxpayers by creating an environment for tax education at schools, in additional, a number of taxes and tax rates should be reduced if cases of tax evasion have to be reduced; provision of proper social services to taxpayers, transparent in dealing with tax revenue and proper allocation of revenue collected.

Keywords: Tax, Tax Evasion, Iringa, Tanzania, Factors

1.0 Background

The desire to uplift one’s society is the first desire of every patriotic citizen. Tax payment is a demonstration of such a desire (Adebisi & Gbegi, 2013). Tax revenues allow the government to cover Revenue Goals such as administrative services, protective services, social services and development services. They also allow the government to cover Non-revenue Goals such as to
protect domestic industries, to discourage certain habits, to regulate demand and supply in the economy in times of inflation (economic stabilization), income redistribution etc. For this purpose, taxation is a core source of revenue to the government and according to the law, it is an obligation of individuals and businesses to pay for it so that the government can obtain enough revenue to efficiently and effectively finance its expenditures.

Despite the fact that individuals and businesses, according to the law, have an obligation to pay tax to the government so that it can have enough revenue to finance its expenditures for the benefit of its citizens, what is prevailing in Iringa is that the majority of business owners, citizen and individuals evade to pay taxes to the respective authority. This is due to various reasons such as multiplicity of taxes, high tax rate and frequent change of tax rates, tax system, corruption among tax officials, level of education and awareness of taxpayers on tax and the manner in which the tax revenue is spent. Tax evasion is said to occur when individuals deliberately fail to comply with tax obligations. A real example is that, businesses either small or large are after profit maximization; since tax reduces their profit then they use different ways by which they can either reduce tax liability or not to pay tax at all. There are several ways used to reduce tax liability among them are overstating of expenses and understating sales revenue which results in lower taxable profit.

If this situation will continue to prevail in the country, the results due to tax revenue loss may cause serious damage on the performance of public sectors. Example, threatening the government capability to finance public expenditures, causing economic inequality, many projects to be kept on hold and welfare services to be kept aside. Due to that, the study investigates factors influencing tax evasion in Tanzania specifically Iringa Municipal so that tax payers can be educated to voluntarily pay their tax liability as well as help the policy makers (government) to formulate suitable tax policy.

2.0 Literature Review

2.1 Multiplicity of tax and tax evasion

According to Izedonmi (2010), multiple taxes is said to occur when the same income is subjected to more than one tax treatment. Multiple taxes make business entry difficult and expensive. If it is taxed twice then it is double taxation. When it is taxed thrice, it becomes triple taxation. An example of double taxation involves a situation where a company’s profit is subject to corporate tax at corporate level and at the same time opened to withholding tax and PAYE as income tax in the hands of the investor.

Nongwa (2013) conducted an empirical study to examine the Efficacy of Anti-Avoidance Provisions under the Income Tax Act in Tanzania Mainland. The study found that multiplicity of tax is the one of the factors that tax payer hate paying tax thus noncompliance to tax issues which lead to reduction of revenue for the Government to operate. However, the researcher recommended that, tax laws should be harmonized so as to do away with the current multiplicity of tax laws which defeats taxpayers’ positive perception to tax laws.

Akinwunmi, Olotu , & Adegbie (2017) conducted a study with a title; “Multiplicity of Taxes and Foreign Direct Investment: A Relational Analysis of Nigerian Tax Environment”. The emphasis of this study was to examine the relationship between multiple taxes and Foreign Direct Investment in flow in Nigeria for the period 1996 to 2015. The study adopted the ex-post facto research design and descriptive method. Secondary data used was collected from Central Bank of Nigeria Statistical bulletins, National bureau of statistics publications and Central Bank of Nigeria Annual Reports. Descriptive analytical procedure and inferential statistics were employed. The descriptive statistics was used in explaining the characteristics of the variables.
while inferential statistics involved the use of multiple regressions for analysis and time series was used for estimation. From the findings, it is noted that there is an inverse relationship between multiple taxes and Foreign Direct Investment (FDI) in Nigeria. It is therefore recommended that for Nigeria to secure a place as an economically viable nation in Africa, it must strive and achieve an internationally competitive tax system by eliminating all forms of multiple taxes in the country.

