6. CHAPTER SIX

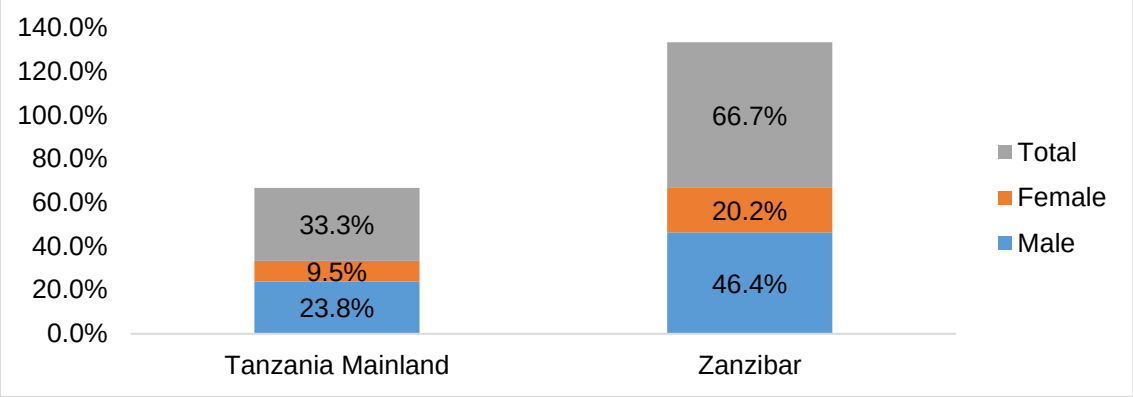
6.0 EMPIRICAL STUDIES, ANALYSIS AND DISCUSSIONS OF THE RESEARCH RESULTS AND FINDINGS

6.1 SOCIO-DEMOGRAPHIC VARIABLES (PERSONAL INFORMATION OF THE RESPONDENTS)

6.1.0 GENDER OF THE INDIVIDUAL RESPONDENTS

Based from the questionnaires collected from the tax stakeholders, the respondents were asked about their gender, Figure 8.0 show their responses.

Figure 8.0: Genders of the Respondents



Source: SPSS Research Findings, 2018.

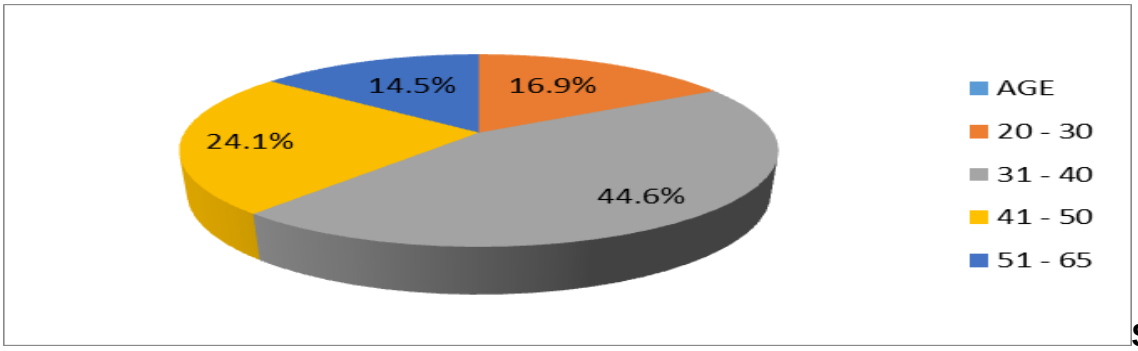
Figure 8.0 illustrate that, out of the 100 percent tax stakeholders[1], respondents' 70.2 percent (46.4% plus 23.8%) were male and 29.7 percent (20.2% plus 9.5%) were female showing that, the research was gender sensitive and inclusive, throughout the institutions. Therefore, the findings imply that, the above targeted institutions were dominated by men not women. Refer question No. 1, Annexure II and III, (pg. 2) section A, respectively, and Annexure IV, SA_1 for the results.

[1] It implies the sample size of this study that consisting of the two tax administrators in Tanzania TRA and ZRB, private sectors (G.C.F Tanzania, T.L.C.L, Z.F.B, Z.P.L, I.F.E.A.L, U.P.L, T.C.C.I.A, Z.N.C.C.I.A, K.C.F.C.L and Z.A.T.I, private businesses, private individuals and others government institutions B.o.T, M.O.F.P Zanzibar, Z.I.P.A and Z.T.C). All of them constitute the entire population area of this study, since they are the taxpayers of both direct and indirect taxes in Tanzania.

6.1.1 AGE OF THE RESPONDENTS

The respondents were asked about their age, Chart 5.0 show their responses.

Chart 5.0: Ages of the Respondents



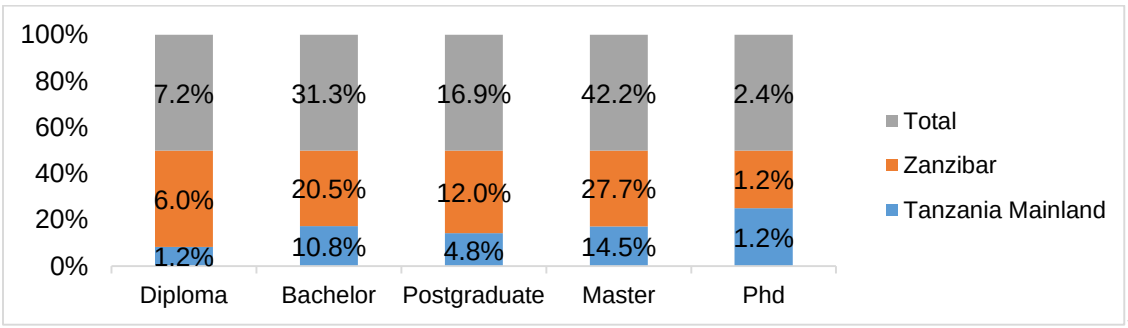
Source: SPSS Research Findings, 2018.

Chart 5.0 depicts that, out of the 100 percent tax stakeholders, respondent's 16.9 percent were between 20-30 years; 44.6 percent were between 31-40 years; 24.1 percent were between 41-50 years; and 14.5 percent were about 51-65 and above years. Therefore, it implies that, 85.6 percent (44.6%, 24.1% plus 16.9%) of the field's stakeholders was dominated by people aging between 20 to 50 years, the most productive and active age of the population. Refer question No. 2 Annexure II and III, (pg. 2) section A, respectively, and Annexure IV, SA_2 for the results.

6.1.2 RESPONDENT'S LEVEL OF EDUCATION AND AREAS OF SPECIALISATIONS

Respondents were asked about their highest level of formal education status and major field of study, Figure 9.0 and Figure 10.0 shows their responses.

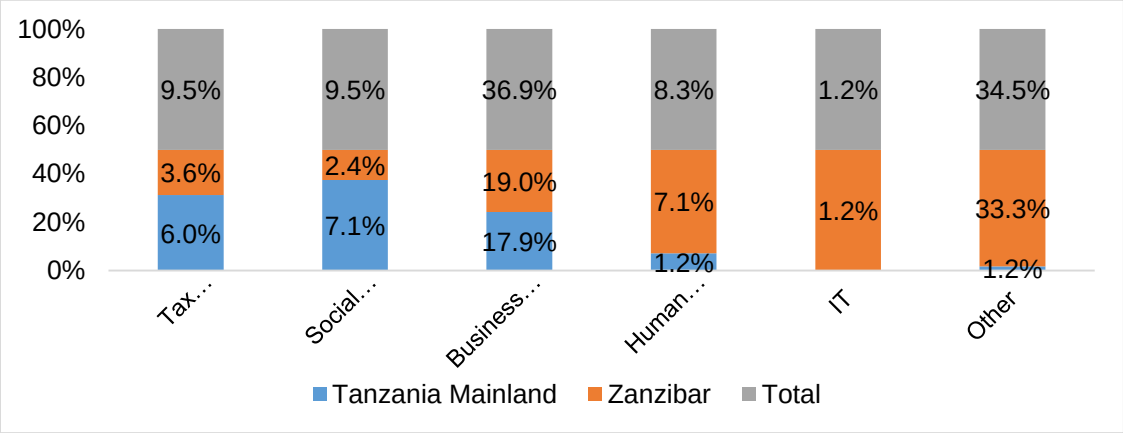
Figure 9.0: Respondent's Level of Education



Source: SPSS Research Findings, 2018.

Figure 9.0 illustrate that, out of the 100 percent tax stakeholders, stakeholder's 7.2 percent had diploma degree level; 31.3 percent had bachelors' degree level; 16.9 percent had postgraduate; 42.2 percent had masters; 2.4 percent had Ph.D. (Figure 9.0). Therefore, it implies that, 90.4 percent (31.3%, 16.9% plus 42.2%) of the stakeholders in tax field had attained bachelors, postgraduates and masters; others had diplomas and Ph.D. levels. Hence, 90.4 percent of the stakeholders in the field were dominated by tax staffs that had attained bachelors, postgraduate and master's level of education (Figure 9.0). Therefore, 90.4 percent of stakeholders and staffs were really tax professional.

Figure 10.0: Respondent's Major Field of the Study



Source: SPSS Research Findings, 2018.

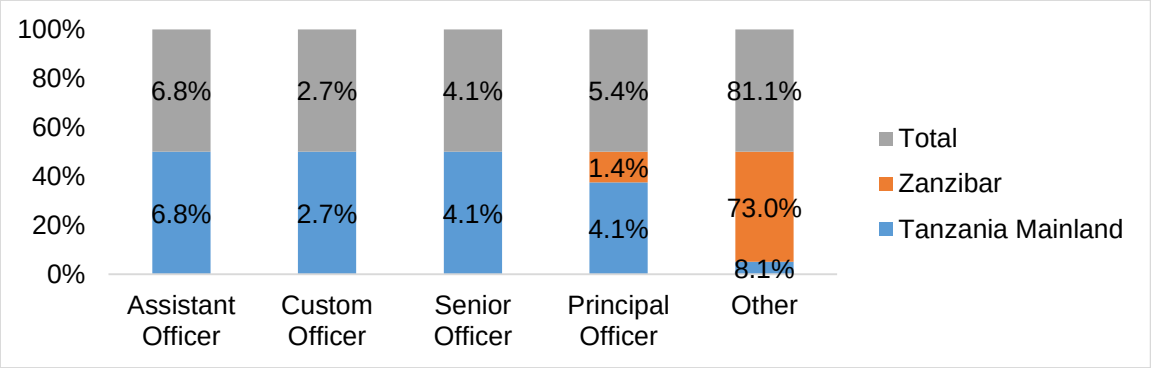
Meanwhile, out of the 100 percent tax stakeholders, stakeholders 9.5 percent specialized in tax management, 9.5 percent specialized in social sciences (economics, engineering, law, etc.), 36.9 percent specialized in business management studies (accounting, finance, commerce, marketing, etc.), 8.3 percent human resource management, 1.2 percent IT and 34.5 percent took others specialisations (Figure 10.0).

The findings also imply that, 55.9 percent (9.5%, 9.5% plus 36.9%) of the staffs in tax field had taken tax related disciplines and 34.5 percent specialized in others studies (Figure 10.0). For the results refer question No. 3 & 5 Annexure II and III (pg. 2) section A, respectively, and Annexure IV, SA_3 and SA_5, SA_5_i, respectively.

6.1.3 RESPONDENT'S POSITIONS AND WORKING EXPERIENCE

Respondents were asked about their positions within their institutions and their working experience, Figure 11.0 and Figure 12.0 shows their responses.

Figure 11.0: Respondent's Position Within Tax Institutions

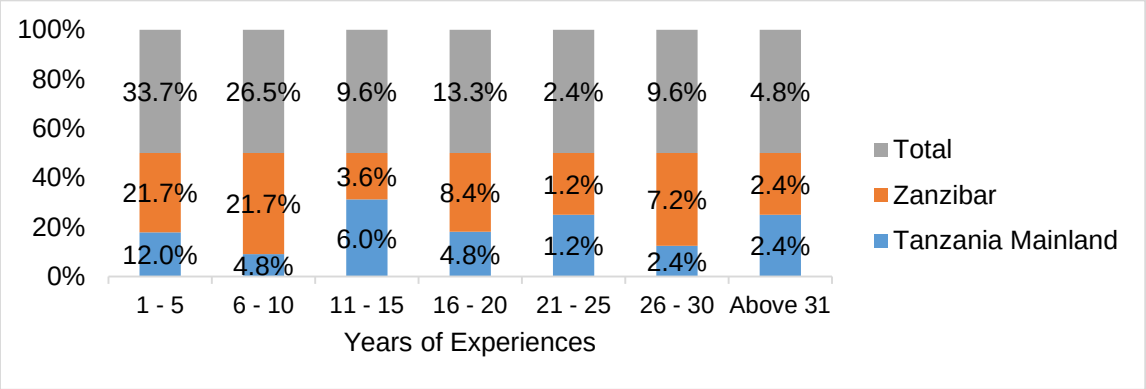


Source: SPSS Research Findings, 2018.

Figure 11.0 illustrate that, out of the 100 percent tax stakeholders, stakeholder's 6.8 percent performing assistant officer, 2.7 percent custom officer, 4.1 percent senior officer, 5.5 percent (4.1% plus 1.4%) principal officer and 81.1 percent (8.1% plus 73.0%) performing others positions within tax institutions in Tanzania.

Example of others positions are accountants and statistician's 8.3 percent, tax officers or inspector's 14.3 percent, economists, planners and researcher's 13.1 percent, lawyer's 3.6 percent, administrators, branch director's economist, director administrations and accounting, manager economics and statistics, and senior principal accountant and statistician 17.9 percent (Figure 11.0). In this regard, Figure 11.0 depicts that, the stakeholders of tax field had performed the all tax levels of management within tax institutions in Tanzania. Hence, their findings are relevant in attaining the specific objectives of this research.

Figure 12.0: Respondent's Working Experiences



Source: SPSS Research Findings, 2018.

In the meantime, out of the 100 percent tax stakeholder's working experiences, stakeholders 33.7 percent ranging from 1-5 years, 26.5 percent ranging from 6-10 years, 9.6 percent ranging from 11-15 years, 13.3 percent ranging from 16-20 years, 2.4 percent ranging from 21-25 years, 9.6 percent ranging from 26-30 years and finally 4.8 percent had experience of above 31 years (Figure 12.0).

Therefore, the findings of Figure 12.0 imply that, 39.7 percent (9.6%, 13.3%, 2.4%, 9.6%, plus 4.8%) of the staffs in the field had been working for 11 years and above; and 60.2 percent (33.3% plus 26.5%) had been working for less than 10 years. Hence, the stakeholders from tax field had had high working experiences; however, more than 50 percent of them had been working for less than 10 years. For the results refer questions No. 4 & 6 Annexure II and III (pg. 2) section A, respectively, and Annexure IV, SA_4_i, ii and iii and SA_6, respectively.

6.2 UNIT ROOT TEST

This test has tested the null hypothesis number one ***Ho 1***) stating that, the series is non-stationary (have a unit root),[2] using both Augmented Dickey-Fuller and Phillips-Perron tests.[3] The decision criteria based on the two tests is to reject the null hypothesis of unit root, *p-values* must be less than 1 percent, 5 percent or 10 percent significance levels for

[2] *Supra* note 88.
[3] *Supra* note 102.

both Augmented Dickey-Fuller test and Phillips-Perron Test respectively, refer to Table 8.0 B.

Also, the test statistics or *t-tests* must be greater than the critical value 1.96 at the 1 percent, 5 percent or 10 percent significance levels, respectively. Therefore, the series will be stationary (does not have a unit root), and accepting the alternative hypothesis of stationary.

6.2.0 AUGMENTED DICKEY-FULLER AND PHILLIPS-PERRON TESTS STATISTICS

(Table 8.0 A & B): Unit Root Results A.D.F and P.P.T Test Statistics (Levels and First Differences).

A.D.F and P.P.T Levels:

Constant Level, and Intercept and Trend Level

Table 8.0 A[4] **A.D.F** **P.P.T**

Variables:	Constant Level	Intercept and Trend Level	Constant Level	Intercept and Trend Level
TRGDP: Ratio of total tax revenue over (G.D.P).	-1.624062 0.4548	-2.030103 0.5551	-1.624062 0.4548	-2.010726 0.5651
TAXRA: Tax Rate.	-0.678233 0.8347	-2.023771 0.5607	-0.678233 0.8347	-2.023771 0.5607
TRA: Total export-import ratio of trade to GDP.	-2.007944 0.2816	-2.103400 0.5181	-2.105806 0.2442	-2.118080 0.5105
POP: Total Population.	0.958951 0.9946	-2.107196 0.5162	1.445440 0.9985	-2.111991 0.5137
TAXBA: Tax Base.	-1.871614 0.3388	-2.655794 0.2613	-0.770559 0.8101	-2.632351 0.2703

[4] The numerator's numbers are the *test statistics (t-tests)* examples -1.624062, -2.030103, -2.010726, etc., while *p-values* are those denominator's numbers examples 0.4548, 0.5551, 0.4548, 0.5651 etc. where all *p-values* are greater than 0.05 for ADF and PPT, respectively.

