

**Readability Assessment of Nigerian Company Income Tax Act**  
*(Penilaian Kebolehbacaan Akta Cukai Pendapatan Syarikat Di Nigeria)*

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**ABSTRACT**

*This study was undertaken to examine the readability of the Nigerian Company Income Tax Act 2007 (CITA 2007), which is the main reference for taxpayers who have intention to comply. For that purpose, the researchers employed readability formulae namely Flesch Reading Ease Score (FRES), Flesch-Kincaid Grade Level (F-KGL), Average Sentence Length (ASL) and Percentage of Passive Voice (PPV). FRES measures the readability of technical writing and rates texts on a 0-100-point scale, while F-KGL translates the 0-100 raw FRES into the number of years of education generally required to understand the materials. On the other hand, ASL and PPV deal with average length and percentage of passive voice, respectively. All these measures were calculated using Microsoft Word 2000. The study found that CITA 2007 has low level of readability which made the Act very difficult to understand. Further, the results indicate that CITA 2007 can only be understood by those with tertiary education. The study recommends that tax simplification policy in Nigeria should include language simplification to enable taxpayers to understand the Act correctly which subsequently motivate them to comply voluntarily; and consequently result in more tax revenue to boost the economy of the nation.*

*Keywords: Complexity of tax law; readability; self-assessment system*

**ABSTRAK**

*Kajian ini dijalankan untuk meneliti kebolehbacaan Akta Cukai Pendapatan Syarikat 2007 di Nigeria (CITA 2007) yang merupakan sumber rujukan utama bagi pembayar cukai yang mempunyai keinginan untuk patuh. Untuk tujuan kajian ini, penyelidik menggunakan formula kebolehbacaan iaitu Skor kebolehbacaan Flesch (FRES,) Tahap Gred Flesch-Kincaid (F-KGL)], purata panjang ayat (ASL) dan peratusan ayat pasif (PPV). FRES mengukur kebolehbacaan teknik penulisan dengan memberikan markah ke atas teks berdasarkan skala 0-100, manakala F-KGL menterjemahkan skor FRES 0-100 kepada bilangan tahun pendidikan diperlukan untuk memahami bahan bacaan tersebut. ASL dan PPV, masing-masing mengukur kepanjangan ayat dan peratusan ayat pasif. Semua formula kebolehbacaan ini dikira menggunakan Microsoft Word 2000. Kajian mendapati CITA 2007 mempunyai tahap kebolehbacaan yang rendah dan sukar difahami. Dapatan kajian juga menunjukkan bahawa CITA 2007 hanya boleh difahami oleh golongan yang memperolehi pendidikan di peringkat ijazah. Kajian ini mencadangkan bahawa dasar simplifikasi cukai di Nigeria harus merangkumi simplifikasi bahasa untuk membolehkan pembayar cukai memahami Akta dengan lebih tepat dan menggalakkan mereka untuk patuh secara sukarela; dan akhirnya meningkatkan hasil cukai untuk menjana ekonomi negara.*

*Kata kunci: Undang-undang cukai yang kompleks; kebolehbacaan; sistem taksiran sendiri*

## INTRODUCTION

Taxation provides an important source of revenue for funding public sector activities and a tool for controlling production, investment and consumption. In Nigeria, the federal government generates higher tax revenue from the oil tax compared to the non-oil tax. In order to increase the general tax revenue and the non-oil in particular, the new National Tax Policy was introduced. Among the non-oil tax revenue sources are Company Income Tax, Value Added Tax, Personal Income Tax and Education Tax. Among all of the sources, the Company Income Tax contributes the highest revenue (with USD4.84 billion in the year 2013), as indicated in Table 1. Considering such a major contribution to the nation, the researchers believe it is worth researching this part of income tax.

TABLE 1. Non-oil tax revenue 2013

Tax	N' billion	USD billion	%
Company Income Tax	963.55	4.84	36.4
Capital Gains Tax	19.66	0.10	0.7
Value-added Tax	802.68	4.03	30.3
Education Tax	279.36	1.40	10.5
Personal Income Tax	585.90	2.94	22.1
Total	2,651.15	13.31	100

*Source:* Federal Inland Revenue Service (2015)

In Nigeria, companies pay their taxes based on Self-Assessment System (SAS). Under the SAS, taxpayers are expected to read and understand the tax laws in order to file returns and pay their taxes appropriately; unlike the old system (Government Assessment), where the tax authority does the assessment. Thus, most of the corporate taxpayers file their return with the help of tax consultants to ensure the correct filing and to avoid penalty charges. However, this means additional compliance costs to taxpayers. This issue of additional compliance costs is worsening in the presence of complexity of the tax laws.

