AN ASSESSMENT OF
THE TAX COMPLIANCE COSTS
OF INDIVIDUAL TAXPAYERS
IN SOUTH AFRICA

by

KAREN STARK

Thesis submitted in accordance with the requirements

for the degree of

DOCTOR OF PHILOSOPHY IN ACCOUNTING SCIENCES

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: Dr S.A. Smulders

CO-SUPERVISOR: Prof. E.M. Odendaal

December 2020

ACKNOWLEDGEMENTS

The Lord open doors that no man can shut and
he closes doors that no man can open. (Isaiah 22:22)

ABSTRACT

AN ASSESSMENT OF THE TAX COMPLIANCE COSTS
OF INDIVIDUAL TAXPAYERS IN SOUTH AFRICA

The tax compliance costs of individual taxpayers in South Africa are unknown, and it is essential to determine, amongst other things, whether these costs pose a risk of causing non-compliance, which could have a negative effect on the collection of tax revenue. Hence, the aim of the study was to assess the tax compliance costs of individual taxpayers in South Africa. The assessment of tax compliance costs entailed calculating these costs in relation to the submission of income tax returns and post-filing activities, ascertaining the determinants of these costs and suggesting ways to reduce them.

Using data collected from an online survey conducted among 10 260 taxpayers, it was estimated (applying various methods) that income tax compliance costs of individual taxpayers for the 2018 year of assessment were between 3.61% and 5.31% of the personal income tax revenue. These results compared well with ratios reported in most studies conducted in other countries and showed a reduction from the results obtained from 752 taxpayers for the 2017 year of assessment.

Chi-square automatic interaction detection (CHAID), a decision tree modelling technique, was used to ascertain the determinants of tax compliance costs and to identify specific groups of taxpayers associated with distinct ranges of the determinants that were statistically significant predictors of tax compliance costs. This breakdown enabled a better understanding of the influence that the specific values of the continuous determinants, such as the service quality rating of the South African Revenue Service (SARS), and the categorical determinants, such as education level and employment status, have on tax compliance costs. The CHAID analysis therefore provided an additional level of insight not possible with regression analysis, enhancing the usability of the results. *Employment status* and *income tax bracket* had the strongest association with tax compliance costs (on average, self-employed taxpayers and taxpayers in the highest income tax bracket had the highest total tax compliance costs). Various other determinants, for example, type of assistance obtained, gender, education level, complexity of tax legislation, complexity of SARS guides, and SARS's service quality rating were also identified in the analyses.

The study concluded with suggestions on how to reduce individual taxpayers' tax compliance costs.

KEY TERMS:

CHAID decision trees

Determinants of tax compliance costs

Individual taxpayers

Personal income tax

Post-filing costs

Service orientation

South African Revenue Service (SARS)

Tax compliance behaviour

Tax compliance burden

Tax compliance costs

ABSTRAK

ASSESSERING VAN DIE BELASTINGVOLDOENINGSKOSTE VAN INDIVIDUELE BELASTINGPLIGTIGES IN SUID-AFRIKA

Die belastingvoldoeningskoste van individuele belastingpligtiges in Suid-Afrika is onbekend, en dit is noodsaaklik om, onder andere, te bepaal of hierdie koste 'n risiko van nievoldoening inhou wat 'n negatiewe uitwerking op die insameling van belastinginkomste kan hê. Die doelwit van die studie was dus om die belastingvoldoeningskoste van individuele belastingpligtiges in Suid-Afrika te assesseer. Die assessering van belastingvoldoeningskoste behels die berekening van hierdie koste ten opsigte van die indiening van inkomstebelastingopgawes en ná-indieningsaktiwiteite, bepaling van die determinante van hierdie koste en voorstelle van hoe om dit te verminder.

Aan die hand van data wat ingesamel is deur 'n aanlyn opname onder 10 260 belastingpligtiges, is (deur middel van verskeie metodes) geraam dat inkomstebelasting-voldoeningskoste van individuele belastingpligtiges vir die 2018-assesseringsjaar tussen 3.61% en 5.31% van die persoonlike-inkomstebelastinginkomste was. Hierdie resultate het goed vergelyk met verhoudings soos berig in die meeste studies wat in ander lande uitgevoer is en het 'n afname gewys in die resultate wat by 752 belastingpligtiges vir die 2017-assesseringsjaar bekom is.

Chi-kwadraat outomatiese wisselwerkingbespeuring (*chi-square automatic interaction detection – CHAID*), 'n besluitnemingskema-modelleringtegniek, is gebruik om die determinante van belastingvoldoeningskoste te bepaal en om spesifieke groepe belastingpligtiges te identifiseer wat statisties-beduidende voorspellers van belastingvoldoeningskoste is. Hierdie uiteensetting het 'n beter begrip daargestel van die invloed wat die spesifieke waardes op die deurlopende determinante, soos die diensgehaltegradering van die Suid-Afrikaanse Inkomstediens (SARS), en die kategoriedeterminante, soos onderwysvlak en indiensnemingstatus, op belastingvoldoeningskoste het. Die CHAID-ontleding het dus 'n bykomende vlak van insig voorsien wat nie moontlik is met regressieontleding nie en sodoende die bruikbaarheid van die resultate verbeter. *Indiensnemingstatus en inkomstebelastingkategorie* het die sterkste assosiasie met belastingvoldoeningskoste (belastingpligtiges in eie diens en belastingpligtiges in die hoogste inkomstekategorie het gemiddeld die hoogste totale belastingvoldoeningskoste). Verskeie ander determinante, byvoorbeeld, soort bystand

verkry, geslag, onderwysvlak, kompleksiteit van belastingwetgewing, kompleksiteit van SARS-gidse en SARS-diensgehaltegradering is ook in die ontledings geïdentifiseer.

Die studie het afgesluit met voorstelle om individuele belastingspligtiges se belastingvoldoeningskoste te verlaag.

SLEUTELTERME:

CHAID-besluitnemingskemas

Determinante van belastingvoldoeningskoste

Individuele belastingpligtiges

Persoonlike inkomstebelasting

Ná-indieningskoste

Diensoriëntering

Suid-Afrikaanse Inkomstediens (SARS)

Belastingvoldoeningsgedrag

Belastingvoldoeningslas

Belastingvoldoeningskoste

SETSOPOLWA

TSHEKATSHEKO YA DITSHENYEGELO TŠA DITEFELO TŠA GO OBAMELA MELAWANA YA METŠHELO KA BALEFAMOTŠHELO KA AFRIKA BORWA

Ditshenyegelo tša ditefelo tša go obamela melawana ya metšhelo ka balefamotšhelo ka Afrika Borwa ga di tsebje, gomme go bohlokwa gore re tsebe, gareng ga tše dingwe, ge eba ditshenyegelo tše di tliša kotsi ya go baka gore balefamotšhelo ba se ke ba obamela melawana ya metšhelo, e lego seo se ka bago le seabe sa go se loke go kgoboketšo ya letseno la motšhelo. Ke ka lebaka leo, maikemišetšo a dinyakišišo tše e bile go sekaseka ditshenyegelo tša go obamela melawana ya motšhelo ka balefamotšhelo ka Afrika Borwa. Tshekatsheko ya ditshenyegelo tša go obamela melawana ya motšhelo go ra gore re swanetše go hlakanya ditshenyegelo tše mabapi le go romela dingwalwa tša motšhelo le ditiragalo tša ka morago ga go romela dingwalwa tšeo tša motšhelo, go realo e le go tseba dilo tšeo di bakago ditshenyegelo tše le go šišinya mekgwa ya go di fokotša.

Ka go šomiša tshedimošo ye e kgobokeditšwego go dinyakišišo tšeo di dirilwego ka inthanete gareng ga balefamotšhelo ba 10 260, go akantšwe gore (ka go diriša mekgwa ye e fapafapanego) ditshenyegelo tša go obamela melawana ya motšhelo wa letseno ka balefamotšhelo ka ngwaga wa tshekatsheko ya metšhelo wa 2018 di bile magareng ga 3.61% le 5.31% ya tšhelete ya motšhelo wa letseno. Dipoelo tše di bapetšwa gabotse le dikelo tšeo di begilwego ka dinyakišišong tše ntši tšeo di dirilwego ka dinageng tše dingwe gomme di laeditše go fokotšega go tšwa go dipoelo tšeo di hweditšwego go balefamotšhelo ba 752 ka ngwageng wa tshekatsheko ya metšhelo wa 2017.

Kutollo ya tirišano ya maitirišo ya *Chi-square* (CHAID), e lego mokgwa wa go nyakišiša sephetho ka maphakga, e šomišitšwe ka nepo ya go tseba dilo tšeo di bakago ditshenyegelo tša go obamela melawana ya motšhelo le go hlaola dihlopha tše itšego tša balefamotšhelo bao ba amanago le mehuta ye e swanago e nnoši ya dihlaodi tšeo di bilego bohlokwa go ya ka dipalopalo mabapi le ditshenyegelo tša go obamela melawana ya motšhelo. Karoganyo ye e kgontšhitše kwešišo ye kaone ya khuetšo yeo dikokwane tše itšego tša dilo tšeo di tšwelago pele go baka se, tša go swana le kelo ya boleng bja tirelo ye e abjago ke Tirelo ya Motšhelo ya Afrika Borwa (SARS), le dilo tšeo di bakago go se obamele melawana ya motšhelo go ya ka makala, go swana le maemo a thuto le maemo a mošomo, go ditshenyegelo tša go obamela melawana ya motšhelo. Tshekatsheko ya CHAID ka fao e file maemo a tlaleletšo a tsebo yeo e sa kgonagalego ka tshekatsheko ya poelomorago, go

maatlafatša go šomišega ga dipoelo. *Maemo a mošomo le legoro la motšhelo wa letseno* di bile le kamano ye kgolo le ditshenyegelo tša go obamela melawana ya motšhelo (ka kakaretšo, balefamotšhelo bao ba itšhomelago le balefamotšhelo bao ba lego ka go legoro la godimo la motšhelo wa letseno ba na le palomoka ya godimodimo ya motšhelo wo ba lefišwago ona). Dilo tše dingwe tša mehutahuta tšeo di bakago go se obamele melawana ya motšhelo, go fa mohlala, mohuta wa thušo ye e hweditšwego, bong, maemo a thuto, go se kwešišege ga melawana ya motšhelo, go se kwešišege ga ditlhahli tša SARS, le kelo ya boleng bja tirelo ya SARS le tšona di utollotšwe ka tshekatshekong.

Dinyakišišo di feditše ka go fa ditšhišinyo mabapi le ka fao go ka fokotšwago ditshenyegelo tša go obamela melawana ya motšhelo ka balefamotšhelo.

MAREO A BOHLOKWA:

Maphakga a dipheto tša CHAID

Dilo tše di bakago ditshenyegelo tša go obamela melawana ya motšhelo

Balefamotšhelo

Motšhelo wa letseno

Ditshenyegelo tša ka morago ga go romela dingwala tša motšhelo

Tlwaetšo ya tirelo

Tirelo ya Motšhelo ya Afrika Borwa (SARS)

Maitshwaro a go obamela melawana ya motšhelo

Morwalo wa go obamela melawana ya motšhelo

Ditshenyegelo tša go obamela melawana ya motšhelo

CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS AND ACRONYMS

ADR	Alternative Dispute Resolution
CGT	Capital Gains Tax
CHAID	Chi-square Automatic Interaction Detection
CIT	Corporate Income Tax
Constitution	Constitution of the Republic of South Africa
DTC	Davis Tax Committee
GDP	Gross Domestic Product
ICASA	Independent Communications Authority of South Africa
IRAS	Inland Revenue Authority of Singapore
IRS	Internal Revenue Service (United States of America)
IT	Information technology
OECD	Organisation for Economic Co-operation and Development
PIT	Personal Income Tax
RSA	Republic of South Africa
SAICA	South African Institute of Chartered Accountants
SARS	South African Revenue Service
SARS Act	South African Revenue Service Act (34/1997)
SMME	Small, Medium and Micro Enterprise
SONA	State of the Nation Address
TAA	Tax Administration Act
TBOR	Taxpayer Bill of Rights
UK	United Kingdom
UNISA	University of South Africa
US/USA	United States/United States of America
USSD	Unstructured Supplementary Service Data
VAT	Value-added tax

CHAPTER 1:

INTRODUCTION

It is bad enough to have to pay taxes, but to have to incur costs for the privilege of doing so is to add insult to injury. (Sandford, 1994:306)

1.1. BACKGROUND

Tax compliance is critical for any tax system, because it ensures that sufficient revenue is raised to fund public goods and services programmes (Yong, Lo, Freudenberg & Sawyer, 2019:767). The importance of ax authorities' providing good services has therefore been emphasised in research about taxpayer compliance behaviour, resulting in an expansion of the variety of services and the support offered by tax authorities to taxpayers around the world (Gangl, Muehlbacher, De Groot, Goslinga, Hofmann, Kogler, Antonides & Kirchler, 2013:503-504).

Tax authorities must constantly rethink their approaches to ensure optimal tax compliance and promote voluntary compliance. One such approach is the coercive tax compliance approach, also known as the deterrence or stick-based approach (Akhand, 2012:1), which aims to improve compliance through penalties and tax audits. The impact of deterrents, such as penalties and threats of prosecution, may not, however, have the desired effect on the compliance behaviour of taxpayers, according to the Organisation for Economic Co-operation and Development (OECD, 2004:37). The persuasive approach, also known as the collaborative, cooperative or carrot-based approach (Akhand, 2012:1), on the other hand, may be a better tool to achieve tax compliance. This approach aims to achieve tax compliance by "influencing tax morale through *increased taxpayer services*, simplified tax law and enhanced mutual understanding" (Akhand, 2012:1; emphasis added).

Three theoretical approaches suggest that tax compliance can be increased if revenue authorities apply service-oriented approaches, where the authorities support and assist taxpayers who want to pay their fair share of tax (Gangl *et al.*, 2013:503), without completely ignoring a coercive approach. These theoretical approaches to tax compliance are the responsive regulation approach (Braithwaite, 2007), the "slippery slope" framework approach (Kirchler, Hoelzl & Wahl, 2008) and the multi-faceted approach (Alm & Torgler, 2011).

The *responsive regulation approach* is based on the premise that tax authorities must first classify a taxpayer's motivational posture towards paying taxes, as being either committed or disengaged (or somewhere between these two extremes), before deciding on an appropriate compliance strategy (Braithwaite, 2007:5). Braithwaite (2007:6) argues that once taxpayers have been classified, tax authorities should assist taxpayers who are making an effort to comply by offering them education and support, but that full audits and prosecution may have to be used to regulate disengaged taxpayers. Figure 1.1 groups examples of various responsive regulation strategies in terms of various levels of compliance.

Figure 1.1:   Examples of responsive regulation strategies
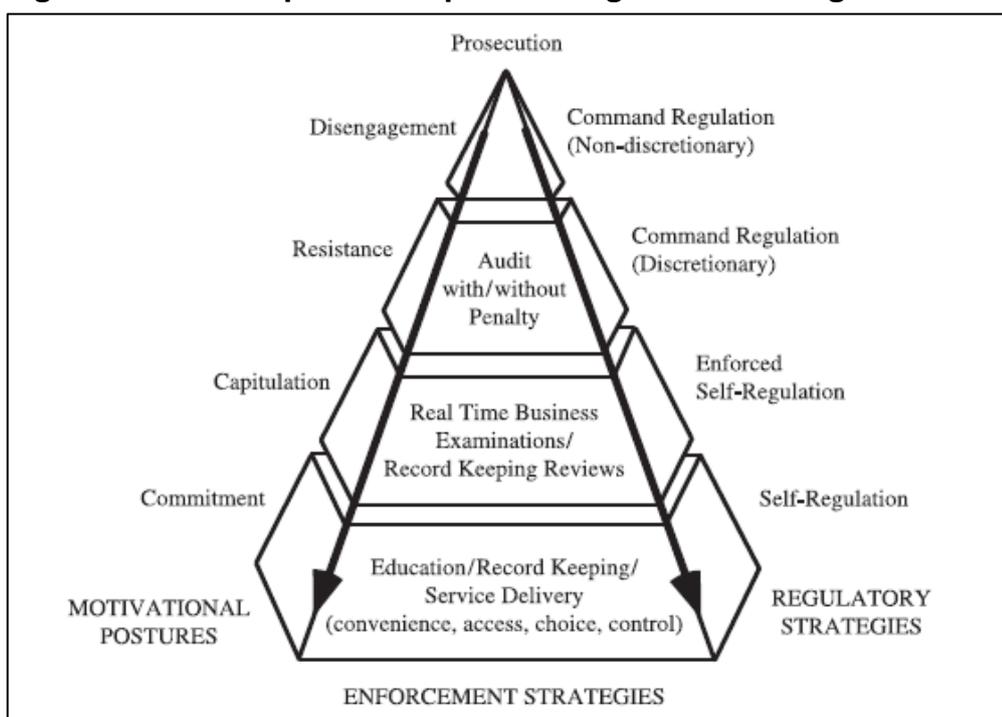
Source: Braithwaite (2007:5)

The pyramid in Figure 1.1 suggests that most taxpayers are committed towards paying tax and being tax compliant. It is therefore in the best interest of the tax authorities to be perceived as service-oriented. This perception can be achieved by offering various education interventions and help with recordkeeping, making tax reporting as easy as possible, and clarifying all the choices available to taxpayers (Braithwaite, 2007:5).

The *"slippery slope" framework approach* focuses on the dynamic interactions between the power of the tax authorities to enforce compliance on the one hand, and trust in the tax authorities on the other hand, as relevant dimensions for understanding enforced and

voluntary compliance (Kirchler *et al.*, 2008:212). The power of the tax authorities refers to taxpayers' perceptions of the ability of tax officers to detect illegal tax evasion; trust in the tax authorities refers to a general opinion among taxpayers that the tax authorities are caring and work towards the common good. Trust in the tax authorities is increased by simplifying tax laws, resulting in improved taxpayer literacy, by training and educating taxpayers, and by increasing taxpayer services (Kirchler *et al.*, 2008:217). The "slippery slope" framework approach assumes that if the authorities are perceived as service-oriented, this will yield a higher degree of voluntary tax compliance, since such tax authorities are perceived to be more trustworthy than ones that are perceived to talk down to taxpayers and to regulate by coercion (Gangl *et al.*, 2013:492-493).

Voluntary tax compliance means that taxpayers register when they ought to, make honest and complete declarations and pay taxes and duties when they are due (SARS, 2019a:3,21). As is illustrated in Figure 1.2, stable areas of high voluntary tax compliance are found at the extremes of maximum power and maximum trust in the tax authorities, but according to Kirchler *et al.* (2008:214), these extremes are highly unlikely, and there is normally a trade-off between the power and trust dimensions.

Figure 1.2:   The "slippery slope" framework approach
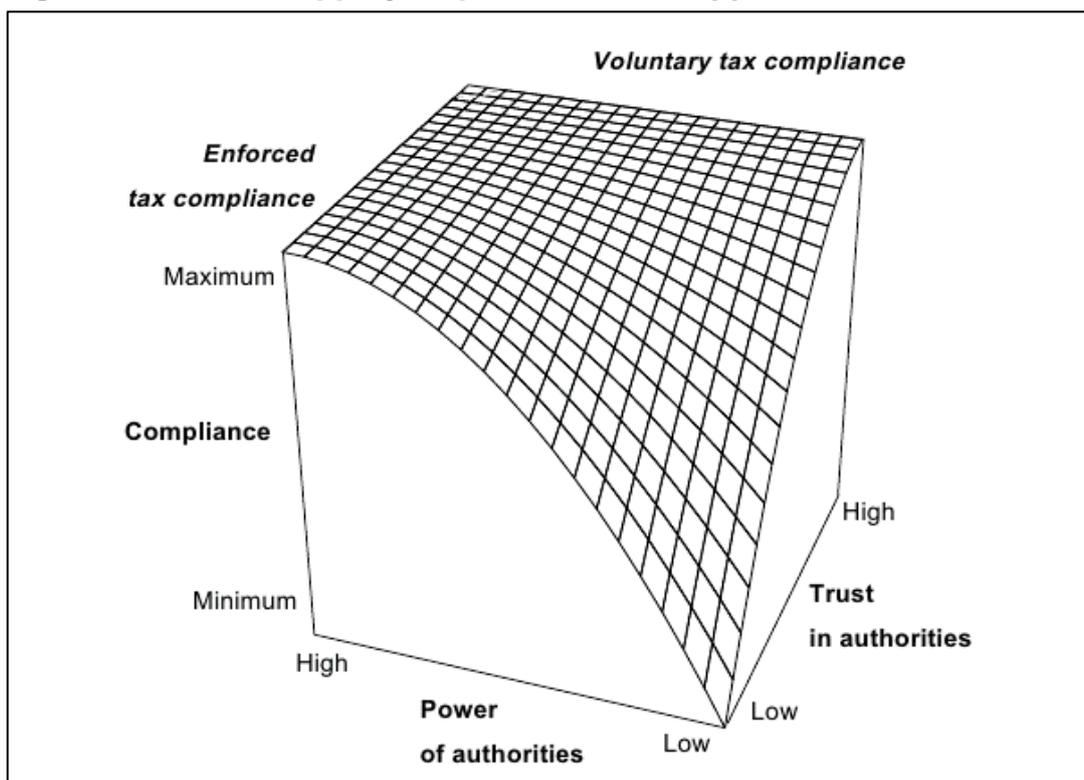
Source: Kirchler *et al.* (2008:212)

The *multi-faceted approach* incorporates three paradigms to improve tax compliance, namely the traditional "enforcement" paradigm, but also the less traditional "trust" and "service" paradigms (Alm & Torgler, 2011:635). The assumption underlying the "enforcement" paradigm is that the taxpayer is a potential criminal who must be prevented from cheating. The "trust" paradigm is built around the role played by morality and social norms in a taxpayer's compliance decisions, while the philosophy behind the "service" paradigm is that every taxpayer is a potential client whose actions depend on his/her moral values (Alm & Torgler, 2011:646). The "service" paradigm emphasises the importance of tax authorities' providing step-by-step assistance to taxpayers to fulfil their tax compliance obligations (Alm & Torgler, 2011:646). Alm and Torgler (2011:649) report that the Inland Revenue Authority of Singapore (IRAS), for example, achieved great success in becoming more service-oriented, improving from the lowest rated government agency in terms of public satisfaction to one that 90% of the taxpayers rated as providing courteous, competent, and convenient services (Alm & Torgler, 2011:649). Alm and Torgler (2011:648) thus conclude that a multi-faceted administrative approach is needed: to explain why people pay taxes, aside from enforcement (a coercive approach), the other two paradigms of service and trust (a persuasive approach) must also be emphasised.

Therefore, tax administrations the world over are gradually moving away from merely being tax collection agencies for governments and are becoming service providers for taxpayers, and hence are positioning themselves as a bridge between the state and the citizens, according to the OECD and the International and Ibero-American Foundation for Administration and Public Policies (FIIAPP) (OECD/FIIAPP, 2015a:3). This shift has progressed to the point that the Davis Tax Committee (DTC) notes that various Taxpayer Bills of Rights (TBOR) in fact go so far as to identify some services provided by tax administrations as a *right*, for example, the right to complete, accurate, clear and timely information (DTC, 2017:69). This implies taxpayers have the right to clear explanations of the applicable tax laws, the right to be informed of the tax authority's decisions about their tax accounts, and the right to receive clear explanations of the outcomes, for example, why an objection or appeal has been rejected (DTC, 2017:69). These services must be delivered promptly, courteously, professionally and in a way that can be easily understood, as the United States (US) Internal Revenue Service (IRS) acknowledges (IRS, 2019a). Furthermore, taxpayers' rights are now categorised as "human rights", which implies that a taxpayer should not only be perceived as a person, each with his or her individual dignity,

"as the centre of the assignment of rights and obligations, from a perspective of cooperation, not juxtaposition" (DTC, 2017:63), but should actually be treated as such.

The responsive regulation approach, the "slippery slope" framework approach and the multi-faceted approach all posit a correlation between improved service delivery by tax authorities and better tax compliance (specifically voluntary compliance). Gangl *et al.* (2013:503-504) have tested this proposition and have demonstrated that authorities' perceived service orientation is indeed positively related to judgments of their trustworthiness, which in turn are vital for taxpayers' compliance intentions. Their findings indicate that a service orientation facilitates tax compliance, builds trust and strengthens compliance, which is in line with the strategic outcomes and objectives of tax authorities in various countries, including SARS (SARS, 2016:37, 2020a:5).

SARS is an organ of the South African government, established in terms of the *South African Revenue Service Act*, 34 of 1997 (RSA, 1997).[1] It is responsible for administering the country's tax system. This entails ensuring optimal compliance with all the laws that SARS administers, ensuring a sustainable revenue stream for government, as well as the controlled and safe flow of goods across South Africa's borders (SARS, 2016:30). Section 4(2) of the *SARS Act* states that SARS must perform its functions in the most "cost-efficient and effective" manner, and in accordance with the values and principles of section 195 of the *Constitution of the Republic of South Africa,* 108 of 1996[2] (RSA, 1996). According to section 195(1) of the *Constitution*, these principles include maintaining a high standard of professional ethics, promoting efficient, economic and effective use of resources, providing services impartially, fairly, equitably and without bias, responding to people's needs, and encouraging the public to participate in policy-making (RSA, 1996). SARS has acknowledged that in fulfilling its mandate it is important that it does "not impose a high administrative and **compliance burden on the** fiscus and **taxpayers** respectively" (SARS, 2016:30; emphasis added) and has stated that it is determined to provide "fair, convenient and diligent services to aid taxpayer compliance" (SARS, 2016:30). One way to assess whether the tax compliance burden on individual taxpayers is high is to determine the magnitude of the tax compliance costs of these taxpayers resulting from their complying with tax obligations, even though it has been recognised that the tax compliance burden may include non-measurable components, and may thus be wider (Sandford, 1976:206-208).

---

[1] Hereafter referred to as the *SARS Act.*
[2] Hereafter referred to as the *Constitution.*

In accordance with the government's performance monitoring approach, SARS has to report annually on its progress towards meeting its core strategic outcomes (SARS, 2018a:8, 2019a:30-38). The outcomes listed in SARS's *Strategic Plan 2016/17 to 2020/21*, and which are applicable to the period reviewed in this study,[3] are

- increased customs and excise compliance;[4]
- increased tax compliance;
- increased ease and fairness of doing business with SARS;
- increased cost effectiveness and internal efficiencies; and
- increased public trust and credibility (SARS, 2016:30).

The first two outcomes align with "strengthening compliance", the third with "facilitating compliance" and the last with "building trust", as discussed in the findings of Gangl *et al.*'s (2013) study, which assessed the approaches advocated by the theoretical frameworks and the service orientations of authorities. In this regard it is relevant that in officially opening the tax filing season for the 2018 year of assessment, on 2 July 2018, the Minister of Finance stated that it "is not primarily about how much revenue SARS will be able to collect. It is about compliance. It is about all taxpayers complying with their obligations to submit the returns they are required to submit" (SARS, 2018b:2). He went on to congratulate SARS on the release of its Service Charter, outlining the rights and obligations of taxpayers and the service standards they can expect from SARS (SARS, 2018b:2).

The fourth core strategic outcome of SARS – "increased cost effectiveness and internal efficiencies" – aligns *indirectly* with facilitation of compliance, since its focus is on building a high-performance culture and operations within SARS (SARS, 2016:47). Examples of goals relating to this outcome are improving data analytics and information technology (IT), as well as identifying, recruiting and retaining engaged and highly skilled people (SARS, 2016:47). Sandford (1994:306) warns that "heavy compliance costs [from a taxpayer's perspective] reduce voluntary compliance and thus have a detrimental effect on tax revenue and hence cost/revenue ratios [for revenue authorities]". It is thus laudable that in administering the South African tax system, SARS has managed to keep its internal operating costs, as a ratio

---

[3] However, in *Strategic Plan 2020/21 to 2024/25*, SARS has changed its terminology to refer to strategic objectives (not outcomes), and has increased the number from five to nine objectives (SARS, 2020a:5). These nine objectives are discussed further in Section 9.4.3 of the current study.

[4] Customs and excise compliance are not considered or discussed further, since they relate to the movement of goods across the country's borders, and do not relate to registered taxpayers in South Africa in general, who are the focus of the study.

to tax revenue, below the international benchmark of 1% (African Tax Administration Forum, 2017:92), while increasing the amount of revenue it has collected over the last five years, as shown in Table 1.1. (The lowest values are indicated in green and the highest values in orange.)

Table 1.1:   Cost of revenue collections, 2014/15 – 2018/19

	Tax revenue collected (R million)	SARS's internal operating costs (R million)	Ratio of SARS's cost to tax revenue collection (%)
2014/15	966,295	9,523	0.97%
2015/16	1,069,983	10,245	0.96%
2016/17	1,144,081	10,696	0.93%
2017/18	1,216,464	10,795	0.89%
2018/19	1 287 690	10 764	0.84%

Source: National Treasury and SARS (2019:15)

The OECD reported in 2015 that SARS had raised revenues more efficiently and effectively through an extensive modernisation programme of its services, indicating that the administration of the South African tax system was comparable to that in many OECD countries (OECD, 2015:41-42). However, since then, SARS has experienced a significant decline in employee engagement[5] and tax morality, as well as significant loss of public confidence, which the Commissioner of SARS, Edward Kieswetter, is determined to regain by implementing vision 2024 (SARS, 2019a:5-6). As pointed out earlier, authorities' perceived service orientation is positively related to judgments of their trustworthiness – from the latest SARS compliance model (see Figure 1.3), it is clear that SARS recognises the importance of allocating resources to education, other services and assistance to taxpayers to regain taxpayers' trust and enhance voluntary compliance. 'Compliance theory' in Figure 1.3 refers to the working hypothesis that informs SARS's engagement with the majority of taxpayers in a specific segment: individuals; small, medium and micro enterprises (SMMEs); and large businesses (SARS, 2019a:3,21).

---

[5] According to SARS (2019a:76), employee engagement refers to the extent to which employees feel valued and involved in their everyday work, which helps to improve their level of commitment and affiliation to the SARS employer brand.

Figure 1.3: SARS's compliance model, which informs its activities
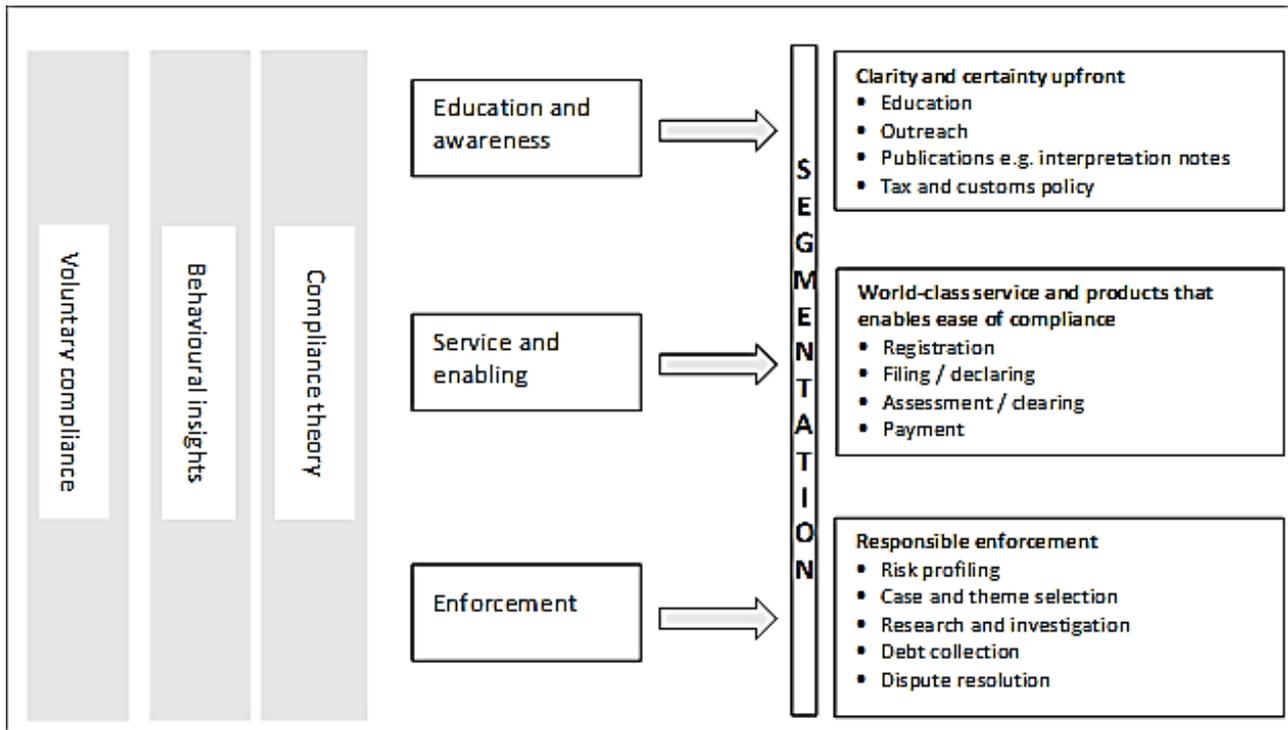
Source: SARS (2019a:21)

Positive engagement by SARS, especially in the individual taxpayers' segment, is crucial, given that Personal Income Tax (PIT) is South Africa's largest source of tax revenue – it comprised 38.3% of the total tax revenue of R1 287.7 billion in 2018/19, followed by Value-Added Tax (VAT) at 25.2% and Corporate Income Tax (CIT) at 16.6% (National Treasury & SARS, 2019:20). PIT contributions are expected to increase to 38.8%[6] of the total tax revenue in 2019/20 and then to remain between 38.4%[7] and 38.6%[8] for the three years thereafter (National Treasury, 2020:36). Furthermore, the contribution of PIT to total tax revenue has more than doubled in monetary terms over a period of five years in relation to CIT. It increased from R132 billion[9] more than CIT in 2013/14, to R280 billion[10] more than CIT in 2018/19 (National Treasury, 2020:187-188). This should be read in the context of the fact that only 24%[11] of the South African population are registered taxpayers, of which 49%[12] have a taxable income below the income tax return submission threshold and do not pay PIT (National Treasury, 2020:41; Statistics South Africa, 2019:8). The entire

---

[6] R527 584m/R1 358 935m.
[7] R546 771m/R1 425 418m.
[8] R621 602m/R1 609 657m.
[9] R309b less R177b.
[10] R492b less R212b.
[11] 13 968 760/58 775 022 = 23.77%.
[12] 6 822 326/13 968 760 = 48.84%.

PIT contribution is therefore borne by 12%[13] of the population, with less than 1%[14] of the population contributing more than half[15] of the total revenue from PIT (National Treasury, 2020:41). It is thus not only important to ensure that individual taxpayers perceive SARS as being service-oriented and trustworthy to promote voluntary compliance and safeguard the inflow of these contributions, but also to ensure that SARS does not impose a high "compliance burden" on these individuals (SARS, 2016:30).

1.2. RATIONALE FOR THE STUDY

Various factors have been identified in the literature as driving tax compliance behaviour. These factors include taxpayer demographics, taxpayers' personal attitudes and experiences, and aspects of the tax system itself, such as complexity, legal ambiguity and costs of compliance (Erard & Ho, 2003:100; McKerchar & Evans, 2009:173). Tax compliance obligations arguably increase with complexity (Eichfelder & Vaillancourt, 2014:111) and the burden on taxpayers results in real economic costs (York, 2018:2).

From an efficiency perspective, if economic resources are wasted on costly compliance activities, that does not add to government revenue (Eichfelder & Vaillancourt, 2014:112). In fact, such waste may even directly harm the government by preventing it from obtaining much-needed investments. This argument informs President Ramaphosa's (2019:6) call in the 2019 State of the Nation Address (SONA) to improve South Africa's "ease of doing business ranking"[16] from 82 out of 190 countries to among the top 50 global performers over three years. He confirmed that improving the ease of doing business in South Africa, which includes paying taxes, is "essential to attracting investment" (Ramaphosa, 2019:6). Hence, a team has been established, consisting of delegates from the Presidency, InvestSA, the National Treasury and the Department of Planning, Monitoring and Evaluation, to address the policy, legal, regulatory and administrative barriers that frustrate investors. Their task is especially urgent considering that South Africa's ranking unfortunately dropped from 82 to 84 out of 190 in 2020. This team was required to report progress to Cabinet on a monthly basis (Ramaphosa, 2019:6).

---

[13] 7 146 434/58 775 022 = 12.16%.
[14] (266 169 + 182 883 + 125 029)/58 775 022 = 0.98%.
[15] (R64.5b + R70.1b + R149.6b)/R546.8b = 51.98%.
[16] These rankings are annually published in the World Bank's Doing Business Report, but are also available from https://www.doingbusiness.org/en/rankings.

A study by Klun and Blažić (2005:419) confirms that tax compliance costs affect the economic behaviour of both individuals and businesses. A large compliance burden may induce taxpayers to "cheat in [an] attempt to recoup their costs associated with preparing and filing their return" (Erard & Ho, 2003:100). Given the potential negative impact of high tax compliance costs on an economy, it is thus essential that these costs are known. This may be one of the reasons for the number of studies that have already been conducted in this field.

Evans (2003:80-92) provides a detailed summary of 61 studies conducted between 1980 and 2003 into the operating costs of taxation (the compliance costs for taxpayers and the administrative costs for revenue authorities). The review reveals both the breadth and the depth of the research in this area. It highlights the geographical spread of such research, as well as the different taxes and aspects of tax systems that have been studied. Of these studies, 15 considered the compliance costs relating to PIT, Capital Gains Tax (CGT) and/or federal taxes of individuals. All except one of the 15 studies were conducted in developed countries, namely the United States of America (USA), Canada, the United Kingdom (UK), European countries and Australia. The only study considering the compliance costs of individual taxpayers in a developing country was that by Chattopadhyay and Das-Gupta (2002), which focused on India. Compliance costs for those taxpayers in India were "extraordinary high" (between 49% and 56%) when expressed as a percentage of revenue yield and compared to that reported in other studies (generally less than 10%) (Evans, 2003:92).

Furthermore, some of these 15 studies (Chattopadhyay & Das-Gupta, 2002; Pope & Fayle, 1990; Sandford, Godwin & Hardwick, 1989) concluded that the tax compliance costs were regressive; this means that the ratio of these costs over the individual's income decreases as the individual's income increases. In other words, tax compliance costs are regressive where lower income taxpayers bear a higher proportionate burden of the tax compliance costs than the higher income taxpayers. Lastly, the summary by Evans (2003) noted evidence that the main determinants of tax compliance costs relating to PIT are taxpayers' level of income, the types of returns submitted, and the complexity of the legislative provisions (Chattopadhyay & Das-Gupta, 2002; Pope & Fayle, 1990; Vaillancourt, 1989).

Research on the compliance costs of individual taxpayers is somewhat neglected, compared to research on tax compliance costs of businesses (European Commission,

2013:8; Tran-Nam, Evans & Lignier, 2014:138). In the period of almost two decades following the summary by Evans in 2003, the following studies have been conducted into the tax compliance costs for individual taxpayers:

- *Developed countries* – Australia, Canada, Croatia, Germany, New Zealand, Portugal, Slovenia, the UK and the USA – have been studied by Blaufus, Eichfelder and Hundsdoerfer (2014), Blaufus, Hechtner and Jarzembski (2019), Blažić (2004), Evans and Tran-Nam (2014), Guyton, O'Hare, Stavrianos and Toder (2003), Klun (2004), Lerman and Lee (2004), Lopes, De Basto and Martins (2012), Marcuss, Contos, Guyton, Langetieg, Lerman, Nelson, Schafer and Vigil (2013), Mathieu, Waddams Price and Antwi (2010), Saxton (2005), Singh and Sharma (2008), Tran-Nam *et al.* (2014), Vaillancourt (2010), and Vaillancourt, Roy César and Barros (2013), and

- *Developing countries* – Ethiopia, India and Malaysia – have been studied by Mera (2011), Sapiei and Abdullah (2008), and Singh and Sharma (2008, 2010).

Evans (2003:72) predicted that the literature on tax compliance costs would continue to develop, but more importantly, he expressed the hope that the "fruits" of the research would continue to be "evident in the policy-making process". He warned that tax law design should not take place without clear recognition of the impact of the proposed changes on the operating costs of a tax system (Evans, 2003:72). An example of establishing whether policy changes do in fact have a positive impact on tax compliance costs can be found in Slovenia, where Klun (2004, 2009) first conducted research to establish a baseline for tax compliance costs for individual taxpayers, and then did follow-up research to establish the effect of pre-filled income tax returns on the tax compliance costs of these taxpayers. Klun (2009) estimated a reduction of compliance costs of 73% as a result of the implementation of pre-filled tax returns.

1.3. PROBLEM STATEMENT

Internationally, many in-depth studies have been performed on the tax compliance costs of individual taxpayers. However, when various keyword searches[17] were conducted at the commencement of this study in 2017, it was found that comprehensive tax compliance cost studies in South Africa were confined to SMMEs, for example, the studies by Smulders and Naidoo (2013), Smulders, Stiglingh, Franzsen and Fletcher (2012), and Smulders and Stiglingh (2008). No published studies considered the tax compliance costs for individual

---

[17] For example "South Africa", "tax", "compliance cost" and "compliance burden" using Google Scholar and all the available databases of the University of Pretoria and the University of South Africa (UNISA).

taxpayers in South Africa. One unpublished mini-dissertation was found, which reported on an exploratory study on individuals at the management levels in a large gold mining company in South Africa (Steyn, 2011:54). The study revealed that tax compliance costs for these individuals were regressive, but appeared to be reasonably low, compared to results from a Croatian study by Blažić (2004) and a Slovenian study by Klun (2004). However, the sample used in Steyn's (2011:20) research was not representative of the population of individual taxpayers in South Africa, so the results could not be generalised, and further research was needed to build on his exploratory findings.

Given the potential negative impact of high tax compliance costs on the economy, ranging from non-compliance to preventing the government from being able to obtain much-needed investments, it is essential to quantify these costs. Furthermore, individual taxpayers contribute the largest part of the South African government's total tax revenue and research into these taxpayers' tax compliance costs may provide insights that will help to ensure or promote their voluntary compliance, in light of the theoretical approaches discussed earlier relating to the importance of the services provided by revenue authorities. Therefore, calculating the tax compliance costs of individual taxpayers in South Africa and ascertaining the determinants of these costs will fill a gap in the literature and provide practical value, and it will provide a much-needed baseline for comparative research, similar, for example, to Klun's (2004, 2009) comparative research to measure the efforts by the government in Slovenia to simplify tax compliance. Furthermore, an assessment of these costs may expose specific characteristics in groups of individuals with higher-than-average tax compliance costs in order to inform government interventions. The characteristics that are explored include taxpayer demographics and their perspectives regarding the service orientation of SARS.

The research problem is therefore that the tax compliance costs of individual taxpayers in South Africa are unknown, and that it is essential to determine, amongst other things, whether there is a risk of non-compliance which could have a negative effect on tax revenue collection in South Africa.

1.4.   RESEARCH AIM AND OBJECTIVES

The aim of this study is to assess the tax compliance costs of individual taxpayers in South Africa. In order to achieve this aim, the thesis endeavours to address three objectives. These objectives are the following:

- to calculate the tax compliance costs of individual taxpayers in South Africa in relation to the submission of their income tax returns and the activities subsequent to that submission (post-filing activities);

- to ascertain the determinants of the tax compliance costs for individual taxpayers in South Africa; and

- to suggest ways to reduce tax compliance costs for individual taxpayers in South Africa.

1.5. DELINEATIONS

This study does not take into account tax deductibility benefits, in other words, the "tax deductibility of costs of managing tax affairs (tax agent fees and incidental costs" (Tran-Nam *et al.*, 2014:142). The reason for this limitation of the scope is that only 4% of assessed individual taxpayers in South Africa have business income and would be allowed to claim a tax deduction for their tax compliance costs (National Treasury & SARS, 2019:58). For the same reason, even though this study calculates tax compliance costs in relation to the income tax payable by all individual taxpayers, which include self-employed taxpayers, other taxes that self-employed taxpayers may be liable for, such as VAT, are not considered.