Constant at First Difference, and Intercept and Trend of First Difference

Table 8.0 B[5] **A.D.F** **P.P.T**

Variables:	Constant at First Difference	Intercept and Trend of First Difference	Constant at First Difference	Intercept and Trend of First Difference
TRGDP: Ratio of total tax revenue over (G.D.P).	-4.584010 0.0016	-4.667623 0.0063	-4.633633 0.0015	-5.619752 0.0008
TAXRA: Tax Rate.	-4.898979 0.0007	-4.842753 0.0038	-4.898998 0.0007	-4.842634 0.0038
TRA: Total export-import ratio of trade to GDP.	-4.088322 0.0047	-4.181348 0.0163	-4.129044 0.0043	-4.217280 0.0152
POP: Total Population.	-3.608794 0.0138	-3.823389 0.0337	-3.476492 0.0184	-3.696717 0.0433
TAXBA: Tax Base.	-8.631980 0.0000	-10.00073 0.0000	-7.639724 0.0000	-9.193196 0.0000

Source: *E-View* Research Findings, 2018.

The footstep of this analysis is to determine whether the series are stationary or not. This analysis is very important, since failure to correct the unit root problem (if any) may results into spurious regression results by which unrelated variables may be reported as significantly related.[6] Thus, the Augmented Dickey-Fuller test has used to test for stationarity of these series as it provides a superior test to Dickey-Fuller, and the Phillips-Perron test has used especially in case the residuals of the regression could be serially correlated.[7]

The lag length has been automatically selected by Akaike Info Criteria[8] from nine proposed lags and all three possibilities have been tested: neither intercept nor trend intercept, but no trend and both intercept and trend. In all cases, the results show that,

[5] The numerator's numbers are the *test statistics (t-tests)* examples -4.584010, -4.667623, -4.633633, etc., while *p-values* are those denominator's numbers examples 0.0016, 0.0015, 0.0063, 0.0008 etc. where all *p-values* are less than 0.05 for ADF and PPT, respectively.

[6] *Supra* note 88.

[7] *Supra* note 103.

[8] AIC is a single number score that commonly utilized to determine which one among the multiple models is the first, foremost and best model for a given dataset. It's particularly valuable for time series, due to the reason that, in time series analysis', their most valuable data are often the most recent one, which normally can be fixed in the validation and test sets: *available at* https://towardsdatascience.com/introduction-to-aic-akaike-information-criterion-9c9ba1c96ced (Last visited on March 07, 2020).

the null hypothesis of unit root could not be rejected at level, refer Table 8.0 A. However, after taking the first differences (Table 8.0 B), I (1) the results are consistent with almost all studies reported in the literatures, e.g. M. Aamir *et al* (2011), E.K. Browning (March, 1989), Sangkyun Park (March, 1997), W.F. Stine (July, 1988), UK Essays (2013), Abhijit Sen Gupta (2007), Dhaneshwar Ghura (1998), and others twenty literature described in this study.

In summary, all the variables included in estimation are integrated in order one. That is, the variables are not stationary at their levels **(*Ho 1*)** because *p-values* are greater than 0.05 (Table 8.0 A), but they become stationary after taking their first difference **(H_1),** because *p-values* are less than 0.05 and *t-statistics* are greater than critical value 1.96 at 1 percent, 5 percent or 10 percent significance levels for both Augmented Dickey-Fuller and Phillips-Perron Test,[9] respectively, please refer Table 8.0 B.

Therefore, the research has rejected the null hypothesis of unit root and accept the alternative hypothesis at 5 percent significance level, respectively (Table 8.0 B). These results provide the indication of the existence of possible long-run relationship in the model. In this regard, they justify the test of co-integration to check whether the model has long-run relationship (Annexure XXVII).

6.3 CO-INTEGRATION TEST

This test has used to answer the null hypothesis number two ***Ho 2)*** stating that, there are no co-integrating relationships or no long-run relationship between level series for the variables, for testing long-run relationship between the variables, so as to avoid spurious regression results.[10]

[9] *Supra* note 102.
[10] *Id.*

Table 9.0: Unrestricted Co-integration Rank Test (Trace) and Unrestricted Co-integration Rank Test (Maximum Eigen Value)-Max-Eigen Statistics.

Null	Test Statistics (5%)		Critical Values (5%)	
Hypothesis	**Trace**	**Max Eigen**	**Trace**	**Max Eigen**
None*	107.3721	48.26374	69.81889	33.87687
At most 1*	59.10832	24.51453	47.85613	27.58434
At most 2*	34.59378	20.99169	29.79707	21.13162
At most 3*	13.60210	11.20928	15.49471	14.26460
At most 4	2.392818	2.392818	3.841466	3.841466

Source: *E-View* Research Findings, 2018.

The Johansen trace test using Multivariate Johansen and Maximum Eigen using Juselius Cointegration test (S. Johansen, and K. Juselius, 1990) had used on the number of cointegrating relations with null hypothesis of no cointegration between the series against the alternative hypothesis of existence of cointegration between the series.[11] All variables enter the cointegration analysis after integrated at I (1) i.e. after taking the first difference.[12]

The results under Table 9.0 suggest that, there is long-run cointegration among the tax rate, ratio of trade to G.D.P, population, tax base and the ratio of total tax revenue over G.D.P at 5 percent significance level. Both Max Eigen and Trace test value indicate the presence of long-run relationship among these variables. These are justified by the trace statistics 107.3721, 59.10832 and 34.59378 which are greater than the critical values 69.81889, 47.85613 and 29.79707, respectively, at the 5 percent significance level. In the meantime, it's justified by the Max-Eigen statistic 48.26374 which is greater than the critical value 33.87687 at the 5 percent significance level (Table 9.0).

Also, these are justified by the *p-values* 0.0000, 0.0031, and 0.0130 (Johansen Trace test) and *p-value* 0.0005 (Max Eigen value) respectively, which are less than 0.05 significance level (Appendix XXVI). Hence, the null hypothesis has rejected and the

[11] *Supra* note 106.
[12] *Id.*

alternative hypothesis has accepted (Table 9.0). Therefore, these indicate that, the research should continue to estimate the long-run impact of tax rate, ratio of trade to G.D.P, population and tax base to the tax revenue performance in Tanzania using Vector Error Correction Model.

6.4 VECM ESTIMATES OF THE LONG-RUN IMPACT OF DETERMINANTS OF TAX REVENUE ON TANZANIAN TAX REVENUE PERFORMANCE.

Since all variables have illustrated co-integration or long-run relationship, the Vector Error Correction Model has tested to find long-run causality among variables in the research.[13] The *t-statistics* and coefficients are the decision criteria of these hypotheses.[14]

That is, for an independent variable to have positive or negative significant influence or relationship on the dependent variable, *t-statistics* must be greater than alpha significance level at 1 percent, 5 percent or 10 percent.[15] In this regard, the coefficients would depict whether a variable have a positive or negative influence or relationship with tax revenue collections or performance in Tanzania, taking consideration a change or vice versa of the coefficient's signs during interpretation.[16]

6.4.0 VECM EMPIRICAL RESULTS

Based on the co-integration results, the model No. 1 shows the existence of a long-run relationship between a dependent variable: total tax revenue over G.D.P and independent variables: tax rate, total export-import ratio of trade to G.D.P, population and tax base. Consider Table 10.0 representing the long-run Vector Error Correction Model estimated regression model and estimates, model No. 1.

[13] *Supra* note 88.
[14] *Id.*
[15] *Id.*
[16] *Id.*

Table 10.0: Vector Error Correction Estimates VECM.

Dependent Variable: Total Tax Revenue Over GDP TRGDP.

Standard errors in ( ) & t-statistics in [ ].

Variables	Coefficients	Std. Errors	T-Statistics	Error Correction Term
Constant	15.58032			
LTAXRA: Tax Rate.	-4.617359	(0.67092)	[-6.88214]	0.080425
LTRA: Ratio of trade to GDP.	-0.470359	(0.10034)	[-4.68778]	-0.309121
LPOP: Total Population.	-1.564289	(0.32161)	[-4.86393]	0.052191
LTAXBA: Tax Base.	0.248367	(0.06338)	[3.91896]	-0.158518

Source: *E-View* Research Findings, 2018.

6.4.1 THE IMPACT OF TAX RATE ON TANZANIAN'S TAX REVENUE PERFORMANCE.

This section has substantiated the specific objective number one that investigates whether tax rate is the potential determinant of tax revenue in Tanzania. It investigates the influence or relationship of tax rate towards the tax revenue performance in Tanzania.

HYPOTHESIS NO. 3:

H_0: There is no influence between the tax rate and the tax revenue in Tanzania.
H_1: There is influence between the tax rate and the tax revenue in Tanzania.

As can be seen in the Table 10.0, a first observation is that, tax rate appears to have a strong long-run positive influence or relationship with tax revenue performance in Tanzanian economy. Since *t-statistic* is greater than alpha significance level at 5 percent. Also, the coefficient of tax rate suggests that, as tax rate increase by 1 percent, the tax revenue in Tanzania increases by 4.62 percent. Hence, the null hypothesis has rejected and the alternative hypothesis has accepted. Thus, there is influence between the tax rate and the tax revenue in Tanzania. Therefore, the tax rate is the potential determinant of the tax revenue in Tanzania.

These results are in agreement with past empirical studies obtained by M. Aamir *et al* (2011), E.K. Browning (March, 1989), Sangkyun Park (March, 1997), and W.F. Stine

(July, 1988). Such that there are statistically significant results indicating that, an increase in tax rate would increase in the ratio of total tax revenue over G.D.P.

The results are consistency with general theory of Jules Dupuit in 1844 in respect to internal taxes stated that "*By thus gradually increasing the tax it will reach a level at which the yield is at a maximum . . . Beyond, the yield of tax diminishes. . . . Lastly a tax [which is prohibitive] will yield nothing.*" (emphasis supplied) (1969, pp. 281-82).[17] Also consider the Laffer curve that portray total revenue vis-a-vis tax rate which argue that, the two tax rates do exist at a time where government given revenue can be collected.[18] In this curve, the tax rate generally denotes to any particular type of tax tool, example payroll tax rate, while revenues commonly refer to total tax earnings.[19]

6.4.1.0 Findings of Stakeholders on the Impact/Influence Between Tax Rate and the Tax Revenue in Tanzania.

Based from the questionnaires collected from the tax stakeholders, the research has analysed the respondent's findings on the influence between tax rate and tax revenue in Tanzania (Table 11.0, Annexure VB).

Table 11.0 Appendix VB, illustrates the stakeholder's findings on the impact between tax rate and tax revenue in Tanzania. As can be seen in question number 3 Figures 13.0 (A & B), 4 Figures 14.0 (A & B) and 5 Figure 14.0.0, out of the 100 percent tax stakeholders, respondents 85 percent (33.3% strongly agreed plus 51.9% agreed), 85.2 percent (14.8% strongly agreed plus 70.4% agreed), and 53.8 percent (15.0% strongly agreed plus 38.8% agreed) respectively, had agreed the stated questions while others had disagreed the same questions. On the other hand, stakeholders 14.8%, 7.4% and 17.5%, respectively, they said don't know for the questions (Table 11.0, Annexure VB).

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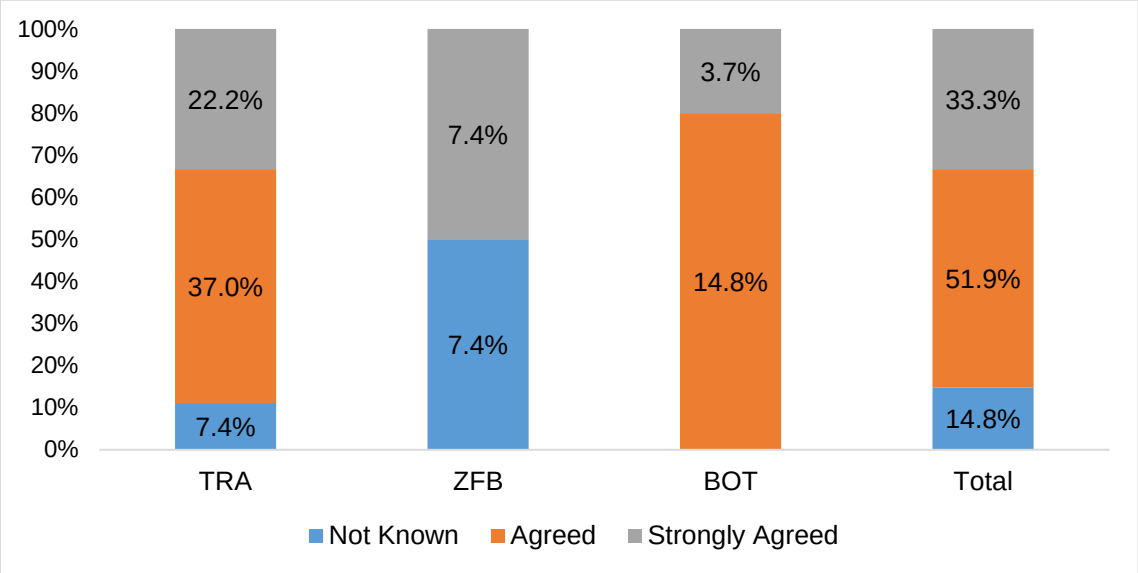
[17] C.L. Ballard *et al, The Relationship between Tax Rates and Government Revenue, ISBN*: 0-226-03632-4(10) A GENERAL EQUILIBRIUM MODEL FOR TAX POLICY EVALUATION (p. 188 - 202), 190 (1985) *available at* file:///C:/Users/HP/Desktop/TAX%20RATE%20JOURNAL.pdf, http://www.nber.org/books/ball85-1, http://www.nber.org/chapters/c11222 (Last visited on February 17, 2017).

[18] *Id,* at 188-189.

[19] *Id.*

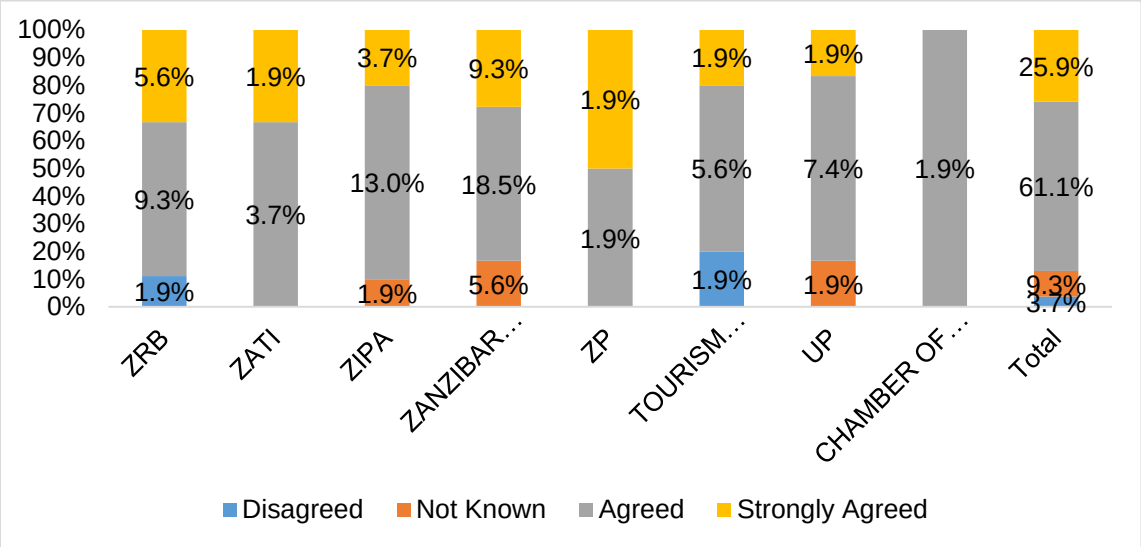
Figures 13.0 (A & B): The Stakeholder's Findings on the Influence/Relationship Between the Tax Rate and the Tax Revenue in Tanzania.

Tanzania Mainland 13.0 (A):



Source: SPSS Research Findings, 2018.

