DETERMINANTS OF TAX ADMINISTRATION EFFICIENCY: A STUDY OF BAUCHI STATE, NIGERIA.

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DETERMINANTS OF TAX ADMINISTRATION EFFICIENCY: A STUDY OF BAUCHI STATE, NIGERIA.

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Thesis submitted to Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia, In Partial Fulfillment of the Requirement for the Master of Sciences (International Accounting)

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ABSTRACT

This study examines the determinants of tax administration efficiency. Tax is a medium which countries across the globe depend upon so as to carry out the mandate of their citizens. Unfortunately, the Nigerian tax system is faced with challenges, such as loss of revenue through high level of tax defaulters from both the legislative arm of the government and public institutions, corruption and financial irregularities and limited government administrative capability. Tax, as a percentage of the Gross Domestic Product (GDP), contributes only seven percent to the Nigerian economy which is below the minimum benchmark of 15% of low income African countries. Therefore, this study examines the influence of autonomy of the State Board of Internal Revenue (SBIR), use of information and communications technology, public enlightenment, strong auditing practice, motivation and incentives and perceived corruption on tax administration efficiency in Nigeria. A mixed research design was used, and data was collected through survey and interview. A total of 124 questionnaires were collected out of 144 questionnaires that were administered. The data was analysed to answer the research questions. The study revealed that there is a significant relationship between tax administration efficiency and: autonomy of board of internal revenue, information and communications technology and public enlightenment. The study further revealed that there is no significant relationship between tax administration efficiency and strong audit practice and motivation and incentives and perceived corruption. The qualitative findings of this study indicate that reformation and restructuring of the tax system and granting of autonomy can help to boost revenue generation and administration efficiency. The qualitative findings further reveal that autonomy, public enlightenment and use of information and communications technology are some of the determinants of tax administration efficiency. Given the findings from the study, it is recommended that government should put an effective measure in place to collect taxes from tax defaulters across the different groups of the economy.

Key words: tax administration efficiency, autonomy.

ABSTRAK

Kajian ini mengkaji faktor-faktor penentu kecekapan pentadbiran cukai. Cukai adalah medium kebergantungan bagi negara-negara di seluruh dunia untuk menjalankan mandat kepada rakyat masing-masing. Malangnya, sistem cukai Nigeria berhadapan dengan cabaran, seperti kehilangan hasil melalui tahap pembayaran cukai daripada kedua-dua institusi perundangan kerajaan dan institusi awam, rasuah dan penyelewengan kewangan dan keupayaan kerajaan pentadbiran yang terhad. Cukai, sebagai peratusan daripada Keluaran Dalam Negara Kasar (KDNK), menyumbang hanya tujuh peratus kepada ekonomi Nigeria iaitu di bawah tahap minima sebanyak 15% daripada pendapatan negara-negara Afrika. Oleh itu, kajian ini meneliti pengaruh autonomi Lembaga Negeri Hasil Dalam Negeri (SBIR), penggunaan teknologi maklumat dan komunikasi, kesedaran awam, amalan pengauditan, motivasi dan insentif dan rasuah ke atas kecekapan pentadbiran cukai di Nigeria. Satu reka bentuk penyelidikan campuran telah digunakan, dan data dikumpulkan melalui kaji selidik dan temubual. Sebanyak 124 soal selidik telah dikumpul daripada 144 soal selidik yang diedar. Data telah dianalisis untuk menjawab persoalan kajian. Keputusan kajian menunjukkan terdapat hubungan yang signifikan antara kecekapan pentadbiran cukai dan autonomi lembaga hasil, teknologi maklumat dan komunikasi, kesedaran awam dan rasuah. Kajian itu juga mendedahkan bahawa terdapat hubungan yang signifikan antara kecekapan pentadbiran cukai dan amalan audit yang kukuh dan motivasi serta insentif. Penemuan kualitatif kajian juga menunjukkan bahawa reformasi dan penstrukturan semula sistem cukai dan pemberian autonomi boleh membantu meningkatkan penjanaan pendapatan dan kecekapan pentadbiran. Penemuan kajian kualitatif menunjukkan bahawa autonomi, kesedaran awam dan penggunaan teknologi maklumat dan komunikasi adalah sebahagian daripada penentu kecekapan pentadbiran cukai. Oleh itu , kajian ini mencadangkan bahawa kerajaan perlu meletakkan langkah yang berkesan untuk memungut cukai daripada pelbagai kumpulan dengan taraf ekonomi berbeza. yang

Kata kunci: kecekapan pentadbiran cukai, autonomi.

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LIST OF ABBREVIATIONS

ABIR: Autonomy of Board Internal Revenue

CITN: Chartered Institute of Taxation of Nigeria

FCT: Federal Capital Territory

HRMC: Her Revenue's Majesty and Custom

ICT: Information and Communication Technology

IRS: Internal Revenue Services

KMO: Kaiser-Meyer-Olkin

MAI: Motivation and Incentives

NGO: Non-Governmental Organization

NTP: National Tax Policy

OECD: Organization for Economic Co-operation and Development

OLS: Ordinary Least Square

PAYE: Pay As You Earn

PE: Public Enlightenment

PC: Perceive Corruption

SAP: Strong Audit Practice

SBIR: State Board of Internal Revenue

SPSS: Statistical Package for Social Sciences

TAE: Tax Administration Efficiency

VAT: Value Added Tax

WHT: Withholding Tax

CHAPTER ONE

INTRODUCTION OF THE STUDY

1.1 Introduction

This chapter provides an overview of the study and a summary of some of the key research outcomes. The chapter begins with the background of the study, problem statement, research objectives and research questions, significance and scope of the study. The chapter also provides the foundation for the next chapter.

