

**DETERMINANTS OF INCOME TAX COMPLIANCE
IN A SELF-ASSESSMENT SYSTEM IN KWARA
STATE, NIGERIA**

BY

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**Being a Thesis Presented and Submitted to the Department of Accounting, Faculty of
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for the Award of the Degree of Doctor of Philosophy in Accounting (Ph.D. Accounting)**

**SUPERVISOR
DR. A.S. KASUM**

MAY, 2018

CERTIFICATION

This is to certify that this thesis has been read and approved as meeting the requirements of the Department of Accounting, University of Ilorin, Ilorin, Nigeria for the Award of Doctor of Philosophy in Accounting.

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Date

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Postgraduate Coordinator

Date

Internal Examiner

Date

External Examiner

Date

DEDICATION

This thesis is dedicated to Almighty Allah, the Light of the Havens and the Earth.

DECLARATION

I, Mudathir Olanrewaju SALAM hereby declare that this thesis titled ‘Determinants of Income Tax Compliance in a Self-Assessment System in Kwara State, Nigeria’ is a record of my research work. It has neither been presented nor accepted in any previous application for a higher degree. All sources of information have been specifically acknowledged. In addition, the research work has been ethically approved by the University Ethical Review Committee.

Salam, M.O.

Date

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
AVE	Average Variance Extracted
CAP	Chapter
CBN	Central Bank of Nigeria
CB-SEM	Covariance Based Structural Equation Modeling
CITN	Chartered Institute of Taxation of Nigeria
COC	Control of Corruption
FAAC	Federation Allocation Accounts Committee
FC	Financial Constraint
FIRS	Federal Inland Revenue Service
GDP	Gross Domestic Product
HNIs	High Net-Worth Individuals
HOC	Higher Order Construct
HTMT	Heterotrait-Monotrait
IMF	International Monetary Fund
IPMA	Importance Performance Matrix Analysis
ITMA	Income Tax Management Act
JTB	Joint Tax Board
KWACO	Kwara State Artisans Congress
LFN	Law of Federation of Nigeria
NHF	National Housing Fund
NHIS	National Health Insurance Scheme
OECD	Organisation for Economic Cooperation and Development
OLS	Ordinary Least Square
PAYE	Pay As You Earn

PDI	Public Disclosure of Information
PGQ	Public Governance Quality
PITA	Personal Income Tax Act
PITAA	Personal Income Tax (Amendment) Act
PLS-SEM	Partial Least Square Structural Equation Modeling
PS & AV	Political Stability and Absence of Violence
RQ	Regulatory Quality
SAS	Self-assessment System
SBIR	State Board of Internal Revenue
SME	Small and Medium sized Enterprises
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
UN	United Nations

ABSTRACT

Tax collection constitutes a major revenue source for any government to discharge its obligation to its citizens. However, loss of revenue resulting from noncompliance especially in a self-assessment system has been a major problem in Kwara State, Nigeria. This study was designed to examine the determinants of income tax compliance in a self-assessment tax system in Kwara State. The objectives were to: (i) determine the relationship between taxpayers' knowledge and tax compliance; (ii) examine the effect of tax system structure on tax compliance; (iii) assess the effect of public governance quality on tax compliance; (iv) determine the relationship between public disclosure of taxpayers' information and tax compliance; and (v) examine the effect of taxpayers' financial constraint on tax compliance.

Survey research design was adopted. The population consisted of 68,338 members of the Kwara State Artisans Congress. The respondents were stratified into 54 groups from which a sample size of 558 respondents was randomly selected. The study used primary data collected through a structured questionnaire administered to the respondents. Partial Least Square Structural Equation Modeling (PLS-SEM) technique was employed for model estimation and test of hypotheses.

The findings of the study were that:

- i. tax knowledge has a significant positive relationship with tax compliance ($\beta = 0.107, p < 0.01$);
- ii. there exists a significant negative effect of tax system structure on tax compliance ($\beta = -0.152, p < 0.05$);
- iii. public governance quality has a significant positive effect on tax compliance ($\beta = 0.169, p < 0.05$);
- iv. there exists a significant positive relationship between public disclosure of taxpayers' information and tax compliance ($\beta = 0.196, p < 0.01$); and
- v. taxpayers' financial constraint has a significant negative effect on tax compliance ($\beta = -0.296, p < 0.01$).

The study concluded that tax knowledge, tax system structure, public governance quality, public disclosure of taxpayers' information and taxpayers' financial constraint determine tax compliance in a self-assessment system in Kwara State. The study therefore, recommended that Kwara State Government through the Kwara State Internal Revenue Service (KWIRS) should organise tax seminars to enhance taxpayers' knowledge on tax matters. There is also the need to review the existing tax system structure by increasing the amount of fines and penalties to deter non-compliance; and improve on public governance quality by providing basic amenities and infrastructure. Kwara State Government through the KWIRS should also publicise the detailed information of tax defaulters to serve as deterrence. Finally, the Kwara State government should formulate economic policies that would improve economic activities which consequently would increase the income of taxpayers in the State.

Word Count 425

APPENDIX I QUESTIONNAIRE

UNIVERSITY OF ILORIN, ILORIN, NIGERIA

DEPARTMENT OF ACCOUNTING



P.M.B. 1515, ILORIN, KWARA STATE
TELEPHONE: 08035771449

Date:

1st October, 2017.

Dear Respondent,

A SURVEY ON THE DETERMINANTS OF INCOME TAX COMPLIANCE IN A SELF-ASSESSMENT SYSTEM IN KWARA STATE, NIGERIA

I am a Ph.D. student in the Department of Accounting, Faculty of Management Sciences, University of Ilorin, Ilorin; conducting a study on the determinants of income tax compliance in a self-assessment system. I am using this medium to seek for your opinions and perceptions on the subject.

As a stakeholder in the informal sector of the Nigeria economy, your participation in this survey is vital in order to obtain information required for the successful completion of this study. By completing this questionnaire it will be understood that you have consented to participate in this research project, and that you consent to the publication of all collective results of the research project with the understanding that your anonymity will be preserved.

Your response is hereby solicited and I can assure you that it will be used exclusively for research purpose. All information obtained will be treated with utmost confidentiality and used strictly for academic purpose.

Thank you for your cooperation.

Yours sincerely,

Salam, Mudathir O.
Doctoral Researcher

GENERAL INSTRUCTION

This survey questionnaire is divided into seven sections. Please answer all questions.

SECTION ONE: TAX KNOWLEDGE

Please TICK ONE (✓) appropriate response in each given statements using the following scales:

- 1. Strongly disagree**
- 2. Disagree**
- 3. Not certain**
- 4. Agree**
- 5. Strongly agree**

		1	2	3	4	5	CODE
1	Corporate bodies and individual citizens are liable to tax on income, property and consumption.						TK1
2	The income tax system is a legitimate way for the government to collect revenue to manage an economy.						TK2
3	The taxpayers are supposed to keep records/ documents pertaining to income and expenditure in order to determine the correct tax payable.						TK3
4	The taxpayers are supposed to inform and declare actual income received from all sources to the Internal Revenue Service.						TK4
5	As far as I am aware, non-compliant taxpayers can be imprisoned, if found guilty of evading tax.						TK5
6	Similar to other criminal offences, I believe that individuals can also be prosecuted for not complying with the Income Tax Act.						TK6
7	I believe that I do not have to abide by the deadline for the submission of tax return form (s) (in case of having other income such as rental and business income), as the deadline is only a guideline and does not result in penalties.						TK7
8	As far as I am aware, everyone who earns income sourced in this country is taxable, regardless of whether that person is resident or not.						TK8
9	I have little idea about the deductions that I can claim as a taxpayer in the computation of my tax liability						TK9
10	To my knowledge, the tax liability of an individual is determined by applying the graduated tax rates on the taxable income.						TK10

SECTION TWO: TAX COMPLIANCE

Please TICK ONE (✓) appropriate response in each given statements using the following scales:

1. Strongly disagree
2. Disagree
3. Not certain
4. Agree
5. Strongly agree

		1	2	3	4	5	CODE
1	I would declare in my tax return the total income I receive from all sources.						TC1
2	I would declare in my tax return the total amount of expenses including my maintenance cost.						TC2
3	I would file my income tax return with tax authority within 90 days from commencement of the year (i.e. from January)						TC3
4	I would not pay my income tax liability within 60 days from the date of assessment notice as deadline is only a guideline and does not result in payment of any penalties.						TC4

SECTION THREE: TAX SYSTEM STRUCTURES

- A. Imagine Mr. D has been paid some amounts in cash for work that he has done outside his regular job. He did not declare it on his income tax return.

Please TICK ONE (✓) appropriate response in each given statements using the following scales:

1. Strongly disagree
2. Disagree
3. Not certain
4. Agree
5. Strongly agree

		1	2	3	4	5	CODE
1	There is chance that Mr. D will be caught by the tax authority, if the amount he was paid is large						TSS 1
2	There is chance that Mr. D will be caught by the tax authority, if the amount he was paid is small						TSS 2

- B. Imagine Mr. D has claimed some amount as work deductions when the expenses have nothing to do with work.

Please **TICK ONE** (✓) appropriate response in each given statements using the following scales:

1. Strongly disagree
2. Disagree
3. Not certain
4. Agree
5. Strongly agree

		1	2	3	4	5	CODE
3	There is chance that Mr. D will be caught by the tax authority, if the amount he claimed as deduction is large						TSS 3
4	There is chance that Mr. D will be caught by the tax authority, if the amount he claimed as deduction is small						TSS 4

- C. Assuming Mr. D did get caught not declaring and deducting the amount stated in (3) and (4) above respectively, **indicate how much a problem do you think the following legal consequences would be to Mr. D.**

Please **TICK ONE** (✓) appropriate response in each given statements using the following scales:

1. No
2. Small
3. Medium
4. Large
5. Very large

		1	2	3	4	5	CODE
5	Pay the tax he owes with interest						TSS 5
6	Pay substantial fine and pay the tax he owes with interest						TSS 6
7	Taken to court, pay the tax he owes with interest						TSS 7
8	Taken to court, pay substantial fine and pay the tax he owes with interest						TSS 8

SECTION FOUR: Public Governance Quality

Please TICK ONE (✓) appropriate response in each given statements using the following scales:

1. Strongly disagree
2. Disagree
3. Not certain
4. Agree
5. Strongly agree

		1	2	3	4	5	CODE
1	I trust the Kwara State Assembly in making good laws for the state.						PGQ1
2	There is free and fair election in Kwara State.						PGQ2
3	There is freedom of expression in Kwara State.						PGQ3
4	Political stability is declining in Kwara State.						PGQ4
5	Political protest is threat to Kwara state peace and stability.						PGQ5
6	I am not satisfied with quality of general infrastructure in Kwara State.						PGQ6
7	Kwara State public servants are vulnerable to political interference.						PGQ7
8	Justice is not fairly administered in Kwara State.						PGQ8
9	There is no confidence in the legal system in Kwara State.						PGQ9
10	I trust the financial honesty of political office holders in Kwara State.						PGQ10
11	The diversion of public funds due to corruption is not common in Kwara State.						PGQ11
12	There is no stringent local law governing the starting of a business in Kwara State.						PGQ12
13	There is a risk that normal business operations become more costly due to the regulatory environment in Kwara State.						PGQ13
14	The multiplicity of taxation in Kwara State has not affected the growth of your business.						PGQ14

SECTION FIVE: Public Disclosure of Taxpayer's Information

Please TICK ONE (✓) appropriate response in each given statements using the following scales:

1. Strongly disagree
2. Disagree
3. Not certain
4. Agree
5. Strongly agree

		1	2	3	4	5	CODE
1	With my status in the community, I believe that it will be a shameful act if my name is published in newspapers or posted in public places that I have evaded tax.						PDI 1
2	I would be bothered if my name is published in newspapers or posted in public places that I have evaded tax.						PDI2

SECTION SIX: Financial Constraints of Taxpayers

Please TICK ONE (✓) appropriate response in each given statements using the following scales:

1. Strongly disagree
2. Disagree
3. Not certain
4. Agree
5. Strongly agree

		1	2	3	4	5	CODE
1	My income always exceeds my expenditure						FC1
2	The prices of basic needs do not increase on daily basis.						FC2
3	I will not pay my debts and basic needs first rather income tax						FC3
4	There have not been significant increase in fuel prices and electricity and water tariff						FC4
5	I am satisfied with my present financial situation						FC5
6	I am living comfortable the way I should with my present income						FC6
7	I am not having financial commitment to my extended family						FC7

SECTION SEVEN: Demographic Information

Please indicate your responses with a tick in the box.

1. Gender

Male ☐

Female ☐

2. Marital status

Single ☐

Married ☐

3. Age group

18-30 years ☐

31-40 years ☐

41-50 years ☐

51-60 years ☐

Above 60 years ☐

4. Highest level of education

Primary School education ☐

Junior secondary education ☐

Senior secondary education ☐

Ordinary National Diploma/NCE ☐

B.Sc. / HND ☐

Postgraduate ☐

5. Income group

Please indicate which group your average monthly income from all sources before other deductions and taxes is:

Less than ~~N~~50, 000 ☐

~~N~~50, 000 – ~~N~~99, 999 ☐

~~N~~100, 000 – ~~N~~149, 999 ☐

~~N~~150, 000 – ~~N~~199, 999 ☐

~~N~~200, 000 – ~~N~~249, 999 ☐

~~N~~250, 000 or more ☐

6. Number of Dependents -----

7. Occupation -----

Thank you for your time

APPENDIX II

UNIVERSITY ETHICAL REVIEW COMMITTEE APPROVAL LETTER

UNIVERSITY OF ILORIN, ILORIN, NIGERIA

UNIVERSITY ETHICAL REVIEW COMMITTEE

Vice-Chancellor: Prof. A.G. Ambali
DVM (ABU), M.V. Sc., Ph.D (Liverpool, UK),
MVCN, MCVSN, MNVMA, FCVSN
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Our Ref:

UIL/UERC/09/68NB037

Date:

8TH June, 2017

Protocol Identification Code: UERC/MS/063
UERC Approval Number: UERC/ASN/2017/910

DETERMINANTS OF INCOME TAX COMPLIANCE IN A SELF-ASSESSMENT SYSTEM IN KWARA STATE, NIGERIA

Name of Applicant/Principal Investigator: SALAM, Mudathir Olanrewaju
Address of Applicant: Department of Accounting,
Faculty of Management Sciences,
University of Ilorin, Ilorin.

Type of Review: Full Committee Review
Date of Approval: 08/06/2017

Notice of Full Committee Approval

I am pleased to inform you that the research described in the submitted proposal has been reviewed by the University Ethical Review Committee (UERC) and given full Committee approval.

This approval dates from 08/06/2017 to 07/06/2020, and there should be no participant accrual or any activity related to this research to be conducted outside these dates.

You are requested to inform the committee at the commencement of the research to enable it appoints its representative who will ensure compliance with the approved protocol. If there is any delay in starting the research, please inform the UERC so that the dates of approval can be adjusted accordingly.

The UERC requires you to comply with all institutional guidelines and regulations and ensure that all adverse events are reported promptly to the UERC. No charges are allowed in the research without prior approval by the UERC. Please note that the UERC reserves the right to conduct monitoring/oversight visit to your research site without prior notification.

Thank You.


Ismaila Isah
For: University Ethical Review Committee



"...if it's not ethical, it's not scientific, if it's not scientific it's not ethical"

APPENDIX III

KWARA STATE ARTISANS CONGRESS (KWACO)

LIST OF AFFILIATED ASSOCIATION

S/No	ASSOCIATIONS
1	Electronic technicians Association
2	Welder/ Blacksmith Association
3	Refrigerator & Air conditional Association
4	Plumbers Association
5	Tailors' Union
6	Barbers Association
7	Women sewing Association
8	Laundry and Dry Cleaners Association
9	Embroidery Designers Association
10	Hair dresser/Cosmetologists Association
11	Aluminum fabricators Association
12	Panel beater Association
13	Video production Association
14	Grinding & Sharpening Association
15	Art & Craft Association
16	Electrical installers Association
17	Battery chargers/ Rewires Association
18	Bag makers Association
19	Motor cycle Mechanic Association
20	NATA Association
21	Furniture makers Association
22	Carpenter Association
23	Knitting (Sweater) Association
24	Hand knitting (Jakan) Association
25	Shoe makers Association
26	Satellite installers Association
27	Vulganizers Union
28	Car upholstery Association
29	Brick Layer Association
30	Office Equipment Maintenance Association
31	Printing machine technicians Association
32	Earth moving Equipment & Power Plant Association
33	Photographer Association
34	Polythene cutters Association
35	Engagers Entertainers Association
36	Kampala/ Adire makers Association
37	Computer operators Association
38	Terrazzo & Tiles workers Association
39	Corn grinding technicians Association
40	Master Bakers (fire wood oven) Association
41	Caterers Association
42	Aso ofi weavers Association
43	Events Decorators Association
44	Rental Association
45	Aluminum port makers Association

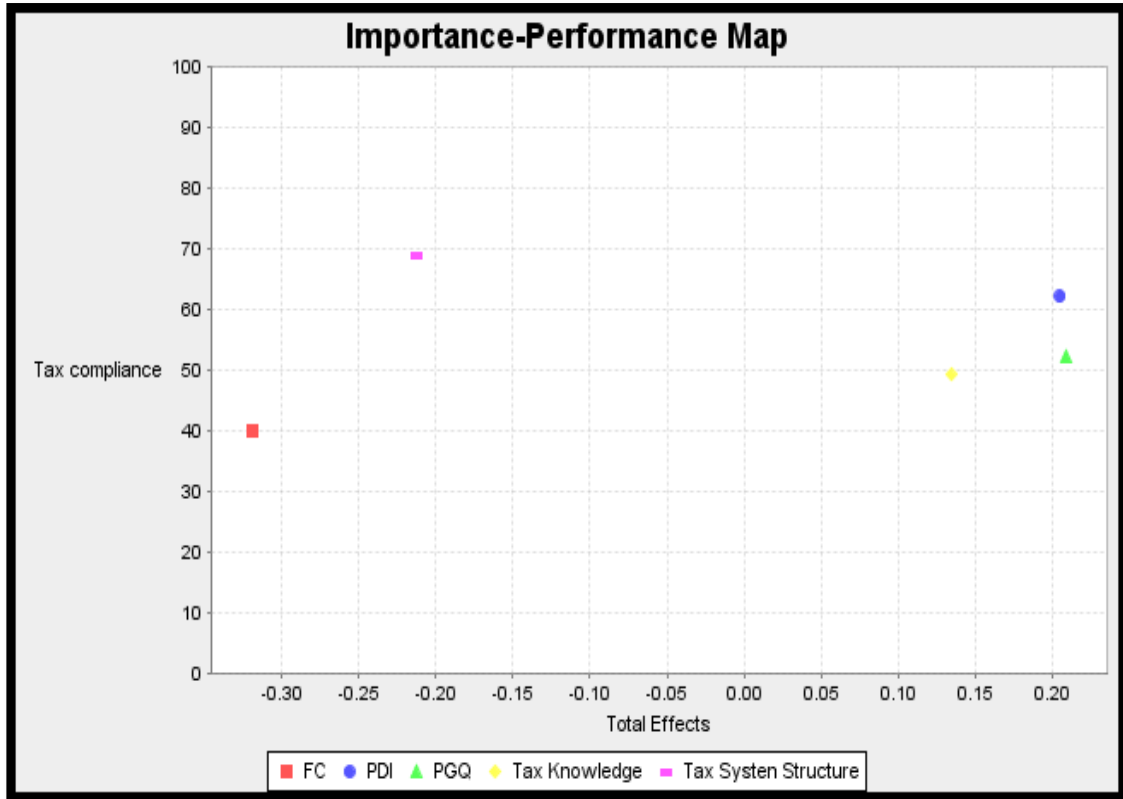
46	Furniture, upholstery carpenters Association
47	Goldsmith Association
48	Traditional hair weavers Association
49	Tin cutters Association
50	Mobile phone repairer Association
51	Car wash Association
52	Poultry Farmers Association
53	Fishery Farmers Association
54	Music advertisement agency of Nigeria (MAAN)

The diagram illustrates the following paths and coefficients:

- Probability of Detection** (latent) → **TSS1** (0.782), **TSS2** (0.853), **TSS3** (0.842)
- Probability of Detection** (latent) → **TK1** (0.703)
- General Knowledge** (latent) → **TK2** (0.817), **TK3** (0.822), **TK4** (0.821)
- Legal Knowledge** (latent) → **TK5** (0.911), **TK6** (0.903), **TK7** (0.912)
- Technical knowledge** (latent) → **TK10** (0.932), **TK8** (0.869), **TK9** (0.916)
- Tax System Structure** (latent) → **TSS5** (0.804), **TSS6** (0.785), **TSS8** (0.815)
- Tax System Structure** (latent) → **Tax compliance** (-0.152)
- Tax Knowledge** (latent) → **Tax compliance** (0.107)
- Tax Knowledge** (latent) → **PD** (0.856)
- PD** (latent) → **PD11** (0.851), **PD12** (0.922)
- FC** (latent) → **FC1** (0.793), **FC2** (0.744), **FC3** (0.714), **FC4** (0.726), **FC5** (0.870), **FC6** (0.796), **FC7** (0.799)
- FC** (latent) → **Tax compliance** (-0.296)
- FC** (latent) → **Govt. Effectiveness** (0.597)
- FC** (latent) → **Rule of Law** (0.931)
- FC** (latent) → **PS&AV** (0.252)
- FC** (latent) → **Voice and Accountability** (0.840)
- RQ** (latent) → **PGQ12** (0.882), **PGQ13** (0.919), **PGQ14** (0.901)
- RQ** (latent) → **PGQ10** (0.947)
- COC** (latent) → **PGQ10** (0.948)
- Govt. Effectiveness** (latent) → **PGQ11** (0.919)
- Rule of Law** (latent) → **PGQ8** (0.919), **PGQ9** (0.931)
- PS&AV** (latent) → **PGQ6** (0.897), **PGQ7** (0.781)
- Voice and Accountability** (latent) → **PGQ1** (0.923), **PGQ2** (0.939), **PGQ3** (0.933), **PGQ4** (0.911), **PGQ5** (0.802)
- Tax compliance** (latent) → **TC1** (0.849), **TC2** (0.830), **TC3** (0.883), **TC4** (0.866)

APPENDIX V

IPMA Results of tax compliance as the Target Construct



APPENDIX VI

Cross Loadings

	FC	PDI	Voice and Accountability	PS& AV	Govt. Effectiveness	Rule of Law	COC	RQ	Tax compliance	General Knowledge
FC1	0.793	-0.150	-0.251	-0.198	-0.152	-0.158	-0.359	-0.303	-0.319	-0.14
FC2	0.744	-0.100	-0.333	-0.099	-0.113	-0.082	-0.330	-0.312	-0.316	-0.16
FC3	0.714	-0.001	-0.142	-0.141	-0.113	-0.012	-0.213	-0.207	-0.311	-0.17
FC4	0.726	-0.016	-0.143	-0.197	-0.167	-0.041	-0.223	-0.184	-0.299	-0.12
FC5	0.870	-0.133	-0.312	-0.142	-0.143	-0.079	-0.287	-0.270	-0.342	-0.13
FC6	0.796	-0.124	-0.228	-0.153	-0.055	-0.040	-0.208	-0.184	-0.272	-0.03
FC7	0.799	-0.114	-0.222	-0.109	-0.104	-0.066	-0.235	-0.231	-0.258	0.01
PDI1	-0.082	0.851	0.134	-0.005	0.022	0.009	0.115	0.149	0.211	0.11
PDI2	-0.121	0.922	0.148	-0.007	0.005	0.030	0.132	0.177	0.287	0.04
PGQ1	-0.270	0.175	0.923	0.042	0.073	0.335	0.667	0.424	0.340	0.04
PGQ2	-0.269	0.145	0.939	0.057	0.052	0.290	0.672	0.433	0.342	0.04
PGQ3	-0.306	0.126	0.933	0.091	0.109	0.281	0.675	0.449	0.354	0.01
PGQ4	-0.201	0.001	0.059	0.911	0.345	0.190	0.164	0.145	-0.007	0.15
PGQ5	-0.115	-0.015	0.058	0.802	0.477	0.016	0.062	0.103	-0.008	0.09
PGQ6	-0.160	0.040	0.135	0.462	0.897	0.109	0.120	0.104	0.010	0.12
PGQ7	-0.098	-0.029	-0.019	0.291	0.781	0.198	0.123	0.079	-0.069	0.05
PGQ8	-0.093	-0.020	0.289	0.121	0.188	0.919	0.420	0.265	0.106	0.16
PGQ9	-0.073	0.060	0.310	0.132	0.131	0.931	0.469	0.328	0.129	0.16
PGQ10	-0.302	0.134	0.690	0.105	0.089	0.446	0.947	0.502	0.316	0.07
PGQ11	-0.350	0.131	0.676	0.162	0.181	0.467	0.948	0.507	0.315	0.13
PGQ12	-0.260	0.157	0.406	0.112	0.088	0.219	0.426	0.882	0.333	0.04
PGQ13	-0.313	0.201	0.417	0.134	0.125	0.333	0.494	0.919	0.368	0.19
PGQ14	-0.273	0.142	0.439	0.151	0.083	0.312	0.515	0.901	0.295	0.15

	FC	PDI	Voice and Accountability	PS& AV	Govt. Effectiveness	Rule of Law	COC	RQ	Tax compliance	General Knowledge
TC1	-0.304	0.245	0.268	-0.002	-0.005	0.074	0.233	0.296	0.849	0.05
TC2	-0.361	0.227	0.378	0.036	0.043	0.147	0.376	0.332	0.830	0.04
TC3	-0.352	0.269	0.282	-0.015	-0.044	0.098	0.262	0.307	0.883	0.12
TC4	-0.321	0.239	0.336	-0.051	-0.087	0.113	0.263	0.325	0.866	0.14
TK1	-0.065	0.058	-0.001	0.101	0.048	0.105	0.033	0.117	0.092	0.70
TK2	-0.133	0.076	0.111	0.117	0.091	0.165	0.142	0.136	0.088	0.81
TK3	-0.113	0.111	-0.009	0.118	0.061	0.098	0.043	0.114	0.112	0.82
TK4	-0.145	0.023	0.009	0.153	0.127	0.173	0.108	0.111	0.050	0.82
TK5	-0.215	0.129	0.656	-0.013	-0.045	0.245	0.639	0.394	0.314	0.26
TK6	-0.226	0.081	0.570	-0.044	-0.012	0.312	0.571	0.328	0.248	0.31

TK7	-0.239	0.116	0.643	-0.001	-0.048	0.209	0.597	0.375	0.322	0.28
TK8	-0.204	0.054	0.605	-0.079	-0.037	0.205	0.509	0.353	0.287	0.12
TK9	-0.220	0.095	0.607	-0.006	0.026	0.282	0.550	0.371	0.308	0.21
TK10	-0.290	0.131	0.669	-0.006	0.034	0.234	0.564	0.427	0.347	0.22
TSS1	-0.103	-0.080	-0.233	0.293	0.225	0.009	-0.082	-0.030	-0.126	0.18
TSS2	-0.068	-0.092	-0.229	0.282	0.213	0.026	-0.094	-0.058	-0.103	0.05
TSS3	-0.059	-0.086	-0.275	0.340	0.270	-0.024	-0.154	-0.067	-0.157	0.08
TSS5	-0.137	-0.053	-0.105	0.349	0.283	0.080	-0.005	0.009	-0.103	0.21
TSS6	-0.098	-0.048	-0.124	0.281	0.238	0.143	0.044	0.018	-0.110	0.08
TSS8	-0.149	0.003	-0.149	0.294	0.327	0.073	0.038	0.051	-0.080	0.21

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Tax payment is an important issue for any country where taxation constitutes a main revenue source for the government to discharge its obligations to the citizens. Everest-Phillips (2011) observes that tax is the most important part of state effectiveness and the most noticeable sign of social contract that exists between the state and citizens. Taxation is a catalyst for developing a responsive and accountable government and also for expanding the capacity of the state (Prichard, 2010). Rakner and Gloppen (2002) observe that taxation is closely connected with an increase in the value of goods and services produced in an economy. Revenue generated from taxes now constitutes the lifeblood for governments to deliver essential services to the people.

Taxation is globally recognized as a sustainable revenue source for governments because of its stability and certainty. Revenue generation from taxes is constantly available as long as people engage in economic activities. Taxation is also a core fiscal policy that is used by governments for effective control of the economy. A cursory observation shows that there is a correlation between bad governance and independence of revenue from taxation of residents. For instance, a country whose income is mainly generated from natural resources like oil and mineral usually experience bad governance based on the fact as the revenue is not from taxation of residents, the tendency for residents to demand for accountability is low.

Tax authorities in the developed countries such as United Kingdom, Australia and United States have reasonable control of tax compliance of their residents. This is owing to the fact that these countries have been able to establish over time the causes

of taxpayers' noncompliance. In addition, they have at their disposal arsenal of weapon to regulate tax compliance. Developing nations such as Nigeria and Ghana are still battling with the issue of tax non-compliance among the residents because they are characterized by large informal sectors and inadequate tax knowledge among the residents (Bird, 2004). CITN (2010) observes that in spite of Nigeria is blessed with both human and natural endowment and it also has great economic potential. However, it is disappointing that the ratio of tax to GDP has been perpetually low.

In addition, tax compliance can be improved upon in Nigeria, if the government can emulate the developed countries in the areas where successes have been achieved and work out the possibility of fitting them into its tax systems.

The Nigerian economy relies heavily on proceeds from crude oil sales. This revenue source accounts for over 90 per cent of foreign exchange earnings (Adedipe, 2004). The heavy reliance on crude oil sales which is vulnerable to swings in prices and production portends a great danger for the survival of the country. In light of this development, there is a need for the Nigeria government to diversify the economy in order to reduce the concentration on revenue from crude oil sales by given consideration to other non-oil sources of revenue. Consideration has now been given to taxation as area where the economy can be diversified as it is only non-exhaustible revenue source to government.

Self-assessment is method of assessment that involves a taxpayer to raise correct assessment, fill the tax return forms, pay the amount assessed, submit the tax return form with the relevant documents on or before the stipulated time by the tax law. Self-assessment method of tax collection has been embraced by many tax authorities worldwide as a means of improving administrative effectiveness and efficiency.

In view of this background, this study investigates the factors that influence income tax compliance in a self assessment system in Kwara State, Nigeria.

1.2 Statement of the Problem

It is compulsory for every resident of Nigeria to pay tax on both earned and unearned incomes to the government. Personal Income Tax Law (PITA CAP P8 LFN 2004) requires that all individual taxpayers who are self-employed to submit self-assessment tax returns with tax agency of the state in which the taxpayer resides every year within ninety days of beginning of a new tax year. However, some residents most especially the self-employed do not want to perform this civic responsibility. Adeosun (2017) acknowledged in her address at the end of the meeting of IMF/World Bank held in Washington DC that there are about thirteen million taxpayers in Nigeria in which about twelve million five hundred thousand have their taxes deducted at source. The balance of five hundred thousand is grossly inadequate to represent the self-employed. The implication of this is that considerable numbers of self-employed are not paying tax (Thisday Newspaper, April 24, 2017).

In Nigeria, tax compliance is one of the major problems confronting tax collection and has negatively affected the tax revenue performance. Alabede (2012) observes that, tax revenue has been dropping significantly, in relative term. For instance at the national level, the proportion of tax collected from individual relative to the aggregate of Federal and State revenue in 1977 was 10.53% but went down in 1997 to 5.19% and dropped further to 4.67% in 2010. In 2013, Nigeria's tax to Gross Domestic Product (GDP) ratio dropped from 20% to 12% and non-oil taxes accounted for 4% of the 12%. In 2017, Nigeria's tax to GDP ratio further dropped to 6% which is far lower than average for developed tax systems (25-35%), developing countries (18-25%). Obi-Chukwu (2015) also observes the significant drop in actual tax revenue collected from year 2012 to 2014. In the year 2012, the actual tax revenue collected was ₦5008 billion, for the years 2013 and 2014 the total amount of ₦4806 billion and ₦4715

billion respectively were collected representing a drop of 5.85% in the actual tax revenue generated between 2012 and 2014.

Alabede, Ariffin and Idris (2011) pointed out that the high volume of tax cases audited and investigated is a good manifestation of poor tax compliance. The report of FIRS (2013) indicates that the sum of ₦57.387 billion was recovered both domestic and foreign companies audited and investigated in 2013. The picture is not very different at the state level. For instance, a look at the report of the account of the Government of Kwara State of Nigeria for the year ended 31st December, 2015 indicated that a sum of ₦117, 678,807,606 was expected as total revenue. This included ₦10, 247,497,903 total revenue generated internally and ₦41, 553,360,367 statutory allocation from Federation Allocation Accounts Committee (FAAC) (Kwara State Government Annual Report, 2015). This indicates that about 36% of the revenue for the state was from the federal allocation.

In addition, the report also revealed that, of the estimated direct taxes in the year 2015, out of ₦4,538,707,000 only ₦4,172,899,030.97 was collected; resulting in about 92% performance leaving a huge sum of over ₦365,807,969.30 representing approximately 8.1% tax gap. Although, 92% performance might be seen as a good performance; but in respect to tax compliance, 100% is expected because every individual taxpayer is under obligation to comply.

Adequate knowledge of the operation of Nigerian tax system is needed by individual taxpayers in a self-assessment environment. It is expected of individuals residing in a country to have adequate knowledge taxes that are paid in the country where they reside. Taxpayers are expected to have the knowledge of determining their tax liabilities in accordance with the relevant provisions of tax laws. However, the Chartered Institute of Taxation of Nigeria (CITN) (2002) observes that, tax

administration in Nigeria is cumbersome because the tax knowledge of residents is low. Nzotta (2007) supported this claim when he made it clear that an average resident in Nigeria does not understand the requirement of the different tax laws, the methods of tax assessments or the obligations of a taxpayer under the different tax laws. Olufemi (2016) also observes that, average Nigerian lacks the shallow not to talk about the in-depth knowledge of principles of taxation in Nigeria.

Tax knowledge is fundamental to the successful implementation of self-assessment regime as this would enable taxpayers to under the tax system. Similarly, Braithwaite (2007) observes that taxpayers' knowledge reveal the connection between the taxpayers' understanding of the tax regulation and their willingness to comply. Therefore, taxpayers are expected to have requisite knowledge about personal income taxation (Funham, 2005; Kasipillai & Hanefah, 2000). Tax knowledge of taxpayer has a direct impact on reducing the tendency to evade (OECD, 2004). Therefore, understanding taxpayers' knowledge is a key factor to be considered by any revenue authority in a self-assessment system. However, Kirchler, Hoelzl and Wahl (2008) observe that in-depth tax knowledge may lead taxpayers to avoid tax payment which can equally lead to loss of revenue.

Moreover, inconsistencies have been found in studies conducted on tax knowledge and tax compliance. The studies of Eriksen and Fallan (1996), Mukasa (2011), Devos (2012); Redae and Sekhon (2016) and Gitaru (2017) found a positive connection of tax compliance and tax knowledge. Meanwhile, the studies carried out by Collins, Milliron and Toy (1992), Murphy (2003), Alm and Gomez (2008); Torgler (2012), Olowookere and Fasina (2013) and Fauziati *et al.* (2016) established a negative relationship between taxpayers' compliance and taxpayers' knowledge. Studies of Torgler and Murphy (2004), McGee and Bose (2009), Ho, Ho and Young (2013) and

Ibrahim, Musah and Abdul-Hanan (2015) established no relationship between taxpayers' compliance and tax knowledge of taxpayers. This study however, attempts to provide empirical evidence from Kwara State, Nigeria on the relationship between tax knowledge of taxpayers and their tax compliance.

Tax system structure is a key determinant of the compliance behaviour in a self-assessment system (Loo, 2006). Alabede (2012) argues that the effectiveness and efficiency of revenue mobilization in a country depends on the way the tax system has been structure. Inasius and Nusantra (2015) in their study, support the argument that there exists a positive connection between the tax system structure and tax compliance. They further argue that a feeble tax system structure and badly managed tax administration can affect tax compliance and as a result have a negative effect on revenue collection. In addition, evidence from past studies on the effect of tax system structure and tax compliance varied with respect to the influence probability of detection and penalties. The findings of the studies on the probability of detection and penalties and fines as components of tax system structure for this study have not been consistent. In light of this, the study attempts to further provide empirical evidence in Kwara State on the effect of tax system structure on tax compliance of taxpayers in a self-assessment system.

Rotberg and Gisselquist (2009) observe that, in spite of its importance in determining tax compliance, public governance quality in developing countries is low. Quite a number of studies have established that the state of decay in public infrastructure, religious inter-ethnic crisis, low quality of the service in return for taxes, low transparency and accountability of public institutions, high level of corruption and lack of rule of law and weak fiscal jurisdiction as factors that determine tax non-compliance (Abati, 2006; Natufe, 2006; Fagbadebo, 2007; & Madueke, 2008). As a

consequence, the country is vulnerable to tax noncompliance of individual and corporate taxpayers. At the state level, it has also been observed that the introduction of taxes in the face of high infrastructural decay and high level of corruption will not give tacit supports to the need for taxation (The Guardian Newspaper, April 9, 2017).

In Nigeria, there are numerous studies on governance quality and tax compliance (Umar, Derashid & Ibrahim, 2016; Mustapha, Zakaree & Yahaya, 2015; Alabede, 2012; Worlu & Nkoro, 2012; Modugu, Eragbhe & Izedonmi, 2012; Akpo, 2009; Oluba, 2008; Nzotta, 2007). These studies have been conducted outside Kwara State. Hence, there is a need to extend existing literature by investigating the effect of public governance quality on taxpayers' compliance.

In a renewed effort by the Nigerian government to increase the revenue generated from tax, the Minister of Finance, Mrs. Kemi Adeosun at the end of the IMF/World Bank spring meetings in Washington DC; revealed that the Federal Government might adopt 'name and shame' strategy to expose tax defaulters in Nigeria. (Thisday Newspaper, April 24, 2017). The idea of 'naming and shaming' as tax enforcement strategy is based on the idea of denting the reputation of those culpable in the public domain. Public disclosure of taxpayers' information involves practice of publishing the names of the delinquent taxpayers in the newspapers or on the website of the tax authorities. Supporters of the idea of public disclosure argue that, it increases tax compliance; while critic considered it as an invasion of taxpayers' privacy and could have negative effects on tax compliance (Hasegawa, Hoopes & Slemrod, 2012). Based on the foregoing, an investigation into the relationship between public disclosure of individual tax information has not been attended to in Nigeria. Therefore, this study attempts to fill the gap.

The financial constraint being faced by individuals may affect their desire to pay tax. Personal financial constraint may be the reason for the taxpayers to prioritize the available income to basic survival needs (food, clothing and housing), repayment of debts, catering for the rise in the fuel prices, electricity and water tariff, financial commitments to the extended family; before thinking about paying any tax liability. There have been instances where taxpayers complained that their earnings could barely feed them and had nothing remain to pay tax. Mohani (2001) observes that people who face personal financial difficulties have tendency to engage in tax evasion when compared to people in less financial problem. Bloomquist (2003) submits that financial strain of taxpayers may be responsible for tax evasion in a situation where the household expenditures outweigh the incomes. In contrast, studies conducted by Vogel (1974) established the irony of life as people with no financial difficulty are also found in the nefarious act of tax evasion. Interestingly, the magnitude of evasion they engage in is greater than people are in financial difficulty. Based on the foregoing, studies on the effects of taxpayers' financial constraints have not produced the same results. Thus, further empirical study is required in order to unravel the mystery surrounding the discrepancies in the results of the previous studies.

1.3 Research Questions

Based on the problems stated above, the basic research questions in this study are:

- i. What is the relationship between taxpayers' knowledge and tax compliance?
- ii. What is the effect of tax system structure on tax compliance?
- iii. What is the effect of public governance quality on tax compliance?

- iv. What is the relationship between public disclosure of taxpayer's information and tax compliance?
- v. What is the effect of taxpayers' financial constraints on tax compliance?

1.2 Objectives of the Study

The general objective of this study is to examine the determinants of income tax compliance in a self-assessment system. The specific objectives are to:

- i. determine the relationship between taxpayers' knowledge and tax compliance;
- ii. examine the effect of tax system structures on tax compliance;
- iii. determine the effect of public governance quality on tax compliance;
- iv. examine the relationship between public disclosure of taxpayer's information and tax compliance; and
- v. determine the effect of taxpayers' financial constraints on tax compliance.