Therefore, the simplicity of the language in the tax laws is very crucial in this regard (James, Sawyer & Wallschutzky 1997; Saw & Sawyer 2010; Urbancic & Hsu 2007). High level of readability may help in achieving the objective of the new National Tax Policy by simplifying the language of the tax laws which may reduce the level of consultations and the tax audit activities. In turn, this may increase the general tax revenue by decreasing the tax audit cost. High level of readability of the tax law can make it easy for both taxpayers and tax authority to carry out their respective responsibilities as prescribed by the laws. The degree of taxpayers' compliance with the SAS is a function of the level of readability of the tax laws (Urbancic & Hsu 2007). High level of readability of the tax laws may also reduce the level of the tax audit.

Upon realizing the importance of understanding the tax laws in complying with tax obligation, several research were conducted to determine the level of readability of tax laws and related materials (such as the Tax Guide, Taxation Rulings, and Taxation Determination) in countries such as New Zealand (Saw & Sawyer 2010; Tan & Tower 1992) and Australia

(Richardson & Smith 2002; Smith & Richardson 1999). In both countries, the studies were conducted to evaluate the tax law re-write projects. In the US, Urbancic and Hsu (2007) investigated the level of readability of Tax Instructions of the Mid-western states of the US. A similar examination was undertaken on Malaysian Income Tax Act 1967 (Saad, Mat Udin & Derashid 2014).

Unfortunately, such response is not demonstrated in Nigerian environment. While studies have indicated that tax laws in Nigeria are complex and difficult for the taxpayer to comprehend, and in some cases problematic, even for the tax authority officials (Micah, Ebere & Umobong 2012) and such tax law's ambiguity has contributed to the poor performance of SAS in Nigeria (Tukur 2010), yet to the best knowledge of the researchers, no empirical studies exist on the readability of Nigerian tax laws. Hence, it motivates the researchers to take this initial step of examining the level of readability of the main source of reference for taxpayers, i.e. Nigerian Company Income Tax Act 2007 (CITA 2007). This is important as when the CITA 2007 is overly and unnecessarily complex, the taxpayers may have difficulty to understand the materials and as a result, they may not benefit from whatever tax incentives offered by the government. In this case, even the most attractive incentives will not be well-functioning as intended. The impact may get even worse when such a low level of readability of the tax rules leads to unintentional noncompliance of taxpayers, which in turn pull them to the penalty regimes as stipulated under SAS.

The findings of this study are expected to contribute to the literature particularly in developing countries. In addition, the insights generated from this study may also assist the Federal Inland Revenue Service (FIRS) to review and improvise (if necessary) the relevant tax materials in their effort to optimize their services to their customers (i.e. taxpayers), and consequently meet the national ultimate objective of high compliance.

The remaining sections of this paper are organized into four sections. The next section reviews existing literature relevant to the tax laws complexity and readability. This is followed by a section on research method. Section 4 discusses the results of the study before the paper concludes in section 5.

## LITERATURE REVIEW

Readability of the tax laws is a very important factor that involves both taxpayers as well as tax authority. For the taxpayers to comply with the tax laws, it should be easy for them to understand their fiscal responsibilities such as when, where and how to pay taxes. Similarly, for the tax authority to administer the tax law efficiently, understanding what is required from the taxpayers, when to impose penalty etc. is essential. All these responsibilities are provided by the law. However, high level of complexity in the tax law may be a threat to the tax system. Thus, a high level of readability in the tax law is very crucial in relation to tax compliance and administration.

## COMPLEXITY OF TAX LAW

Complexity of tax law is one of the main issues discussed by tax commentators . Complexity adds more burdens to the taxpayers, as well as the tax authority, in terms of compliance costs and administrative costs, respectively. Excessive complexity in the tax law may have negative effect on taxpayer's voluntary compliance especially in the era of the SAS (James 2007).