1.2 Background of the Study

The primary obligation of a government is to ensure well-being of the citizens through development of the country. To achieve this, many governments across the globe face challenges, one of which is revenue generation. According to Thomas (2012), estimated global tax evasion is over USD3 trillion annually. Her Majesty's Revenue and Customs (2012) report on tax evasion shows that defaulters in the United Kingdom (UK), including those operating in the 'underground' economy and those who undertake criminal attacks on the tax system, denied the public purse an estimated £14 billion in 2010 - 2011. Edgar and Feige (2009) found that over USD2 trillion has been estimated to be lost from unreported income in the last decade in the United States (US), mostly by small businesses and employees, resulting in a tax gap ranging from USD430 to USD475 billion per year. He further stated that 18 - 19% of total reportable income is not properly reported to the Internal Revenue Service, and has been an issue of serious concern to the US authorities.

The contents of the thesis is for internal user only

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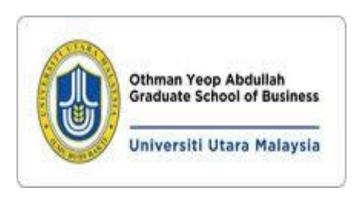
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APPENDIX 1: QUESTIONNAIRE



A SURVEY ON THE DETERMINANT OF TAX ADMINISTRATION EFFICIENCY: A STUDY OF BAUCHI STATE INTERNAL REVENUE

Dear respondents,

I am a Masters (International Accounting) student of School of Accountancy, Universiti Utara Malaysia. I am currently conducting a research on the topic: Determinant of Tax Administration Efficiency: A study of Bauchi State Internal Revenue. I hereby solicit for your opinion through the medium of questionnaire.

This questionnaire is purely for academic research purpose. Any information provided will be strictly treated confidentially and will be used for the purpose which it was meant for. As such your identity is not required.

Thank you so much in anticipating your cooperation and assistance.

Yours Sincerely,

Shamsudeen Ladan Shagari

+60149078349

shagareez@gmail.com

Please indicate the extent to which you agree or disagree to each of the statement below, use the scale below to indicate your answer.

1- Strongly disagree (SD) 2- Disagree (D) 3- Not sure (NS) 4- Agree (A) 5- Strongly Agree (SA)

| <u>(D71)</u> | | | | | | |
|--------------|--|----|---|----|---|----|
| | | SD | D | NS | A | SA |
| 1. | In my view our tax system has an efficient collection process | 1 | 2 | 3 | 4 | 5 |
| 2. | Income generated from tax revenue by my organization has been impressive due to efficient tax administration | 1 | 2 | 3 | 4 | 5 |
| 3. | My organization has adequate infrastructures for efficient tax administration | 1 | 2 | 3 | 4 | 5 |
| 4. | My organization has well-trained staff for efficient tax administration | 1 | 2 | 3 | 4 | 5 |
| 5. | In my opinion our tax administrative structure lack autonomy | 1 | 2 | 3 | 4 | 5 |
| 6. | Politicians interferes too much with the activities of Board of Internal Revenue | 1 | 2 | 3 | 4 | 5 |
| 7. | The Board of Internal Revenue has autonomy in recruitment and dismissal of staff | 1 | 2 | 3 | 4 | 5 |
| 8. | The Board of Internal Revenue has autonomy in budget preparation and implementation | 1 | 2 | 3 | 4 | 5 |
| 9. | The Board of Internal Revenue takes most of the decisions itself after consulting the Ministry of Finance | 1 | 2 | 3 | 4 | 5 |
| 10. | The Board of Internal Revenue has the autonomy to recruit and dismiss staff | 1 | 2 | 3 | 4 | 5 |
| 11. | The Board provides me with useful ICT trainings in the daily working procedures | 1 | 2 | 3 | 4 | 5 |
| 12. | The Board provides online facility in my desk | 1 | 2 | 3 | 4 | 5 |
| 13. | The Board regularly maintained our ICT infrastructures (digital devices, internet facility) | 1 | 2 | 3 | 4 | 5 |
| 14. | The Board ensure that our organizational website is well maintained and updated | 1 | 2 | 3 | 4 | 5 |
| 15. | The board employs strong tax audit to achieved Targeted Revenue | 1 | 2 | 3 | 4 | 5 |

| 16. | The Board employs strong tax audit to solve the problems of tax evasion, avoidance and other irregularities | 1 | 2 | 3 | 4 | 5 |
|-----|--|---|---|---|---|---|
| 17. | The Board employs strong tax audit to ensure the submission of accurate and current returns | 1 | 2 | 3 | 4 | 5 |
| 18. | The Board creates awareness of strong tax audit to makes the taxpayers render a satisfactory returns | 1 | 2 | 3 | 4 | 5 |
| 19. | Public enlightenment campaign on utilisation of tax revenue by Board of Internal Revenue will encourage tax payment | 1 | 2 | 3 | 4 | 5 |
| 20. | Issuance of tax payment notice in reasonable time by Board of Internal Revenue will encourage tax payment | 1 | 2 | 3 | 4 | 5 |
| 21. | Public enlightenment by Board of Internal Revenue will make people in the informal sector pay their tax regularly | 1 | 2 | 3 | 4 | 5 |
| 22. | Public enlightenment campaign by Board of Internal Revenue on sanctions and penalty for noncompliance will encourage tax payments | 1 | 2 | 3 | 4 | 5 |
| 23. | I have been motivated by my organization to put my best effort in my job done | 1 | 2 | 3 | 4 | 5 |
| 24. | I have been remunerated for staying beyond the working hours to finish my daily routine task | 1 | 2 | 3 | 4 | 5 |
| 25. | Employees in my organization work as hard as employees in other organization with similar remuneration | 1 | 2 | 3 | 4 | 5 |
| 26. | I have been motivated by my organization to do extra work for my job that isn't normally expected for me | 1 | 2 | 3 | 4 | 5 |
| 27. | Time seems to drag while I am on the job | 1 | 2 | 3 | 4 | 5 |
| 28. | Board of Internal Revenue explicitly disallow tax deductions for bribes to public officials | 1 | 2 | 3 | 4 | 5 |
| 29. | Board of Internal Revenue raises awareness among taxpayers that bribes are not deductible | 1 | 2 | 3 | 4 | 5 |
| 30. | Board of Internal Revenue Staff are authorised to report suspicious of corruption by taxpayers to the appropriate law enforcement authority | 1 | 2 | 3 | 4 | 5 |
| 31. | Board of Internal Revenue uses tax information sharing agreements with other States Board of Internal Revenue to obtain and provide information to determine whether a | 1 | 2 | 3 | 4 | 5 |

deducted payment constitutes a bribe.