1.3 Research Hypotheses

In line with the research objectives, the following hypotheses stated in null form are formulated as follows:

- H₀₁: There is no significant positive relationship between taxpayers' knowledge and tax compliance;
- H₀₂: Tax system structure does not have a significant negative effect on tax compliance;
- H₀₃: Public governance quality does not have positive significant effect on taxpayers' compliance;
- H₀₄: There is no significant positive relationship between public disclosures of taxpayers' information and tax compliance;

H₀₅: Financial constraint of taxpayers does not have a significant negative effect on tax compliance.

1.4 Justification for the Study

This study examined the determinants of income tax compliance in a self-assessment system in Kwara State. The study is justified on the ground that, it is important to both theory and practice.

From the theoretical perspective, the study contributes to existing knowledge on tax compliance determinants by empirically testing the relationship between public disclosure of individual taxpayers' information and tax compliance which, hitherto, has not been given attention in Nigeria. Furthermore, a study on relationship between tax compliance and public disclosure of tax payers' information had been suggestion by Bărbuță-Mișu, 2011 and Devos & Zackrisson, 2015.

From the practical perspective, this study reveals the determinants of personal income tax compliance in Kwara State, Nigeria. Research into the factors that determine tax compliance under the self-assessment system at this point in time in the State where there has been a tremendous increase in the tax drive in an effort to boost the internally generated revenue for the state becomes absolutely necessary. The finding of this study is expected to be considered by the Kwara State Government through the Kwara State Internal Revenue Service (KWIRS) when devising strategies to achieve higher rates of voluntary compliance in the state.

Tax administrators and public policy makers will benefit from the outcome of this study as it is expected to provide useful information on the perception of residents about tax system structure; this would assist them while reviewing the tax laws.

1.5 Scope of the Study

This study focuses mainly on the taxation of individual taxpayers which falls within the jurisdiction of the Personal Income Tax Act, Cap. P8, LFN 2004 and Personal Income Tax (Amendment) Act, 2011. The Act empowers all state governments in Nigeria to generate tax revenue by assessing and collecting taxes on taxable incomes under the Act. The reason for choosing personal income tax is based on the fact that, it is the major tax collected at the state level in Nigeria. In addition, personal income has been identified as the income tax that records the highest rate of noncompliance (Odusola, 2006; Asada, 2005; Nzotta, 2007; Kiabel & Nwokah, 2009). The reason adduced to this is that, it involves individuals who are self-employed that do not have record with the relevant tax authorities.

Furthermore, Kwara State has been chosen as the study area based on the fact that in recent time, there has been a quiet revolution in the revenue collection system in the state. Therefore, research into the factors that determine tax compliance at this point in time would go a long way in assisting the Kwara State Internal Revenue Service in formulating policies that would enable it to realize the objective of increasing the internally generated revenue from tax. A cross- sectional survey method was used to collect the data for the study. This method was employed on the premise that all the constructs for the study were observed at a point in time. The field work was embarked upon from October to December, 2017. The target respondents in this study were the members of the Kwara State Artisans Congress (KWACO).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter focuses on the review of relevant literature to the study. For this purpose, the chapter is organised into four main sections: conceptual issues, theoretical issues, empirical studies, and research gap in the literature reviewed.

2.2 Conceptual Issues

2.2.1 The Concept and Definition of Tax and Taxation

Tax is defined as “a compulsory levy, imposed by government or other tax raising body, on income, expenditure, or capital assets, for which the taxpayer receives nothing specific in return” (Lymer & Oats, 2009, p.3). Black (1990) defined tax as an enforced contribution of money or other property, assessed in accordance with some reasonable rule or apportionment by authority of a sovereign state on persons or property within its jurisdiction for the purpose of defraying the public expenses. The Institute of Chartered Accountants of Nigeria (ICAN) (2014) defined tax as a form of levy imposed on all the residents and non residents engaging in business activities within a tax jurisdiction.

A judiciary definition of tax was given in *Mathew’s v Chikory Marketing Board* (Victoria) 1938, cited in FIRS (2012a) – a high Court of Australia case that considered Section 90 of the Australian Constitution, which prohibits States from levying excise (taxes) – as a compulsory exaction of money by a public authority for public purposes. Soyode and Kajola (2006) emphasized that the exaction of tax by government is not tied to any particular benefit to the taxpayer. David (2013) stated that for any payment to be considered as tax, it must possess some characteristics which include: it must be a compulsory levy; it must be made to a public authority with tax jurisdiction; the levy

must be certain; it must have a known formula or basis for calculating the payment; the levy must be collected for the common good or benefit of all; it must be backed up by Acts promulgated from time to time and there must be penalties for non-compliance.

However, The Institute of Chartered Accountants of Nigeria (ICAN) (2014) defined taxation as the process of levying and collection of tax from taxpayers.

2.2.2 The Concept of Income Tax

Income tax is a tax levied on both earned income (wages, salaries, commission) and unearned income (dividends, interest, rents). The two basic types are: Personal income tax – levied on incomes of individuals, households, partnerships, and sole proprietorships. Corporation income tax – levied on profits of incorporated firms. However, the focus of this study is on personal income tax.

2.2.3 The Concept and Definition of Tax Compliance

Palil (2010) observed that, tax compliance issues can be looked at from different perspectives such as law, economics, accounting, psychology and public finance. For example, James and Alley (2004) defined tax compliance as the readiness of taxpayers to behave according to the tax law without being enforced to do so. Roth, Scholtz and Witte (1989) defined tax compliance as timely submission of tax returns that accurately report the tax liability of the taxpayers in line with the applicable tax law in force as at the time submission of the tax returns. Milliron and Toy (1988) defined tax compliance from the angle of economics by viewing taxpayers as having the tendency of evading tax when they consider the expected gain from tax evasion exceeds the cost. Andreoni, Erard, and Feinstein (1998) defined tax compliance as taxpayers' willingness to comply with tax laws in order to obtain the economy equilibrium of country.

McBarnet (2003) identified three categories of tax compliance as: committed compliance – taxpayers who will comply to pay taxes without any complaints; creative compliance – taxpayers who are found of engaging in tax avoidance and capitulative compliance – are taxpayers that require to be persuaded before paying taxes. Franzoni (2000) and Chatopadhyay and DasGupta (2002) stated that compliance with tax laws involves reporting of tax-base correctly, raising of accurate assessment, timely completion of tax returns forms and timely making of payment of amount due. From the foregoing, tax compliance has been defined by different scholars in the field of taxation. However, Franzoni (2000) and Chatopadhyay and DasGupta (2002) definition of compliance is adopted for this study.

2.2.4 Tax Compliance Determinants

The review of tax compliance literature reveals that a considerable body of literature exists on taxpayer compliance and the factors that determine tax compliance behaviour. Jackson and Milliron (1986) used a meta-analysis to analyse the existing compliance literature from which they identified fourteen factors (tax rate, sanction, probability of detection, revenue authority contact, complexity, fairness, ethics, peer influence, occupation, income source, income level, education, gender and age) that to some extent did influence the compliance behaviour of taxpayers. However, these fourteen factors are categorised by Fischer, Wartick and Mark (1992) into four groups in a model named Fischer model.

Several studies have also been conducted that focused on various combinations of these factors (Ritsema, *et al.*, 2003; Mckerchar, 2003; Kasipillai & Hijattulah, 2006). Other recent factors such as satisfaction with government (Smith & Stalans, 1991; Oberholzer, 2008), financial condition (Brett, Cron & Slocum, 1995; Alabede, 2012 and Bloomquist, 2003), willingness and opportunity (Wallschutzky, 1990) and

taxpaying culture (Torgler, 2002). Loo (2006) identified five main categories causes namely: the assessment system, tax knowledge, tax structure features, financial constraints and attitude towards tax. However, in this study, the determinants of tax compliance examined include: taxpayers' knowledge, tax system structure, public governance quality; public disclosure of taxpayers' information and financial constraints of taxpayers.

Tax knowledge is the extent to which taxpayers are familiar with tax legislations. Fallan (1999) described tax knowledge as the combination of information about tax legislations, tax policies and tax administration with financial skills required in the determination of economic results for taxpayers. Tax knowledge is considered to be a prerequisite in a voluntary compliance tax system. Possessing adequate tax knowledge will enable a taxpayer to determine accurately his tax liability. Jackson and Milliron (1986) identified two elements of tax knowledge as: general degree of fiscal knowledge and specific degree of knowledge in respect to tax evasion opportunities.

The studies of Jackson and Milliron (1986), Richardson and Sawyer (2001) and Lewis (1982) identified four measures of tax knowledge as: the general degree of fiscal knowledge, knowledge involving evasion opportunities, general educational attainment and specific tax knowledge. Saad (2011) in his study identified three aspects of tax knowledge, namely general knowledge, technical knowledge and knowledge of legal sanctions. General knowledge relates to a broad idea about the income tax system such as its purpose and the tax structure. Legal knowledge emphasizes taxpayers' knowledge on the regulation aspects of income tax system, such as responsibility to submit their tax return forms timely and the penalty for non-compliance. Technical knowledge is about the taxpayers' ability to fill and file their return forms themselves. The study conducted by Spilker (1995) also, identified the

types of knowledge required in taxation to include declarative knowledge and procedural knowledge. However, this study adopted the classification of Saad (2011).

Chau and Leung (2009) identified deficient tax system structure as one of the main causes of decreasing tax compliance in many developing countries. However, tax system structure as a determinant of tax compliance has been viewed from different perspectives. Loo (2006) identified tax structure components to include, tax rates, probability of audit and the penalty regime. Jayawardane and Low (2017) also identified tax rate, probability of being audited; non-complexity of tax system and detection probability as the constituents of tax system structure. However, this study, adopted detection probability, penalty and fine as the constituents of tax system structure.

Governance refers to the formal and informal structures that determine how public decisions are made and how public actions are executed from the perspective of keeping a country's constitutional values (UN, 2007). Lynn, Heinrich and Hill (2000) described governance as the means of achieving direction, control, and coordination of wholly or partially independent individuals and organisations in order to represent the interests to which they jointly contribute. Governance indicators are employed to evaluate and liken the institutional quality of countries and are used in conducting research and policy formulation.

Alabede (2012) opined that no general agreement on what should constitute governance. However, Nzongola-Ntalaja (2003) as cited in United Nation (UN, 2007) identified three main types of governance: first, public governance – basically concerned with authority of the public sector that connects the process by which a society arranges its affairs and controls its resources. The second, economic governance – the authority is the private sector, this is in relation to policies, and the

organizational mechanisms that are needed to make available goods and services. Third, social governance – the authority is the civil society, including the citizens and non-profit making organisation. It is connected to a system of beliefs and values that are needed for social behaviours to exist and for public decision-making. The focus of this study is Public governance.

Public governance according to Rotberg (2005) involves the management, supply and delivery of political goods to the citizens of a country. World Bank (2006) viewed public governance as the traditions and the institutions by which authority is exercised for the common good of the people living in the environment. It includes the process by which the people in authority are chosen, watched and checked and replaced, the capacity of the government to effectively manage its resources and implement sound policies, and the respect of citizens and state for institutions that govern economic and social interactions in the state. The quality of governance usually depends on the way the constituted authority exercises its power to achieve its objectives. Rotberg (2005) argued that public governance is ‘good’ when a state allocates and manages the available resources in catering for the collective need of the people. According to Besancon (2003) and Rotberg (2005), political goods include provision of adequate security for the people, political and civil freedom, and rule of law; provision of basic infrastructural facilities such as sound health care services, well-equipped schools with adequate manpower, good roads network, railways; accountability; and participation in governance.

2.2.5 Self-assessment System in Nigeria

The 1999 Constitution of the Federal Republic of Nigeria has provided a leeway for implementation of self-assessment system of tax. Section 24 (f) makes prompt payment of taxes a duty of every citizen of Federal Republic. The section provides as

follows: it shall be the duty of every citizen to declare his income honestly to appropriate and lawful agencies and pay his tax promptly.

Personal Income Tax (Amendment) Act (2011) are clear on the issue of self-assessment. Section 44 of Personal Income Tax Act (PITA) 2004, contains the explanation on operation of self-assessment method of tax collection. It states that: “a taxable person is required by this Act to file a return of income shall in return calculate the amount of tax payable”. The self-assessment method of tax collection was first introduced into tax system in Nigeria in the year 1991 by Finance Miscellaneous Taxation Decree No 2 of 1991 which empowered companies to self assess and became operational with effect from 1992. Notwithstanding, the initial incentives attached to the self-assessment system upon introduction, the tax authority was administering both government assessment and self-assessment with preference to government assessment.

However, Section 44 of the Act which required a taxable person to file a return of income and calculate the amount of tax payable was not enforced. Consequently, the implementation of self-assessment method of tax collection system was not successful. This possibly may have been due lack of appreciation or buy-in of the concepts by the tax administrators. In addition, there was no uniform approach to enhance compliance (FIRS, 2011). However, the implementation of self-assessment system became effective in the year 2011 (Onyegbule, 2012).

Furthermore, under the government assessment tax regime, the assessment process was characterized by the many challenges which include: non-payment of taxes until assessment notices were raised; delays in issuance and delivery assessment notices which impedes the steady flow of tax revenue to government; some taxpayers enjoyed the delay and even avoided service of notices of assessment; loss of assessment notices; the power to assess in the hands of the tax official lent itself to abuse;

numerous dispute/litigation arising from improper service of notice; high administrative cost to tax authority and Mutual suspicion and antagonism between the taxpayer and tax administrators (FIRS, 2011).

Self-assessment tax regime is a system of tax administration where the taxpayer is granted the right, by law, to compute his own tax liability, make payment for the tax due at the designated banks and attach the evidence of tax paid at the time of filing his tax return at the tax office, on due date. FIRS (2011) identified the key elements of a self-assessment tax regime as follows: the taxpayer bears the burden of accurately calculating his/her tax liabilities, pays tax due and files self-assessed return on or before the due date; the tax returns are accepted by the tax officers as filed, subject to simple checks to ensure that tax return forms are duly completed (the tax authority shall accept all returns as filed; it may subject the returns to further administrative checks to determine whether or not a taxable person has assessed less than what should be); where the taxpayer fails to meet his obligations, sanctions are immediately applied. Non-filer are subjected to administrative assessments that are based on information obtained from taxpayer and other sources and with the appropriate penalties and interests effective from the time the return was initially due; and it relies heavily on post-filing controls such as risk-based audits, collection enforcement measures and so on.

FIRS (2011) emphasized that self-assessment tax regime involves a series of activities beginning with taxpayer enablement, computation of tax due, payment and filing, tax return processing, debt management and compliance enforcement. The underlying objective is to promote voluntary compliance and ensure that the taxpayer takes responsibility for his assessment. Malik (2010) submitted that self-assessment scheme is based on key assumptions which include: the taxpayer is a stakeholder and a partner and should be treated courteously; the taxpayer is honest and indeed demonstrates this

by signing a declaration as the correctness of the tax returns; the taxpayer runs the business and knows the right amount of profits and taxes payable; on the part of the revenue, it should accept returns as filed and later subject the returns to risk assessment.

2.2.6 Taxonomy of Personal Income Taxation in Nigeria

Nigerian Personal Income Tax Law

The legitimacy of imposing taxes in Nigeria is derived from the 1999 Nigerian constitution. Part I of the Second Schedule to the 1999 Constitution contains a list of matters over which the National Assembly of the Federation has power to make laws (Exclusive Legislative List). The Houses of Assembly of states do not have powers to legislate on such matters. Part II of the Second Schedule to the 1999 Constitution contains a list of matters over which the National Assembly and a House of Assembly may make laws (Concurrent Legislative List). In a situation where the House of Assembly of a state makes a law on any of these matters which is inconsistent with the one made by the National Assembly, that of the National Assembly shall supersede. The power to make laws for the imposition of taxes is expressly given to the National Assembly at the centre under item 58 and 59 of the Exclusive Legislative List as well as item 7 and 9 in the Concurrent Legislative List. The administration of some specified taxes, such as personal income tax is given to the state governments under the Concurrent Legislative List. The House of Assembly at the state level is empowered to make laws to levy taxes and rates on individuals within the jurisdiction of the local government under the Residual List. Thus, the law to regulate and impose income tax on the individuals is contained in the Exclusive List. The first personal income tax law in Nigeria was the Native Revenue Ordinance of 1906. The Income Tax Management Act of 1961 was the first enactment that was promulgated with a

view to regulate the taxation of personal incomes exclusively and also provide a uniform system of personal income taxation across the federation.

Several other amendments were made to ITMA through the instrumentality of sundry enactments up to 1993 (such as Finance (Miscellaneous Taxation Provisions) Decrees Nos. 21 and 63 of 1991). The current law governing the personal income tax administration in the country is Personal Income Tax Act Cap P8 Laws of Federation of Nigeria 2004 (FIRS, 2012). The latest amendments are contained in the Personal Income Tax (Amendment) Act 2011. In 2004, PITA 1993 was consolidated with various amendments to promulgate the Personal Income Tax Act Cap P8 LFN 2004. Personal Income Tax Act Cap P8 LFN 2004 is made up of 13 parts, 109 sections and 8 schedules.

2.3 Theoretical Issues

2.3.1 Theories of Tax Compliance

Studies on tax compliance have emerged from different disciplines such as law, economics, public administration, sociology, psychology, political science, accounting and criminology. As a multi-discipline study, theories on tax compliance have been developed from diverse sources. However, review of literature revealed that, researches into tax compliance behaviour can be aligned with the two major types of theories: the economic theories and sociological/psychological theories each reflecting the relevant underlying discipline. Economists assume that human beings would act rationally when evaluating the costs and benefits associated with tax compliance. Similarly, sociologists and psychologists assume that individuals' tax compliance behaviour is influenced by quality of public governance, demographic characteristics, cultural background, perception of fairness of tax system and attitudes.

Therefore, the theoretical frameworks within which this study was examined are divided into economic theory and sociological/psychological theories. Under the economic theory, the theoretical assumptions were drawn from the economic deterrence theory. The sociological/psychological theories for this study were drawn from: social exchange theory and theory of planned behaviour.

2.3.1.1 Economic Based Theory

2.3.1.1.1 Economic Deterrence Theory

The economic approach to compliance behaviour was tested by Becker in 1968 when he employed a ‘crime and punishment’ framework to explain the economics of crime. Becker used a utility-maximizing framework to explicate the reaction of criminals to a crime. He argued that criminals would behave like any other individuals. They would commit a crime if the expected benefits would outweigh the gains when the legitimate activity is performed.

Although, Becker (1968) argued that his model was applicable to tax evasion. Allingham and Sandmo (1972) developed an economic model for tax compliance using deterrence theory to analyse taxpayers’ compliance behaviour and developed a model called A-S model. The model was seminal for it was followed by a large number of contributions from the literature which extended the original model in a number of directions (Marandu, Mbekomize & Ifezue, 2014). The A-S model relied on the theoretical antecedents of tax evasion, such as rates and detection probability. The model assumed that taxpayers were risk averse, rational and perfectly moral while taking decision on utility maximization. A-S model also presumed the independence of the amount involved from the probability of detection. The model further assumed that an individual might be discouraged from tax evasion when he is aware of the existence of a fixed probability of being detected and the penalty imposed on actual

tax liability if detected. In applying economic deterrence theory to this study, it can be said that the compliance decision of taxpayers can be affected by the awareness of the existence of a fixed probability of being detected and the penalty imposed on actual tax liability if detected. The inference that can be drawn from this is that, the tax authorities should increase penalties and introduce policies that would increase the probability of detection in order to minimize tax non-compliance among taxpayers.

2.3.1.2 Psychological and Sociological Theories

The economics-of-crime approach and its extensions is based on the assumption that an individual pays taxes only because of the economic consequences of the evasion gamble and because they fear detection and punishment (Marandu *et al.*, 2014). However, it is crystal clear that compliance cannot be explained entirely by such purely economic considerations and level of enforcement. Alm (2012) also observed that the percentage of income tax returns that are subject to a thorough tax audit is generally quite small in most countries. Therefore, noneconomic factors are considered necessary in the study of factors that affect tax compliance.

2.3.1.2.1 Theory of Planned Behaviour (TPB)

TPB was developed out of the Theory of Reasoned Action (TRA). TPB is a generally used theoretical framework to explicate human behaviour (Ajzen, 1991). The TPB model describes that behavioural intention determines the actual behaviour. Behavioural intention is, in turn, determined by attitudes towards behaviour, subjective norm and perceived behavioural control (Saad, 2010).