Weaver (1948), in his seminal work on tax law complexity, identified two different types of tax law complexity, i.e., organized and disorganized complexity. Karlinsky and Koch (1984) identified content complexity and reading complexity as two factors that contributed to the tax law complexity. First, content complexity refers to the inherent difficulty in a given concept, for example, the concept of calculus is more difficult to understand than the concept of arithmetic. Second, reading complexity involves presentation of the concept under consideration, for instance, a story in long sentences and many passive voices is more difficult to read and understand than the one in short sentences and less passive voices. Concerning readability, it is generally agreed that from the tax literature, readability problem is among the determinants of tax complexity (Karlinsky & Koch 1984). In the same vein, Morris and Qiao (2011) considered complicated computations, obscure language, and different interpretations for the same term, regular changes, cross-references and unclear terms as the factors contributing to the complexity in the tax law.

According to Cooper (1993), in the discussions of tax simplification, tax commentators refer to at least one of seven factors to indicate tax complexity: (1) Predictability, referring to simplicity, easiness and accuracy in understanding the rules and their scope by the taxpayers as well as their advisers, whenever it is necessary; (2) Proportionality, referring to the aim of a tax law in relation to how simple the solution provided by the laws is; (3) Consistency which involves rules on similar issues. In this case, laws should be consistent without arbitrary distinctions; (4) Compliance referring to easiness for the taxpayer to comply without incurring high compliance costs; (5) Administration referring to simplicity of the tax laws to be administered; (6) Coordination, involving the consistency of the tax laws with other rules. Thus, the relationship of the tax laws with other rules should be appropriate and not complicated; and (7) Expression, which claims that the laws are simple when all rules are clearly expressed.

It can be deduced from the above that complexity of tax laws is a multi-dimensional issue as it refers to different things. However, these can be summarized into three main areas, i.e., tax policy, tax compliance and language. As this study is focusing on language aspect, it should be emphasized that the provisions of the law should be in a simple language for easy understanding to enhance compliance as well as administration of the tax laws. In other words, high level of readability ensures clarity of the responsibilities of stakeholders as expressed in the laws.

#### READABILITY

Readability describes the simplicity by which a text can be read and comprehended. Hence, readability is a pre-conditional feature of understandability (Urbancic & Hsu 2007). In other words, one should consider the kind and the number of ideas expressed, the vocabulary, style, format and typography for a document to be readable and understandable. In addition, matching the texts to reader's skills is also very important.

Considering the importance of text readability, numerous studies have been conducted to develop a measure for readability of text materials (Gray & Leary 1935; Sherman 1926; Vogel & Washburne 1928; Waples & Tyler 1931). At the initial stage, these studies tried to establish a measure that could help in matching students' levels of education to the textbooks they used in various grades or classes. Over time, readability formulae are now used in various fields such as research, law, health care, journalism, insurance, and industry (DuBay 2006). The above studies are the key studies that paved the way for the development of the Flesch Reading Ease Scale

(FRES) and Flesh Kincaid Grade Level (F-KGL) that are largely used to measure readability of tax laws.

In the area of taxation, several studies were conducted using one or combination of the readability measures to assess the readability level of tax laws in New Zealand and Australia after the re-write of the laws (Richardson & Smith 2002; Saw & Sawyer 2010; Smith & Richardson 1999; Tan & Tower 1992). Also, in the US, Urbancic and Hsu (2007) used them to assess the readability of selected states' tax instruction materials. In New Zealand, the Income Tax Act (ITA) 1976 and Inland Revenue Department Act (IRDA) 1974 were rewritten in plain language with the aim of tax system simplification based on the recommendation of Waugh Committee (Richardson & Sawyer 1998; Saw & Sawyer 2010). Reading and understanding are considered as aspects of compliance and therefore improving them will enhance tax compliance. The rewrite aimed at minimizing complexity by re-writing the laws in order to increase readability and understanding of the tax laws (James, Sawyer & Wallschutzky 1997; Saw & Sawyer 2010).

Tan and Tower (1992) conducted an empirical study to test the tax laws in New Zealand before completing the re-write. The study used FRES to measure the readability of the ITA 1976, the Goods & Services Tax Act 1985 (GSTA 1985), the Technical Information Bulletins (TIBs) and the Tax Returns Guides (TRG), to determine the readability of such materials. The study used selected samples of Sections from ITA 1976 and GSTA 1985 before and after the simplification program to enable comparison. The readability of the two Acts was also compared to that of the TIBs and the TRG. The results revealed a FRES score of less than 30 for both Acts, before and after the simplification. Furthermore, ITA 1976 showed an average sentence length (ASL) of 141.60 words and 135.22 for the old and the new respectively. Similarly, GSTA 1985 showed average words per sentence of 125.69 and 128.11 for the old and new respectively. Also, there was excessive use of passive voice with a range of 35% to 55%. These results indicated that the Acts are still very difficult to read and understand by many taxpayers. Similarly, the TIBs got an average FRES of 40 and ASL of 23.45 words. Finally, the TRG showed an impressive result of FRES score of 65, ASL of 15 and percentage of passive voice (PPV) of 16.29. All the results for the Tax Return Guide were within the acceptable range.