2.2 Tax Rates and Tax Evasion

Nyang’au, (2016), conducted an empirical study to investigate the causes of tax evasion and tax avoidance in Tanzania in Magu District. The study found that high tax rate has a positive and significant impact on tax evasion. The positive effect of tax rate implies that the higher the tax rates the more the likelihood of tax evasion and avoidance. Higher tax rates tempted people to evade and avoid tax because of the pinch associated with the higher tax rate. The researcher recommended that tax rates should be reduced so as to encourage tax payers not to evade and avoid tax. Another empirical study on high tax rate was conducted by Adebisi and Gbegi, (2013). The study aimed at examining the effect of tax avoidance and tax evasion on personal income tax administration in Nigeria. The research findings among others disclose that high tax rates on personal income encourage tax avoidance and tax evasion.

In addition, Hove and Hove (2016), conducted an empirical study on Investigating the Causes of Tax Avoidance and Tax Evasion in Zimbabwe: A Survey of Business Operators in Bulawayo. The study’s sample frame was drawn from all tax registered companies in Bulawayo (SMEs and Large scale companies) and all ZIMRA employees working in Bulawayo. The researchers among others found that high tax rates encourage tax avoidance and tax evasion. The researcher recommended that the Government should review the tax percentage across various tax categories and better lower it than never.

2.3 The manner in which tax revenue is spent and tax evasion

The manner in which tax revenue is spent can be seen in two perspectives; one is transparency and accountability, and the other perspective is the quality of services in return. Lack of transparency and accountability in the use of public funds contributes to public distrust both with respect to the tax system as well as the government. This, in turn, increases the willingness to evade taxes (Kirchler, 2007). Furthermore, GIZ, 2010 added that if the government fails to provide basic public goods and services or provides them insufficiently, citizens may not be willing to pay taxes and tax evasion will be the consequence. Stephen, (2014), conducted an empirical study to Assess Tax Evasion Practices in Tanzania, a case of Temeke Municipal and found that accountability and improper utilizations of tax revenues contributes to tax evasion. Among others the researcher recommended that, Temeke Municipal Council should provide proper accountability for the tax revenue collected, and to ensure that public services are improved so as to increase payments of tax.

Asuamah, Amoah and Amaning (2014), conducted an empirical study with the title of “Investigation into Tax Evasion in Ghana and found tax evasion occurs if most of the money collected is spent unwisely and if the money collected is spent on projects that people do not benefit from, and when the money collected gets into the pockets of corrupt politicians. It is then recommended that tax policies must be fair and that tax officers must be encouraged to stay away from corrupt activities, and tax revenue should be spent on projects that will benefit the public as a whole. Another empirical study was conducted by Asumwisye (2014) with the title of “Tax Compliance in Local Government Authorities in Tanzania; A Case Study of Sumbawanga District Council” showed that, tax noncompliance behaviours such as tax evasion occurs due to unsatisfactory return in form of services delivery to the public.
2.4 The Level of Education and its influence on Tax Evasion

Research has demonstrated that when people are educated about the importance of paying tax it re-awakens them and they become more conscious and responsible in paying their taxes promptly than the uneducated ones (Stamatopoulos, Vrantaki, & Terzakis, 2015). Tumisifu (2015), conducted an empirical study which aimed at profiling attributes articulating SMEs’ tax compliance in Tanzania. Findings among others showed that SMEs’ tax compliance is influenced when reasons for paying tax are well known among tax payers and simplicity of tax laws. The study recommends to responsible institutions that they should simplify tax procedures, eliminate bureaucracies and educate tax payers for better compliance.

Berhane (2011) conducted an empirical study to examine the influence of tax education on the compliance attitude of tax payers, the study was conducted in Addis Ababa, Ethiopia. The findings indicated that tax compliance is influenced by tax education. Also Muzainah & Zakariya’u (2016), conducted a study to assess the determinants of tax evasion in Gombe state (a state in Nigeria). The results shown that an adequate knowledge of taxes leads to a good understanding of tax laws and policies hence facilitates tax compliance and discourages tax evasion.

2.5 The Research Gap and Conceptual Framework

2.5.1 The Research Gap

Despite the fact that many researchers conducted different studies on tax evasion as stipulated in literature review above, there was no known study conducted in Iringa Municipality. This study, therefore, aimed to address this gap.

2.5.2 Conceptual Framework

The study proposed a conceptual framework based on the variable drawn from the study. Tax evasion is a dependent variable and factors influencing tax evasion is an independent variable. These two variables have been used by the researcher to see the relationship between these variables to investigate the factors influencing tax evasion.

The model as shown in the figure 1 below suggests that multiplicity of tax; high tax rate; the manner in which tax revenue is spent and level of education/awareness of tax are independent variables whereby Tax evasion is a dependent variable.