Attitude towards behaviour is defined as an individual's evaluation of performing the behaviour (Manstead, 2004) which often contains two independent components, namely affective and instrumental attitudes (Ajzen, 2006). Affective attitude deals

with emotions such as feeling happy, sad or guilty, if performing certain behaviour while instrumental attitude refers to a more cognitive considerations to which performing certain behaviour would be advantageous (Ajzen, 2006; Breckler & Wiggins, 1989).

Subjective norms refer to a person's perceptions of the expectations of the people who are important to him or her, whether he or she should or should not perform certain behaviour (Ajzen, 2006; Fishbein & Ajzen, 1975; Manstead, 2004). Subjective norms are determined by normative beliefs. Normative beliefs comprise the person's beliefs that people that have regard for him or her would expect him or her to act in certain way, and his/her inclination to conform to their expectations (Manstead, 2004). Perceived behavioural control reflects an individual's perception on the ease or difficulty in performing a particular behaviour (Saad, 2010). The construct stipulates that a behaviour that is easy to perform is high in perceived behavioural control, while one that is difficult to perform is low in perceived behavioural control (Manstead, 2004). Saad (2011) summarized that TPB suggests that one's motivation to perform a particular behaviour is also influenced by individual's perception of how easy or difficult it is to perform such behaviour.

According to Saad (2010) when a taxpayer believes that he or she can successfully complete and file the tax return forms with Inland Revenue without any mistakes, the person seems to have a high perceived behavioural control and is more likely to comply with their tax obligations. On the other hand, if a taxpayer believes that he or she can avoid paying tax without being caught by tax audit, the person also seems to have a high perceived behavioural control over non-complying, and thus, is more likely to avoid paying tax.

In applying the TPB to this study, it can be said that the subjective norms as one of the determinants of behavioural intention would influence the taxpayer's compliance. Disclosing publicly, the information about tax defaulter may be construed by the taxpayers as an embarrassment to them. Perceived behavioural control reflects an individual's perception on the ease or difficulty in performing a particular task. Adequate tax knowledge of taxpayers will encourage them to comply in a self-assessment system. Therefore, the taxpayers' knowledge may influence perceived behavioural control of the taxpayers, which in turn affects their decision whether to comply or not.

2.3.1.2.2 Social Exchange Theory

Social exchange theory is a theory associated with the work of George Caspar Homans in 1961 and Peter Blau in 1964. It is based on the assumption that all human relationships can be understood in terms of an exchange of value. Social exchange theory analyzes interactions between two parties by examining the costs and benefits to each. The key point of the theory is that it assumes the two parties are both giving and receiving items of value from each other. Under this theory, interactions are only likely to continue if both parties feel they are coming out of the exchange with more than they are giving up—that is, if there is a positive amount of profit for both parties involved. Rewards and costs are important concepts that form the basis of most social exchange theories. Rewards are exchanged resources that bring pleasure and satisfaction, while costs are exchanged resources that are perceived as a loss or punishment.

Some propositions of the theory as provided in Homan (1974) as cited in Alabede (2012) include:

The success proposition: for all actions taken by individuals, the more often a particular action of individual is rewarded by some benefits, the more likely the individual is to undertake that action. In application to taxation, as taxpayers get more benefits from the payment of taxes, the more they will be willing to comply with the tax obligations. The stimuli proposition: if in the past, the occurrence of a particular stimuli or set of stimuli, has been the occasion on which an individual's action has been rewarded by some benefits, then the more similar the present stimuli are to the past ones, the more likely the individual is to undertake the action, or some similar action now. In application to taxation, if in the past the benefits that taxpayers have been receiving from tax payment have been rewarding then the more the more that is added to the past benefits will likely make them to be more willing to comply with tax obligations. Therefore, consistent improvement in the provision of public goods and control of corruption will enhance tax compliance.

The value proposition: the more precious to people the result of performing an action, the more likely they are to undertake the action. Applying this to taxation, if the benefit taxpayers received from the government is valuable in quality for compliance, and then they are more likely willing to comply.

2.4 Empirical Studies

This section discusses prior empirical studies related to this study. These include: studies on the relationships of tax compliance with tax knowledge; tax system structure; public governance quality; public disclosure of taxpayers' information and taxpayers' financial constraints.

2.4.1 Tax Knowledge and Tax Compliance

Tax knowledge is the most important factor that influences taxpayers' compliance in a self-assessment system. (Eriksen & Fallan 1996; Kirchler *et al*, 2008; Kasipillai &

Jabbar, 2003; Singh & Bhupalan, 2001). Craner and Lymer (1999) opined that more compliance would be achieved with adequate tax knowledge of people. Barjoyai (1992) argued that taxation knowledge is more essential than geometry or geography knowledge in the sense that taxation knowledge is a universal knowledge required by individuals with potential liability of paying tax one day. Eriksen and Fallan (1996) also concluded that better tax knowledge associates, at least in part, for the improved perception of fairness and attitude to others' tax evasion.

Halim, Ahmad, Katmum and Jaafar (2015) conducted a study to determine the basic knowledge of non-accounting students in Universities in Malaysia. The results found that close to 40% of the respondents possess low basic tax knowledge. Adimassu and Jerene (2015) examined factors that influence taxpayer's voluntary compliance in self-assessment system in Southern Nation Nationalities and People's Regional State (SNNPRS), Ethiopia. The study used a cross-sectional survey method of research design. Pearson correlation matrix and logistic regression model were employed. The result of the study revealed that tax knowledge has influence on tax compliance. Beesoon, Hemavadi and Jugurnath (2016) assessed the factors that influence income tax compliance in Mauritius for individual taxpayers. The study adopted primary survey design to obtain data which was analysed with the aid of thematic statistical analysis. The result revealed that tax knowledge impact significantly on tax compliance.

Diamini (2017) conducted a research to examine the factors that influence tax non-compliance of SMEs in Zimbabwe. A survey research was used to obtain data for analysis with the aid of regression statistical technique. The result revealed that poor follow-up strategy and lack of a tax audit, high tax rates, financial constraints, abuse of public funds by government and tax education were factors contributing to non-

compliance. Mukasa (2011) conducted a research to examine the connection between tax compliance and tax knowledge of taxpayers in Uganda. The study found that tax knowledge had a significantly positive connection with tax compliance. Similarly, Palil and Mustapha (2011); Palil *et al.* (2013) and Redae and Sekhon (2015) also found that tax knowledge had positively significant relationship with tax compliance.

Studies on tax knowledge as one of the determinants of tax compliance were carried out Kenya and Ghana by Jemaiyo and Mutai (2016), Gitaru (2017) and Abukari (2017) respectively. These studies were conducted to examine the relationship between tax compliance and taxpayers' knowledge. The results of the finding of the studies indicated that tax knowledge of taxpayers had significant positive relationship with tax compliance. Olowookere and Fasina (2013) examined taxpayers' education as a key strategy in achieving voluntary compliance in Lagos State. The study adopted a quasi-experimental survey research design. Analysis of Variance (ANOVA) statistical technique was used to analyse the data. The result revealed that tax education programmes for the taxpayers had influence on self-assessment compliance in Lagos State. Ibadin and Eiya (2013) carried out a study that examined the relationship between level of education attained by the self-employed and their decision on tax evasion. The study was carried out using a sample size of six hundred respondents spread among the six geo-political zones in Nigeria. ANOVA and Ordinary Least Square (OLS) method of regression were used to estimate the data collected. The study revealed a positive significant relationship between educational level of taxpayers and tax compliance. Empirical studies conducted by Oladipupo and Obazee (2016) and Olaoye, Ayeni-Agbaje and Alaran-Ajewole (2017) in Nigeria, investigated the relationship between taxpayers' knowledge and tax compliance amongst small and medium enterprises in Nigeria. The study used survey research method using a structured questionnaire administered to obtain data from the respondents. Ordinary

Least Square regression was used to analyse the data. The study found that tax knowledge had positive significant relationship with tax compliance.

Contradictory evidence, however, is documented in Malaysia where an increase in taxpayers' knowledge has impacted negatively on fairness perceptions (*Loo et al*, 2008). In particular, their findings suggest that taxpayers who have adequate knowledge of government expenditure for public benefits view the income tax system to be unfair as they are not receiving sufficient benefits in return for their tax paid. Ching (2013) conducted a study to examine factors influencing taxpayers' non-compliance in Malaysia. The study used purposive sampling method. Pearson's correlation analysis was employed in the data analysis. The results showed that taxpayers' level of education may influence their non-compliance. The study of Collins *et al.* (1992) and Fauziati *et al.* (2016) found no relationship between tax knowledge and tax compliance.

2.4.2 Tax System Structure and Tax Compliance

Empirical studies on tax audit / probability of detection have been conducted by many scholars in the field of taxation in an attempt to determine the effect of probability of detection or tax audit on tax compliance. In any tax system, where self-assessment is practiced, tax audit, heavy penalties and fines are measures put in place by the relevant tax agencies to discourage tax compliance.

Allingham and Sandmo (1972), Riahi-Belkaoui (2004), Richardson (2008) and Alasfour (2016) submitted that taxpayers will not understate his/her incomes or overstate his/her allowable expenditure where he/she is fully aware that adequate mechanism of probability of detection has been established and heavy penalties and fines are available if found guilty. Tax audits can play a crucial role in sustaining the confidence and integrity of the taxpayers and consequently enhance voluntary

compliance. Engida and Biasa (2014) and Alm, Deskin and Mckee (2004) argued that tax audit will not only have a direct deterrent effect on taxpayers being audited but also an indirect deterrent effect on taxpayers not being audited. Alabede (2012) and Chau and Leung (2009) submitted that a high rate of detection and high audited probability will encourage tax compliance.

Tehulu and Dinberu (2014) conducted a study to examine the effect of probability of being audited on taxpayers' compliance in Ethiopia. The study collected using structured questionnaire. One-way ANOVA, two samples and one sample T-test were used for the analysis. The results revealed that probability of being audited has no significant effect on taxpayers' compliance. Empirical studies conducted by Friedland, Maital and Reuentberg (1978), Witte and Woodbury (1985), Dubin and Wilde (1988) and Slemrod, Blumenthal and Christian (2001) reported that tax audit had a significant positive effect on tax compliance. Tax audits were more effective at inducing accurate reporting of deductions rather than income. Dubin, Graetz and Wilde (1990), using data over a period from 1977 to 1986, explored the relationships between audit rates and three aspects relating to compliance, namely, reported tax per return, assessed liabilities per return and number of returns filed per capita. They concluded that audit rates had a significant positive effect on reported tax per return.

Ali, Cecil and Knoblett (2001) utilising the 1980-1995 data from the Annual Reports of IRS developed two equations and concluded that audit rates and penalty rates were both effective deterrent of non-compliance. The effectiveness of the two instruments was subjected to taxpayers' income level and that these two instruments were more effective for those high-income level taxpayers. Ebimobowei and Peter (2013) and Modugu and Anyaduba (2014) studies found a significant positive effect of tax audit on taxpayers' compliance and also probability of being audited has a tendency to

significantly influence tax compliance in Nigeria. Badara (2012) also found that tax audit not effective because of the problem of negative attitude of tax payers to tax officials, poor sanctions for non-compliant taxpayers. However, Beron, Tauchen and Witte (1993) found that probability of detection only had a modest positive effect on compliance. Similarly, the study conducted by Alm *et al.* (1992), Alm *et al.* (2004) and Alm and McKee (2006) reported that the effect of probability of detection was small and nonlinear. This implies that the deterrent effect on compliance declines over time.

Penalty is the sanction imposed for non-compliance with filing and payment requirements. The tax laws and other applicable laws operational in a country have adequate provisions for sanctions/penalties for the various offences. Taxpayer awareness of offences and penalties also has a significant role to play in tax compliance. Taxpayers' awareness and understanding of the consequences of tax non – compliance might reduce their tendency to evade tax. The self-assessment voluntarily relies on the enforcement of a strict penalty regime whenever the taxpayer fails to comply voluntarily. Doran (2009) suggests that taxpayers are likely to comply with taxes if they perceive the penalties to be higher than the cost of compliance. In the same vein, Devos (2014), Ali, Fjeldstand and Sjursen (2013) and Zivanai et al (2013) conclude that if penalties are not severe non-compliance will be high. The studies conducted by Virmani (1989) and Oladipupo and Obazee (2016) found a positive association of penalties and fines with tax compliance. However, the studies of Gordon (1990), Alm, Jackson and McKee (1992) and Feld and Frey (2007) found that tax penalty rates have a negative association with tax compliance.

Chebusit, Namusonge, Biraori and Kipkoech (2014) conducted a study in Kitale town in Kenya, with the objective of examining the effect of fines and penalties on tax

compliance of small and medium enterprises. The study adopted a descriptive research design involving both qualitative and quantitative research methodology. The study revealed that fines and penalties had a positive and significant effect on tax compliance. Camille and Yona (2016) also found that penalties and fine had a strong positive relationship with tax compliance.

2.4.3 Public Governance Quality and Tax Compliance

Good governance achieves good tax system and state legitimacy, the effectiveness of tax administration and taxpayers' voluntary compliance constitute the main pillars for the good tax system (Hossain, 2014). Everest-Phillip and Sandall (2009) observed that public governance quality is germane to have a good tax system and in the same vein, a good tax system is necessary to gain public governance quality. Similarly, Ajaz and Ahmed (2010) argued that, quality of governance is crucial for proper planning and efficient revenue generation. He further argued that when tax non-compliance and corruption of public officials is a general perception then tax revenue as well as economic growth and development would be negatively be affected. Torgler (2003) observed that, when people are no longer having trust in government tax compliance tend to be affected. He further observed that positive actions by the government might cause taxpayers to develop a positive attitude and commitment to tax system and tax payment and consequently, tax compliance is enhanced. In the same vein, Akpo (2009) reported that good governance as to do with the provision of basic infrastructure to the residents in exchange for tax paid and in the event of failing to do that the people in the state may become reluctant to tax payment.

The study of Wang (2010) concluded that taxpayers' confidence is largely dependent on the efficiency and efficacy of government services, the perceived level of fraud and corruption in the government and whether government is serious in combating fraud and corruption. Alm and Gomeg (2008) affirmed a significant positive relationship

between the perception of the benefit to be derived from good governance and taxpayers' voluntary compliance. The study of Richardson (2008) conducted across 47 countries found that government effectiveness had a positive significant relationship with tax compliance. Mustapha, Zakaree and Yahaya (2015) concurred with the position of Richardson because taxpayers most especially in the developing countries like Nigeria would like to feel the presence of government in terms of provision of social amenities before complying with legal provisions because the taxpayers perceived that government does not utilize the revenue collected from tax judiciously. Bird, Martinez-Vazquez and Torgler (2008) confirmed that factors such as corruption, rule of law, entry regulations are important determinants of tax revenue.

Torgler (2003) argued that direct democratic rights, local autonomy, trust in government and courts and legal system has a positive and significant effect on tax moral. Tanzi (1998) observed that countries with high level of corruption do have the experience of low tax revenue because substantial parts of the taxes paid by taxpayers are embezzled. The studies of Egwaikhide (2010), Kasum, Abu-Kasum and Osemene (2013), Madueke (2008), Fagbadebo (2007) and Nzotta (2007) identified lack of control of corruption, rule of law and poorly articulated government policy as the causes of general dissatisfaction of citizens with the quality of public and governance and this has affected the willingness of people to comply to payment of taxes in Nigeria. In addition, Abati (2006) pointed out that, the state of decay in Nigeria's public infrastructure and economic activity are a reflection of poor governance quality.

Umar, Derashid and Ibrahim (2016) submitted that good public governance enhances tax compliance by citizens and ultimately leads to availability of more fund for public programmes. The study further submitted that poor public governance quality impoverish and alienate citizens who also react by failing to pay tax and consequently,

fund for public programme will be inadequate. Alabede (2012) investigated the perception of taxpayers on the public governance quality of in relation to tax compliance. The study was designed using taxpayers' opinion survey method. Multi-stage cluster random sampling technique was applied to select the samples from the population of individual taxpayers residing in Federal Capital city of Abuja. The data collected through self-administered questionnaire were analysed using multiple regression technique. The results revealed that perception taxpayer about public governance quality significantly related to the compliance behaviour.

Mustapha, Zakaree and Yahaya (2015) conducted a study on institutional factors and tax compliance in Kaduna State, Nigeria. Public governance quality was one of the variables used. The study used stratified random sampling method to select 285 respondents out of population of 991 registered self- employed business men and women with Directorate of Poverty Alleviation and live in Kaduna, Kanfanchan and Zaria cities. The study found that good governance has positive significant relationship with taxpayers' compliance in the state. The study recommended that transparency and accountability should be the guiding principles in thought and action of government as the basis for good governance in the state. Fagbemi and Abogun (2014) study found that trust in government had positive relation with taxpayers' compliance.

Modugu, Eragbhe and Izedonmi (2012) examined the nexus between government accountability and voluntary tax compliance. The study was based on the theoretical framework that there exist a relational fiscal/social contract between the state and the citizens. The study found that the citizens' perception of government accountability is an instrumental factor that shapes the emergence and maintenance of tax morale resulting in voluntary tax compliance. The study recommended that perception of quality of governance should be improved by actually imbibing the tenets of representative democracy. Ajaz and Ahmed (2010) investigated the relationship

between corruption and tax efforts using panel data for 25 developing countries during 1990 – 2005. The GMM regression results suggested that corruption has adverse effect on tax collection, while good governance contributes to better performance in tax collection.

2.4.4 Public Disclosure of Tax Information and Tax Compliance

Hasegawa *et al.* (2012) investigated the effect Japanese income tax disclosure system up until its abolition in 2005. It was discovered that where there was a threshold of disclosure many taxpayers whose liability were close to the threshold took the decision to report lower income in order to escape disclosure. However, the strong result only applied to disclosure systems with a threshold and the financial statements of companies provided no evidence that taxable incomes declined after the end of the disclosure system. Overall, it was concluded that public disclosure had the power to change behaviour.

Bø, Slemrod and Thoresen (2015) examine the effect on income reporting on the change in the degree of public disclosure; making use of the fact that prior to 2001, in some municipalities, tax information was distributed widely through locally produced paper catalogues. They found that almost 3 percent increase in income reported because of internet public disclosure.

2.4.5 Financial Constraint and Tax Compliance

The empirical studies conducted by Appah and Wosowei (2016) and Diamini (2017) investigated the relationship between taxpayers's financial constraints and tax compliance. The studies used survey research design and regression analysis was employed to establish the relationship. The results of the studies revealed that financial constraint of taxpayers was inversely related to tax compliance. This means that, if

taxpayers' financial constraint increases, tax compliance decreases. The studies of Engida and Baisa (2014), Tehulu and Dinberu (2014) and Palil and Mustapha (2011) conducted in Ethiopia and in Malaysia respectively on the effect of taxpayers' financial constraint and tax compliance revealed that personal financial constraint of taxpayers would influence their tax compliance.

Loo *et al.* (2009) investigated the influence of taxpayers' financial constraint on tax compliance. The study adopted a mixed method design using both the quantitative and qualitative paradigms. Two quantitative strategies of inquiry (a survey and an experiment) and one qualitative strategy of inquiry (a case study) were implemented concurrently in three phases. The findings of the three strategies were consolidated and triangulated using cross- method analysis. Financial constraint was found to have a direct and strong influence on the compliance behaviour of self-employed taxpayers.

2.5 Research Gap in the Literature Reviewed

Existing studies on determinants of income tax compliance have revealed that individuals' decisions are usually determined by many factors such as tax knowledge, tax system structure, public governance quality and financial constraints. However, there have been inconsistencies in the findings of studies conducted on these tax compliance determinants. With respect to tax knowledge, the studies of Eriksen and Fallan (1996), Mukasa (2011), Devos (2012); Redae and Sekhon (2016) and Gitaru (2017) found a positive connection of tax compliance and tax knowledge. Meanwhile, the studies carried out by Collins, Milliron and Toy (1992), Murphy (2003), Alm and Gomez (2008); Torgler (2012), Olowookere and Fasina (2013) and Fauziati *et al.* (2016) established a negative relationship between taxpayers' compliance and taxpayers' knowledge. In addition, studies conducted by Torgler and Murphy (2004), McGee and Bose (2009), Ho, Ho and Young (2013) and Ibrahim, Musah and Abdul-

Hanan (2015); found no relationship between taxpayers' tax knowledge and tax compliance. Therefore, there is need for further investigation.