After the re-write, Saw and Sawyer (2010) investigated the readability of New Zealand ITA and other relevant materials to assess the success of the re-write. The study used FRES, F-KGL, ASL and PPV to achieve its objective. The results showed an average FRES of 48.6 with average ASL of 25 words per sentence. This indicated that the laws are now easier to read and understand. For Tax Instruction Booklet (TIB) and Binding Rulings (BR), the FRES index was 36.4 and 32.4, respectively. Comparing the results obtained by Tan and Tower (1992), and Saw and Sawyer (2010), it is clearly indicated that New Zealand's effort to redraft the tax laws has achieved a reasonable level of success (Sawyer 2013).

In Australia, similar project was carried out based on the recommendations of the Joint Public Accounts Committee (JPAC), with the main objectives of: (1) simplification of the tax laws; and (2) reducing tax compliance and administrative costs by rewriting the tax laws into simple and easy to understand tax laws. The rewrite project aimed at simplifying the tax laws to an understandable level of individuals with ten years of schooling, i.e., a person without university or post-secondary education. This became an important issue as compliance cost was estimated to be the highest in the Organization for Economic Cooperation and Development (OECD) countries, i.e. 12% of tax revenue in the country.

Following the rewrite project, Smith & Richardson (1999) conducted an empirical study to investigate the success of the simplification of the ITA 1936, as amended. The study utilized the FRES, F-KGL, ASL and PPV on sampled Sections of ITA 1936 and the corresponding Sections of the new version, ITA 1997. In addition, the study included a sample from other relevant tax materials, such as the recent Taxation Rulings and Taxation Determinations and the Australian Individual Taxation Returns Guide. A sample of 95 Sections from ITA 1997 and the Sections from ITA 1936 were analyzed. The study found that based on the samples, ITA 1997 was more readable than the ITA 1936. However, the FRES for both laws was found to be below the required readability level benchmark of 60.1 to 70 (i.e. standard level of readability). The same results were found for Taxation Rulings and Taxation Determinations. While for the Tax packs, the result was found to be interesting with high readability level, which was within the benchmark score. The results for F-KGL Index for both laws (ITA 1997 and ITA 1936) were disappointing. The results indicated that ITA 1997 is still difficult to understand. The use of passive sentence increased in ITA 1997 but not to an extreme level. Considering the ASL, there was an improvement with reduction in the words per sentence.

Later, Richardson and Smith (2002) studied the readability of the Australian GST law using an empirical method. The study used large sample of Sections (58.2%, i.e., 205 Sections out of 385) selected from the Australian GSTA. FRES, F-KGL, PPV and ASL were used to assess the readability level of the Act. The results revealed an average FRES of 40.3, which was below the required benchmark of 60 to 70. This means that the GSTA is still obscure and complicated. The results also showed that more than 70% of the GSTA required at least university level of education to understand the Act. For the F-KGL, similar results were obtained. An average F-KGL of 11.0 was obtained for the whole sample. This also indicates low level of readability of the Act. For the PPV and sentence length, an average of 20% and 20.9 words per sentence, respectively, were obtained. To sum up, the Australian GSTA is still difficult for the taxpayers to read and understand.

In the US, there has been a debate on simplification of tax laws as the laws have been identified as ambiguous. However, no serious action has been taken to re-write the tax laws. Notwithstanding that, Urbancic and Hsu (2007) studied the readability of tax instruction materials (of income tax) of the Western states in the USA. The study tested the readability of such materials for 16 years (1990 to 2005) to make comparison between the states. The study utilized FRES and Fog Index. The readability levels were determined relative to the level of adult education attainment of the states. The result of the study showed an average FRES of 53 for the states in which the score was above the threshold. Among the eleven states, Illinois had the most favorable Fog index followed by Wisconsin and Michigan with 12.4, 13.4 and 14.1, respectively. Nebraska had the worst result of 17.1.