![Conceptual Framework](source: (Developed from literature review))

**INDEPENDENT VARIABLES**

- Multiplicity of Tax
- High Tax Rate
- The Manner in which Tax Revenue is spent
- Level of Education/awareness of tax

**DEPENDENT VARIABLE**

Tax Evasion
3.0 Research Methods
The study employed quantitative method. The study used descriptive research design while simple random and purposive sampling design were used in collecting data to a total of 100 respondents derived from total population of 49,253 tax payers. Questionnaires were used to obtain primary data while books, journals, dissertations and internet were used to obtain secondary data. Data was analyzed by using Statistical Package for Social Sciences (SPSS) software version 20 and Microsoft excel; the results were summarized in tables of frequencies percentages and charts. Furthermore, the reliability of the data was measured by using the Cronbach’s Alpha and the validity of the study was measured using the Kaiser-Meyer-Olkin (KMO) and Bartlett’s Test of sphericity. Lastly, the researcher used correlation analyses to test the relationship exist between variables.

4.0 Results
4.1 Demographic characteristics
In this study, in order to have a better understanding on the demographic characteristics and specifications of the respondents, frequency analysis has been used. Findings as indicated in Table 1.

<table>
<thead>
<tr>
<th>Table 1: Sample characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>Sex</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Education Level</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Source: field data (2018)

The respondents were male 66 percent and female 34 percent. Most respondents were in the age group of 25-34 years (43 %). Also majority (39%) of the respondents were degree holders.

4.2 Validity and Reliability
4.2.1 Reliability
Table 2 shows the value of the coefficient alpha or Cronbach’s alpha. The alpha coefficient for thirty five items is 0.924, suggesting that the items have relatively high internal consistency. (Note that a reliability coefficient of 0.70 or higher is considered acceptable).

<table>
<thead>
<tr>
<th>Table 2 Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cronbach’s Alpha</strong></td>
</tr>
<tr>
<td>.924</td>
</tr>
</tbody>
</table>

Source: Field Data 2018
4.2.2 Validity
Kaiser (1974) recommends KMO statistic a bare minimum of 0.5 and that values between 0.5 and 0.7 are mediocre, value between 0.7 and 0.8 are good, value between 0.8 and 0.9 are great and value above 0.9 are superb (Hutcheson & Sofroniou, 1999). Therefore, KMO of 0.671 is acceptable while, Bartlet’s test is significant at 0.05.

<table>
<thead>
<tr>
<th>Table 3</th>
<th>KMO and Bartlett’s Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
<td>.671</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td></td>
<td>Df</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
</tr>
</tbody>
</table>

Source: Field Data 2018

4.3 Multiplicity of tax and tax evasion

Data in table 4 suggests that 77% of the respondents declared that there are many taxes in Iringa Municipal and thus influences tax evasion, while 81% of the respondents agreed that many taxes erode savings or capacity to save and thus they decide to evade tax, 68% of the respondents consider multiple taxes as unfair therefore, they evade tax. 83% of the respondents agreed that multiple taxes are difficult to comply with that’s why they are influenced to evade payments, 86% of the respondents agreed that when there are many taxes the decisions and confidence to invest are destroyed hence they evade tax payments, 76% of the respondents claimed that many taxes raises cost of doing business and 72% of the respondents claimed that paying many taxes leads to bankruptcy or shut down of production.

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Multiplicity of Tax and Tax Evasion (n=100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statement</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td></td>
<td>F (%)</td>
</tr>
<tr>
<td>There are many taxes</td>
<td>2 (2.0)</td>
</tr>
<tr>
<td>Erode savings or capacity to save</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Multiple tax are unfair</td>
<td>3(3.0)</td>
</tr>
<tr>
<td>Multiple taxes are difficult to comply with</td>
<td>2 (2.0)</td>
</tr>
<tr>
<td>Destroys investors’ confidence</td>
<td>1 (1.0)</td>
</tr>
<tr>
<td>Raises cost of doing business</td>
<td>1 (1.0)</td>
</tr>
<tr>
<td>Leads to bankruptcy or shut down of production</td>
<td>4 (4.0)</td>
</tr>
</tbody>
</table>

F= Frequency, n= Sample Size
Source: Field Data 2018
4.4 Tax rates and its influence on tax evasion

Results in table 5 indicates that, 80% of the respondents claimed that when the rate of tax is high, it erodes their profits thus reduces capacity to save and increase their capital then they evade to pay tax liability. 91% of the respondents claimed that high tax rates increase burden then they evade tax payments, 88% of the respondents disclosed that high rate imposed on tax leads to bankruptcy, also the table shows that 83% of the respondents declared that high tax rates discouraged their working morale, furthermore, 86% of the respondents claimed that high tax rate leads to lose of jobs. 85% of the respondents uncovered that high tax rate it is difficult to them to comply with and 80% of the respondents declared that high tax rate destroys decisions by multinational companies to invest in Tanzania. From the findings it is clear that there is a close relationship between high tax rate and tax evasion in Iringa Municipal.