Zanzibar 13.0 (B):

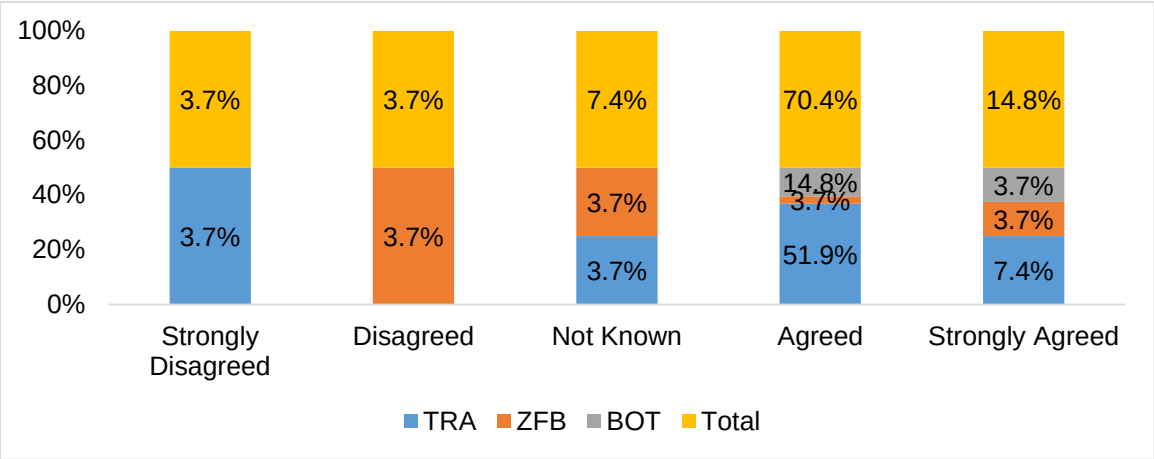


Source: SPSS Research Findings, 2018.

Specifically, the findings of question number 3 Figures 13.0 (A & B) agreed with the research null hypothesis H1 stating that, there is influence between the tax rate and the tax revenue in Tanzania.

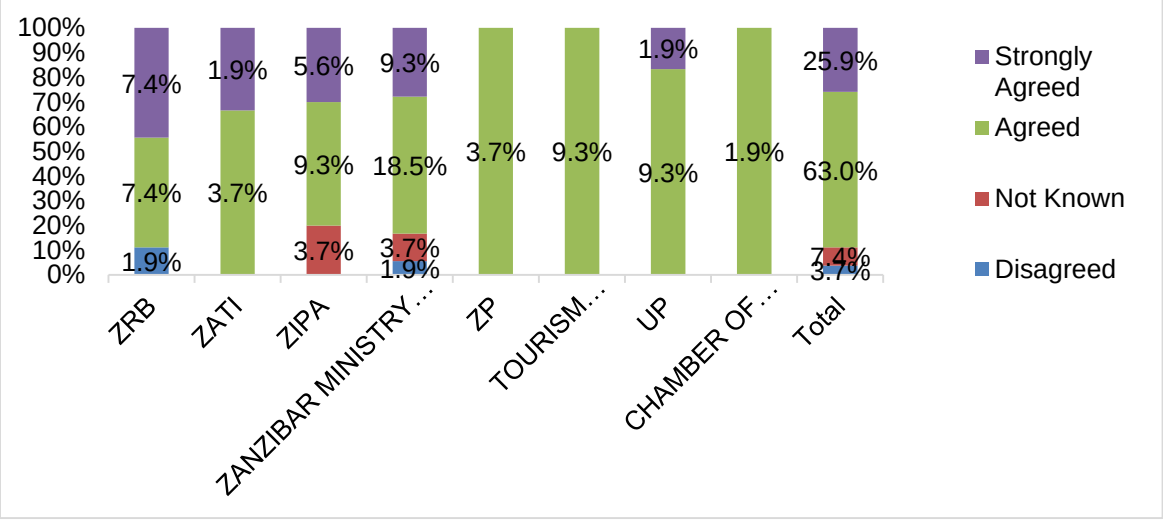
Figures 14.0 (A & B): The Stakeholder's Findings on the Potentiality of the Tax Rate as the Determinant of the Tax Revenue in Tanzania.

Tanzania Mainland 14.0 (A):



Source: SPSS Research Findings, 2018.

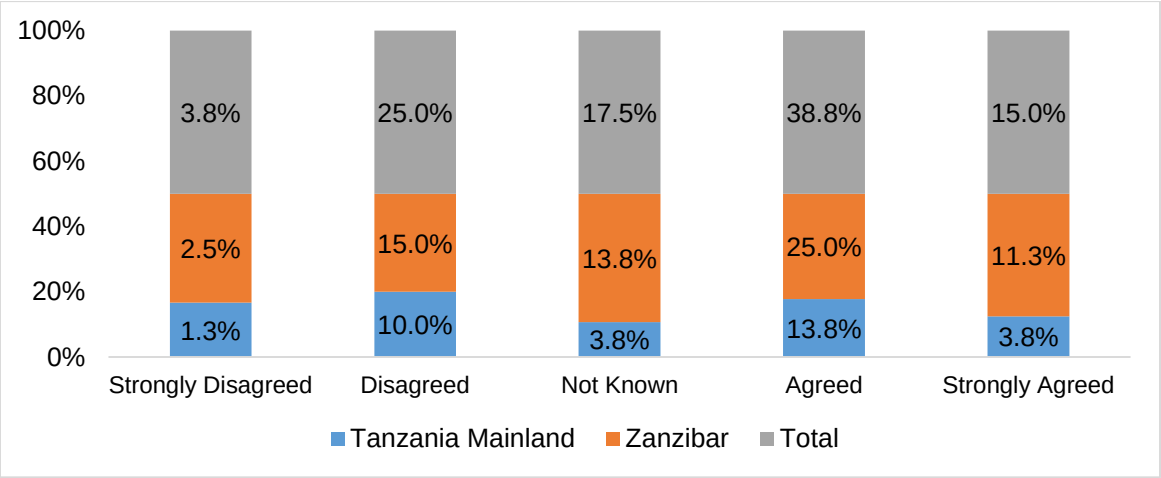
Zanzibar 14.0 (B):



Source: SPSS Research Findings, 2018.

Equally, the findings of question number 4 Figures 14.0 (A & B) is consistency with the research specific question that, tax rate is the potential determinant of the tax revenue in Tanzania.

Figure 14.0.0: The Stakeholder's Findings on the Areas of Direct and Indirect Taxes Rates, Significant and Standard.



Source: SPSS Research Findings, 2018.

Finally, the findings of question number 5 Figure 14.0.0 support the findings that, the taxes rates imposed by Tanzania Revenue Authority and Zanzibar Revenue Board, e.g. VAT 18% measured in percent ad-valorem rate for V.A.T is significant and standard. Specifically, the findings under (Table 11.0, Annexure VB) proves that, tax rate have statistical positive influence on tax revenue performance in Tanzania. The vivid example is direct taxes rates that proved to generate more revenue to the Tanzania government compared with indirect taxes rates (Table 11.0, Annexure VB).

Therefore, these findings have answered the research specific question and null hypothesis that, the tax rate influence performance of tax revenue in Tanzania. Hence, they indicate that, tax rate is the potential determinant of tax revenue performance in Tanzania. For the questions refer to Annexure II and III (pg. 12-13 & 11-13) respectively on taxes rates section, and Annexure V C_3, VI C_3, VII C_4, VIII C_4, and VIII C_1, C_2, and C_5, respectively, for the results.

Despite the presence of a strong significant long-run positive influence or impact of the tax rate on tax revenue performance in Tanzania, it is recommended that, the 18 percent V.A.T tax rate should not be increased, thus it should remain unchanged. This is because, V.A.T is one type of an indirect consumption tax, such that, it is charged upon purchasing of commodities by final consumers.

In this regard, it will cost every one of the citizens if it will be increased, say from 18 percent to 20 percent, since it's regressive in nature.[20] Therefore, it is very good recommendation to remain as it is. Since, if it will be increased, it will add more inflation within the country, hence the rising of prices of goods and services will be reported in the land.

6.4.2 THE IMPACT OF TRADE ON TANZANIAN'S TAX REVENUE PERFORMANCE.

This section has analysed the specific objective number two that examine whether the ratio of trade to G.D.P is the major determinant of tax revenue in Tanzania. It examines the influence between the ratio of trade to G.D.P and tax revenue in Tanzania.

HYPOTHESIS NO. 3:

H_0: There is no influence between the ratio of trade to G.D.P and the tax revenue in Tanzania.
H_1: There is influence between the ratio of trade to G.D.P and the tax revenue in Tanzania.

From the Table 10.0, a second observation is that, the ratio of trade to G.D.P appears to have a strong long-run positive relationship with tax revenue in Tanzania. This implies that, the increase in the ratio of trade to G.D.P lead to increase the performance of tax revenue in Tanzania. Since *t-statistic* is greater than alpha significance level at 5 percent. Also, the coefficient of trade indicates that, as the ratio of trade to G.D.P (for major commodity groups in Tanzania) increase by 1 percent, tax revenue in Tanzania increases by 47 percent. Hence, the null hypothesis has rejected and the alternative hypothesis has accepted. Therefore, there is influence between the ratio of trade to G.D.P and the tax revenue in Tanzania (Table 10.0).

These findings are consistent with UK Essays (2013), Abhijit Sen Gupta (2007), Dhaneshwar Ghura (1998), Tony Addison and Jorgen Levin (1980-2005), [Bird, et al. (2007) and Le, et al (2008)]; Leuthold (1991); [Stotsky and Mariam (1997)]; Ghura (1998), [Morss and Lotz (1967)], [A.Y. Javid and Umaima Arif (Winter, 2012)], concluded that the

[20] *Supra* note 148.

total tax revenue has positively long-run impact to and hence rises with the ratio of trade to G.D.P in Tanzania. Therefore, the ratio of trade to G.D.P is the major determinant of tax revenue in Tanzania.

Regarding these findings, it is recommended on more openness of exportation and importation of goods and services, especially for the major commodity groups in Tanzania, with affordable trade terms, less bureaucracy and allowing trade liberalization in Tanzanian economy (Table 10.0).

6.4.3 THE IMPACT OF POPULATION ON TANZANIAN'S TAX REVENUE PERFORMANCE.

This section has substantiated the specific objective number three which analyse whether population affect performance of tax revenue in Tanzania. It examines the influence between population and tax revenue in Tanzania.

HYPOTHESIS NO. 3:

H_0: There is no influence between population and the tax revenue in Tanzania.
H_1: There is influence between population and the tax revenue in Tanzania.

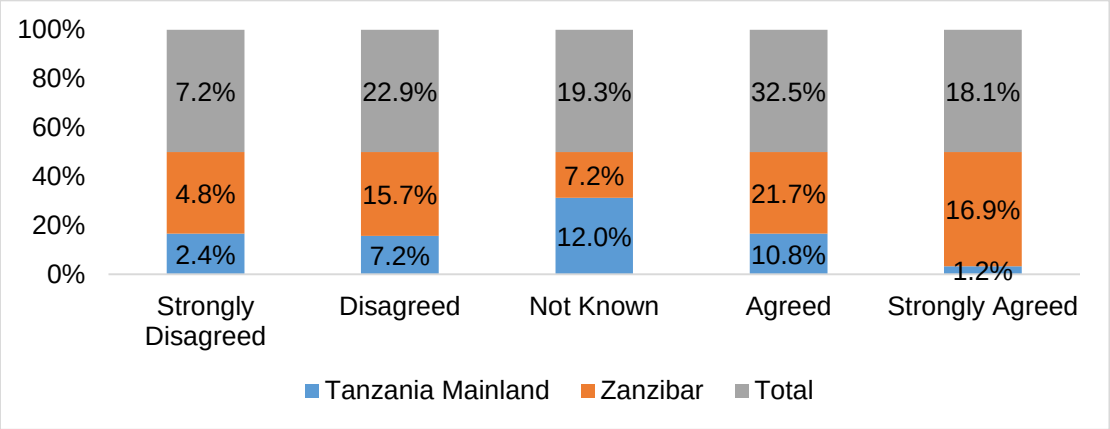
A third finding is that, the coefficient of population in the long-run has strongly significantly positive relationship with tax revenue in Tanzania. This is proved by *t-statistic* which is greater than alpha significance level at 5 percent.

Also, the coefficient of population indicates that, for every 1 percent increase in population, the tax revenue performance in Tanzania will increase by 1.56 percent (Table 10.0). Hence, the null hypothesis has rejected and the alternative hypothesis has accepted. Hence, there is influence between population and the tax revenue in Tanzania. Therefore, population do affect performance of tax revenue in Tanzania.

This is in line with other studies that found that, the capacity to pay and collect taxes increases with the increasing level of population. For instance, by Tony Addison and Jorgen Levin (1980-2005), A.C. Jansen (Spring, 1991), Bunescu Liliana (2011), Utah State University (2011), Atl Econ J et al (1994), W.K. Schmelzle (1948), Kadir Karagoz (2013) concluded that, total tax revenue is positively related to population.

In this regard, population in the long-run affect performance of tax revenue in Tanzania. However, the larger population does not always imply increased in tax revenue performance as we have to consider other crucial factors such as individual's economic levels and their purchasing powers.[21]

Figure 15.0: The Stakeholder's Findings on Population Areas/Diversity Vs. the Tax Base Collections.



Source: SPSS Research Findings, 2018.

Figure 15.0 on total bars shows that, out of the 100 percent tax stakeholders, respondents 50.6 percent (32.5% agreed plus 18.1% strongly agreed) had agree that the area where its population is huge will have high tax base compared to the area having lower population, where by 30.1 percent (22.9% disagreed plus 7.2% strongly disagreed) had disagreed, while 19.3 percent they don't know.

Thus, the findings are consistency with the mentioned literature that, total tax revenue is positively related to population. Hence, in Tanzania population do have the long-run affect on tax revenue performance. Refer question No. 8 Annexure II and III, (pg. 12 & 11) on tax base section respectively, and Annexure IX, B_8 for the results.

Regarding these findings, it is recommended that, the Tanzanian population should increase during the coming decades so as to enhance the capacity to pay and collect taxes with the increasing the level of population in the country. However, increasing level

[21] *Supra* note 160.

of population in Tanzanian should be accompanied with the increasing individual's economic levels and their purchasing powers.[22]

In the time being, in order to stimulate the domestic tax revenue base in developing countries, it is suggested on increasing the level of human capital, which must be accompanied by the good quality and reasonable social services to be provided by the government to the society. Since the level of human capital is among the important public policy for the development of the tax system in the country. Correspondingly, for the areas where its population is huge in Tanzania, its tax base should be highly diversified compared to the areas having lower population in the country (Figure 15.0).

6.4.4 THE IMPACT OF TAX BASE ON TANZANIAN'S TAX REVENUE PERFORMANCE.

This section has substantiated the specific objective number four which test whether the tax base impact performance of tax revenue in Tanzania. Hence, it checks the influence between the tax base and tax revenue in Tanzania.

HYPOTHESIS NO. 3:

3) **H_0:** There is no influence between the tax base and tax revenue in Tanzania.
   H_1: There is influence between the tax base and tax revenue in Tanzania.

It is revealed that, in the long-run, the tax revenue in Tanzania is negatively significantly affected by tax base since its sign is negative as expected (Table 10.0). This means that, in the long-run, the increase in the tax base (taxes on import plus taxes on local goods and services) lead to the decrease in tax revenue in Tanzania. The result is justified by *t-statistic* which is greater than alpha significance level at 5 percent. Also, the coefficient of tax base points out that, for every 1 percent increase in tax base; tax revenue in Tanzania decrease by 25 percent (Table 10.0).

Hence, in the long-run the tax base is negatively impacting the performance of tax revenue in Tanzania. Hence, the null hypothesis has rejected and the alternative hypothesis has accepted. Thus, there is influence between the tax base and the tax

[22] *Supra* note 160.

revenue in Tanzania. Therefore, tax base do impact performance of tax revenue in Tanzania.

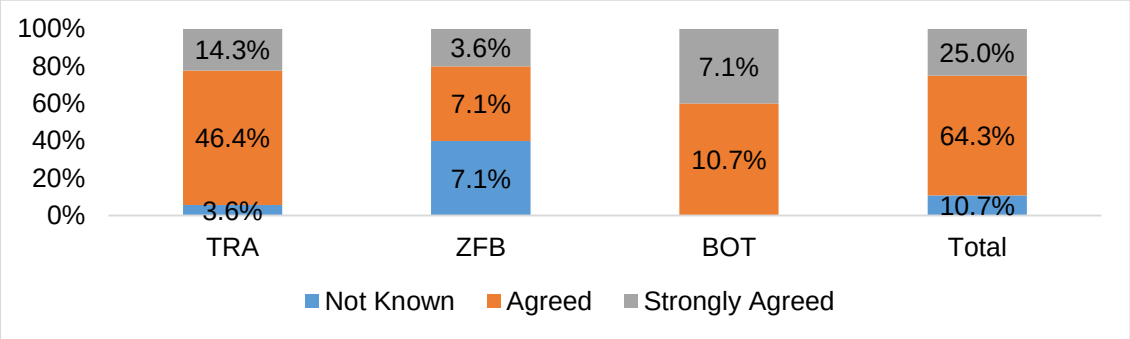
This finding agrees with the results obtained by Dhaneshwar Ghura (1998), W.F. Stine (July, 1988), A. Oestreicher and R. Koch (March 2011), Brill and Hassett (2007), Clausing (2007), Devereux (2006), Laura Kawano and Joel Slemrod, (October, 2012) and Matthias Wrede (1996). Thus, many researchers have proved that, there is a negative significant relationship between the tax base, e.g: taxing subsistence agricultural activities, or if the country depend her taxes revenue mostly from export taxes, or a decline in the terms of trade is associated with the decline in income; and the ratio of total tax revenue over G.D.P in developing countries. In this regard, the tax base is negatively impacting the performance of tax revenue in Tanzania.