DEMOGRAHIC BACKGROUND

Instruction: please tick (\checkmark) in the correct response where appropriate.

| 1. | Age [group] |
|----|--|
| | [] 20 – 30 |
| | [] 31 – 40 |
| | []41-50 |
| | []51-60 |
| _ | [] Above 60 years |
| 2. | Gender |
| | [] Male |
| 2 | [] Female |
| 3. | Educational background |
| | [] Secondary School Certificate |
| | [] Diploma Certificate |
| | [] Degree B.sc/Higher National Diploma (HND) |
| | [] Master degree/Ph. D |
| 4. | Position |
| | [] Top Management |
| | [] Middle Management |
| | [] Supporting Management |
| 5. | Marital Status |
| | [] Married |
| | [] Single |
| | [] Divorce |
| 6. | Religion |
| | [] Islam |
| | [] Christian |
| | [] Others |

THANK YOU FOR YOUR COOPERATION

APPEDIX 2: Measurement of Variable

Table 3.2: Measurement of Variable Tax Administration Efficiency

| Name of Variable | Measurement Item | Sources |
|-------------------------------------|--|-----------------------------|
| Tax Administration Efficiency | Tax administration system in Nigeria is complex | Abiola and Asiweh (2012) |
| | Income tax structure is equitable | Abiola and Asiweh (2012) |
| | Tax system has an inefficient tax collection process | Abiola and Asiweh (2012) |
| | Nigeria tax System is progressive in nature | Abiola and Asiweh (2012) |

Table 3.3: Measurement of Variable Autonomy of Tax Authority

| Name of Variable | Measurement Item | Sources |
|------------------------------|---|--------------------------------|
| Autonomy of Tax authority | Tax Administrative structure in Nigeria lack Autonomy | Abiola and Asiweh (2012) |
| | Politicians interferes much with the Nigerian tax system | Abiola and Asiweh (2012) |
| | Tax authority has autonomy in recruitment and dismissal of staff | EU (2007) |
| | Tax authority has autonomy in budget preparation and implementation | EU (2007) |
| | Tax authority takes most of the decisions itself after consulting the ministry of finance | Verscheure (2007) |

Table 3.4: Measurement of Variable Use of ICT

| Name of Variable | Measurement Item | Sources |
|---------------------|--|---------------------|
| Use of ICT | Usefulness of ICT trainings in the daily working procedures of my organization | Upadhyaya (2011) |
| | Having online facility in my desk | Upadhyaya (2011) |
| | ICT infrastructures (digital devices, internet facility) are regularly maintained in my organization | Upadhyaya (2011) |
| | To what extent, do you agree that the website of your organization is well maintained and updated | Upadhyaya (2011) |
| | | |

Table 3.5: Measurement of Variable Strong Audit Practice

| Name of Variable | Measurement Item | Sources |
|--------------------------|--|------------------|
| Strong Audit Practice | Tax audit is employed by Relevant Tax Authority (RTA) to achieved Target Revenue | Badara (2012) |
| | Tax audit solves the problems of tax evasion, avoidance and other irregularities | Badara (2012) |
| | Tax audit ensures the submission of accurate and current returns | Badara (2012) |
| | The awareness of tax audit makes the tax payers to render a satisfactory returns | Badara (2012) |

<u>Table 3.6: Measurement of Variable Public Enlightenment</u>

| Name of Variable | Measurement Item | Sources |
|-------------------------|---|--------------------------------|
| Public Enlightenment | Public enlightenment on utilisation of tax revenue will encourage tax payment | Abiola and Asiweh (2012) |
| | Tax authority issues tax payment notice in reasonable time | Abiola and Asiweh (2012) |
| | Public enlightenment make people in the informal sector pay their tax regularly | Abiola and Asiweh (2012) |
| | Tax authority makes people aware about sanctions and penalty for noncompliance | Badara (2012) |

Table 3.7: Measurement of variable Motivation and Incentives

| Name of Variable | Measurement Item | Sources |
|-----------------------------------|--|---------------|
| Staff remuneration and motivation | I have been motivated by my organization to put my best effort my job done | Wright (2004) |
| | I have been remunerated for staying beyond the working hours to finish in my daily routine task | Wright (2004) |
| | Employees in my organization work as hard as employees in other organization with similar remuneration | Wright (2004) |
| | I have been motivated by my organization to do extra work for my job that isn't normally expected for me | Wright (2004) |
| | Time seems to drag while I am on the job | Wright (2004) |

Table 3.8: Measurement of Variable Perceive Corruption

| Name of Variable | Measurement Item | Sources |
|------------------------|--|----------------|
| Perceive Corruption | Tax systems explicitly disallow tax deductions for bribes to public officials | OECD (2012) |
| | Tax administrations raise awareness among taxpayers that bribes are not deductible | OECD (2012) |
| | Are tax authorities authorised to report suspicions of corruption to the appropriate law enforcement authorities | OECD (2012) |
| | Tax authorities use tax information sharing agreements with other States to obtain and provide information to determine whether a deducted payment constitutes a bribe | OECD (2012) |