The pay-now-argue-later rule, as contained in section 164 of the *Tax Administration Act* (RSA, 2011),[18] requires taxpayers to pay a disputed amount of tax before the resolution of the dispute, unless a suspension of payment has been secured. The motivation for such a suspension may be drafted by a tax practitioner or by the taxpayer – either way, the taxpayer incurs costs through time spent or out-of-pocket costs. The study did not consider separately the compliance costs associated with requests to suspend payment, because doing so would have added to the length of the questionnaire. However, respondents could include these costs in the compliance costs relating to the dispute resolution process, since a request for suspension of payment is submitted at the same time as an objection or appeal.

Furthermore, since the aim of the study is to assess the tax compliance costs of individual taxpayers, the study does not consider the tax compliance costs of employers who have to withhold employees' tax from individual taxpayers and pay it over to SARS. Nor are the tax compliance costs of other institutions considered, such as banks, retirement funds and medical aid schemes, who also have to issue the required tax certificates. Lastly, no attempt

---

[18] Hereafter referred to as the *TAA*.

is made in this study to quantify psychological costs (the measurement problems relating to psychological costs are discussed in more detail in Chapter 3), even though it is acknowledged (Sandford, 1976:206-208) that these costs form part of tax compliance costs.

1.6. RESEARCH METHODOLOGY

The philosophical stance of the researcher (positivism) arises from the researcher's preference to collect data about an observable reality, namely the time and costs incurred by individual taxpayers in complying with income tax regulations in South Africa. A quantitative research design was chosen, and a survey strategy was applied, using online questionnaires. The questionnaire was divided into various parts to collect the information needed to calculate the tax compliance costs of respondents up to and after submission of the income tax return (the time spent and costs incurred). It also gathered information needed to ascertain the determinants of these costs (for example, demographic information and perceptions of respondents regarding the service orientation of SARS). The design of the questionnaire is discussed in detail in Section 4.5 of the study. Qualtrics survey software was used to administer the online questionnaire, due to the capabilities of the software for handling a complex questionnaire.

The online questionnaire was distributed in two phases, which resulted in data for two consecutive years of assessment, namely the 2017 year of assessment (Phase 1) and the 2018 year of assessment (Phase 2), collected from individual taxpayers in South Africa who submitted an income tax return for the relevant year of assessment. For the 2017 year of assessment, 6 399 319 individual taxpayers were expected to submit income tax returns; 6 562 568 individual taxpayers were expected to submit income tax returns for the 2018 year of assessment. A "snowball" sampling technique (discussed in more detail in Section 4.4.1) was used during Phase 1, and 752 usable responses were obtained. Since it is not known how many persons received the questionnaire during this phase, it is not possible to determine the response rate.

As a result of a collaboration agreement signed with SARS after Phase 1, a stratified random sampling technique could be employed during Phase 2, which resulted in 10 260 usable responses that were available for analysis. The response rate for Phase 2, based on these usable responses, was 7.07%[19], calculated based on the 145 037 taxpayers who opened

---

[19] Considering that valid responses may also include partial responses (Andrews, Nonnecke & Preece, 2003:191), 15.13% of the persons who opened the SARS email answered *some* of the questions. If one only

the email sent by SARS. This is in line with the 6.7% response rate achieved by Smulders *et al.* (2012:188), when SARS distributed their compliance cost survey to 88 057 small business taxpayers. Tran-Nam *et al.* (2014:147) acknowledged that their 13.4% response rate for their tax compliance cost survey, sent to individual taxpayers in Australia, "far exceeds those obtained in similar [tax compliance cost] surveys". Blaufus *et al.* (2019:932) considered the 0.54%[20] response rate that they achieved in their tax compliance cost survey, sent to 5.55 million individual taxpayers in Germany, to be within the "usual range" for surveys by their Ministry of Finance. The 7.07% response rate of this study is therefore acceptable, as it falls between these two extremes (13.4% and 0.54%) and the wave analysis conducted on the responses did not indicate any non-response bias.

The reliability and validity of research results depend on a robust research design, appropriate sampling methods and careful and consistent data collection and analysis procedures (Middleton, 2019). Given that a stratified random sampling technique could only be employed during Phase 2, resulting in almost 14 times more usable responses than those obtained during Phase 1, the main focus of this study is on the 2018 year of assessment. The snowball sampling method used in Phase 1 provided data regarding the tax compliance costs of individuals in respect of the 2017 year of assessment, even though these results were slightly skewed (see Section 6.2). Nevertheless, using weighting factors based on income level and employment status, the tax compliance costs of individual taxpayers for the 2017 year of assessment could be calculated and compared to the tax compliance costs for the 2018 year of assessment. This comparison was deemed important because the tax compliance costs for the 2018 year of assessment are used as baseline information. Moreover, with regard to ascertaining the determinants of the tax compliance costs of individual taxpayers in South Africa, and suggesting how tax compliance costs can be reduced, it is submitted that the latest information (that for the 2018 year of assessment) is the most valuable, since it takes into account the various reforms introduced by SARS since 2017. Hence, it was not deemed necessary to repeat all the statistical tests and analyses in respect of the 2017 year of assessment.

---

considers questionnaires that are 50% completed, then the response rate is 9.94%. However, because important sensitive information regarding income levels was only asked for later in the questionnaire, many partially completed responses were not "usable" to achieve the objectives of this study. Rigorous cleaning criteria further reduced the usable responses.

[20] This response rate drops to 0.33% if only the usable responses are taken into account.

Data management was carefully considered and included comprehensive data cleaning procedures (discussed in more detail in Section 4.10). All statistical tests which were performed as part of the data analysis process were conducted under the supervision of a statistician. Assistance with the coding of open-ended responses was obtained from a suitably qualified coder. Lastly, ethical approval for this study was obtained from UNISA and core ethical principles were adhered to (see Section 4.11).

1.7.   DEFINITION OF KEY TERMS AND CONCEPTS

Burden: A burden is defined as a duty or responsibility that causes worry, difficulty or hard work (*Oxford Learner's Dictionaries*, n.d.).

Excess burden (of a tax system): The excess burden is the burden caused by a tax system over and above the tax itself. This excess burden includes efficiency costs,[21] the taxpayer compliance burden, as well as psychological costs (Guyton *et al.*, 2003:675). These last two components of the "excess burden" are also referred to as "tax compliance costs", even though the psychological costs are not normally included in the calculation of tax compliance costs, due to measurement problems (Sandford, 1976:206-208).

Psychological costs (also referred to a psychic costs): The "dissatisfaction, frustration, and anxiety" of taxpayers caused by their interactions with a tax system are known as the psychological costs of tax compliance (Guyton *et al.*, 2003:675). According to Mathieu *et al.* (2010:357), the difficulty of taxpayers in dealing with their tax affairs can be seen as a proxy or "surrogate" for the psychological costs of tax compliance. These psychological costs form part of the "excess burden" of a tax system.

Tax compliance: Tax compliance is the "willingness of taxpayers to act in accordance with the statutory requirements or intentions of the tax law and administration". Some taxpayers go to extreme lengths to reduce their tax liability, but they may still be compliant with the technicalities of the law; however, they are not compliant with the spirit of the law (James, 2012:58).

---

[21] Efficiency costs are the costs of "non-optimal" behaviour caused by a tax system, for example, where tax incentives change taxpayers' investment choices, their spending and/or employment decisions (Guyton *et al.*, 2003:675). These behavioural costs fall outside the scope of this study.

Tax compliance costs: "Pure" tax compliance costs are the costs incurred by taxpayers to comply with their tax obligations, without taking the actual tax liability into account (Evans, Ritchie, Tran-Nam & Walpole, 1997:2-3), or alternatively, they are the "costs which would disappear if the tax was abolished" (Sandford *et al.*, 1989:3). A detailed discussion of the components of tax compliance costs is offered in Section 3.2, and they are also compared to the "taxpayer compliance burden" definition.

Tax(payer) compliance burden: According to Guyton *et al.* (2003:675), the "taxpayer compliance burden" is a type of excess burden, which is one of the components of the total burden of a tax system. See Section 3.2 for a comparison between the "tax compliance burden" and "tax compliance costs".[22]

Total burden (of a tax system): The total burden of a tax system has two components, namely, first, the tax burden[23] (the tax liability or tax itself) and, second, the excess burden (the remaining resource costs) (Guyton *et al.*, 2003:675).

1.8.   OUTLINE OF THE STUDY

This **first chapter** provides background on and an introduction to the study, highlighting the importance of service-oriented revenue authorities in the context of three theoretical approaches, namely the responsive regulation approach, the "slippery slope" framework approach and the multi-faceted approach to increase tax compliance. The chapter emphasises the importance of individual taxpayers and the large contribution of PIT to South Africa's tax revenue. The chapter point out that there is a gap in the literature – no comprehensive research has been conducted on the compliance costs for individual payers of South African PIT. The rationale for the study, the problem statement, the aim and objectives of the research, as well as the study's delineations are discussed in this chapter. Finally, the research methodology used is highlighted, key terms and concepts are defined, and an outline of the study is provided.

The **second chapter** sets out the theoretical foundation for this study. It identifies and defines the theories regarding tax compliance behaviour and compliance costs. The

---

[22] Guyton *et al.* (2003:675) use "taxpayer compliance burden", but this term is shortened to "tax compliance burden" for easier comparison to "tax compliance costs". It is submitted that this does not alter the meaning.
[23] The tax burden falls outside the scope of this thesis.

connection between tax compliance and tax compliance costs is examined, whereafter the chapter concludes with a theoretical framework for the study.

The **third chapter** contains a literature review of studies that calculated the tax compliance costs of individual taxpayers, focusing on the use of different terminologies, measurement methodologies and the findings of those studies. The review confirms the gap in the literature with regard to research on tax compliance costs in South Africa, and reiterates the need for the current research.

The **fourth chapter** provides a justification for the research philosophy, paradigm, and design followed to meet the objectives of the study. The sampling and data collection methods, questionnaire design, pilot testing and responses relevant to the different phases of the research are also described in this chapter. Furthermore, the steps taken to improve the quality of the data are discussed, data management is considered, the process of analysing the responses is described, and the ethical considerations that are adhered to in conducting the study are provided.

The **fifth chapter** contains the analysis of the empirical data and the calculation of the tax compliance costs of individual taxpayers in South Africa, based on the survey data collected in respect of the 2018 year of assessment.

The **sixth chapter** contains the analysis of the empirical data and calculation of the tax compliance costs of individual taxpayers in South Africa based on the survey data collected in respect of the 2017 year of assessment. The chapter concludes by comparing these tax compliance costs to the tax compliance costs of individual taxpayers in respect of the 2018 year of assessment (as calculated in Chapter 5).

The **seventh chapter** commences with an in-depth analysis of the empirical evidence from the rating questions (scale items) collected for the 2018 year of assessment, as possible determinants of tax compliance costs. In the second part of the chapter, a Chi-square Automatic Interaction Detection (CHAID) decision tree modelling technique is employed to ascertain the determinants of the tax compliance costs of the respondents, using not only the empirical findings from the first part of the chapter, but also the demographic and other information for the respondents.

The **eighth chapter** contains the analysis of the empirical data relating to suggestions of possible ways to reduce tax compliance costs for individual taxpayers in South Africa. These suggestions are evaluated in the context of the theoretical framework presented in the second chapter, the determinants of tax compliance costs identified in the seventh chapter, and the changes already implemented by SARS subsequent to the collection of the data. The purpose of the discussion is to suggest possible further steps that could be taken in future.

The **final chapter** provides an overview of the thesis and a summary of the key findings in relation to each of the objectives. Furthermore, the theoretical, methodological and practical contributions of this study are discussed. The chapter concludes by indicating the limitations of the study and making recommendations regarding future research, and presents the concluding remarks.

CHAPTER 2:
THEORETICAL FRAMEWORK

2.1. INTRODUCTION

The purpose of this chapter is to provide a theoretical framework for the study. This is done by first identifying theories explaining tax compliance behaviour (in other words, why taxpayers may or may not comply with tax requirements) and theories underpinning tax compliance costs (Section 2.2). The interrelationship between tax compliance and tax compliance costs is then examined (Section 2.3), followed by a presentation of the theoretical framework for this study (Section 2.4).

2.2. THEORIES UNDERPINNING TAX COMPLIANCE BEHAVIOUR AND COST

Most modern tax philosophy or tax theory is largely based on the seminal theory of economist Adam Smith, set out in his now classic work, *The wealth of nations: An inquiry into the nature and causes of the wealth of nations* (1776), even though other influential economic and political theories were developed by some of his predecessors (Frecknall-Hughes, 2014:35). Studies into the tax compliance costs of taxpayers usually start with a discussion of Adam Smith's four fundamental maxims (also known as canons) of taxation theory, namely *equity* (also known as equality), *certainty*, *convenience* of payment and *economy* in collection (also known as efficiency). For example, in the studies by Chattopadhyay and Das-Gupta (2002:1-2), Evans (2003:64), Hudson and Godwin (2000:30), Ibrahim (2017:172), Mathieu *et al.* (2010:351), Pope (1989:126, 2000:8), Saxton (2005:1), Slemrod and Sorum (1984:1), Tran-Nam and Evans (2002:391), Tran-Nam *et al.* (2014:138), Yesegat, Coolidge and Corthay (2017:813). However, these four maxims are flawed in terms of their practical application, since there will always be a trade-off between some of them (Frecknall-Hughes, 2014:25,50). For example, in striving to obtain optimal taxation,[24] a tax that is economically efficient may not meet the equity requirement of fairness to taxpayers (and *vice versa*) (Brewer, Saez & Shephard, 2010:94). Notwithstanding this trade-off, the importance of the maxims (equity, certainty, convenience

---

[24] "At its heart, optimal tax theory says that the two desirable features of a tax and benefit system are that it be fair, and that it minimizes disincentive effects. But the problem of having two desirable features is that one has to know how much weight to give to each. For example, a poll tax (under which all individuals have to pay the same level of tax) might have no disincentive effects, but is rather unfair to those on low incomes" (Brewer, Saez & Shephard, 2010:94).

and efficiency) is evident from the discussion of theories underpinning tax compliance behaviour and tax compliance costs in the next two subsections.

2.2.1. Theories explaining tax compliance behaviour

Tax compliance can be defined as the "willingness of taxpayers to act in accordance with the statutory requirements *or intentions* of the tax law and administration" (James, 2012:58; emphasis added) – there is a risk that some taxpayers may go to extreme lengths to reduce their tax liability within the technicalities of the law, and are thus not compliant with the spirit of the law.

A considerable amount of research has been conducted to explore the factors that may influence tax compliance behaviour. This is evident from a meta-analysis of survey data from 111 countries considering the effect of age, gender, education and income level on compliance behaviour (Hofmann, Voracek, Bock & Kirchler, 2017). Examples of other factors identified in research as influencing tax compliance behaviour are culture, social norms, religion, type or nature of income, peer influence, ethics, fairness, complexity, revenue authority contact, probability of detection, use of tax professionals and *compliance costs* (Yong *et al.*, 2019:789).

Various theories have attempted to explain why these factors play a role in taxpayer compliance behaviour,[25] but according to Yong *et al.* (2019:768) "no one theory can completely explain the complex relationship between taxpayers and the tax system". The purpose of the discussion below is therefore not to cover all the possible theories underpinning tax compliance behaviour, but rather to provide a foundation for the tax compliance costs discussion (see Section 2.2.2). The theories underpinning tax compliance behaviour can be divided into two categories: the traditional economic and deterrence theories on the one hand, and the psychological and sociological theories on the other (Frecknall-Hughes, 2014:54-55; Thimmesch, 2015:1084; Torgler, 2003:127).

The traditional economic theory relies on the economics-of-crime assumption, which posits that a rational individual will maximise the expected utility (personal gain) of the evasion gamble, balancing the benefits of successful evasion with the risky possibility of detection and punishment (Alm, 1999:6). Similarly, the deterrence theory asserts that individual

---

[25] Until 1997, the main theories in use were prospect theory, deterrence theory, cognitive structures theory, agency theory and contingency theory (Yong *et al.*, 2019:774).

taxpayers are deterred from non-compliance in accordance with their perceptions of probable detection and the severity of penalties (Frecknall-Hughes, 2014:54-55). The deterrence parameters must be such that when a taxpayer performs a cost-benefit calculation, penalties must be high enough for the attractions of non-compliance not to appear to outweigh the possible penalties (Alm, 1999:45; Slemrod, 1992:7). Research has shown that where the probability of detection and punishment is almost guaranteed (for example, where employees' tax must be withheld by an employer and reported directly to the revenue authority), there is a higher level of compliance, and the powerful impact of a withholding tax and information reporting on compliance must therefore not be underestimated (Thimmesch, 2015:1090-1092,1095).

Nevertheless, research has shown that although the perception of audit and detection risk increases compliance by low- and middle-income taxpayers (with the potential to evade tax), the same cannot be proven for high-income taxpayers (Thimmesch, 2015:1093). Therefore, even though attempts to heighten taxpayer perceptions of audit risk can be valuable in improving tax compliance behaviour, when it comes to high-income taxpayers, tax authorities should not rely solely on the threat of audits and potential penalties to increase tax compliance (Thimmesch, 2015:1093). These traditional economic and deterrence theories support the "enforcement" paradigm, which is one of the approaches Alm and Torgler (2011) advocate in their multi-faceted approach, but as pointed out, may need to be used in conjunction with other approaches, in particular when considering the compliance of high-income taxpayers. This is especially important in the South African context, given the fact that high-income taxpayers (persons in the top marginal tax bracket with a taxable income of at least R1 500 000 per annum) contribute, on average, between 26% and 29% of the total PIT revenue (National Treasury, 2017:45, 2018:49, 2019:42, 2020:41).

Alm and Torgler's (2011) remaining two paradigms to explain taxpayer compliance behaviour, namely service and trust, fall into the psychological and sociological theories category. The psychological and sociological theories are based on insights from social and cognitive psychology and behavioural economics. They consider motivations for tax compliance behaviour in situations where there is little chance that non-compliance will be detected and punished as discussed above (Frecknall-Hughes, 2014:55). These non-monetary motivations fall outside the standard expected utility framework and are sometimes referred to in broad terms as relating to the tax morale or ethics (Alm & Torgler, 2011:635; Luttmer & Singhal, 2014:150). The social norms theory and theories explaining

taxpayers' views regarding the legitimacy and fairness of their government (perceptions of equity) are examples of psychological and sociological theories (Thimmesch, 2015:1095). The *social norms theory* is based on the notion that taxpayers tend to be more tax compliant when they believe their peers to be compliant, and violations of social norms have consequences such as guilt, remorse, embarrassment, gossip and ostracism where it is socially unacceptable to evade tax (Polinsky & Shavell, 2000:73; Thimmesch, 2015:1095-1096).

Bobek, Hageman and Kelliher (2013:453) divide social norm perceptions into four categories, namely *descriptive norms* (what other people do in a given situation), *injunctive norms* (what most people think others should do in a given situation), *subjective norms* (what peers think one should do in a given situation) and *personal norms* (what an individual believes he/she should do in a given situation). Bobek *et al.* (2013:451) tested these social norms and showed that personal norms (own values) and subjective norms (expectations of peers) directly influence tax compliance decisions, whereas injunctive (general societal norms) and descriptive norms (actual behaviour of other individuals) have a more indirect influence on tax compliance decisions. The social norms theory emphasises the importance of tax authorities' communicating the actual levels of compliance of taxpayers to promote taxpayers' seeing themselves fitting into this norm, rather than focusing on and reporting on tax evasion or the extent of the tax gap[26] (Thimmesch, 2015:1106). The main conclusions of studies in the USA, the UK, Sweden and Spain based on the social norms theory are summarised by Torgler (2003:83) as follows:

- individuals who comply tend to view tax evasion as immoral;
- individuals whose friends are tax evaders are more likely to be evaders themselves;
- compliance is higher if moral appeals are made to the taxpayer; and
- compliance is greater in societies with a stronger sense of social cohesion.

Theories explaining compliance behaviour based on taxpayers' perceptions of a government's legitimacy and fairness are considered next. The fairness of a tax system is often broken up into distributive justice (consisting of horizontal equity, vertical equity and exchange equity), procedural justice and retributive justice (Thimmesch, 2015:1097). The reasoning behind the equity theory (which is based on the notion of distributive justice) is

---

[26] The tax gap refers to the difference between the tax that is owed (or estimated to be owed) to a tax authority and the actual tax that is paid, and therefore generally represents taxpayers' failure to comply voluntarily with their tax obligations (Thimmesch, 2015:1106).

that taxpayers are more inclined to be tax compliant if the tax they pay and the government services received in exchange for the tax paid are equitable and fair, based both on outcome levels and when compared to others (Tyler & Smith, 1998). Taxpayers' perceptions of exchange equity could change if a government makes its services more noticeable to taxpayers without necessarily changing how, or to whom, those services are rendered (Thimmesch, 2015:1098). An unfair tax system could enhance the taxpayers' perceptions of some justification for cheating as people engage in behaviours such as tax evasion in an attempt to restore equity (Torgler, 2003:116). All tax systems should strive for fairness or equity by treating individuals with similar wealth equally (horizontal equity) and expecting those with a greater ability to pay to bear a greater tax burden (vertical equity) (Hoynes, 2010:175-176). As was pointed out in the introduction to the section, *equity* is also one of the four maxims of taxation theory proposed by Adam Smith's theory:

> The subjects of every state ought to contribute towards the support of the government, as nearly as possible, in proportion to their respective abilities; that is in proportion to the revenue which they respectively enjoy under the protection of the state… In the observation or neglect of this maxim consists what is called the equality or inequality of taxation. (Smith, [1776] 2010:603)

Fairness in the form of procedural and retributive justice is linked to taxpayers' perceptions of the legitimacy of a government's authority. The trustworthiness of a government is judged not only on the basis of the honesty and competence of officials (retributive justice), but also of the fairness of processes used in dealing with taxpayers (procedural justice), for example, acknowledgement of taxpayers' rights during processes, consistency in and quality of decisions and courteous treatment by the revenue authority officials (Thimmesch, 2015:1098-1100). These perceptions are also foundational to the dimensions of power and trust of the slippery slope framework approach, as discussed in Section 1.1.

As has already been pointed out, the power of the tax authorities denotes the taxpayers' perception of the ability of the tax officials to detect illegal tax evasion, while trust in the authorities implies a general opinion that the tax authorities are caring and work beneficially for the common good (Kirchler *et al.*, 2008:217). What should be kept in mind is that the way a person is treated during an audit, for example, the tone and method of communication, will influence the taxpayer's perception more than the actual outcome of the audit (Thimmesch, 2015:1100-1101). Authorities that are perceived as service-oriented would yield a higher degree of voluntary tax compliance, since these authorities are perceived to be more trustworthy than authorities that are perceived to talk down to taxpayers and that

try to regulate by coercion (Gangl *et al.*, 2013:492-493). In an online experiment with Brazilian taxpayers, Da Silva, Guerreiro and Flores (2019) confirmed that the existence of trust-based interactions between taxpayers and the public administration leads to voluntary compliance, while policies based on the imposition of power result in enforced compliance.

Procedural justice also suggests that penalties for unintentional violations or contraventions by taxpayers due to uncertainty regarding the law should not be too severe, in order to protect the fundamental concepts of fairness that affect taxpayers' views of the legitimacy of the government's authority (Thimmesch, 2015:1100-1101). Lastly, the importance of these perceptions is also found in the responsive regulatory approach (discussed in Section 1.1), which is encapsulated by the following description:

> The implementation of responsive regulation in taxation means influencing the community's commitment to pay tax through respectful treatment, through attending to resistance and reforming faulty processes, through fairly directed and fully explained disapproval of non-compliant behavior, through preparedness to administer sanctions, and capacity to follow through to escalate regulatory intervention in the face of continuing non-compliance. (Braithwaite, 2007:3)

Taking into account the traditional economic and deterrence theories, as well as the psychological and sociological theories discussed above, the DTC concluded that increased exchange of information (third party information) will help with SARS's enforcement of compliance because it will make taxpayers aware of the fact that SARS is in possession of such information (DTC, 2017:54). But, as Thimmesch (2015:1093) points out in respect of high-income taxpayers, the tax authorities should not rely solely on the threat of audit and potential penalties to increase tax compliance. The DTC (2017:54) therefore recommends that a better initiative to improve compliance by high-income taxpayers is for SARS "to respect and honour those taxpayers' rights, while Government needs to demonstrate that it can be trusted, both procedurally and retributively".

The DTC (2017:54) also recommends that SARS commit to an action plan to improve fiscal citizenship by building trusting relationships with high-income taxpayers, with the intention of inspiring confidence in the tax authority, resulting in improved tax compliance. Examples given to achieve this outcome are constructive engagement with taxpayers to assist them with understanding their tax obligations, timeous refunds, quality control over actions by SARS officials to ensure fair treatment of all taxpayers, prosecution of fraud without fear or

favour, and zero tolerance of corruption within SARS and all areas of the government (DTC, 2017:54).

2.2.2. Theories underpinning tax compliance costs

The focus in the discussion of theories above was on explanations of tax compliance behaviour, for example, establishing that positive interactions with and the trustworthiness of the revenue authorities can improve taxpayer compliance behaviour. The focus now shifts to the theories underpinning tax compliance costs.

Cedric Sandford, known as the "grandfather" of tax compliance cost studies, argues that three of Adam Smith's four maxims, *certainty, convenience* and *economy*,[27] "were concerned wholly or partly with compliance costs" (Sandford, 1995:2; Tran-Nam & Evans, 2002:405). However, Yesegat *et al.* (2017:82) point out that "the relatively heavier burdens of compliance costs on smaller taxpayers erode the built-in progressivity in the tax system and undermine the equitable distribution of the overall burden of taxation". Adam Smith ([1776] 2010) is cited verbatim below and discussed in the context of tax compliance costs.

He explains the maxim of *certainty* as follows:

> The time of payment, the manner of payment, the quantity to be paid, ought to be clear and plain … otherwise, every person subject to the tax is put in the power of the tax gathered, who can either aggravate the tax upon any obnoxious contributor, or extort, by the terror of such aggravation, some present or perquisite to himself.
>
> The certainty of what each individual ought to pay is, in taxation, a matter of so great importance that a very considerable degree of inequality, it appears, I believe, from the experience of all nations, is not near so great an evil as a very small degree of uncertainty. (Smith, [1776] 2010:603)

Compliance costs could increase if taxpayers have to spend extra resources to work through various issues arising from a lack of certainty in tax legislation or from arbitrariness and the inconvenience of the administrative procedures (Yesegat *et al.*, 2017:81). Certainty (or the lack of it) may also directly influence the last maxim (economy) as shown later.

He comments on the maxim of *convenience* as follows:

> Every tax ought to be levied at the time, or in the manner, in which it is most likely to be convenient for the contributor to pay it. (Smith, [1776] 2010:604)

---

[27] The fourth maxim is *equity.*

In South Africa, employees' tax, also known as pay-as-you-earn (PAYE), complies with the maxim of convenience, since the tax is withheld at the same time that the remuneration is earned. Another example of this principle is provisional tax payments that are due every six months on income that is not subject to employees' tax, for example, business income. Convenience (or the lack of it) from a tax compliance costs perspective could relate to the administrative procedures that taxpayers have to follow in order to comply with their tax obligations.

Regarding the maxim of *economy*, Smith [1776] 2010:604) warns:

> Every tax ought to be so contrived as both to take out and to keep out of the pockets of the people as little as possible over and above what it brings into the public treasury of the state. A tax may either take out or keep out of the pockets of the people a great deal more than it brings into the public treasury… by subjecting the people to the frequent visits and the odious examination of the tax-gatherers, it may expose them to much unnecessary trouble, vexation, and oppression; and though vexation is not, strictly speaking, expense, it is certainly equivalent to the expense at which every man would be willing to redeem himself from it. (Smith, [1776] 2010:604)

The last maxim, economy, is violated if a tax system results in high tax compliance costs (for example, as a result of the complexity or any arbitrariness in the system); this maxim requires operating costs (both the compliance costs of the taxpayers and the administrative costs of the government) to be as low as possible (Yesegat *et al.*, 2017:82). Further examples of the economic effects of high tax compliance costs are "deadweight resource costs,[28] increased non-compliance, distorted production decisions and reduced investment, higher deficits, reduced tax equity, lower economic growth and adverse price movements" (Chattopadhyay & Das-Gupta, 2002:1). Many researchers point out that this last maxim also speaks to the psychological costs of taxation, referring to the stress, anxiety and frustration experienced by taxpayers, especially the old, retired and widowed, in dealing with their tax affairs (Ibrahim, 2017:172; Lopes & Martins, 2013:54; Pope, 1989:126, 2000:8; Tran-Nam & Evans, 2002:403; Yesegat *et al.*, 2017:81-82). If a tax system contains uncertainty and is unpredictable and inconvenient, taxpayers would be exposed to needless psychological costs, thereby increasing their overall compliance costs (Yesegat *et al.*, 2017:81-82).

---

[28] Also known as the excess burden (see definition in Section 1.7).

Smith ([1776] 2010:605) summarises all the maxims as follows:

> All nations have endeavoured, to the best of their judgment, to render their taxes as equal as they could contrive; as certain, as convenient to the contributor, both in the time and in the mode of payment, and, in proportion to the revenue which they brought to the prince, *as little burdensome to the people*. [emphasis added]

In line with this argument, Pope (1989:127) states that the Asprey Report, which was commissioned to review the Australian taxation system in 1975, summarised its aims in the context of Smith's maxims as "efficiency, fairness and simplicity".

The theories underpinning tax compliance and tax compliance costs provided a better understanding of these constructs. The next section considers the interrelationship between the constructs.

2.3. INTERRELATIONSHIP BETWEEN TAX COMPLIANCE AND TAX COMPLIANCE COSTS

As has already been pointed out, one of the main benefits of a service-oriented revenue authority is voluntary tax compliance. The compliance themes identified in a study by Akhand (2012:224) confirm that service to taxpayers directly influences tax compliance (see Figure 2.1). Even though Akhand's (2012) study focused on large corporate taxpayers, it still provides valuable insights for compliance-related research on individual taxpayers. Of specific interest to this study are the themes "taxpayer service quality" and "compliance costs" (see the interconnection lines indicated in red in the adapted Figure 2.1), and the theme "trust and respect" (see the interconnection lines indicated in blue, starting with a cooperative approach), since the slippery slope framework approach is built on the dimensions of power and trust. The left side of the figure deals with coercive power dimensions; the major themes of "tax audit", "penalty" and "imprisonment" are emphasised in black.

Figure 2.1: Patterns of the major themes related to tax compliance
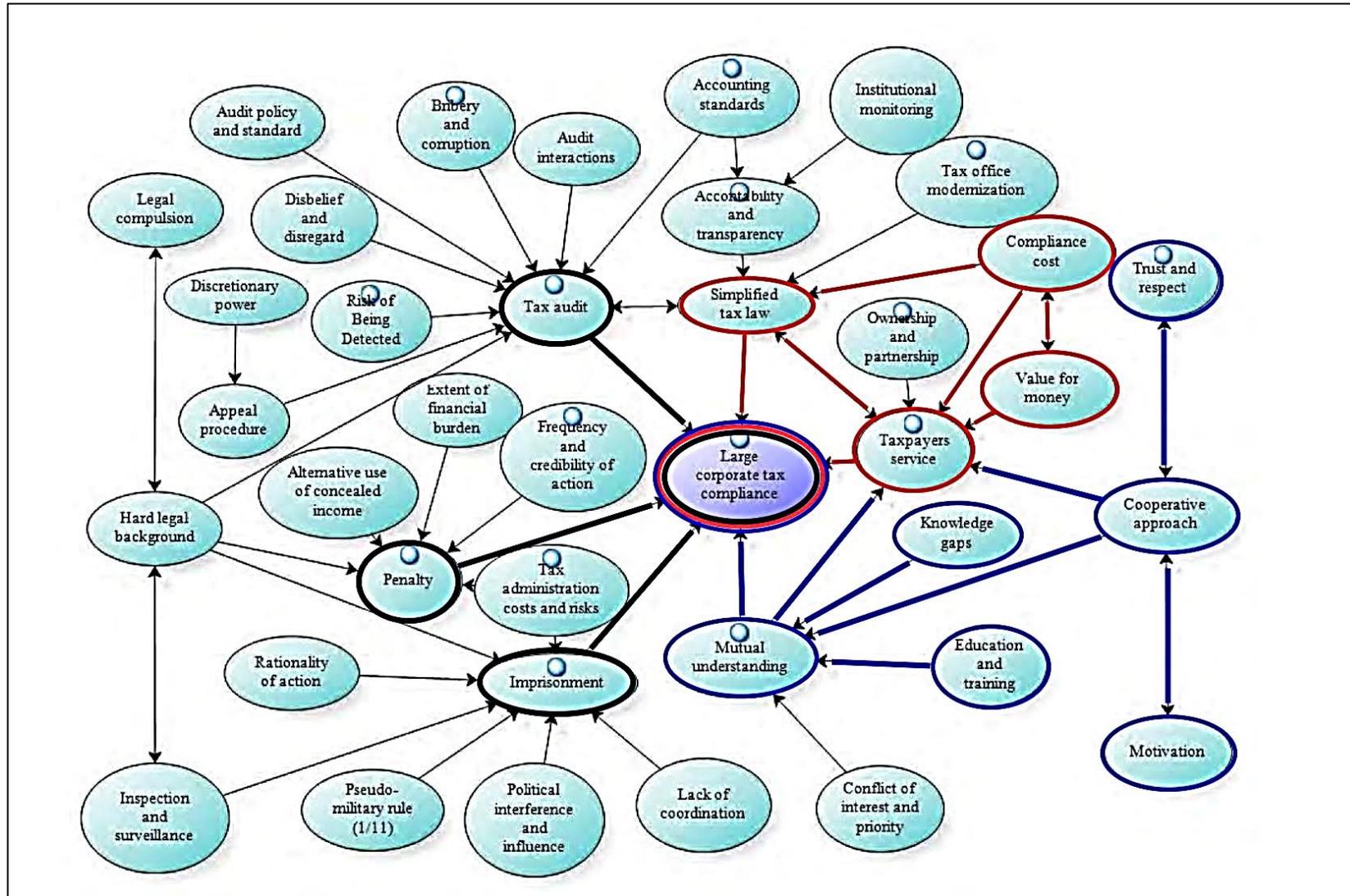
Source: Adapted from Akhand (2012:224; emphasis added in red, blue and black)

From Figure 2.1, it is clear that "compliance cost" is directly linked to "value for money", "simplified tax law" and "taxpayers service", and then indirectly to "tax compliance". According to Akhand (2012:247) some "respondents argued that taxpayer service – good or bad quality – should enable taxpayers to reduce the financial and psychological costs of tax compliance", while other large corporates argued that even high-quality taxpayer service in most cases ends in disagreement, resulting in a loss of time and money (thus there is no value for money). Therefore, in order for the taxpayer service to encourage compliance, the revenue authorities must have the "required efficiency and positive attitude" to provide the service, and the service must also reduce the tax compliance costs for the taxpayer (Akhand, 2012:284).

As is evident from the connection between the blue circles, a "cooperative approach" between the revenue authorities and taxpayers directly influences "trust and respect", "motivation", "mutual understanding" and "taxpayers service", which then ultimately affects compliance. The rationale behind the development of mutual understanding is to increase the level of trust and transparency between parties, reduce the demand for tax policing and ultimately minimise compliance costs (Akhand, 2012:47). The converse of this service-oriented approach to increasing taxpayers' perception of the fairness of a tax system is a costly "cops and robbers" approach, where taxpayers are regarded as thieves that need to be caught (Kirchler, 2007:189). Such a "cops and robbers" approach may compel taxpayers to follow the letter of the law, but it does not encourage them to follow the "spirit of the law". Voluntary compliance, on the other hand, may be achieved by a "service and client" approach (Kirchler, 2007:4,189).

Yong *et al.* (2019) analysed 713 articles on tax compliance factors using Leximancer text mining software to develop a visual representation of the frequency and co-occurrence of concepts and themes. The emerging five themes, namely tax evasion, tax system, tax agents, tax morale and ethics, are displayed in Table 2.1, with the tax compliance concepts contained in each of these five themes. (The concepts that have a direct or indirect connection to tax compliance costs have been emphasised in green for the convenience of the reader.)

Table 2.1:   Themes and concepts in tax compliance literature

Themes	Tax compliance concepts contained in each theme
Tax evasion	Tax evasion
	Tax rate
	Probability of detection
	Trust
	Tax inducement
	Tax fairness
	Power
	Tax perception
	Tax enforcement
	Income level
	Reciprocity
	Peer influence
Tax system	Tax system
	Tax complexity
	Individual taxpayer
	Wealthy taxpayer
	Tax avoidance
	Political
	Business taxpayer
	Income source
	Withholding taxes
	Authorities contact
	Sanction
Tax agents	Tax agents
	Tax compliance cost
	Sole traders
	Education
Tax morale	Tax morale
	Tax amnesty
	Framing
	Perceived opportunity
Ethics	Ethics
	Social norms
	Religion
	Occupation
	Age
	Gender

Source: Adapted from Yong *et al.* (2019:789-790; emphasis added)

The interconnectivity of these themes and concepts (see Table 2.1) and the type of research that was conducted are displayed in Figure 2.2, which helps to explain why the issues indicated in bold in Table 2.1 may be considered to have a direct or indirect connection with tax compliance costs.

Figure 2.2: Type of research and concepts
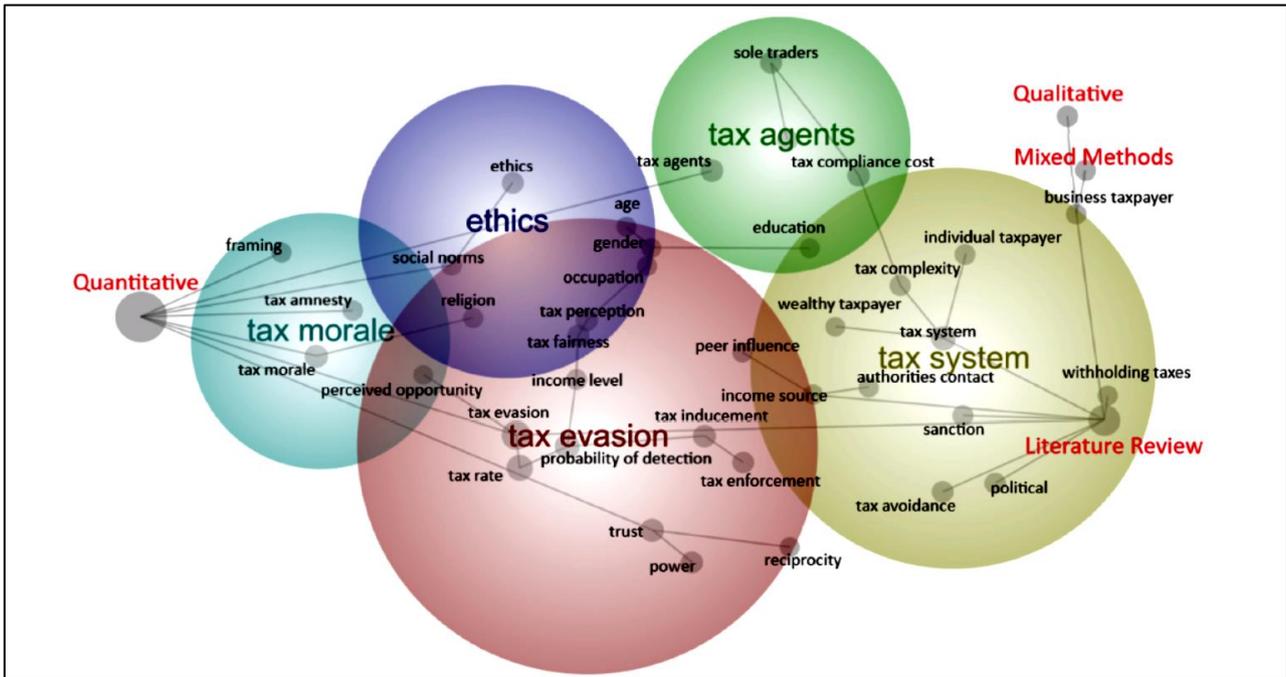
Source: Yong *et al.* (2019:792)

From Yong *et al.*'s (2019) analysis, as depicted in Figure 2.2, it is therefore clear that the concepts in the closest proximity to tax compliance costs (as highlighted in Table 2.1) are tax agents,[29] sole traders, education, the tax system, tax complexity and the individual taxpayer. The relationship between these concepts is considered when the determinants of tax compliance costs are explored in Section 7.3.

Drawing on the theories discussed in Section 2.2 and the consideration of the interrelationship between tax compliance and tax compliance costs in Section 2.3, the next section presents the theoretical framework for this study.

2.4. THEORETICAL FRAMEWORK

As has been pointed out in Section 2.2.1, tax compliance costs are one of the factors that may influence tax compliance behaviour. Some examples of other factors are age, gender, education, income level, type or nature of income, culture, social norms, religion, peer influence, ethics, fairness, complexity, revenue authority contact, probability of detection and the use of tax professionals (Hofmann *et al.*, 2017; Yong *et al.*, 2019). Various theories have attempted to explain why these factors play a role in taxpayer compliance behaviour, but

---

[29] Tax agents are also known as tax advisors or tax practitioners. They assist taxpayers with their tax compliance obligations.

since "no one theory can completely explain the complex relationship between taxpayers and the tax system" (Yong *et al.*, 2019:768), only those theories which are considered foundational to the current compliance cost study are included in this thesis. These theories can be divided into the traditional economic and deterrence theories on the one hand, and the psychological and sociological theories on the other.

Based on the theories that attempt to explain taxpayer compliance behaviour, revenue authorities employ different approaches to ensure (or enhance) tax compliance. This study focuses on the slippery slope framework approach, the responsive regulation approach and the multifaceted approach, because of their connection with tax compliance costs based on the relative importance of the service orientation of the revenue authority (see Section 1.1). For revenue authorities worldwide, implementing the best approach for optimal tax compliance is critical, especially since the risk of non-compliance is generally higher during an economic recession (Akhand, 2012:1) and at present, the full impact of the economic shutdowns imposed due to the COVID-19 pandemic is still unknown.

The maxims of certainty, convenience and economy are widely used to underpin theories of tax compliance costs. In respect of the certainty maxim, it makes sense to argue that compliance costs could increase if taxpayers have to spend extra resources to work through various issues arising, for example, from a lack of certainty in the tax legislation. Convenience (or the lack of it) from a tax compliance costs perspective could relate to the administrative procedures that taxpayers have to follow in order to comply with their tax submission and payment obligations. The last maxim, economy, is violated if a tax system results in high compliance costs as a result, for example, of complexity in the system, or of the stress, anxiety and frustration experienced by taxpayers (in other words, the psychological costs of taxation) in trying to comply with their tax obligations.

Therefore, drawing on both Akhand's (2012) and Yong *et al.*'s (2019) schematic depictions (see Figure 2.1 and Figure 2.2) and incorporating the theories and approaches discussed above, the theoretical framework for the study is presented in Figure 2.3.