With respect to tax system structure, there have been inconsistencies in the findings on the components of tax system structure from other studies in other countries as well as in Nigeria. Tehulu and Dinberu (2014) and Oladipupo and Obazee (2016) revealed that probability of being audited has no significant impact on tax compliance behaviour. Meanwhile, Gordon (1990), Alm, Jackson and McKee (1992) and Feld and Frey (2007) found that tax penalty rates have a negative association with tax compliance. In light of this, it is evident that further study to investigate the effect of probability of detection and penalties on tax compliance is absolutely necessary. In addition, an empirical study into the relationship between tax compliance and public disclosure of individual taxpayer's information has remained unexplored in Nigeria. Thus, this study has been conducted to fill the gap. Furthermore, a study on relationship between tax compliance and public disclosure of tax payers' information had been suggestion by Bărbuță-Mișu, 2011 and Devos & Zackrisson, 2015.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter describes the methodological aspects of this study. It describes the detailed procedures that were followed in order to achieve the objectives of the study.

3.2 Research Design

The research design adopted in this study was the survey method of research. Survey method is useful for the study of non-observable events, such as opinions, attitudes, preferences or dispositions (Soyombo, 2002). Survey research studies both large and small populations by selecting and studying samples chosen from the population to discover the relative incidence, distribution, and interrelations of sociological and psychological (Osuala, 2005). Since the researcher interest is to use many variables at a point in time, a cross sectional survey research design was used to collect data. The quantitative research approach was employed. This involved descriptive and inferential analysis of the relationship and the effect of tax knowledge, tax system structure, public disclosure of taxpayers' information, public governance quality, and financial constraints on taxpayers' compliance in Kwara State, Nigeria.

3.3 Population of the Study

The target population of this study comprised all 68,338 registered member of Kwara State Artisans Congress (KWACO) as at 30th September, 2017.

Kwara State Artisans Congress (KWACO) is the umbrella body for artisans in Kwara State. KWACO was inaugurated on July 5, 2013 by the executive governor of Kwara State. Before the inauguration of (KWACO), there were 47 different associations of skilled workers organised into four major umbrella bodies. These are: Kwara State

Self-Employed Artisans (KWASEA); Kwara State Technicians Congress (KWATECO); and Federation of Informal Workers' Organisation of Nigeria (FIWON). At the inauguration of KWACO, the 47 different associations now became affiliated associations of KWACO. As at September 30, 2017 the affiliated associations of KWACO had risen to 54.

3.4 Sample Size Determination

In this study, the Yamane formula for determining an appropriate sample size was used. The formula for sample size provided by Yamane (1967) as cited in Saad (2011)

is expressed as:
$$n = \frac{N}{1 + N(e)^2}$$

In this formula, 'n' represents the sample size; 'N' is the population. The value of 'e' (standard error), the confidence level used is 95 percent.

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{68,338}{1 + 68,338(0.05)^2}$$

~ 398 respondents

Thus, the minimum sample calculated from the Yamane formula is 398. While the result of Yamane revealed that a minimum of 398 subjects would be required for this study. It is worth noting that response rate in completing questionnaire in survey research in Nigeria is very poor even among the highly educated people (Asika, 1991; Adomi, Ayo, & Nakpodia, 2007). To further minimize the low response rate from uncooperative respondents, the sample size was increased by 40% as suggested by Salkind (1997). Adding this percentage to 398 gave approximately 558. Finally, a sample size of 558 was used for this study.

3.5 Sampling Technique

This study population was stratified and simple random sampling method was used to select respondents. Stratified random method was used to group the Artisans in various strata based on the associations that make up KWACO. This was done to ensure that all associations in KWACO were included in the sample and this gave each respondent a chance of being selected.

3.6 Data Source and Instrument for data collection.

Primary data was collected through a self-administered structured questionnaire. The questionnaire was designed with close-ended questions that covered all the variables gleaned from literature. This was done for ease in data analysis.

The questionnaire was divided into seven sections. The first section consisted of questions on tax knowledge. The second section contained questions on tax compliance. Section three had questions that related to the tax system structure. Section four dwelt on questions on public governance quality and the fifth section contained the questions on public disclosure of tax payers' information. The sixth section of the questionnaire had questions on the financial conditions of taxpayers. Finally, the seventh section covered the demographic characteristics of the respondents. The respondents were asked to indicate their opinions on five- point Likert-type scale which ranged from 'strongly disagree' to 'strongly agree'.

The data for this study was collected by the researcher together with 10 research assistants. However, for effective coverage of registered members of the Kwara State Artisans Congress (KWACO) across the 16 local governments in the state, the researcher and the research assistants contacted the respondents at the meetings of the various associations which took place at different scheduled period. Some associations held their meeting once in a month while some held theirs fortnightly.

In addition, some members of the associations were also identified with their associations' identity cards. This was done in order to capture the registered members. The questionnaire was prepared in English language being the official language in Nigeria, but researcher and research assistants deemed it fit to explain the contents in the local languages of the respondents when the need arose.

The procedures and the objectives of the study were clearly explained in the most comprehensive yet simple manner to all volunteers before their participation in this study. All volunteers were informed that all data generated shall respect their utmost confidentiality as their names and identity were not obtained.

3.7 Validity and reliability of the instrument

Validity of the instrument

The research instrument (questionnaire) was subjected to content validity as copies were given to three lecturers teaching on postgraduate programme in the Department of Accounting, University of Ilorin, Nigeria and two tax experts for their suggestions. The suggestions were incorporated. It was further pre-tested by administering it to 100 probable respondents and tested their understandability of the items. Items that were found not to be relevant were eliminated and those found not to be understood were adjusted for understandability for the final research instrument that was used. Additionally, some of the items in the questionnaire are adopted from questionnaire designed by past studies (Saad, 2011; Palil, 2011; Alabede, 2012).

Reliability of the Instrument

The reliability of the questionnaire items was tested using the composite reliability coefficient of each latent variable. The instrument is deemed fit if coefficient value falls between 0.7 and above indicating good reliability (Hair *et al.*, 2011). The

coefficient value of the questionnaire items in this study was between 0.881 and 0.917. Hence, there is adequacy of internal consistency reliability of the measures used in this study.

3.8 Method of Data Analysis

The data collected for this study was analysed using both descriptive and inferential statistics such as percentages, frequency, mean and standard deviations. Furthermore, the inferential statistics used was Partial Least Square Structural Equation Modeling (PLS-SEM). PLS-SEM approach constitutes a variance-based structural equation modeling technique (Chin, 1998). This tool combines factor analysis and multiple regressions which enable the researcher to simultaneously examine a series of interrelated dependent relationships among the measured variables and latent constructs as well as between several latent construct. In addition, the PLS-SEM approach is one of the powerful statistical tools in social and behavioural sciences that place minimal limitations on distributional characteristics of the data and sample size (Ringle, Wende & Will, 2005).

PLS-SEM consists of two components: a measurement model linking a set of observed indicators to a smaller set of latent constructs; and a structural model linking the hypothesized model's latent constructs (Hair *et al.*, 2006). Latent constructs are described as unobserved variables which are to be measured indirectly by two or more observed indicators. In the measurement model, the validity and reliability of these observed indicators in measuring the latent constructs are addressed. Once the validity and reliability of the measures in measurement model are established, the relationship between the latent constructs can be assessed by path analysis to test the research hypotheses.

3.9 Measurement of Variables

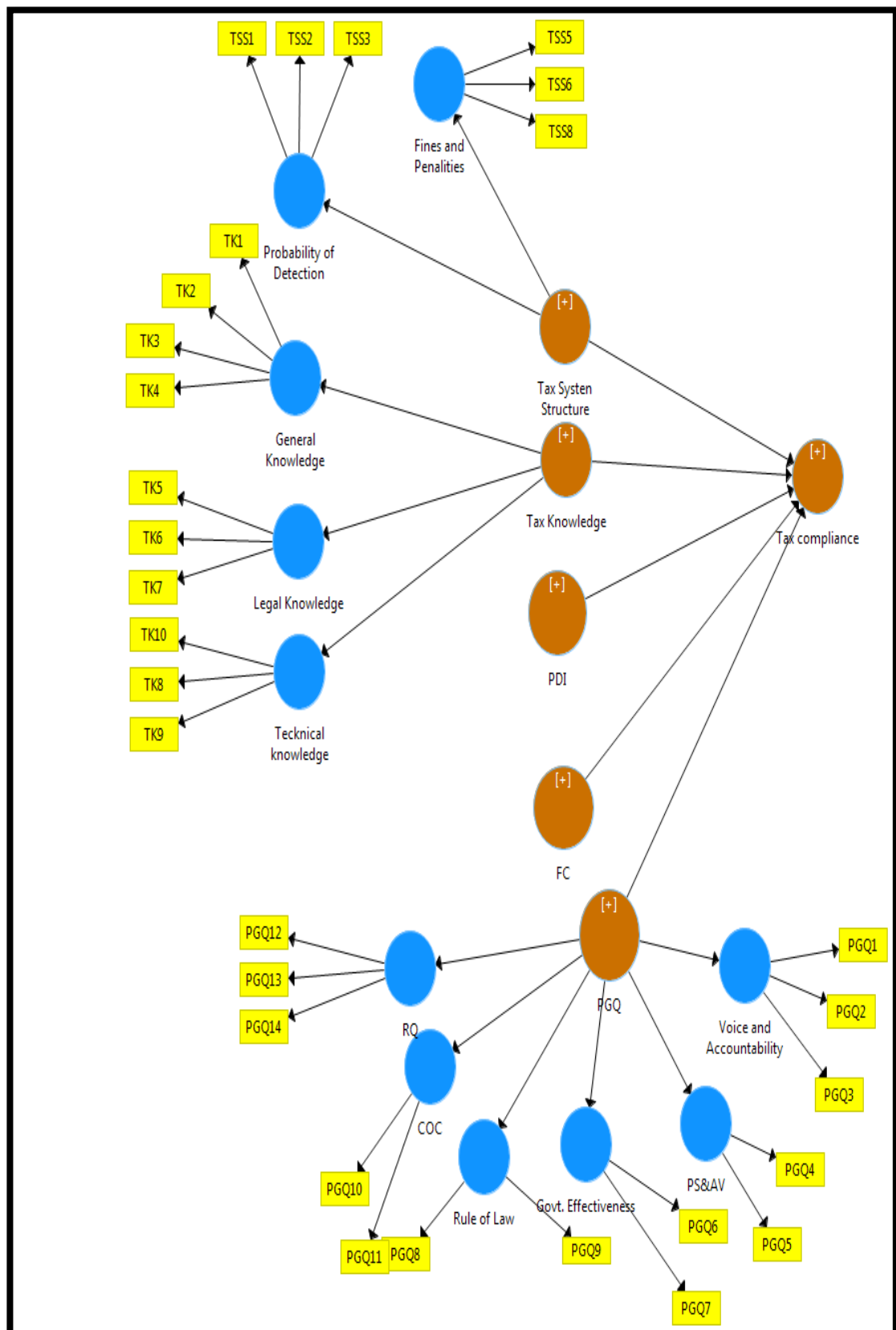
The data for this study was collected using a structured questionnaire. Therefore, scale measurement used for the variables was ordinal scale level. In this study, variables were measured using a five-point Likert scale of strongly disagree, disagree, not certain, agree and strongly agree with score from 1 to 5 respectively.

This study has six main constructs. These are tax compliance, tax knowledge, tax system structure, public governance quality, public disclosure of taxpayers' information and financial constraint. The following section contains a discussion on the model constructs and the indicators used to measure these constructs.

Tax compliance

In the context of this study, tax compliance is the dependent variable. Tax compliance is operationally defined as true reporting of the tax base; correct computation of the tax liabilities; timely filing of tax returns and timely payment of the amount due as tax. The measures of tax compliance were adapted from the study of Alabede (2012). However, it is worthy of note that Alabede (2012) also adapted the measures from previous questionnaires of Eriksen & Fallan (1996) and Kasipillai (1997). Tax compliance was measured with four items covering the four components of tax compliance as contained in figure 3.1 (TC1 to TC4).

Figure 3.1 First and Second Order Measures of Tax Determinants Construct



Source: Developed by Researcher (2017)

Note: **TK**- Tax Knowledge, **TC**- Tax Compliance, **TSS** – Tax System Structure, **PGQ** – Public Governance Quality, **PD** – Public Disclosure of taxpayers' information, **FC** – Financial Constraints, **RQ** – Regulatory Quality, **COC** – Control of corruption, **PS&AV** – Political Stability & Absence of Violent.

Tax Knowledge

The operational definition of tax knowledge in this study is the acquisition of general knowledge, legal knowledge and technical knowledge of tax system. Some items used to measure tax knowledge were developed by the researcher (TK1 to TK4) others (TK5 to TK10 were adapted from Saad (2011)). Tax knowledge was measured with items TK1 to TK10 contained in the figure 3.1.

Tax System Structure

Another construct in this study is tax system structure. This was operationalised to measure the two components namely: probability of detection and penalty and fine. The measures of tax system structure were adapted from the study of Alabede (2012). However, it is worthy of note that Alabede (2012) also adapted the measures from previous questionnaires of Mustafa (1997 & 2007), Wenzel (2004), James, Murphy & Reinhart (2005) and Gilligan & Richardson (2005). Tax system structure was measured with items (TSS1, TSS2, TSS3, TSS5, TSS6 and TSS8) contained in the figure 3.1.

Public Governance Quality

Public governance quality is another construct that is operationalised as measure of voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law and control of corruption. The measures of public governance quality were adapted from Alabede (2012), Afro barometer (2005), Tayib (1998), Marc (2001), World Economic Forum (2006) and Gallup

(2006). These components are in turn measured with some items contained in the figure 3.1.

Public Disclosure of taxpayers' Information

The operational definition of public disclosure of taxpayers' information in this study is the perception of taxpayers about their names being publicly disclosed if they default or evade tax payment. The measures of PDI were developed by the researcher. Items PD1 to PD2 in the figure 3.1 were used to measure public disclosure of taxpayers' information.

Financial Constraints

The operational definition of financial constraints in this study is the perceptions of taxpayers as to the extent to which the taxpayers are satisfy with his financial condition and that of his /her household. The measures of financial constraints were adapted from Palil (2011) and Alabede (2012). Seven items (FC1 to FC7) contained in the figure 3.1 were used to measure financial constraint of the respondents.

3.10 Model Specification

The Structural Equation Model was used to test the five hypotheses of this study. Each of the paths in the model has tax compliance as the dependent variable. PLS-SEM is a statistical technique for simultaneously testing and estimating causal relationships among multiple independent and dependent constructs.

3.10.1 PLS Model Evaluation

PLS-SEM does not make any distributional assumptions other than predictor specification. Wold (1980) argues that to be consistent, the PLS-SEM approach should apply prediction-oriented measures that are also nonparametric. For that purpose, several techniques were implemented to evaluate both the measurement model and the structural model. The measurement model assessment is crucial to establish the

validity and reliability of the model, while the structural model assessment is important for the models predictive capability.

3.10.1.1 Assessing the Measurement Model

Two main approaches namely, reflective and formative measurements have been acknowledged for evaluating the validity and reliability of any measurement model. First, the reflective measures which are represented by arrows pointing from the construct to the indicators are calculated in PLS-SEM by the outer loadings. While the formative measures which are presented by arrows pointing from the indicator to the construct, are calculated by their outer weights. However, all indicators in this study are reflective measures which are shown in figure 3.1. Therefore, the assessment of reflective models in this study was examined via: individual item (indicator) reliability, internal consistency reliability and construct validity (convergence and discriminant validity).

3.10.1.1.1 Individual Item (Indicator) Reliability

Indicator reliability can be defined as the proportion of indicator variance that is explained by the latent variable and the value ranges between 0 and 1. According to Hair *et al.* (2014) and Hulland (1999), indicator reliability is assessed by examining the outer loadings of each construct measures. That is, when indicator and latent variable are standardized, the indicator reliability equals the squared indicator loading.

3.10.1.1.2 Internal Consistency Reliability

The internal consistency reliability is assessed after the unidimensionality of the indicators have been carried out. The Partial Least Square Structural Equation Modeling (PLS-SEM) employs the use of composite reliability (ρ_c) instead of

Cronbach's alpha (α) which estimate the reliability based on the inter-correlations of the observed indicators variables to measure the internal consistency reliability. The prioritization of items in accordance with their individual reliability by PLS-SEM couples with the limitations of Cronbach's alpha (α) such as it assumes equality of all indicators loadings; it is sensitive to the number of indicators on a construct; and it underestimate the internal consistency reliability has made it imperatives for an alternative means of measuring internal consistency reliability which composite reliability (ρ_c) has readily fill the gaps. According to Hair *et al.* (2014), composite reliability (ρ_c) takes note of outer loadings of every indicator variables and it is calculated using the following formula:

$$\rho_c = \frac{(\sum_i l_i)^2}{(\sum_i l_i)^2 + \sum_i \text{var}(e_i)} \dots\dots\dots 4.1$$

Where l_i is the standardized outer loadings of the indicator variable l of a specific construct, e_i represent the measurement error of indicator variable l , and $\text{var}(e_i)$ is the variance of the measurement of error defined as $1-l_i^2$

3.10.1.1.3 Convergent Validity

This measured the extent to which each indicator of a construct shares high proportions of variance and converges in comparison to indicators measuring other constructs. Convergent validity tests if whether an item measures the construct it is expected to measure. The criterion for measuring convergent validity is the AVE proposed by (Fornell & Larcker, 1981). AVE which is equivalent to the communality of a construct is the sum of square loadings of indicators associated with a construct divided by the number of indicators. Convergent validity is achieved when the AVE value is 0.50 and above which means that, the construct explains more than half of the variance of its indicators on the average. When the value of AVE is below the

threshold value of 0.50, convergent validity is not achieved because the construct on the average cannot explain the variance of its indicators due to errors in the items (Hair *et al.*, 2014; Kayode, Yusoff & Veloo, 2016; Urbach & Ahlemann, 2010).

3.10.1.1.4 Discriminant Validity

Discriminant validity is defined as the extent to which the measures of a construct are distinct from the measures of another constructs by empirical standards. When discriminant validity is established, it means that, a construct is distinct in its representation of a phenomenon in comparison to other constructs in the model. Fornell-Larcker criterion has been employed to measure the discriminant validity in a reflective measurement model. It examines and compares the square root of AVE of each latent construct with the latent variable correlations of other latent construct. Discriminant validity is achieved if the square root of a construct's AVE is greater than the correlations with the other constructs in the model. (Hair *et al.*, 2014; Urbach & Ahlemann, 2010; Fornell & Larcker, 1981).

3.10.1.2 Assessing the Structural Model

The structural model according to Hair *et al.* (2014) deals with dependent relationships connecting the constructs in the hypothetical model. It is a useful representation of interrelationships among constructs. That is, it explains the relationship between latent variables. The relationship between the variables in the proposed hypotheses in this study as indicated in the model was tested through the structural model. The structural model comprising the exogenous variables which are tax system structure, tax knowledge, PD, FC and PGQ while the endogenous variable is tax compliance. The structural model was assessed for collinearity issues, relevance and significance of the structural model relationships, level of R^2 , effect sizes and the predictive relevance Q^2 .

Bootstrapping which is consistent with Chin (1998a) was used to generate the t-statistics and the standard errors as it represents a non-parametric approach for estimating the precision of the PLS estimates which allow the researcher to assess the statistical significance of the path coefficients.

3.11 Ethical Considerations

An ethical clearance (UERC/ASN/2017/910) to conduct this study was obtained from the University of Ilorin Ethical Review Committee. See (Appendix II)

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

4.1 Introduction

This chapter presents the results of the analysis for the data collected via the questionnaire designed for this study. It contains the response rate, data screening and data coding procedures, the demographic characteristics of the respondents, evaluation of PLS-SEM results and discussion of findings.

4.2 Response Rate

The questionnaire used for this study was administered on the members of KWACO. Out of five hundred and fifty eight (558) copies of questionnaire distributed to respondents, five hundred and forty eight (548) copies of the questionnaire were returned, ten (10) copies of the questionnaire were not returned while eight (8) copies of the returned questionnaire were unusable because the respondents selected multiple responses for most the questionnaire items. Consequently, only five hundred and forty (540) copies of the questionnaire were completely and properly filled, making a total of 96.7 percent and were considered to be adequate for the analysis.