APPENDIX 3: DESCRIPTIVE ANALYSIS

<u>Summary of Descriptive Statistics of Variables</u>

| Code | Items | Min | Max | Mean | SD | SA | NS | SD |
|-------|--|-----|-----|------|------|-------------|-------------|-------------|
| TAE1 | Tax system has an efficient | 1 | 5 | 4.21 | 0.92 | 105 | 4 | 8 |
| | collection process | | | | | (90%) | (3%) | (7%) |
| TAE2 | Tax revenue by my organization has been impressive due to efficient tax administration | 1 | 5 | 3.93 | 0.72 | 91 (78%) | 23 (20%) | 3 (2%) |
| TAE3 | Organization has adequate infrastructures for efficient tax administration | 1 | 5 | 3.81 | 0.84 | 89 (76%) | 15 (13%) | 13 (11%) |
| TAE4 | Organization has well- trained staff for efficient tax administration | 1 | 5 | 4.14 | 0.81 | 99 (85%) | 14 (12%) | 4 (3%) |
| ABIR1 | our tax administrative structure lack autonomy | 1 | 5 | 2.99 | 1.18 | 47 (40%) | 21 (18%) | 49 (42%) |
| ABIR3 | Board of Internal Revenue has autonomy in recruitment and dismissal of staff | 2 | 5 | 4.01 | 0.86 | 85 (73%) | 4 (3%) | 28 (24%) |
| ABIR4 | Board of Internal Revenue has autonomy in budget preparation and implementation | 2 | 5 | 3.74 | 0.76 | 71 (61%) | 4 (3%) | 42 (36%) |
| ABIR6 | Board of Internal Revenue has the autonomy to recruit and dismiss staff | 1 | 5 | 3.89 | 1.02 | 78 (67%) | 23 (21%) | 14 (12%) |
| ICT 1 | The Board provides me with useful ICT trainings in the daily working procedures | 2 | 5 | 3.96 | 0.68 | 88 (75%) | 2 (2%) | 27 (23%) |
| ICT 2 | The Board provides online facility in my desk | 1 | 5 | 3.90 | 0.84 | 82 (70%) | 23 (20%) | 7 (6%) |
| ICT 3 | The Board regularly maintained our ICT infrastructures (digital | 2 | 5 | 4.12 | 0.69 | 37 (32%) | 60 (52%) | 20 (17%) |

| | devices, internet facility) | | | | | | | |
|-------|---|---|---|------|------|--------------|-------------|--------|
| ICT 4 | The Board ensure that our organizational website is well maintained and updated | 1 | 5 | 4.10 | 0.66 | 104 (89%) | 11 (10%) | 2 (1%) |
| SAP1 | The board employs strong tax audit to achieved Targeted Revenue | 1 | 5 | 4.30 | 0.77 | 106 (91%) | 8 (7%) | 3 (3%) |
| SAP2 | The Board employs strong tax audit to solve the problems of tax evasion, avoidance and other irregularities | 2 | 5 | 4.24 | 0.59 | (35%) | 70 (60%) | 6 (5%) |
| SAP3 | The Board employs strong tax audit to ensure the submission of accurate and current returns | 2 | 5 | 4.17 | 0.55 | 109 (93%) | 7 (6%) | 1 (1%) |
| SAP4 | The Board creates awareness of strong tax audit to makes the taxpayers render a satisfactory returns | 2 | 5 | 4.19 | 0.65 | 107 (91%) | 7 (6%) | 3 (3) |
| PE 1 | Public enlightenment by Board of Internal Revenue will make people in the informal sector pay their tax regularly | 2 | 5 | 4.42 | 0.64 | 111 (95%) | 4 (3%) | 2 (2%) |
| PE 2 | Issuance of tax payment notice in reasonable time by Board of Internal Revenue will encourage tax payment | 1 | 5 | 4.10 | 0.78 | 105 (90%) | 7 (6%) | 5 (4%) |
| PE 3 | Public enlightenment by Board of Internal Revenue will make people in the informal sector pay their tax regularly | 3 | 5 | 4.00 | 0.60 | 92 (79%) | 25 (21%) | 0 |
| PE 4 | Public enlightenment campaign by Board of Internal Revenue on sanctions and penalty for noncompliance will encourage tax payments | 2 | 5 | 3.87 | 0.66 | 87 (74%) | 28 (24%) | 2 (2%) |

| MAI1 | I have been motivated by my | 1 | 5 | 3.77 | 1.08 | 80 | 15 | 22 |
|------|--|---|---|------|------|-------------|----------|----------|
| | organization to put my best effort in my job done | 1 | | 3.77 | 1.00 | (68%) | (13%) | (19%) |
| MAI2 | I have been remunerated for staying beyond the working hours to finish my daily routine task | 1 | 5 | 3.51 | 0.95 | 73 (62%) | 20 (17%) | 24 (21%) |
| PC 1 | Board of Internal Revenue explicitly disallow tax deductions for bribes to public officials | 1 | 5 | 3.89 | 0.78 | 85 (73%) | 28 (24%) | 4 (3%) |
| PC 2 | Board of Internal Revenue raises awareness among taxpayers that bribes are not deductible | 2 | 5 | 3.84 | 0.78 | 87 (74%) | 21 (18%) | 9 (8%) |
| PC 3 | Board of Internal Revenue Staff are authorised to report suspicious of corruption by taxpayers to the appropriate law enforcement authority | 3 | 5 | 4.09 | 0.46 | 109 (93%) | 8 (7%) | 0 |
| PC 4 | Board of Internal Revenue uses tax information sharing agreements with other States Board of Internal Revenue to obtain and provide information to determine whether a deducted payment constitutes a bribe. | 3 | 5 | 3.92 | 0.52 | 86 (74%) | 31 (26%) | 0 |
| | | | | | | | | |