The most recent study was undertaken in Malaysia, where a readability examination was conducted on the Income Tax Act 1967 (ITA 1967) using FRES and F-KGL (Saad et al. 2014). The results from FRES (33.5) and F-KGL (16.3) scores indicate that the level of readability of ITA 1967 is low and the materials can only be well understood by those who had obtained undergraduate education. To date, there is little effort of tax laws simplification that has been undertaken.

A review of the above literature suggests that readability of tax legislations is a prerequisite for tax compliance. With poor understanding of tax legislations, it will be difficult for taxpayers to comply even though they wish to do so. A readability analysis on tax legislations in Nigeria,

however seems to be ignored despite the increasing concern on tax law ambiguity. Hence, it is of a high time to conduct this study in Nigerian environment by investigating the level of readability of CITA 2007. This effort would be a stepping stone for the re-write process (if necessary) in order to simplify the legislations, as what has been experienced in New Zealand, Australia and the US. For that purpose, the study adopts the methodology used by the previous studies.

## METHODOLOGY

In order to answer the objective of this study, i.e. to examine the level of readability of CITA 2007, this study adopts four measures of readability, namely FRES, F-KGL, ASL and PPV. Prior research supported the use of these readability measures in assessing the readability level of tax legislations (see Saw & Sawyer 2010; Richardson & Smith 2002; Smith & Richardson 1999; Tan & Tower 1992; Urbancic & Hsu 2007).

### FLESCH READABILITY EASE SCORE (FRES)

Flesch's (1948) study on readability has developed a formula that determines the ease or difficulty of a text based on the number of syllables and the number of words in a sentence of a given text. The formula uses a range score of 1 to 100 to determine the readability of a text. Lower scores indicate 'difficult to read text' while higher scores reflect an 'easy to read text'. For instance, a score of 1 to 30 is considered very difficult while that of 60 and above is easy. Table 2 gives the details of the scores and their respective rankings.

TABLE 2. FRES scores description

Flesch Readability Scores	Description of level of Readability
0.00 to 30.00	Very difficult
30.00 to 50.00	Difficult
50.00 to 60.00	Fairly difficult
60.00 to 70.00	Standard
70.00 to 80.00	Fairly easy
80.00 to 90.00	Easy
90.00 to 100.00	Very easy

Source: Flesch (1948)

The scores are calculated using the following formula:

$$\text{FRES} = 206.835 - (1.015 \times \text{asl}) - (84.6 \times \text{asw})$$

Where:

- FRES is a point on a scale from zero (0) (most difficult) to hundred (100) (easiest), with 30 as very difficult and 70 as easy.
- *asl*- Average Sentence Length is the number of words divided by the number of sentences.
- *asw*- The average number of syllables per word is the number of syllables divided by the number of words.

FRES has been the most widely accepted readability measure in different fields compared to other readability measurements (Klare 2000). The potential reason could be due to its flexibility. In addition, FRES is claimed as an easy to use and time saving formula compared to the previous readability formulae (such as Gray-Leary and Lorge) which require reference to word list (DuBay 2006).

FRES is the dominant readability measure used in Accounting (Richardson & Smith 2002). According to Karlinsky and Koch (1984), the US tax authority used FRES to determine the readability of tax return forms and tax instruction booklets. In the area of academic research, FRES was also used to measure readability of tax instruction booklets (Karlinsky & Koch 1984). Furthermore, several researchers have used this index to calculate readability of accounting, finance, management, marketing and business communication textbooks. F-KGL is another version of FRES that gives corresponding grade levels as FRES.

#### FLESCH KINCAID GRADE LEVEL (F-KGL)

F-KGL is a reformulation of FRES that tries to match a point on FRES scale (0-100) to education level (grade level). This will help in matching the determined readability level of CITA 2007 to the appropriate education level required to understand the Act. Table 3 shows the F-KGL scores and corresponding education level based on the Nigerian education system.