Table 4.1

Response Rate of the Questionnaire

Response	Frequency
Number of copies of questionnaire distributed	558
Returned copies of questionnaire	548
Returned and usable copies of questionnaire	540
Returned and unusable copies of questionnaire	8
Number of copies of questionnaire not returned	10
Response rate	98.2
Valid response rate	96.7

Sources: Computed from the field survey data, 2017

4.3 Data Screening

Data screening is essential most especially when SmartPLS is the main analysis technique to be used in data analysis (Tabachnick & Fidell, 2013). It aids the

researcher to recognize any likely assumptions violation regarding the data analysis techniques (Hair *et al.*, 2010). In this study, data screening was conducted after the data collected was input into the SPSS software version IBM SPSS statistics 21.

4.3.1 Data coding

All the latent variables items from the questionnaire were coded using 2 or 3 letters by the researcher for easy identification in both PLS and SPSS. Specifically, items for tax compliance were coded TC1 to TC4, tax knowledge items were coded as TK1 to TK10, tax system structure items were coded as TSS1 to TSS8, public governance quality items were coded as PGQ1 to PGQ14, public disclosure of taxpayers' information items were coded as PDI1 to PDI2 and financial constraint items were coded as FC1 to FC7. The entire 540 returned and usable questionnaire were coded and entered into SPSS. Additionally, all the negatively worded items were reverse coded.

4.4 Demographic Characteristics of the Respondents

This section describes the demographic characteristics of the respondents in this study. The respondents consist of the registered members of Kwara State Artisans Congress (KWACO). The demographic characteristics examined included gender, age group, marital status, educational level and income level.

Table 4.2 shows the demographic characteristics of the respondents in this study.

Table 4.2
Demographic characteristics of the Respondents

Sample Description	Frequency	Percentage (%)
Gender		
Male	392	72.6
Female	148	27.4
Age group		
18-30 years	140	25.9
31-40 years	225	41.7
41-50 years	143	26.5
51-60 years	28	5.2
Above 60 years	40	.7
Marital status		
Single	172	31.9
Married	368	68.1
Educational level		
Primary School Education	25	4.6
Junior Secondary Education	59	10.9
Senior Secondary Education	227	42.0
OND/NCE	101	18.7
B.Sc./HND	121	22.4
Postgraduate	7	1.3
Income Level (monthly)		
Less than ₦ 50,000	321	59.4
₦ 50,000 - ₦ 99,999	136	25.2
₦ 100,000 - ₦ 149,999	68	12.6
₦ 200,000 - ₦ 249,999	3	.6
₦ 250,000 above.	12	2.2

Sources: Computed from the field survey data, 2017

The data collected on demographic characteristics of the respondents, as presented in Table 4.2 shows that about 73% of the respondents were male while the balance of 27% were female. This shows that majority of the respondents are males. The reason for this male dominance is that, the sector is characterized by such technical and pure manpower kind of ventures. However, the women formed the majority of the respondents in the business of hair dressing salon. Another reason for the dominance of male respondents over females may be related to the cultural background of the

respondents where larger percentages of females do not belong to the working class. In respect of the age of the respondents, the majorities of the respondents representing about 68% are within 18-40 years age brackets, while the remaining 30% of the respondents are within the age bracket of 41 and above form the minority. This is an indication that the sample of this study largely consisted of young men and women. Additionally, this situation is confirmed by Bruno and Friedrich (2000) that, more young people are involved in the informal economy than older people.

With regards to the respondents' marital status, majority representing more than 68% were married while 32% were single. This study again revealed that, about 5% of the respondents had primary school education; about 11% and 42% also had junior and senior secondary school education respectively. More than 42% of the respondents had tertiary education in the form of NCE, OND, HND, B.Sc. and postgraduate degree. This is an indication that the respondents have the basic level of education required to respond to the items in the questionnaire distributed for this study. Regarding the income level of the respondents, majority representing about 60% of the respondents were in the range of less than ₦50, 000 average monthly income. More than 25% of the respondents were in the range of average monthly income of ₦50, 000 – ₦99, 999 while the balance of 15% of the respondents had average monthly income of above ₦100, 000.

4.5 Descriptive Statistics

The descriptive statistics involved the use of percentages, frequency count, mean and standard deviations. The means score and standard deviations were computed for individual items as well as weighted items of the entire metric latent variable in relation to 540 valid cases of the study. For the purpose of the interpretation of the mean scores, the 50th percentile of the range of five-point Likert scale was calculated as 3. The mean

score below 3 was treated as low and above 3 was regarded as high. This same method was used in the study of Alabede (2012) for the interpretation of the mean score.

4.5.1 Tax Compliance

The descriptive statistics relating the respondents' tax compliance towards tax compliance is operationally defined as true reporting of the tax base, correct computation of the tax liabilities; timely filing of tax returns and timely payment of the amount due as tax are presented in the Table 4.3.

Table 4.3

Descriptive statistics for Tax Compliance

Code	Items	Mean	Std D	SA/ Agree	Not Certain	S D/ Disagree
TC1	I would declare in my tax return the total income I receive from all sources.	2.86	1.227	155(28.7)	213(39.4)	172(31.9)
TC2	I would declare in my tax return the total amount of expenses including my maintenance cost.	2.97	1.254	195(36.2)	205(38.0)	140(25.1)
TC3	I would file my income tax return with tax authority within 90 days from commencement of the year (i.e. from January)	2.76	1.254	155(28.7)	163(30.2)	222(41.1)
TC4	I would not pay my income tax liability within 60 days from the date of assessment notice as deadline is only a guideline and does not result in payment of any penalties.	2.65	1.341	154(28.5)	0(0)	386(71.5)
Overall		2.81	1.187			

Source: Computed from the field survey data, 2017

Note: Std D = Standard Deviation, SA = Strongly Agree, SD = Strongly Disagree
Percentage in parenthesis rounded to nearest whole number.

The table reveals that only about 29% of the respondents expressed their agreement in relation to declaring their total income received from all sources in their tax return for the purpose of tax assessment while about 32% of the respondents disagreed. However, 39% of the respondents were not certain of what to do. A similar result was also obtained in the case of filing of tax return with the tax authority within the 90 days

stipulated in the tax law as 41% percent disagreed. More than 30% of the respondents were not certain and about 29% of the respondents were in agreement region. In respect of the respondents view on declaring the total amount of expenses including maintenance cost in their tax returns for the purpose of tax assessment, more than 36% agreed, 38% were not certain while more than 25% of the respondents disagreed. Similarly, more than 71% of the respondents disagreed. Not certain was 0% and more 28% agreed in connection with timely payment of the amount due as tax.

However, on overall, average of 61.5% of respondents disagreed while 38.5% of the respondents agreed with the true reporting of the tax base, correct computation of the tax liabilities; timely filing of tax returns and timely payment of the amount due. The result shows that tax noncompliance is a serious problem in personal income tax administration in self-assessment system in Kwara State.

The mean score and standard deviation of tax compliance, declaring in tax return the total amount of expenses including the maintenance cost has the highest mean score of 2.97 while tax claim reporting has the lowest means score of 2.65 with a standard deviation of 1.341 respectively. The mean score and standard deviation for the four of components of tax compliance is 2.81 and 1.187 respectively. These descriptive statistics suggest that compliance among the individual taxpayers in Kwara State is low.

4.5.2 Tax Knowledge

The descriptive statistics of the respondents in relation to tax knowledge is shown Table 4.4.

Table 4.4***Descriptive Statistics for Tax Knowledge***

Code	Items	Mean	Std D	SA/ Agree	Not Certain	S D/ Disagree
TK1	Corporate bodies and individual citizens are liable to tax on income, property and consumption.	3.58	0.886	348(64.5)	118(21.9)	74(13.7)
TK2	The income tax system is a legitimate way for the government to collect revenue to manage an economy.	3.46	0.846	283(52.5)	200(37.0)	57(10.6)
TK3	The taxpayers are supposed to keep records/ documents pertaining to income and expenditure in order to determine the correct tax payable.	3.45	0.895	277(51.3)	190(35.2)	73(13.5)
TK4	The taxpayers are supposed to inform and declare actual income received from all sources to the Internal Revenue Service.	3.42	0.899	272(50.4)	187(34.6)	81(15.0)
TK5	As far as I am aware, non-compliant taxpayers can be imprisoned, if found guilty of evading tax.	1.81	0.586	0(0)	51(9.4)	489(90.6)
TK6	Similar to other criminal offences, I believe that individuals can also be prosecuted for not complying with the Income Tax Act.	1.91	0.611	0(0)	78(14.4)	462(85.6)
TK7	I believe that I do not have to abide by the deadline for the submission of tax return form (s) (in case of having other income such as rental and business income), as the deadline is only a guideline and does not result in penalties.	1.76	0.610	0(0)	51(9.4)	489(90.6)
TK8	As far as I am aware, everyone who earns income sourced in this country is taxable, regardless of whether that person is resident or not.	1.99	1.016	65(12.0)	79(14.6)	396(73.3)
TK9	I have little idea about the deductions that I can claim as a taxpayer in the computation of my tax liability	1.90	1.037	78(14.4)	31(5.7)	431(79.8)
TK10	To my knowledge, the tax liability of an individual is determined by applying the graduated tax rates on the taxable income.	1.79	1.022	79(14.6)	0(0)	461(85.4)
Overall		2.51	0.463			

Source: Computed from the field survey data, 2017

Note: Std D = Standard Deviation, SA = Strongly Agree, SD = Strongly Disagree
Percentage in parenthesis rounded to nearest whole number.

The measure of tax knowledge is based on the acquisition of general knowledge, legal knowledge and technical knowledge of tax system. With respect the acquisition of general knowledge, the respondents indicated their knowledge and understanding on items TK1, TK2, TK3 and TK4. Each of these items has a mean score of above 3 with

standard deviation ranging from 0.846 to 0.899. This suggests that the respondents had high general knowledge of taxation as represented by items TK1 to TK4 in the questionnaire.

Items TK5 to TK7 measured the legal knowledge of the respondents, the mean score of the items is 1.83 and the standard deviation is 0.445. This is an indication that the legal knowledge of respondents about the personal income tax is low. Items TK8 to TK10 also measured the technical knowledge of respondents. The mean score of the items representing the technical knowledge of the respondents is 1.89 and the standard deviation is 0.926. This suggests that the technical knowledge of the respondents is also low.

Generally, the overall mean score and standard deviation of 2.51 and 0.463 respectively, on all the items used to measure tax knowledge show that the respondents had low tax knowledge.

4.5.3 Tax System Structure

The views of the respondents on the probability of detection and penalty and fine are presented in Table 4.5.

Table 4.5
Descriptive Statistics for Tax System Structure

Code	Items	Mean	Std D	SA/ Agree	Not Certain	S D/ Disagree
TSS1	There is chance that Mr. D will be caught by the tax authority, if the amount he was paid is large	3.69	1.162	353(65.5)	98(18.1)	89(16.4)
TSS2	There is chance that Mr. D will be caught by the tax authority, if the amount he was paid is small	3.73	0.988	372(69)	104(19.3)	34(11.7)
TSS3	There is chance that Mr. D will be caught by the tax authority, if the amount he claimed as deduction is large	3.70	1.021	351(65.1)	116(21.4)	73(13.5)
TSS5	Pay the tax he owes with interest	3.85	0.958	390(72.3)	103(19.0)	47(8.7)
TSS6	Pay substantial fine and pay the tax he owes with interest	3.68	1.082	339(62.8)	127(23.5)	74(13.7)
TSS8	Taken to court, pay substantial fine and pay the tax he owes with interest	3.87	1.057	377(69.8)	107(19.8)	56(10.4)
Overall		3.75	0.780			

Source: Computed from the field survey data, 2017

Note: Std D = Standard Deviation, SA = Strongly Agree, SD = Strongly Disagree
Percentage in parenthesis rounded to nearest whole number.

The respondents' views on the probability of detection were expressed through items TSS1 to TSS 3. The mean score of the items representing the probability of detection is 3.71 and the standard deviation is 0.871. The high mean score is a reflection of the fact that the respondents perceived the probability of detection to be high.

Furthermore, the opinion of the respondents in relation to penalties and fines are measured with items TSS5, TSS6 and TSS8. With the mean score of more than 3, this suggests that the different forms of tax sanctions are available for different tax offences. Generally, the overall mean score and standard deviation of 3.75 and 0.780 respectively, suggests that the perception of the respondents about the tax system structure is high which means that the tax system structure is effective.

4.5.4 Public Governance Quality

The views of the respondents on the public governance quality in Kwara State were expressed through items PGQ1 to PGQ14 and the results of the descriptive analysis of the items are presented in Table 4.6.

Table 4.6***Descriptive Statistics for Public Governance Quality***

Code	Items	Mean	Std D	SA/ Agree	Not Certain	S D/ Disagree
PGQ1	I trust the Kwara State Assembly in making good laws for the state.	1.49	0.573	3(0.6)	9(1.7)	528(97.8)
PGQ2	There is free and fair election in Kwara State.	1.50	0.573	3(0.6)	9(1.7)	528(97.8)
PGQ3	There is freedom of expression in Kwara State.	1.48	0.563	3(0.6)	6(1.1)	531(98.3)
PGQ4	Political stability is declining in Kwara State.	4.05	0.906	423(78.4)	83(15.4)	34(6.3)
PGQ5	Political protest is threat to Kwara state peace and stability.	4.00	0.906	407(75.4)	100(18.5)	33(6.1)
PGQ6	I am not satisfied with quality of general infrastructure in Kwara State.	4.20	0.761	453(83.9)	80(14.8)	7(1.3)
PGQ7	Kwara State public servants are vulnerable to political interference.	4.15	0.761	441(81.7)	94(17.4)	5(0.9)
PGQ8	Justice is not fairly administered in Kwara State.	3.19	1.350	261(48.4)	97(18.0)	182(33.7)
PGQ9	There is no confidence in the legal system in Kwara State.	3.15	1.348	250(46.3)	107(19.8)	183(33.9)
PGQ10	I trust the financial honesty of political office holders in Kwara State.	2.43	1.156	103(19.1)	128(23.7)	309(57.2)
PGQ11	The diversion of public funds due to corruption is not common in Kwara State.	2.43	1.136	93(17.3)	122(22.6)	325(60.2)
PGQ12	There is no stringent local law governing the starting of a business in Kwara State.	3.04	1.427	217(40.2)	120(22.2)	203(37.6)
PGQ13	There is a risk that normal business operations become more costly due to the regulatory environment in Kwara State.	2.87	1.428	213(37.4)	109(20.2)	218(40.4)
PGQ14	The multiplicity of taxation in Kwara State has not affected the growth of your business.	2.83	1.431	183(33.9)	101(18.7)	256(47.4)
Overall		2.91	0.404			

Source: Computed from the field survey data, 2017

Note: Std D = Standard Deviation, SA = Strongly Agree, SD = Strongly Disagree
Percentage in parenthesis rounded to nearest whole number.

The views of the respondents about the voice and accountability in Kwara State as represented by item PGQ1 to PGQ3 which is indicated in the mean score and standard deviation of 1.49 and 0.400 respectively. This suggests that voice and accountability as one of the indicators of public governance quality was low. With respect to the political stability and absence of violence which are expressed in items PGQ4 and PGQ5, more than 78% of the respondents expressed their agreement with item PGQ4 (“political stability is declining in Kwara State”) while 15% and 6% were not certain and disagreed respectively.

The views of the respondents concerning government effectiveness in the provision of quality infrastructural facilities and the vulnerability of public servants to the political interference were expressed in items PGQ6 and PGQ7. The result of the analysis shows that more than 80% of the respondents were not satisfied with the quality of general infrastructure in the state. In addition, more 80% also expressed agreement with the item PGQ7 (“Kwara State public servants are vulnerable to political interference”). This is an indication that the respondents perceived government effectiveness in the provision of quality infrastructural facilities such as sound education, good health facilities, and tarred roads and so on as low. Furthermore, the views of the respondents about the rule of law in Kwara State are also expressed in item PGQ8 and PGQ9. The result indicated that more than 48% of the respondents also expressed their agreement that justice is not fairly administered in Kwara State and more 46% of the respondents expressed no confidence in the legal system in Kwara State. The views of the respondents on control of corruption in Kwara State were expressed in items PGQ10 and PGQ11. The mean scores and standard deviations of the two items were 2.43 and 2.43 and 1.156 and 1.136 respectively. This suggests that the respondents viewed control of corruption in Kwara State to be low. Comparatively, more than 40% of the respondents agreed that there is no stringent local law governing the starting of a

business in Kwara State while more than 22% were not certain and over 37% disagreed. With respect to item PGQ13 that measured the risk that normal business operations become more costly due to the regulatory environment in Kwara State, more than 37% of the respondents agreed and over 20% were not certain and more 40% disagreed. Items PGQ14 was on the views of the respondents on the effect of multiplicity of taxation on the growth of the business in Kwara State. More than 47% of the respondents expressed their disagreement; over 18% were not certain and more than 33% of the respondents expressed agreement. Based on all the items measuring the public governance quality, the overall mean score and standard deviation were 2.91 and 0.404 respectively. This is an indication that the respondents perceived that public governance quality was low in Kwara State.

4.5.5 Public Disclosure of Taxpayers' Information

The descriptive statistics of the respondents in relation to public disclosure of taxpayers' information is shown Table 4.7.

Table 4.7

Descriptive Statistics for Public Disclosure of Taxpayers Information

Code	Items	Mean	Std D	SA/ Agree	Not Certain	S D/ Disagree
PDI 1	With my status in the community, I believe that it will be a shameful act if my name is published in newspapers or posted in public places that I have evaded tax.	3.20	1.195	240(44.5)	190(35.2)	110(20.4)
PDI2	I would be bothered if my name is published in newspapers or posted in public places that I have evaded tax.	3.18	1.188	239(44.3)	171(31.7)	130(24.1)
Overall		3.19	1.089			

Source: computed from the field survey data, 2017

Note: Std D = Standard Deviation, SA = Strongly Agree, SD = Strongly Disagree
Percentage in parenthesis rounded to nearest whole number.

The measure of disclosure of taxpayers' information is based on item PDI1 and PDI2. Each of these items has a mean score of above 3 with standard deviation ranging from 1.188 to 1.195. This suggests that the respondents were of the opinion that it is a

shameful act if their names are published in newspapers or posted in public places for evading tax.

4.5.5 Financial Constraints

The views of the respondents on their financial constraints were expressed through items FC1 to FC7 and the results of the descriptive analysis of the items are presented in Table 4.8.

Table 4.8

Descriptive Statistics for Financial Constraint

Code	Items	Mean	Std D	SA/ Agree	Not Certain	S D/ Disagree
FC1	My income always exceeds my expenditure	3.62	1.460	306(56.7)	65(12.0)	169(31.3)
FC2	The prices of basic needs do not increase on daily basis.	3.26	1.413	279(51.7)	62(11.5)	199(36.9)
FC3	I will not pay my debts and basic needs first rather income tax	3.26	1.474	272(50.4)	60(11.1)	208(38.5)
FC4	There have not been significant increase in fuel prices and electricity and water tariff	3.72	1.417	346(64.1)	56(10.4)	138(25.6)
FC5	I am satisfied with my present financial situation	3.31	1.401	263(48.7)	98(18.1)	178(33.0)
FC6	I am living comfortable the way I should with my present income	3.31	1.403	260(48.2)	98(18.1)	182(33.7)
FC7	I am not having financial commitment to my extended family	3.37	1.403	269(49.8)	95(17.6)	176(32.6)
Overall		3.41	1.424			

Source: computed from the field survey data, 2017.

Note: Std D = Standard Deviation, SA = Strongly Agree, SD = Strongly Disagree
Percentage in parenthesis rounded to nearest whole number.

With the mean score of FC1 to FC7 being more than 3, which suggests that the respondents were faced with different kinds of financial commitment including tax payment. However, item FC4 (“There have been significant increases in fuel prices and electricity and water tariff”) which had the highest mean score of 3.72 together with the standard deviation of 1.417 was considered by the majority of the respondents (64%) to be the pressing financial constraint.

4.6 Evaluation of PLS-SEM Results

This part presents the PLS-SEM path modeling results using two-step process as recommended by Henseler, Ringle and Sinkovics (2009). The two-step process: the assessment of the appropriateness of the measurement model and the assessment of a structural model (Hair *et al.*, 2014; Henseler *et al.*, 2009). The measurement model involves examining individual items reliability, internal consistency reliability, convergent validity and discriminant validity. The structural model assessed in this study includes: assessing for collinearity issues, assessing the significance of path coefficients, evaluating the level of R-squared values, determining the effect size, assessing the predictive relevance of the model and importance-performance matrix analysis (IPMA).