Figure 2.3: Theoretical framework
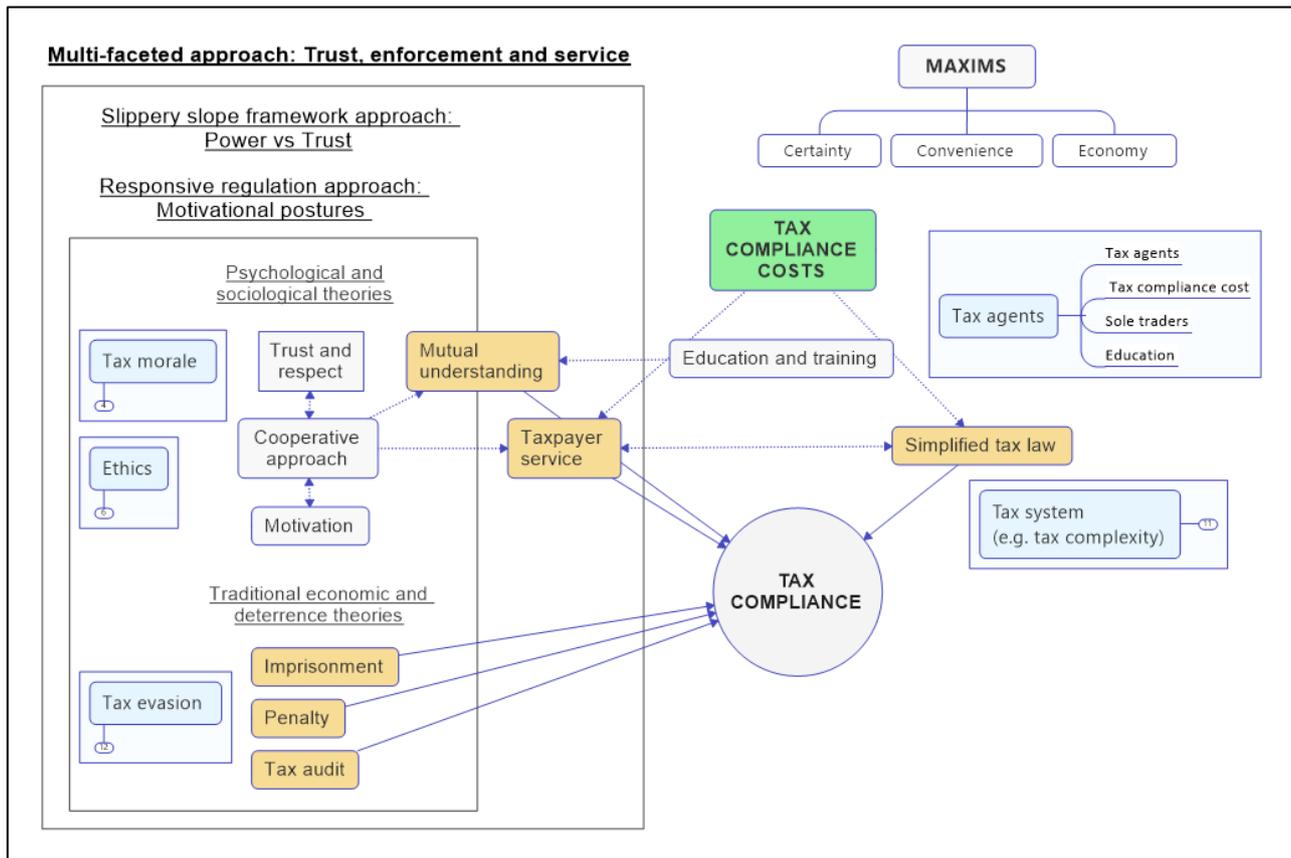
Source: Own diagram combining approaches and theories with findings of Akhand (2012) and Yong *et al*. (2019)

The left side of the theoretical framework presented in Figure 2.3 illustrates that the slippery slope framework approach and the responsive regulation approach employed by revenue authorities to ensure (or improve) tax compliance are founded on psychological and sociological theories, as well as on the traditional economic and deterrence theories. These approaches and theories were highlighted by three of the five themes from Yong *et al*.'s (2019) analyses, namely *tax evasion*, *ethics*, and *tax morale*. The traditional economic and deterrence theories focus on the coercive power of authorities to prevent tax evasion[30] such as imprisonment, penalties and tax audits. By contrast, the psychological and sociological theories (built on ethics and tax morale) focus on the cooperative approach, with its positive dimensions, such as trust and respect, motivation, mutual understanding[31] and taxpayer service to improve tax compliance. Therefore, the "multi-faceted approach"[32] does not discard the importance of the trust and power (enforcement) facets of the slippery slope framework and responsive regulation approaches, but rather emphasises the importance of

---

[30] Resulting in tax compliance.
[31] Education, training and reduction of knowledge gaps increase mutual understanding (Akhand, 2012:224).
[32] Namely trust, enforcement and service.

adding the *service* facet to ensure (or enhance) tax compliance. Furthermore, Akhand (2012) found a relationship between "tax compliance costs" and the service that taxpayers receive from tax authorities. This relationship is explored in the current study.

It is important to consider tax compliance costs under the overarching maxims of certainty, convenience and economy. The remaining two of the five themes from Yong *et al.*'s (2019) analysis are displayed on the right of the diagram in Figure 2.3, namely *tax agents* and the *tax system*, which are both linked to tax compliance costs and ultimately to tax compliance. The fees paid to tax agents increase tax compliance costs, because these fees are one of the components in the calculation of that cost. Furthermore, the extent of tax agent usage can be regarded as a proxy for tax system complexity (Tran-Nam, Lignier & Evans, 2016:460). If a system is complex, taxpayers may spend more time on tax compliance activities, which increases compliance costs. However, the services of tax agents may also be employed for tax planning, which is seen as an avoidable/voluntary cost and is not regarded by all researchers to be part of tax compliance costs (see Section 3.2). Two further concepts relevant to the tax agent theme are sole traders (as opposed to full-time employed taxpayers) and education (Yong *et al.*, 2019), which have been shown to be determinants of tax compliance costs, for example, in the studies of Blaufus *et al.* (2014), Chattopadhyay and Das-Gupta (2002), Guyton *et al.* (2003), Klun (2004), Sandford *et al.* (1989) and Slemrod and Sorum (1984). Lastly, the tax system theme contains the concepts of tax complexity, and, as Akhand (2012:224) has pointed out, one way of addressing tax system complexity is simplified tax law.

2.5. CONCLUSION

This chapter has considered the theories that underpin tax compliance behaviour and tax compliance costs. The theories explaining taxpayer compliance behaviour were split into the traditional economic and deterrence theories on the one hand, and the psychological and sociological theories on the other. These theories established (amongst other things) that positive interactions with and the trustworthiness of revenue authorities can improve taxpayer compliance behaviour. The theories underpinning tax compliance costs were based on Adam Smith's maxims relating to a good tax system (equity, certainty, convenience and economy).

The interrelationship between tax compliance and tax compliance costs was considered, whereafter the theoretical framework for this study was described and schematically

depicted in Figure 2.3. The theoretical framework positions tax compliance costs in the context of ensuring or enhancing tax compliance, and also lays the foundation for an exploration of why the determinants of tax compliance costs are important.

Chapter 3 reviews terminology, measurement methodologies and the findings of research conducted on the tax compliance costs of individual taxpayers across the world.

CHAPTER 3:
TAX COMPLIANCE COSTS

3.1. INTRODUCTION

This chapter builds on the theoretical framework established in Chapter 2, which positioned tax compliance costs in the context of ensuring or enhancing tax compliance, and also laid the foundation of an explanation of why exploring the determinants of tax compliance costs is important. The chapter provides an overview of the global state of the tax compliance costs of individuals based on the research conducted on these costs. As part of the overview, the chapter considers the use of different terms, in particular "tax compliance burden" and "tax compliance costs" (Section 3.2), and measurement methodologies to address the valuation of an individual's time (Section 3.3). The overview is concluded by presenting the findings of the research on these topics from three perspectives, namely tax compliance costs in comparison to revenue yield, the determinants of tax compliance costs, and the time burden of taxpayers relating to tax compliance activities (Section 3.4).

3.2. TAX COMPLIANCE BURDEN VS TAX COMPLIANCE COSTS

This section considers whether the meaning of the term "tax compliance burden" is the same as that of "tax compliance costs", since this terminology seems to have been used interchangeably by various authors (Blaufus *et al.*, 2014:802; Coolidge, 2012:251,257; European Commission, 2013:17; Evans, 2008:460; Gueydi & Abdellatif, 2018:799; Hansford & Hasseldine, 2012:289; Highfield, Evans & Walpole, 2018:620&622; Kerr, 2012:465-466; Marcuss *et al.*, 2013:834; Singh & Sharma, 2010:8; Smulders *et al.*, 2012:184,204; Smulders & Naidoo, 2013:35,36; Veit 2018:101,104). Some authors have even used the combined term "tax compliance cost burden" (Blaufus *et al.*, 2014:803; Eichfelder & Schorn, 2012:8; Evans, 2008:460; Evans & Tran-Nam, 2014:5; Singh & Sharma, 2010:7), while others have referred to "tax compliance burden/costs" (Highfield *et al.*, 2018:620).

According to Guyton *et al.* (2003:675), the "tax compliance burden" is a type of excess burden which is one of the components of the total burden of a tax system. They explain it as follows: The *total burden of the tax system* has two components, namely, first, *tax liability*, and second, the *excess burden*. The tax liability component relates to the tax itself, while the excess burden includes the remaining resource costs and can be divided further into three types, namely the *taxpayer compliance burden* (shortened to "tax" compliance burden for the purposes of this comparison), *efficiency costs* and *psychological costs*. The first of these, the *tax compliance burden*, includes the time and money spent by taxpayers to comply with their tax obligations, which involves spending on activities such as recordkeeping, tax planning, gathering tax materials, working with a tax professional, completing and submitting tax returns. The last two types of the excess burden, namely *efficiency costs* and *psychological costs*, reflect the costs of non-optimal behaviour and costs associated with dissatisfaction, frustration and anxiety in relation to tax compliance obligations respectively (Guyton *et al.*, 2003:675).

Blaufus *et al.* (2014:801) posit a third component besides the tax liability and the excess burden, namely "tax effort". From their explanation of the tax effort (the time effort and the monetary expenses spent on tax compliance and tax planning), it is clear that the meaning does not differ from the tax compliance burden (one of the types of the excess burden component) as explained by Guyton *et al.* (2003). It is therefore concluded that tax effort is not an additional component of the total burden of a tax system, but merely a different description of the tax compliance burden.

Various authors have confirmed the definition of "tax compliance burden" offered by Guyton *et al.* (2003:675), but some explicitly limit the definition of the tax compliance burden to refer only to the time and costs spent up to and including the submission (completion and filing) of the taxpayer's income tax return, and exclude any post-filing activities associated with the submission (IRS, 2019b:100-101; Lerman & Lee, 2004:139; Singh & Sharma, 2010:8; York, 2018:2). Audits and objections and appeal procedures are examples of post-filing activities.

When one compares the definitions of "tax compliance costs" with the definition of the "tax compliance burden" by Guyton *et al.* (2003), a few similarities and differences are found. Six of the definitions of "tax compliance costs" are considered chronologically below, followed by a discussion of the similarities to and differences from the "tax compliance burden"

definition, starting with the visual depiction of the main forms of tax compliance costs by Sandford (1976:206) in Figure 3.1.

Figure 3.1:   Main forms of tax compliance costs

	Compliance costs		
	Personal taxpayers	Third parties → Voluntary helpers	Firms
Affected persons	Personal taxpayers	Voluntary helpers	Firms
Main taxes	Income tax / Wealth and wealth transfer taxes / CGT	Mainly personal	VAT; Corporate tax; Employees' tax
Main forms of compliance costs	*Money* (e.g. fees to professional advisers) / *Time* (e.g. completing tax returns) / *Psychic* (e.g. anxiety based on incomprehension)	*Time* of voluntary labour	*Money* (e.g. fees to accountants; staff time); *Time* (e.g. of proprietor of small business); *Psychic* (e.g. resentment at having to act as unpaid tax collector)

Source: Sandford (1976:206)

From Figure 3.1, it is clear that the "tax compliance costs" that affect personal taxpayers (on the left in the diagram) include money (e.g. fees to professional advisers), time (e.g. completing tax returns) and psychic aspects (namely the psychological costs) (e.g. anxiety based on incomprehension). However, Sandford (1976:208) excluded psychological costs when he formulated the following definition: "Measurable compliance costs … consisted of *fees* to tax advisers, an estimated *value of the time* costs of the taxpayer and unpaid advisers, *miscellaneous expenses* like postage and travel" [emphasis added]. Furthermore, Sandford (1976:205) argues that "discretionary" expenses incurred by taxpayers in an attempt to reduce the amount of tax payable, for example, "tax-planning" advice, should not be included in tax compliance costs, even though he also shows the counter argument for its inclusion.

When one compares Sandford's (1976) views on "tax compliance costs" to the "tax compliance burden" definition by Guyton *et al.* (2003), it is clear that both definitions include time and money spent by the taxpayer, but there are two differences. First, Sandford (1976) initially includes psychological costs as a component of tax compliance costs, but then excludes it from a more restrictive definition of "measurable" tax compliance costs, whereas Guyton *et al.* (2003) consider psychological costs to be a separate type of the excess burden

and not as part of the tax compliance burden. Second, Sandford (1976) is of the view that tax planning costs should not form part of "tax compliance costs", while Guyton *et al.* (2003) include these costs as part of the "tax compliance burden".

According to Slemrod and Sorum (1984:2), the "concept of [tax] compliance costs refers to all those costs incurred by taxpayers or by third parties in complying with the requirements of the tax system, over and above the tax payments themselves", even though these authors focus more narrowly on the costs directly borne by the taxpayers in their study. Furthermore, they consider only "measurable components of cost such as *time* and *pecuniary expenditures*", and do not include third party costs and "psychic costs of filling out tax forms" (Slemrod & Sorum, 1984:2) [emphasis added]. They also point out that tax compliance costs must be distinguished and treated separately from the efficiency costs of taxation (Slemrod & Sorum, 1984:31).

It is therefore clear that Slemrod and Sorum (1984) also see "tax compliance costs" as costs "over and above" the tax payments themselves, similar to the "excess burden" concept (Guyton *et al.*, 2003). Furthermore, both definitions ("tax compliance costs" and "tax compliance burden") regard efficiency costs as a separate type of excess burden, and both definitions include time and money spent. The only difference is that Slemrod and Sorum (1984) agree with Sandford (1976) (discussed first) that psychological costs form part of "tax compliance costs" (even though they do not deal with those costs in their research) whereas Guyton *et al.* (2003) consider psychological costs to be a separate type of the excess burden and not part of the "tax compliance burden".

Pope (1989) formulated the next definition of "tax compliance costs" analysed here. He describes the main components of "tax compliance costs" as

> the *amount of time* spent on tax affairs, by both the respondent and spouse/de facto, the amount of *incidental expenses* in connection with the person's tax affairs e.g. travel, phone calls, postage and, for persons who pay for professional assistance, the *amount paid in fees* for work in regard to income tax return preparation, processing and (possibly) planning. (Pope, 1989:134) [emphasis added]

When one compares Pope's (1989) definition of "tax compliance costs" to the "tax compliance burden" definition (Guyton *et al.*, 2003), it is clear that both definitions include time and the money spent by the taxpayer. The only difference is that Pope (1989) notes

that planning fees could "possibly" form part of "tax compliance costs", while Guyton *et al.* (2003) include planning fees as part of the "tax compliance burden".

The fourth definition under consideration was presented by Chattopadhyay and Das-Gupta (2002). After a long, in-depth discussion of previous authors' work, Chattopadhyay and Das-Gupta (2002:10) conclude that it is "clear that a satisfactory definition and classification of [tax] compliance costs is elusive". They provide their own definition of "tax compliance costs" for a *society as a whole*, but since this comparison is in the context of individual taxpayers, only the elements they consider to form part of the "tax compliance costs" of individual taxpayers are summarised below:

- the *time* spent by the taxpayer (including time spent on tax planning);
- any direct *money* costs (including any fees that are paid to tax professionals);
- any *bribes* that are paid (although these may be a reality, they are not costs foreseeable in any efficient system);
- the *psychological costs* arising from any harassment by tax officials;
- the *psychological costs* arising from anxiety around tax ambiguity, complexity and uncertainty; and
- any *benefits* arising from compliance requirements (this only applies to self-employed taxpayers) (Chattopadhyay & Das-Gupta, 2002:11).

As with the previous comparisons, both definitions include time and money spent by the taxpayer, but there were various differences between Chattopadhyay and Das-Gupta's (2002) definition of "tax compliance costs" and Guyton *et al.*'s (2003) definition of the "tax compliance burden" as a result of the additional elements included by Chattopadhyay and Das-Gupta (2002). The first additional element is "bribes paid" by taxpayers to tax officials, which links to the second additional element, namely psychological costs relating to harassment by tax officials. Chattopadhyay and Das-Gupta (2002) are of the opinion that psychological costs, including psychological costs of this kind, form part of "tax compliance costs", whereas Guyton *et al.* (2003) consider psychological costs to be a separate type of excess burden and not part of the "tax compliance burden". Furthermore, Chattopadhyay and Das-Gupta (2002) divide psychological costs into two categories, namely psychological costs relating to harassment by tax officials (mentioned above) and those relating to tax ambiguity, complexity and uncertainty. Lastly, Chattopadhyay and Das-Gupta (2002) add the element of offsetting benefits obtained by self-employed taxpayers from income tax compliance requirements. Examples of these benefits are better preparation of income

statements, better control of employees, better asset management and better inventory control. These additional elements are not addressed in the "tax compliance burden" definition (Guyton *et al.*, 2003).

According to Saxton (2005:1), the excess burden (or deadweight loss of taxation) is a loss of welfare above and beyond the tax revenues collected, which affects the government (administrative costs) and the taxpayers (compliance costs): "Tax compliance costs" are defined as

> the cost (usually thought of as *time*, but can also be *monetary*) that is borne by individuals as a result of paying their income taxes. This includes recordkeeping, learning about specific laws and forms, preparation time, remittal time, and any monetary costs such as seeking assistance from a certified public accountant, tax lawyer, or tax preparer or buying computer programs or books. It is a measure of the opportunity cost of complying with the tax code. (Saxton, 2005:1) [emphasis added].

The components of time and money spent by the taxpayer are once again the common elements of both definitions that are compared. The differences between Saxton's (2005) and Guyton *et al.*'s (2003) views are listed below:

- Saxton (2005) includes "learning about specific laws and forms" which may overlap to some extent with "tax planning" in the "tax compliance burden" definition (Guyton *et al.*, 2003), but which is not necessarily the same.
- Saxton (2005) includes "buying computer programs or books" which is not specifically catered for in the "tax compliance burden" definition (Guyton *et al.*, 2003).
- Saxton (2005) adds the concept of an opportunity cost of complying with tax obligations.

Marcuss *et al.* (2013) formulated the last definition of "tax compliance costs" that is analysed here. According to them, "[c]ompliance cost consists of the individual's or firm's compliance burden, which is a function of *resources spent* plus the *cost* of hiring an outside tax specialist" (Marcuss *et al.*, 2013:840) [emphasis added]. Resources spent include "time", so both definitions (Marcuss *et al.*, 2013; Guyton *et al.*, 2003) therefore consider time and money, similar to the definitions in the previous comparisons. It is interesting that Marcuss *et al.* (2013) use the term "compliance burden" in their definition, which could indicate that the definitions are identical, but then they also state that "the spread between compliance costs and compliance burden depends on the value of the tax deduction for the compliance costs" (Marcuss *et al.*, 2013:849). According to Marcuss *et al.* (2013:849), the difference between a taxpayer's compliance costs and the associated burden is therefore very modest

for non-business compliance costs, since deductions for individuals, non-business and investment-related out-of-pocket compliance costs are only allowed in limited circumstances, and are subject to a maximum amount.

As all the definitions considered above point out, "tax compliance costs" and the "tax compliance burden" are similar, if one considers their main underlying elements, namely time and costs. The differences detected relate mainly to the different authors' views of which activities or costs form part of the calculation, and Marcuss *et al.* (2013) regard these concepts as being different only to the extent that a taxpayer obtains some value from being able to deduct the tax compliance costs for tax purposes. Since only 4% of assessed individual taxpayers in South Africa have business income (National Treasury & SARS, 2019:58), and most individuals in South Africa are therefore not entitled to a tax deduction for tax compliance costs, the concepts of the "tax compliance burden" and "tax compliance costs" are generally the same in the South African context. When Saxton (2005:4) describes the results of the Individual Taxpayer Burden Model (ITBM), he reports on the estimated tax compliance burden in hours (3.21 billion hours for the tax year 2000), and only once the different wage rates have been applied, does he report the results as "tax compliance costs", after which the out-of-pocket costs are added.

For the purposes of this study, tax compliance costs are calculated by converting the time burden of *all* compliance activities to a monetary amount (rand) and adding all other out-of-pocket costs relating to compliance activities. These tax compliance costs then form the foundation of the assessment of the tax compliance costs of individual taxpayers. Even though no attempt is made in this study to *quantify*[33] psychological costs, it is acknowledged that these costs form part of the tax compliance costs of individual taxpayers in South Africa. Psychological costs are only indirectly incorporated when the determinants of tax compliance costs are ascertained, since the difficulty of taxpayers in dealing with their tax affairs is a proxy or "surrogate" for the psychological costs of tax compliance (Mathieu *et al.*, 2010:357).

---

[33] Since there are no objective and consistent ways to monetise these costs, monetary and psychological costs cannot be added together to arrive at a total tax compliance cost (Blaufus *et al.*, 2019:930; Tran-Nam *et al.*, 2014:141).

3.3. VALUATION OF TIME

An essential step in calculating tax compliance costs is converting the time spent by taxpayers on tax compliance activities to a monetary amount. Only thereafter can other out-of-pocket costs relating to tax compliance activities be added to obtain an estimate of the total tax compliance costs. Therefore, the total hours spent on tax compliance activities need to be multiplied by an hourly rate. It is this hourly rate that has been broadly debated in the literature.

Six methods of valuing taxpayers' time have been recognised (Pope, 1989:135, 1995:115-117). These methods are

- each individual's own valuation of time;
- each individual's own valuation of time, subject to a maximum hourly rate;
- the same hourly value for all respondents (for example, the median value of time as reported by individual taxpayers or an "equity rate"[34]);
- what taxpayers would pay to be rid of all tax compliance costs[35];
- a before-tax hourly wage rate; and
- an after-tax hourly wage rate.

There is no preferred method of valuing time that is used in compliance cost studies, and a combination of these methods is also regarded as acceptable (Malmer, 1995:242,248; Pope, 1995:118). Tran-Nam *et al.* (2014:143) used the *before-tax hourly wage rate[36]* of self-employed or unemployed[37] individuals and the *after-tax hourly wage rate[38]* of employed individuals for the purposes of estimating their tax compliance costs. Sandford *et al.* (1989:35-39) suggest using different rates for different persons, for example, based on *when* the tax activities were conducted (i.e. during working hours, overtime or leisure time), whether the individual obtained *paid assistance* (which could indicate that a higher value is

---

[34] The "equity rate" is calculated by converting the national earnings of the country's individuals for the relevant year to an hourly rate (Pope, 1989:135). Using this rate ignores the income and opportunity cost of a specific individual.

[35] It is argued that by asking taxpayers how much they would be willing to pay to be rid of all tax compliance costs, the researcher not only obtains information regarding the value of the respondent's time, but also information regarding the psychological costs experienced by the respondents in dealing with their tax compliance obligations (Allers, 1994:54).

[36] This rate is also referred to as the "reservation wage", which is the lowest (before tax) hourly wage rate for which the individual would be willing to work.

[37] Unemployed individuals include persons actively looking for employment, but also persons who are not looking for work, for example, because they are studying, or persons who are retired.

[38] The *after-tax* "reservation wage" is obtained by reducing the *before-tax* "reservation wage" by the marginal tax rate of the individual.

placed on that individual's own time as opposed to that of individuals who do not pay for help) or whether the individual is *self-employed* (in which case the opportunity cost of the business must be considered). Evans *et al.* (1997:38) argue that the appropriate hourly wage rate for sole traders (self-employed taxpayers) should fall between the before-tax hourly wage rate of employed taxpayers who are medium income earners and those who are high income earners.[39] However, Slemrod and Sorum (1984:465) and Blumenthal and Slemrod (1992:188) assume that *all* respondents sacrificed leisure time to conduct tax compliance activities and therefore they used the after-tax hourly wage rate to value the time of all respondents.

A few studies performed cross-checks to evaluate the reasonableness of the average time values used in calculating tax compliance costs by comparing those values to the average hourly earnings from national statistics, for example, or other national survey data (for example, Sandford *et al.*, 1989; Vaillancourt, 1989) or the average time values obtained with a second method of valuing time, such as asking how much the respondent would be willing to pay to be rid of all tax compliance costs (Sandford, 1973:175). Lopes *et al.* (2012:155) checked the reliability and internal consistency of the respondents' own time valuations with their responses relating to their income groups. Acknowledging the problems of time monetisation, Blaufus *et al.* (2014:806) decided to report a lower-bound and an upper-bound estimate of tax compliance costs using *average[40] after-tax* earnings per working hour for the lower-bound, and *before-tax* earnings per working hour for the upper-bound time values.

To place a value on the time spent by unpaid helpers (for example, a spouse, friend or family member), researchers normally rely on the values reported by the respondents (for example, Evans *et al.*, 1997:11; Lopes *et al.*, 2012:155; Tran-Nam *et al.*, 2014:143). Vaillancourt *et al.* (2013:9) assumed that the time value of the taxpayer also applied to the friend or family member and used the same value for both.[41]

---

[39] The before tax "reservation wage" for medium income earners was used for small sole traders, while the midpoint was considered the appropriate wage for sole traders in medium-sized businesses.

[40] Blaufus *et al.* (2014:806) calculated the before-tax and after-tax incomes per working hour *for different income classes* on the basis of the German Socio-economic Panel.

[41] Their argument is that parents are more likely to assist their young children with their income tax returns than the other way around, and such an assumption probably biases downward the value of this time (Vaillancourt *et al.*, 2013:9). In a South African context, this argument would be weak as a result of the submission threshold for income tax returns (discussed in Section 5.3), so young children would normally not need to file income tax returns.

There are several different ways in which tax compliance costs can be estimated, but Tran-Nam, Evans, Walpole and Ritchie (2000:231) emphasise the following three important considerations in estimating such costs, namely a sound and consistent conceptual basis, a proper framework for quantification, and the availability of appropriate and reliable data. For the purposes of this study, the first two considerations were addressed by using a combination of the valuation methods described in this section. A combination was necessary mainly because full-time employed respondents provided their gross *monthly* salaries and all other respondents[42] provided either their *hourly* salaries/wages, charge-out rates or the rate that they would be prepared to work for if not employed. The gross monthly salaries were converted to hourly rates by dividing the figure by 160 hours (based on an average of 20 working days in a month and 8 working hours per day), which were then reduced by the marginal tax rate[43] to obtain an after-tax hourly wage rate. The hourly values provided by persons who were not in full-time employment were not reduced to an after-tax wage rate (similar to Tran-Nam *et al.,* 2014:143), but were made subject to different maximum limitations, depending on the respondent's employment category. Refer to Section 5.7 for a detailed discussion of this method and the other methods considered. The last consideration – "availability of appropriate and reliable data" (Tran-Nam *et al.*, 2000:231) – was considered as part of the research design process, as discussed in detail in Chapter 4.

3.4. GLOBAL STATE OF TAX COMPLIANCE COSTS OF INDIVIDUALS

As has been pointed out in Section 1.2, the extent of research into compliance costs is revealed by the summary by Evans (2003:80-92) in an overview of 61 studies conducted between 1980 and 2003 into the operating costs of taxation (compliance costs for taxpayers and administrative costs for revenue authorities). The summary highlights the geographical spread of the research, the different taxes and aspects of tax systems that have been studied. However, only 25% of these studies considered compliance costs relating to PIT (and/or personal capital gains tax). All except one of these studies were conducted in developed countries, namely Australia, Canada, European countries, the UK and the USA. The only study considering the compliance costs of individual taxpayers in a developing country was that of Chattopadhyay and Das-Gupta (2002) in India.

---

[42] Namely part-time employed, self-employed, retired or unemployed respondents.
[43] The tax rate was determined based on the income tax bracket selected by the respondents, which varied from 18% (lowest income tax bracket) to 41% or 45% (highest tax bracket) in respect of the 2017 and 2018 years of assessment respectively.

Even though less research has been conducted in respect of the tax compliance costs of individual taxpayers (when compared to businesses), in the almost two decades following the summary by Evans in 2003, several published follow-up (and also first-time) studies[44] were conducted into tax compliance costs for personal income taxpayers in developed countries (Australia, Canada, Croatia, Germany, New Zealand, Portugal, Slovenia, the UK and the USA) and in developing countries (Ethiopia, India and Malaysia).

It is therefore clear that research on tax compliance costs cannot be a once-off measurement. Pope (1993:71-72) suggests that the quantification of tax compliance costs should first be followed by policy recognition, then effective policy measures and legislation changes to reduce compliance costs, and that the ultimate goal of awareness of compliance costs is continual monitoring of those costs. Developed countries, such as Australia, Canada, the UK and the USA, have successfully completed the quantification stage, based on the summary of Evans (2003), and in the last two decades their focus has shifted to influencing policy[45] and monitoring their tax compliance costs. The follow-up study in Slovenia[46] also highlights the importance of evaluating the effect of changes to a tax system (for example, pre-filled income tax returns) on tax compliance costs.

From a South African perspective, an exploratory (unpublished) study on individuals at the management levels in a mining company was conducted (Steyn, 2011), but since the sample used was not representative of the population of individual taxpayers in South Africa, the results could not be generalised and further research is needed to build on Steyn's (2011) exploratory findings. Therefore, the calculation of the tax compliance costs of individual taxpayers in South Africa in relation to the submission of their income tax returns and the activities subsequent to their submission (post-filing activities), which is the first objective of this study, will not only fill a gap in the literature, but will provide a much-needed baseline for comparative research.[47] Efforts can then focus on improving recognition of the effect of tax compliance costs and reforms on tax policy (such as tax legislation changes) and on ultimately achieving the goal of the continual monitoring of tax compliance costs for individual taxpayers in South Africa.

---

[44] For example, Blaufus *et al.* (2014), Blaufus *et al.* (2019), Blažić (2004), Evans and Tran-Nam (2014), Guyton *et al.* (2003), Klun (2004, 2009), Lerman and Lee (2004), Lopes *et al.* (2012), Marcuss *et al.* (2013), Mathieu *et al.* (2010), Mengistu (2016), Mera (2011), Sapiei and Abdullah (2008), Saxton (2005), Singh and Sharma (2008, 2010), Tran-Nam *et al.* (2014), Vaillancourt (2010), Vaillancourt *et al.* (2013).

[45] For example, the tax law design process (Evans, 2003:65).

[46] Klun (2004, 2009).

[47] For example, the research in measuring the simplification efforts by the government in Slovenia (Klun, 2004, 2009).

It is acknowledged that comparisons of different tax compliance cost studies should be done with the greatest care, since many differences may exist, for example, time valuation methods, sample frames and response rates, and also differences in definitions and tax regimes (Sandford, 1995:405-408). However, a broad comparison of some aspects may provide some insight into global trends and the determinants of tax compliance costs.

The findings of the research conducted on tax compliance costs relating to PIT across the globe are now considered, first, by considering compliance costs as a percentage of revenue yield, then by considering the determinants of tax compliance costs, and finally by evaluating the time burden (in hours[48]) of taxpayers in relation to tax compliance activities. The same studies are not necessarily included in all the comparisons, since not all of these studies reported on the aspect under consideration.

3.4.1. Compliance costs as a percentage of revenue yield

The first aspect that is compared is findings of research conducted on PIT compliance costs as a percentage of the related tax revenue yield (see Table 3.1). Only studies that report on this aspect are included in the table. The number of responses on which each estimate is based and the method used to collect the data are provided for context. (The lowest values are indicated in green and the highest values in orange.)

---

[48] Therefore, before the estimation of the *value* of time.

Table 3.1: PIT compliance costs as a percentage of tax revenue yield

Year[49]	Author(s)	Country	Number of responses	Data collection method[50]	PIT compliance costs as a percentage of tax revenue yield
1984	Slemrod & Sorum	USA[51]	653	Postal	5% to 7%
1989	Vaillancourt	Canada	2 040	Interviews	2.5%
1989	Sandford *et al.*	UK	1 776	Postal	3.6%
1990	Pope & Fayle	Australia	1 098	Postal	7.9% to 10.8%
1994	Allers	Netherlands	4 743[52]	Postal	1.4%
1995	Diaz & Delgado	Spain	2 355	Interviews	3.3%
1997	Evans *et al.*	Australia	936	Postal	4% to 5.6%
2001	Delgado, Salinas & Sanz	Spain	2 388 (1998); 2 449 (1999)	Interviews	Reduced from 1.8% to 1.3%[53]
2002	Chattopadhyay & Das-Gupta	India	128	Postal	49% to 56%
2003	Guyton *et al.*	USA	15 447[54]	Postal & telephonic	8.3%
2004	Blažić	Croatia	300	Interviews	0.9% (excl. self-employed)
2004	Klun	Slovenia	222	Postal & interviews	2.5% (excl. self-employed)
2008	Sapiei & Abdullah	Malaysia	144	Postal	0.27% (only direct costs)
2010	Vaillancourt	Canada	2 000	Telephonic	2.2% to 3.2%
2011	Mera	Ethiopia	103	Interviews[55]	0.98%
2014	Blaufus *et al.*	Germany	894[56]	Postal	3.1% to 4.7%
2014	Tran-Nam *et al.*	Australia	517[57]	Postal	5.5% (excl. self-employed)
2019	Blaufus *et al.*	Germany	18 196	Postal	2.03% to 2.92%

Source: Compiled from Evans (2003:80-92), Eichfelder and Vaillancourt (2014:120) and own detail from original sources

---

[49] The summary is listed by year of publication.
[50] The three methods are shortened as follows: Postal surveys (postal), Face-to-face interviews (interviews) and telephonic surveys (telephonic).
[51] Only Minnesota.
[52] Evans (2003:86) reports 10 992 responses from the commercial postal polling for non-business costs, but only 4 743 of these responses related to PIT returns (Allers, 1994:145).
[53] Attributed to PIT reform.
[54] There were 6 366 wage and investment earners and 9 081 total responses for self-employed taxpayers. A breakdown between postal survey and telephone responses was only provided for the 6 366 wage and investment earners, namely 2 551 (40%) for the postal survey and 3 815 (60%) for the telephone interviews.
[55] Mera (2010:30) explains the disadvantages of postal surveys, but without elaborating on the distribution method used, so it was assumed that interviews were used.
[56] Of these 894 responses, 265 were completed by households which did not file a return and were excluded from the final sample. The remaining 629 responses contained the required information on compliance time and monetary expenses.
[57] There were 444 paper responses and 73 online responses.

The summary in Table 3.1 reveals that the estimates in developed countries were based on a higher number of responses (ranging from 222 to 18 196) than the estimates in developing countries, namely Ethiopia, India and Malaysia, where the responses were only 103, 128 and 144 respectively. The highest number of responses (namely 18 196) was obtained from a postal survey in Germany.

Six studies did not provide exact estimates, but rather a range, which shows the sensitivity of estimates. The upper and lower values of the ranges were (except for the Indian study) between 1% and 2.9% apart. The estimate in the Indian study (which was based on only 128 respondents), was significantly higher than all the other estimates, with a 7% difference in the range (49% to 56%). Chattopadhyay and Das-Gupta (2002:v) warn, however, that due to their low response rate of 2.35% and sample bias towards high income respondents and high income earners, the findings of their study must be "taken as preliminary and subject to error". The estimate from Malaysia was only based on direct costs and did not include the value of time and is thus not comparable to that in the other studies. Therefore, without taking the Indian and Malaysian studies into account, compliance costs of PIT are generally between 1% and 11% of the revenue yield. Furthermore, the Swedish study showed a decrease in the tax compliance costs to PIT revenue yield ratio, from 2.7% to 1.7%, and one Spanish study showed a similar decrease from 1.8% to 1.3%, as a result of tax reform, whereas a follow-up study on the Minnesota residents[58] in the USA found an increase in tax compliance costs, despite tax reform. All the follow-up studies would seem to indicate that tax compliance cost research has been able to influence tax policy and the evaluation of policy changes by monitoring compliance costs after reforms have been instituted.

The above comparison of PIT compliance costs as a percentage of the tax revenue yield highlights the fact that this percentage differs significantly across the globe, and that there is not an "acceptable" percentage. It seems that the focus worldwide is more on reducing the percentage, once determined, rather than on attaining a specific percentage.

---

[58] Blumenthal and Slemrod (1992) considered the impact of the US Tax Reform Act 1986 on the compliance costs of Minnesota's individual taxpayers, compared to the findings of Slemrod and Sorum's (1984) study, but because Blumenthal and Slemrod (1992) did not report on the compliance cost percentage compared to revenue yield, the study was not included in Table 3.1.

3.4.2. Determinants of PIT compliance costs

The different determinants of tax compliance costs reported in the reviewed research are listed in Table 3.2. It is important to bear in mind that these determinants merely show a correlation (or relationship) between different variables and tax compliance costs, and that they do not prove causality. The summary also indicates where the authors specifically reported on the regressive nature of PIT compliance costs, since arguably the regressivity of tax compliance costs is linked to income level, which is a determinant.

Table 3.2: Determinants of PIT compliance costs

Year	Author(s)	Country	Determinants and related findings
1984	Slemrod & Sorum	USA (only Minnesota)	• *Self-employed* taxpayers have relatively higher costs than salary earners.
1988	Arthur D Little Inc.[59]	USA	• Respondents spent 50% of their time on recordkeeping, while tax return preparation takes 29% of total time. • Strong correlation between time spent and the *number of line items on the tax return*.
1989	Vaillancourt	Canada	• Main determinant is *tax complexity* of taxpayer's situation.
1989	Sandford *et al.*	UK	• Main determinants are *size of income*, *employment category* and *type of income* (namely CGT), even though it affected relatively few taxpayers). • Regressive for self-employed respondents (although they enjoyed cash flow benefits).
1990	Pope & Fayle	Australia	• Main determinants are *level of income* and *type of return* submitted. • Regressive.
1994	Allers	Netherlands	• *Gender* (men spent more time on their income tax return than women). • Time spent increases with level of *education.* • *Higher income* taxpayers devote more time to tax affairs. • *Type of tax return* (simple or complex). • Main *source of income* (particularly high compliance costs for self-employed). • *Number of supplementary income sources.*
1995	Diaz & Delgado	Spain	• Time costs comprising 73% and monetary costs 27%.
1997	Evans *et al.*	Australia	• Regressive.
2002	Chattopadhyay & Das-Gupta	India	• Compliance costs are seven to ten times higher for *non-salaried taxpayers* than for salary earners. • Regressive.
2003	Evans	Australian and UK tax practitioners	• Determinants are *legislative complexity*, *frequency of legislative change*, and also *recordkeeping* and *valuation requirements* for *CGT* (especially in the UK).

---

[59] Original source could not be obtained to verify findings as reported by Evans (2003:81).

Year	Author(s)	Country	Determinants and related findings
2003	Guyton *et al.*	USA	• *Employment category.* • *Type of tax return.* • *Preparation method* (paid for help, prepared self with and without software).
2004	Blažić	Croatia	• *Level of income* and *number of income sources.* • Younger *women* mostly obtain help while *elderly* women fill in more on their own. Older persons take longer. • Higher *education* levels result in handling more self. • Regressive.
2004	Klun	Slovenia	• More time was spent as *education* level increased. • No correlation between income and compliance costs and low correlation between *number of income sources* and compliance costs.
2010	Mathieu *et al.*	UK	• *Income.* • *Occupation.* • *Education.* • *Difficulty* in attending to tax affairs and compliance costs. • Regressive.
2011	Steyn	South Africa	• *Complexity* of tax legislation. • Use of *paid assistance.* • Regressive.
2012	Lopes *et al.*	Portugal	• Determinants are *number of dependents*, level of taxpayers' *education*, economic activity (*wage earners or self-employed*) and *income levels.* • Elderly and less educated taxpayers have higher psychological costs (caused by anxiety and stress).
2013	Marcuss *et al.*	USA	• Regressive.[60]
2014	Blaufus *et al.*	Germany	• *Self-employment* increases the cost burden by 166%, time burden by 65% and monetary expenses by 196%.
2019	Blaufus *et al.*	Germany	• The use of *tax advice.* • The *appeal procedure.* • *Income level.* • Return *complexity.*[61] • *Education.*[62]

Source: Compiled from Evans (2003:80-92) and own detail from original sources

From Table 3.2, it is clear that 11 of the 19 studies, thus the majority, reported that complexity is a determinant, whether this referred to the complexity of the tax return, or complexity arising from tax legislation or the frequency of changes in the legislation. Other determinants reported in many studies were employment status, income level and education. Many studies considered and reported the regressive nature of tax compliance

---

[60] The study found a tax compliance cost burden of up to 83.3% for the taxpayers with the lowest income.
[61] Measured by the number of income sources of the taxpayer.
[62] Measured by having a university degree.

costs. Guyton *et al.* (2003:678) split the explanatory variables (determinants) of tax compliance costs into three groups. The first group of determinants related to **taxpayer characteristics**, which included educational attainment, self-employment status, and marital status. The second group consisted of variables relating to **compliance methods**, particularly the use of paid professionals. The last group related to the **complexity of the tax return**. Various studies listed in Table 3.2 state that different tax returns indicate different levels of complexity of taxpayers' affairs, but overall, the complexity of tax legislation and the frequency of legislative changes have been identified as determinants of tax compliance costs (Evans, 2003). Furthermore, all the reported determinants, except the appeal procedure reported by Blaufus *et al.* (2019), fit into one of the three groups proposed by Guyton *et al.* (2003:678), whose classification is thus still relevant 16 years later.

3.4.3. Time spent on PIT compliance activities

The comparison of the average time spent on tax compliance activities in Table 3.3 is presented in a slightly different format from that of the previous comparisons, since almost all tax compliance cost studies reported on the hours spent by taxpayers, but not all studies reported their cost findings as a percentage of the revenue yield or considered the determinants of tax compliance costs. This summary is therefore done per country and the tax year[63] under review is added, where available. This format highlights the increase or decrease of time spent between different tax years in a specific country (for example, the decrease from 1998 to 1999 in Spain, as reported by Delgado *et al.* (2001)). Furthermore, the hours spent by employed and self-employed taxpayers on tax compliance activities are provided separately (where available). However, if authors did not provide a distinction between employed and self-employed taxpayers, or it could not be established that self-employed taxpayers were excluded from a particular study, then the relevant columns are left blank. (The lowest values are indicated in green and the highest values in orange.)

It must be emphasised again that these comparisons are done merely to provide an overview of the global situation, since the impact of technology and different tax systems (which include self-assessment) may significantly influence the reported hours.

---

[63] If the tax year stretches over two years, the second year is indicated.

Table 3.3:   Time spent on PIT compliance activities

Country	Authors	Year under review	Hours spent by *employed* taxpayers	Hours spent by *self-employed* taxpayers	Hours spent by individual taxpayers
Australia	Pope & Fayle (1990:100)	1987	5.6	33.8	10.7
	Evans *et al.* (1997:20)	1995	8.5	not incl.	8.5
	Tran-Nam *et al.* (2014:151,157)	2012	8.3	not incl.	8.3[64]
Canada	Vaillancourt (1989)	1986	4.8	8	5.5[65]
	Vaillancourt (2010:17)	2007	7.7	10.7	7.2[66]
Croatia	Blažić (2004:339)	2001	1.7	not incl.	1.7[67]
Ethiopia	Mera (2011:55)	2010	5.2	not incl.	5.2
	Mengistu (2016:26)	2015	7.5	not incl.	7.5
Germany	Tiebel (1986)[68]				11.2
	RWI (2003)[69]				15.8
	Blaufus *et al.* (2014:809)	2007	7.1 to 8.8	20.6 to 35.9	9.8 to 14.4[70]
	Blaufus *et al.* (2019:937,953)	2015	7.6 to 7.8	21.6 to 36.2	9.1 to 10.2
India	Chattopadhyay & Das-Gupta (2002:199)	2000	27.9	88.1	41.3
Malaysia	Sapiei & Abdullah (2008:226)	2007			70.6
Netherlands	Allers (1994:148)	1990			3[71]
Slovenia	Klun (2004:99)	2000	1.7	not incl.	1.7
	Klun (2009:227)	2006	0.9	not incl.	0.9
Spain	Diaz & Delgado (1995:216)	1990			6.8
	Delgado *et al.* (2001:470)	1998			3.6
	Delgado *et al.* (2001:470)	1999			2.2
Sweden	Malmer (1995:238)	1992			2.4
	Malmer (1995:238)	1993	1.1	6.3	1.7
UK	Sandford *et al.* (1989)	1984	3.4 to 11.7	9.1 to 20.8	3.5[72]
	Mathieu *et al.* (2010:355)	1999			4.5
USA	Slemrod & Sorum (1984)[73]	1982	18.2	57.2	21.7
	Blumenthal & Slemrod (1992:192)	1989	22.5	59.8	27.4
	Guyton *et al.* (2003:682)	2000	13.8	59.5	25.5
	Marcuss *et al.* (2013:845)	2012			12.5
Average time spent			**8.8**	**36.0**	**11.9**

Source: Compiled from various authors as indicated

---

[64] The hours of taxpayers were weighted based on taxable income distribution.