6.4.4.0 Findings of Stakeholders on the Impact/Influence Between the Tax Base and the Performance of Tax Revenue in Tanzania.

The study has analysed the respondent's findings on the influence between the tax base and performance of tax revenue in Tanzania (Table 12.0, Annexure VC). Table 12.0 Annexure VC, illustrates the stakeholder's findings on the impact between the tax base and performance of tax revenue in Tanzania. As can be seen in question number 5 Figures 16.0 (A & B), 6 Figures 17.0 (A & B) and 3 Figure 17.0.0, out of the 100 percent tax stakeholders, the respondents 89.3 percent (25.0% strongly agreed plus 64.3% agreed), 75.0 percent (28.6% strongly agreed plus 46.4% agreed), and 58 percent (28.4% strongly agreed plus 29.6% agreed) respectively, had agreed the stated questions, while others had disagreed the same questions.

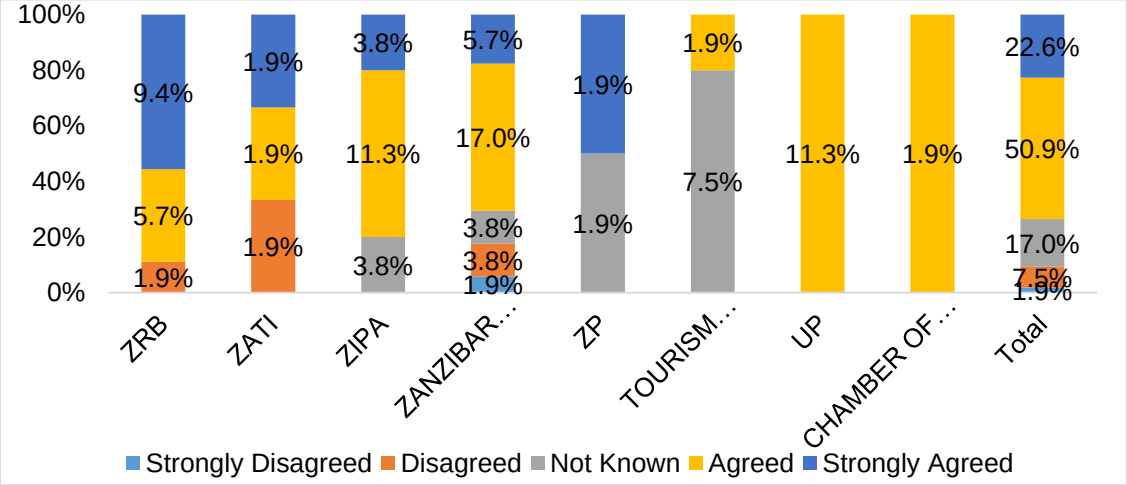
Figures 16.0 (A & B): The Stakeholder's Findings on the Influence/Relationship Between the Tax Base and the Performance of Tax Revenue in Tanzania.

Tanzania Mainland 16.0 (A):



Source: SPSS Research Findings, 2018.

Zanzibar 16.0 (B):

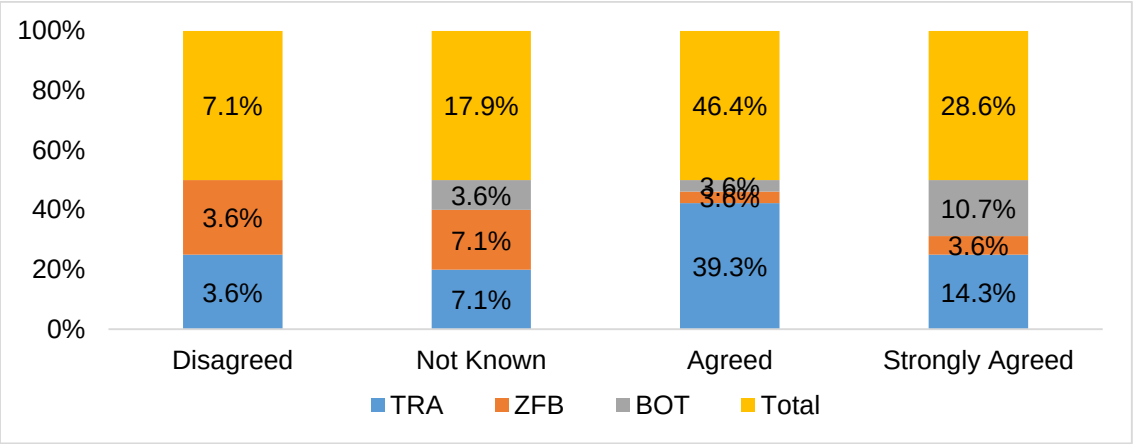


Source: SPSS Research Findings, 2018.

Specifically, the findings of question number 5 Figures 16.0 (A & B), agree with the research null hypothesis H1 regarding tax base stating that, there is influence between the tax base and the tax revenue in Tanzania (Table 12.0 Annexure VC).

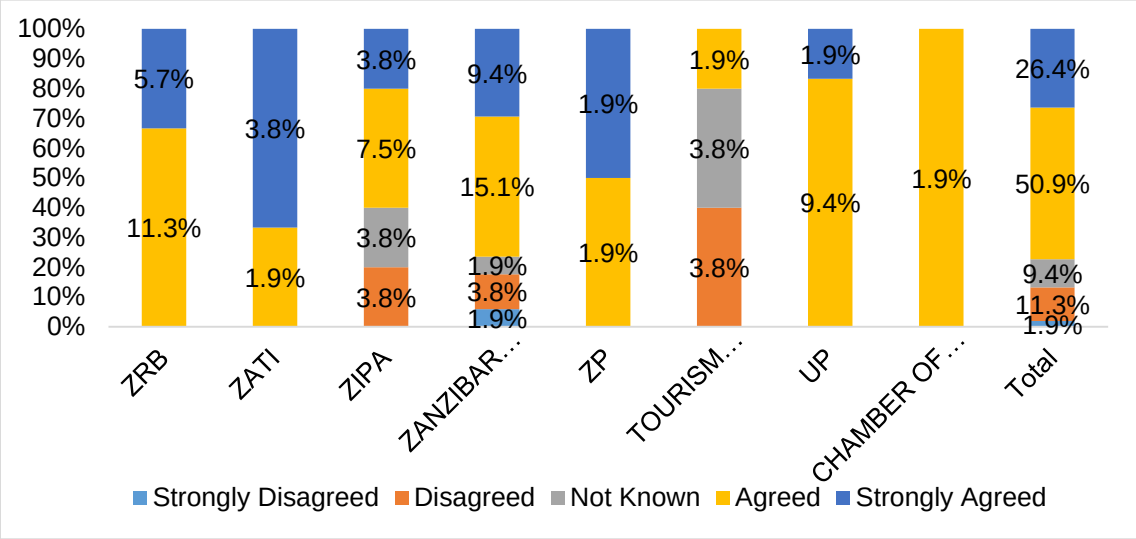
Figures 17.0 (A & B): The Stakeholder's Findings on the Potentiality of the Tax Base as the Determinant of the Tax Revenue in Tanzania.

Tanzania Mainland 17.0 (A):



Source: SPSS Research Findings, 2018.

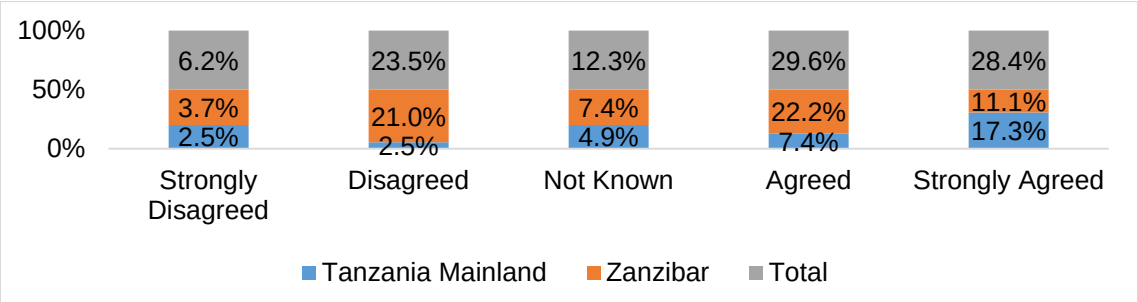
Zanzibar 17.0 (B):



Source: SPSS Research Findings, 2018.

In the meantime, the findings of question number 6 Figures 17.0 (A & B) are consistency with the research specific question that, tax base impact performance of tax revenue in Tanzania. Consequently, the findings agree with the hypothesis that, there is significance influence or relationship between tax base like V.A.T and tax revenue performance in Tanzania (Table 12.0 Annexure VC).

Figure 17.0.0: The Stakeholder's Findings on the Area of Creation of the New Reliable Sources of the Tax Base.



Source: SPSS Research Findings, 2018.

Also, the findings of question number 3 Figure 17.0.0 depicts that, the respondents 58.0 percent (28.4% strongly agreed plus 29.6% agreed), had agreed that, apart from income tax, VAT, and others, there is a need for Tanzanian government to create extra new reliable sources of tax base so as to generate more revenue in the country (Table 12.0, Annexure VC).

Therefore, these findings have answered the research specific question and null hypothesis that, there is influence between the tax base and the tax revenue in Tanzania. Hence, the results indicate that, tax base impact performance of the tax revenue in Tanzania. For the questions refer to Annexure II and III (pg. 10-12 & 10-11), respectively, on taxes base section, and Annexures X and XI B_5, XII (B_6 A and B_6 B), and XIII B_3, B_1, B_2, B_4, B_7, B_10 and B_11, respectively for the results.

In this case, it is recommended that, both taxes on import and on local goods and services, taxing subsistence agricultural activities, export taxes, etc., must be reduced significantly in Tanzania, purposively to widen the tax base. Hence, boosting the tax revenue collection in the economy. Also, the terms of trade must be adjusted to associate with rising in income in the land.

Moreover, apart from income tax, VAT and others, there is a need for Tanzania government to create the extra new reliable sources of tax base, creations of new wealth and the fiscal policy measures so as to generate more revenue. For example, change in exchange rates, share of industrial sector, share of capital gains and profit, oil and mining

sector, curbing of informal sector and underground economic activities (Table 12.0 Annexure VC; and Table 22.0 Annexure VM).

Also, strengthening the service sector in G.D.P, secondary sector like manufacturing, reviewing and reducing the tax exemptions in the country, etc. (Table 12.0 Annexure VC; and Table 22.0 Annexure VM). Also, the fighting against tax evasion and avoidance must be prioritized for Tanzania Revenue Authority and Zanzibar Revenue Board. Likewise, lowering the V.A.T base from 40 million Tanzanian Shilling of turnover to 20 million Tanzanian Shilling of turnover, so as to widening the tax base, thus increasing the performance of the tax revenue in the country (Table 12.0, Annexure VC).

6.4.5 THE IMPACT OF OTHER CONTROL VARIABLES ON TANZANIAN'S TAX REVENUE PERFORMANCE.

This section has substantiated the specific objective number five that identify and analyse whether the other control variables are potential determinants of tax revenue performance in Tanzania. Hence, it analyses the influence between the other control variables and the tax revenue performance in Tanzania.

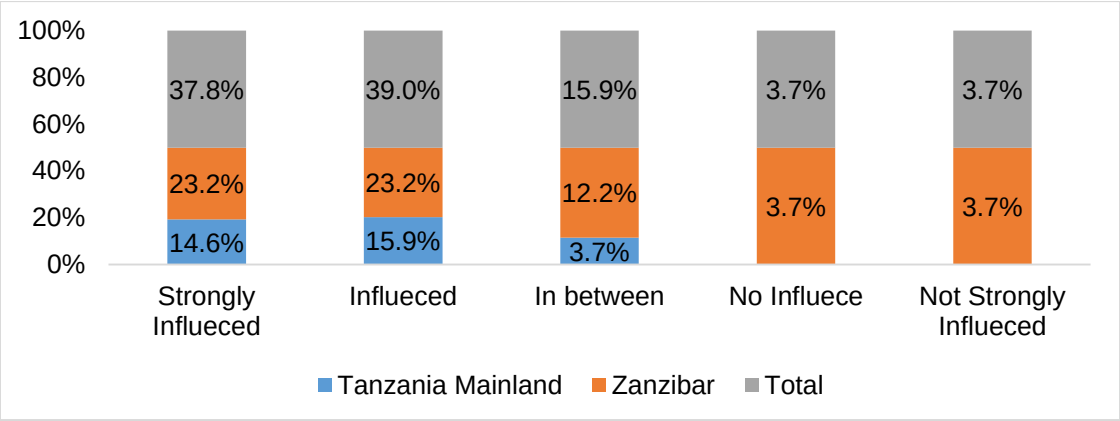
HYPOTHESIS NO. 3:

H_0: There is no influence between the other control variables and the tax revenue performance in Tanzania.
H_1: There is influence between the other control variables and the tax revenue performance in Tanzania.

6.4.5.0 Inflation in Tanzania

Table 13.0 Annexure VD proves the stakeholder's findings on the impact of inflation rate on tax revenue performance in Tanzania. As can be seen in question number 3 Figure 18.0, 4 Figure 19.0.0 and 5 Figure 19.0, out of the 100 percent tax stakeholders, the respondents 78 percent (37.8% most important plus 40.2% important), 84.4 percent (38.6% strongly agreed plus 45.8% agreed), and 76.8 percent (37.8% strongly influenced plus 39.0% influenced) respectively, had agreed the stated questions, while others had disagreed the same questions.

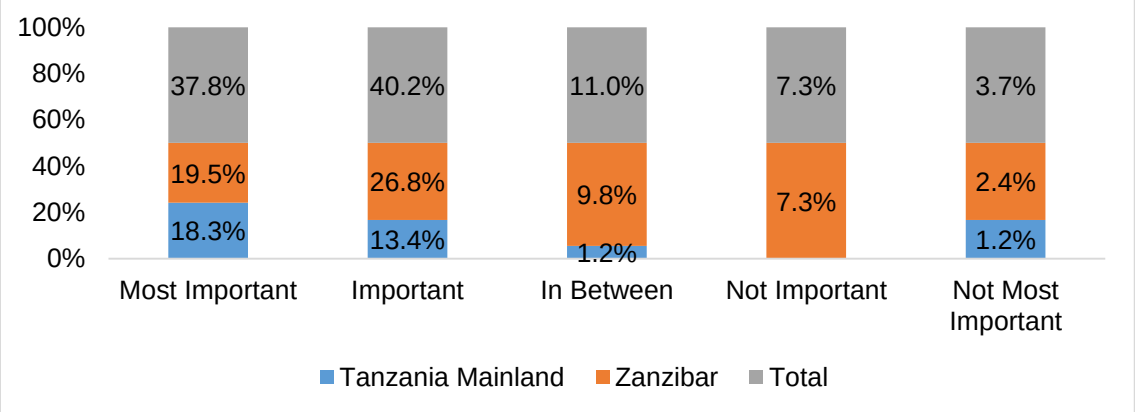
Figure 19.0: The Stakeholder's Findings on the Influence/Relationship Between Inflation Rate and the Tax Revenue in Tanzania.



Source: SPSS Research Findings, 2018.

Specifically, the findings of question number 5 Figure 19.0 agree with the research null hypothesis H1 stating that, there is influence or relationship between the other control variables (inflation rate) and the tax revenue performance in Tanzania.

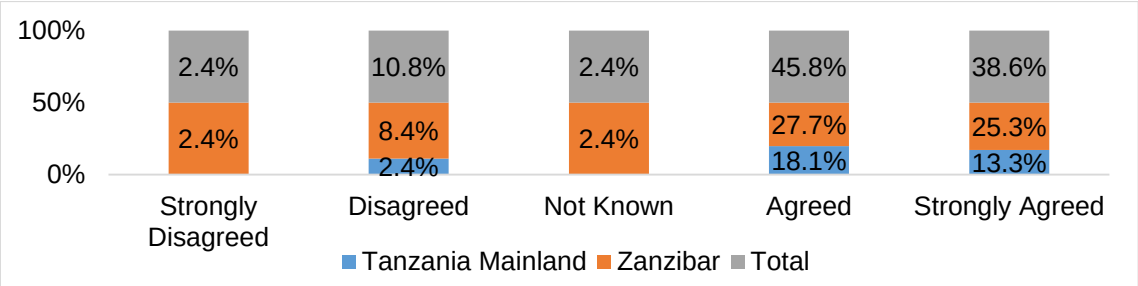
Figure 18.0: The Stakeholder's Findings on the Potentiality of Inflation Rate as the Determinant of the Tax Revenue in Tanzania.