4.6.1 Results of the Measurement Models

In this study, the appropriateness of measurement models was evaluated by assessing the individual item reliability, internal consistency reliability, convergent validity, discriminant validity and higher order construct.

4.6.1.1 Individual Item (Indicator) Reliability

Individual items reliability was assessed based on the standardised factor loadings of individual items on their respective constructs (Hair *et al.*, 2014). Following the rule of thumb that any reflective indicators whose loadings within the PLS model are smaller than 0.4 should be eliminated (Hair *et al.*, 2014; Hulland, 1999; Peng & Lai, 2012), one item was deleted. This means that all the items (indicators) used in this study are reliable (See Table 4.9).

4.6.1.2 Internal Consistency Reliability

The internal consistency reliability was assessed after the unidimensionality of the indicators have been carried out. The Partial Least Square Structural Equation Modeling (PLS-SEM) employs the use of composite reliability (ρ_c) instead of Cronbach's alpha (α) which estimate the reliability based on the inter-correlations of the observed indicators variables to measure the internal consistency reliability.

The prioritization of items in accordance with their individual reliability by PLS-SEM couples with the limitations of Cronbach's alpha (α) such as it assumes equality of all indicators loadings; it is sensitive to the number of indicators on a construct; and it underestimate the internal consistency reliability has made it imperatives for an alternative means of measuring internal consistency reliability which composite reliability (ρ_c) has readily fill the gaps. According to Hair *et al.* (2014), composite reliability (ρ_c) takes note of outer loadings of every indicator variables

As shown in Table 4.9, the composite reliability coefficient of each latent variable is between the range of 0.828 and 0.952 which are above the threshold value of 0.7 as suggested by Hair *et al.* (2011). Thus, suggesting the adequacy of internal consistency reliability of the measures used in this study.

Table 4.9***Psychometric properties for first order construct***

Constructs	Loadings	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
COC	0.947- 0.948	0.886	0.886	0.946	0.897
FC	0.714- 0.870	0.891	0.894	0.915	0.607
Fines and Penalties	0.785- 0.815	0.723	0.725	0.844	0.643
General Knowledge	0.703- 0.822	0.803	0.816	0.871	0.628
Govt. Effectiveness	0.781- 0.897	0.597	0.644	0.828	0.708
Legal Knowledge	0.903- 0.912	0.894	0.894	0.934	0.825
PD	0.851- 0.922	0.736	0.783	0.882	0.787
PS&AV	0.802- 0.911	0.652	0.712	0.848	0.736
Probability of Detection	0.782- 0.853	0.767	0.767	0.866	0.683
RQ	0.882- 0.919	0.884	0.887	0.928	0.812
Rule of Law	0.919- 0.931	0.831	0.834	0.922	0.855
Tax Compliance	0.831- 0.883	0.880	0.882	0.917	0.735
Technical Knowledge	0.869- 0.932	0.891	0.894	0.932	0.821
Voice & Accountability	0.923- 0.939	0.924	0.924	0.952	0.868

Source: computed from the field survey data, 2017.

4.6.1.3 Convergent Validity

Convergent validity is the degree to which indicators represent the intended construct and indeed correlate with each other to measure the same construct (Hair *et al.*, 2006). The criterion for measuring convergent validity was the AVE proposed by (Fornell & Larcker, 1981). AVE which is equivalent to the communality of a construct is the sum of square loadings of indicators associated with a construct divided by the number of indicators. Convergent validity is achieved when the AVE value is 0.50 and above which means that, the construct explains more than half of the variance of its indicators on the average. When the value of AVE is below the threshold value of

0.50, convergent validity is not achieved because the construct on the average cannot explain the variance of its indicators due to errors in the items (Hair *et al.*, 2014; Kayode, Yusoff & Veloo, 2016; Urbach & Ahlemann, 2010).

As shown in Table 4.10, there is adequate convergent validity of the measures as their AVE values ranges from 0.607 to 0.897 which exceed the minimum acceptable level of 0.5 as suggested by Bagozzi and Yi (1988) and thus, indicating adequate convergent validity.

Table 4.10**Overview of the model quality**

Construct	Dimensions	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Tax Compliance	Tax Compliance	0.880	0.882	0.917	0.735
PGQ	COC	0.886	0.886	0.946	0.897
	Govt. Effectiveness	0.697	0.644	0.828	0.708
	PS&AV	0.652	0.712	0.848	0.736
	RQ	0.884	0.887	0.928	0.812
	Rule of Law	0.831	0.834	0.922	0.855
	Tax Compliance	0.880	0.882	0.917	0.735
	Voice & Accountability	0.924	0.924	0.952	0.868
Tax Knowledge	General Knowledge	0.803	0.816	0.871	0.628
	Legal Knowledge	0.894	0.894	0.934	0.825
	Technical Knowledge	0.891	0.894	0.932	0.821
Tax System Structure	Fines and Penalties	0.801	0.806	0.883	0.715
	Probability of Detection	0.734	0.736	0.849	0.653
FC	FC	0.891	0.894	0.915	0.607
PD	PD	0.736	0.784	0.881	0.787

4.6.1.4 Discriminant Validity

Discriminant validity is defined as the degree to which a particular construct differs from other constructs (Duarte & Raposo, 2010). Discriminant validity is achieved if the square root of a construct's AVE is greater than the correlations with the other constructs in the model. (Hair *et al.*, 2014; Urbach & Ahlemann, 2010; Fornell & Larcker, 1981). As shown in Table 4.11, the square root of the average variances

extracted (in bold) were all greater than the correlations among the latent construct which suggest discriminant validity.

In addition to the Fornell and Larcker (1981) criterion, The Heterotrait-Monotrait Ratio (HTMT) was examined in this study. This criterion is regarded to be a more reliable criterion for evaluating discriminant validity than the Fornell and Larcker criterion (Henseler, Ringle & Sarstedt, 2015). The HTMT criterion in this study showed that discriminant validity has been achieved. As shown in Table 4.12, the highest correlation found is between probability of detection and fines and penalties 0.826 which is within the threshold value of 0.85 (Henseler *et al.*, 2015).

Table 4.11

Fornell-Larcker Criterion

Constructs	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. COC	0.947													
2. FC	0.344	0.779												
3. Fines and Penalties	0.095	0.107	0.802											
4. General Knowledge	0.109	0.148	0.146	0.793										
5. Govt. Effectiveness	0.143	0.158	0.304	0.107	0.841									
6. Legal Knowledge	0.663	0.250	0.216	0.316	0.039	0.908								
7. PD	0.140	0.117	0.090	0.083	0.013	0.120	0.887							
8. PS&AV	0.141	0.192	0.384	0.155	0.461	0.021	0.007	0.826						
9. Probability of Detection	0.002	0.145	0.636	0.205	0.327	0.153	0.051	0.358	0.808					
10. RQ	0.533	0.314	0.043	0.151	0.110	0.403	0.185	0.147	0.016	0.901				
11. Rule of Law	0.482	0.089	0.035	0.174	0.172	0.280	0.023	0.137	0.091	0.322	0.925			
12. Tax Compliance	0.334	0.392	0.142	0.105	0.027	0.325	0.286	0.009	0.130	0.368	0.128	0.857		
13. Technical Knowledge	0.597	0.264	0.222	0.207	0.010	0.666	0.104	0.032	0.156	0.424	0.266	0.347	0.906	
14. Voice & Accountability	0.721	0.303	0.234	0.039	0.084	0.686	0.159	0.068	0.210	0.467	0.324	0.371	0.692	0.932

Note: Diagonal (in bold) signify the average variance extracted whereas the other entries represent the squared correlations.

Table 4.12

Heterotrait-Monotrait Ratio (HTMT)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. COC														
2. FC	0.383													
3. Fines and Penalties	0.138	0.130												
4. General Knowledge	0.130	0.179	0.192											
5. Govt. Effectiveness	0.198	0.206	0.435	0.154										
6. Legal Knowledge	0.745	0.276	0.260	0.364	0.145									
7. PD	0.172	0.146	0.112	0.119	0.063	0.149								
8. PS&AV	0.172	0.240	0.523	0.205	0.741	0.029	0.014							
9. Probability of Detection	0.084	0.185	0.826	0.259	0.499	0.189	0.081	0.500						
10. RQ	0.601	0.349	0.078	0.176	0.148	0.452	0.227	0.189	0.068					
11. Rule of Law	0.560	0.106	0.064	0.209	0.260	0.326	0.055	0.172	0.122	0.372				
12. Tax Compliance	0.374	0.438	0.168	0.127	0.096	0.363	0.348	0.040	0.163	0.417	0.147			
13. Technical Knowledge	0.672	0.288	0.269	0.238	0.102	0.746	0.130	0.050	0.193	0.476	0.308	0.391		
14. Voice & Accountability	0.797	0.330	0.279	0.061	0.123	0.755	0.192	0.088	0.253	0.517	0.370	0.409	0.763	

4.6.2 Structural Model Assessment (PLS-SEM)

The structural model according to Hair *et al.* (2014) deals with dependent relationships connecting the constructs in the hypothetical model. It is a useful representation of interrelationships among constructs. It explains the relationship between latent variables. The relationship between the variables in the proposed hypotheses in this study as indicated in the model was tested through the structural model. The structural model comprising the exogenous variables which are tax system structure, tax knowledge, PD, FC and PGQ while the endogenous variable is tax compliance. The structural model was assessed for multicollinearity issues, relevance and significance of the structural model relationships, level of R^2 , effect sizes and the predictive relevance Q^2 . Bootstrapping which is consistent with Chin (1998a) was used to generate the t-statistics and the standard errors as it represents a non-parametric approach for estimating the precision of the PLS estimates which allow the researcher to assess the statistical significance of the path coefficients.

4.6.2.1 Assessing the Structural Model for Multicollinearity

In this study, multicollinearity was assessed using variance inflated factor (VIF). Hair, *et al.*, 2011 recommended that multicollinearity is an issue if VIF value is higher than 5. As shown in Table 4.13, the VIF values for all the exogenous constructs are less than 5. Therefore, collinearity is not an issue in this study.

Table 4.13

Assessment of collinearity

Exogenous Construct	VIF scores
FC	1.208
PD	1.041
PGQ	1.932
Tax Knowledge	1.852
Tax System Structure	1.067

Source: computed from the field survey data, 2017.

4.6.2.2 Results of Hypothesis Testing

With the establishment of the measurement model, the next stage is to test the hypotheses formulated for this study through the structural model. The structural model which according to Ee, Halim, and Ramayah (2013), Sang, Lee, and Lee (2010) indicates the causal relationships among the constructs in the model which estimates the R^2 value and the path coefficients that determine the predictive power of the model. Table 4.14 and Figure 4.1 present the results of the structural model. All the relationships in this study are represented by standardized beta values. Additionally, in testing the relationships of the structural model, the significance level was set at $p < 0.05$ and $p < 0.001$ (1-tailed) (Hair *et al.*, 2010).

Hypothesis 1 predicted that there is no positive significant relationship between taxpayers' knowledge and tax compliance. Results from Figures 4.1 and Table 4.14 indicated that taxpayers' knowledge had a significant and positive relationship with tax compliance in a self-assessment system in Kwara State ($\beta = 0.107$, $t = 2.176$ $p < 0.001$). Therefore, hypothesis 1 was not supported.

Hypothesis 2 predicted that tax system structure does not have a significant negative effect on tax compliance in a self-assessment system in Kwara State. The results from Figures 4.1 and Table 4.14 also showed that tax system structure had a significant and negative effect on tax compliance in a self-assessment system in Kwara State ($\beta = -0.152$, $t = 4.043$ $p < 0.05$). Hence, hypothesis 2 was not supported.

Hypothesis 3 predicted that public governance quality does not have a significant positive effect on taxpayers' compliance in a self-assessment system in Kwara State. Results from Figures 4.1 and Table 4.14 indicated that public governance quality had a significant and positive effect on tax compliance in a self-assessment system in Kwara State ($\beta = 0.169$, $t = 3.297$ $p < 0.05$). So, hypothesis 3 was not supported.

Hypothesis 4 predicted that there is no positive significant relationship between public disclosure of taxpayers' information and tax compliance in a self-assessment system in Kwara State. Results from Figures 4.1 and Table 4.14 indicated that public disclosure of taxpayers' information had a significant and positive relationship with tax compliance in a self-assessment system in Kwara State ($\beta = 0.196$, $t = 4.982$ $p < 0.001$). Thus, hypothesis 4 was not supported.

Hypothesis 5 predicted that financial constraint of taxpayers does not have a significant negative effect on tax compliance in a self-assessment system in Kwara State. Results from Figures 4.1 and Table 4.14 indicated that Taxpayers' financial constraints had a significant and negative effect on tax compliance in a self-assessment system in Kwara State ($\beta = -0.296$, $t = 7.183$ $p < 0.001$). Therefore, hypothesis 5 was not supported.

Furthermore, a closer examination of the model revealed that FC is the most influential predictor of tax compliance.

Figure 4.1. Structural Model with β and t values

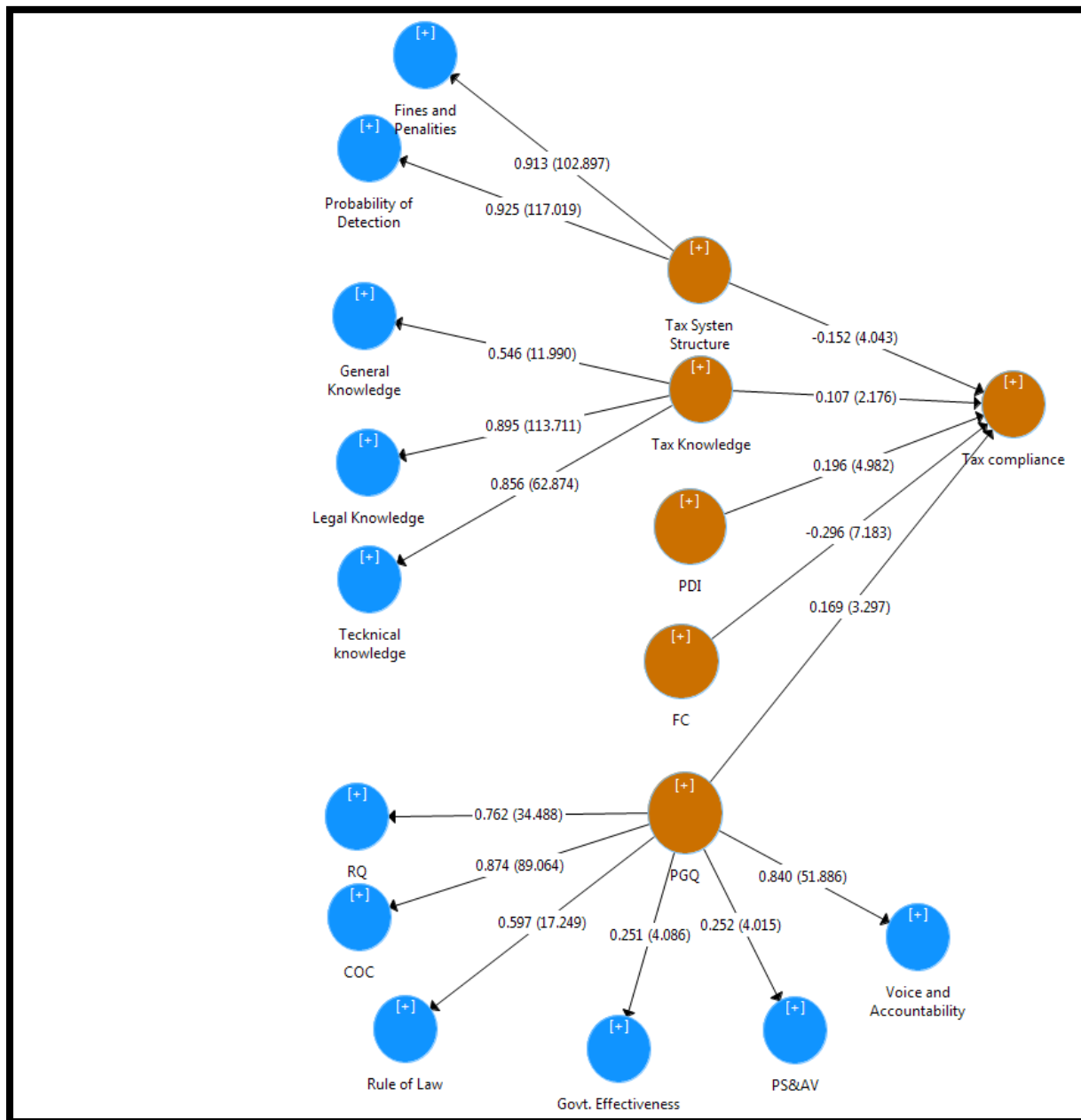


Table 4.14**Structural Model Assessment Effect**

Hypothesis	Relationship	Beta value (β)	T Statistics	P Values	Decision
H ₀₁	Tax Knowledge -> Tax compliance	0.107	2.176	0.017*	Not Supported
H ₀₂	TSS -> Tax compliance	-0.152	4.043	0.000**	Not Supported
H ₀₃	PGQ -> Tax compliance	0.169	3.297	0.001**	Not Supported
H ₀₄	PD-> Tax compliance	0.196	4.982	0.000**	Not Supported
H ₀₅	FC -> Tax compliance	-0.296	7.183	0.000**	Not Supported

Note: ** Significant at 0.001(1 tailed). *Significant at 0.05(1 tailed)

Source: computed from the field survey data, 2017

4.6.2.3 Coefficient of Determination (R^2)

One of the common arguments for using PLS-SEM according to Ringle *et al.* (2012) is its good prediction. The R-squared is another significant criterion for evaluating the structural model in PLS-SEM (Hair *et al.*, 2012). Model estimations use the R-squared (R^2) values to characterize the ability of the model to explain and predict the endogenous latent variable (Lei & Chu, 2015). The coefficient of determination represents the exogenous latent variables' combined effects on the endogenous latent variable. It is a measure of the goodness of fit (regression function) against the empirically manifest items obtained with values ranging from 0 to 1.

According to Chin (1998b), R^2 values for endogenous latent variables are assessed as 0.67 (substantial), 0.33 (moderate) and 0.19 (weak). However, acceptability and non-acceptability of the R^2 value varies from one field of study to another. The higher the R^2 value, the bigger the percentage of explained variance (Hair, *et al.*, 2014). In this model, as shown in Table 4.15, the R^2 value for tax compliance is 0.299. This indicates that the research model explains 29.9% of the total variance in tax compliance in a self-assessment system. This means that, tax system structure, tax knowledge, public disclosure of taxpayers' information, public governance quality and financial constraint of taxpayers collectively explain 29.9% of the variance in tax compliance which is moderate while 70.1% of the variance in tax compliance is explained by other factors which are not covered in this study. Thus, this model has predictive accuracy and can be adjudged to be a good model.

Table 4.15***Coefficient of determination (R^2) Table***

Latent Variables	R Square (Variance Explained)
Tax Compliance	0.299

Source: computed from the field survey data, 2017.

4.6.2.4 Assessment of the Effect Size (f^2)

Apart from determining the R^2 value, the change in R^2 value when a specific exogenous variable is omitted from the model was also examined to know the effect size (f^2) which is the magnitude of the impact of an exogenous variable on an endogenous variable (Gim, Desa, & Ramayah, 2015; Hair *et al.*, 2014). Effect size (f^2) according to Preacher and Kelley (2011) serves as a practical guide to interpret the practical importance of a specific relationship. This according to Gim *et al.* (2015) is done by examining the f^2 effect size for each relationship. It indicates the contribution of each exogenous latent variable (tax system structure, tax knowledge, PD, FC and PGQ) to the overall prediction of the endogenous construct tax compliance (Chin, 1998). It is calculated by omitting an exogenous construct from the model and re-specifying the structural model to determine the new R^2 on the endogenous construct. The difference between the R^2 when the exogenous construct of interest is included and the new R^2 when it is omitted shows the impact of the exogenous construct in the prediction of the endogenous construct under investigation. This is repeated for all exogenous constructs in the model to determine their impact. According to Callaghan, Wilson, Henseler, Ringle, and Næs (2007), Effect size (f^2) is expressed as:

$$\text{Effect size: } f^2 = \frac{R_{included}^2 - R_{excluded}^2}{1 - R_{included}^2}$$

Where $R_{included}^2$ is the R^2 value of the endogenous construct when a particular exogenous construct is included while $R_{excluded}^2$ is the value of such endogenous constructs when that

particular exogenous construct is excluded from the model. According to Cohen (1988) f^2 value is assessed as: 0.02 (small), 0.15 (medium), and 0.35 (large). Table 4.16 shows the effect sizes of the respective exogenous variables of the structural model.