[65] Time could not be verified from the original source. Blaufus *et al.* (2014:821) reported the time as 5.5 hours, while Delgado *et al.* (2001:479) reported the time as 6.5 hours. Eichfelder and Vaillancourt (2014:120) provided the time spent by employed and self-employed individuals as 7.7 and 10.7 hours respectively, but did not comment on the total time spent.

[66] Based on all tax filers (Vaillancourt, 2010:17) who may be neither employed nor self-employed.

[67] Respondents who submitted their tax returns themselves spent on average 2.15 hours, while respondents who obtained help spent on average 1.44 hours.

[68] Time could not be verified from original source, but Blaufus *et al.* (2014:807) reported these hours.

[69] Time could not be verified from original source, but Blaufus *et al.* (2014:807) reported these hours.

[70] These hours are, however, only 5.5 to 8.3 when calculated based on taxable income weighting (Blaufus *et al.*, 2014:819).

[71] These three hours exclude the time spent by unpaid helpers (namely 1.5 hours) for their assistance with tax compliance.

[72] As reported by Delgado *et al.* (2001:479) and Eichfelder and Vaillancourt (2014:120).

[73] As reported by Blumenthal and Slemrod (1992:192) in a follow-up study.

From Table 3.3, it is clear that, on average, self-employed taxpayers spent approximately four times more time on tax compliance activities than employed taxpayers (8.8 hours vs 36.0 hours). The average time spent by all individual taxpayers (based on the summary of studies in Table 3.3) is 11.9 hours. Some countries showed a reduction in time spent (for example, Australia, Slovenia, Spain and Sweden), while others showed an increase in time spent (for example, Canada, Ethiopia and the UK). Studies from Germany and the USA first showed an increase in time spent and then a decrease. The reduction in time spent in Spain and Sweden was attributed to tax reform, while pre-filled returns attributed to the reduction of times in Australia and Slovenia. However, even though the *time spent* in Australia decreased, Tran-Nam *et al.* (2014:168-169) provide evidence that tax compliance *costs* increased in relative terms,[74] despite simplification measures such as e-tax and pre-filled income returns.

3.5. CONCLUSION

The chapter commenced with a consideration of different terms used in the literature, specifically the terms "tax compliance burden" and "tax compliance costs". It was found that these terms are similar in meaning, when one considers their main underlying elements, namely time and costs. The differences detected related mainly to different authors' views of which activities or costs form part of the calculation of the "tax compliance burden" and "tax compliance costs", but Marcuss *et al.* (2013) regard these concepts as being different only to the extent that the taxpayer obtains a value from being able to deduct the tax compliance costs for tax purposes. It was pointed out that, in a South African context, these terms would generally mean the same, since only 4% of assessed individual taxpayers have business income (National Treasury & SARS, 2019:58) and most individuals in South Africa are therefore not entitled to a tax deduction for tax compliance costs.

The chapter has also provided an overview of the widely debated and contentious measurement methodologies regarding the value that should be placed on an individual taxpayer's time (the hourly rate at which the time spent on tax compliance activities should be converted to a monetary value). For the purposes of this study, a combination of valuation methods was necessary, mainly because respondents who were employed full-time provided their gross *monthly* salaries and all other respondents (namely part-time employed, self-employed, retired or unemployed respondents) provided either their *hourly*

---

[74] Taxpayers' compliance costs as a percentage of tax revenue and the gross domestic product (GDP) of Australia increased, namely from 4.00% and 0.34% in 1994/95 to 4.84% and 0.43% respectively in 2011/12.

salaries/wages or charge-out rates, or the rate that they would be prepared to work for if they were not employed.

Lastly, the chapter has presented an overview of the global state of the tax compliance costs of individual taxpayers. It showcased countries where research on tax compliance costs has moved beyond a once-off measurement. South Africa does not have a comprehensive once-off measurement, so the calculation of the tax compliance costs of individual taxpayers in South Africa in relation to the submission of their income tax returns and the activities subsequent to the submission of their returns (post-filing activities), which is the first objective of this study, will not only fill a gap in the literature, but will provide a much-needed baseline for comparative research. Efforts can then be focused on effective policy measures and legislation changes to reduce tax compliance costs and increase tax compliance, and ultimately on the achievement of the goal of continual monitoring of tax compliance costs, as envisaged by Pope (1993), for individual taxpayers in South Africa.

The next chapter presents the research philosophy and paradigm of the study. It details the research design used to obtain appropriate and reliable data, which can be subjected to a range of statistical analysis techniques.

CHAPTER 4:
RESEARCH METHODOLOGY

4.1. INTRODUCTION

In the preceding chapter, the importance of this study was highlighted by presenting an overview of previous studies conducted on the tax compliance costs of individual taxpayers. To achieve the objectives of this study, a robust research design is thus essential. In this chapter, the research philosophy and choice of the research paradigm are justified (Section 4.2), followed by an explanation of the chosen research design (Section 4.3). The sampling and data collection methods (Section 4.4), questionnaire design (Section 4.5), pilot testing (Section 4.6) and the responses relevant to the different phases of the research (Section 4.7) are set out. The process of analysing the responses (Section 4.8) is described. This is followed by a detailed discussion of the steps taken to improve the quality of the data (Section 4.9) and data management (Section 4.10). The chapter concludes with clarification of the ethical considerations, which were carefully adhered to (Section 4.11) and some concluding remarks (Section 4.12).

4.2. RESEARCH PHILOSOPHY AND PARADIGM

Three types of research assumptions normally distinguish research philosophies, namely ontology, epistemology and axiology (Saunders, Lewis & Thornhill, 2019:133). *Ontology* addresses whether the 'reality' represents an objective existence independent from individual cognition, or is a product of individuals' subjective perceptions, while *epistemology* addresses how the world can be understood and how such knowledge can be transmitted among human beings (Su, 2018:17). Lastly, *axiology* refers to the role of the researcher's own values and ethics on the research process (Saunders *et al.*, 2019:134).

The philosophical stance of the researcher (positivism) is based on the researcher's preference for collecting data about an observable reality – in this study, the time and costs incurred by individual taxpayers in complying with income tax regulations in South Africa – while remaining neutral and independent from what is being investigated (even though the researcher is also an individual taxpayer in South Africa). Furthermore, the researcher follows an objectivist epistemology that searches for relationships in the data to create generalisations to explain and predict what happens in the social world (Burrell & Morgan,

1979:5; Saunders *et al.*, 2019:136,144), and more specifically, in respect of tax compliance costs for individual taxpayers in South Africa.

Based on the above descriptions, the research also fits into a functionalist paradigm, which entails that the dimensions of objectivism and regulation are adopted in the way in which the tax compliance costs are calculated and examined to obtain rational explanations for these costs' being high or low (Saunders *et al.*, 2019:140-141). Furthermore, in line with these research assumptions, positivist research tends to use quantitative research designs with predetermined and highly structured data collection techniques (Saunders *et al.*, 2019:176), as discussed below.

4.3.   RESEARCH DESIGN

Since the aim of this study is to *assess* the tax compliance costs of individual taxpayers in South Africa, the research design needed to address the calculation of these costs and also ensure that any relationships between the variables could be explained (Saunders *et al.*, 2019:186,188). Therefore, issues that influenced this research design include the need for statistical tests to analyse and explore the relationship between tax compliance costs and, for example, the demographics of respondents (including their income levels), their use of assistance with tax compliance activities and their perceptions relating, amongst other things, to the services and processes of SARS. The assessment also needed to include an evaluation of the regressive nature of tax compliance costs for individual taxpayers that has been reported in the literature (Chattopadhyay & Das-Gupta, 2002; Pope & Fayle, 1990; Vaillancourt, 1989).

Therefore, a quantitative research design was the logical methodological choice for this study, even though some qualitative elements were included, because there were three "open" questions (Saunders *et al.*, 2019:175). Since the researcher was independent of the respondents, this research exhibits all the characteristics of a quantitative research design, as explained by Saunders *et al.* (2019:178). It was designed to examine relationships between variables and measure variables numerically. It employed a range of statistical and graphic techniques for analyses. The study used probability sampling[75] to ensure generalisability, and used a highly structured data collection technique. Data were collected by conducting a survey in the form of a questionnaire as a research strategy.

---

[75] This was, however, only possible for Phase 2 of this research, as explained below.

There are various data collection techniques to obtain empirical data for tax compliance cost research. The researcher had to decide whether the questionnaire would be "self-completed" (and distributed *online*) or "researcher completed" (and conducted *face-to-face*) (Saunders *et al.*, 2019:506). Online surveys are popular to measure tax compliance costs because their advantages seem to outweigh their disadvantages (European Commission, 2013:10). For example, online surveys are much quicker and cheaper than face-to-face surveys when researchers need to access a large sample dispersed over a wide geographical area (Investment Climate Advisory Services, 2011:27,44), even though non-response and bias as a result of misunderstandings can be reduced with face-to-face surveys (Blaufus *et al.*, 2014:803). In South Africa in 2012, a face-to-face survey of 2 000 businesses (1 000 formal and 1 000 informal businesses) cost about nine times more than an online survey that yielded a sample of more than 2 500 tax practitioners (Coolidge, 2012:283). Therefore, due to limited funding available for this research and the wide geographical area over which the population is spread (the nine provinces of South Africa), an *online* questionnaire was chosen as the data collection technique.

Furthermore, quantitative data can be collected for *statistical analysis* purposes through online surveys (this is also possible using other data collection methods). Previous studies in South Africa have successfully adopted this technique (Smulders *et al.*, 2012). For example, this research design made it possible not only to measure the variables numerically, but also to perform various statistical tests during the data analysis process, such as examining relationships between variables and ascertaining the determinants of tax compliance costs.

It must be stressed, however, that using an online questionnaire may have created a systematic bias against less sophisticated individuals who may not have access to electronic communication and would therefore not have received the questionnaire to provide feedback on their income tax compliance costs. This problem was partly mitigated by the fact that the income tax return submission threshold for both the 2017 and 2018 years of assessment was R350 000 (National Treasury & SARS, 2019:43), and individuals who earn an income above this threshold could be expected to have access to electronic communication. Nevertheless, since some taxpayers under this threshold do need to submit an income tax return to obtain tax relief, for example, for additional medical expenses (discussed in more detail in Section 5.3), this bias may still be present.

The online questionnaire was distributed to individual taxpayers in South Africa in two phases, which resulted in the collection of data in respect of two consecutive years of assessment, namely the 2017 year of assessment (Phase 1) and the 2018 year of assessment (Phase 2). The reason for conducting the research in two phases was that after collecting the data needed to estimate the tax compliance costs for individual taxpayers in South Africa in respect of their 2017 year of assessment, an opportunity arose to collaborate with SARS. This collaboration created the potential for a broader and more accurate sampling frame and the research was therefore extended into a second phase. The second phase resulted in the collection of data that were used to estimate the tax compliance costs for individual taxpayers in South Africa in respect of their 2018 year of assessment. The data yielded by the second phase were also used to ascertain the determinants of tax compliance costs and to provide suggestions on ways to reduce tax compliance costs (as explained in Section 1.6).

4.4. SAMPLING AND DATA COLLECTION METHODS

The target population, sampling techniques and data collection methods for each of the phases are discussed below.

4.4.1. Phase 1

As explained above, Phase 1 was rolled out and completed prior to the researcher's obtaining any assistance from SARS. This phase entailed the collection of data relating to the 2017 year of assessment from individual taxpayers in South Africa. In this phase, the target population for the survey was all individuals who submitted an income tax return to SARS for the 2017 year of assessment. Of the 19 980 110 registered individual taxpayers, only 6 399 319 were expected to submit income tax returns for the 2017 year of assessment (National Treasury & SARS, 2019:37). However, because the contact information of individuals registered for tax is not publicly available, it was not possible to use a stratified and systematic random sampling technique, as described by Pieterse, Gavin and Kreuser (2018:26) and Tran-Nam *et al.* (2014:140). Therefore, as an alternative, four types of nonprobability sampling were considered, namely availability sampling, purposive sampling, quota sampling, and respondent-assisted sampling (Daniel, 2012:81). Due to the importance of reaching taxpayers in all nine provinces (and potentially also South African taxpayers living abroad), respondent-assisted sampling was chosen as the most useful method.

In addition, the subtypes of respondent-assisted sampling considered for this research included snowball sampling, (chain) referral sampling, nominated sampling, multiplicity sampling, network sampling, and respondent-driven sampling, of which snowball sampling is the most popular (Anieting & Mosugu, 2017:34; Daniel, 2012:111). Snowball sampling was also used in the current study, since a snowball sampling technique was specifically suggested by Coolidge (2012:280) in the context of tax compliance cost research as an alternative where taxpayers' details are not available to the researcher. As the term "snowball" suggests, the idea is that the sample expands just like a snowball grows in size as it rolls downhill, even though it may start with only one participant (linear snowball sampling) or a group of participants (exponential snowball sampling) (Akhand, 2012:101; Anieting & Mosugu, 2017:35). Some authors use the terms snowball and chain-referral sampling interchangeably (for example, Crouse & Lowe, 2018:1532; Etikan, Alkassim & Abubakar, 2016:55), while Yong and Martin (2017:58) consider chain-referral sampling to be an extension of snowball sampling when the sample is drawn from a variety of networks. It seems that using a variety of networks may be similar to exponential snowball sampling, where the starting point is a group of participants from various networks. Wahl, Kastlunger and Kirchler (2010:394-395) employed snowball sampling when they investigated trust in the authorities and power to enforce tax compliance by sending an email to self-employed taxpayers known to the authors, in which they asked the recipients to complete an online questionnaire and send the e-mail to other self-employed taxpayers the recipients were acquainted with. In addition, they also posted the questionnaire link on a business platform (Wahl *et al.*, 2010:395). A similar snowball sampling technique was employed for the purposes of Phase 1 of the study.

The initial channels used to distribute the survey were members of the South African Institute of Chartered Accountants, social media platforms (LinkedIn and Facebook), and e-mail contacts of the researcher. These three sets of recipients were requested to forward the survey to other taxpayers, including friends and family. Entities such as PKF South Africa Inc. and the Organisation Undoing Tax Abuse (OUTA) also assisted with the distribution of the questionnaire to their clients/members.

Although the rationale of probability theory cannot be relied on for this phase, Anieting and Mosugu (2017:33) state that non-probability samples can be representative of a population. Alternatively, weighting factors could be applied to reduce the importance of

representativeness (Blaufus *et al.*, 2019:934; Tran-Nam *et al.*, 2014:147). This aspect is considered further in Section 6.2.

4.4.2. Phase 2

Phase 2 was implemented after a memorandum of understanding was signed between UNISA and SARS, allowing the survey to be sent to a sample of individual taxpayers registered on the SARS database. This phase collected data relating to the 2018 year of assessment for individual taxpayers in South Africa.

The target population for Phase 2 was all individuals who submitted an income tax return to SARS for the 2018 year of assessment. Of the 21 104 375 registered individual taxpayers, only 6 562 568 were expected to submit income tax returns for the 2018 year of assessment (National Treasury & SARS, 2019:37). According to Coolidge (2012:279), a common methodological issue for tax compliance costs studies is the determination of the size of the sample (determining how many respondents are needed). In this field, "the more – the merrier" is not necessarily true. For example, based on the mathematics of probability, a sample of 1 056 respondents from a population of 100 000 and a sample of 1 067 from a population of 10 million would both achieve a confidence level of 95% and a margin of error of 3% (Coolidge, 2012:279-280). However, if a high confidence level is required for a specific segment of the population, for example, based on location or size, the number of respondents needed may increase significantly (Coolidge, 2012:280).

At the end of August 2018, SARS proposed a stratified random sample of 9 908 individual taxpayers out of a population of 1 228 264 taxpayers who had already submitted their 2018 income tax returns by that date (Moshoette, 2018:pers. comm.). The sample would include approximately 0.8% of each of the different segments of the population, ranging from low to high net worth individuals, and it was also possible to differentiate between provisional taxpayers and other taxpayers. The proposed sample size for the complex, business and high net worth individuals segments could, however, be problematic if a low response rate was obtained, since a representative sample of individuals in these segments are crucial. Previous studies have shown that income level, complexity and business income are determinants of tax compliance costs (for example, Blaufus *et al.*, 2014:802; Tran-Nam *et al.*, 2014:144)). A low response rate for this study was likely, given that Smulders *et al.* (2012:188) achieved only a 6.7% response rate when SARS distributed their survey to 88 057 small business taxpayers. Blaufus *et al.* (2019:932) also stated that the 0.54% response

rate they achieved in their tax compliance cost survey sent to 5.55 million individual taxpayers in Germany was within the "usual range" for surveys of their Ministry of Finance. Furthermore, Tran-Nam *et al.* (2014:147) acknowledge that their 13.4% response rate for their tax compliance cost survey sent to individual taxpayers in Australia "far exceeds those obtained in similar [tax compliance cost] surveys".

Working on a best-case scenario (13.4% response rate), the proposed sample sizes would result in no more than 24[76] answered questionnaires from complex, business and high net worth individuals. SARS therefore agreed to increase the sample size. According to Moshoette (2019a:pers. comm.), the questionnaire would be sent to 1 000 022 individuals in the sampling frame, namely taxpayers who had already submitted their income tax returns[77] by the end of August 2018 and for whom SARS had a valid e-mail address. This date ensured that enough time had lapsed for post-filing questions to be answered by respondents, but created a systematic bias against individuals (mainly provisional taxpayers) who submitted their income tax return after the end of August 2018 cut-off date, since they were only required to submit their returns by 31 January 2019.

The period for individuals who are not provisional taxpayers to file their income tax returns for the 2018 year of assessment was shortened by three weeks (compared to the 2017 year of assessment), running only from 1 July 2018 until 31 October 2018, while provisional taxpayers who use e-filing had until 31 January 2019 to file their income tax returns, as mentioned above. According to SARS (2018b), approximately 65% of all individual *non-provisional* taxpayer returns are filed in the first three months of the tax season, after which submissions decline, followed by a spike towards the end of the tax season. Apart from submitting two compulsory provisional tax returns (31 August 2017 and 28 February 2018 respectively in relation to the 2018 year of assessment), individual *provisional* taxpayers may also submit a voluntary third provisional tax return and top-up payment (30 September 2018 for the 2018 year of assessment) to ensure that no interest is incurred on any outstanding tax liability. With this in mind, many individual *provisional* taxpayers would not have submitted their income tax returns by the end of August 2018, creating the bias mentioned above.

---

[76] 13.4% x (51 + 93 + 32) = 23.58.
[77] Irrespective of whether the taxpayer met the compulsory submission threshold of R350 000 mentioned in Section 4.3, and discussed in more detail in Section 5.3.

Those not accessed could have high levels of compliance costs, resulting in an underestimation of tax compliance costs. Conversely, the fact that SARS facilitated the data collection could have resulted in an overestimation, given the tax administration environment at the time of the survey. However, the sample frame of the taxpayers who submitted their tax returns was the most credible source of information available. This is evident from the fact that 100% submission was not reached even after four years: by the end of August 2019 only 88.6% of expected return submissions for 2015 had been assessed, 87.8% had been assessed for 2016, 85.8% for 2017 and 74.9% for 2018 (Treasury & SARS, 2019:38). In later years, the level of assessment for a given tax year increased as more outstanding returns were submitted and processed. The latest available information was therefore used to test the representativeness of the samples reported in Sections 5.2 and 6.2. The tax population outside the sample frame is unknown and could have resulted in either overestimation or underestimation of costs. Although the questionnaire was administered by SARS, respondents were told clearly that their answers were anonymous and would be analysed independently, which should not have led to any bias to be reported on.

The questionnaire used in Phase 1 was updated and slightly adjusted before using it again during Phase 2, based on input from SARS, as explained in Section 4.5.2. The questionnaire design process is discussed next.

4.5. QUESTIONNAIRE DESIGN

The design of a survey instrument (the questionnaire) is crucial to the success of research, since a questionnaire is a scientific instrument used to measure and collect particular kinds of data, and is not just a list of questions or a form to be completed – its design has to keep the specific goal of the research in mind (Oppenheim, 1966). The questionnaire in this study had to contain all the elements necessary to calculate tax compliance costs, to obtain information regarding possible determinants of tax compliance costs and to allow respondents to provide suggestions on how tax compliance costs can be reduced. Keeping these goals (objectives) in mind, the broad design considerations are presented below.

First, the tax compliance activities that were to be specified in the questionnaire had to be identified. Blaufus *et al.* (2014) list only two activities, namely "collecting receipts" and "preparing tax returns", whereas Lopes *et al.* (2012) list the same two activities but use slightly different wording, namely "recordkeeping" and "filling in and sending tax form", and also include "tax research" as an additional activity. By contrast, other studies list six or more

different activities (Delgado *et al.*, 2001; Singh & Sharma, 2010; Tran-Nam *et al.*, 2014; Vaillancourt *et al.*, 2013). These additional activities include "tax planning", "discussions" with revenue authorities and helpers (paid or unpaid), and "tax audit/objection/appeal". As already indicated, it has been broadly debated exactly which activities may be taken into account for the purpose of determining tax compliance costs. One of the contentious activities is tax planning. The argument against the inclusion of tax planning is based on the argument that this cost is "discretionary" or "avoidable", because it is incurred by taxpayers who endeavour to reduce the amount of tax payable by them (Sandford, 1976:205). Tran-Nam *et al.* (2014:141) regard tax planning as a legitimate activity of tax compliance, however, and, based on their comprehensive approach, they included "all tax related activities" when measuring tax compliance costs. Pope (1989:134) indicates uncertainty about whether or not to include tax planning activities in the calculation of tax compliance costs by adding "possibly" in brackets before planning as a component of tax compliance costs.

Another controversial activity is one that could be prevented if the taxpayer uses, for example, e-filing (which could save time spent on travelling) or employs better recordkeeping practices (Tran-Nam *et al.*, 2014:142). It is very difficult (if not impossible) to determine the *best practice* activities and to make adjustments to the actual activities of taxpayers. Furthermore, tax compliance activities performed by taxpayers who fall below the income tax return submission threshold could also be considered "preventable", as these taxpayers are not in effect required to complete or submit a return. Nevertheless, due to complex medical rebates (discussed in Section 5.3) that a taxpayer under the threshold may be entitled to and that may result in their receiving a refund, the decision as to whether or not an income tax return should be submitted is not always straightforward.

To avoid having to make any subjective judgements on whether an activity is avoidable and/or preventable, this study included all tax-related activities of South African individual taxpayers as "legitimate" tax compliance activities, in line with Tran-Nam *et al.* (2014:141). However, given that Eichfelder and Vaillancourt (2014:128) note that post-filing costs may place a significant burden on the affected taxpayers, it was decided to consider separately each of the different post-filing activities in which South African individual taxpayers could be involved. Information on the time spent and costs incurred in respect of the following activities were therefore obtained in the questionnaire:

- recordkeeping (compiling information needed for tax) as required by section 29 of the *TAA*;[78]

- obtaining tax knowledge (including attending tax seminars and workshops);

- tax planning and getting tax advice (e.g. tax opinions);

- dealing with SARS (e.g. relating to changing banking details);

- dealing with family members/friends/tax practitioners (including providing information to them);

- calculating tax, completing income tax returns and paying tax;

- completing and submitting provisional tax returns;[79]

- fulfilling verification and audit requests;[80]

- lodging an objection as allowed by section 104 of the *TAA*;

- utilising the alternative dispute resolution (ADR) process as contemplated in section 107 of the *TAA*; and

- further litigation as allowed by Parts C to E of Chapter 9 of the *TAA*.

The second important consideration in the questionnaire design (still related to meeting the goal of calculating tax compliance costs) was the valuation of a respondent's time, since there is no universally accepted method to do so, as pointed out in Section 3.3. Tran-Nam *et al.* (2014), for example, requested all their respondents to estimate their (before tax) hourly wage, whereas Blažić (2014) asked for the (after tax) hourly wage in her study. For the purposes of this questionnaire, it was decided to request full-time employees to provide their gross monthly salaries (given that they are paid on a monthly basis), and asking for the (before tax) hourly wage amounts from the other respondents. A follow-up question regarding the respondent's income tax bracket helped to identify the marginal tax rate, to allow for using more than one valuation method of a respondent's time.

The third consideration in designing the questionnaire related to possible determinants of the tax compliance costs of individual taxpayers. Questions were included to obtain information relating to the determinants of tax compliance costs already reported in other

---

[78] To gain insight into why recordkeeping was the most time-consuming activity, as, for example, Blaufus *et al.* (2014:808) and Eichfelder and Vaillancourt (2014:128) have shown, a question was included to determine the biggest contributing factor to the total time spent by a respondent on recordkeeping.
[79] Section 25 of the *TAA* requires the submission of *all* returns in the prescribed form and manner and by the specified date(s).
[80] Section 40 of the *TAA* authorises SARS to select a taxpayer for inspection, verification or audit on the basis of any consideration relevant for the proper administration of a tax Act, including on a random or a risk assessment basis.

studies (for example, employment status, use of paid assistance, and demographic information as discussed in Section 3.4.2). New questions were also added to test possible determinants not previously considered in the context of tax compliance cost studies conducted in respect of *individual taxpayers*. Previously, Eichfelder and Kegels (2014) found that tax compliance costs of *businesses* were influenced by the service orientation of the revenue authority, taking into account the power and trust dimensions of the ''slippery slope'' framework approach. Akhand (2012) also found a relationship between tax compliance costs and the service that taxpayers receive from tax authorities (refer to the theoretical framework in Section 2.4).

Furthermore, even though tax compliance costs were not the focus of Gobena and Van Dijke's (2016) study, they considered aspects of the "slippery slope" framework approach by exploring the role of the power of a tax authority in the relationship between procedural justice, trust in the tax authority, and voluntary tax compliance. Therefore, in an attempt to evaluate the service orientation of SARS, as a possible determinant of the tax compliance costs of individual taxpayers in South Africa, questions from the questionnaires used by Eichfelder and Kegels (2014) and Gobena and Van Dijke (2016) were included in this questionnaire. The specific questions are discussed in more detail when they are analysed in Section 7.2.

Lastly, in the open-ended questions, the respondents were afforded an opportunity to make suggestions regarding the services received from SARS and how tax compliance costs could be reduced.

Qualtrics Survey Software was used to design and administer the online questionnaire. This software was chosen because of its capabilities in handling a complex questionnaire with *display logic* and *skip logic* based on multiple AND/OR statements (where necessary). Display logic allows the developer of the questionnaire to display or hide a question based on information that becomes available about the current respondent, whereas skip logic sends respondents to a future point in the survey based on how they answer a question. Display logic was used extensively: for example, if a participant indicated that he/she submitted his/her own income tax return, then questions relating to tax practitioner costs were not displayed, unless a later question indicated that external tax advice was also obtained. These survey flow elements also enhanced the ease of use by respondents, which is an important factor if a survey is long and/or complex (as was the case in this study). A

summary of the questions and further reasoning behind the inclusion of the questions contained in each of the thirteen sections of the original questionnaire, as well as the adjustments to the questionnaire for the purposes of Phase 2, are discussed in the next section.

4.5.1. Original questionnaire (Phase 1)

An exported copy of the full questionnaire is included in Appendix A.

4.5.1.1. *Section 1: Introduction (1 question)*

This single question in this section of the questionnaire was designed to ensure that participants understood the context and purpose of the study and agreed voluntarily to complete the online questionnaire by selecting the "next" button. The information provided in this question included the target population and the approximate time required to complete the questionnaire (15 to 20 minutes). The definition of tax compliance costs for the purposes of the study was also given, which may include external costs (for example, costs of tax practitioners), internal costs (own time spent) and non-labour costs (for example, internet and travel costs), but not the cost of the *tax itself* (the tax liability). Participants were made aware that they could withdraw from participating at any time without penalty. The question screen also included a link to a comprehensive participant information sheet that contained further information. One piece of information was, for example, about the bigger project initiated by SAICA to estimate the total cost to comply with tax administration in South Africa, across all taxes and in respect of all compliance activities undertaken by individuals, as well as small, medium and large businesses in South Africa – this study formed part of this bigger SAICA project.

4.5.1.2. *Section 2: Employment status and economic sector (2 questions)*

Employment status was used to frame the questions relating to the value of a taxpayer's time. If a person was, for example, employed full-time and worked 40 hours or more per week, then information on a monthly gross salary was required, whereas any of the other employment status options would require information on an hourly wage/salary.

Statistics with regard to individuals in the different economic sectors are reported by SARS in two ways. The first is with reference to the employees' tax (PAYE) received from the different economic activities. The second is with reference to the business income earned

by individual taxpayers (National Treasure & SARS, 2017:53,55). The same economic sector categories that are used by SARS in their statistics were provided to the respondents.

4.5.1.3. *Section 3: Sources of income and types of expenditure (2 questions)*

Lists of income sources and types of expenditure were provided. A participant could select one or more of these from each list (if applicable). At the end of each list, the participant could also select "other" and provide additional income sources or types of expenditure. The reason for including these questions was to establish whether certain sources of income and types of expenditure contributed to tax compliance costs in South Africa. For example, Sandford *et al.* (1989) found that CGT was an important source of high compliance costs for personal taxpayers in the UK, even though it affected relatively few taxpayers.

4.5.1.4. *Section 4: Completion and submission of the tax return* *(15 questions)*

This section contained the bulk of the questions to gather the information needed to calculate tax compliance costs up to the point of submitting an income tax return and paying the income tax due by an individual. It was assumed that the *same person* who completed the income tax return also submitted it, since the submission process is usually a quick process (a click of the button on e-filing). This implies that any reference to the submission of a tax return in the remainder of the thesis also includes the completion of the tax return.

As has been pointed out in the literature review in Section 3.2, the indisputable three core elements of tax compliance costs are taxpayers' and unpaid helpers' time (internal costs), tax practitioners' fees (external costs), and incidental expenses. Therefore, the first question determined who submitted the income tax return. The respondent had the option of selecting that he/she submitted the income tax return him-/herself, obtained free help (for example, from a family member, friend or SARS employee), or alternatively that a tax practitioner submitted the return on the respondent's behalf. By using display logic, the next questions are displayed based on the participant's answer to this question. At the end of this section, information regarding the time taken by an individual taxpayer (or unpaid helper), as well as the amounts paid to tax practitioners and sundry expenditure incurred were collected.

A necessary step in calculating tax compliance costs is converting the time spent by taxpayers on tax compliance activities to a monetary amount, so the value of the respondents' time was determined on the basis of information gathered in Section 10 of the

questionnaire, which took into consideration the different methods of valuing a taxpayer's time (Pope, 1989:135, 1995:115-117) as discussed in Section 3.3.

4.5.1.5. *Section 5: Supporting documents and request for reasons (7 questions)*

Once an income tax return is submitted, it can be selected by SARS for verification[81]. Verification is a *face-value comparison* of the information declared by the taxpayer in his/her income tax return against the taxpayer's accounting records and/or other supporting documents to ensure that the return is a fair and accurate representation of the taxpayer's tax position (SARS, 2019b). Supporting documents are generally in the possession of the taxpayer/tax practitioner at the time when the income tax return is submitted, and extra time and costs may often merely relate to the uploading of those documents when SARS requests the taxpayer/tax practitioner to submit these documents to SARS for verification purposes (SARS, 2019c). However, as part of the verification process, "the SARS auditor would typically request additional substantiating documentation to verify or substantiate disclosures made in the taxpayer's return" (SAICA, 2020:166), which may entail, for example, scanning receipts of medical expenditure incurred by taxpayers that were not covered by their medical aid schemes. Some taxpayers may even need to travel to SARS to submit supporting documents. The questions in this section flow logically, depending on who submitted the supporting documents, and includes the associated sundry expenditure (if applicable).

The section ends by asking whether or not the respondent requested reasons for an assessment and how long it took for SARS to supply the reasons (if requested). A taxpayer who is aggrieved by an assessment, and who does not think that the grounds provided in the assessment are sufficient to enable him/her to understand the basis of the assessment in order to formulate an objection, may request reasons for the assessment from SARS (SARS, 2019d). Confirmation of a valid request for the reasons for an assessment automatically extends the period within which an objection may be lodged (this is covered in Section 9 of the questionnaire).

---

[81] Being selected for an audit and being selected for verification are two different processes, even though both are dealt with in the same section (section 40) of the *TAA*. The audit process is covered in Section 7 of the questionnaire.

4.5.1.6.   *Section 6: Provisional tax, penalties and/or interest (4 questions)*

Not all individual taxpayers are provisional taxpayers. In general, a person who derives any income other than remuneration from an employer, is a provisional taxpayer as defined in paragraph 1 of the Fourth Schedule to the *Income Tax Act* (RSA, 1962). For the 2017 year of assessment, provisional tax payments by individuals contributed 6.7% to net PIT collections (National Treasury & SARS, 2019:23). Provisional taxpayers are required to pay at least two amounts in advance during the year of assessment, while the third top-up payment is voluntary.

This section of the questionnaire incorporated questions to determine whether or not the taxpayer is a provisional taxpayer and, since taxpayers are penalised if there is under-estimation of taxable income for provisional tax purposes, in terms of paragraph 20 of the Fourth Schedule to the *Income Tax Act* (RSA, 1962), this section also incorporated questions relating to penalties and interest. Even though penalties and interest are not technically a cost of compliance, but rather a cost of non-compliance, the extent of penalties and interest may, for example, expose the complexity of estimations required for provisional tax purposes and therefore affect tax compliance costs (Vaillancourt, 1989). Understatement penalties (as contemplated in section 222 of the *TAA*) may also increase the tax compliance costs of taxpayers who may be frightened and therefore obtain the assistance of a tax practitioners at additional costs.

4.5.1.7.   *Section 7: Selected for an audit (3 questions)*

An audit is an *examination* of the accounting records and/or supporting documents of the taxpayer to determine whether the taxpayer has correctly declared his/her tax position to SARS (SARS, 2019b) and is authorised by section 40 of the *TAA*. Taxpayers can be selected by SARS for an audit on a risk basis or on a random or cyclical basis. Even if a taxpayer was subjected to a verification, and the verification process was completed, the taxpayer's tax affairs could still be referred for audit as part of SARS's compliance process (SARS, 2019b). SARS either issues a formal *Notification of Audit* (where the audit has been allocated to a specific auditor) or a *Notice of Assessment* (where a finding was made during the verification and the audit did not commence), a process which could take up to 120 business days (SARS, 2019b). This section of the questionnaire requested information from respondents regarding the time and costs spent on fulfilling audit requests (if applicable).

4.5.1.8. *Section 8: Advance Tax Rulings (4 questions)*

The questions in this section provided information on the time spent and costs incurred by taxpayers who applied for an Advance Tax Ruling (ATR) as contemplated in sections 75 to 90 of the *TAA*. The ATR system seeks to promote clarity, consistency and certainty about the interpretation and application of the applicable tax laws (SARS, 2019e). Clarity and certainty on the Commissioner's interpretation and application of the tax laws about proposed transactions can be obtained through a binding private ruling or a binding class ruling (SARS, 2019e). ATRs are therefore expected to be used mostly by taxpayers who need clarity on business transactions, although individuals earning only employment income may need clarity when services are rendered abroad, or foreign pensions are earned. ATRs are, however, very expensive. The fee to apply for an ATR (payable to SARS and not taking into account possible tax practitioner's fees for assistance with the application) starts at R2 500. The estimated cost recovery fee for a standard application ranges between R10 000 and R35 000 (based on an hourly rate of R650), which does not include direct costs incurred by SARS in connection with the application (SARS, 2019e). The estimated fee range for a complex case is R70 000 to R105 000 (SARS, 2019e).

4.5.1.9. *Section 9: Objection, appeal and litigation (4 questions)*

Post-filing costs are typically limited to a relatively small number of taxpayers, but may place a significant burden on those taxpayers, according to Eichfelder and Vaillancourt (2014:128) and the Office of the Tax Ombud (OTO, 2018:31-39,54). The questions in this section were drafted to determine the extent of objection, appeal and litigation time spent, as well as the costs incurred by respondents in respect of their income tax returns for the 2017 year of assessment. (Reference to the 2017 year of assessment was adjusted to 2018 for the purposes of Phase 2, see Section 4.5.2).

4.5.1.10. *Section 10: Value of time (to calculate tax compliance costs) (3 questions)*

The first two questions in this section elicited responses on the income of the respondents, either their monthly gross salary or their hourly wage rates, depending on their employment status (see Section 4.5.1.2). The third question in this section requested the respondent to indicate the tax bracket in which his/her taxable income falls. This not only provides information of the respondent's marginal tax rate, but also enables the researcher to determine whether or not the compliance costs of individual taxpayers in South Africa are regressive, supporting findings in other studies (Chattopadhyay & Das-Gupta, 2002; Pope & Fayle, 1990; Vaillancourt, 1989).

4.5.1.11. *Section 11: Background questions (5 questions)*

Chattopadhyay and Das-Gupta (2002:108) advise moving the socio-demographic questions to the end of a questionnaire, because of the general principle that the most important questions must be asked in the beginning and the sensitive questions at the end. Following this principle, the demographic questions were only asked in this section and not at the beginning of the questionnaire. These five questions required respondents to indicate the province in which they reside, their gender, age, education level and personal tax knowledge.

4.5.1.12. *Section 12: Statements regarding perceptions, interactions and suggestions (8 questions)*

Rating questions are often used to collect opinion data, and Saunders *et al.* (2019:523) warn that they "should not be confused with scales to measure concepts, which are a coherent set of questions or scale items that are regarded as indicators of a construct or concept". The purpose of the rating questions in this section was to measure concepts relating to the service orientation of SARS, as was explained in the broad questionnaire design considerations at the beginning of Section 4.5. Using a 5-point[82] Likert-style rating (1 = strongly disagree to 5 = completely agree) the rating questions (also known as scale items (Saunders *et al.*, 2019:528)) were combined into scales to measure various constructs that were used to ascertain the determinants of tax compliance costs (explained in more detail in Section 7.2).

---

[82] In some instances, the option "don't know" was added as a sixth point.

Section 12 concluded with an open-ended question where respondents could provide comments on their interactions with SARS and make recommendations (if applicable).

4.5.1.13. *Section 13: Closing questions (7 questions)*

This last section contained two open-ended questions where respondents could make suggestions on how they thought tax compliance costs could be reduced and any other information relating to tax compliance costs that they wanted to bring to the attention of the researcher.

This section also contained the following question adapted from an Australian questionnaire (Lignier & Evans, 2012:661):

> Imagine the tax system in South Africa was abolished. How much do you think you would save in terms of the money, time and effort you would no longer have to spend in complying with your tax affairs? Do not count the tax you would no longer have to pay – only count the tax compliance costs you would no longer have to incur.

The purpose of this question was to enable the researcher to test the reasonableness of the calculated tax compliance costs against the value that respondents think they would save if the tax system in South Africa were abolished.

Lastly, this section gave the respondents the opportunity voluntarily to supply their contact details if they wanted a copy of the final research report and/or were willing to be contacted to validate any response.

4.5.2. Updated questionnaire (Phase 2)

One of the conditions that had to be met before SARS would distribute the questionnaire in Phase 2 of the study was the approval of the survey instrument by SARS. The original questionnaire used for Phase 1 was thus adjusted based on the recommendations from SARS. Apart from minor changes relating to semantics and available options (e.g. combining or adding categories), the following changes were made to the original questionnaire:

- *Change of year of assessment:*
  The year of assessment was changed to the succeeding year of assessment, namely from 2017 to the 2018 year of assessment. Information regarding appeals and litigation was, however, not limited to the 2018 year of assessment. Respondents could also

indicate time and costs relating to the *2017 year* of assessment in respect of appeals using the ADR process, and *any year* of assessment in respect of further litigation. The reason for this change was that the appeal process could possibly take longer than a year to resolve and extending the time period would increase the likelihood of obtaining information regarding the tax compliance costs of appeals and litigation;

- *Removal of questions considered non-essential:*
  In an attempt to reduce the length of the questionnaire without sacrificing information necessary to determine the tax compliance costs, the questions relating to the economic sector in which the respondent worked and ATR were removed. For example, working in the economic sector would not affect the tax compliance costs of a full-time employee. Furthermore, in Phase 1, only one respondent had provided time and costs regarding ATR, offering too small a response rate on the question to draw meaningful conclusions;

- *Addition of additional categories for selection:*
  More selection categories were added; for example, in the original questionnaire, the last monthly salary category, was "more than R100 000", but because many respondents did not specify their monthly salary after selecting this category, the updated questionnaire added two extra categories, namely "R100 001 to R120 000" and "R120 001 to R150 000". The open category then became "more than R150 000"; and

- *Removal of question where the respondent could voluntarily provide personal details.*

An exported copy of the full updated questionnaire is included in Appendix B.

4.6. PILOT TESTING

The purpose of a pilot test is to "refine the questionnaire so that respondents will have no problems in answering the questions and there will be no problem in recording the data" (Saunders *et al.,* 2019:540). The pilot testing in this study aimed, amongst other things, to measure the time required to complete the questionnaire, to ensure that the questions were unambiguous, and to verify whether or not any relevant questions had been or should be omitted. The questionnaire used during each phase underwent separate pilot testing.

4.6.1. Original questionnaire (Phase 1)

The first draft questionnaire was tested by 15 local tax academics and two international[83] tax academics who have substantial experience in drafting questionnaires. Valuable comments for improving the questionnaire were received. After updating the questionnaire with the comments from the first round of pilot testing, it was tested again. During this second round of testing, it was distributed by SAICA to members of its PAYE committee, and the researcher also requested friends and family members who had no tax knowledge to provide feedback on the questionnaire. The questionnaire was revised based on the feedback from the second pilot test before being distributed during Phase 1 of the research.

4.6.2. Updated questionnaire (Phase 2)

Prior to the distribution of the updated questionnaire in Phase 2 (after making the changes to the Phase 1 questionnaire as explained in Section 4.5.2), the questionnaire was pilot tested again. It was first tested internally by SARS personnel involved in the tax compliance cost research project. Then SARS sent it to 100 randomly selected individual taxpayers. Of these taxpayers, only three completed the questionnaire in full. Six commenced with the questionnaire, but did not complete it (progress varied between 2% and 19%). The reason for the high drop-out rate (commencement without completion) was considered to be the length of the questionnaire, but a decision was made not to remove any further questions at that stage. Two small changes were made to the questionnaire based on the pilot testing, namely a change to the highest education level categories and splitting one of the perception statements into two separate statements. Thereafter, the questionnaire was distributed for Phase 2.

4.7. RESPONSES RECEIVED, NUMBER OF USABLE RESPONSES AND RESPONSE RATE

As explained in Section 1.6, the eventual focus of this study was the 2018 year of assessment, since the stratified random sampling technique employed during Phase 2 resulted in almost 14 times more usable responses than those obtained during Phase 1. The discussion below of the responses received, number of usable responses and response rate therefore commences with details pertaining to Phase 2.

---

[83] Chris Evans (Professor of Taxation at the School of Taxation and Business Law, Australian School of Business within the University of New South Wales, Australia) and Lisa Marriott (Professor at the School of Accounting and Commercial Law, Victoria University of Wellington, New Zealand).

4.7.1. Phase 2

Since the questionnaire could not be delivered or administered directly by the researcher, the researcher had to rely on information and reports received from SARS relating to the distribution of the questionnaire, which resulted in some challenges. The first challenge was the distribution of an outdated questionnaire link. This mistake was picked up within a few hours of the distribution of the questionnaire and the email was resent by SARS, using the correct questionnaire link. Considering the length of the questionnaire and the minor differences between the pilot questionnaire and the final questionnaire, there was no significant risk that taxpayers would complete the questionnaire twice, and responses from both survey links were therefore retained, but unique identification numbers were assigned to ensure that responses could be separated later if desired.

The second challenge was to reconcile the agreed sample size of 1 000 022 with the deliverable metrics provided by SARS, which indicated that the email containing the questionnaire link had been delivered only to 426 310 individual taxpayers. Reasons for the difference were determined to have been duplicate email addresses when SARS combined individual lists to be used for the distribution, suppressed (meaning previously undelivered addresses) and bounced emails (Moshoette, 2019b:pers. comm.). SARS was further able to confirm that only 145 037 of these 426 310 persons opened the email and 24 449 persons started the questionnaire (Moshoette, 2019b:pers. comm.). Of these 24 449 respondents, 8 560 used the first Qualtrics link and 15 889 used the final Qualtrics link.