TABLE 3. F-KGL readability scores

F-KGL Score	Equivalent Education Level
17	University graduate
16	Undergraduate level 4
15	Undergraduate level 3
14	Undergraduate level 2
13	Undergraduate level 1
12	Senior Secondary School 3
11	Senior Secondary School 2
10	Senior Secondary School 1
9	Junior Secondary School 3
8	Junior Secondary School 2
7	Junior Secondary School 1
6	Primary school leaver
5	Primary 5

Similar to FRES, F-KGL also calculates the readability of a given text based on the number of syllables per word and the number of words per sentence, as follows:

$$F-KGL = (0.39 \times \text{number of words/number of sentence}) + (1.8 \times \text{number of syllables/number of words}) - 15.59$$

#### AVERAGE SENTENCE LENGTH AND PERCENTAGE OF PASSIVE VOICE (ASL AND PPV)



In addition to FRES and F-KGL, ASL and PPV in a text are important determinants of complexity of a reading material. Although the length of the sentence is encompassed in FRES and F-KGL, it is important to consider both ASL and PPV separately in readability analysis (Smith & Richardson 1999). For good readability score in a document, it is a normal practice to keep the number of words per sentence at minimum possible levels and proportion of passive voices. In order to achieve this, excessive use of long sentences and passive voices have to be avoided. Whenever a passive voice can be replaced with an active one, this should be done as long as the intended meaning remains in the text. Similarly, long sentences should also be replaced with shorter ones as recommended by Strader and Fogliasso (1989), and Tan and Tower (1992) based on their studies on complexity of the tax laws. Tan and Tower (1992) found that the use of shorter sentences could reduce the reading complexity of tax laws. Using active voices instead of passive ones makes a sentence clearer by identifying the subject. For instance, the sentence “A taxpayer must file a return.” is simpler and more straightforward than “A return must be filed” (Thuronyi 1996).

According to Richardson and Smith (2002), a percentage of around 20 for passive voices is considered acceptable in the tax legislation. With regards to ASL, 20 words per sentence would be acceptable (DuBay 2006). This contention was supported by James (2007), who claimed that short sentences, clear and simple definitions, modern design and appropriate headings, are all needed to help the readers. These can lead to high level of readability which can make tax legislations simple to understand. This simplification of tax laws to solve the problem of complexity in the tax laws, and the SAS in particular, could be done through rewriting the laws in plain English by taking into account the above mentioned criteria. This effort will surely bring improvement to the tax system of the country, as has been experienced in many countries (James & Wallschutzky 1997).

Considering their contribution to readability research, this study utilized the four readability measures discussed above. All the readability calculations of this study were performed using Microsoft Word 2007 computer program to calculate the readability of CITA 2007, comprising 14 Parts and 106 Sections. All Sections of the CITA 2007 were subjected to the test excluding fifteen Sections that have less than fifty words. Sentences of less than fifty words were considered inappropriate for this analysis (Smith & Richardson 1999).

## RESULTS AND DISCUSSION

This section presents the results of the readability of CITA 2007 which was measured using the readability indices discussed.

### FLESCH READING EASE SCORE (FRES)

Table 4 gives a summary of the CITA 2007 readability test using the FRES index. The Table shows that CITA 2007 has an overall average FRES of 29.76. Given the acceptable threshold score of 60 to 70, this score of 29.76 clearly indicates that the Act is difficult to read and understand.

TABLE 4. Summary of CITA 2007 readability test using FRES index

Test	Result
Average Overall Score	29.76

Average Scores by Part:	
Part 1: Administration	36.03
Part 2: Imposition of Tax and Profits	25.60
Part 3: Ascertainment of Profits	32.70
Part 4: Ascertainment of Assessable Profits	39.85
Part 5: Ascertainment of Total Profit	21.30
Part 6: Incentives to Gas Industry	10.90
Part 7: Rates of Tax, Deduction of Tax from Dividends and Relief for Double Taxation	14.52
Part 8: Persons Chargeable, Agents, Liquidators etc.	38.20
Part 9: Returns	29.86
Part 10: Assessments	21.55
Part 11: Appeals	30.60
Part 12: Collection, Recovery and payment of Tax	35.33
Part 13: Offences and Penalties	41.60
Part 14: Miscellaneous	38.63

Table 4 further reveals that some Parts are more readable than others. For instance, Part 13 (Offences and Penalties) is the most readable Part with an average FRES of 41.60. The possible reason for a relatively high readability of Part 13 (compared to the others) is to familiarize the taxpayers about the possible consequences for avoiding or evading tax. This is important to increase awareness of the taxpayers. On the other hand, Part 6 (Incentives to Gas Industry) is the most difficult part with an average FRES of 10.90. Notwithstanding the fact that Part 6 is the most difficult, the effect may not be felt by every corporate taxpayer except for those in the Gas Industry.