Table 4.16

Effect size of all the exogenous latent variable on Tax Compliance

Exogenous latent variable	f^2 effect size	Magnitude
FC	0.103	Medium
PD	0.052	Small
PGQ	0.021	Small
Tax Knowledge	0.009	None
Tax System Structure	0.031	Small

Source: computed from the field survey data, 2017.

Based on the rule of thumb, Tax Knowledge has no effect on tax compliance. PD, PGQ and tax system structure has small effect size on tax compliance amounting to 5.2%, 2.1% and 3.1% respectively while FC has medium effect size on tax compliance amounting to 10.03%. However, a small effect size does not imply that the effect is not important (Chin, Marcolin & Newsted, 2003; Preacher & Kelley, 2011). Since all the hypothesized relationships and effects were already shown to be statistically significant.

4.6.2.5 Construct Cross-Validated Redundancy (Predictive Relevance) (Q^2)

Predictive relevance is a measure used to assess the relative predictive relevance of a predictor construct on an endogenous construct. It helps to determine the relevance of the reflective construct in a structural equation modeling (SEM) model. In this study, Q^2 was calculated in SmartPLS 3.1.2 using blindfolding procedure. Cross-validated redundancy approach was used in this study to determine the predictive relevance of the constructs. According to Hair *et al.* (2014), cross-validated redundancy approach includes the

elements of structural model, path model and predicted eliminated data in its assessment. In Table 4.17, the predictive relevance is shown in the column labelled Q^2 (1-SSE/SSO) which means squared prediction error/squared observations. Any value in the column that is more than 0 are said to have predictive relevance. The result in Table 4.17 shows that the Q^2 value for all the five endogenous variables (tax system structure, tax Knowledge, PD, FC and PGQ) is 0.202 which is above zero and therefore, the model is adjudged to have predictive relevance (Henseler *et al.*, 2009).

Table 4.17

Predictive capability of the Model

Construct	SSO	SSE	Q^2	R^2
Tax Compliance	2,160.000	1,721.311	0.203	0.299

4.6.2.6 Importance-Performance Matrix Analysis (IPMA)

The Importance-Performance Matrix Analysis (IPMA) was carried out by the researcher to extend the result of the PLS-SEM structural model. The IPMA identifies the relative importance of the exogenous constructs in a study by assessing the direct, indirect, and total relationships to the endogenous construct. It also includes the actual performance of each constructs in the model using the latent variable scores of the PLS-SEM results. Hair *et al.* (2014) describe IPMA as a distinctions of total effects (importance) and the average values of latent variable scores (performance) in other to show the significant areas for the improvement of management activities or the specific focus of the research model (See Table 4.18 and Figure 4.2).

As shown in Table 4.18 and Figure 4.2, FC exhibits the highest importance while tax system structure exhibits the highest performance variable towards tax compliance with 32.3% and 67.01% respectively. Tax knowledge has the least performance index of

49.20%. Although, PGQ exhibit a higher level of importance than PD, PD has a higher performance index of 62.18 when compared with PGQ of 52.21 performance index. Therefore, there is need to focus on all the five elements (tax system structure, tax knowledge, PGQ, PD and FC) in order to enhance tax compliance.

Table 4.18

Index Values and Total Effects for the IPMA of Tax Compliance

Constructs	LV Total Effects	LV Performances
FC	-0.319	39.845
PD	0.205	62.180
PGQ	0.209	52.213
Tax Knowledge	0.134	49.203
Tax System Structure	-0.212	68.873

Source: computed from the field survey data, 2017.

The results of the tested hypothesis were summarized in Table 4.19.

Table 4.19

Hypotheses summary

Hypothesis	Statement	Decision
H ₀₁	There is no significant positive relationship between taxpayers' knowledge and tax compliance in a self-assessment system in Kwara State;	Not supported
H ₀₂	Tax system structure does not have a significant negative effect on tax compliance in a self-assessment system in Kwara State;	Not supported
H ₀₃	Public governance quality does not have positive significant effect on taxpayers' compliance in a self-assessment system in Kwara State;	Not supported
H ₀₄	There is no significant positive relationship between public disclosures of taxpayers' information and tax compliance in a self-assessment system in Kwara State;	Not supported
H ₀₅	Financial constraint of taxpayers does not have a significant negative effect on tax compliance in a self-assessment system in Kwara State.	Not supported

4.8 Discussion of Findings

The main objective of this study is to examine the determinants of income tax compliance in a self-assessment system in Kwara State, Nigeria. The determinants examined were: tax knowledge, tax system structure, public governance quality, public disclosure of taxpayers' information and taxpayers' financial constraints. In line with the objectives of this study, this section provides answers to the research questions raised in chapter one.

Research Question 1: What is the relationship between taxpayers' knowledge and tax compliance in a self-assessment system in Kwara State?

The test performed on hypothesis H_{01} provides evidence in relation to the relationship between tax knowledge and tax compliance in a self-assessment system in Kwara State. Tax knowledge was found to have a significant positive relationship with tax compliance. This implies that, it is most likely that taxpayers' possession of better understanding of general tax knowledge, legal tax knowledge and technical tax knowledge will encourage them to fulfil their tax obligations and thus, do away with non-compliance temptations. This finding is in accord with the observation of CITN (2002), Nzotta (2007) and Olufemi (2016) about the low level of taxpayers' knowledge in Nigeria.

The descriptive statistics of the respondents in relation to tax knowledge revealed that on the average, the respondents had low tax knowledge. The low tax knowledge might have been one of the factors responsible the unsuccessful implementation of self-assessment tax system in Nigeria. Under the self-assessment tax system, adequate tax knowledge of taxpayers is required for its successful implementation. This would enable the taxpayers to understand the tax system and tax policies which are required by taxpayers to effectively discharge their tax obligations. Inadequate knowledge of taxpayers will put them in the darkness in respect of the assessment of the fairness of the tax system and the principles, objectives and purposes of taxation in the society. In addition, low tax knowledge would encourage non-compliance in a self-assessment system. This finding is consistent with prediction of one of the components of the theory of planned behaviour – Perceived behavioural control. Perceived behavioural control reflects an individual's perception on the ease or difficulty in performing a particular behaviour. In a self assessment tax system, tax knowledge is considered to be a prerequisite in ensuring voluntary compliance. Possessing adequate tax knowledge and understanding of tax system will enable a taxpayer to determine accurately

his tax liability. Therefore, individual taxpayer knowledge may influence perceived behavioural control of taxpayers, which in turn affects their decision whether to comply or not.

However, the finding of this study is consistent with the studies of Eriksen and Fallan, 1996, Mukasa, 2011, Devos, 2012, Redae & Sekhon, 2016 and Gitaru, 2017 that found positive significant relationship between tax knowledge and tax compliance.

Research Question 2: What is the effect of tax system structure on tax compliance in a self-assessment system in Kwara State?

The test performed on hypothesis H₀₂ provides evidence in relation to the effect of tax system structure on tax compliance in a self-assessment system in Kwara State. The result shows that there exists a significant negative effect of tax system structure on tax compliance. This implies that, taxpayers are less likely to comply with tax laws based on the structure of the tax system in place.

For the purpose of this study tax system structure has two dimensions – probability of detection and fines and penalty. The descriptive statistics of respondents about the probability of detection revealed that the respondents are of the opinion that the system is structured in a way that the probability of detection of overstatement of expenses and understatement of income is high. In addition, respondents' opinion on the fines and penalties showed that adequate fines and penalties are available in the tax laws.

The descriptive statistics results and the hypothesis testing might appear to have produced conflicting results. The reason being that the respondents perceived probability of detection and fine and penalty to be high while the result of hypothesis testing revealed that the joint effect of these two dimensions of tax system structure significantly reduces tax compliance. This is reconciled through the economic deterrence theory. Since probability of detection and fine and penalty work complementarily to assure tax compliance, it is inferred that the

detection mechanisms in place are strong but the eventual fines and penalties (though perceived to be high from perspective of the respondents) are not high enough to achieve desired tax compliance. This inference can be supported by a recent legislation in Lagos State that traffic law offenders would have their vehicles forfeited to the State. This legislation is an example of the reason for fines and penalties must be high enough, after putting effective detection mechanisms in place, in order to ensure better level of tax compliance.

Research Question 3: What is the effect of public governance quality on tax compliance in a self-assessment system in Kwara State?

The test performed on hypothesis H_{03} provides evidence in respect of the effect of public governance quality on tax compliance in a self-assessment system in Kwara State. Public governance quality shows a positive significant relationship with tax compliance. This implies that, taxpayers are more likely to comply with tax payment if they perceive that the revenue collected from tax is judiciously utilized. This finding is consistent with the prediction of social exchange theory in terms of an exchange of value. The more benefits taxpayers derive from the payment of taxes in the form of good quality of governance such as provision of quality infrastructure, quality health service, quality educational system; adequate control of corruption, political stability and absence of violence, free and fair election; freedom of expression, no stringent local law governing the starting of a business and confidence in the legal system of the state would improve taxpayers' compliance. Furthermore, the result of the descriptive statistics also revealed that the respondents have a low perception about public governance quality in Kwara State. This finding also confirmed the opinion of some concerned people in the state as they rightly observed that the introduction of taxes in the face of high infrastructural decay and high level of corruption

will not give tacit supports to the need for taxation (The Guardian Newspaper, April 9, 2017).

In addition, the finding of this study is consistent with some previous studies carried out on the relationship between public governance quality and tax compliance (Alabede, 2012; Hossain, 2014; Mustapha *et al.*, 2015; Alm & Gomeg, 2008; Richardson, 2008).

Research Question 4: What is the relationship between public disclosure of taxpayers' information and tax compliance in a self-assessment system in Kwara State?

The test performed on hypothesis H₀₄ provides evidence concerning the relationship between public disclosure of taxpayers' information and tax compliance in a self-assessment system in Kwara State. The result shows that there exists a significant positive relationship between public disclosure of taxpayers' information and tax compliance. This implies that, taxpayers are more likely to comply with tax laws if they know that their names would be published in newspapers or posted in public places for people to know that they are not discharging their tax obligation. In addition, the positive relationship between public disclosure of taxpayers' information and tax compliance is reflected in one of the components of the theory of planned behaviour – Subjective norm, which suggests a person's perceptions of the expectations of the people who are important to him or her, whether he or she should or should not perform certain behaviour (Ajzen, 2006; Fishbein & Ajzen, 1975; Manstead, 2004) would influence the taxpayer's compliance as public disclosure of taxpayer information for the tax defaulters may constitute a sort of embarrassment to the taxpayer.

Research Question 5: What is the effect of taxpayers' financial constraint on tax compliance in a self-assessment system in Kwara State?

The test performed on hypothesis H₀₅ provides evidence in relation to the effect of taxpayers' financial constraint on taxpayers and tax compliance in a self-assessment system in Kwara State. Financial constraint shows a negative significant effect on tax compliance.

This implies that, taxpayers are more likely to comply with tax payment if they are not outweighed by their financial constraint.

Personal financial constraint may be the reason for the taxpayers to prioritize the available income to basic survival needs (food, clothing and housing), repayment of debts, catering for the increase in the fuel prices, electricity and water tariff, financial commitment to the extended family; before thinking about paying any tax liability. There have been instances where taxpayers complained that their earnings could barely feed them and they had nothing to spare for payment of tax. The finding of this study corresponded with the findings reported by Mohani (2001) and Bloomquist (2003) that people who face personal financial difficulties are likely to be prone to evade tax when compared to people in less financial problem.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings revealed in this study and the conclusion drawn from the findings. It also highlights policy recommendations as well as suggestions for further studies.

5.2 Summary

The main objective of this study is to investigate the determinants of income tax compliance in a self-assessment system in Kwara State, Nigeria. The determinants examined were: tax knowledge, tax system structure, public governance quality, public disclosure of taxpayers' information and financial constraint. In order to accomplish this, five hypotheses which span the determinants variables selected were formulated.

The research design adopted was a cross-sectional survey method. The target population of this study comprised all 68,338 registered member of Kwara State Artisans Congress (KWACO) as at 30th September, 2017. The study was based on five hundred and forty (540) respondents. This study used stratified and simple random sampling methods. Stratified random method was used to group the Artisans in various strata based on the associations making up KWACO. This was done to ensure that all associations making up KWACO are included in the sample. Simple random sampling method was used to select the respondents from each association.

The data collected for this study was analysed using both descriptive and inferential statistic. The descriptive method involved the use of percentages, frequency count, mean and standard deviation. Furthermore, the data analysis technique of Partial Least Square Structural Equation Modeling (PLS SEM) was employed to analyse the data. PLS

approach constitutes a variance-based structural equation modeling technique. This tool combines factor analysis and multiple regressions which enable the researcher to simultaneously examine a series of interrelated dependent relationships among the measured variables and latent constructs as well as between several latent construct. In addition, the PLS SEM approach is one of the powerful statistical tools in social and behavioural sciences that place minimal limitations on distributional characteristics of the data and sample size. A PLS-SEM model was applied to determine the relative importance of determinants variables with respect to tax compliance in a self assessment system in Kwara State. It was established that 29.9% of the variation in tax compliance is explained by tax knowledge, tax system structure; public governance quality, public disclosure of taxpayers' information and financial constraints of taxpayers collectively. 70.1% of the variance in tax compliance is explained by other factors which are not covered in this study.

The following are the summary of the findings of this study:

- i. Tax knowledge was found to have a significant positive relationship with tax compliance in a self-assessment system in Kwara State. This implies that, it is most likely that taxpayers' possession of better understanding of general tax knowledge, legal tax knowledge and technical tax knowledge will encourage them to fulfil their tax obligations and thus, do away with non-compliance temptations.
- ii. There exists a significant negative effect of tax system structure on tax compliance in a self-assessment system in Kwara State. This implies that, taxpayers are less likely to comply with tax laws based on the structure of the tax system in place.
- iii. Public governance quality has a significant positive effect on tax compliance in a self-assessment system in Kwara State. This implies that, taxpayers are more likely

to comply with tax payment if they perceive that the revenues that are generated from taxes are judiciously utilized.

- iv. The result shows that there exists a significant positive relationship between public disclosure of taxpayers' information and tax compliance in a self-assessment system in Kwara State. This implies that, taxpayers are more likely to comply with tax laws if they know that their names would be published in newspapers or posted in public places for people to know that they are not discharging their tax obligation.
- v. Taxpayers' financial constraint has a significant negative effect on tax compliance in a self-assessment system in Kwara State. This implies that, taxpayers are more likely to comply with tax payment if they are not outweighed by their financial constraints.

5.3 Conclusion

Overall, the results indicate that tax compliance in a self-assessment system is influenced by taxpayers' knowledge. Self-assessment places the responsibility on taxpayers to correctly determine their own tax liabilities. Consequently, taxpayers' knowledge would play a crucial role in ensuring compliance. Probability of detection and penalties would ensure tax compliance in self-assessment system, as probability of detection would have more effect in enhancing taxpayers' compliance, penalties would act as deterrent against non-compliance.

Public governance quality was found to influence tax compliance in terms of the capacity of the government to formulate and implement sound policies, provision of quality infrastructure; quality health service and quality educational system; control of corruption, political stability and absence of violence, free and fair election; freedom of expression, no stringent local law governing the starting of a business and confidence in the legal system of the state would improve taxpayers' compliance. Public disclosure of taxpayers' information

would have more effect in improving tax compliance if the taxpayers are aware that their names would be published in newspapers or posted in public places for people to know that they are not discharging their tax obligation.

Financial constraints of taxpayers would affect tax compliance. Taxpayers who have so much financial commitment would have to prioritize the available income to basic survival needs (food, clothing and housing), repayment of debts, catering for the increase in the fuel prices, electricity and water tariff, financial commitment to the extended.

5.4 Recommendations

Based on the conclusion drawn from the research findings, the following recommendations are made:

- i. There is a need for KWIRS to develop a new tax education programmes that would further enhance taxpayers' tax knowledge. These education programmes should contain information on public awareness about tax payment and its importance in the economy. The tax education programmes should be extended to all categories of taxpayers residing in all geographical locations in the state instead of the current practice of concentrating in the vicinity of the urban areas. There is also a need to implement effective tax education and tax compliance programmes that would accommodate the different and diverse needs of the taxpayers.

Promoting tax education should not be the sole responsibility of the KWIRS, other government Ministries and extra Ministerial Departments, such as the Ministry of Education and The Ministry of Information. Ministry of Education should consider introducing tax education in curricular of primary schools, secondary schools and tertiary institutions. It should be noted that students are potential taxpayers when they join the workforce in the future. In addition, courses in taxation in tertiary institutions should not be offered only to students in the field of Accounting, but

should be extended to other field or better still, be offered as a General studies in the tertiary institution. This would not only equip the students with adequate tax knowledge, but also contributes to their awareness about their legal, moral or social obligations in relation to tax compliance. To further enhance the simplicity of tax system, tax laws should be codified in simple, non technical languages and be translated to three major languages in Nigeria.

- ii. There is a need to review the existing tax system structure by increasing the amount of fines and penalties to deter non-compliance;
- iii. There is a need to improve on the quality of governance in the state in order to elicit voluntary tax compliance. This could be achieved if there is improvement in the : taxpayers' participation in a direct democracy, political peace and stability, provision of quality infrastructure, provision of quality health service, provision of quality educational system, control of corruption by strengthening the measures that have been put in place to control corruption, fair administration of justice and effort should be made to enhance taxpayers' confidence in the legal system, regulatory quality of government in relation to the enactment of local laws and formulation of policies governing the starting of a business in the state.
- iv. To elicit voluntary tax compliance, the idea of relevant tax authorities publicly disclosing taxpayers' information by publishing the names of the delinquent taxpayers in the newspapers or their websites as tax enforcement strategy is a welcome development. However, there is a need for such a punitive measure to be included in the tax laws in order to avoided unnecessary litigations in the future.
- v. The finding of this study gives credence to the fact that voluntary tax compliance of taxpayers depends on their financial conditions, if there is too much financial commitments for the taxpayers, they are likely not to voluntarily comply. However,

it has been observed that the heavy financial commitments emanate from the unfavorable economic situation in the state. Therefore, there is a need for the government to be more responsive to welfare needs of the citizens and to formulate economic policies that encourage more investment to the economy in order to enhance circular flow of income in the state.

5.5 Contribution to Knowledge

This study has contributed to the body of knowledge on tax compliance from the theoretical and practical perspectives.

Theoretical perspective, the study, to the best of the researcher's knowledge, the first empirical evidence in respect of taxpayers' response to public disclosure of taxpayers' information in Nigeria. The study empirically tested the relationship between public disclosure of taxpayers' information and tax compliance. The result shows that there exists a significant positive relationship between public disclosure of taxpayers' information and tax compliance. This implies that, taxpayers are more likely to comply with tax laws if they know that their names would be published in newspapers or posted in public places for people to know that they are not discharging their tax obligation.

Practical perspective, the study also revealed the determinants of personal income tax compliance in a self-assessment system in Kwara State. The study has provided information that would be useful to the government in formulating strategy on tax non-compliance in the state.

5.6 Limitation of the Study and Direction for Further Research

This study has some limitations. Firstly, it focused on only five out of numerous determinants that can affect tax compliance. This is the reason for the model of this study explaining only 29.7% of the total variance in tax compliance. Secondly, the use of survey

methodology with its self-report methods of determining attitudes and opinion is less reliable, especially when the information sought on tax is sensitive. More importantly, this study only used artisans to represent the self employed taxpayers in the state, while considerable number of self-employed taxpayers could be found in the categories of ‘High Net-Worth Individuals’ (HNIs) and traders.

Furthermore, this study has been conducted focusing on the direct relationship between tax compliance and the five determinants used for the study. However, considering the potentials of the PLS-SEM statistical tool, studies can be carried out using the determinants as moderating or mediating variables. In addition, further study can also be conducted on other tax compliance determinants variables that were not included in this study. Finally, all categories of all self-employed taxpayers (the artisans, HNIs and the traders) could be used for the study.

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