All responses that did not contain either the monthly or hourly income of the respondents (information which was necessary to estimate the value of time spent on tax compliance activities) were removed.[84] The two datasets were therefore reduced to 4 774[85] and 9 326[86] responses respectively. Before combining these 14 100 (4 774 and 9 326) responses into one file in Statistical Package for the Social Sciences (SPSS), it was ensured that the coding of each questionnaire's answer options was identical except for the categories in

---

[84] Since not all parts of the questionnaire were open to all respondents (controlled by the display logic), the completion percentages varied, but the completion rate of these respondents was roughly less than 74%.

[85] The 3 786 respondents that were removed were comprised of 939 respondents who did not answer any questions (0% progress), 2 726 respondents who completed less than 50% of the questionnaire, and 121 respondents who completed at least 50% of it, but did not provide their income. Therefore, 8 560 less 3 786 = 4 774 responses.

[86] The 6 563 respondents that were removed were comprised of 1 566 respondents who did not answer any questions (0% progress), 4 796 respondents who completed less than 50% of the questionnaire, and 201 respondents who completed at least 50% of it, but did not provide their income. Therefore, 15 889 less 6 563 = 9 326 responses.

Question 10.4 (Q10.4) relating to highest level of education. The categories for Q10.4 were adjusted after the pilot study and first had to be coded differently to facilitate the collapsing of the responses and recoding when the two questionnaires were combined. Table 4.1 shows the categories and frequencies before and after the combination of the two questionnaires.

Table 4.1:   Original and combined highest level of education categories

	N[87]	%
Original categories in the two questionnaires		
Questionnaire 1		
No schooling	1	0.0%
Primary School	9	0.1%
Secondary School	1 182	8.4%
Tertiary (up to certificate, diploma or degree)	2 761	19.6%
Tertiary (postgraduate)	758	5.4%
Questionnaire 2		
Some schooling	567	4.0%
National Matric Certificate	3 344	23.7%
Undergraduate	3 482	24.7%
Postgraduate	1 326	9.4%
Master / Doctoral	468	3.3%
Missing (not answered)	202	1.4%
Total respondents	**14 100**	**100.0%**
New combined recoded categories		
No schooling	1	0.0%
Only schooling	5 102	36.2%
Tertiary (up to certificate, diploma or degree)	6 243	44.3%
Postgraduate	2 552	18.1%
Missing (not answered)	202	1.4%
Total respondents	**14 100**	**100.0%**

Source: Own data

After combining the two sets of responses, the cleaning up process continued by first removing responses that contained *unrealistic* hours reported in Question 4.3 (open to persons who submitted their own return) or Question 4.8 (open to persons who obtained help to submit their return), as indicated in Table 4.2. It was considered *unrealistic* if a respondent indicated 500 hours or more for any single activity or in total. The allocated identification number of the relevant respondent is provided in the column on the right.

---

[87] N indicates the number of respondents.

Table 4.2:   Responses considered unrealistic in terms of hours reported

Number of hours reported	ID#
Q4.3: **1 116 hours** in total (36+80+100+400+500)	3736
Q4.3: **1 500 hours** on activity #1	1737
Q4.3: **1 920 hours** on activity #2	2266
Q4.3: **10 000 hours** on activity #4	4346
Q4.3: **100 hours** on each of the five activities	1494
Q4.3: **2 000 hours** on activity #4	13637
Q4.3: **21 000 hours** on activity #3 and **21 000 000 hours** on activity #4	5604
Q4.3: **3 000 hours** on activity #5	1963
Q4.3: **3 160 hours** on activity #1	4085
Q4.3: **3 980 hours** in total (100+1 200+980+100+1 600)	12395
Q4.3: **5 000 hours** on activity #2	3420
Q4.3: **5 760 hours** on activity #4	7219
Q4.3: **525 600 hours** on activity #5	10301
Q4.3: **6 570 hours** on activity #4	4000
Q4.3: **7 200 hours** on activity #4	10950
Q4.3: **700 hours** on activity #5	11711
Q4.3: **720 hours** on activity #1 and **720 hours** on #4 and **72 hours** on #5	7359
Q4.3: **720 hours** on activity #4 and **720 hours** on activity #5	7294
Q4.3: **720 hours** on activity #5	8197
Q4.3: **8 760 hours** on activity #1	13465
Q4.3: **900 hours** on activity #1	10633
Q4.3: **999 hours** on each activity	253
Q4.8: 0.5 + 0 + 0 + 1080 + 1080 + 1080 on the 6 activities (**3 240.5 hours**)	9203
Q4.8: 0.5 + 0 + 0 + 7 + 1 + 9000000000000 on the 6 activities	12791
Q4.8: 0 + 0 + 0 + 400 + 1 + 13 000 on the 6 activities (**13 401 hours**)	8264
Q4.8: 168 + 720 + 720 + 72 + 5808 + 5808 on the 6 activities (**13 296 hours**)	895
Q4.8: 2 + 3 + 3 + 600 + .5 + 600 on the 6 activities (**1 208.5 hours**)	6656
Q4.8: **4 380 hours** on activity #1	12404
Q4.8: 48 + 48 + 48 + 1000 + 1000 + 0 on the 6 activities (**2 144 hours**)	1269
Q4.8: 6 + 0 + 0 + 900 + 24 + 0 on the 6 activities (**930 hours**)	11509
Q4.8: **8 760 hours** on activity #1	13458

Source: Own data

The five activities referred to in Table 4.2 relating to Question 4.3 are recordkeeping, obtaining tax knowledge, tax planning/advice, dealing with SARS, calculating tax, completing the return and paying tax. The six activities for Question 4.8 are recordkeeping, obtaining tax knowledge, tax planning/advice, dealing with SARS, dealing with the person who assisted, and paying the tax due.

Next, responses with a discrepancy were marked with a discrepancy code (D-code) to enable the researcher to report on the number of responses within each code category before removing the response from the dataset. The first D-code related to the completion

level of the questionnaire. The researcher decided to increase the acceptable completion level of the questionnaire to 79% to increase the likelihood that some demographic information from each respondent was obtained. The five demographic questions (Q10.1 to Q10.5) were asked immediately *after* the monthly or hourly income questions used for the previous completion cut-off. This D-code was awarded to 161 responses. D-codes were also awarded to responses containing structural integrity problems and missing information, for example, where a respondent indicated that he/she submitted the return him-/herself, but did not indicate any time on any activity, or where a respondent indicated "paid help" but did not incur any costs. D-codes were also assigned if a respondent indicated that his/her gross monthly salary exceeded R150 000 but then did not complete the field requiring the respondent to specify an amount. The same applied to an hourly rate selected as exceeding R6 000, sundry expenditure exceeding R1 500, and other categories requiring a further answer as a specification, but then left unanswered.

The last consideration for awarding D-codes related to the extreme values (outliers) for Questions 4.3 and 4.8 (Q4.3 and Q4.8), not including the responses with unrealistic hours that were already removed as indicated in Table 4.2. There is no single recommended procedure to deal with outliers that are neither the result of a data entry error or measurement error, but are genuine responses (Laerd Statistics, 2015:10). In consultation with a statistician,[88] the researcher marked responses where the hours exceeded the 99.5th percentile values for a specific activity[89] with a D-code for removal. In addition, winsorizing (replacing outliers with the nearest acceptable values) based on the 5th and 95th percentile values was employed to deal with outliers in other questions where applicable. Possible reasons for extreme values included incorrect recollection by respondents and extreme personal valuation, as also reported in the study by Tran-Nam *et al.* (2014:150). The researcher made a deliberate decision, as Chattopadhyay and Das-Gupta (2002:136) did, to "err on the side of conservatism" even though such an approach may lead to an underestimation of tax compliance costs.

---

[88] Dr Marthi Pohl.

[89] For Q4.3, these hours were 80.00, 36.00, 17.40, 48.00 and 48.56 respectively for the five activities in Q4.3 (namely recordkeeping, obtaining tax knowledge, tax planning/advice, dealing with SARS, as well as calculating tax, completing the return and paying tax). For Q4.8, these hours were 106.10, 24.16, 24.00, 53.18 and 60.00 respectively for the first five activities in Q4.8 (namely recordkeeping, obtaining tax knowledge, tax planning/advice, dealing with SARS and dealing with person who assisted). With regard to the last activity for Q4.8 (paying the tax due), it seemed as if many respondents interpreted this question to refer to actual amount of tax paid and not the time taken to pay the tax. All respondents whose answer for this activity exceeded 16 hours were removed, even though the 95th percentile value was 5.65 hours.

Table 4.3 contains a list of the different D-code criteria, as well as the number of respondents who met each criterion. It should be noted that an individual respondent could be allocated more than one D-code.

Table 4.3:   List of different D-code criteria

Criteria for allocating a D-code	N
Less than 79% completed	161
Q4.1 = Other (flow logic problem)	192
Q4.1 = Self; but no time on activity #5 (Q4.3)	1 188
Q4.1 = Self; but no time on any activity (Q4.3)	483
Q4.1 = Self; only completed last activity; missing values for all other activities	4
Q4.3: Hours exceed 99.5th percentile for any one activity	140
Q4.8: Hours exceed 99.5th percentile for any of first 5 activities	94
Q4.8: Hours exceed 16 for activity #6 (interpretation issue)	204
No time on any activity (Q4.8)	1 222
Completed activity #6 and missing values for all other activities	23
Paid help but no cost indicated	341
Q9.1 Monthly salary > R150 000, but no amount specified	159
Hourly salary or wage indicated as >R6 000, but no amount specified	86
Q4.6: Sundry expenditure indicated as >R1 500, but no amount specified	198
Q4.10: Sundry expenditure indicated as >R1 500, but no amount specified	105
Q5.3: Selected "more than 2 hours", but did not estimate hours	145
Q5.4: Selected "more than R500", but did not indicate amount	27
Q5.5: Selected "more than R1 000", but did not indicate amount	14
Total D-codes allocated	**4 786**

Source: Own data

Even though D-codes were allocated to 4 786 respondents as indicated in Table 4.3, only 3 809 respondents were removed, namely if more than one D-code was allocated to the same respondent in some cases. The removal of these 3 809 responses resulted in 10 260[90] responses remaining for analysis. If the 14 100 responses from the combined dataset are compared to the 145 037 persons who opened the email sent by SARS, the response rate equates to 9.7%, but if the responses after the cleaning process described above (10 260) are used, the response rate drops to 7.07%. Even though the response rate is lower than the 29% obtained by Sapiei and Abdullah (2008:223) and 13.4% obtained by Tran-Nam *et al.* (2014:147), it is higher than the 2.36% obtained by Chattopadhyay and Das-Gupta (2002:7), and is thus deemed acceptable.

---

[90] 14 100 combined dataset responses with at least 74% completion rate *less* 31 responses containing unrealistic hours (Table 4.2) *less* 3 809 responses with one or more D-codes = 10 260 responses.

4.7.2. Phase 1

During the period for which the survey was open for completion (8 December 2017 to 7 May 2018), 880 responses were received. These responses were subjected to a similar cleaning process as the process described for Phase 2 above (Section 4.7.1) to remove extreme values, structural integrity problems and responses with missing information.[91] The remaining *752 complete and useable responses* were used to calculate the tax compliance costs of individual taxpayers for the 2017 year of assessment. It was not possible to determine a response rate for Phase 1, since it is not known how many persons received the survey.

4.8. DATA ANALYSIS

SPSS (in this case, IBM SPSS Statistics 26) was used as the data analysis program, as in many tax compliance cost surveys, for example, in the studies by Hansford and Hasseldine (2012:288) and Steyn (2011:26). The responses collected from Qualtrics were directly exported to SPSS. After the data had been cleaned, as described in Section 4.7, the data analysis process commenced with the 10 260 usable responses from Phase 2 and the 752 usable responses from Phase 1. Standard descriptive statistics in respect of both these phases were calculated, as discussed in detail in Chapters 5 and 6. However, as explained in Section 1.6, only the data in respect of the 2018 year of assessment (collected during Phase 2) were used to ascertain the determinants of the tax compliance costs of individual taxpayers in South Africa (see Chapter 7).

As part of the analysis of the tax compliance cost data collected during Phase 2, further inferential statistical tests were conducted. These included the chi square test of independence (to test whether there was an association between two nominal variables) and one-way Analysis of Variance (ANOVA) (to determine whether or not there were any statistically significant differences between the means of two or more independent groups with regard to continuous tax compliance cost data). If statistically significant differences were found, post hoc tests were conducted to determine which groups were significantly different from each other. Pearson correlation tests were also used to determine the strength and direction of linear relationships between continuous variables. Exploratory factor analysis procedures were employed prior to the analysis of the constructs referred to in

---

[91] Part of the first step in the data cleaning process in Phase 2 was not relevant to Phase 1, namely the collapsing and recoding after combining the two questionnaires.

Section 4.5.1 (based on the scale items) and the Cronbach alpha statistic was used to check the reliability (internal consistency) of the factors.

Building on the analysis described above (see Section 7.2), the CHAID decision tree modelling technique was used to ascertain the determinants of tax compliance costs, instead of regression analysis as used in several other compliance cost studies, for example, by Blaufus *et al*. (2019), Slemrod and Sorum (1984) and Vaillancourt *et al*. (2013). This technique offers a number of advantages over several more commonly used statistical techniques (such as regression analysis) because it is nonparametric and nonlinear (Önder & Uyar, 2017:610). Furthermore, missing data do not present a problem, and normality and homogeneity assumptions of the data are not required. Linear relations between variables are neither assumed nor necessary. Moreover, the technique can be applied to continuous or discrete dependent and independent variables, and its output is highly visual and easy to interpret with multiple trees (Önder & Uyar, 2017:610-611; You, Si, Zhang, Zeng, Leung & Li, 2015:3358). The CHAID outcomes thus identify the determinants, as with regression. They also determine the breakdown of individuals into specific groups, according to the determinants that statistically significantly predict the dependent variable, thereby enabling a better understanding of the influence of the continuous determinants' specific values (for example, SARS's service quality rating) and the categorical determinants (for example, education level and employments status) on tax compliance costs. The CHAID analysis thus provided an additional level of insight and usability of the results not possible with regression analysis.

With the help of a co-coder,[92] the respondents' suggestions on how tax compliance costs could be reduced were grouped according to categories and subcategories using Excel and following an inductive approach. This approach seeks to provide insight into the frequency and patterns of responses with the aim of increasing the usefulness of the data, while sacrificing as little as possible of its comprehensiveness, specificity and validity (Flanagan, 1954:344). Although many answers were vague or ambiguous, the most probable meaning of a response was determined through lengthy discussions between the researcher and co-coder. Furthermore, the coding scheme was developed by the co-coder and was reviewed and adjusted by the primary researcher on an ongoing basis after each discussion. Some

---

[92] Ruanda Oberholzer (Professor at S P Jain School of Global Management in Dubai) was the co-coder. She not only has experience with the coding of open-ended questions, but she obtained her PhD investigating perceptions of taxation among different population groups in South Africa and therefore also has a deep understanding of the topic under investigation.

adjustments resulted in the creation of a new main or subcategory, and other adjustments resulted in the combination of a main or subcategory.

4.9. DATA QUALITY (RELIABILITY AND VALIDITY)

According to Middleton (2019), the reliability and validity of results depend on a robust research design, selecting appropriate sampling methods, and conducting the research carefully and consistently. Reliability is about the *consistency* of the measuring instrument (in this study, the questionnaire). Validity is about the *accuracy* of the instrument (Middleton, 2019). Since the questionnaire was administered online, it may be considered reliable, because there was no risk that questions could be rephrased differently, which would have been a concern if the data were collected, for example, by conducting interviews. The fact that only minor changes were made to the questionnaire between the two phases in respect of the two different years of assessment (as explained in Section 4.5.2) also indicates that the measuring instrument was reliable and consistent as a tool to measure the tax compliance costs of individual taxpayers across different periods (in other words, the questionnaire was repeatable). Furthermore, the scales used to measure constructs relating to tax compliance costs (as explained in Section 7.2) had a high internal consistency reliability.

To ensure the *accuracy* of the questionnaire and consequently the validity of the conclusions reached in the current study, a number of strategies were employed. The questionnaire was reviewed by leading local and international tax academics, which included an international *expert on tax compliance costs*,[93] to verify whether or not any relevant questions had been or should be omitted. Furthermore, the questionnaire was tested during each data collection phase by means of a pilot survey prior to being formally distributed. The pilot testing measured the time required to complete the questionnaire, and ensured that the questions were unambiguous[94] (cognitive testing).

The sampling methods were deemed appropriate to produce valid, generalizable results. This was confirmed by testing for the *representativeness* of the observed samples and for *non-response bias*. The demographic characteristics of the respondents (for example, location, age, gender and level of income) were compared to those of the individual taxpayer

---

[93] Prof. Chris Evans (see Footnote 83).
[94] This was done by requesting respondents who completed the questionnaire during the pilot testing phase to provide feedback regarding the clarity of the questions, and also by considering the reasonableness of responses received during the pilot testing. Questions were reworded or clarified where necessary.

population in South Africa. Based on these comparisons, the sample collected during Phase 2 was found to be representative of the population (see Section 5.2), but the sample collected during Phase 1 was skewed towards higher income earners (see Section 6.2). However, because the sample in Phase 1 also exhibited a wide range of variation in the respondents' demographics, this skewing was not considered a problem, since Tran-Nam *et al.* (2014:147) explain that a range of variation may even be more important than representativeness, since results can be weighted with population proportions if they are not representative. Based on Tran-Nam *et al.*'s (2014:147) argument, therefore, weighting factors were applied to the results of Phase 1 (see Section 6.5).

Testing for non-response bias is important, since there may be systematic differences in some key areas between respondents and non-respondents (those who have, for whatever reason, decided not to respond to the research) that may influence the overall results (Creswell, 2013:157; Tran-Nam *et al.*, 2014:148). Since it was not possible to identify non-respondents in this study, re-surveying a sub-sample of non-respondents or analysis of known characteristics could not be used to test for non-response bias, but wave analysis was employed (Lewis, Hardy & Snaith, 2013:241) to address this issue. A wave analysis compares respondents' answers to certain key questions in the survey with reference to the point of time *when* the respondents answered these questions. The assumption underlying this analysis is that, based on the continuum of resistance theory, late responders are almost non-responders and can therefore be used as a proxy for the non-response group (Lewis *et al.*, 2013:241; Tran-Nam *et al.*, 2016:467). The number of questions used in wave analysis vary in the literature: for example, Tran-Nam *et al.* (2014:149) used only one question, but Tran-Nam *et al.* (2016:467) used two questions for their analysis.

It was decided to use responses to three key questions for each of the phases of this study. The responses to these questions, received from early and late respondents respectively (the first 100 and last 100 responses), were compared statistically to detect non-response bias. The questions, as well as the reason for their being considered key questions, were the following:

- *Question 4.1: Indication of who submitted the income tax return*
  Reason: The use of paid assistance is an important determinant of tax compliance costs (Tran-Nam *et al.*, 2014:161).
- *Question 4.3: Estimation of total time spent on each of five listed tax compliance activities*

Reason: Time spent on income tax-related activities is one of the main components of tax compliance costs (Pope, 1989:134).

- *Question 11.4/12.4:[95] Perception regarding administrative quality of service received from SARS*

    Reason: The statements provided in this question are considered key attitudinal statements, since an additional tax compliance burden may arise from information procurement if the administrative quality is low (Eichfelder & Kegels, 2014:203).

Each of the above three questions necessitated a different statistical test to determine whether or not there were significant differences between the early and late response groups (waves), based on the types of variables under consideration. The non-parametric Pearson's Chi-Square (χ^2) test was used for Q4.1 (two categorical variables). The Multivariate Analysis of Variance (MANOVA) was used for Q4.3 – one numeric (time spent on each activity) and one categorical variable. One-way ANOVA was used for Q11.4 – one numeric (mean ratings) and one categorical variable. The determination of the different waves for each of the phases and corresponding statistical results are provided next, again in order of importance for the study.

4.9.1.   Wave analysis – Phase 2

The 10 260 responses obtained during Phase 2 were divided into three waves as follows:

- Wave 1 (early): **first 100** responses (all on 18 March 2019);
- Wave 2 (middle): next 10 060 responses (from 18 March to 12 April 2019); and
- Wave 3 (late): **last 100** responses (from 12 to 30 April 2019).

No statistically significant differences were found between the *early* and *late* groups with regard to any of the questions (p > 0.05), as is clear from the following results summary:

- Pearson's Chi-Square test result for Question 4.1: χ^2(3, n=200) = 2.639, **p = 0.451**;
- MANOVA result for Question 4.3:[96] F(5, 105) = 1.510,[97], **p = 0.193**; and
- One-way ANOVA result for Question 11.4:[98] F(1, 80) = .132, **p = 0.717**.

---

[95] Due to small adjustments to the questionnaire, this question's number was 11.4 during Phase 2.
[96] Question 4.3 was only answered by respondents who completed their income tax return themselves and thus only 57 respondents answered this question in the first wave and 54 did so in the last wave.
[97] All four multivariate statistics, namely Pillai's Trace, Wilks Lambda, Hotelling's Trace and Roy's Largest Root, resulted in the same F statistic because only two groups were compared.
[98] Question 11.4 was only answered by respondents who had some interactions with SARS and thus only 34 respondents answered this question in the first wave and 48 respondents did so in the last wave.

4.9.2. Wave analysis – Phase 1

For the sake of consistency with the number of responses used in the wave analysis for Phase 2, the three waves for this phase were the following:

- Wave 1 (early): **first 100** responses (8 December 2017 to 2 March 2018);
- Wave 2 (middle): next 552 responses (2 March 2018 to 20 March 2018); and
- Wave 3 (late): **last 100** responses (20 March 2018 to 7 May 2018).

No statistically significant differences were found between the *early* and *late* groups with regard to any of the questions (p > 0.5), as is clear from the following results summary:

- Pearson's Chi-Square test result for Question 4.1:[99] χ^2(2, n=200[100]) = 3.837, **p = 0.147**;
- MANOVA result for Question 4.3:[101] F(5, 139) = .536[102], **p = 0.749**; and
- One-way ANOVA result for Question 12.4:[103] F(1, 98) = .152, **p = 0.698**.

Therefore, assuming that late respondents can be used as a proxy for non-respondents, it can be concluded from the above testing that no non-response bias was detected for the survey during either Phase 1 or Phase 2.

4.10. DATA MANAGEMENT

According to Fink (2003:2), data management consists of the activities that a researcher has to undertake to organize survey information so that it can be analysed, such as creating a codebook, establishing reliable coding, reviewing surveys for incomplete or missing data and cleaning the data. Therefore, the codebook (containing the variable names and labels) of the survey information is preserved with the data, while the coding of the different response options is contained in the exported questionnaires.

In this study, incomplete or missing data were picked up by running frequency analyses on SPSS and were either addressed as part of the comprehensive data cleaning process described in Section 4.7 or when analysing a specific question, as described in Chapters 5

---

[99] For the purposes of this analysis, the variable was recoded into only three categories, namely "self", "paid help" and "other" because of the low number of respondents in some categories.

[100] 100 + 100 = 200.

[101] Question 4.3 was only answered by respondents who completed their income tax return themselves and thus only 73 respondents answered this question in the first wave and 72 respondents did so in the last wave.

[102] All four multivariate statistics, namely Pillai's Trace, Wilks Lambda, Hotelling's Trace and Roy's Largest Root, again resulted in the same *F* statistic because only two groups were compared.

[103] Question 11.4 was only answered by respondents who had some interactions with SARS and thus only 55 respondents answered this question in the first wave and 45 respondents did so in the last wave.

to 8. The comprehensive data cleaning process also resulted in the removal of responses containing errors and inconsistencies. Appropriate measures to deal with outliers were implemented. Smaller changes, such as converting numbers written in full or with a currency symbol ("R") to a numeric format, allowed for the analysis of all valid responses. Where questions allowed a respondent to choose a response from the options provided and/or indicate the "Other – please specify" option, the "other" category was analysed, and the answers provided were either re-allocated to the original or new categories, or left in the "other" category. However, apart from the original cleaning of data, due to complicated analyses (see Section 4.8) and the large number of responses, especially during Phase 2, the data were continuously managed and updated to make sure that they were "clean", complete, and appropriate for the analyses, as recommended by Fink (2003:2). For example, seven age categories were recoded into only three categories for certain statistical tests.

Furthermore, even though Qualtrics can compel respondents to answer a specific question of the survey before being allowed to move to a subsequent question, it is believed that forcing respondents to answer every question is coercive and unethical (Fink, 2003:12). This facility in Qualtrics was therefore only employed in instances where an answer was necessary for the correct application of the display logic of the questionnaire. Because answers to all questions were not forced, missing data were found and these were dealt with on a question-by-question basis.

A further data management consideration was the preservation and sharing of data. Data preservation refers to the physical and digital methods used to ensure that data are archived and protected for future use, but the process goes beyond simply storing files on a hard drive (Hoelter, Pienta & Lyle, 2016:653). According to Hoelter *et al.* (2016:654), preservation includes deciding on a file format that will remain robust over time and help retain data integrity, such as SPSS and tab-delimited formats for quantitative data and .xml and pdf for other documentation. Therefore, the survey data collected in this study were preserved in SPSS and the questionnaire was converted to a pdf and was stored with the data. The data is currently stored on the researcher's hard drive (and on dropbox for back-up purposes), while the questionnaire and original responses are kept on Qualtrics for back-up purposes. Due to the confidential nature of the study and the Memorandum of Understanding signed between SARS and UNISA, only SARS, the supervisors, statistician and co-coder obtained copies of these data files and they will not be shared on an open source platform.

4.11. RESEARCH ETHICS

According to Saunders *et al*. (2019:263-275), a researcher who respects research ethics must ensure that all the processes that are followed in producing, storing and finalising the research output are both methodologically sound and morally defensible to all parties involved in the research process. It is thus clear that all stages of the research process are affected by ethical concerns.

Saunders *et al*. (2019:257-259) list a number of key ethical issues. The core ethical principles that were adhered to in this study include each participant's right
- to be fully informed;
- to informed consent;
- to withdraw;
- to confidentiality/anonymity;
- to the confidential processing and storing of data; and
- to high quality research.

These ethical considerations were explained in the informed consent form, which was provided to all participants in Phase 1 (see Appendix C). In Phase 2, the information content of the informed consent form was incorporated in the cover letter to the e-mail that was distributed by SARS to the taxpayers, and in the first question of the survey instrument, where respondents could also indicate their consent.

Ethical approval for this study was obtained from the UNISA College of Accounting Sciences Ethics Review Committee on 22 August 2017 (see Appendix D).

4.12. CONCLUSION

This chapter has provided information on the philosophical stance of the researcher, namely positivism, which is based on the researcher's preference for collecting data about an observable reality, in this case, the time and costs incurred by individual taxpayers in complying with income tax regulations in South Africa, while the researcher remains neutral and independent from what is being investigated. This research fits into a functionalist paradigm, since the dimensions of objectivism and regulation were adopted in the research in the way in which tax compliance costs were calculated and examined to obtain rational explanations for these costs' being high or low.

Furthermore, the selection of a quantitative research design has been justified. This research design entailed the use of an online questionnaire to collect the data, enabling the numerical measurement of the variables (the calculation of tax compliance costs) and the performance of various statistical tests during the data analysis process (for example, explaining relationships between variables and ascertaining the determinants of tax compliance costs).

The reason and impact of the use of different sampling and data collection methods have been explained. Given the crucial role that the questionnaire played in this study, this chapter contained an in-depth discussion of the design and content of the questionnaire, an explanation of why Qualtrics Survey Software was used and how pilot testing was conducted for each of the two phases. The comprehensive data cleaning process was described to put into perspective usable responses (namely 10 260 from Phase 2 and 752 from Phase 1), after which the statistical tests that were used during the data analysis process were described. The chapter has also explained the processes put in place to enhance and ensure the quality and management of the data. Lastly, relevant ethical considerations adhered to have been addressed.

Since the focus of this study is on the data obtained from the 10 260 respondents who responded in Phase 2 (as explained in Section 4.7), the analysis of the empirical evidence related to the calculation of tax compliance costs and the actual calculation of the tax compliance costs of these respondents is presented in the next chapter, Chapter 5, followed by the discussion of the results for Phase 1 in Chapter 6.

CHAPTER 5:
CALCULATION OF TAX COMPLIANCE COSTS FOR
THE 2018 YEAR OF ASSESSMENT

5.1. INTRODUCTION

In order to calculate the tax compliance costs of individual taxpayers in South Africa, a survey administered by means of an online questionnaire was used as the data collection instrument. As explained in Section 4.5, the questionnaire was designed to incorporate all the elements necessary to calculate tax compliance costs, to obtain information regarding the possible determinants of tax compliance costs and to allow respondents to provide suggestions on how tax compliance costs could be reduced. In this chapter, the empirical evidence regarding the calculation of the tax compliance costs collected from the questionnaire relating to the 2018 year of assessment is analysed. The data are then used to calculate the tax compliance costs of the respondents in the population for the tax year under review, namely individual taxpayers who had to submit an income tax return for the 2018 year of assessment.

The analysis of the results commences with an assessment of the representativeness of the responses collected in Phase 2 from individual taxpayers in respect of their 2018 income tax return against the full population of individual taxpayers, where possible (Section 5.2). Thereafter the income tax return submission threshold is discussed and possible reasons for *voluntary* submissions are presented (Section 5.3). Furthermore, reasons why respondents opted to complete and submit their income tax returns themselves and not obtain help (or *vice versa*) are investigated to determine whether or not any specific demographic characteristics (Section 5.4) or perhaps more complex sources of income (Section 5.5) influenced their decisions.

In Sections 5.6 to 5.9, the information provided by respondents regarding the time they spent and costs incurred on tax compliance activities up to the point of submitting their income tax return is analysed. The valuation of the respondents' time is discussed, and then the tax compliance costs of respondents up to the submission of the return are calculated, based on different valuation methods. Activities relating to provisional tax returns and penalties and interest incurred by respondents are considered in Sections 5.10 and 5.11. Then Section 5.12 contains the data on all post-filing activities and the calculation of the tax compliance

costs relating to these. After calculating the total tax compliance costs of the respondents in Section 5.13, these costs are tested for regressiveness (Section 5.14) before being extrapolated to the population for the 2018 tax year under review (Section 5.15).

5.2. REPRESENTATIVENESS OF RESPONSES

All nine provinces of South Africa were represented by the respondents. Most of the respondents (75.6%) resided in three provinces: Gauteng (46.7%), the Western Cape (16.9%) and KwaZulu Natal (12%). This representation follows a similar distribution pattern to that of assessed individual taxpayers reported by the National Treasury and SARS (2019:49), which noted that 66% of assessed individual taxpayers reside in these three provinces: Gauteng (35.9%), the Western Cape (16%) and KwaZulu Natal (14.1%). Figure 5.1 depicts the distribution of respondents and the population (assessed individual taxpayers for the 2018 year of assessment) across all the provinces, based on the province where the taxpayer resides, and not the province where the SARS office is located at which the taxpayer is registered.

Figure 5.1: **Geographic location**

	Gauteng	Western Cape	KwaZulu Natal	Eastern Cape	Mpumala nga	Free State	North West	Limpopo	Northern Cape	Unknown /Living abroad)
■ Respondents	46.7%	16.9%	12.0%	6.1%	4.8%	4.3%	3.6%	3.1%	1.8%	0.7%
■ Population	35.9%	16.0%	14.1%	8.5%	5.7%	4.9%	4.6%	5.2%	2.1%	3.0%
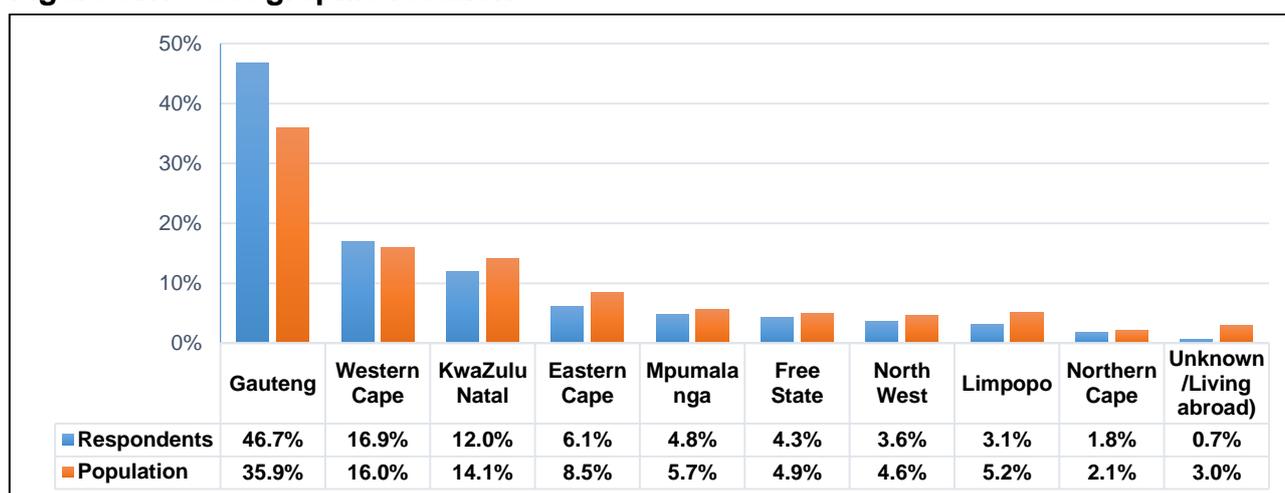
Source: Own data and National Treasury and SARS (2019:49)

The overall age distribution of respondents (see Figure 5.2) displayed a similar trend to that of the population from which the sample was drawn, namely individual taxpayers who submitted an income tax return for the 2018 year of assessment. Compared to the population, the younger taxpayers were slightly underrepresented among the respondents.

Figure 5.2:   Age distribution[104]

	25 or younger	26 to 34	35 to 44	45 to 54	55 to 64	65 to 74	75 or older
■ **Respondents**	0.7%	21.7%	26.4%	24.4%	16.7%	7.6%	2.4%
■ **Population**	2.7%	23.6%	27.3%	23.0%	14.9%	5.9%	2.6%
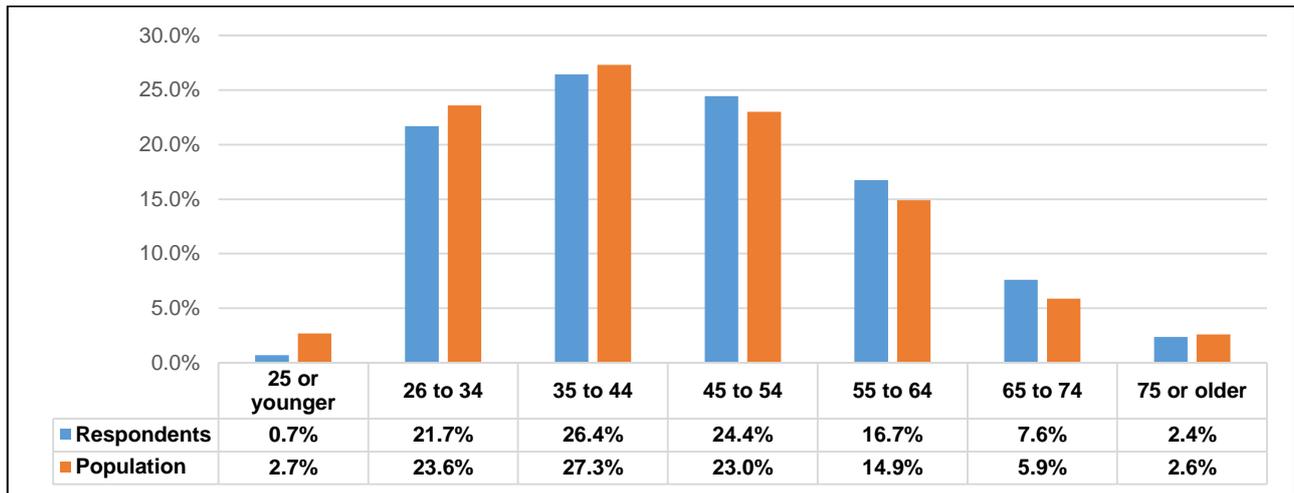
Source: Own data and National Treasury and SARS (2019:66)

The split between male and female respondents was almost perfectly aligned with the gender split of the assessed individual taxpayers in the population for the tax year under review, namely the 2018 year of assessment, as can be seen in Figure 5.3.

Figure 5.3:   Gender distribution[105]

	Male	Female	Prefer not to indicate
■ **Respondents**	54.3%	44.0%	1.6%
■ **Population**	54.5%	45.5%	0%
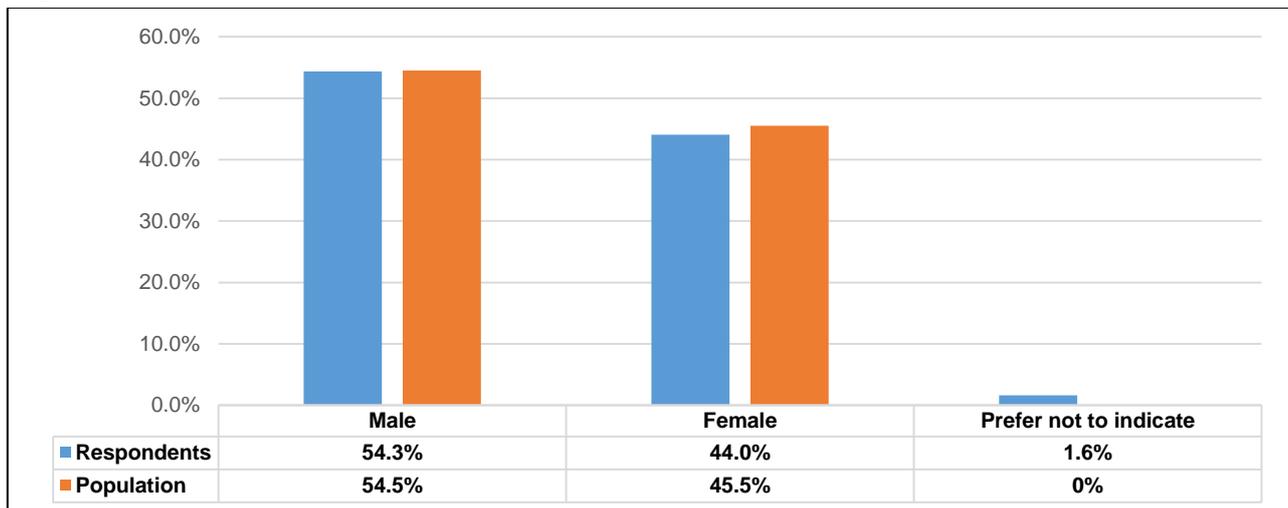
Source: Own data and National Treasury and SARS (2019:67)

The distribution based on taxable income is important, since previous studies have shown the regressive nature of tax compliance costs, for example, the studies by Chattopadhyay and Das-Gupta (2002), Pope and Fayle (1990), Steyn (2011) and Vaillancourt (1989). It was, however, not possible to perform an exact comparison between the taxable income of the respondents and the population, due to different cut-off points in the taxable income

---

[104] Due to rounding, the respondents' total added up to 99.9% instead of 100%.
[105] Due to rounding, the respondents' total added up to 99.9% instead of 100%.

categories. The taxable income brackets used in the survey were based on the actual tax brackets for the 2018 year of assessment, but SARS publishes broader taxable income categories to enable comparisons over different years of assessment, because tax brackets change every year. Furthermore, some respondents indicated that they did not know into which tax bracket they fell and some preferred not to indicate their tax bracket.

Figure 5.4 provides a visual comparison of the taxable income of the respondents and of the population for the 2018 year of assessment, even though the taxable income categories differ slightly. Respondents who indicated that they did not know their income tax bracket or preferred not to indicate their income tax bracket were ignored for the purposes of this comparison.

Figure 5.4:   Taxable income distribution

Taxable income: Respondents

- 21%
- 24%
- 20%
- 12%
- 9%
- 14%

- Not exceeding R189 880
- R189 881 to R296 540
- R296 541 to R410 460
- R410 461 to R555 600
- R555 601 to R708 310
- Exceeding R708 310

Taxable income: Population

- 29%
- 23%
- 18%
- 15%
- 9%
- 7%

- Not exceeding R150 000
- R150 001 to R250 000
- R250 001 to R350 000
- R350 001 to R500 000
- R500 001 to R750 000
- Exceeding R750 000
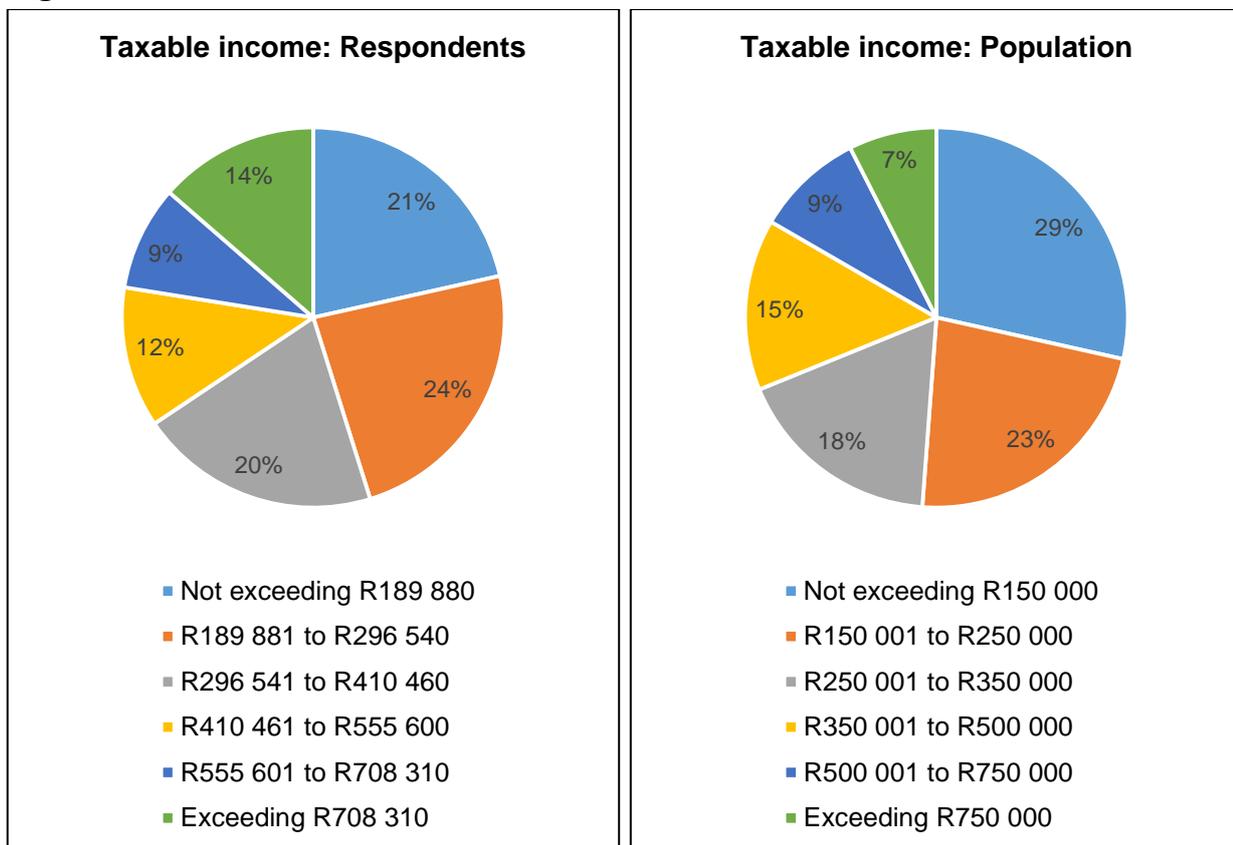
Source: Own data and National Treasury and SARS (2019:62)

Figure 5.4 illustrates that even though the taxable income categories were not perfectly aligned, the distribution of the respondents follow a similar trend to the population, based on taxable income for the 2018 year of assessment. Apart from taxable income, one can also consider the distribution of respondents based on their gross annual salary income. It is not possible to compare this information in relation to the entire population, as SARS does not

report on this aspect and not all taxpayers are employed, but this distribution is important, since taxpayers under a certain threshold do not need to submit an income tax return.