Source: SPSS Research Findings, 2018.

Alike, the findings of question number 3 Figure 18.0 are consistency with the research specific question that, inflation rate is the potential determinant of the tax revenue performance in Tanzania. Since, it is the important factor affecting tax revenue collections in Tanzania (Table 13.0, Annexure VD).

Figure 19.0.0: The Stakeholder's Findings on Inflation as a Major Problem in Tanzania.



Source: SPSS Research Findings, 2018.

On the other hand, the findings of question number 4 support the findings that, inflation is the major problem in Tanzania. Explicitly, the findings under (Table 13.0, Annexure VD) verifies that, inflation rate have negative influence on tax revenue performance in Tanzania.

Therefore, these findings have answered the research specific question and the null hypothesis that, inflation rate influence performance of tax revenue in Tanzania. Thus, the results indicate that, inflation has negative impact on tax revenue performance in Tanzania (Table 13.0, Annexure VD).

Therefore, it is the potential determinant of tax revenue performance in Tanzania (Table 13.0, Annexure VD). For the questions refer Annexure II and III (pg. 2-5) on inflation rate section, and Annexure XIV SB_3, XV SB_5, XVI SB_1, SB_4, SB_6, SB_7, and SB_11, respectively for the results.

In the time being, out of the 100 percent tax stakeholders, 92.9 percent (29.8% plus 63.1%) had ticked that, Bank of Tanzania is the only institution that can best solve or prevent inflation problem in Tanzania.

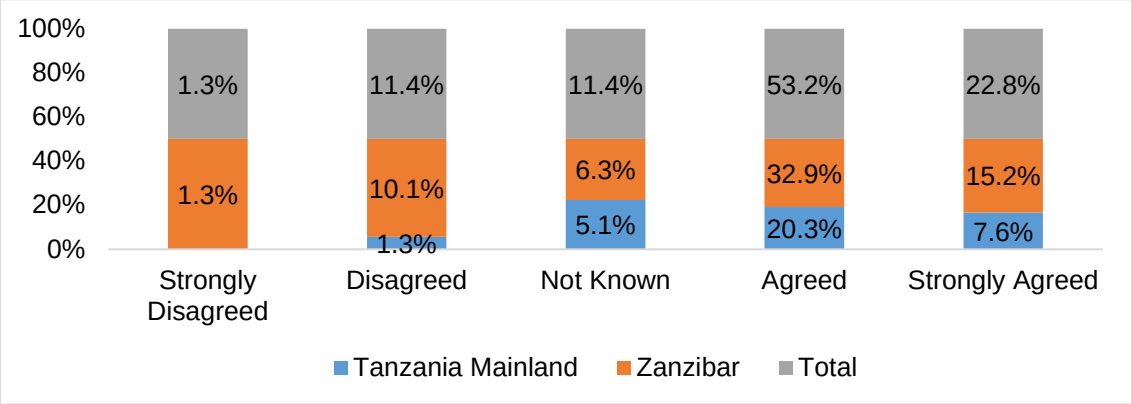
However, others viewed differently that, a combination of the government and the private sector institutions involved in production and distribution (1.2%), Agriculture Ministry and Food Security (2.4%), Businessman (1.2%); and Seaport and Airport for making more export (1.2%) should be emphasized so as to prevent the problem in land (Question number 9, Annexure II and III (pg. 5 and 4)), respectively.

These results proves that, inflation play an important role towards the significances of tax revenue collection in the country. Refer question No. 9 Annexure II and III (pg. 5 and 4) on inflation rate section respectively, and Annexure XVI, SB_9 for the results.

6.4.5.1 G.D.P Per Capita in Tanzania

Table 14.0 Annexure VE illustrates the stakeholder's findings on the impact of G.D.P Per Capita on tax revenue performance in Tanzania. As can be seen in question number 1-5, 3 Figure 20.0 and 4 Figure 21.0, out of the 100 percent tax stakeholders, respondents 60.5 percent (21.0% strongly agreed plus 39.5% agreed) and 76.0 percent (22.8% strongly agreed plus 53.2% agreed) respectively, had agreed the stated questions, while the others had disagreed the same questions.

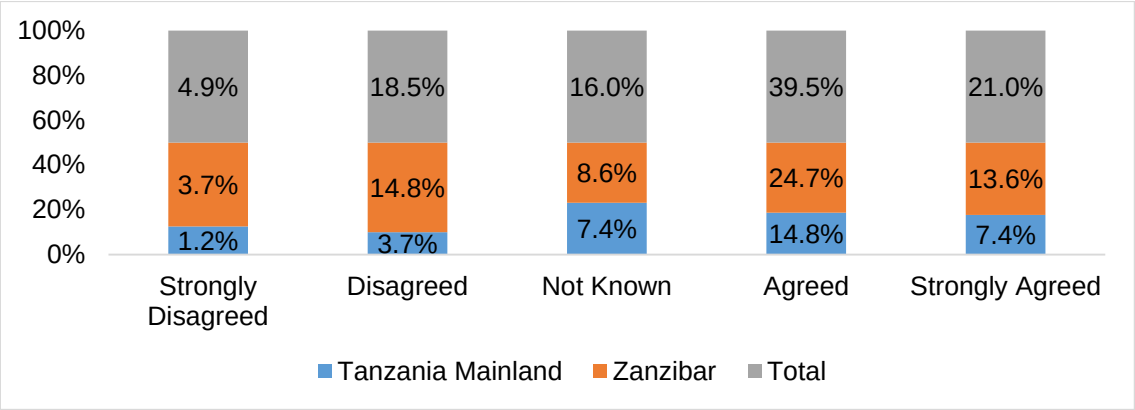
Figure 21.0: The Stakeholder's Findings on the Influence/Relationship Between Per Capita (G.D.P) and the Tax Revenue in Tanzania.



Source: SPSS Research Findings, 2018.

Specifically, the findings of question number 4 Figure 21.0 agree with the research null hypothesis H1 stating that, there is influence or relationship between the other control variables (G.D.P Per Capita) and the tax revenue performance in Tanzania.

Figure 20.0: The Stakeholder's Findings on the Potentiality of Per Capita (G.D.P) as the Determinant of the Tax Revenue in Tanzania.



Source: SPSS Research Findings, 2018.

Identically, the findings of question number 3 Figure 20.0 are consistency with the research specific question that, the variable is the potential determinant of the tax revenue performance in Tanzania (Table 14.0, Annexure VE).

Since, G.D.P Per Capita is the important major factor that affecting tax revenue collection in Tanzania. Unambiguously, the findings under the table authenticates that, the higher the Per Capita G.D.P, the higher the tax collections or performance in the country (Table 14.0, Annexure VE). Therefore, these findings have answered the research specific question and the null hypothesis that, G.D.P Per Capita influence performance of tax revenue in Tanzania.

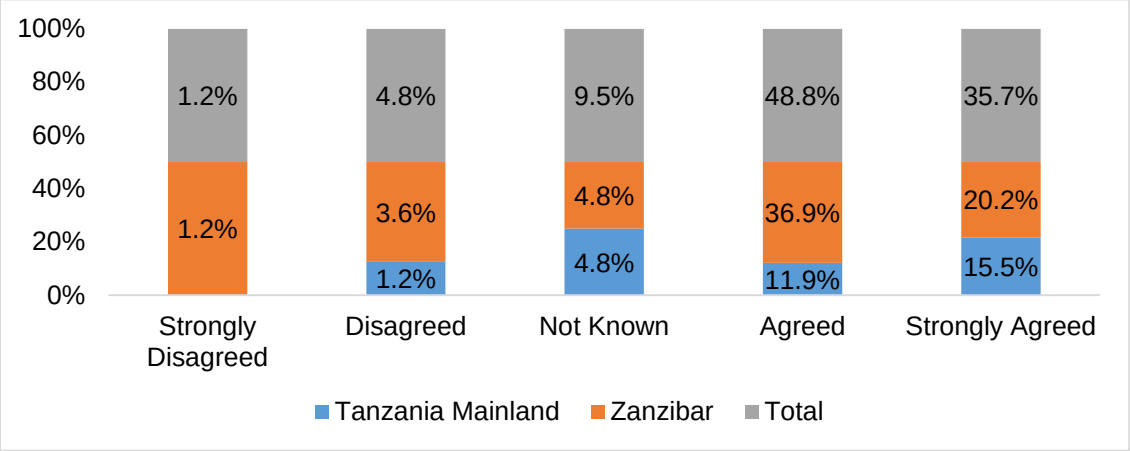
Thus, the results indicate that, the variable has positive impact on tax revenue performance in Tanzania (Table 14.0, Annexure VE). Therefore, it is the potential determinant of tax revenue performance in Tanzania (Table 14.0, Annexure VE). For the questions refer Annexure II and III (pg. 5-6) on G.D.P Per Capita section, and Annexure XVII SC_1, SC_2, SC_3, SC_4, SC_5, respectively for the results.

6.4.5.2 Macro-Economic Policies in Tanzania

Table 15.0 Annexure VF illustrates the stakeholder's findings on the impact of macro-economic policies on tax revenue performance in Tanzania. As can be seen in question numbers 1-2 Figure 22.0 and Figure 23.0 respectively, 3, 5, 7, 9, 11-15, out of the 100 percent tax stakeholders, respondents 84.5 percent (35.7% strongly agreed plus 48.8%

agreed) and 74.7 percent (25.3% strongly agreed plus 49.4% agreed) for question number 1-2, respectively, had agreed the stated questions, while others had disagreed the same questions.

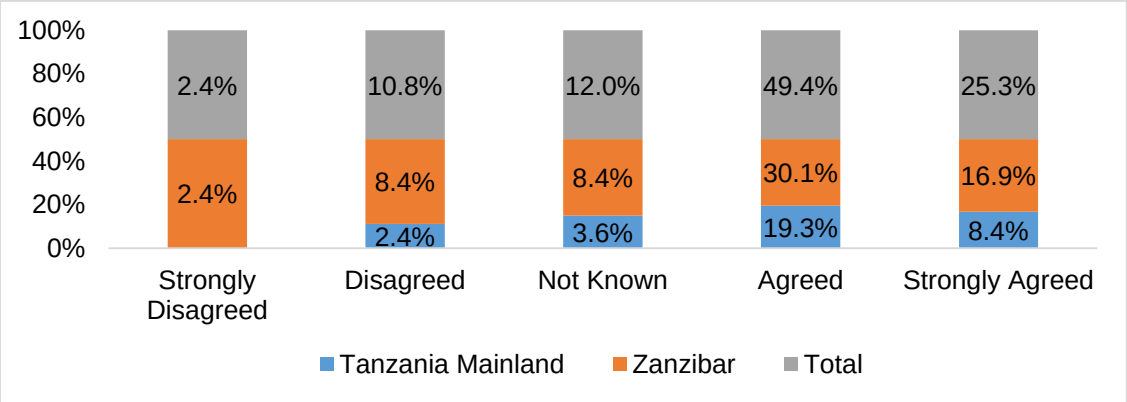
Figure 22.0: The Stakeholder's Findings on the Potentiality of Macro-Economic Policies as the Determinant of the Tax Revenue in Tanzania.



Source: SPSS Research Findings, 2018.

Specifically, the findings of question number 1 Figure 22.0 agree with the research null hypothesis H1 stating that, there is influence or relationship between the other control variables (macro-economic policies) and the tax revenue performance in Tanzania. Since, macro-economic policy instruments affect performance of tax collections or base in Tanzania (Table 15.0, Annexure VF).

Figure 23.0: The Stakeholder's Findings on the Impacts Between the Macro-Economic Policies and the Tax Revenue in Tanzania.



Source: SPSS Research Findings, 2018.

Again, the findings of question number 2 Figure 23.0 are consistency with the research specific question that, the variable is the potential determinant of the tax revenue performance in Tanzania. Since it has positive impacts to the tax system in Tanzania (Table 15.0, Annexure VF).

On the other hand, the remaining findings support the facts that, if the government of Tanzania will finance its expenditures from domestic taxes or revenue rather than depending on foreign loans, aids and grants will help attaining good policy objectives in the country (Question Number 9, Table 15.0 Annexure VF). Because of this important, under economic recommendations has suggested on the best ways of fighting deficit problem in the nation.

For instance, Tanzania must change its tax policies by preferring the direct taxes rather than relying on indirect taxes (Table 11.0, Annexure VB). The mobilizations of tax revenue by enhancing internal factors rather than external factors like loans, aids and grants must be the prerequisite policy short-run and long-run objectives for raising the domestic revenue in Tanzania (Table 15.0, Annexure VF).

Therefore, these findings have answered the research specific question and the null hypothesis that, macro-economic policies influence performance of tax revenue in Tanzania. Thus, they indicate that, the policies have the great positive impact on tax revenue performance in Tanzania (Table 15.0, Annexure VF). For the questions refer Annexure II and III (pg. 6-8) on macro-economic policies section, and Annexure XVIII, SD_1, SD_2, SD_3, SD_5, SD_7, SD_9, SD_11, SD_12, SD_13, SD_14 and SD_15, respectively for the results.

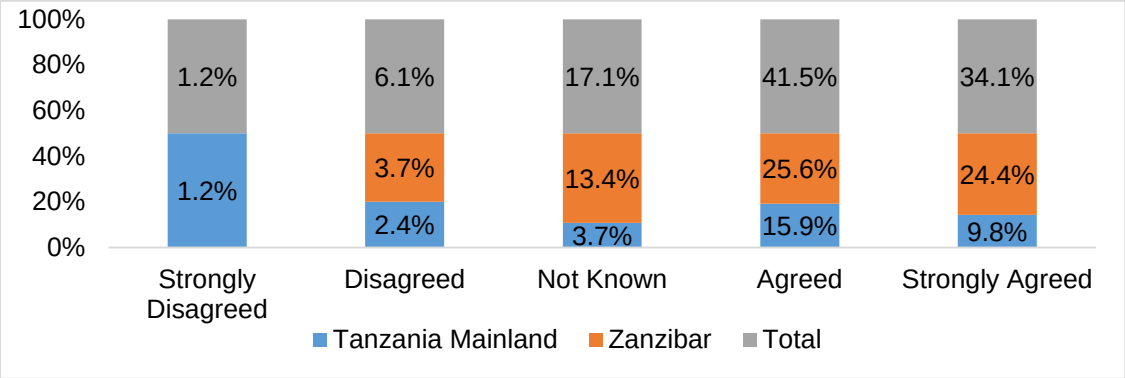
6.4.5.3 F.D.I & D.I

Table 16.0 Annexure VG illustrates the stakeholder's findings on the impact of F.D.I on tax revenue performance in Tanzania. As can be seen in question number 4-6 Figures 24.0 (A & B) for 5 and Figures 25.0 (A & B) for 6, out of the 100 percent tax stakeholders, respondents 81.7 percent (31.7% strongly agreed plus 50.0% agreed), 75.6 percent (34.1% strongly agreed plus 41.5% agreed) and 72.0 percent (30.5% strongly agreed plus

41.5% agreed) respectively, had agreed the stated questions, while others had disagreed the same questions.

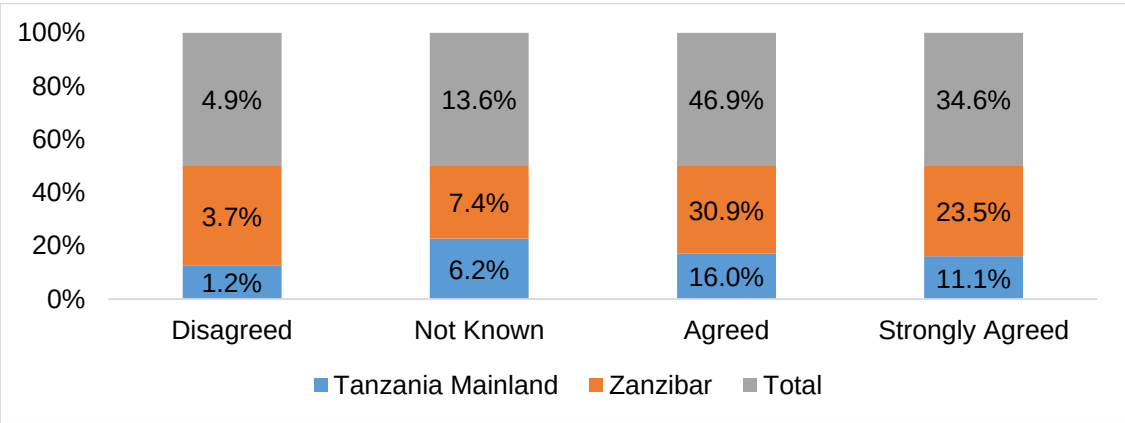
Figures 24.0 (A & B): The Stakeholder's Findings on the Influence/Relationship Between F.D.I) & D.I and the Tax Revenue in Tanzania.