APPENDIX 4: RELIABILITY ANALYSIS

Tax Administration Efficiency

Reliability Statistics

| | Cronbach's Alpha Based | | | | | | |
|------------|---------------------------|-------|----|--|--|--|--|
| | on | | | | | | |
| Cronbach's | Standardized | N | of | | | | |
| Alpha | Items | Items | | | | | |
| .597 | .599 | 4 | | | | | |

Item-Total Statistics

| | | | | | | Cronbach's |
|-------------------|--------------|------------|--------------|-------------|-------------|------------|
| | | Scale Mean | Scale | Corrected | Squared | Alpha if |
| | | if Item | Variance if | Item-Total | Multiple | Item |
| | | Deleted | Item Deleted | Correlation | Correlation | Deleted |
| TAX | ADMIN | 11.88 | 3.017 | .356 | .135 | .547 |
| EFFICIENCY | 1 | | | | | |
| TAX | ADMIN | 12.17 | 3.542 | .348 | .124 | .549 |
| EFFICIENCY | 2 | | | | | |
| TAX | ADMIN | 12.28 | 3.121 | .397 | .180 | .510 |
| EFFICIENCY | 3 | | | | | |
| TAX | ADMIN | 11.96 | 3.144 | .417 | .190 | .495 |
| EFFICIENCY | 4 | | | | | |

Autonomy of Board of Internal Revenue

| - | Cronbach's | | |
|------------|--------------|-------|----|
| | Alpha Based | | |
| | on | | |
| Cronbach's | Standardized | N | of |
| Alpha | Items | Items | |
| .715 | .718 | 4 | |

| | | | | | Cronbach's |
|-------------|------------|--------------|-------------|-------------|------------|
| | Scale Mean | | Corrected | Squared | Alpha if |
| | if Item | Variance if | Item-Total | Multiple | Item |
| | Deleted | Item Deleted | Correlation | Correlation | Deleted |
| AUTONOMY OF | 11.64 | 3.884 | .611 | .384 | .584 |
| BOARD OF | | | | | |
| INTERNAL | | | | | |
| REVENUE 1 | | | | | |
| AUTONOMY OF | 10.61 | 5.372 | .507 | .269 | .653 |
| BOARD OF | | | | | |
| INTERNAL | | | | | |
| REVENUE 3 | | | | | |
| AUTONOMY OF | 10.89 | 5.919 | .440 | .247 | .691 |
| BOARD OF | | | | | |
| INTERNAL | | | | | |
| REVENUE 4 | | | | | |
| AUTONOMY OF | 10.74 | 4.872 | .491 | .292 | .661 |
| BOARD OF | | | | | |
| INTERNAL | | | | | |
| REVENUE 6 | | | | | |

Information and Communication Technology

| | Cronbach's Alpha Based | | | | | |
|------------|---------------------------|-------|----|--|--|--|
| | on | | | | | |
| Cronbach's | Standardized | N | of | | | |
| Alpha | Items | Items | | | | |
| .745 | .753 | 4 | | | | |

| | | | | | | Cronbach's |
|-----------------|---------|------|--------------|-------------|-------------|------------|
| | Scale | Mean | Scale | Corrected | Squared | Alpha if |
| | if | Item | Variance if | Item-Total | Multiple | Item |
| | Deletec | l | Item Deleted | Correlation | Correlation | Deleted |
| INFORMATION AND | 12.12 | | 3.122 | .482 | .417 | .717 |
| COMMUNICATION | | | | | | |
| TECHNOLOGY 1 | | | | | | |
| INFORMATION AND | 12.19 | | 2.688 | .491 | .443 | .726 |
| COMMUNICATION | | | | | | |
| TECHNOLOGY 2 | | | | | | |
| INFORMATION AND | 11.97 | | 2.896 | .576 | .478 | .667 |
| COMMUNICATION | | | | | | |
| TECHNOLOGY 3 | | | | | | |
| INFORMATION AND | 11.98 | | 2.881 | .636 | .507 | .638 |
| COMMUNICATION | | | | | | |
| TECHNOLOGY 4 | | | | | | |

Strong Audit Practice

| Tremusinty Statistics | | | | | | | |
|-----------------------|---------------------------|-------|----|--|--|--|--|
| | Cronbach's Alpha Based | | | | | | |
| | on | | | | | | |
| Cronbach's | Standardized | N | of | | | | |
| Alpha | Items | Items | | | | | |
| .734 | .751 | 4 | | | | | |

| | | Scale Mean if Item Deleted | | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|----------------------|--------|----------------------------|--------|----------------------------------|------------------------------------|---|
| STRONG | AUDIT | 12.60 | 2.185 | .423 | .209 | .755 |
| PRACTICE 1 STRONG | AUDIT | 12 66 | 2.346 | .593 | .353 | .640 |
| PRACTICE 2 | повп | 12.00 | 2.5 10 | .575 | .555 | .010 |
| STRONG | AUDIT | 12.73 | 2.422 | .601 | .409 | .642 |
| PRACTICE 3 STRONG | AUDIT | 12.71 | 2.276 | .538 | .381 | .667 |
| PRACTICE 4 | 110011 | 121,1 | 2.270 | | | .007 |

Public Enlightenment

Reliability Statistics

| 2102200022200 | | | |
|---------------|---------------------------|-------|----|
| | Cronbach's Alpha Based | | |
| | on | | |
| Cronbach's | Standardized | N | of |
| Alpha | Items | Items | |
| .632 | .629 | 4 | |