5.3. INCOME TAX RETURN SUBMISSION THRESHOLD

Of the 10 260 respondents, 8 641 (84%) indicated that they were employed full-time. Their gross annual salaries are depicted in Figure 5.5.

Figure 5.5: Gross annual salary distribution of the 8 641 respondents employed full-time
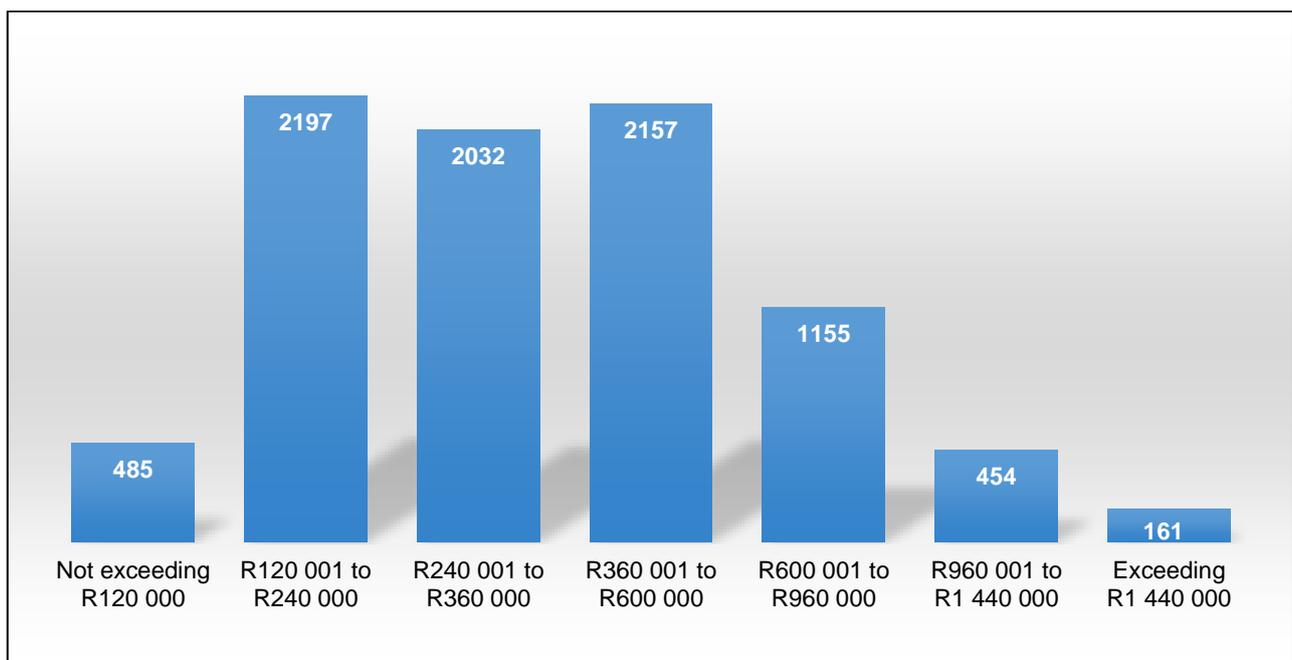
Source: Own data

As illustrated in Figure 5.5, the gross income of respondents employed full-time predominantly fell into three gross income categories, namely R120 001 to R240 000, R240 001 to R360 000 and R360 001 to R600 000 per annum.

More importantly, 4 714 (485 + 2 197 + 2 032) of the respondents employed full-time earned an annual salary of no more than R360 000. This finding is important because this is the income tax return submission threshold – that is, the amount below which a person need not submit an income tax return to SARS. The submission threshold introduced in 2008 was R120 000, and the threshold remained at this level until the 2013 tax year, when it was increased to R250 000. In the 2015 tax year, it was increased again, to R350 000 and this threshold was still in effect for the 2018 year of assessment, which is the year reviewed in Phase 2 of the current study.

As mentioned above, the submission threshold allows taxpayers to elect whether or not to submit a return for assessment if they meet specific criteria (National Treasury & SARS, 2019:43). For the 2018 year of assessment, individuals who earned remuneration from only one employer up to R350 000 per annum[106] and whose employer withheld employees' tax (plus further requirements[107]) were not obligated to submit an income tax return. Despite this concession, according to SARS, there are many individual taxpayers[108] who still submit an income tax return, even though they are below the compulsory submission threshold (National Treasury & SARS, 2019:38). One possible reason why taxpayers who are not liable to submit a return do elect to submit a return is to recover the employees' tax withheld by their employers, as they may qualify for refunds that the employer was not aware of (National Treasury & SARS, 2019:38). Even if employers are aware of the medical expenses incurred by their employees, the additional medical expenses tax credit provided for in section 6B of the *Income Tax Act* (RSA, 1962) may only be taken into account by an employer if the employee will be 65 years or older on the last day of the year of assessment, according to the Fourth Schedule paragraph 9(6) of the *Act* (RSA, 1962). Since the majority of full-time employees in the sample would not be 65 years or older (see Figure 5.2) and also because the "normal retirement age" as defined can be as early as 55 years, in terms of section 1 of the *Act* (RSA, 1962), the additional medical expenses tax credit could only be obtained if the individual submitted an income tax return.

Of the assessed taxpayers for the 2018 year of assessment, more than half (52.48%) who qualified for the additional medical expenses tax credit did not have a taxable income of more than R300 000 and a further 20.53% were in the taxable income group from R300 001 to R400 000 (National Treasury & SARS, 2019:107). Even though the submission threshold is based on gross remuneration from one employer and not on taxable income, the information relating to the percentage of taxpayers with low taxable income qualifying for the additional medical expenses tax credit is a strong indication that there may be many individuals who earn less than the compulsory submission threshold, but who elect to submit an income tax return in order to obtain the tax benefit relating to additional medical

---

[106] Unfortunately, the income bracket in the questionnaire was up to R30 000 per month, which equates to an annual amount of R360 000 and thus was not exactly comparable to the R350 000 limit.

[107] That individual may not have a car allowance or company car or travel allowance or other income (for example, interest or rental income). If an individual is claiming tax-related deductions or rebates (for example, medical expenses, retirement annuity contributions other than pension contributions made by an employer and travel expenses), such an individual may elect to submit an income tax return (SARS, 2018b:3).

[108] During the 2016 tax season, 1.8 million people who did not need to submit an income tax return did so, while in the 2017 tax season, 1.6 million people who did not need to submit an income tax return did so (SARS, 2018b:1).

expenses. The problem that many taxpayers are faced with is that they do not know whether they are entitled to an additional medical expenses tax credit due to the inherent complexity of the legislation provisions (Smulders, Stark & Tickle, 2019:210-211) and thus they *voluntarily* submit an income tax return to ensure that they do not miss out on a possible refund.

The additional medical expenses tax credit is a rebate that is non-refundable, but it is used to reduce the normal tax a person pays (SARS, 2019f:2). The credit is limited to the tax payable *before* the offset of employees' tax and provisional tax, and can accordingly never create a refund, nor can any excess be carried forward to the next year of assessment (SARS, 2019f:9). In other words, the possible refund is from employees' tax and provisional tax paid in respect of the individual. If the credit therefore results in a reduction of the tax paid, the taxpayer becomes entitled to a refund (SARS, 2019f:31). However, even if an individual incurs qualifying medical expenses, the total amount incurred in respect of these expenses may not be sufficient to result in a medical expenses tax credit, since this credit is contingent on various factors, including the person's taxable income. The lower the person's taxable income, the higher the possibility of obtaining the additional medical expenses tax credit. For example, for persons younger than 65 years without a disability, the formula to determine an additional medical expenses tax credit is the following:

> {[(contributions made to medical schemes - (4 x medical scheme fees tax credit)) +
> qualifying medical expenses] - (7.5% x taxable income)} x 25%
>
> (RSA, 1962: section 6B)

Of the 4 714 respondents employed full-time who earned an annual salary of no more than R360 000, more than half (2 866) indicated that they had incurred medical expenses. It is not possible with the data obtained from the questionnaire[109] to determine which of these respondents *voluntarily* submitted an income tax return without obtaining any tax benefit, which would open up the debate of whether these (unnecessary) compliance costs incurred should be taken into account in calculating the tax compliance costs for this study. Unnecessary filing also creates administrative costs for SARS. Hence, in June 2018, SARS embarked on a campaign to discourage individuals from filing unnecessarily by sending personalised and direct communications to taxpayers who were potentially not required to

---

[109] Future researchers should note that it may be beneficial to ask whether or not the person voluntarily submitted an income tax return and whether or not a refund/tax benefit was obtained.

submit an income tax return, based on the information they submitted during the preceding year of assessment (SARS, 2018b).

<div style="border:1px solid; padding:10px;">

Lesson learnt: Consider including a follow-up question for a full-time employed respondent whose remuneration is less than the submission threshold (and no other income was indicated), for example, a question to determine whether or not a tax refund was obtained. This additional information could be used to determine whether or not the respondent voluntarily submitted an income tax return without obtaining any tax benefit. Alternatively, a respondent could be asked whether or not the income tax return had been submitted voluntarily or because it was compulsory, but it is anticipated that some respondents may not know.

</div>

The debate in previous studies surrounding mandatory and voluntary compliance costs did not focus on mandatory vs voluntary submission of an income tax return, but on tax planning. Sandford *et al*. (1989:12-13) recognise that various costs are avoidable in a literal sense, but a more realistic, or common sense, approach should be applied when considering what should form part of tax compliance costs. For example, tax planning that is a normal part of commercial activity to reduce tax could be included in tax compliance costs, but must be distinguished from "artificial transactions with no commercial relevance" which are undertaken with the sole objective of reducing taxes and are associated with deliberate evasion, which should not form part of tax compliance costs (Chattopadhyay & Das-Gupta, 2002:10).

The remaining 1 619 (16%) respondents, who were not employed full-time but were employed part-time, self-employed, retired or unemployed, provided a gross hourly rate instead of a monthly gross salary. Figure 5.6 indicates the distribution of these 1 619 respondents in the different hourly rate categories. The question presented to these respondents was phrased as follows:

> This question is concerned with the value of your time. What is your **hourly** salary/wage (before tax) or your charge-out rate or what would you be prepared to work for (if not employed)?

Figure 5.6: Distribution of gross hourly rates of the 1 619 part-time employed, self-employed, retired or unemployed respondents
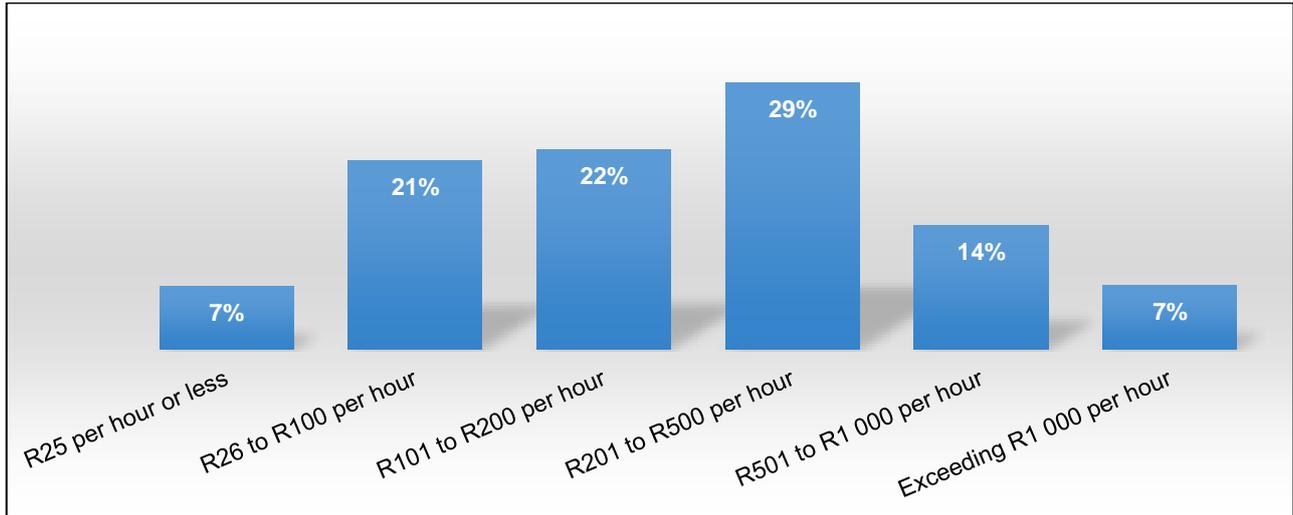
Source: Own data

It is clear from Figure 5.6 that the majority (72%) of respondents who were not employed full-time earned from R26 up to R500 per hour, and 21% of respondents earned more than R500 per hour, or would be prepared to work for such a rate, if they were not employed. This may be explained by the fact that 34% of all the respondents had only school-level education and no further education, but 46% had obtained an undergraduate qualification and 20% had continued to study to obtain postgraduate qualifications. The majority of the respondents (55%) rated their tax knowledge as "average". Figure 5.7 contains graphs of both the highest education level and tax knowledge of the respondents.

Figure 5.7: Highest education level and tax knowledge of respondents
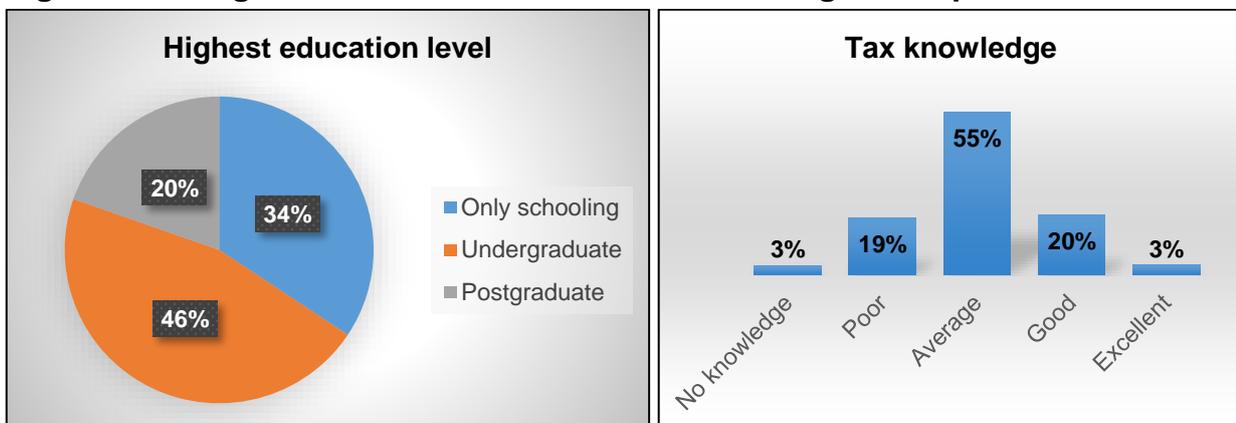
Source: Own data

The monthly salaries and hourly rates provided by the respondents were analysed further when the value of respondents' time was determined for the purposes of calculating tax

compliance costs (see Section 5.7). Obtaining assistance with income tax return submissions may also influence tax compliance costs, and reasons why respondents opted to submit their income tax returns themselves and not obtain help (or *vice versa*) were investigated next, to determine whether or not demographic characteristics (such as age and income levels, but also level of education and tax knowledge, discussed above) influenced respondents' decisions about obtaining assistance with their income tax return submission or completing their returns by themselves.

5.4.   ASSISTANCE WITH INCOME TAX RETURN SUBMISSION

The majority (54%) of respondents submitted their income tax returns themselves, while 18% paid someone to assist with the submission. The remaining respondents (28%) either obtained help from a SARS employee (20%) or from a friend or family member (8%) for free.

The respondents who submitted their income tax returns themselves could select various relevant reasons (one or more) for submitting the return themselves. As indicated in Figure 5.8, the main reason given was that the respondent's tax affairs were simple. The second most cited reason was that the online help function while using e-filing was sufficient to enable the respondent to submit the income tax return, which may explain why many taxpayers who rated their tax knowledge as no knowledge or poor knowledge could submit their tax returns themselves, without requiring, for example, paid assistance.[110]

Figure 5.8: Reasons why income tax return was submitted by respondents themselves
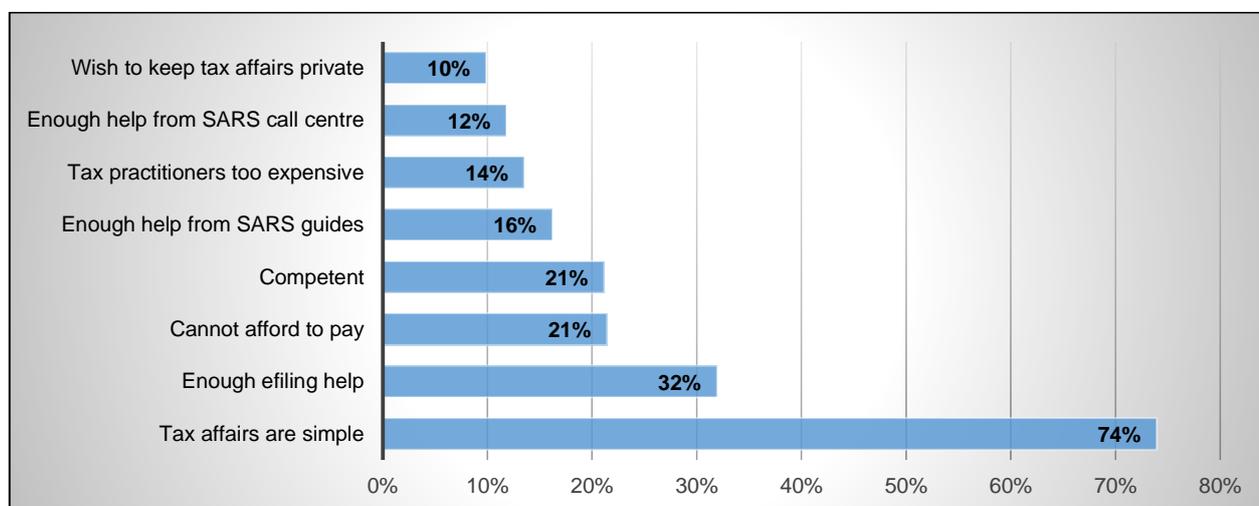
Source: Own data

---

[110] See Figure 5.11.

The respondents who obtained help with the submission of their income tax returns could also select various relevant reasons (one or more) for their obtaining paid help. As indicated in Figure 5.9, the two most cited reasons were "I want to get my tax refund quickly" and "My income tax return is too complicated".

Figure 5.9:   Reasons why paid help was obtained
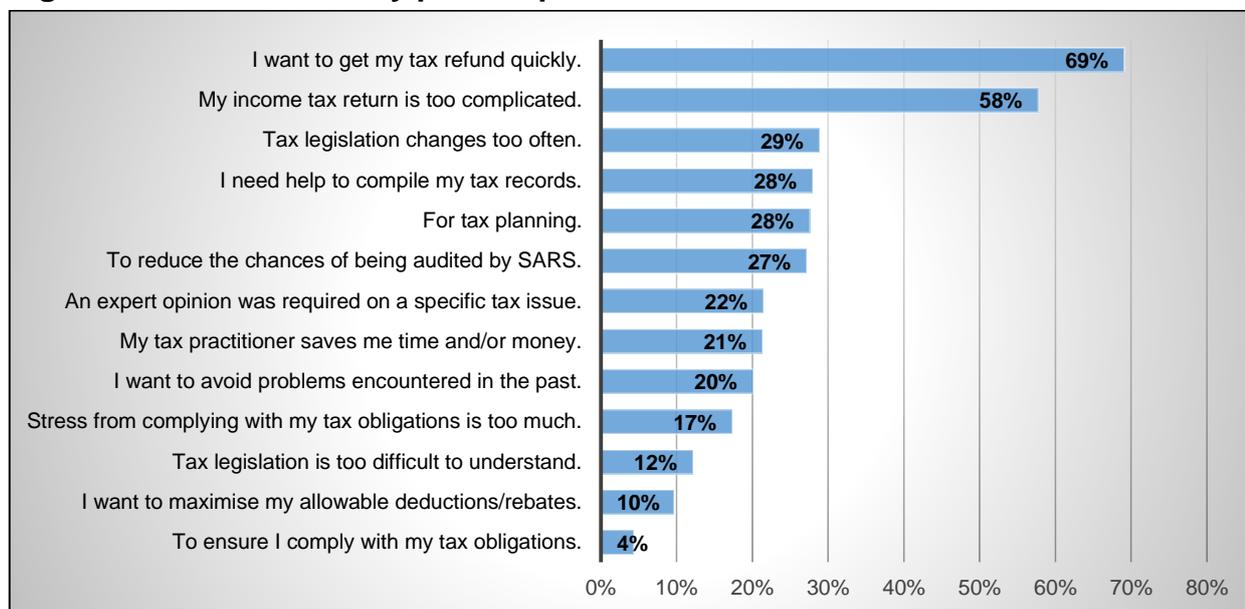
Source: Own data

A chi-square test for independence was performed on the association between the education level of the respondents and their decision either to submit their income tax return themselves ("self"), obtain free help from a friend/family/colleague ("free help"), pay for assistance ("paid help") or obtain help from a SARS employee ("SARS employee"). This decision is referred to as "type of assistance". This chi-square test was repeated for tax knowledge vs type of assistance. In both instances, there was a statistically significant association between the tested variable and type of assistance, namely

- χ^2(6, n=10 238) = 91.36, p < 0.001 for education; and
- χ^2(12, n=10 241) = 975.17, p < 0.001 for tax knowledge.

Given the large sample size and its impact on statistical significance, an effect size called the Cramer's V value was determined. For education vs type of assistance the Cramer's V value (0.07) indicated a small effect (based on three categories),[111] while the Cramer's V

---

[111] Based on three categories (the lesser of row categories minus 1 and column categories minus 1 = 2) the Cramer's V value indicates a small effect if it equals 0.07, a medium effect if it equals 0.21 and a large effect if it equals 0.35 (Pallant, 2007:217).

value for tax knowledge vs type of assistance (0.18) indicated a medium effect (based on four categories).[112] Figure 5.10 and Figure 5.11 present the patterns of responses from the cross-tabulation in two graphs.

Figure 5.10: Type of assistance vs education levels of 10 238 respondents
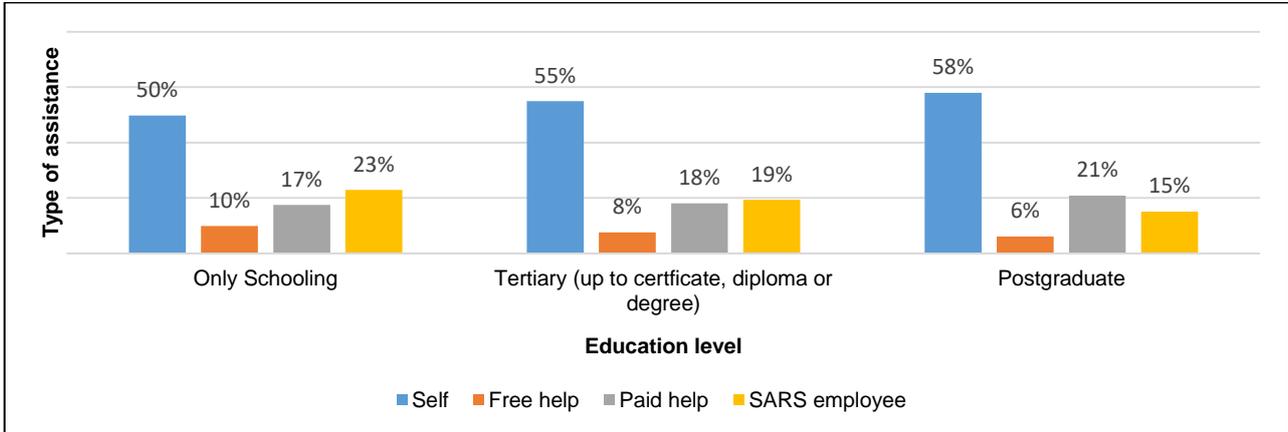
Source: Own data

From the chi square and cross-tabulation findings as depicted in Figure 5.10, it is thus clear that the distribution trends were fairly similar across all education levels: respondents with postgraduate qualifications used free help and SARS employee assistance the least, whereas respondents who had only school-level education used these two types of assistance the most. Therefore, more educated taxpayers use either more paid help, or submit their own income tax returns. Figure 5.11 presents the tax knowledge of the respondents against their type of assistance.

Figure 5.11: Type of assistance vs tax knowledge of 10 241 respondents[113]
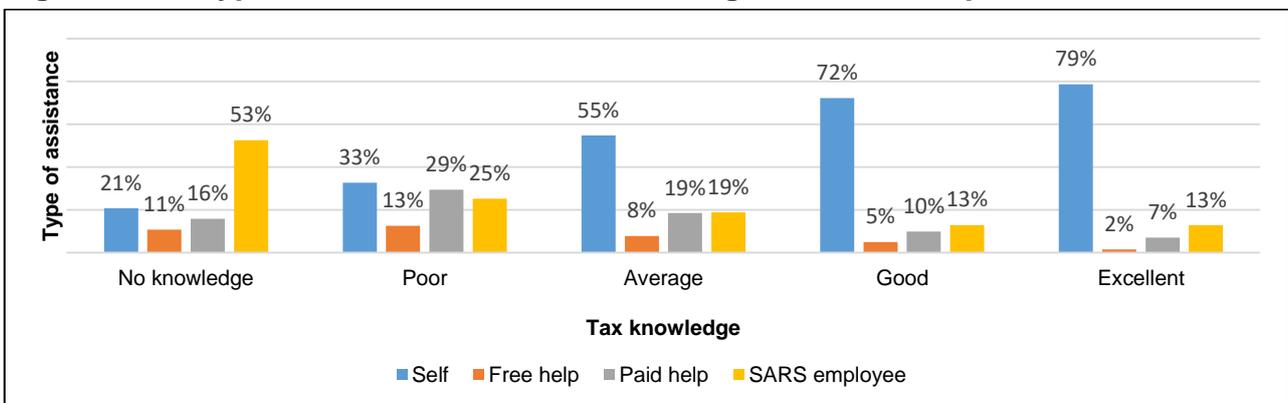
Source: Own data

---

[112] Based on four categories (lesser of row categories minus 1 and column categories minus 1 = 3) the Cramer's V value indicates a small effect if it equals 0.06, a medium effect if it equals 0.17 and a large effect if it equals 0.29 (Pallant, 2007:217).
[113] Due to rounding, some categories added up to 101%.

Figure 5.11 illustrates that the majority of respondents with average, good or excellent tax knowledge submitted their own income tax returns. The majority (53%) of respondents with no tax knowledge used a SARS employee to help them to submit their return. There was no clear distinction between the decision of respondents with poor tax knowledge regarding submitting themselves, using paid help or using a SARS employee. These findings may be read in the light of the findings of Tran-Nam *et al.* (2014:169), who compared results obtained in respect of two tax periods 17 years apart (namely 1994-95 and 2011-12); they suggest that there may be a link between income level and the use of paid help based on the evidence that "very high-income personal taxpayers have increased the amount of outsourcing of their tax obligations to professional tax advisers".

To test this finding, a chi-square test for independence was performed on the association between gross income (using the division as discussed in Section 5.3, namely monthly for full-time employee respondents and hourly for all other respondents) and the type of assistance chosen, if any. This chi-square test to consider the gross income bands and the type of assistance indicated a statistically significant medium effect association (based on four categories),[114] namely $\chi^2(18, n = 8\ 641) = 676.60$, $p < 0.001$, Cramer's V = 0.16 for full-time employees, and $\chi^2(15, n = 1\ 619) = 106.25$, $p < 0.001$, Cramer's V = 0.15 for respondents who are not employed full-time (employed part-time, self-employed, retired or unemployed). The next two figures, Figure 5.12 and Figure 5.13, depict the patterns from the chi square and cross-tabulation between gross income and type of assistance.

---

[114] Based on four categories (lesser of row categories minus 1 and column categories minus 1 = 3) the Cramer's V value indicates a small effect if it equals 0.06, a medium effect if it equals 0.17 and a large effect if it equals 0.29 (Pallant, 2007:217).

Figure 5.12: Type of assistance vs gross income of respondents employed full-time[115]

Respondents employed full-time (8 641)
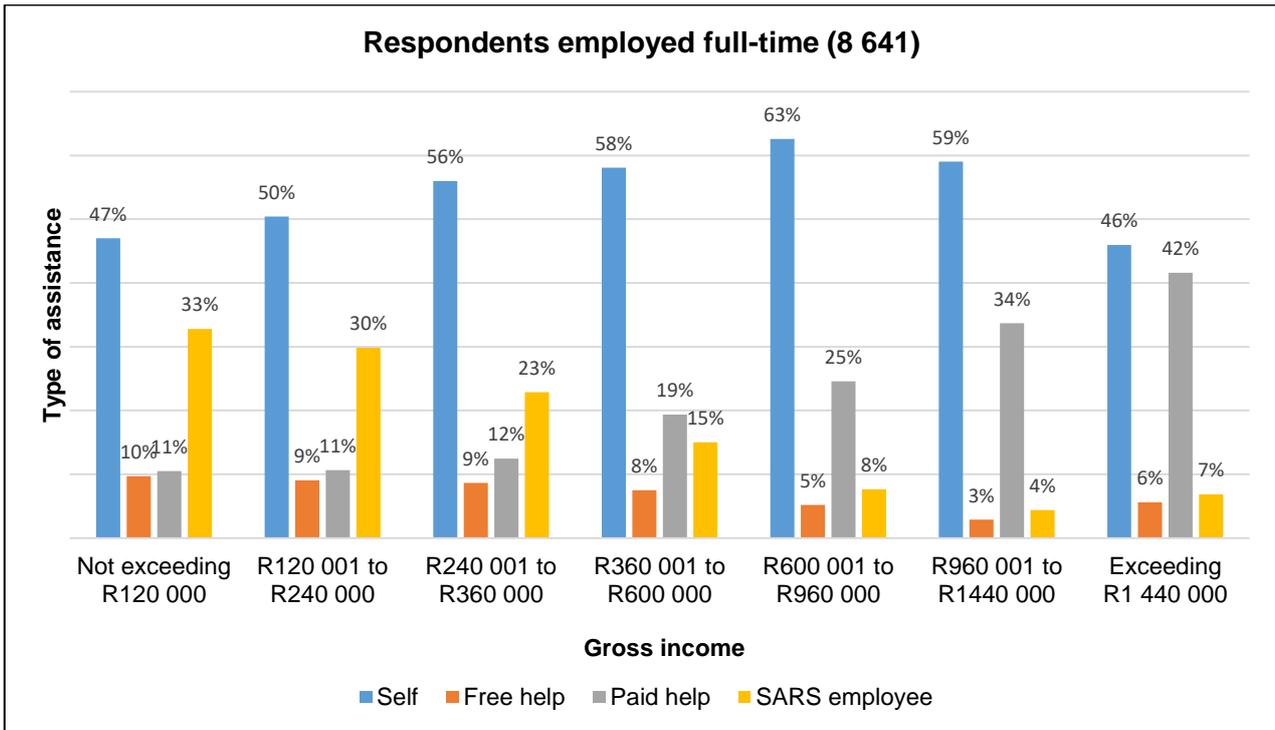
Source: Own data

Figure 5.13: Type of assistance vs gross income of respondents who are employed part-time, self-employed, retired or unemployed[116]

Respondents not employed full-time (1 619)
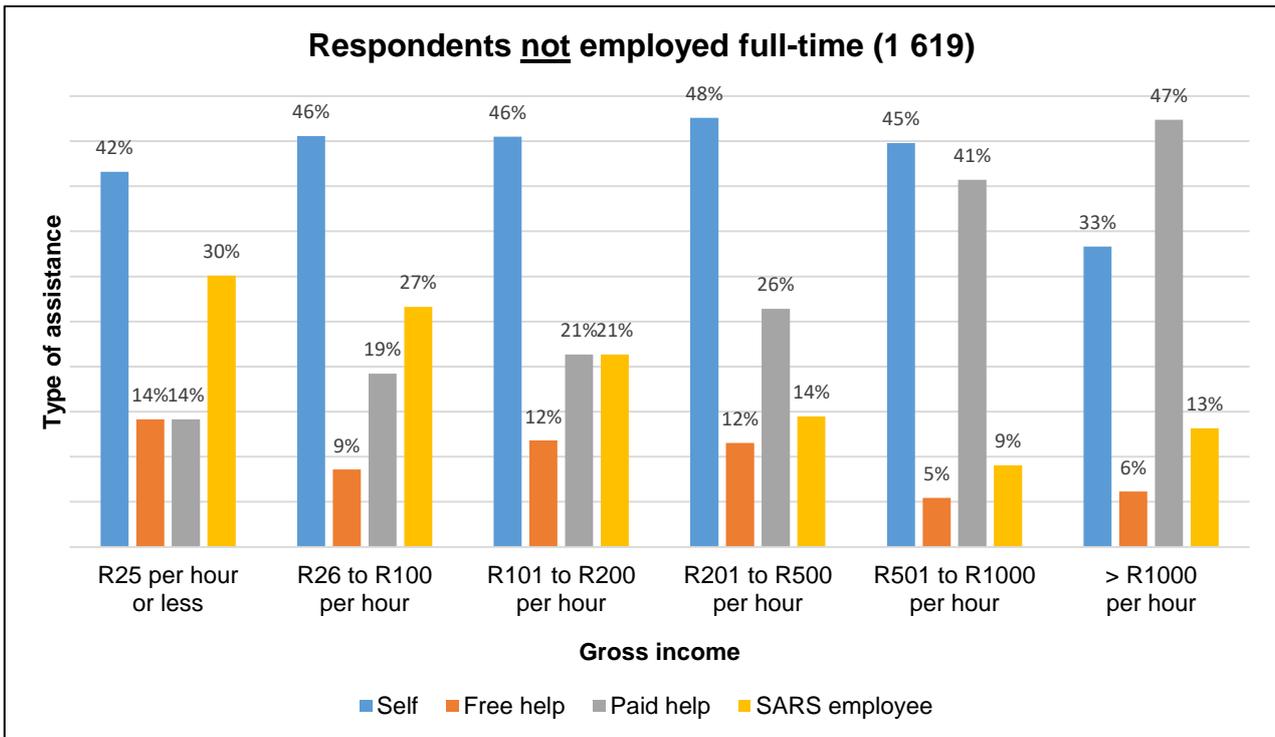
Source: Own data

---

[115] Due to rounding, some groups added up to 99% or 101%, instead of 100%.
[116] Due to rounding, some groups added up to 99% or 101%, instead of 100%.

From the chi square and cross-tabulation findings as depicted in Figure 5.12 and Figure 5.13, it is clear that the higher the income of the respondent, the more paid help is used, which confirms the suggestion by Tran-Nam *et al.* (2014:169) that there may be a link between income level and the use of paid help. Considering respondents who submitted their income tax returns themselves, there was first a slight increase with increased income levels, but in the higher income levels (R960 000 annual gross income and an hourly gross income of more than R500), the percentage of respondents who submitted their own income tax returns decreased. Furthermore, the higher the income of the respondents, the less they used free help or the help of a SARS employee.

Next, the different sources of income and types of expenditure of the respondents were analysed, because it has been found that paid help with the submission of income tax returns tends to be used more often by taxpayers with more complex sources of income, such as self-employment or rental income than by taxpayers who only earn salaries and wages (as reported, for example, by Vaillancourt *et al.*, 2013:11).

5.5.   SOURCES OF INCOME AND TYPES OF EXPENDITURE

Before reporting on the testing for the influence of complex sources of income on the use of paid help with the submission of income tax returns, the respondents' sources of income and types of expenditure are summarised in Table 5.1, based on the employment category selected by respondents that best described their employment status for the 2018 year of assessment. Since the self-employed and part-time employed respondents were grouped together in the questionnaire, the respondents' income sources were used to determine which of them were self-employed. For instance, a self-employed individual would probably have independent contract income or business income, whereas an individual who was employed part-time was more likely to have a salary income. This is important because self-employment was established as one of the determinants of tax compliance costs (Blaufus *et al.*, 2014:802; Eichfelder & Vaillancourt, 2014:112).

Table 5.1: **Distribution of income sources and types of expenditure between different employment categories of respondents**

	Best description of employment split into four categories				Total
	Cat. 1	Cat. 2	Cat. 3	Cat. 4	
Income source					
Salary (incl. wages, allowances, benefits and overtime)	8 527	174	101	93	**8 895**
Pension, annuity and/or lump sum	307	35	996	35	**1 373**
Independent contract, commission, director's, rental, farming and/or other business income	598	175	105	19	**897**
Investment, royalty and/or trust income	459	36	373	5	**873**
Capital gains (local and/or foreign)	38	4	54	0	**96**
Donations, inheritance, grants, maintenance or claims	34	5	11	9	**59**
No income	0	0	0	48	**48**
Foreign services	15	1	9	0	**25**
Type of expense					
Medical expenses	5 792	175	935	70	**6 972**
Contribution to funds	4 528	161	258	58	**5 005**
Travel expenses	1 712	94	35	14	**1 855**
Deductible donations	391	24	73	1	**489**
Commission expenses	219	42	10	4	**275**
Rental expenses	179	16	39	1	**235**
Independent contract expenses	70	44	15	8	**137**
Business expenses	51	60	5	2	**118**
Farming expenses	10	0	1	0	**11**
Cat. 1: Employed: full-time (40 hours or more per week) (8 641 respondents)					
Cat. 2: Self-employed (own business) and/or part-time employed (321 respondents)					
Cat. 3: Retired (with or without part-time employment) (1 120 respondents)					
Cat. 4: Unemployed, actively looking for work (178 respondents)					

Source: Own data

In interpreting Table 5.1, one must remember that respondents may have moved between employment categories during the year under review. For example, a person could have been employed for part of the year and then unemployed for the remaining part of the year, which would explain different types of income, for example, in the unemployment category. Furthermore, a person who is employed full-time can also, for example, earn farming, rental or other business income, which would explain different types of income in the same employment category. Respondents were encouraged to indicate all relevant sources of income and types of expenditure, and the total column therefore does not add up to total number of respondents.

To test whether or not the complexity of income sources influenced the decision of respondents to obtain paid help with the submission of their income tax returns, the different sources of income listed in Table 5.1[117] were compared to the type of assistance obtained by the respondents (see Figure 5.14). The distribution of assistance by respondents who earned salary income strongly resembled the distribution of the entire sample (55%/8%/17%/20% vs 54%/8%/18%/20% for "self", "free help", "paid help" and "SARS employee" assistance respectively).

Figure 5.14: Type of assistance with submission of income tax return vs sources of income
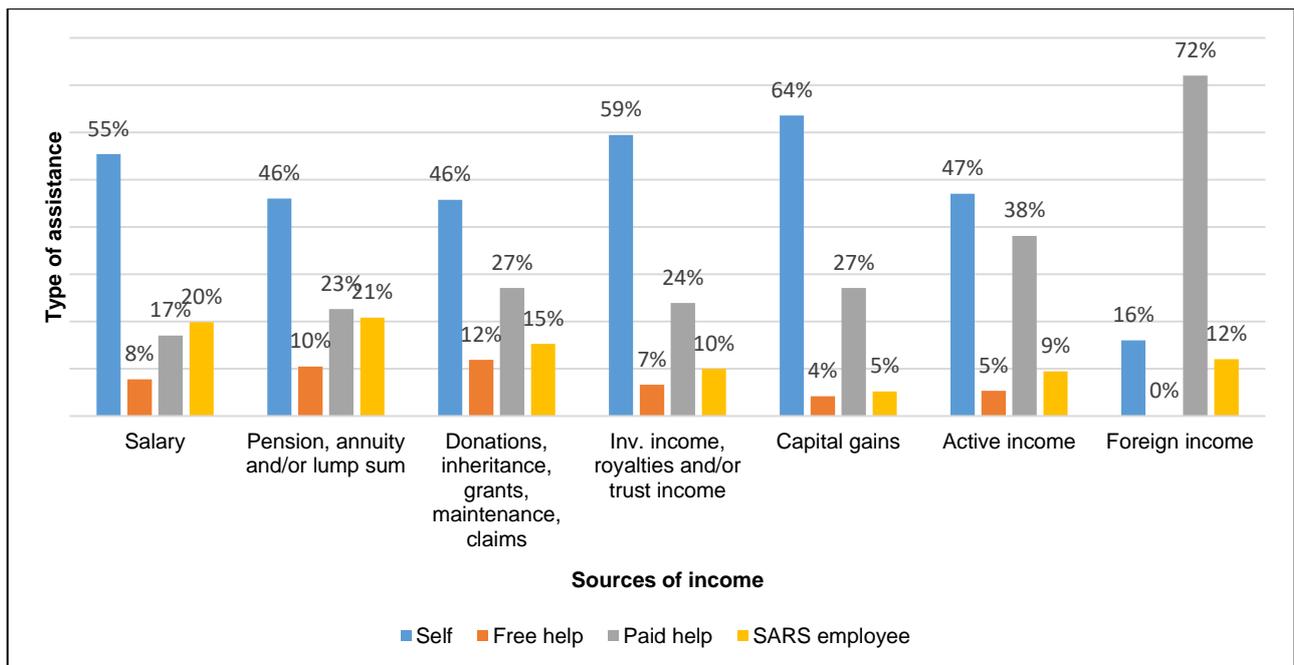
Source: Own data

From Figure 5.14, it is clear that a different source of income (other than salary income) increases the use of paid help with the submission of income tax returns, with a varying effect on the other types of assistance. The most significant increase in paid help with the submission of income tax returns occurred when respondents earned active income[118] or foreign income. All other types of assistance decreased when respondents earned active or foreign income. Seven chi square tests for independence were performed on the association of having or not having earned a particular source of income and the type of assistance used with the submission of an income tax return. Except for the donations-type income source

---

[117] The combined group of "independent contract, commission, director's, rental, farming and/or other business income" is termed "*active income*" in the graph.
[118] Namely independent contract, commission, director's, rental, farming, and/or other business income.

group, where the p-value equalled 0.184,[119] all other tests indicated a statistically significant small (or very small) effect association (based on two categories)[120], namely

- χ^2(3, n = 10 260) = 107.940, p < 0.001, Cramer's V = 0.103 for salary income
- χ^2(3, n = 10 260) = 70.326, p < 0.001, Cramer's V = 0.083 for investment/royalty/trust income
- χ^2(3, n = 10 260) = 45.899, p < 0.001, Cramer's V = 0.067 for pension/annuity/lump sum
- χ^2(3, n = 10 260) = 278.000, p < 0.001, Cramer's V = 0.165 for active income
- χ^2(3, n = 10 260) = 17.897, p < 0.001, Cramer's V = 0.042 for capital gains
- χ^2(3, n = 10 260) = 48.597, p < 0.001, Cramer's V = 0.069 for foreign income

The results confirmed the finding of Vaillancourt *et al.* (2013:11) that paid help with the submission of income tax returns is used more often by taxpayers with more complex sources of income (38%), such as self-employment or rental income, than by those who only earn salaries and wages (17%). The results also indicated that income from foreign services could be regarded as the most complex source of income paid to the respondents, since it resulted in the highest percentage use of paid help (72%) with the submission of their income tax returns. This finding is further explored in Section 7.2, where the respondents' perceptions of the complexity of legislation and SARS guides (Q11.2) are analysed.

Briefly considering the types of expenses indicated by respondents, it is clear from Table 5.1 that medical expenses are the most frequently incurred expense indicated by the respondents. Furthermore, respondents were invited to indicate "other expenses" that they incurred and declared for tax purposes, and many respondents listed private expenses such as groceries and school fees, which are not tax deductible (see Table 5.2).

---

[119] χ^2(3, n = 10 260) = 4.842, p = 0.184, Cramer's V = 0.022.
[120] Based on two categories (lesser of row categories minus 1 and column categories minus 1 = 1) the Cramer's V value indicates a small effect if it equals 0.10, a medium effect if it equals 0.30 and a large effect if it equals 0.50 (Pallant, 2007:217).