Table 5 below shows that 56.05% of the Sections have a FRES below 30, which is very difficult to understand. About 25.27% of the Sections are difficult to read and understand and another 10.99% is fairly difficult to understand. Finally, only 6.59% of the Sections fall within the standard score (of 60 to 79) and the remaining 1.10% is easy to understand. This also shows that a substantial part of the Act is difficult to understand.

TABLE 5. Summary of Flesch readability scores

Flesch Score	CITA 2007 No. of Sec.	%	General Reading Ease Score
Below 30	51	56.05%	Very Difficult
30 to 49	23	25.27%	Difficult
50 to 59	10	10.99%	Fairly Difficult
60 to 79	6	6.59%	Standard
80 to 89	1	1.10%	Easy
Total	91	100%	

This is in line with the assertion of Micah et al. (2012) that Nigerian tax laws are complex and difficult for the taxpayers to comprehend, and in some cases are problematic even for the officials of the tax authority. This also indicates that corporate taxpayers have to engage more professionals. As a result of this low level of readability, the tax experts may have to spend longer time working for their clients. Hence, longer time means higher compliance costs to be borne by the corporate taxpayers. In the same vein, the tax authority has to commit more

resources in taxpayer education, tax audit and litigations. Thus, this would increase administrative costs for the tax authority.

Similar results were found in Australian ITA before the re-write process. At that time, the score was 38.44 for the ITA (Smith & Richardson 1999), indicating a difficult tax Act. After the re-writing process (of some Parts), the Act became more readable with a FRES of 46.42. Although the score of the post re-written ITA 1997 does not meet the required threshold level of 60 to 70, this still indicates an improvement in the readability level of the Act with a percentage increase of 20.86. Thus, if CITA 2007 is redrafted with such a similar increase, the readability level will be 35.97. At this level, the law would be much easier to be understood by those who have undergraduate education, under which a large number of the tax consultants may fall.

The results of this study provide a good comparison with the results obtained in New Zealand. The FRES obtained for the New Zealand ITA 1976 was even worse with a score of 1.03 at the early stage of New Zealand tax laws re-write project (Tan & Tower 1992). Saw and Sawyer (2010) later obtained an improved result of 42.77 for the same legislation after substantial parts of the laws were simplified. This simplification mainly involved the re-writing of the legislation in plain language.

Learning from Australia's and New Zealand's experiences, one can simply conclude that the laws of the developed countries are more readable after the re-write. However, if compared with the results of the pre re-write, they are little bit more readable, with scores of 33.52 (Saw & Sawyer 2010) and 38.44 (Smith & Richardson 1999) for New Zealand and Australia respectively. Interestingly, when compared with the results obtained in Malaysia, CITA 2007 appears to be more readable than the ITA 1967. This is based on the FRES score of which all sections of the ITA 1967 were considered difficult (Saad et al. 2014).

#### FLESCH-KINCAID GRADE LEVEL (F-KGL)

Table 6 shows disappointing results for F-KGL with an average overall F-KGL score of 19.64. Similarly, this score indicates that the Act is not easy to comprehend. It needs education level of a graduate to be able to understand the Act. This supports the assertion of Tukur (2010) that the SAS has not achieved its objective of enhancing voluntary compliance due to the ambiguity in the tax laws. In the same vein, the result supports the Ease of Paying Tax Index that ranked Nigeria 138<sup>th</sup> out of 184 countries (The World Bank & International Finance Corporation 2012), as low level of readability is one of the factors that makes tax payment difficult.

Furthermore, Table 6 shows that 65.93% of the CITA 2007 can only be understood by those who have received graduate level of university education, with a score of 17 and above; while another 17.58% require attainment of undergraduate level 4 of education, with a score of 13 to 16. Only 13.19% is readable by those who have attained senior secondary school level 2 with a score of 7 to 12. The remaining 3.30% requires junior secondary school level 1 of education with a score below 7. To sum up, out of 100%, only 16.49% of the CITA 2007 is within the threshold score of 12 while, all the remaining 83.51% of the Act is below the threshold.

TABLE 6. F-KGL summary

F-KGL Score	No. of Section	%	Education Level
Below 7	3	3.30%	Junior Secondary 1
7 to 12	12	13.19%	Senior Secondary 2

13 to 16	16	17.58%	Undergraduate level 4
17 Above	60	65.93%	University Graduate
Total	91	100.00%	
Overall F-KGL Score of CITA			19.64

Smith and Richardson (1999), Saw and Sawyer (2010) and Saad et al. (2014) used F-KGL and obtained scores of 13.38, 10.76 and 16.3, respectively. When these results are compared with the score 19.64 as obtained in this study, it is apparent that the tax law in Nigeria is more difficult to understand and requires higher level of education.