Table 5 How High Tax Rate Leads to Tax Evasion (n=100)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affects savings or capacity to save</td>
<td>F (%)</td>
<td>F (%)</td>
<td>F (%)</td>
<td>F (%)</td>
<td>F (%)</td>
</tr>
<tr>
<td>Increase burden</td>
<td>1 (1.0)</td>
<td>3 (3.0)</td>
<td>3 (3.0)</td>
<td>38 (38.0)</td>
<td>55 (55.0)</td>
</tr>
<tr>
<td>Leads to bankruptcy or shut down of production</td>
<td>1 (1.0)</td>
<td>1 (1.0)</td>
<td>10 (10.0)</td>
<td>27 (27.0)</td>
<td>61 (61.0)</td>
</tr>
<tr>
<td>Discourage work or will to work</td>
<td>0 (0.0)</td>
<td>6 (6.0)</td>
<td>11 (11.0)</td>
<td>34 (34.0)</td>
<td>49 (49.0)</td>
</tr>
<tr>
<td>Loss of jobs</td>
<td>1 (1.0)</td>
<td>6 (6.0)</td>
<td>7 (7.0)</td>
<td>55 (55.0)</td>
<td>31 (31.0)</td>
</tr>
<tr>
<td>High tax rates are difficult to comply with</td>
<td>1 (1.0)</td>
<td>3 (3.0)</td>
<td>11 (11.0)</td>
<td>37 (37.0)</td>
<td>48 (48.0)</td>
</tr>
<tr>
<td>Jeopardize foreign direct investment</td>
<td>3 (3.0)</td>
<td>0 (0.0)</td>
<td>17 (17.0)</td>
<td>49 (49.0)</td>
<td>31 (31.0)</td>
</tr>
</tbody>
</table>

F= Frequency, n= Sample Size
Source: Field Data 2018

4.5 The Manner in Which Tax Revenue is Spent and Tax Evasion

The majority of respondents agreed that tax evasion occurs when most of the money collected is spent unwisely, also if the money collected is spent on projects that they do not benefit from and the way decisions on allocating the collected revenue is made. However, the findings are summarized and presented in the table 6 below. 86% of the respondents agreed with the statement that lack of transparency on tax revenue utilization contributes to the tax evasion, 76% of the respondents claimed that lack of accountability of the government leads to tax evasion, also 77% of the respondents agreed that absence of direct equivalent benefit from what has been taxed or collected make them to decide not to pay tax. 89% of the respondents claimed that lack of quality goods and services in return for the tax revenue collected leads to tax evasion, 79% of the respondents indicated that wastage of public funds or abuse of public revenue discourage tax payers to voluntarily paying tax liability, while 77% of the respondents claimed that the way decisions on tax revenue allocation are made discourages them on paying tax thus evading tax. Finally, 77% of the respondents claimed that the manner tax revenue is utilized makes them evade tax.
Table 6 The Manner in Which Tax Revenue is Spent and Tax Evasion (n=100)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of transparency on tax revenue utilization</td>
<td>4 (4.0)</td>
<td>1 (1.0)</td>
<td>9 (9.0)</td>
<td>48 (48.0)</td>
<td>38 (38.0)</td>
</tr>
<tr>
<td>Lack of accountability of the government</td>
<td>0 (0.0)</td>
<td>6 (6.0)</td>
<td>19 (19.0)</td>
<td>51 (51.0)</td>
<td>24 (24.0)</td>
</tr>
<tr>
<td>No direct equivalent benefit or absence of Quid Pro Quo relationship</td>
<td>2 (2.0)</td>
<td>3 (3.0)</td>
<td>18 (18.0)</td>
<td>50 (50.0)</td>
<td>27 (27.0)</td>
</tr>
<tr>
<td>Lack of quality goods and services in return</td>
<td>2 (2.0)</td>
<td>1 (1.0)</td>
<td>8 (8.0)</td>
<td>59 (59.0)</td>
<td>30 (30.0)</td>
</tr>
<tr>
<td>Wastage of public funds/abuse of tax revenue</td>
<td>1 (1.0)</td>
<td>1 (1.0)</td>
<td>19 (19.0)</td>
<td>50 (50.0)</td>
<td>29 (29.0)</td>
</tr>
<tr>
<td>Poor decisions on tax revenue allocation</td>
<td>3 (3.0)</td>
<td>2 (2.0)</td>
<td>18 (18.0)</td>
<td>45 (45.0)</td>
<td>32 (32.0)</td>
</tr>
<tr>
<td>Leads to tax evasion</td>
<td>0 (0.0)</td>
<td>2 (2.0)</td>
<td>11 (11.0)</td>
<td>32 (32.0)</td>
<td>55 (55.0)</td>
</tr>
</tbody>
</table>