Table 5.2:   Examples of other expenses

Bank interest paid
Burglaries
Cell phone expenses
Child maintenance/support
Clothing and clothing accounts
Domestic worker's salary
Education investment
Entertainment
Family expenses
Feed and spade feral cats
Food/groceries
General living expenses/day-to-day household expenses
Home repairs and maintenance
Insurance and policies
Investments
Levies
Loan and other debt repayments
Looking after household
Monthly instalments and insurance on car
Monthly tithing at church
Mortgage bond payments
Municipal services (water and electricity; rates and taxes)
Nappies
Old age home expenses of mother-in-law
Paying for son at varsity
Petrol
Rent and levies (including retirement village levy)
School fees (including uniforms and stationery)
School fees for domestic worker's children/poor boy/special needs child
Security upgrades
Traffic fines
Transport (including costs for kids to school)
Unemployment insurance fund contributions

Source: Own data

It is concerning that many respondents regard private expenses as tax deductible, since it could mean that recordkeeping time is spent on items that do not qualify for tax deductions. This aspect was considered next when the time spent on different activities was analysed. Training may be needed to explain to taxpayers which expenses are tax deductible and thus necessitate keeping records of invoices and proof of payment.

5.6. TIME SPENT ON ACTIVITIES UP TO SUBMISSION OF THE INCOME TAX RETURN

As explained in Section 4.5, to avoid having to make any subjective judgements on whether an activity is avoidable and/or preventable, the questionnaire included *all* tax-related activities (even dispute resolution) as "legitimate" tax compliance activities, in line with Tran-Nam *et al.* (2014:141). This section considers time spent on activities up to the submission of the income tax return, while time spent on dispute resolution is reported on in Section 5.12 as part of the post-filing activities.

5.6.1. Total time spent by respondents

Respondents were required to indicate the time that they actively spent on activities up to the point of submitting the income tax return (if they submitted it themselves; Q4.3) or of handing records over to the person who submitted the income tax return on their behalf (if help was obtained; Q4.8). As explained in Section 4.7.1, respondents with unrealistic hourly values for activities in either Q4.3 or Q4.8, as well as respondents whose hours exceeded the 99.5th percentile values, were removed from the dataset as part of the data cleaning process. Winsorizing was therefore not applied to these questions, as all remaining hours were deemed possible and acceptable. Missing values were replaced with nil, since not all activities are necessary when submitting an income tax return and could therefore have been left open by respondents who did not spend time on a specific activity. Table 5.3 provides an overview of the minimum, maximum, mean and standard deviation for the time (in hours) reported by the 5 519 respondents who answered Q4.3 and the 4 741 respondents who answered Q4.8. On average, the respondents who obtained help spent approximately half an hour *more* on their tax-related activities than those who submitted their income tax returns themselves (notwithstanding the fact that the help may also come at an additional expense – see Section 5.8.1). The mean time (in hours) of the most time-consuming activities is indicated in orange.

Table 5.3: Descriptive statistics of time (in hours) for activities in Q4.3 and Q4.8

	Min.	Max.	Mean	Std. Deviation
Q4.3 (submitted self: 5 519 respondents)				
Recordkeeping	0.00	80.00	3.14	7.463
Obtaining tax knowledge	0.00	36.00	0.88	2.756
Tax planning and tax advice	0.00	15.00	0.41	1.253
Dealing with SARS	0.00	48.00	1.12	3.525
Calculating tax, submitting return and paying tax	0.01	48.00	1.93	3.848
TOTAL time for all 5 activities	**0.03**	**152.00**	**7.47**	**12.694**
Q4.8 (obtained help: 4 741 respondents)				
Recordkeeping	0.00	100.00	3.58	8.830
Obtaining tax knowledge	0.00	24.00	0.42	1.518
Tax planning and tax advice	0.00	24.00	0.57	1.821
Dealing with SARS	0.00	50.00	1.13	3.804
Dealing with person who assisted you	0.00	60.00	1.95	4.527
Paying the income tax due	0.00	16.00	0.39	1.222
TOTAL time for all 6 activities	**0.05**	**160.00**	**8.04**	**14.145**

Source: Own data

From the overview in Table 5.3, is it clear that the two most time-consuming activities for respondents submitting their own income tax returns were, on average, recordkeeping (3.14 hours) and calculating tax, completing the income tax return and paying tax (1.93 hours). This finding confirms Eichfelder and Vaillancourt's (2014:128) observation that the two most time-consuming activities are recordkeeping and tax return preparation. For respondents who obtained help, on average, recordkeeping was also the most time-consuming activity (3.58 hours). The second-most time-consuming activity for them was from their interaction with the person who helped them with their income tax returns (1.95 hours). It is submitted that this activity also includes some respondents' time relating to the submission of their income tax returns, since respondents could be present when the return was submitted by the person(s) providing the help. This assumption would imply that "tax return preparation" was the second-most time-consuming activity for both groups of respondents.

In order to compare the time spent on the different activities by the different groups of respondents (those who submitted their returns themselves, and those who obtained help), activities five and six listed in Q4.8 (namely dealing with a helper and paying tax) were combined. The comparison is presented in Figure 5.15 and discussed thereafter.

Figure 5.15: Comparative average times (in hours) spent by respondents who submitted their income tax returns themselves and those who obtained help
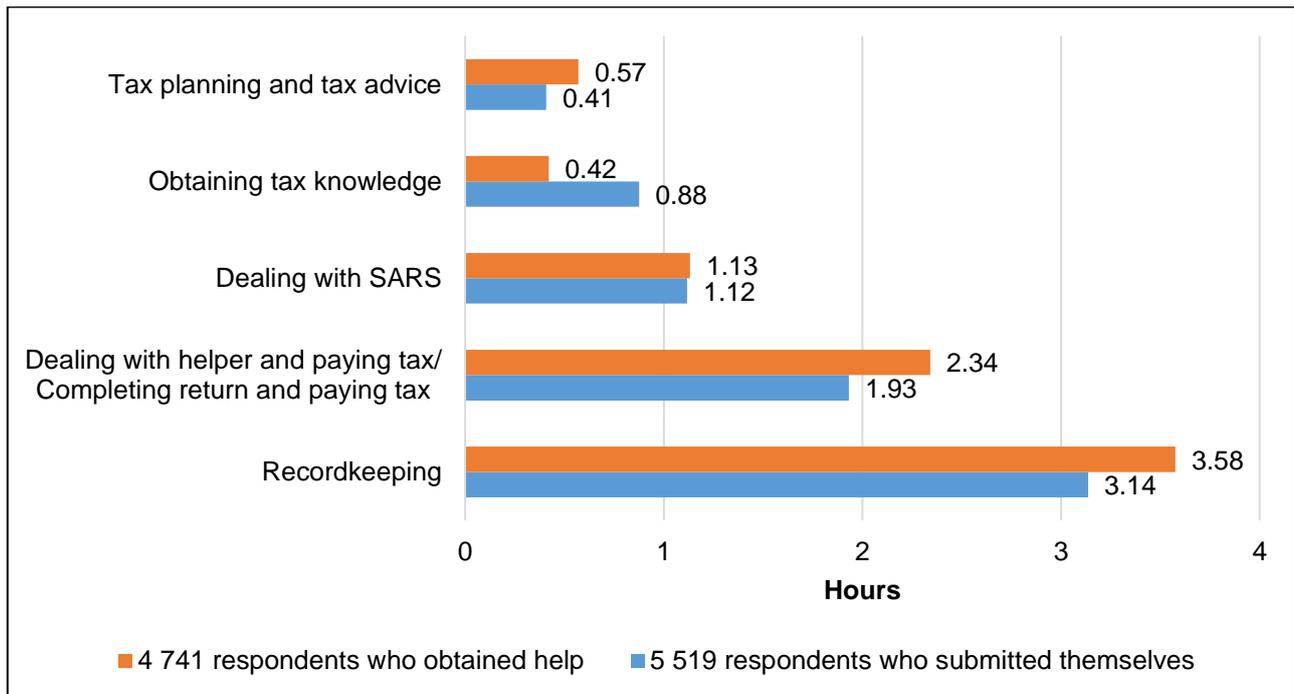
Source: Own data

From Figure 5.15 is it clear that the average time spent by all respondents in dealing with SARS was virtually identical and that there was little difference (on average less than 10 minutes[121]) between the time spent on tax planning and obtaining tax advice between respondents who submitted their income tax returns themselves versus respondents who obtained help. The activities "dealing with helper and paying tax" and "completing return and paying tax" are not the same, and therefore the time spent on these different activities was not expected to be same.[122]

Respondents who submitted their income tax returns themselves spent more time on obtaining tax knowledge than the respondents who obtained help (on average 27 minutes more). A possible reason for this finding could be that in order for these respondents to be competent in submitting their own income tax returns, they needed to ensure that their tax knowledge was up to date in light of annual tax amendments.[123] However, respondents who obtained help with the submission of their income tax returns spent more time on recordkeeping than respondents who submitted their income tax returns themselves (on

---

[121] (0.57 hours - 0.41 hours) x 60 minutes.
[122] For completeness, the difference is on average 25 minutes ((1.93 hours - 2.34 hours) x 60 minutes).
[123] For example, the annual amendment acts on rates and monetary amounts, taxation laws and tax administration laws.

average 26 minutes more[124]). A possible reason could be that due to their lack of tax knowledge, they may also keep records of private expenses that are not tax deductible (see Table 5.2). Since recordkeeping is the most time-consuming activity, it is considered in more detail next.

5.6.1.1. *Recordkeeping*

Respondents who indicated that they spent time on recordkeeping were requested to indicate the "**biggest** contributing factor" to the total time spent on recordkeeping (either in Q4.5 for respondents who submitted their income tax returns themselves or in Q4.9 for respondents who obtained help to submit their income tax returns). The options presented to the respondents were the following:

o Recordkeeping of income (1)
o Recordkeeping of expenditure relating to rental income (2)
o Recordkeeping of expenditure relating to farming income (3)
o Recordkeeping of expenditure relating to other business income (4)
o Recordkeeping of expenditure relating to independent contract income (5)
o Recordkeeping of expenditure relating to commission income (6)
o Recordkeeping of travel expenses (against travel allowance) (7)
o Recordkeeping of medical expenses (8)
o Recordkeeping of retirement fund contributions (9)
o Other (please specify) (10) _____

The various *expenditure* options only displayed if a respondent indicated in Q3.2 that the specific expenditure was incurred. The "other" option (Option 10) was selected by 409 respondents in Q4.5 and by 410 respondents in Q4.9. In analysing these "other" factors listed by respondents, it became clear that many respondents did not understand the question correctly and provided the biggest contributing factor for time spent in general and not for "recordkeeping" (recoded as Option 13). This misunderstanding also raised a concern that some respondents may have incorrectly included time spent on post-filing activities such as the submission of supporting documents in Q4.3 and Q4.8 (even though these were specifically excluded from Q4.3 and Q4.8). Examples of factors listed by respondents who misunderstood the question are the following:

• Changing bank details;

---

[124] (3.58 hours – 3.14 hours) x 60 minutes.

- Completing the tax return;

- E-filing;

- Traveling to and from SARS premises to submit more documents;

- Uploading documents for audit purposes and then processing disputes and following up on outstanding disputes;

- Visiting SARS; standing in the queue;

- Waiting on telephone for SARS to respond to my queries;

- Website down, not supported, struggling to get plugins to work; and

- When SARS does not believe the amounts they get from medical aid beforehand.

Where possible, factors provided by respondents in this open category (Option 10) were recoded into an existing category, for example, where a respondent listed travel time to banks to obtain an IT3(b) certificate[125] or correspondence with employer to correct the IRP5[126] it was recoded as Option 1 (recordkeeping of income). Furthermore, where respondents elaborated on the time spent on their logbooks or medical receipts, it was recoded as Option 7 (travel expenses) or Option 8 (medical expenses) respectively. During this recoding process, another problem was found: some respondents did not indicate in the list of expenses provided under Q3.2 that travel or medical costs (for example) were incurred (which would have opened Options 7 and 8 for selection), but now (in the open category) indicated one of these expenses as the biggest contributing factor to the time spent on recordkeeping. However, since it was not possible to determine which answer was the correct one, no further adjustments were made.

Furthermore, even though the word "biggest" was emphasised in Q4.5 and Q4.9 to avoid respondents providing *all* the reasons for time spent on recordkeeping, some respondents selected "other" and stated:[127]

- "All of the above";

- "Travel <u>and</u> medical";

- "Investment <u>and</u> medical aid tax sheets";

- "Logging on internet to get IRP5 <u>and</u> retirement fund certificate"; and

- "Tax certificates from Insurance companies <u>and</u> medical aid".

---

[125] Proof of interest income.
[126] Proof of employment income.
[127] Respondent answers that are quoted verbatim are printed in quotation marks.

These responses were recoded as Option 11, but did not provide usable data. Furthermore, many respondents stated "none" or "not applicable" (recoded as Option 12) which indicates that the condition (minimum hours) set for asking this question should not have been recordkeeping hours greater than 0, but rather greater than 3 hours (or even more). Examples of valid factors left in the "other" category were recordkeeping of time spent outside South Africa, assets and liabilities, donations, home office expenses and CGT.

Lesson learnt: Set a minimum number of hours spent on recordkeeping before asking questions on the biggest contributing factor to hours spent on recordkeeping to avoid respondents' selecting the "other" option, and stating that there is no significant factor.

After the necessary recoding of answers provided in the open category (Option 10) as explained above, it was clear that recordkeeping of *medical expenses* (indicated in orange) was selected most frequently as the biggest contributing factor to the total time spent on recordkeeping by respondents who submitted their income tax returns themselves (Q4.5: "self"), and also by respondents who obtained help to submit their income tax returns (Q4.9: "help") (see Table 5.4).

Table 5.4:   Biggest contributing factor to recordkeeping time in Q4.5 and Q4.9

Option	Biggest contributing factor to recordkeeping time	Q4.5 (self) N	Q4.5 (self) %	Q4.9 (help) N	Q4.9 (help) %
1	Income	1 116	23.0%	1 008	26.9%
2	Rental income	115	2.4%	70	1.9%
3	Farming	1	0.0%	2	0.1%
4	Business related	17	0.3%	24	0.6%
5	Independent contract income related	22	0.4%	23	0.6%
6	Commission related	28	0.6%	59	1.6%
7	Travel expenses (against travel allowance)	666	13.8%	617	16.5%
8	Medical expenses	1 999	41.3%	1 274	34.1%
9	Retirement fund contributions related	567	11.7%	364	9.7%
10	Other (e.g. days outside SA, home-office expenses and CGT)	13	0.3%	12	0.3%
11	More than one factor or time in general	91	1.9%	94	2.5%
12	Nothing or n/a	95	2.0%	85	2.3%
13	Misunderstood question	112	2.3%	109	2.9%
Total number of respondents answering the question		**4 842**	**100%**	**3 741**	**100%**

Source: Own data

To put the results presented in Table 5.4 into perspective, it was decided to compare each selected option[128] (biggest contributing factor) with the mean recordkeeping time of the respondents who selected that factor. Keeping in mind that the mean time spent on recordkeeping by respondents who submitted their income tax returns themselves was 3.14 hours, while respondents who obtained help spent on average 3.58 hours on recordkeeping (see Figure 5.15), the findings mirrored the mean time reported by the respondents who selected recordkeeping of *medical expenses* as the biggest contributing factor to their total recordkeeping time (see Figure 5.16).

Figure 5.16: Comparative mean recordkeeping times (in hours) vs biggest contributing recordkeeping factor
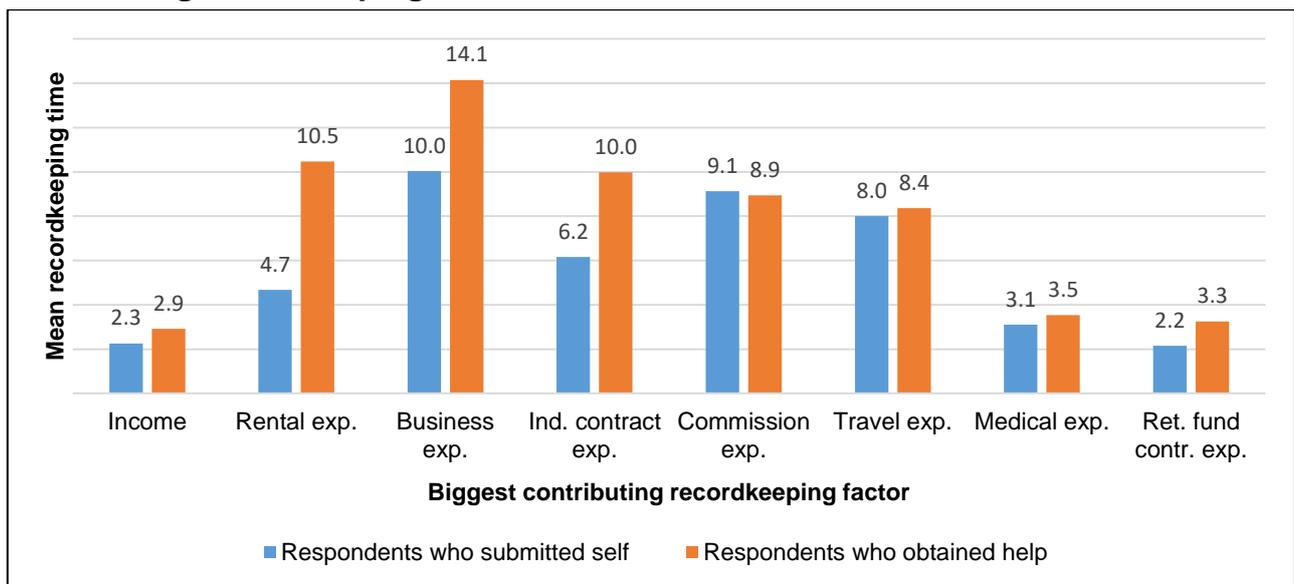
Source: Own data

Since averages could, however, be skewed by a few high or low values, the comparison was conducted again, using the median hours, instead of the mean hours (see Figure 5.17). The median indicates the number of hours where 50% of the number of hours given by respondents is lower than this value, and 50% is higher than this value, thereby providing a more comparable basis.

---

[128] However, because only one respondent selected farming expenses under Q4.5 and two respondents selected it under Q4.9, the mean for this option could not be calculated and compared. Furthermore, Options 10 to 13 were not compared, because they did not contain one conclusive factor under consideration.

Figure 5.17: Comparative *median* recordkeeping times (in hours) vs biggest contributing recordkeeping factor
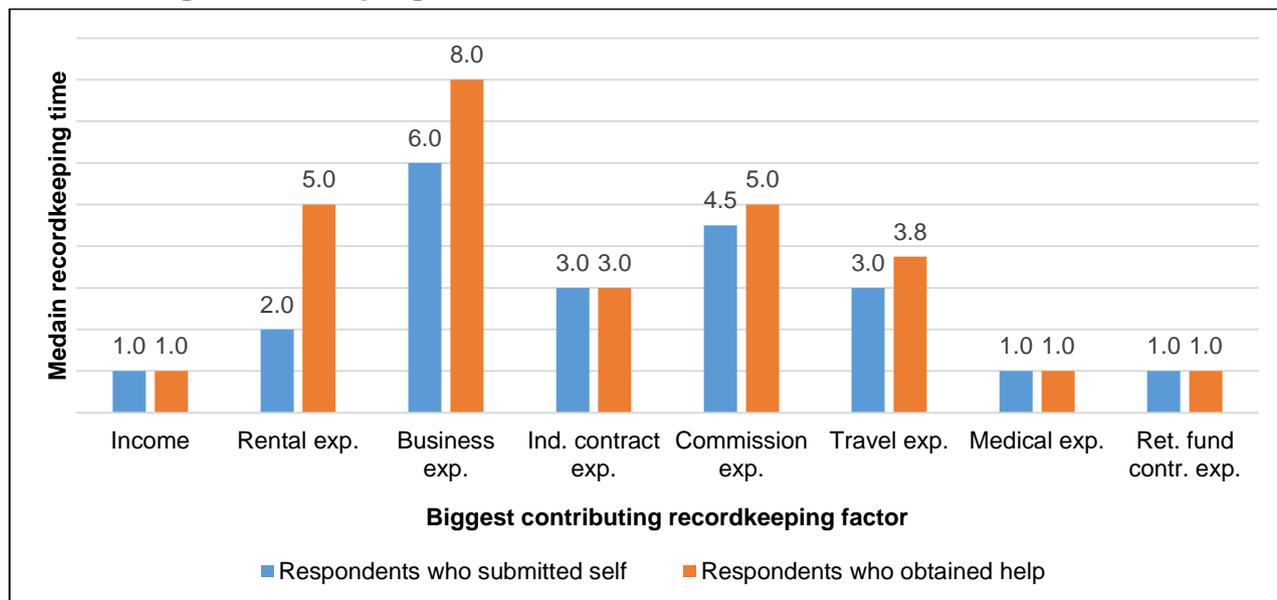
Source: Own data

Figure 5.17 illustrates that recordkeeping for *rental* and *business* expenses resulted in the highest median recordkeeping times (5 and 8 hours respectively) for respondents who obtained help to submit their income tax returns, while the medians for respondents who submitted their own income tax returns (and indicated these factors) were only 2 and 6 hours respectively. The median recordkeeping times were consistently high between the two groups of respondents ("self" vs "help") when expenses relating to *independent contracting income*, *commission income* or *travel expenses* were selected as the biggest contributors to recordkeeping, ranging between 3 and 5 hours.

As was pointed out at the beginning of Section 5.6, tax planning is a contentious activity when considering tax compliance costs, since it is incurred by taxpayers in an attempt to reduce the amount of tax payable by them, and not necessarily to comply with tax obligations. Following the approach of Tran-Nam *et al.* (2014:141) to take *all* tax-related activities into account, tax planning is therefore regarded as a justifiable tax compliance activity.

5.6.1.2. *Tax planning and tax advice*

The time spent on tax planning and obtaining tax advice must be considered in conjunction with the follow-up questions relating to additional payment for such tax planning and tax advice. It was considered that even respondents who submitted their income tax returns

themselves could have employed the services of a tax professional for tax planning and tax advice, and Q4.4 therefore required them to indicate the amount paid for such services. For persons who obtained paid help with submitting their income tax return, Q4.15 required them to indicate any *additional* amount paid for tax planning (over and above the amount paid for the submission of the income tax return), if applicable. Out-of-pocket tax compliance costs are considered in Section 5.8.

Lastly, time spent by the persons who assisted the taxpayers at no cost was also considered a tax compliance activity of the taxpayer and is considered next.

5.6.2. Time spent by a family member or friend

The question that was posed to the respondents was: "How much time did your **family member or friend** spend on completing and submitting your 2017/18 income tax return?" and the options presented were the following:

- I don't know (1);
- Up to 1 hour (2);
- >1 to 2 hours (3);
- >2 to 5 hours (4);
- >5 to 8 hours (5); and
- More than 8 hours (please indicate the hours) (6) _____.

The midpoints of options containing a range were awarded to the respondents and used in calculating the mean time spent, namely 30 minutes for Option 2, 1.5 hours for Option 3, 3.5 hours for Option 4, and 6.5 hours for Option 5. Option 6 (more than 8 hours) was selected by only 9 respondents. However, the one respondent who selected Option 6, without indicating any hours and without answering the follow-up question regarding an estimate of the total rand value of the time spent, was recoded as Option 1 ("I don't know"). The three respondents who selected Option 6 without indicating any hours, but who did answer the follow-up question regarding the total rand value of time spent, were recoded as Option 5 to be conservative. Lastly, the midpoint (median) of the remaining five respondents who selected Option 6 and indicated hours used was 24 hours.[129] After the recoding, it was clear that Option 2 was the most selected category, indicating that most family members or friends

---

[129] Based on the following five values: 10, 16, 24, 30 and 70.

did not spend more than an hour on the submission of the respondent's tax return, as illustrated by the frequencies in Figure 5.18.

Figure 5.18: Time spent by family members or friends as estimated by 827 respondents[130]
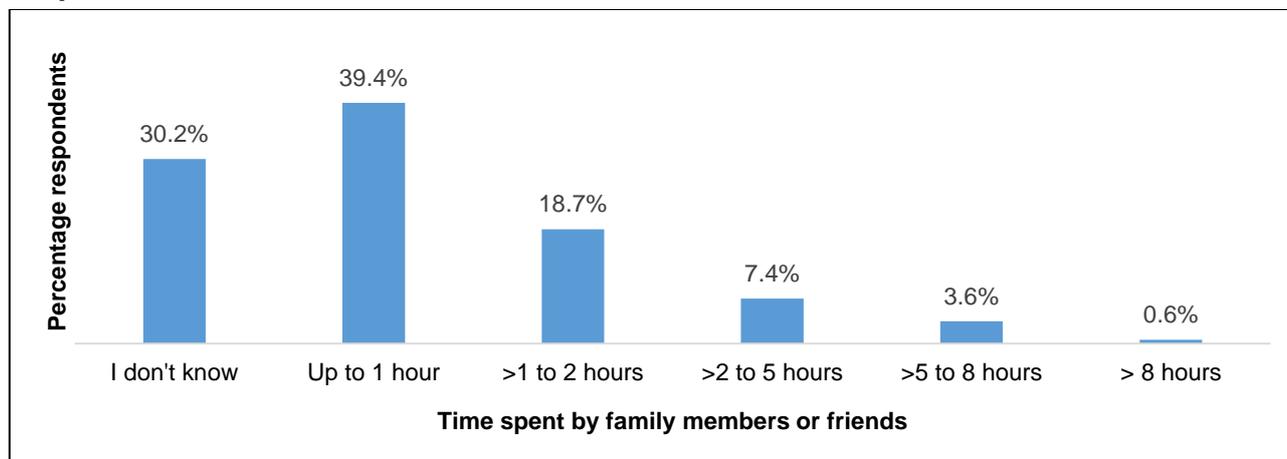
Source: Own data

Using the midpoints as described above, the mean time spent by family members or friends to submit the income tax return was 1.6 hours. This compared well with the average time of 1.93 hours that the respondents who submitted their own income tax return spent on their submissions, which included the calculation and payment of the tax (see Table 5.3).

5.6.3. Summary

In Section 5.6, the time spent on all tax compliance-related activities up to the submission of the income tax return either by the respondents themselves or by a friend or family member at no cost was considered. The average time spent by the 10 260 respondents on all tax compliance-related activities up to the submission of the income tax return was *7.73 hours.* Of these, 0.48 hours (approximately half an hour) related to tax planning and tax advice), while *1.6 hours* were spent on average by friends and family members who assisted with the submission of their income tax returns. When these average hours are explored, based on employment status (employed full-time vs self-employed) and compared to the international averages presented in Table 3.3, the time spent of 7.6 hours by respondents employed full-time compares well with the average time of 8.8 hours calculated in international studies. However, the average time spent by self-employed respondents, 17.0 hours, was lower than the international average of 36.0 hours. One possible explanation

---

[130] Due to rounding, the percentages added up to 99.9% instead of 100%.

could be the data cleaning process described in Section 4.7.1, which removed respondents who claimed to spend more than 500 hours (the 99.5ᵗʰ percentile values). Most of the studies reviewed say nothing about their data cleaning processes and limitations, which could imply that all the reported hours were retained. One exception is Blaufus *et al.* (2019:934), who clearly describe their data cleaning process and based their removal on a 99.9% truncation, resulting in self-employed taxpayers' spending on average 21.6 to 36.2 hours on tax compliance activities, which is closer to the time obtained in the current study. The next step was to convert these hours into rand values to ascertain the implicit cost of these tax compliance activities.

5.7. VALUE OF TIME SPENT UP TO SUBMISSION OF THE INCOME TAX RETURN

There are many different valuation methods to determine the value of an hour of a respondent's time, as discussed in Section 3.3. This value can then be multiplied by the time (hours or fractions of hours) spent by respondents on tax compliance activities to obtain a rand value for this implicit part of tax compliance costs. A combination of methods was used in this study. The choice of method was mainly influenced by the employment status of respondents.

5.7.1. Value of an hour spent by respondents employed full-time

Only respondents who were employed full-time were presented with Q9.1. The question was phrased as follows: "This question is concerned with the value of your time. What is your gross **monthly** salary?" and the options presented were the following:
- R5 000 or less (1);
- R5 001 to R10 000 (2);
- R10 001 to R20 000 (3);
- R20 001 to R30 000 (4);
- R30 001 to R50 000 (5);
- R50 000 to R80 000 (6);
- R80 001 to R100 000 (7);
- R100 001 to R120 000 (8);
- R120 001 to R150 000 (9); and
- More than R150 000 (please provide monthly salary (10) _____.

The distribution of these salaries (after converting them to an annual equivalent and after combining the first two[131] and last two[132] options) is presented in Figure 5.5. The midpoints of the selected salary ranges were awarded to the respondents.[133] The monthly salaries provided by the 23 respondents who earned more than R150 000 per month ranged from R155 000 to R270 000. The 5th and 95th percentile values that were used for winsorizing were R155 600 and R266 000 respectively. All gross (before tax) monthly salaries were then converted to an hourly amount by dividing them by 160.[134] The mean of the monthly salaries of the 8 641 respondents employed full-time was R36 502 with a corresponding hourly value of **R228.13**. The 5% trimmed mean was R33 686 with a corresponding hourly value of R210.54, and the median was R25 000 with a corresponding hourly value of R156.25. The maximum hourly rate was R1 662.50 (in other words, R266 000/160).

The next step was to determine the marginal tax rate for each respondent to convert the before-tax hourly rate into an after-tax hourly rate. The marginal tax rate was determined based on the income tax bracket selected by the respondents, which varied from 18% (lowest income tax bracket for taxable income not exceeding R189 880) to 45% (highest tax bracket for taxable income exceeding R1 500 000). To estimate the marginal tax rate of the respondents who indicated that they did not know their tax bracket or preferred not to indicate their tax bracket, a cross-tabulation was performed between the gross monthly salaries and the income tax brackets of the 6 826 respondents employed full-time who did provide their income tax brackets. The marginal tax rate corresponding to the tax bracket selected by most respondents earning a specific gross monthly salary was awarded to the respondents who earned the same salary, but did not know their bracket (1 536 respondents) or did not want to indicate it (279 respondents). In other words, a tax bracket was assumed of

- 18% for gross monthly salaries up to R10 000;
- 26% for monthly salaries of R10 001 to R20 000;
- 31% for monthly salaries of R20 001 to R30 000;
- 36% for monthly salaries of R30 001 to R50 000;

---

[131] 39 respondents earned R5 000 or less and 446 respondents earned R5 001 to R10 000, which adds up to the 485 respondents' earning R120 000 or less per annum (see Figure 5.5).
[132] 138 respondents earned R120 001 to R150 000 and 23 respondents earned more than R150 000 which added up to the 161 respondents whose annual gross income exceeded R1 440 000 (see Figure 5.5).
[133] Some respondents selected a salary range bracket and then used the opportunity to provide the monthly salary, which was only meant for Option 10, to provide their exact salary. These exact salaries were, however, ignored and the midpoint of the range of the selected bracket was also used for these respondents.
[134] Based on an average of 20 working days in a month and 8 working hours per day.

- 41% for monthly salaries of R50 001 up to R120 000; and
- 45% for all monthly salaries exceeding R120 000.

When the cross-tabulation explained above was conducted, it was found that some respondents employed full-time may have misunderstood Q9.1. They may have indicated their *annual salaries* instead of their *monthly salaries*, because it is highly unlikely (but not impossible) that a monthly salary of, for example, R135 000 (equalling an annual salary of R1 620 000) would result in a taxable income not exceeding R189 880 (the lowest tax bracket). When an attempt was made to *correct* salaries based on reported tax brackets, it was realised that there could be legitimate reasons why high employment income does not correlate with the income tax bracket of a respondent. For example, some of these respondents indicated that they also received rental income but had expenses which could have led to a significant tax deduction if they suffered a rental loss. Some of the respondents claimed expenses against a travel allowance which could also result in significant tax deductions, and some of these respondents incurred costs on tax planning, which may also indicate that structuring their tax affairs could have led to additional tax deductions and a lower tax bracket. Lastly, another explanation could be that a respondent was employed for less than 12 months, and therefore fell into a lower tax bracket. Taking all the above possibilities into account, it was decided not to decide arbitrarily which salaries to reduce, and which ones to accept as correct. All given values were therefore regarded as correct, accepting the risk that the tax compliance costs of respondents in the lower tax brackets could be inflated due to possible higher hourly values of respondents who may have misunderstood the question.

Lesson learnt: Consider asking the question relating to respondent's monthly salary after the question relating to his/her income tax bracket. This will allow for a comparison to be made and a follow-up question to be posed to highlight possible misunderstanding and request correction or obtain a reason for the difference.

The mean marginal tax rate for the 6 826 respondents of 30.52% compared well with the mean marginal tax rate of all 8 641 respondents employed full-time of 30.7% after assuming the unknown marginal tax rates as explained above. The median marginal tax rate remained constant at 31%.[135] The *after-tax* hourly value of each respondent's time was obtained by

---

[135] The 25th and 75th percentile values were 26% and 36% respectively.

multiplying the *before-tax* hourly value by (1 – the marginal tax rate of the individual). The average after-tax hourly value of respondents employed full-time was **R148.54** (with a median of R115.63).

5.7.2. Value of an hour spent by respondents not in full-time employment

The respondents who were *not* in full-time employment but were self-employed or employed part-time (321), retired (1 120) or unemployed (178) provided their hourly wage, charge-out rate or the wage for which they would be prepared to work. The options presented in Q9.2 were the following:

- R25 per hour or less (1);
- R26 to R50 per hour (2);
- R51 to R100 per hour (3);
- R101 to R200 per hour (4);
- R201 to R500 per hour (5);
- R501 to R1 000 per hour (6);
- R1 001 to R2 000 per hour (7);
- R2 001 to R4 000 per hour (8);
- R4 001 to R6 000 per hour (9); and
- More than R6 000 per hour (please provide hourly rate) (10) _____.

The distribution of these hourly wages/charge-out rates are shown in Table 5.5. The one respondent who selected an hourly rate in excess of R6 000 was a retired person who indicated R9 000.

Table 5.5:   Distribution of hourly wages/charge-out rates of respondents *not* in full-time employment

	N	%
R25 per hour or less	113	7%
R26 to R50 per hour	105	6%
R51 to R100 per hour	233	14%
R101 to R200 per hour	356	22%
R201 to R500 per hour	477	29%
R501 to R1 000 per hour	221	14%
R1 001 to R2 000 per hour	77	5%
R2 001 to R4 000 per hour	24	2%
R4 001 to R6 000 per hour	12	1%
> R6 000 per hour	1	0%
Total	**1 619**	**100%**

Source: Own data

After awarding the midpoints of the selected wage ranges to the respondents,[136] the mean (median) hourly rate was R411.01 (R350), which can be broken down as follows:

- self-employed (own business) and/or employed part-time: R531.97 (R350);
- retired (with or without part-time employment): R385.82 (R150); and
- unemployed (actively looking for work): R351.41 (R150).

It was, however, considered important to consider self-employed respondents and those who were employed part-time separately. Therefore, based on the assumption that self-employed respondents would probably earn "independent contract income", "rental income", "farming income" or other "business income" (Q3.1), the 321 respondents who were self-employed and/or employed part-time were divided into self-employed respondents (120) and those who were employed part-time (201). A similar method[137] was followed to divide the 1 120 retired respondents into two groups, namely those *with* (195) and those *without* (925) active income.

The mean, 5% trimmed mean and median hourly rates for the new (separated) employment categories were the following:

- Category (i): self-employed (N = 120): R677.71, R585.42 and R350;
- Category (ii): part-time employed (N = 201): R444.96, R349.01 and R350;
- Category (iii): retired (with active income) (N = 195): R404.17, R327.62 and R350;
- Category (iv): retired (without active income) (N = 925): R381.95,[138] R285.70 and R150; and
- Category (v): unemployed (actively looking for work) (N = 178): R351.41, R235.73 and R150.

The 5th and 95th percentile values were used to winsorize the hourly values in each of the above employment categories. The 5th percentile value was R12.50 for employment Categories (iv) and (v), and R37.50 for Categories (i), (ii) and (iii). The 95th percentile values were R787.50 for Category (v), R1 500 for Categories (ii) to (iv), and R3 000 for Category (i).

---

[136] Three respondents selected Option 5 (R201 to R500 per hour) and then used the opportunity to provide the hourly wage, which was only meant for Option 10, to provide their exact wage. These exact wages were ignored and the midpoint of the range of the selected bracket (namely R350) was also used for these respondents.

[137] Considering the sources of income indicated by the retired respondent in Q3.1, indicating that active income is still earned, for example, wages, commission, director's fees, rental, farming and other business income.

[138] This value is a little skewed as a result of the one respondent who indicated an hourly rate of R9 000.

Estimating the tax bracket (and marginal tax rate) for the respondents who did not indicate their tax bracket for respondents who were not employed full-time was more difficult than for those who were employed full-time. Because of the five different employment categories and low number of respondents in the cross-tabulation groups, it was difficult to observe a clear pattern. Furthermore, many factors could influence the income tax bracket, such as number of hours employed and tax deductions. It seemed that retired respondents valued their time very highly even when they indicated that they fell into the lowest tax bracket. Therefore, using a cross-tabulation on the hourly values reported by self-employed respondents and their income tax brackets as a guide, the lowest marginal tax rate of 18% was used for respondents who did not indicate their tax bracket, but indicated an hourly rate up to R200. A marginal rate of 26% was applied for hourly rates from R201 up to R500, a rate of 39% for hourly rates from R501 up to R1 000, a rate of 41% for hourly rates from R1 001 to R2 000, and a rate of 45% for hourly rates exceeding R2 000.

Following the argument by Evans *et al.* (1997:38) that the appropriate wage rate for sole traders (**self-employed taxpayers**) should fall between the before-tax wage rate of employed taxpayers who are medium income earners and those who are high income earners depending on the size of the business,[139] the 90th percentile value of **R1 500** was used as the maximum hourly rate for self-employed respondents. This was a little less than the before-tax hourly wage rate of the highest income earner of R1 662.50 (see Section 5.7.1). The 95th percentile value of R3 000 per hour would far exceed the appropriate wage rate of sole traders explained by Evans *et al.* (1997:38) and was therefore not used.

For respondents with **part-time income**, the 90th percentile value of **R750** was applied as the maximum,[140] while the median of **R150** was used as the maximum for respondents who are **not in the active work force**.[141] These limitations were applied in order to provide a more realistic and conservative estimate. After applying the maximum limits to the hourly values provided by the respondents as discussed above (namely R1 500, R750 and R150), the rates were not reduced further with the marginal tax rate. Therefore, as in the study by Tran-Nam *et al.* (2014:143), the before-tax hourly wage rates were used for persons who

---

[139] The respondents were not required to provide information regarding the size of their businesses.
[140] To be consistent with the limitation process for self-employed respondents, the 90th percentile value (and not the 95th percentile value of R1 500) was used for the part-time employed respondents.
[141] This value of R150 was deemed appropriate for persons who were not in the active work force (instead of the 90th percentile value of R750), since the mean after-tax wage rate of the respondents employed full-time was R148.54 (Section 5.7.1). Vaillancourt *et al.* (2013:8) used a value between the country's minimum hourly wage and the country's average after-tax wage for hourly paid employees as an estimate for retired individuals who did not provide a wage.

were *not* in full-time employment. The average hourly rate for these 1 619 respondents was **R204.09**.

5.7.3. Other methods to value an hour spent by respondents

From the methods and maximum limitations described in Sections 6.7.1 and 6.7.2 above, a weighted **average hourly rate of R157.31**[142] was derived for all 10 260 respondents. This rate is referred to as **Method 1**. It is acknowledged that other methods of valuing time may lead to substantially different estimates (Yesegat *et al.*, 2017:81) and that is why Vaillancourt *et al.* (2013) also calculated an upper-bound limit with before-tax hourly wage rates. For the purposes of this study, it was therefore decided to use additional methods (based on possible methods discussed in Section 3.3) when calculating the tax compliance costs to report on the range (and sensitivity) of different valuation methods.

For **Method 2**, two main changes were made. Firstly, all hourly rates were used without reducing them by the maximum marginal tax rate (the *before-tax* hourly rates). Secondly, the limitations placed on the hourly rates of respondents who were not in full-time employment, namely R1 500, R750 and R150, based on as Evans *et al.*'s (1997:38) arguments, were removed. Therefore only the winsorized limitations remained, resulting in the maximum hourly rate of R1 662.50 for respondents who were employed full-time and one of R787.50, R1 500 and R3 000 for respondents who were not in full-time employment, as explained in Section 5.7.2. For **Method 3**, the hourly rates (calculated according to Method 2) were reduced by the maximum marginal tax rate, and this method therefore used *after-tax* hourly rates.

For **Method 4**, the *mean before-tax* hourly rate was calculated based on the different income tax brackets. That rate was then used for all respondents whose taxable income fell within that income tax bracket. This procedure was done separately for respondents in full-time employment, and for those who were not in full-time employment. The means of the before-tax hourly rates varied from R102.83 to R834.29 for the respondents who were employed full-time and from R266.45 to R827.24 for the respondents who were not in full-time employment. For **Method 5**, the mean of the before-tax hourly rates (of Method 4) was reduced with the maximum marginal tax rate applicable to that respondent, and this method therefore used *mean after-tax* hourly rates.

---

[142] (R148.54 x 8 641/10 260) + (R204.09 x 1 619/10260) = R157.31. The 5% trimmed value is R141.89 and the median is R128.13.

Lastly, **Method 6** kept the *after-tax* hourly wage rates for respondents employed full-time as in Method 1, but used the *5% trimmed mean salary* per employment category (as shown in Section 5.7.2) for all respondents in that category. Thus R585.42 was used for self-employed respondents, R349.01 for respondents who were employed part-time, R327.62 for retired respondents with active income, R285.70 for retired respondents without active income, and R235.73 for unemployed respondents.

Even though different methods result in the same weighted average hourly rate,[143] the impact on individual respondents' tax compliance costs depends on the amount of time spent by the respondent on tax compliance activities and that is considered next.

5.7.4. Calculating the value of time spent up to submission of the income tax return

In calculating the value of time spent up to submission of the income tax return, the value of the respondents' time was calculated first, after which the value of the time spent by their family members or friends was calculated.

5.7.4.1. *Value of time spent by respondents*

The average value of the total time spent by the 10 260 respondents up to submission of the income tax return ranged between R1 425.42 and R2 419.97, taking all the hours discussed in Section 5.6.1 into account, and applying the hourly values as summarised under the six methods in Section 5.7.3. Table 5.6 shows the mean, 5% trimmed mean, median, minimum and maximum values of the total time spent by the respondents up to submission of their income tax return based on the different valuation methods.

---

[143] For example, the weighted average hourly rate for Methods 2 and 4 is R249, and the weighted average hourly rate for Methods 3 and 5 is R166.

Table 5.6:   **Value of time spent by respondents up to submission of income tax return (rounded)**

	Method 1 R	Method 2 R	Method 3 R	Method 4 R	Method 5 R	Method 6 R
Mean	1 520[144]	2 420	1 570	2 192	1 425	1 563
5% Trimmed mean	1 019	1 605	1 061	1 614	1 072	1 126
Median	431	625	431	720	506	486
Minimum	1	1	1	5	4	2
Maximum	116 250	232 500	155 250	100 115	55 063	68 494

Source: Own data

From Table 5.6 it is clear that the value of total time spent up to submission of the income tax return differs significantly, depending on valuation method. The mean ranges from R1 425 (indicated in green) to R2 420 (indicated in orange) and the maximum ranges from R55 063 to R232 500.

5.7.4.2.   *Value of time spent by family members or friends*

Not all the respondents who estimated the time spent by family members or friends answered the follow-up question regarding an estimate of the total rand value of such time spent. Furthermore, some persons who indicated they did not know how many hours were spent by family members or friends did provide an estimate of the value of the time. Excluding all nil values, the minimum value was R2, with the maximum value being R35 000 (of the 690 responses that remained); the mean was R866.85. The 5% trimmed mean was R615.61 and the median was R500.

Since the value of the time spent by family members or friends, also known as labour costs incurred by unpaid helpers (Evans *et al.*, 1997:16) forms part of the compliance costs borne by the taxpayers, the estimated time values provided were scrutinised further. This was necessary to ensure the values were reasonable given the employment category of the respondent and also to inform decisions on how to replace missing values (where respondents were required to respond but did not provide a value estimate). The process followed is described next.

---

[144] If the hours spent on tax planning are considered separately, the value of the time spent on tax planning was R94.43 and on the other activities was R1 425.52 which added up to R1 519.95 for all activities up to submission of the income tax return. Irrespective of the valuation method, the value of time spent on tax planning was approximately 6% of the time value of all activities up to submission of the income tax return.