Item-Total Statistics

| | | | | | Cronbach's |
|-----------------|------------|--------------|-------------|-------------|------------|
| | Scale Mean | Scale | Corrected | Squared | Alpha if |
| | if Item | Variance if | Item-Total | Multiple | Item |
| | Deleted | Item Deleted | Correlation | Correlation | Deleted |
| PUBLIC | 11.96 | 2.379 | .351 | .225 | .603 |
| ENLIGHTENMENT 1 | | | | | |
| PUBLIC | 12.29 | 1.813 | .497 | .308 | .494 |
| ENLIGHTENMENT 2 | | | | | |
| PUBLIC | 12.38 | 2.441 | .364 | .231 | .594 |
| ENLIGHTENMENT 3 | | | | | |
| PUBLIC | 12.51 | 2.180 | .443 | .293 | .539 |
| ENLIGHTENMENT 4 | | | | | |

Motivation and Incentives

Reliability Statistics

| Tenasing statistics | | | | | | | |
|---------------------|---------------------------|-------|----|--|--|--|--|
| | Cronbach's Alpha Based | | · | | | | |
| | on | | | | | | |
| Cronbach's | Standardized | N | of | | | | |
| Alpha | Items | Items | | | | | |
| .541 | .544 | 2 | | | | | |

Item-Total Statistics

| | Scale Mean if Item Deleted | | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|----------------------------|---------------|----------------------------------|------------------------------------|---|
| MOTIVATION AND INCENTIVES 1 MOTIVATION AND INCENTIVES 2 | | .920 1.173 | .373 | .139 | a a |

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Perceive Corruption

| | Cronbach's Alpha Based on | | |
|------------|---------------------------------|-------|----|
| Cronbach's | Standardized | N | of |
| Alpha | Items | Items | |
| .658 | .654 | 4 | |

| | | | | | Cronbach's |
|--------------|------------|--------------|-------------|-------------|------------|
| | Scale Mean | Scale | Corrected | Squared | Alpha if |
| | if Item | Variance if | Item-Total | Multiple | Item |
| | Deleted | Item Deleted | Correlation | Correlation | Deleted |
| PERCEIVE | 11.84 | 1.691 | .536 | .380 | .518 |
| CORRUPTION 1 | | | | | |
| PERCEIVE | 11.90 | 1.574 | .611 | .400 | .448 |
| CORRUPTION 2 | | | | | |
| PERCEIVE | 11.65 | 2.355 | .580 | .358 | .540 |
| CORRUPTION 3 | | | | | |
| PERCEIVE | 11.81 | 2.906 | .126 | .035 | .750 |
| CORRUPTION 4 | | | | | |

APPENDIX 5: FACTOR LOADING ANALYSIS

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin | n Measure | of | Sampling | .634 |
|--------------------|------------|-----|----------|----------|
| Adequacy. | | | | |
| Bartlett's Test | of Approx. | Chi | -Square | 1529.159 |
| Sphericity | Df | | | 325 |
| | Sig. | | | .000 |

Total Variance Explained

| Compone | | | | Extrac | tion Sums | of Squared | | | |
|-----------------|---------|-----------|------------|---------|-----------|------------|------------|-------------|--------------|
| nt | Initial | Eigenvalu | es | Loadir | <u> </u> | | Rotation S | ums of Squa | red Loadings |
| | | % of | | | % of | | | | |
| | | Varianc | Cumulative | | Varianc | Cumulative | | % of | |
| | Total | e | % | Total | e | % | Total | Variance | Cumulative % |
| 1 | | 19.414 | 19.414 | 5.048 | | 19.414 | 3.106 | 11.945 | 11.945 |
| 2 | | 12.384 | 31.798 | 3.220 | | 31.798 | 2.693 | 10.357 | 22.302 |
| 3 | | 10.235 | 42.032 | 2.661 | 10.235 | 42.032 | 2.685 | 10.327 | 32.629 |
| 4 | | 7.836 | 49.868 | 2.037 | 7.836 | 49.868 | 2.496 | 9.601 | 42.230 |
| 5 | | 6.851 | 56.720 | 1.781 | 6.851 | 56.720 | 2.334 | 8.976 | 51.206 |
| 6 | | 5.631 | 62.350 | | 5.631 | 62.350 | 2.138 | 8.222 | 59.428 |
| 7 | | 4.933 | 67.283 | | 4.933 | 67.283 | 1.638 | 6.302 | 65.730 |
| 8 | 1.231 | 4.734 | 72.017 | 1.231 | 4.734 | 72.017 | 1.635 | 6.288 | 72.017 |
| 9 | .922 | 3.546 | 75.563 | | | | | | |
| i 10 i 11 | .892 | 3.430 | 78.993 | | | | | | |
| 111 | .804 | 3.091 | 82.083 | | | | | | |
| <u>,</u> 12 | .688 | 2.647 | 84.730 | | | | | | |
| 113 | .563 | 2.167 | 86.897 | | | | | | |
| £14 | .529 | 2.036 | 88.933 | | | | | | |
| ⁱ 15 | .447 | 1.718 | 90.651 | | | | | | |
| ⁽ 16 | .374 | 1.437 | 92.088 | | | | | | |
| 117 | .323 | 1.244 | 93.331 | | | | | | |
| 18 | .313 | 1.205 | 94.536 | | | | | | |
| 19 | .268 | 1.032 | 95.568 | | | | | | |
| 20 | .226 | .867 | 96.436 | | | | | | |
| 21 | .219 | .842 | 97.277 | | | | | | |
| 22 | .183 | .705 | 97.983 | | | | | | |
| 23 | .152 | .585 | 98.568 | | | | | | |
| 24 | .138 | .529 | 99.097 | | | | | | |
| 25 | .122 | .471 | 99.568 | | | | | | |
| 26 | .112 | .432 | 100.000 | | | | | | |