#### AVERAGE SENTENCE LENGTH AND PERCENTAGE OF PASSIVE VOICE

Table 7 shows ASL and PPV of 44.01 and 12.75 respectively. Table 7 further shows that 89% of CITA 2007 contains very long sentences that are above the threshold of 20 words per sentence. The long sentences and the ASL indicate the ambiguity of the Act. The PPV gives an interesting result which did not exceed the threshold of 20%. Seventy seven percent (77%) of the Sections are within the threshold. This, in particular, indicates that there is no excessive use of passive sentences in the Act. Yet, this alone does not solve the problem of complexity.

TABLE 7. Summary of average sentence length and percentage of passive voice

	ASL	PPV
CITA 2007 Average	44.01	12.75
Sections Within the Threshold (%)	11	77
Sections Outside the Threshold (%)	89	23

In Australia, Richardson and Smith (2002) obtained interesting results for both ASL and PPV for GST 1999 which were 20.9 words per sentence and 20% respectively. Similarly, in New Zealand Saw and Sawyer (2010) obtained 19.98 words per sentence and 13% for ASL and PPV respectively for ITA 2007. All these results were found to be within the threshold. Comparing this result with that of CITA 2007, it is clear that CITA 2007 has longer sentences than tax legislations in both countries. This is further evidence for CITA 2007 as being more difficult compared with the Australian and New Zealand legislations. However, in terms of use of passive voices, CITA 2007 appeared to be better with an average difference of 42%.

Generally, the results show that the CITA 2007 is complex with low readability level. The FRES, F-KGL and ASL results all indicated there is low level of readability which makes the Act difficult to understand. Interestingly, in terms of passive voice usage, the result shows that the Act is not in excessive use of the passive voice. It is also surprising that the Act is also difficult for the trained tax professionals. This can be explained by the fact that most of the professionals are trained accountants, not lawyers, and it is normal, in the case of the SAS, that when a new system is introduced, it takes time before the professionals become familiar with it. A similar situation was observed in the UK. After four years of SAS experience, the ACCA revealed that 39% of its members had difficulty with the SAS and about 7% of them admitted that the new system was still problematic (Association of Chartered Certified Accountants 2002).

#### POLICY IMPLICATION, FUTURE RESEARCH AND CONCLUSION

This study examined the readability of CITA 2007. The study used the readability formulae - FRES, F-KGL, ASL and PPV. This study found that the CITA 2007 has low level of readability due to long sentences and words. The Act also requires attainment of high level of education to be able to understand it because of the low level of readability. Interestingly, in terms of use of PPV, it is found to be within the required threshold of 20% and below (Richardson & Smith 2002). This study provides empirical evidence on the readability level of CITA 2007, thus provides evidence on the readability of tax laws in a developing country, specifically Nigeria.

Based on the results of this study from the policy perspective, the results imply that the CITA 2007 is very difficult to understand, even by the tax professionals. This leads to an increase in compliance costs as well as administrative costs of taxation and also impairs the progress of the SAS. Thus, there is a need to re-write tax laws in Nigeria in order to enhance voluntary compliance by reducing both compliance as well as administrative costs of taxation. This tax simplification will help in making it easy for all businesses, especially small ones, to pay taxes in Nigeria. More importantly, this may encourage foreign businesses to do business in Nigeria.

This study investigated the level of readability of CITA 2007 via quantitative method. Future research should use cloze<sup>1</sup> analysis or qualitative method such as interview to obtain opinion of the tax consultants and /or tax authority who deal with the taxpayers on the readability of the tax laws. Moreover, the sample may include the companies who are the actual taxpayers. Future research should study tax law complexity from the perspective of other important factors, such as tax policy. The complexity of tax law should not be narrowed to readability alone as changing requirements of tax policy may also be a source of complexity, as noted by James and Wallschutzky (1997).

Finally, complexity of tax laws has been one of the problems highlighted by tax commentators, while readability of the tax laws is one of the aspects of tax law complexity. Thus, identifying the level of readability is very important in an attempt to increase voluntary tax compliance.

#### ENDNOTE

- <sup>1</sup> This is a test used to measure readability of a given text by removing some words and asking the participant to fill in the missing words. This test determines whether the context of the text is understood by the participant.

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