Figure 24.0 (A): F.D.I



Source: SPSS Research Findings, 2018.

Figure 24.0 (B): D.I

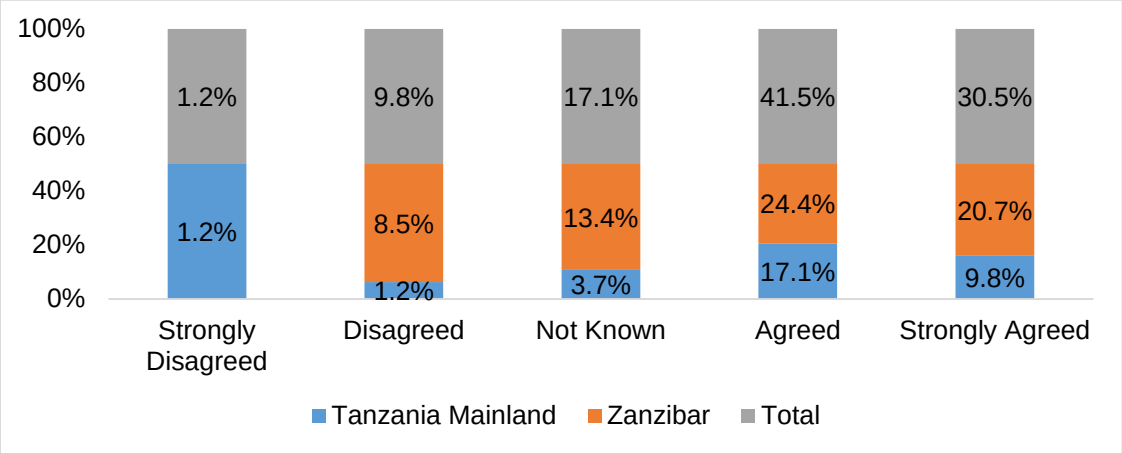


Source: SPSS Research Findings, 2018.

Specifically, the findings of question number 5 Figures 24.0 (A & B) agree with the research null hypothesis H1 stating that, there is influence or relationship between the other control variables F.D.I and the tax revenue performance in Tanzania.

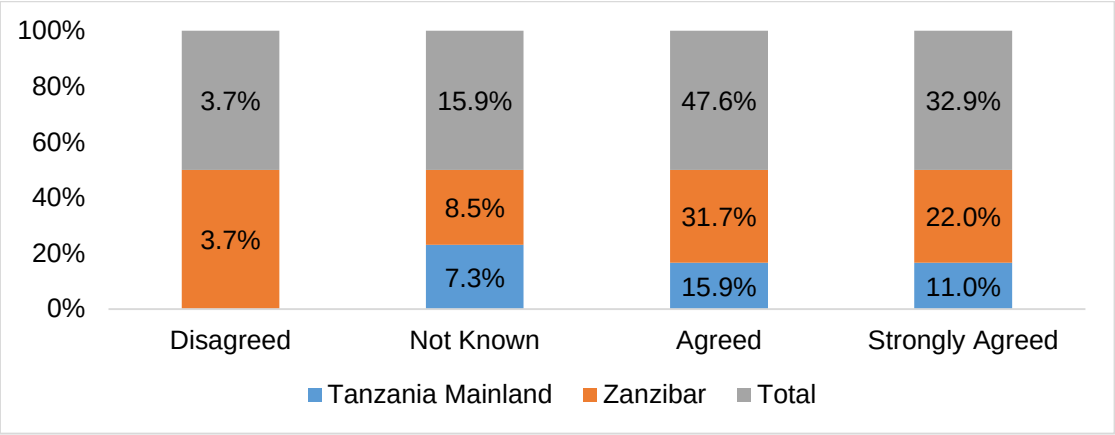
Figure 25.0 (A & B): The Stakeholder's Findings on the Potentiality of F.D.I & D.I as the Determinant of Tax Revenue in Tanzania.

Figures 25.0 (A): F.D.I



Source: SPSS Research Findings, 2018.

Figures 25.0 (B): D.I



Source: SPSS Research Findings, 2018.

Similarly, the findings of question number 6 Figures 25.0 (A & B) are consistency with the research specific question that, the variable is the potential determinant of the tax revenue performance in Tanzania (Table 16.0, Annexure VG).

On the other hand, the findings of question number 4 support the findings that, F.D.I contribute towards the tax revenue collections of Tanzania. Clearly, the findings under (Table 16.0, Annexure VG) verifies that, it is the important major factors that influence or enhance tax revenue collections or base in Tanzania.

Therefore, these findings have answered the research specific question and the null hypothesis that, F.D.I influence performance of tax revenue collections or base in Tanzania. Thus, these results indicate that, F.D.I do have positive impact on tax revenue performance in Tanzania (Table 16.0, Annexure VG). However, question number 14 portraying that, regardless the contribution of F.D.I towards the tax revenue collections in Tanzania, only 43.9 percent (9.8% strongly agreed plus 34.1% agreed) had agreed that, the revenue collected from F.D.I are reported to Tanzania Revenue Authority and Zanzibar Revenue Board (on time, while 17.1 percent (3.7% strongly disagreed plus 13.4% disagreed) had disagreed the same (Table 16.0, Annexure VG).

Regarding these findings, it is recommended that, apart from having close cooperation between Tanzania Revenue Authority and Zanzibar Revenue Board, with others influencing tax institutions, like Tanzania Investment Centre; Zanzibar Investment Promotion Authority; Zanzibar Commission for Tourism; etc. The exemptions, tax holidays etc., that granted to the foreign investors must be reduced or removed by them. This measure will ensure the highest tax collections records within the nation (question number 15, Annexure II and III (pg. 10 and 9)), respectively.

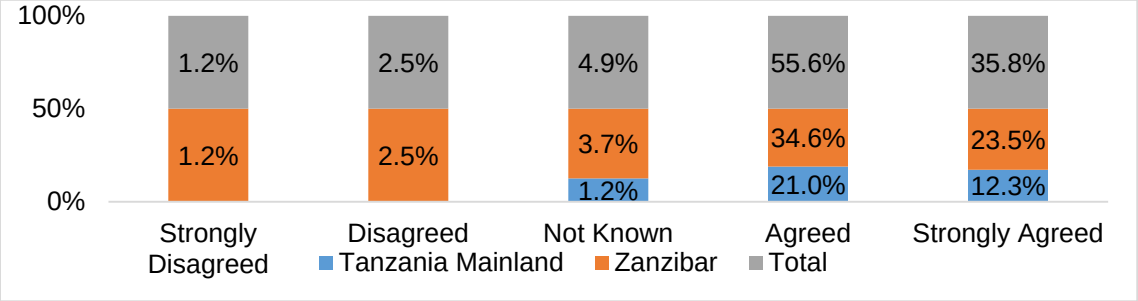
Similar results have obtained regarding Domestic Investment that, it has positive impact on tax revenue performance in Tanzania. Therefore, these findings have answered the research specific question and the null hypothesis that, both F.D.I and Domestic Investment influence performance of tax revenue in Tanzania. Hence, they indicate that, the variables have positive impacts on tax revenue performance in Tanzania. Therefore, they are the potential determinants of tax revenue performance in Tanzania (Table 16.0, Annexure VG). For the questions refer Annexure II and III (pg. 9-10 & 8-9), on (F.D.I & D.I) section respectively, and Annexure XIX SE_5 & SE_11, SE_6 & SE_12, SE_1 & SE_7, SE_2 & SE_8, SE_4 & SE_10, SE_13, SE_14, SE_15, SE_16 & SE_17, simultaneously for the results.

6.4.5.4 Tax Regime

Table 17.0 Annexure VH illustrates the stakeholder's findings on the impact of tax regime on tax revenue performance in Tanzania. As can be seen in question number 1-6, Figure 26.0 for 2; 3 Figure 27.0 and 4 Figure 28.0; out of the 100 percent tax stakeholders,

respondents 91.4 percent (35.8% strongly agreed plus 55.6% agreed), 89.0 percent (25.6% strongly agreed plus 63.4% agreed) and 67.9 percent (12.3% strongly agreed plus 55.6% agreed) respectively, had agreed the stated questions, while others had disagreed the same questions.

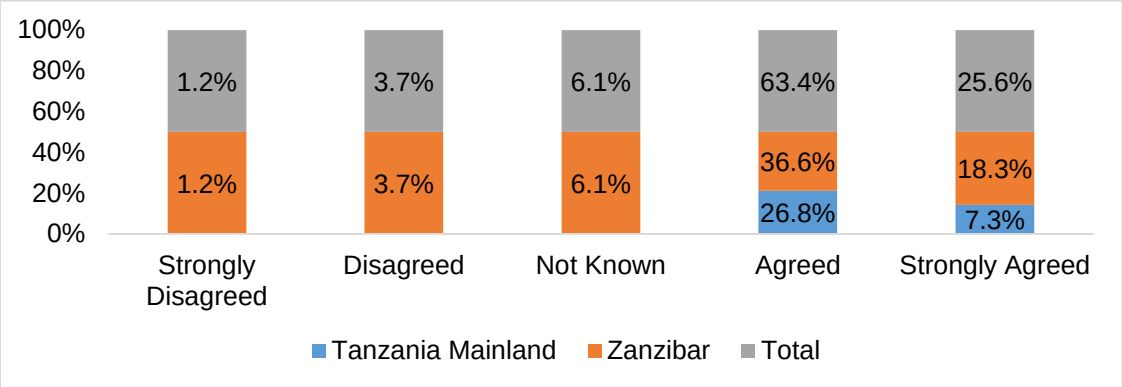
Figure 26.0: The Stakeholder's Findings on the Influence/Relationship Between the Tax Regime and the Tax Revenue Performance in Tanzania.



Source: SPSS Research Findings, 2018.

Specifically, the findings of question number 2 Figure 26.0 agree with the research null hypothesis H1 stating that, there is influence or relationship between the other control variables (tax regime) and the tax revenue performance in Tanzania.

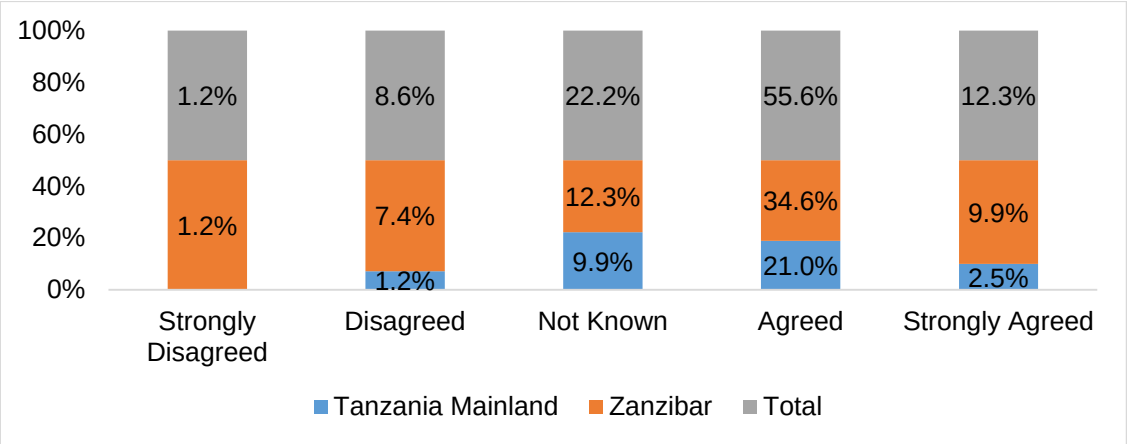
Figure 27.0: The Stakeholder's Findings on the Potentiality of the Tax Regime as the Determinant of Tax Revenue Performance in Tanzania.



Source: SPSS Research Findings, 2018.

Similarly, the findings of question number 3 Figure 27.0 are consistency with the research specific question that, the variable is the potential determinant of tax revenue collections in Tanzania (Table 17.0, Annexure VH). Hence, it is the important factor affecting tax revenue performance in Tanzania.

Figure 28.0: The Stakeholder's Findings on the Impacts Between the Tax Regime and the Tax Revenue Performance in Tanzania.



Source: SPSS Research Findings, 2018.

Explicitly, the findings of question number 4 Figure 28.0 verifies that, the tax regime of Tanzania Revenue Authority and Zanzibar Revenue Board have positive impacts to the tax system of Tanzania (Table 17.0, Annexure VH). Despite of the positive impacts of a variable, it is recommended that, there are needs for tax reforms, e.g. legal reforms and others taxes reforms to the tax regime of Tanzania. Also, the efficiency in Tanzanian tax administrations must be very prioritized (Table 17.0, Annexure VH).

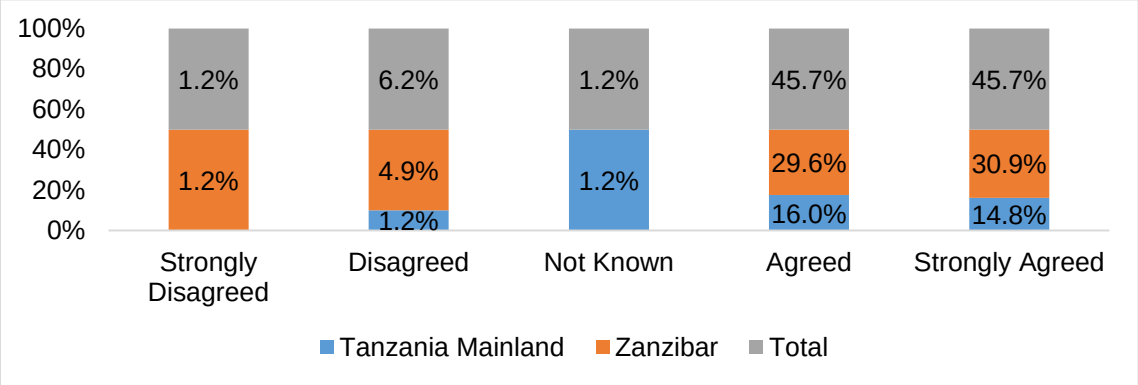
Hence, these findings have answered the research specific question and the null hypothesis that, tax regime influence performance of tax revenue in Tanzania. Therefore, they indicate that, tax regime has positive impact on tax revenue performance in Tanzania (Table 17.0, Annexure VH). For the questions refer Annexure II and III (pg. 13-14 & 12-13), on tax regime section respectively, and Annexure XX D_1, D_2, D_3, D_4, D_5 and D_6, respectively for the results.

6.4.5.5 Tax Institutions

Table 18.0 Annexure VI illustrates the stakeholder's findings on the impact of tax institutions on tax revenue performance in Tanzania. As can be seen in question number 1-3, Figure 29.0 for 1; Figure 30.0 for 2 and Figure 31.0 for 3 respectively, out of the 100 percent tax stakeholders, the stakeholders 91.4 percent (45.7% strongly agreed plus 45.7% agreed), 82.9 percent (37.8% strongly agreed plus 45.1% agreed) and 81.9

percent (33.7% strongly agreed plus 48.2% agreed) respectively, had agreed the stated questions, while others had disagreed the same questions.

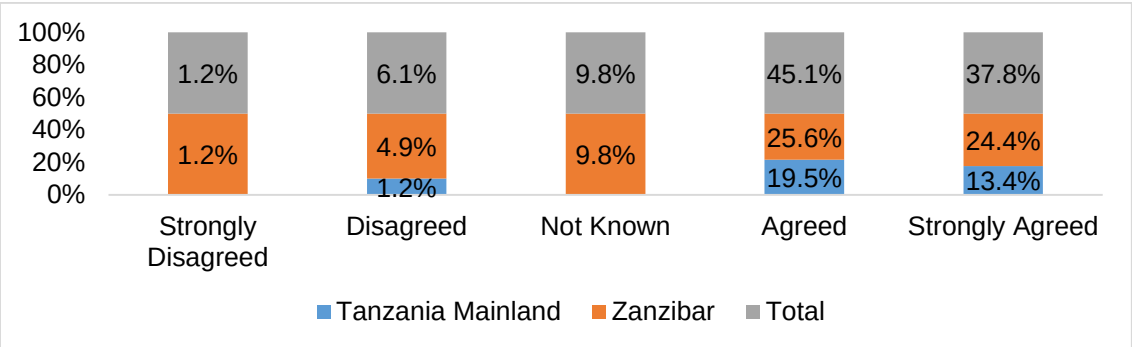
Figure 29.0: The Stakeholder's Findings on the Influence/Relationship Between the Tax Institutions and the Tax Revenue Performance in Tanzania.



Source: SPSS Research Findings, 2018.

Specifically, the findings of question number 1 Figure 29.0 agree with the research null hypothesis H1 stating that, there is influence or relationship between the other control variables (tax institutions i.e. Tanzania Revenue Authority and Zanzibar Revenue Board) and the tax revenue performance in Tanzania. Hence, the institutions have significance influence or impact on tax revenue collections or performance in Tanzania (Table 18.0, Annexure VI).