Total Variance Explained

| Com | pone | | | | Extrac | tion Sums | of Squared | | | |
|-------------|------|---------|-----------|------------|--------|-----------|------------|------------|-------------|--------------|
| nt | | Initial | Eigenvalu | es | Loadir | | | Rotation S | ums of Squa | red Loadings |
| | | | % of | | | % of | | | | |
| | | | Varianc | Cumulative | | Varianc | Cumulative | | % of | |
| - | | Total | e | % | Total | e | % | Total | Variance | Cumulative % |
| 1 | | | 19.414 | 19.414 | 5.048 | 19.414 | 19.414 | 3.106 | 11.945 | 11.945 |
| 2 | | | 12.384 | 31.798 | 3.220 | 12.384 | 31.798 | 2.693 | 10.357 | 22.302 |
| 3 | | 2.661 | | 42.032 | 2.661 | 10.235 | 42.032 | 2.685 | 10.327 | 32.629 |
| 4 | | 2.037 | | 49.868 | 2.037 | 7.836 | 49.868 | 2.496 | 9.601 | 42.230 |
| 5 | | 1.781 | | 56.720 | 1.781 | 6.851 | 56.720 | 2.334 | 8.976 | 51.206 |
| 6 | | | 5.631 | 62.350 | 1.464 | 5.631 | 62.350 | 2.138 | 8.222 | 59.428 |
| 7 | | 1.283 | 4.933 | 67.283 | 1.283 | 4.933 | 67.283 | 1.638 | 6.302 | 65.730 |
| 8 | | 1.231 | 4.734 | 72.017 | 1.231 | 4.734 | 72.017 | 1.635 | 6.288 | 72.017 |
| 9 | | .922 | 3.546 | 75.563 | | | | | | |
| i 10 | | .892 | 3.430 | 78.993 | | | | | | |
| 111 | | .804 | 3.091 | 82.083 | | | | | | |
| , 12 | | .688 | 2.647 | 84.730 | | | | | | |
| 113 | | .563 | 2.167 | 86.897 | | | | | | |
| ٤14 | | .529 | 2.036 | 88.933 | | | | | | |
| i 15 | | .447 | 1.718 | 90.651 | | | | | | |
| 16 | | .374 | 1.437 | 92.088 | | | | | | |
| 117 | | .323 | 1.244 | 93.331 | | | | | | |
| 18 | | .313 | 1.205 | 94.536 | | | | | | |
| 19 | | .268 | 1.032 | 95.568 | | | | | | |
| 20 | | .226 | .867 | 96.436 | | | | | | |
| 21 | | .219 | .842 | 97.277 | | | | | | |
| 22 | | .183 | .705 | 97.983 | | | | | | |
| 23 | | .152 | .585 | 98.568 | | | | | | |
| 24 | | .138 | .529 | 99.097 | | | | | | |
| 25 | | .122 | .471 | 99.568 | | | | | | |
| 26 | | .112 | .432 | 100.000 | | | | | | |

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

| Rotated Component M | Compone | ent | | | | | | |
|-----------------------------|---------|-------|------|------|------|---|---|------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| STRONG AUDIT | .829 | _ | | | | | | |
| PRACTICE 3 | .027 | | | | | | | |
| STRONG AUDIT | .772 | | | | | | | |
| PRACTICE 4 | .,,2 | | | | | | | |
| PUBLIC 4 | .677 | | | | | | | |
| ENLIGHTENMENT 1 | .077 | | | | | | | |
| STRONG AUDIT | .640 | | | | | | | |
| PRACTICE 2 | .070 | | | | | | | |
| INFORMATION AND | .533 | .434 | | | | | | |
| COMMUNICATION | .555 | T.TJT | | | | | | |
| TECHNOLOGY 1 | | | | | | | | |
| INFORMATION AND | .532 | .478 | | | | | | |
| COMMUNICATION | .552 | .4/0 | | | | | | |
| TECHNOLOGY 3 | | | | | | | | |
| INFORMATION AND | | .803 | | | | | | |
| COMMUNICATION AND | | .003 | | | | | | |
| TECHNOLOGY 4 | | | | | | | | |
| INFORMATION AND | | .792 | | | | | | |
| COMMUNICATION AND | | 1.174 | | | | | | |
| TECHNOLOGY 2 | | | | | | | | |
| | | .688 | | | | | | |
| TAX ADMIN | | .000 | | | | | | |
| EFFICIENCY 4 AUTONOMY OF | | | .866 | | | | | |
| | | | .000 | | | | | |
| BOARD OF INTERNAL | | | | | | | | |
| | | | | | | | | |
| REVENUE 1 | | | 677 | | | | | |
| AUTONOMY OF | | | .677 | | | | | |
| BOARD OF | | | | | | | | |
| INTERNAL DEVENUE 2 | | | | | | | | |
| REVENUE 3 | | | (41 | | | | | |
| AUTONOMY OF | | | .641 | | | | | |
| BOARD OF | | | | | | | | |
| INTERNAL DEVENUE 4 | | | | | | | | |
| REVENUE 4 | | | 501 | | | | | |
| AUTONOMY OF | | | .591 | | | | | |
| BOARD OF | | | | | | | | |
| INTERNAL | | | | | | | | |
| REVENUE 6 | | | | 750 | | | | |
| PUBLIC | | | | .750 | | | | |
| ENLIGHTENMENT 2 | | | | 717 | | | | |
| STRONG AUDIT | | | | .717 | | | | |
| PRACTICE 1 | | | | 606 | | | | 4.61 |
| TAX ADMIN | | | | .606 | | | | .461 |
| EFFICIENCY 1 | | | | | 000 | | | |
| PERCEIVE | | | | | .800 | | | |
| CORRUPTION 3 | | | | | 7.00 | | | |
| PERCEIVE | | | | | .760 | | | |
| CORRUPTION 2 | | | | | | | | l |

| PERCEIVE | | 1 | .713 | | | |
|-----------------|------|---|------|------|------|------|
| CORRUPTION 1 | | | | | | |
| PUBLIC | | | | .886 | | |
| ENLIGHTENMENT 3 | | | | | | |
| PUBLIC | | | | .721 | | |
| ENLIGHTENMENT 4 | | | | | | |
| MOTIVATION AND | | | | | .858 | |
| INCENTIVES 2 | | | | | | |
| MOTIVATION AND | | | | | .512 | |
| INCENTIVES 1 | | | | | | |
| PERCEIVE | | | | | | .715 |
| CORRUPTION 4 | | | | | | |
| TAX ADMIN | | | | | | .601 |
| EFFICIENCY 3 | | | | | | |
| TAX ADMIN | .439 | | | | | .442 |
| EFFICIENCY 2 | | | | | | |

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 19 iterations.