*F* = Frequency, *n* = Sample Size

Source: Field Data 2018

4.6 The Level of Education/Awareness of Tax Payers and Tax Evasion

The majority of the respondents revealed that the level of education or awareness or knowledge about tax change the attitudes of tax payers towards tax evasion, thus, inadequate knowledge or lack of knowledge about tax will increase the possibility of evading tax payments. Findings from table 7 depicts that 75% of the respondents claimed that inadequate knowledge about the reasons of paying tax makes the tax payers evade tax payments, 83% of the respondents declared that tax knowledge is the influential factor towards tax payments, while 69% of the respondents declared that when tax payers provided less training or seminar about taxes by tax administrator will increase the possibility of tax payers to evade tax. 81% of the respondents agreed that inadequate knowledge about tax laws contributes to tax evasion practices, furthermore, 87% of the tax payers claimed that lack of technical knowledge in determining tax liability influences tax evasion, 80% of the respondents showed that inadequate access of information about tax leads to tax evasion and 82% of the respondents claimed that tax education or knowledge enables tax payers to obey tax laws and prompt paying tax liability.

Table 7 How Level of Education/Awareness about Tax Influences Tax Evasion (n=100)

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate knowledge of reasons for paying tax</td>
<td>2 (2.0)</td>
<td>12 (12.0)</td>
<td>11 (11.0)</td>
<td>43 (43.0)</td>
<td>32 (32.0)</td>
</tr>
<tr>
<td>Tax knowledge is the influential factor for tax payment</td>
<td>2 (2.0)</td>
<td>2 (2.0)</td>
<td>13 (13.0)</td>
<td>33 (33.0)</td>
<td>50 (50.0)</td>
</tr>
</tbody>
</table>
### 5.0 Conclusion and Recommendation

#### 5.1 Conclusion

The study concludes that multiplicity of tax positively and significantly influence tax evasion in Iringa, this implies that, the lower the tax the higher the likelihood of reducing tax evasion. High tax rate positively and significantly influence tax evasion in Iringa. This indicates that the higher the tax rate the higher the likelihood of tax evasion occurrence. Moreover, it was concluded that the manner in which tax revenue is spent found to be positively and significantly influence tax evasion, this implies that, the more responsible the government is in terms of provision of quality services, transparency and better allocation of revenue collected the more the likelihood of reducing tax evasion; and lastly, education level positively and significantly influence tax evasion in Iringa, this means that, the higher the education on the part of the tax payers the higher the chances of reducing the likelihood of tax evasion.

#### 5.2 Recommendation

Based on the study findings, it was observed that in order to increase voluntary tax compliance and overcome problem of tax evasion the following steps should be taken into consideration.

i. Provision of education and tax counseling to tax payers on the significance of paying tax to the Government because education provided is not enough thus many individuals perceived that taxation is the difficult subject.

ii. Keeping marginal rates of tax low so as encourage tax payers not to evade and avoid tax.

iii. It is said that taxpayers tend to comply with tax rules if it is easier and cheaper for them to pay taxes. Reducing the complex procedure for tax payment and provision of guidance on how to improve bookkeeping and tax returns perhaps can increase tax payment prompt.

iv. Government should provide proper social services to the taxpayers, transparent in its dealings and proper allocation of revenue collected.
v. Multiple taxation is harmful to businesses as they promote uncertainty and unlock the channel for revenue leakages. The government should review its tax system in order to make as fewer as possible number of taxes to increase tax payment morale.

vi. Penalty provisions. The penalty for fraud, default, etc. must be imposed consistently. The tax authorities should undertake criminal prosecution in respect of cases involving fraud or evasion, and where appropriate publish the names of tax evaders which will act as a deterrent.

6.0 References