Figure 30.0: The Stakeholder's Findings on the Potentiality of the Tax Institutions as the Determinant of the Tax Revenue Performance in Tanzania.

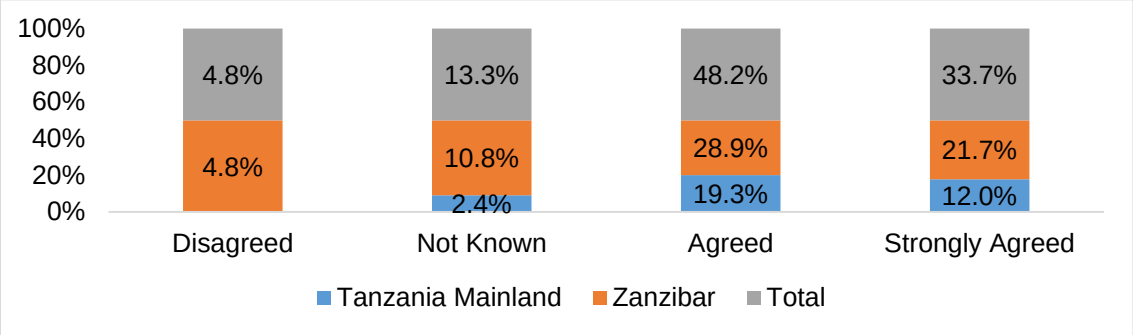


Source: SPSS Research Findings, 2018.

Correspondingly, the findings of question number 2 Figure 30.0 are consistency with the research specific question that, the variable is the potential determinant of the tax revenue performance in Tanzania. Hence, Tanzania Revenue Authority and Zanzibar Revenue

Board are important tax institutions for tax revenue performance or collections in Tanzania.

Figure 31.0: The Stakeholder's Findings on the Impacts Between the Tax Institutions and the Tax Revenue Performance in Tanzania.



Source: SPSS Research Findings, 2018.

Obviously, the findings of question number 3 Figure 31.0 verifies that, the institutions have positive impacts to the tax system of Tanzania (Table 18.0, Annexure VI). In spite of the positive influence of the variable towards the performance of tax revenue in Tanzania, it is recommended that, the effectiveness and efficiency of Tanzania Revenue Authority and Zanzibar Revenue Board must be strengthened so as to be in line with others tax institutions on Earth (question number 4, Appendix II and III (pg. 14 and 13)), respectively.

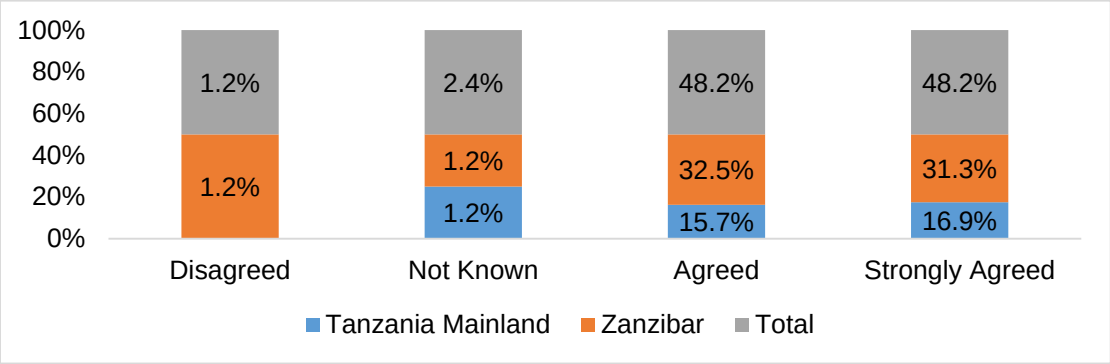
Specifically, improvement in terms of customer cares, organizational structures, electronic capabilities, ensuring taxpayer's satisfactions, quality services, improving the staff's skills and experiences, etc. (question number 6, Annexure II and III (pg. 14 and 13)), respectively.

Therefore, these findings have answered the research specific question and the null hypothesis that, the tax institutions influence performance of tax revenue in Tanzania. Thus, they indicate that, the tax institutions have great positive impact on tax revenue performance in Tanzania (Table 18.0, Annexure VI). Therefore, it is the potential determinant of tax revenue performance in Tanzania (Table 18.0, Annexure VI). For the questions refer Annexure II and III (pg. 14-15 & 13-14), on tax institutions section respectively, and Annexure XXI E_1, E_2, E_3, E_5, E_7, E_8 and E_10, respectively for the results.

6.4.5.6 Tax Compliance

Table 19.0 Annexure VJ illustrates the stakeholder's findings on the impact of tax compliance on tax revenue performance in Tanzania. As can be seen in question number 1-7, 9, 12, 14 and 17-19, Figure 32.0 for 1; 2 Figure 33.0 and 3 Figure 34.0, out of the 100 percent tax stakeholders, the respondents 96.4 percent (48.2% strongly agreed plus 48.2% agreed), 93.9 percent (43.9% strongly agreed plus 50.0% agreed) and 92.6 percent (39.5% strongly agreed plus 53.1% agreed) respectively, had agreed the stated questions, while others had disagreed the same questions.

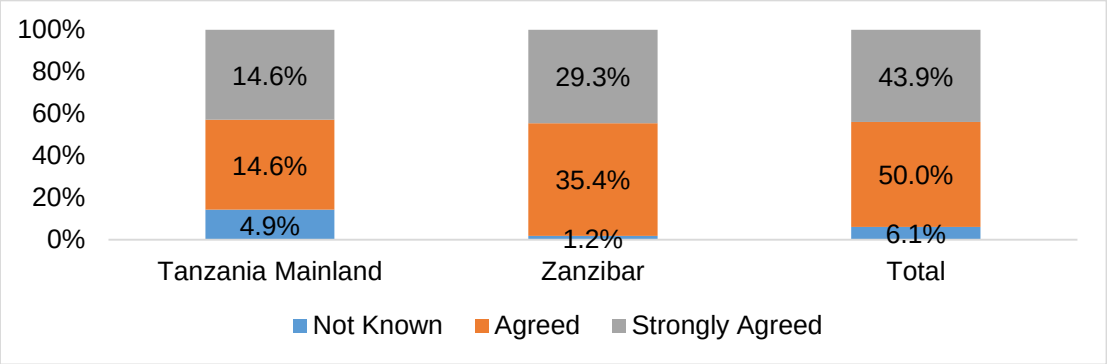
Figure 32.0: The Stakeholder's Findings on the Influence/Relationship Between Tax Compliance and the Tax Revenue Performance in Tanzania.



Source: SPSS Research Findings, 2018.

Precisely, the findings of question number 1 Figure 32.0 agree with the research null hypothesis H1 stating that, there is influence or relationship between the other control variables (tax compliance) and the tax revenue performance in Tanzania.

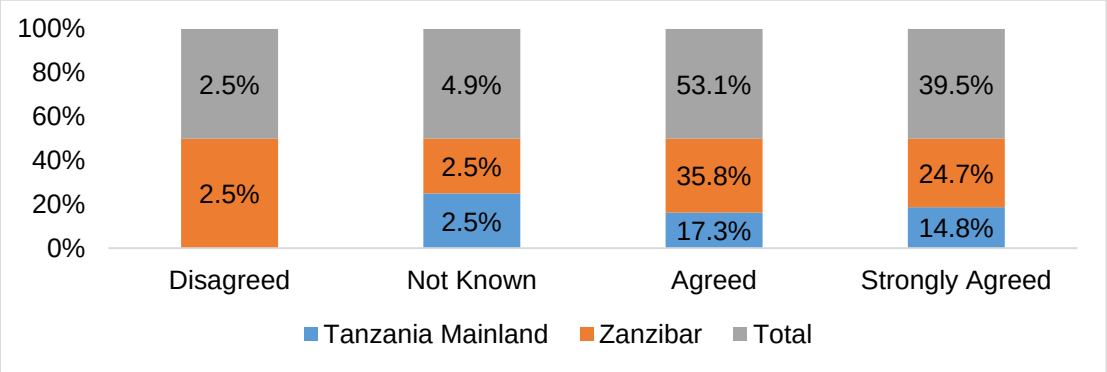
Figure 33.0: The Stakeholder's Findings on the Potentiality of Tax Compliance as the Determinant of the Tax Revenue Performance in Tanzania.



Source: SPSS Research Findings, 2018.

Meanwhile, the findings of question number 2 Figure 33.0 are consistency with the research specific question that, the variable is the potential determinant of the tax revenue performance in Tanzania (Table 19.0, Annexure VJ). Therefore, it is the important factor that affecting tax revenue collections or performance in Tanzania.

Figure 34.0: The Stakeholder's Findings on the Impacts Between Tax Compliance and the Tax Revenue Performance in Tanzania.



Source: SPSS Research Findings, 2018.

Definitely, the findings of question number 3 Figure 34.0 verifies that, tax compliance have positive impacts to the tax system of Tanzania (Table 19.0, Annexure VJ). However the findings (Table 19.0, Annexure VJ) illustrate the positive impacts of the variable to the tax system of Tanzania, 43.2 percent of the stakeholders (6.2% strongly disagreed plus 37.0% disagreed) had disagreed that, the self-tax assessment system in Tanzania is accepted by 100.

Because of the findings, it is recommended that, in order to stimulate voluntary tax compliance in Tanzania, the tax self-assessment reported to Tanzania Revenue Authority and Zanzibar Revenue Board by taxpayers must be reviewed and enhanced periodically. In the meantime, the tax requirements imposed by Tanzania Revenue Authority and Zanzibar Revenue Board must be reviewed periodically so as to meet the taxpayer's fully satisfaction (Table 19.0, Annexure VJ). Therefore, these findings have answered the research specific question and the null hypothesis that, tax compliance has significant influence or relationship on tax revenue collections or performance in Tanzania.

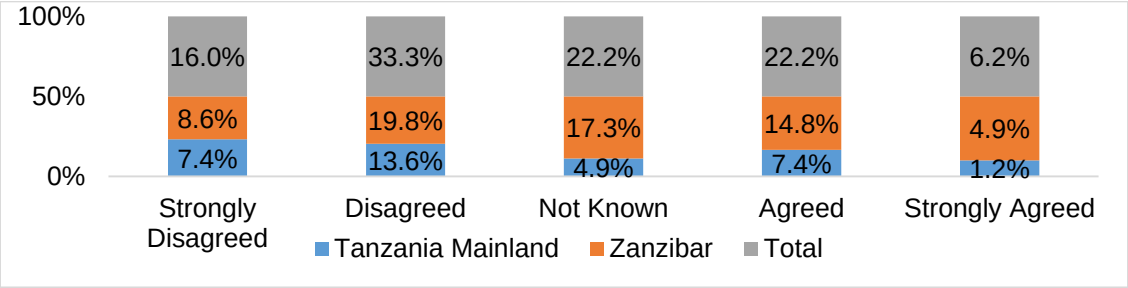
Thus, the results indicate that, tax compliance has significant positive impact on tax revenue performance in Tanzania (Table 19.0, Annexure VJ). Therefore, it is the potential

determinant of tax revenue performance in the country (Table 19.0, Annexure VJ). For the questions refer Annexure II and III (pg. 15-16 & 14-15) on tax compliance section respectively, and Annexure XXII F_1, F_2, F_3, F_4, F_5, F_6, F_7, F_9, F_12, F_14, F_17, F_18 and F_19, respectively for the results.

6.4.5.7 Political Situation

Table 20.0 Annexure VK illustrates the stakeholder's findings on the impact of political situation on tax revenue performance in Tanzania. As can be seen in question number 1-6, Figure 35.0 for 2; 3 Figure 36.0 and 4 Figure 37.0, out of the 100 percent tax stakeholders, the respondents 49.3 percent (16.0% strongly disagreed plus 33.3% disagreed), had disagreed the stated questions while others had agreed the same. Contrarily, the respondents 72.0 percent (23.2% strongly agreed plus 48.8% agreed) and 46.3 percent (7.3% strongly agreed plus 39.0% agreed) respectively, had agreed the stated questions while others had disagreed the same questions.

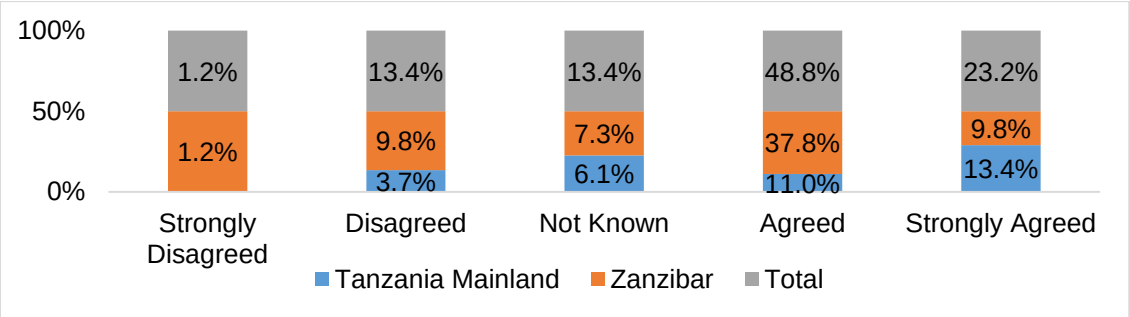
Figure 35.0: The Stakeholder's Findings on the Influence/Relationship Between Political Situation and the Tax Revenue Performance in Tanzania.



Source: SPSS Research Findings, 2018.

Specifically, the findings of question number 2 Figure 35.0 agree with the research null hypothesis H1 stating that, there is influence or relationship between the other control variables (political situation) and the tax revenue performance in Tanzania. Since, the respondents 49.3 percent (16.0% strongly disagreed plus 33.3% disagreed), had disagreed that, Tanzania's political situation does not have any significant impacts on tax revenue performance (Table 20.0, Annexure VK).

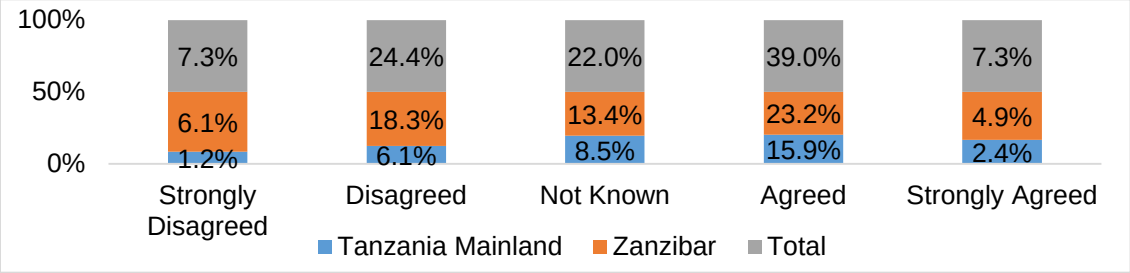
Figure 36.0: The Stakeholder's Findings on the Potentiality of Political Situation as the Determinant of the Tax Revenue Performance in Tanzania.



Source: SPSS Research Findings, 2018.

Also, the findings of question number 3 Figure 36.0 are consistency with the research specific question that, the variable is the potential determinant of the tax revenue performance in Tanzania. Hence, it is the important factor that affecting tax revenue performance in Tanzania (Table 20.0, Annexure VK).

Figure 37.0: The Stakeholder's Findings on the Impacts Between Political Situation and the Tax Revenue Performance in Tanzania.



Source: SPSS Research Findings, 2018.

Explicitly, the findings question number 4 Figure 37.0 under the Table verifies that, political situation have negative influence on tax revenue performance in Tanzania. This is evidenced by the findings of question number 5 that, there are some influences by large or medium or small taxpayers against tax revenue system in Tanzania (Table 20.0, Annexure VK).

Because of the importance of this variable, it is recommended that, the good political environment and stability are prerequisites for the country's growth, because it enhance the tax collection performance in the country. Also, Tanzania Revenue Authority and

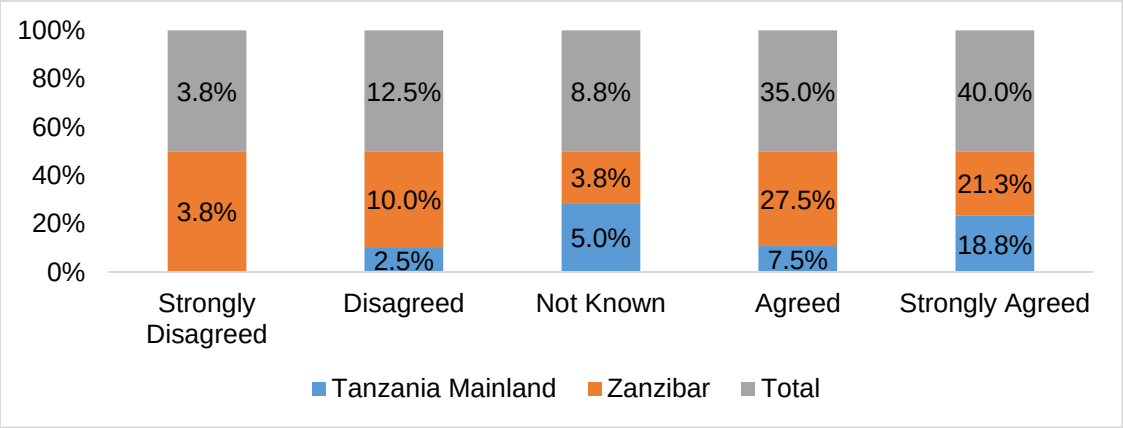
Zanzibar Revenue Board must be free from the influences by large, medium or small taxpayers against tax revenue system in Tanzania (Table 20.0, Annexure VK).