APPENDIX 6: CORRELATION ANALYSIS

Correlations

| Ī | Claudis | TAE | ADID | ICT | CAD | DE | NAAT | DC |
|-----|-----------------|--------|--------|--------|--------|--------|-------|--------|
| | | TAE | ABIR | ICT | SAP | PE | MAI | PC |
| TA | Pearson | 1 | .332** | .329** | .166 | .278** | 164 | .228* |
| E | Correlation | | | | No. | | | |
| | Sig. (2-tailed) | | .000 | .000 | .074 | .002 | .077 | .013 |
| | N | 117 | 117 | 117 | 117 | 117 | 117 | 117 |
| ABI | Pearson | .332** | 1 | .249** | .131 | 007 | 247** | .175 |
| R | Correlation | | | | | | | |
| | Sig. (2-tailed) | .000 | | .007 | .158 | .940 | .007 | .059 |
| | N | 117 | 117 | 117 | 117 | 117 | 117 | 117 |
| ICT | Pearson | .329** | .249** | 1 | .346** | .098 | 173 | .473** |
| | Correlation | | | | | | | |
| | Sig. (2-tailed) | .000 | .007 | | .000 | .294 | .063 | .000 |
| | N | 117 | 117 | 117 | 117 | 117 | 117 | 117 |
| SAP | Pearson | .166 | .131 | .346** | 1 | .233* | .068 | .437** |
| | Correlation | | | | | | | |
| | Sig. (2-tailed) | .074 | .158 | .000 | | .012 | .465 | .000 |
| | N | 117 | 117 | 117 | 117 | 117 | 117 | 117 |
| PE | Pearson | .278** | 007 | .098 | .233* | 1 | .156 | .078 |
| | Correlation | | | | | | | |
| | Sig. (2-tailed) | .002 | .940 | .294 | .012 | | .094 | .403 |
| | N | 117 | 117 | 117 | 117 | 117 | 117 | 117 |
| MA | Pearson | 164 | 247** | 173 | .068 | .156 | 1 | 001 |
| I | Correlation | | | | | | | |
| | Sig. (2-tailed) | .077 | .007 | .063 | .465 | .094 | | .989 |
| | N | 117 | 117 | 117 | 117 | 117 | 117 | 117 |
| PC | Pearson | .228* | .175 | .473** | .437** | .078 | 001 | 1 |
| | Correlation | | | | | | | |
| | Sig. (2-tailed) | .013 | .059 | .000 | .000 | .403 | .989 | |
| | N | 117 | 117 | 117 | 117 | 117 | 117 | 117 |

^{**.} Correlation is significant at the 0.01 level (2-tailed).

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

APPENDIX 7: REGRESSION ANALYSIS

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|----------------------|----------------------------|
| 1 | .505 ^a | .255 | .214 | .49667 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

a. Predictors: (Constant), PC, MAI, PE, ABIR, SAP, ICT

b. Dependent Variable: TAE

ANOVA^b

| Mode | 1 | Sum of Squares | Df | Mean Square | F | Sig. |
|------|------------|-------------------|-----|----------------|-------|------------|
| 1 | Regression | 9.289 | 6 | 1.548 | 6.276 | $.000^{a}$ |
| | Residual | 27.135 | 110 | .247 | | |
| | Total | 36.425 | 116 | | | |

a. Predictors: (Constant), PC, MAI, PE, ABIR, SAP, ICT

b. Dependent Variable: TAE

Coefficients^a

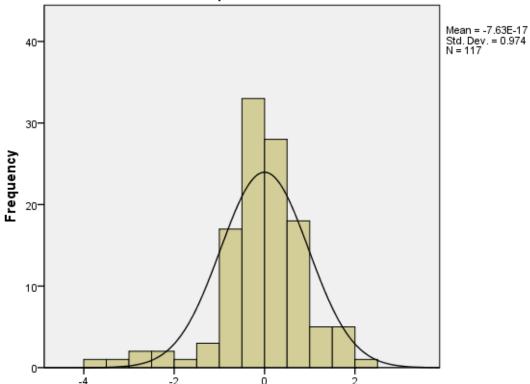
| Model | | | | Standardized Coefficients | | |
|-------|------------|-------|------------|---------------------------|--------|------|
| | | В | Std. Error | Beta | T | Sig. |
| 1 | (Constant) | 1.155 | .637 | | 1.812 | .073 |
| | ABIR | .194 | .069 | .247 | 2.829 | .006 |
| | ICT | .195 | .101 | .190 | 1.932 | .025 |
| | SAP | 031 | .110 | 027 | 278 | .390 |
| | PE | .334 | .103 | .278 | 3.248 | .001 |
| | MAI | 074 | .058 | 111 | -1.271 | .103 |
| | PC | .103 | .121 | .085 | .850 | .198 |

a. Dependent Variable: TAE

APPENDIX 8: HISTOGRAM

Histogram

Dependent Variable: TAE



Regression Standardized Residual

APPENDIX 9: NORMAL P-P PLOT

Normal P-P Plot of Regression Standardized Residual