Therefore, these findings have answered the research specific question and the null hypothesis that, political situation influence performance of tax revenue in Tanzania. Therefore, the variable is the important determinant of tax revenue performance in Tanzania (Table 20.0, Annexure VK). For the questions refer Annexure II and III (pg. 16-17 & 15-16) on political situation section respectively, and Annexure XXIII G_1, G_2, G_3, G_4, G_5 and G_6, respectively for the results.

6.4.5.8 Corruption

Table 21.0 Annexure VL illustrates the stakeholder's findings on the impact of corruption on tax revenue performance in Tanzania. As can be seen in question number 1-4 and 6-7, Figures 38.0 for 2; 3 Figures 39.0 and 4 Figures 40.0, out of the 100 percent tax stakeholders, respondents 75 percent (40.0% strongly agreed plus 35.0% agreed), 76.5 percent (37.0% strongly agreed plus 39.5% agreed) and 44.7 percent (15.8% strongly agreed plus 28.9% agreed) respectively, had agreed the stated questions, while others had disagreed the same questions.

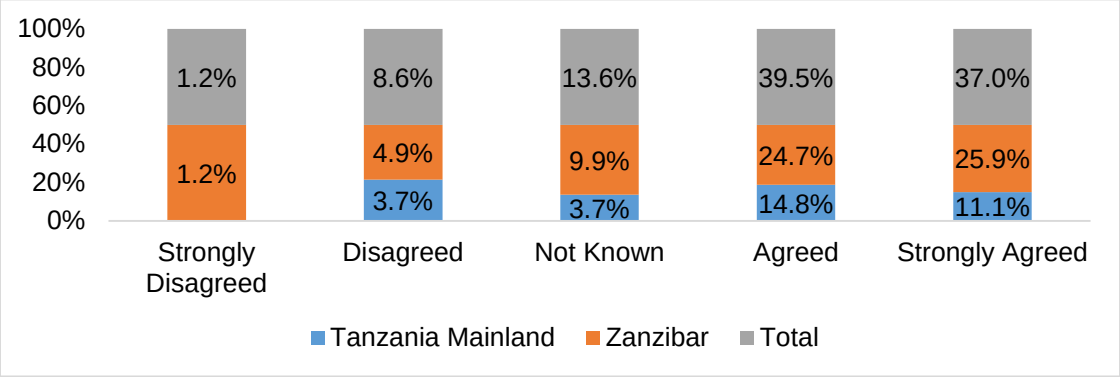
Figure 38.0: The Stakeholder's Findings on the Influence/Relationship Between Corruption and the Tax Revenue Performance in Tanzania.



Source: SPSS Research Findings, 2018.

Specifically, the findings of question number 2 Figures 38.0 agree with the research null hypothesis H1 stating that, there is influence or relationship between the other control variables (corruption) and the tax revenue performance in Tanzania.

Figure 39.0: The Stakeholder's Findings on the Potentiality of Corruption as the Determinant of the Tax Revenue Performance in Tanzania.

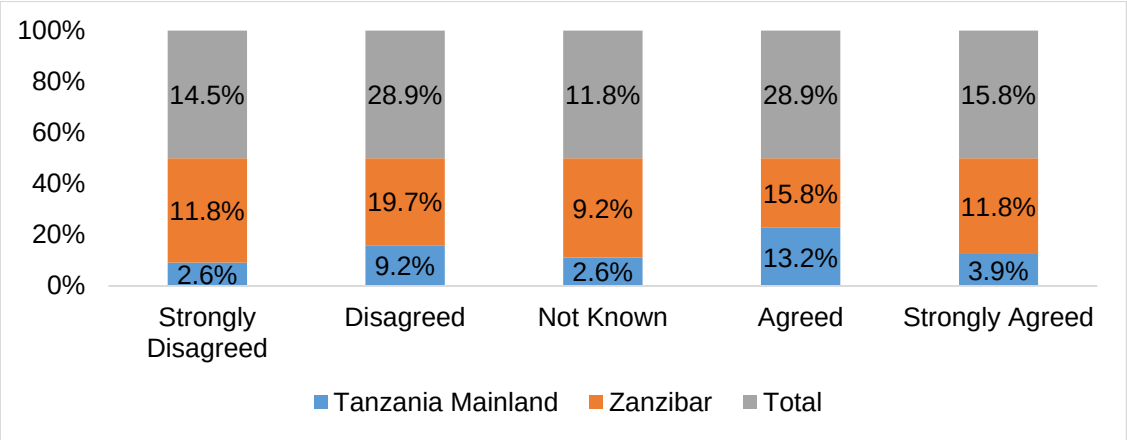


Source: SPSS Research Findings, 2018.

Likewise, the findings of question number 3 are consistency with the research specific question that, the variable is the potential determinant of the tax revenue performance in Tanzania (Table 21.0, Annexure VL). Thus, it is the major factor affecting tax revenue collections or performance in Tanzania. This is because, it has been confirmed that, some Tanzania Revenue Authority staffs have been fired from their jobs because of involving in corruption practices.[23] Finally, the findings under (Table 21.0, Annexure VL) verifies that, corruption is the major obstacle to get services in Tanzania, since respondents 75.3 percent (44.4% strongly agreed plus 30.9% agreed) agreed on the same.

[23] *Supra* note 230.

Figure 40.0: The Stakeholder's Findings on the Impacts Between Corruption and the Tax Revenue Performance in Tanzania.



Source: SPSS Research Findings, 2018.

As a result, the findings of question number 4 Figures 40.0 agree that, it has negative impacts on tax revenue performance in Tanzania. Hence, it is recommended that, in order to combat the problem, the provisions of Tanzania's Constitution and laws, must assure openness, (equity and equality) and efficiency in offering government services (question number 5, Annexure II and III (pg. 18 and 16)), respectively.

Therefore, these findings have answered the research specific question and the null hypothesis that, corruption influence performance of tax revenue in Tanzania. They indicate that, it has significant negative impact on tax revenue performance in Tanzania (Table 21.0, Annexure VL). Hence, it is the potential determinant of tax revenue performance in Tanzania. For the questions refer Annexure II and III (pg. 17-18 & 16-17) on corruption section respectively, and Annexure XXIV H_1, H_2, H_3, H_4, H_6, H_7, H_8, H_9, H_10 and H_11, respectively for the results.

6.4.6 POTENTIALITY OF OTHERS FACTORS THAT MIGHT AFFECTS THE TAX REVENUE PERFORMANCE IN TANZANIA.

Many literature under the study have outlined numbers of factors that might affect tax revenue collections on Earth. Table 22.0 Annexure VM illustrates the respondent's responses on the extent to which others factors or determinants may affect tax revenue performance in Tanzania.

It shows that, factors like laws and order, provision of public services by government, income inequality, tax exemptions, level of tax evasion and avoidance, budget rationalization, foreign debt stock, foreign debt and others are among very important determinants that affecting the tax revenue collections in Tanzania. This means that, apart from the tax rate, ratio of trade to G.D.P, population, tax base and other control variables that have analysed in this research, the factors mentioned under the (Table 22.0, Annexure VM) are also crucial in determining the tax revenue performance in Tanzania.

Example, it is revealed that, among the appropriate measures, strategies or policies that can help to overcome the challenges facing tax revenue system in Tanzania is the provision of quality goods and services to all citizens (Table 31.0, Annexure VQ).[24] For more information about the factors, refer Annexure II and III (pg. 19-21 & 17-19), respectively.

Table 23.0 Annexure VN illustrates the stakeholder's findings about the others institutions that appropriately might influence tax revenue collections or performance in Tanzania. These institutions play crucial roles in tax system of the country, for instance, either in making policies like Ministry of Finance and Planning-Tanzania; Ministry of Finance and Planning-Zanzibar; Planning Commission Tanzania, and Zanzibar Planning Commission.

Some of them are the important tax collecting agents like Airports Authority of Tanzania and Zanzibar Airports Authority, that holding 89.5% and 10.5, respectively (Table 23.0, Annexure VN). On the other hand, the Parliament of Tanzania and The Zanzibar House of Representatives are crucial in making up the laws of the land, 89.5% and 10.5%, respectively (Table 23.0, Annexure VN).

Apart from above influencing institutions, the stakeholders have also commented on the tax collecting agents, e.g. clearing and forwarding agents having influence on tax performance at 98.8 percent (66.7% Tanzania Mainland plus 32.1% Zanzibar) in

[24] *Supra* note 365.

Tanzania (Table 23.0, Annexure VN). For more information about the institutions refer Appendix II and III (pg. 21 & 19-20), respectively.

Table 24.0 Annexure VO illustrates the stakeholder's findings on some challenges that have been facing the tax revenue system in Tanzania. The findings verify that, the tax system in Tanzania is suffering from the vast challenges from which the immediate measures, policies and strategies must be taken to save the sector (Table 24.0, Annexure VO). This is because, apart from the above challenges, the stakeholders have also commented on the others challenges.

Such challenges are, frequent changes of policies without engagement with stakeholders; and inadequate uses of IT system where both constituting 100.0 percent (97.6% Tanzania Mainland plus 1.2% Zanzibar), respectively (Table 24.0, Annexure VO). In this regard, it is recommended on the following appropriate measures, strategies or policies that can help to overcome the challenges facing the tax revenue system in Tanzania (Table 31.0, Annexure VQ).

a) Imposing low rate of tax.

b) Presence of accountability and transparency after tax collection and development expenditures to the citizens.

c) Bringing quality services to all citizens.[25]

Also, the frequent changes of policies without engaging the stakeholders must be strictly avoided in the country.[26] For more information about the challenges refer Annexure II and III (pg. 22 & 20-21), respectively.

6.5 GRANGER CAUSALITY TEST

Based on the co-integration results, it can be ascertained that, the variables are co-integrated, and therefore, are causally related. This test has used to answer the null

[25] *Supra* note 365.

[26] Derived from the comments written in the questionnaire number 25 of (Z.A.T.I) stakeholder, the comment was on Section G(d) about the challenges facing tax revenue system in Tanzania, (Refer to Appendix II & III (pg. 22 & 20-21)) respectively, 2018.

hypotheses number four stating that, there is no directional causality (short-run relationship) among the level series of the variables under the study, since the paper has already shown the long-run relationship. In this regard, the test is meant to detect any short-term relationship (direction of causality) between the variables and it is applied to test whether the changes in one variable can cause the changes in another variable and vice-versa.[27] So far there is a long-run relationship between the variables, the error correction term has included in the Granger causality test for estimating a short-run relationship.[28] It is worth noting that, Granger causality test should be applied to stationary series (Sinha and Macri, 2001).[29]

The results show that, there is short-run impact between tax rate and the ratio of trade to G.D.P, this indicates that, the increase in trade to G.D.P, in short time will influence an increase in tax rate in Tanzania. Also, the results indicate that, there is short-run impact between tax base and population verifying that, the increase in population in short time will influence the increase in tax base in the country.

Table 25.0: Causality (Ratio of Total Tax Revenue Over G.D.P (TRGDP) is Dependent Variable)

Dependent variable: D (LnTRGDP): Ratio of total tax revenue over (G.D.P).

Excluded	Chi-sq	df	Prob.
D(LTAXRA)	0.004928	1	0.9440
D(LTRA)	0.805293	1	0.3695
D(LPOP)	0.156038	1	0.6928
D(LTAXBA)	2.723523	1	0.0989
All	2.928733	4	0.5698

Source: *E-View* Research Findings, 2018.

Since all probability values are greater than 0.05 (Table 25.0), it is concluded that, no short-run relationship between dependent variable the ratio of total tax revenue over

[27] *Supra* note 125.
[28] *Id.*
[29] Dipendra Sinha and Joseph Macri, *Financial development and economic growth: The case of eight Asian countries,* 54(2) MUNICH PERSONAL REPEC ARCHIVE MPRA (219-234) (2001) *available at* https://mpra.ub.uni-muenchen.de/18297/ (Last visited on January 23, 2019).

G.D.P TRGDP and independent variables: tax rate TAXRA, ratio of trade to G.D.P TRA, population POP and tax base TAXBA for the years 1992 to 2018 in Tanzania. Thus, it is recommended that, any policy that would aimed at the short-run positive impact between the same would be ineffective in Tanzania. For more information regarding the findings, refer Annexure XXV, D (LnTRGDP).

Table 26.0: Causality (Tax Rate (TAXRA) is Dependent Variable)

Dependent variable: D (LTAXRA): Tax Rate.

Excluded	Chi-sq	df	Prob.
D(LTRGDP)	0.484212	1	0.4865
D(LTRA)	8.522933	1	0.0035
D(LPOP)	1.799260	1	0.1798
D(LTAXBA)	2.505358	1	0.1135
All	9.945779	4	0.0414

Source: *E-View* Research Findings, 2018.

In this case the *p-value* (0.0035<0.05) indicates that, there is short-run relationship between dependent variable tax rate TAXRA and the ratio of trade to G.D.P TRA, and for the other variables no short-run relationship for the years 1992 to 2018 in Tanzania (Table 26.0).

Therefore, it is recommended on the policy that would have both short-run and long-run positive impact between the two, on tax revenue performance in the country, example stimulating trade to G.D.P in the country. This is because, the findings reveal that, the two variables also have long-run relationship with tax revenue performance in Tanzania (Table 10.0). For more information regarding the findings, refer Annexure XXV, D (LTAXRA).

Table 27.0: Causality (Ratio of Trade to G.D.P (TRA) is Dependent Variable).

Dependent variable: D (LTRA): Ratio of trade to GDP.

Excluded	Chi-sq	df	Prob.
D(LTRGDP)	0.182945	1	0.6689
D(LTAXRA)	3.544597	1	0.0597
D(LPOP)	0.065186	1	0.7985
D(LTAXBA)	0.156457	1	0.6924
All	3.574258	4	0.4667

Source: *E-View* Research Findings, 2018.

Since all probability values are greater than 0.05 (Table 27.0), it is concluded that, no short-run relationship between dependent variable the ratio of trade to G.D.P TRA and independent variables: the ratio of total tax revenue over G.D.P TRGDP, tax rate TAXRA, population POP and tax base TAXBA for the years 1992 to 2018 in Tanzania. Hence, the policy that would aim at the short-run positive impact between the same in Tanzania would be unproductive. For more information regarding the findings, refer Annexure XXV, D (LTRA).

Table 28.0: Causality (Population (POP) is Dependent Variable)

Dependent variable: D(LPOP): Population

Excluded	Chi-sq	df	Prob.
D(LTRGDP)	2.627159	1	0.1050
D(LTAXRA)	0.005222	1	0.9424
D(LTRA)	0.531601	1	0.4659
D(LTAXBA)	1.041462	1	0.3075
All	7.027191	4	0.1345

Source: *E-View* Research Findings, 2018.

Since all probability values are greater than 0.05 (Table 28.0), it is concluded that, no short-run relationship between dependent variable population POP and independent variables: the ratio of total tax revenue over G.D.P TRGDP, tax rate TAXRA, ratio of trade to G.D.P TRA and tax base TAXBA for the years 1992 to 2018 in Tanzania. So, any policy that would aimed at the short-run positive impact between the same would be

unsuccessful in the land. For more information regarding the findings, refer Annexure XXV, D (LPOP).

Table 29.0: Causality (Tax Base (TAXBA) is Dependent Variable)

Dependent variable: D (LTAXBA): Tax Base.

Excluded	Chi-sq	df	Prob.
D(LTRGDP)	0.060309	1	0.8060
D(LTAXRA)	0.186515	1	0.6658
D(LTRA)	0.576103	1	0.4478
D(LPOP)	4.751088	1	0.0293
All	5.851837	4	0.2105

Source: E-View Research Findings, 2018.

In this case the *p-value* (0.0293<0.05) (Table 29.0) indicates that, there is short-run relationship between dependent variable tax base TAXBA and population POP, and for the other variables no short-run relationship for the years 1992 to 2018 in Tanzania.

Hence, for the coming decades of 2020 to 2030, it is recommended on the population policy that would rise the tax collection performance in Tanzania, the policy must have both short-run and long-run positive impact on tax revenue performance in the country. For more information regarding the findings, refer Annexure XXV, D (LTAXBA).