First, the total time values provided were divided by the respondents' estimation of the time spent to obtain an hourly rate.[145] The mean (median) hourly rates *of the family members or friends* were then explored, based on the employment category *of the respondent*. The findings are the following:

- Employed full-time (N = 381) – R735.89 (R500);

- Self-employed (N = 4) – R1 639.58 (R1 029.17);

- Employed part-time (N = 10) – R655.98 (R475.71);

- Retired (with part-time employment) (N = 10) – R944.27 (R833.33);

- Retired (without part-time employment) (N = 73) – R547.34 (R333.33); and

- Unemployed (actively looking for work) (N = 5) – R374.05 (R285.71).

All of these averages are higher than the averages of the respondents' own time (even though most averages are based on only few respondents), which could indicate that the respondents either regard their family member or friend's time as worth more than their own, or maybe that they used a person who is more qualified than themselves for assistance. Due to the arbitrary nature of these values, it was decided to winsorize all total values provided (not hourly values) using the 5th and 95th percentile values of R100 and R2 500. A conservative approach[146] was followed to replace missing time values, namely R100 for respondents who indicated that the family member or friend did not spend more than an hour and R500 for respondents who indicated that the family member or friend spent more than an hour without providing a rand value. Respondents who provided neither a time nor a value estimate were allocated R100. This resulted in an average value of R598.91 for the 827 respondents who obtained free help from a family member or friend.

Up to this point, the time spent on tax compliance activities up to submission of the income tax return was considered along with its corresponding value, but in order to obtain the total compliance costs up to submission of the income tax return, out-of-pocket costs of the respondents had to be added to the calculated time values. These costs are considered next.

---

[145] Even though 690 respondents provided total rand values, only 483 respondents estimated the hours spent and this calculation was therefore limited to these 483 respondents.
[146] Based on the 25th percentile weighted average time values given by respondents who provided both time and value amounts.

5.8. "OUT-OF-POCKET" COSTS INCURRED UP TO SUBMISSION OF THE INCOME TAX RETURN

Out-of-pocket compliance costs arise from payments to tax practitioners for assistance and from sundry expenditure. Payments to tax practitioners are considered first.

5.8.1. Payments to tax practitioners

Of the respondents who submitted their income tax returns themselves, 164 (3%[147]) indicated that they also paid for tax planning and advice (Q4.4). A further 268 (14%[148]) of respondents who paid a tax practitioner for assistance to submit their income tax return also paid an additional amount for tax planning and advice. The extreme values provided by respondents were winsorized based on the 5th (indicated in green) and 95th (indicated in orange) percentile values using the weighted average method, as indicated in Table 5.7.

Table 5.7: Percentile values based on the weighted average method for amounts in Q4.4, Q4.14 and Q4.15 respectively

	Percentiles						
	5	**10**	**25**	**50**	**75**	**90**	**95**
Q4.4	70	245	500	725	1 400	3 000	4 750
Q4.14	250	300	500	750	1 400	2 500	3 500
Q4.15	100	200	350	600	1 000	2 000	3 000

Source: Own data

After replacing the extreme values with the 5th and 95th percentile values, the statistics of the amounts paid to tax practitioners were those displayed in Table 5.8.

Table 5.8: Statistics of amounts paid to tax practitioners

	Respondents who submitted their income tax returns themselves	Respondents who obtained paid help to submit their income tax returns	
	Q4.4 (amount paid for tax planning and advice)	**Q4.14** (amount paid for submitting income tax return)	**Q4.15** (additional payment for tax planning and advice)
Mean	R1 134.46	R1 050.27	R903.00
5% Trimmed mean	R993.71	R958.63	R831.08
Median	R725.00	R750.00	R600.00

Source: Own data

---

[147] 164/5 519.
[148] 268/1 887.

From the mean values in Table 5.8 it is clear that, on average, amounts paid to tax practitioners for either submitting an income tax return or for providing additional tax planning and advice was approximately R1 000.

5.8.2. Sundry expenditure

Similar to the questions relating to time spent, respondents were first only required to indicate the sundry expenditure incurred up to the point of submitting the income tax return (if they submitted it themselves; Q4.6) or handing records over to the person who submitted the income tax return on their behalf (if help was obtained; Q4.10). They were not asked at that point for information on expenditure incurred for any post-filing activity. Examples of sundry expenditure provided to respondents were costs related to data bundles, internet café, petrol, telephone, stationery, taxation books and TaxTim.[149]

The options presented to the respondents were:
- R0 (1);
- R1 to R99 (2);
- R100 to R299 (3);
- R300 to R499 (4);
- R500 to R999 (5);
- R1 000 to R1 500 (6); and
- More than R1 500 (please provide estimate) _____ (7).

Of the respondents who answered Q4.6, 60% indicated that their sundry expenditure was less than R100 (they selected one of the first two options), while only 43% of respondents who answered Q4.10 selected one of the first two options (see Figure 5.19). A possible reason why respondents who obtained help (and thus answered Q4.10) had higher sundry expenditure could be as a result of expenditure incurred on petrol to travel to those who assisted them, and telephone costs to communicate with those who assisted them.

---

[149] TaxTim is a software program integrated with SARS to assist taxpayers in submitting their income tax return.

Figure 5.19: Percentage of respondents selecting the various options of sundry expenditure in Q4.6 (N = 5 519) and Q4.10 (N = 4 741) respectively[150]
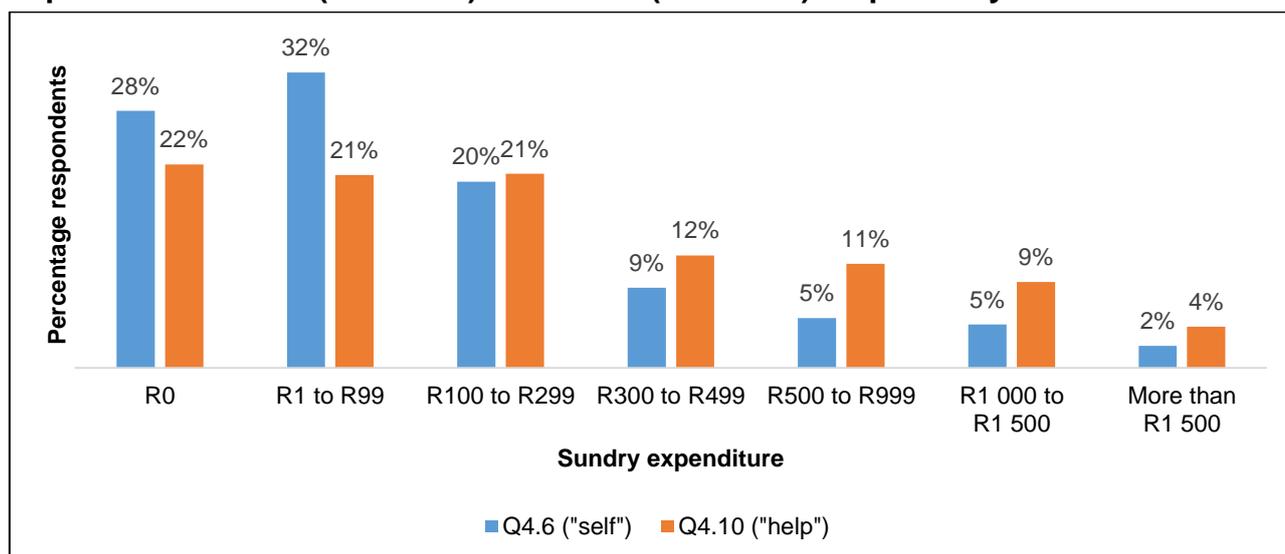
Source: Own data

The midpoints of options containing a range were awarded to each respondent and used in the further analysis, namely R50 for Option 2, R200 for Option 3, R400 for Option 4, R750 for Option 5, and R1 250 for Option 6. Option 7 (more than R1 500) was selected by 129 respondents in Q4.6, and by 209 respondents in Q4.10, with maximum reported costs of R182 000 and R1 790 000 respectively. The medians of R4 500 and R3 500 for the open categories in Q4.6 and Q4.10 respectively were applied as the maximum values in each category, as the 95th percentile values would distort or skew the data due to the nature of the data in the open categories.

The mean sundry expenditure of the two groups of respondents ("self" vs "help") was R274.10 (Q4.6) and R430.30 (Q4.10), resulting in a combined average of R346.28[151].

5.9. TAX COMPLIANCE COSTS UP TO SUBMISSION OF THE INCOME TAX RETURN

The tax compliance costs up to submission of the income tax return is the sum of the respondents' own time (converted to a rand-equivalent) (Section 5.7.4), the value of time spent by their family members or friends (Section 5.7.4.2), costs paid to tax practitioners (Section 5.8.1) and sundry expenditure incurred (Section 5.8.2). Table 5.9 contains the mean, median, maximum and standard deviation of the tax compliance costs up to

---

[150] Due to rounding, the percentages for "self" respondents added up to 101% instead of 100%.
[151] Calculated as (R274.10 x 5 519/10 260) + (R430.30 x 4 741/10 260) = R346.28.

submission of the income tax return calculated using the six different time valuation methods discussed in Section 5.7.3.

Table 5.9:   Tax compliance costs up to submission of income tax return (rounded)

	Method 1 R	Method 2 R	Method 3 R	Method 4 R	Method 5 R	Method 6 R
Mean	2 149	3 049	2 200	2 822	2 055	2 192
5% Trimmed mean	1 434	1 924	1 473	1 976	1 510	1 540
Median	844	1 100	859	1 214	917	920
Minimum	2	2	2	5	4	2
Maximum	125 502	239 500	159 250	107 116	62 064	72 894
N	10 260	10 260	10 260	10 260	10 260	10 260
Std. Deviation	4 945	7 758	5 090	5 307	3 484	4 133

Source: Own data

From Table 5.9 it is clear that the different time valuation methods have a significant impact on the maximum tax compliance costs. Method 5 results in the lowest *mean* (shown in green)*, maximum* and *standard deviation*, while Method 1 results in the lowest *5% trimmed mean* and *median* tax compliance costs. Method 2 results in the highest values (shown in orange) (except for the median[152]). On average, the tax compliance costs up to submission of the income tax return ranges between R2 055 and R3 049.

Even though the provisional tax returns are separate from the normal income tax return, it is a compliance activity relating to income tax and therefore also needs to be taken into account when calculating the total tax compliance costs.

5.10. TAX COMPLIANCE COST RELATING TO PROVISIONAL TAX RETURNS

Only persons who earn income other than remuneration from employment (and subject to further criteria) need to be registered as provisional taxpayers and since most respondents were full-time employed and did not indicate other income sources than salary, it was not expected that many respondents would be provisional taxpayers. Approximately 18% of the respondents indicated that they were provisional taxpayers (Figure 5.20). It is not clear why such a high percentage (27.7%) of respondents left this question unanswered, given that there was a "Don't know" option provided, which no respondent selected.

---

[152] Method 3 results in the highest median of R1 214.

Figure 5.20: Provisional taxpayers
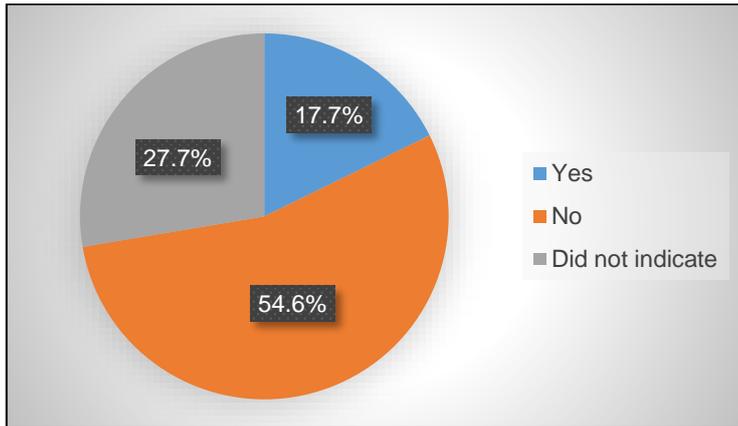
Source: Own data

Unfortunately, upon further investigation, it was found that the criteria for being a provisional taxpayer did not match the sources of income indicated by some of the respondents. The discrepancy could be a result of incorrect information provided, or could arise from a lack of knowledge regarding the registration for provisional tax. For example, 179 respondents who indicated that they earned rental income and 17 respondents who indicated that they earned business income stated that they were not provisional taxpayers, but met the criteria for compulsory registration for provisional tax. On the other hand, 1 302 respondents who indicated that they were employed full-time and did not earn any other source of income than remuneration from employment indicated that they were provisional taxpayers.

Discrepancies were also found in the information regarding time and costs provided by respondents, since respondents would only "tick" the boxes without providing the hours or costs. The question was phrased as follows: "Please estimate the total hours and/or cost to complete and submit your first, second and third (if applicable) provisional tax returns in respect of your 2017/18 tax year.

- Own hours spent (Use decimals for fraction of hours (e.g. 0.5 for half hour)) (1) _____
- Costs (e.g. amount paid for assistance) (2) _____"

Lesson learnt: Consider including pop-up messages to force a respondent to indicate the time and/or costs or suggest the correction of a response selected in the previous question (if applicable). Furthermore, respondents could be provided with more explanations as to the meaning of certain tax terms, for example, the meaning of provisional tax.

Therefore, even though 1 690 respondents selected answers indicating that they spent time to complete and submit their provisional tax returns, only 1 350 respondents provided an estimate of their time (including estimates of 0 hours). Similarly, of the 983 respondents who indicated that they incurred costs regarding their provisional tax returns, only 876 provided a cost estimate (including R0). These estimates (before and after using winsorizing) are set out in Table 5.10. The mean estimates before and after are indicated in orange and green respectively.

Table 5.10:   Time spent and costs incurred on provisional tax returns before and after winsorizing

	Hours before winsorizing	Hours after winsorizing	Costs before winsorizing	Costs after winsorizing
N	**1 350**	**1 350**	**876**	**876**
Mean	6.01	2.78	R599.15	R402.30
5% Trimmed mean	2.31	2.31	R335.89	R335.89
Std. Deviation	51.50	3.52	R1 822.07	R608.96
Minimum	0.00	0.05	R0.00	R0.00
Maximum	1 500.00	14.00	R28 000.00	R2 000.00

Source: Own data

From Table 5.10 it can be concluded that, on average, respondents spent *2.78 hours* and incurred costs of *R402.30* on provisional tax returns.

Using the different time valuation methods (see Section 5.7.3), the average tax compliance costs (time burden converted to rand and out-of-pocket costs) of the 1 433 respondents who spent some time and/or incurred some costs relating to their provisional tax returns was between R709 and R1 059. The maximum tax compliance costs relating to provisional tax returns ranged between R8 833 and R42 000.

Since taxpayers are penalised if an under-estimation of the taxable income for provisional tax purposes is submitted, questions relating to penalties and interest were also asked. Even though penalties and interest are not technically a cost of compliance, but rather of non-compliance, the extent of penalties and interest may, for example, expose the complexity of estimations required for provisional tax purposes and therefore affect tax compliance costs.

5.11. PENALTIES AND INTEREST

Of the respondents, 5% (537) indicated that they incurred a penalty and/or interest in respect of their income tax or provisional tax returns for the 2018 year of assessment. The respondents were presented with a few possible reasons, from which they could select more than one (if applicable). They were also given an opportunity to provide their own reason in the open (other) category. Table 5.11 presents an overview of the number of respondents who selected the various options. The most cited reason was interest on outstanding income tax.

Table 5.11: Number of respondents who selected the different reasons for penalties and interest

	N	%
Interest on underpayment of provisional tax	53	9%
Interest on outstanding income tax	117	21%
Penalty on late payment of provisional tax	51	9%
Penalty as a result of underestimation of provisional tax	27	5%
Administrative penalty for non-submission of income tax returns	71	13%
Other	88	16%
Respondents who did not select any of the above options	211	37%
	565	**100%**

Source: Own data

From Table 5.11 it is clear that with regard to interest incurred, most respondents indicated *interest on outstanding income tax* as the reason for the interest, while with regard to penalties incurred, most respondents indicated the *administrative penalty for non-submission of income tax returns* as the reason for the penalty. From analysing the reasons provided in the "other" category, it became clear that some respondents used the opportunity to explain their selection of the given categories. For example, respondents who selected *interest on outstanding income tax*, stated the following:

- "The amount was in the region of R1.45 and they charged me interest! It cost more in bank charges to make the payment!"
- "I still owe some outstanding amount, not sure where to ask. No internet at home and can only work on my private things in 20-minute lunch."
- "Interest was charged on the amount outstanding whilst I was awaiting finalization of my travel allowance submission."

Examples of reasons provided by respondents who selected *administrative penalty for non-submission of income tax returns,* are the following:

- "They hit me for non-submission of returns for the year, I have been in Saudi and it was not even a requirement for me in those years to submit those returns."
- "I failed to submit a tax return in 2014, due the fact that I received an email from SARS to say that I did not need to submit a tax return as I earned below a certain amount. I was penalised in 2015 and 2018."
- "Did not know I was in the tax bracket."

It seems as if some of the respondents understood "penalty" to mean that they owed SARS money on an assessment. This conclusion was based on responses such as the following:

- "My employer did not pay enough tax as required."
- "SARS officials only said 'you owe SARS' this amount. Nothing due to you."
- "For having a permanent job and doing locums to boost my little insufficient salary to try to make ends meet."

Furthermore, a few respondents indicated that the penalties and/or interest related to travel expenses (even though it seems that some of these could merely relate to the amount of tax because insufficient PAYE was deducted and not to a penalty or interest as such). Examples of their statements include the following:

- "Non submission of a complete logbook and large initial refund, which on adjustment created a deficit unexpectedly."
- "Penalty on my travel allowance submitted."
- "For not submitting proof of travelling allowances."

Some of the "other" reasons for penalties and/or interest provided by the respondents seemed to relate to the "pay-now-argue later" principle, namely where respondents did not pay the outstanding amount while waiting for a dispute to be finalised. Examples of some of these responses are the following:

- "Because I was disputing tax assessment and have not yet received a reply."
- "Apparently, the person that assessed my tax return did not feel the expenses claimed on my rental property were valid. I disagree and therefore have lodged a dispute."
- "Notice of objection not finalised. SARS had IT glitch which prevented me from selecting suspension of payment. SARS has therefore now added interest to an amount that is still under dispute and not yet resolved."

Lastly, examples of other reasons for penalties and/or interest provided by the respondents were the following:

- "Misunderstanding after the first assessment was done. Paid only the second assessment as I thought it was a correction from the first assessment."
- "Outstanding documents I did not know about."
- "Fine for double submitting e-filing as you cannot delete a submission."

From the above examples it is clear that some of the penalties and interest could have been avoided with better communication and explanations from SARS. Furthermore, the 5% of respondents who paid a penalty as a result of underestimation of provisional tax, compared to the 13% of respondents who paid an administrative penalty for non-submission of their income tax return must be considered in the context of only 18% of the respondents' being provisional taxpayers. It seems, therefore, based on this finding and the maximum time spent and costs incurred on provisional tax returns as summarised in Table 5.10, that the complexity of estimations required for provisional tax purposes may negatively affect tax compliance costs.

As mentioned in Section 5.6, this study included a review of *all* tax-related compliance activities. Thus it also included dispute resolution, which is also specifically mentioned by Tran-Nam *et al.* (2014:141). The next section deals with dispute resolution, and all post-filing activities.

5.12. TAX COMPLIANCE COST OF POST-FILING ACTIVITIES

All activities that occur *after* the income tax return has been submitted are considered post-filing activities. However, payment of the amount due as a result of the original assessment following the submission of the income tax return is not considered a post-filing activity and is normally grouped together with the filing of a tax return (Evans *et al.*, 2012:631; Smulders *et al.*, 2012:194). It was therefore included in the last activity under both Q.3 and Q4.8 (see Section 5.6).

The post-filing activities discussed in the remainder of this section are complying with verification and audit requests from SARS, requesting SARS to provide reasons for an assessment to enable respondents to formulate an objection and all activities undertaken to resolve a dispute (such as objection, appeal and litigation procedures).

5.12.1. Verification requests from SARS

As explained in Section 4.5.1, once an income tax return is submitted, it can be selected by SARS for verification (which is different from being selected for an audit – this is dealt with in Section 5.12.2). Verification is a *face-value comparison* of the information declared by the taxpayer in his/her income tax return against the taxpayer's accounting records and/or other supporting documents to ensure that the return is a fair and accurate representation of the taxpayer's tax position (SARS, 2019b).

The majority of respondents (51%) indicated that they were requested to submit supporting documentation for verification purposes, while the remaining 49% indicated that they were either not requested to submit supporting documentation or they were not aware of any such requests. The vast majority of respondents (82.7%) who were requested to submit supporting documents did so themselves, while 16.9% (893 respondents) obtained help, and the remainder (0.4%) had not submitted their supporting documents at the time when the questionnaire was completed. These percentages are visually displayed in the pie charts in Figure 5.21.

Figure 5.21: Requests for supporting documents and who fulfilled requests
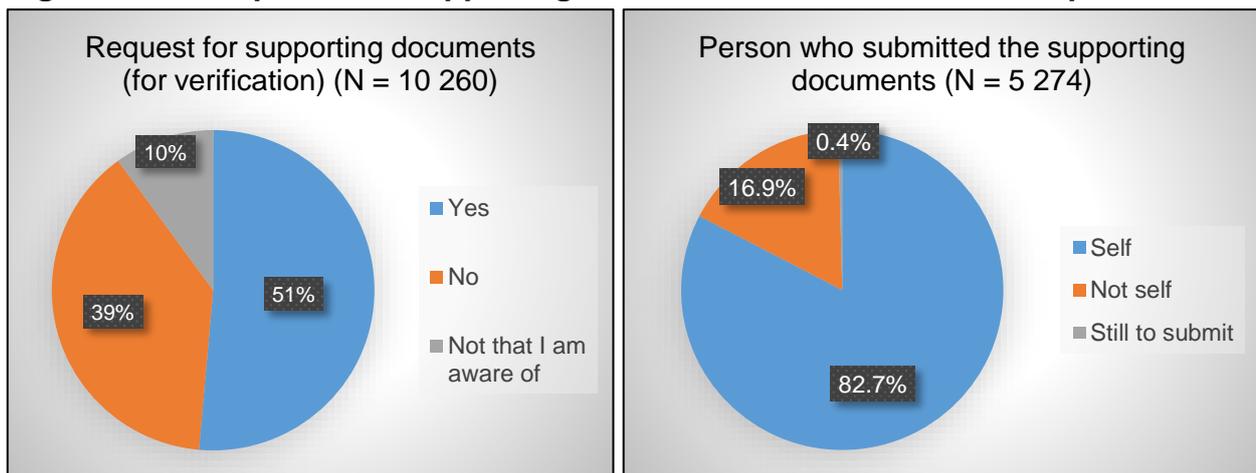
Source: Own data

5.12.1.1. *Submitted supporting documents themselves (4 359 respondents)*

Respondents who submitted the supporting documents themselves were requested to indicate their time and out-of-pocket costs relating to the submission of these documents. It was emphasised that these time and cost estimates should **not** take any time and costs into account that they spent on preparing documents for the purposes of submitting the income tax return, since these would have already been taken into account as tax compliance costs. Time spent on preparing *additional* medical expense schedules and travelling and printing costs were provided as examples.

The time options in Q5.3 were
- 0 to 15 minutes (1);
- 16 to 30 minutes (2);
- 31 to 59 minutes (3);
- 1 to 2 hours (4); and
- More than 2 hours (please estimate) _____ (5).

The sundry expenditure options in Q5.4 were
- R0 (1);
- R1 to R50 (2);
- R51 to R100 (3);
- R101 to R200 (4);
- R201 to R500 (5); and
- More than R500 (please estimate) _____ (6).

The majority of respondents who prepared and submitted their supporting documents for verification purposes themselves (53%) indicated that it took them no longer than half an hour. With regard to additional sundry expenditure incurred, 62% indicated that they did not spend more than R50. On the higher end of the scale, 9% of the respondents who prepared and submitted the supporting documents themselves spent more than two hours and in excess of R200 in additional sundry expenditure. These percentages are visually displayed in the graphs in Figure 5.22.

Figure 5.22: Time spent and costs incurred by respondents who prepared and submitted supporting documents for verification purposes themselves
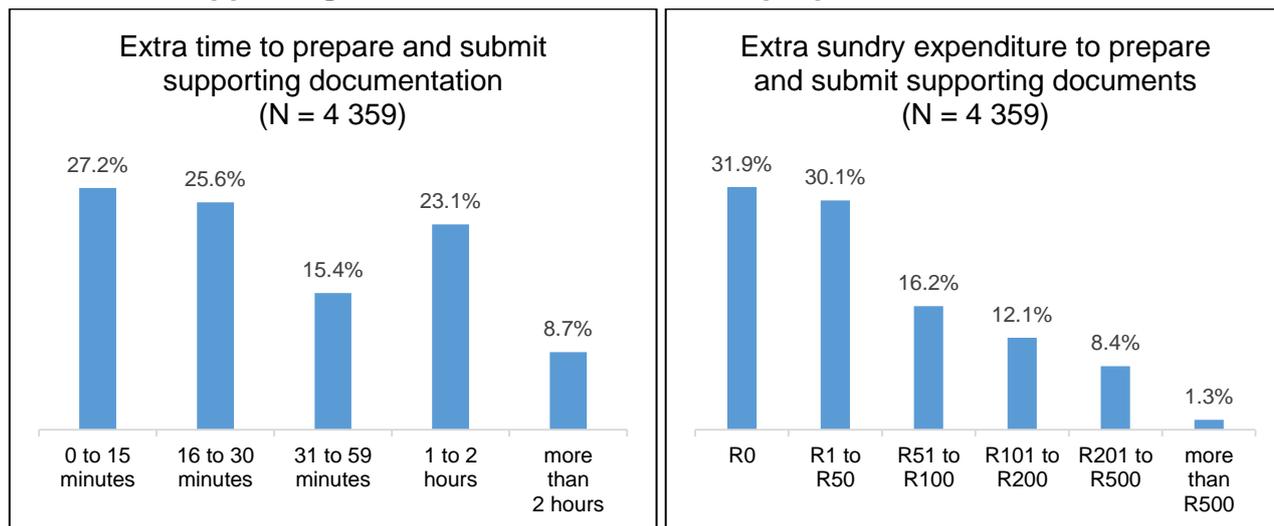
Source: Own data

The midpoints of options containing a range were awarded to each respondent and used in the further analysis. For the time spent question (Q5.3), they were 0.13 for Option 1, 0.38 for Option 2, 0.75 for Option 3 and 1.5 hours for Option 4. For the sundry expenditure question (Q5.4) the midpoints were R25 for Option 2, R75 for Option 3, R150 for Option 4, and R350 for Options 5. Option 5 (more than 2 hours) was selected by 381 respondents in Q5.3, but 58 respondents selected Option 6 (more than R500) in Q5.4, with the maximum reported time of 363 hours and sundry expenditure of R10 000. The median values of 5 hours and R1 000 were applied as the maximum values for the open-ended category of time spent (Q5.3) and sundry expenditure incurred (Q5.4) by respondents who prepared and submitted supporting documents themselves.

5.12.1.2. *Obtained help to submit supporting documents (893 respondents)*

Of the 893 respondents who obtained help to submit their supporting documents, 406 respondents (45.5%) obtained free help and 300 respondents (33.6%) were assisted by the person who submitted their income tax return and did not have to pay any additional amount for this service, as it was included in the original fee charged. Most of the 187 respondents who had to pay for the submission of supporting documents (approximately three quarters of the remaining 20.9%) spent no more than R500. Figure 5.23 displays the distribution of amounts paid by respondents who obtained help to prepare and submit supporting documents for verification purposes.

Figure 5.23: Amounts paid by respondents who obtained help to prepare and submit supporting documents for verification purposes (N = 893)
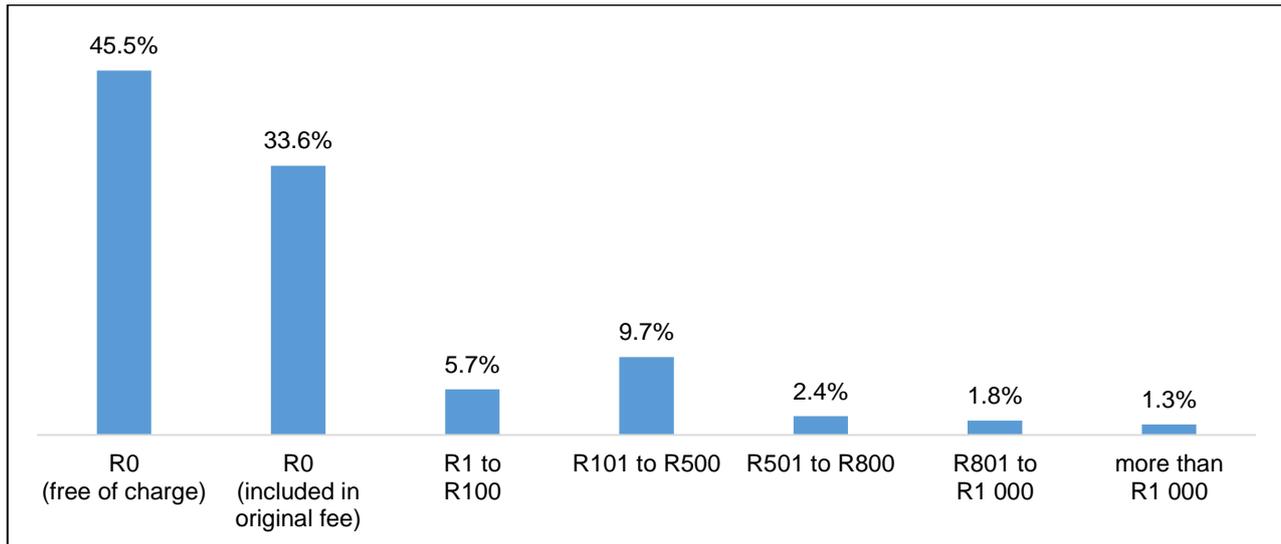
Source: Own data

The midpoints of the range options were awarded to the respondents and used in the further analysis, namely R50, R350, R650 and R900. The median of R1 850 was used as the maximum for the open-ended responses.

In summary (after determining the midpoints and maximum values of all categories), respondents spent on average almost an hour (0.98 hours) and R79.47 in sundry expenditure to prepare and submit supporting documentation for verification purposes themselves, and the 187 respondents who paid an additional amount for assistance with these verification requests spent on average R412.30.

Even if a taxpayer is subjected to a verification and the verification process has been completed, the taxpayer's tax affairs could still be referred for audit as part of the SARS compliance process (SARS, 2019b).

5.12.2. Audit requests from SARS

An audit is an *examination* of the accounting records and/or supporting documents of the taxpayer to determine whether the taxpayer has correctly declared his/her tax position to SARS (SARS, 2019b). SARS either issues a formal *Notification of Audit* (where the audit has been allocated to a specific auditor) or a *Notice of Assessment* (where a finding is made during the verification and the audit has not commenced). The process could take up to 120

business days (SARS, 2019b), but there is no prescribed maximum duration for a SARS audit.

Of the respondents, 34% indicated that they had been audited by SARS in respect of their 2018 income tax return, while the rest either answered "no" (47%) or not that they were aware of (19%). However, it was concerning that 445 respondents who indicated that they had been audited, indicated "n/a (not handled by myself)" to the time question and also indicated "R0 (not applicable)" to the cost question which was meant for respondents who handled the audit themselves. The other R0 options were "R0 (free help)" and "R0 (included in original fee)". A possible reason for this discrepancy is that respondents may not be clear on the difference between a verification request and an audit. These 445 responses were not used in the further analysis (and are marked as "incorrectly indicated yes"). This reduces the percentage of respondents who have been audited to 30% (namely 3 088 respondents) (see Figure 5.24).

Figure 5.24: Percentage of respondents selected for audit
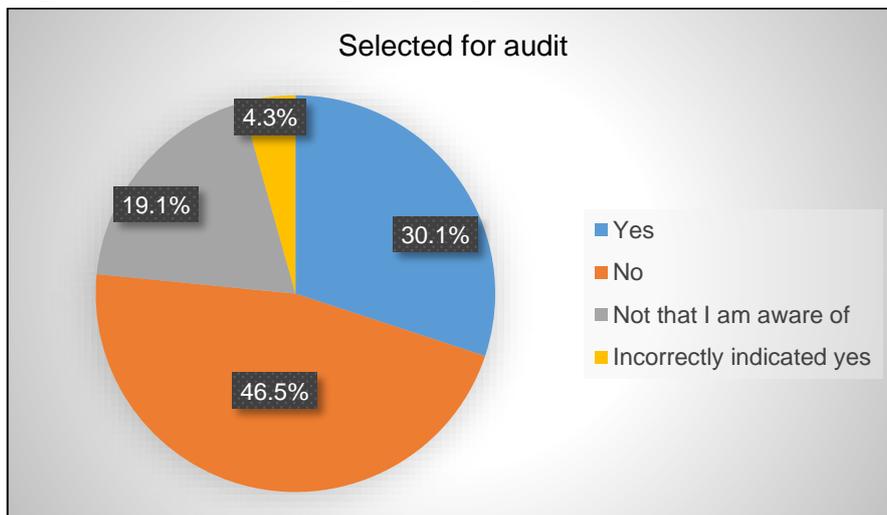
Source: Own data

The majority (48.5%) of respondents who were audited spent no more than 1 hour actively on the audit, either because someone else handled the audit on their behalf or because their own time did not exceed 1 hour (see Figure 5.25).

Figure 5.25: Active time spent on audit (N = 3 088)
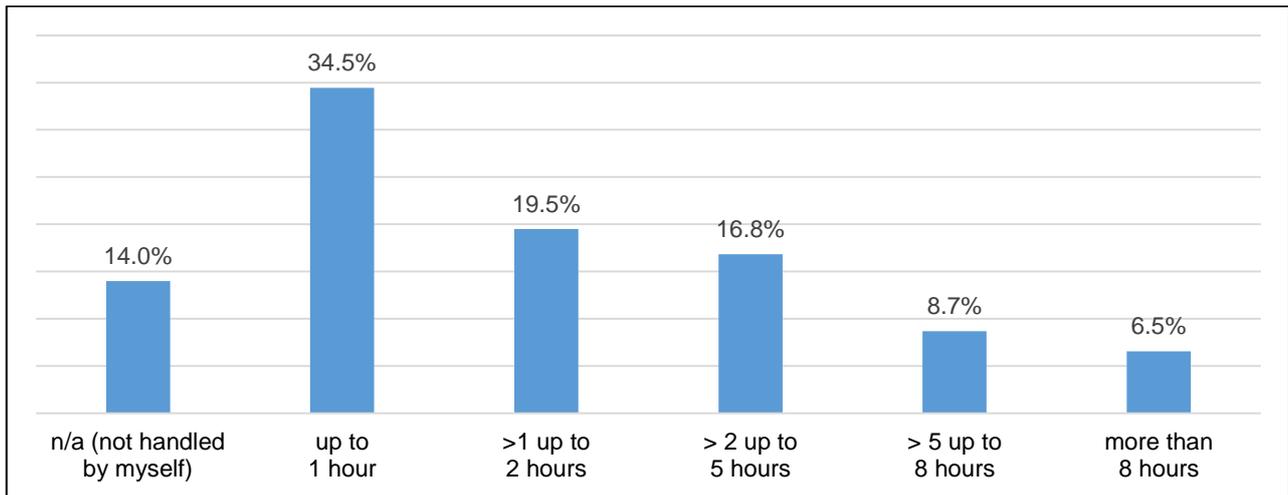
Source: Own data

The midpoints of the range options were awarded to the respondents (namely 30 minutes, 1.5 hours, 3.5 hours and 6.5 hours) and were used in the further analysis. The hours reported by the 202 respondents[153] (6%) who indicated that they had spent more than 8 hours actively on the audit varied between 9 hours and 5 136 hours. The median of 24 hours was used as the maximum for the open-ended category.

The majority of respondents (65%) who obtained assistance with regard to their audit did not incur any costs, either because someone assisted them for free (40%), or because the assistance with the audit was already included in the fee charged for submitting the respondent's income tax return (25%). One quarter (25%) of the respondents did not pay more than R1 000 for assistance with their audit, 8% of the respondents paid between R1 000 and R5 000, 1% paid between R5 000 and R10 000 and 1% paid more than R10 000[154] (varying between R11 500 and R23 000) (see Figure 5.26).

---

[153] "More than 8 hours" was selected by 202 respondents, but only 129 specified their hours.
[154] Nine respondents selected "more than R10 000", but only three specified their costs.

Figure 5.26: Costs incurred for assistance with audit (N = 1 089)
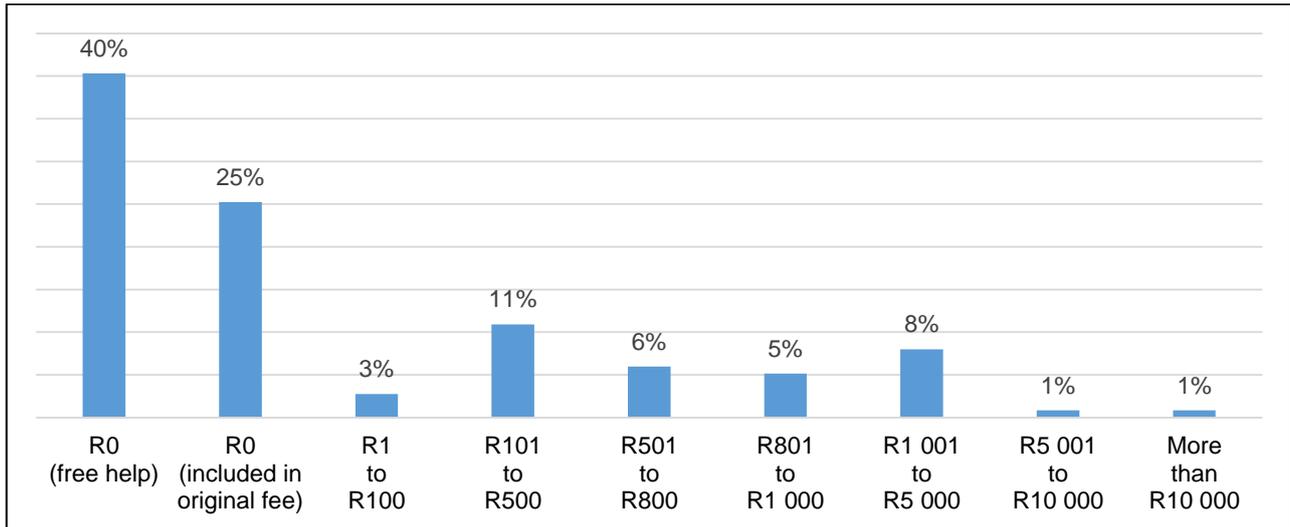
Source: Own data

The midpoints of the range options (R50, R300, R650, R900, R3 000 and R7 500) and the median of the open category of R15 000 was used as the maximum.

In summary, on average *3.10 active hours* were spent by the 2 656 respondents[155] on audit, while *R1 572.93* was spent on average by the 375 respondents who incurred additional costs[156] for assistance with the audit.

The next few sections consider the activities undertaken by respondents who did not agree with their assessments. Section 5.12.3 considers the request for reasons that enables a taxpayer to formulate an objection, while Sections 5.12.4 to 5.12.6 consider the tax compliance costs relating to the actual dispute (objection, appeal and litigation).

5.12.3. Requesting reasons

In terms of section 103 of the *TAA,* the Minister of Finance has to prescribe the rules[157] governing the procedures to lodge an objection and appeal against an assessment or decision under Chapter 9 of the *TAA*, the procedures for ADR, and the conduct and hearing of appeals before a Tax Board or Tax Court. Rule 6 provides that a taxpayer who is aggrieved by an assessment may, prior to lodging an objection, request SARS to provide the reasons for the assessment required to enable the taxpayer to formulate an objection in

---

[155] Excluding the 432 respondents who indicated that they did not spend any time on this item because they did not handle it themselves.
[156] Therefore, excluding the respondents who indicated that they paid R0 for assistance.
[157] These rules were contained in General Notice 550 of 11 July 2014 and published in *Government Gazette* No. 37819 (RSA, 2014).

the form and manner referred to in rule 7. SARS must provide reasons within 30 business days, unless a SARS official is satisfied that more time is required to provide reasons due to exceptional circumstances, the complexity of the matter or the principle, or the amount involved, in which case the time frame may be extended to 45 business days.

Only 10% of respondents (1 070) requested reasons for their assessments. Of these respondents, 77% (820) received their reasons within 30 business days. However, 15% of these respondents (159) indicated that they waited longer than 30 days, but less than half of them (only 70 of the 159 respondents) specified the actual number of business days. The median of the business days provided by these 70 respondents was 60 days. Similarly, 8% of the respondents (namely 88) indicated that they had not yet received reasons, but less than half of them (only 41 of the 88 respondents) stated the number of business days since they had requested reasons. Seven of these were still within the normal required time frame of 30 business days. The median of the business days provided by these 41 respondents was 120 business days. Figure 5.27 presents these percentages in two graphs.

Figure 5.27: Request for reasons and time waited
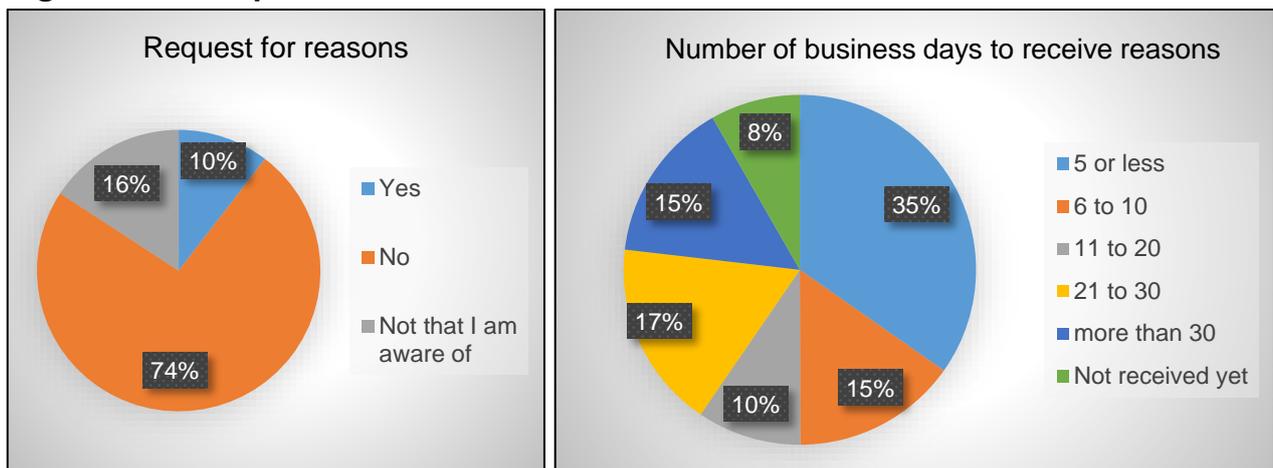
Source: Own data

It is therefore clear that some respondents would have been forced to object to an assessment without having received the requested reasons, due to the allowed time frames during which an aggrieved taxpayer may file an objection.

5.12.4. Lodging a notice of objection

Only 5% of the respondents indicated that they (or someone else on their behalf) lodged a notice of objection to their 2018 assessments. Of these 533 respondents, only 483 indicated

the active time spent to date with regard to their objection. The minimum hours reported were "0", while the maximum time spent was 5 000 hours. After winsorizing the outliers with the 5th and 95th percentile values, the average time spent was 4.6 hours.

Of the 220 respondents who indicated that they had obtained help with regard to their objection, the majority (61%) did not incur any costs, either because someone assisted them for free (35%), or assistance with the objection was included in the fee charged for submitting the respondent's income tax return (26%). Of the respondents who obtained help, 27% did not pay more than R1 000 for the help, while 8% paid between R1 000 and R2 000. The costs of the remaining 4% (namely eight respondents) who indicated that they paid more than R2 000 varied between R2 600 and R5 000 (see Figure 5.28). The median of R4 000 was used as the midrange for the open category.

Figure 5.28: Costs incurred for assistance with objection to 2018 assessment (N = 220)
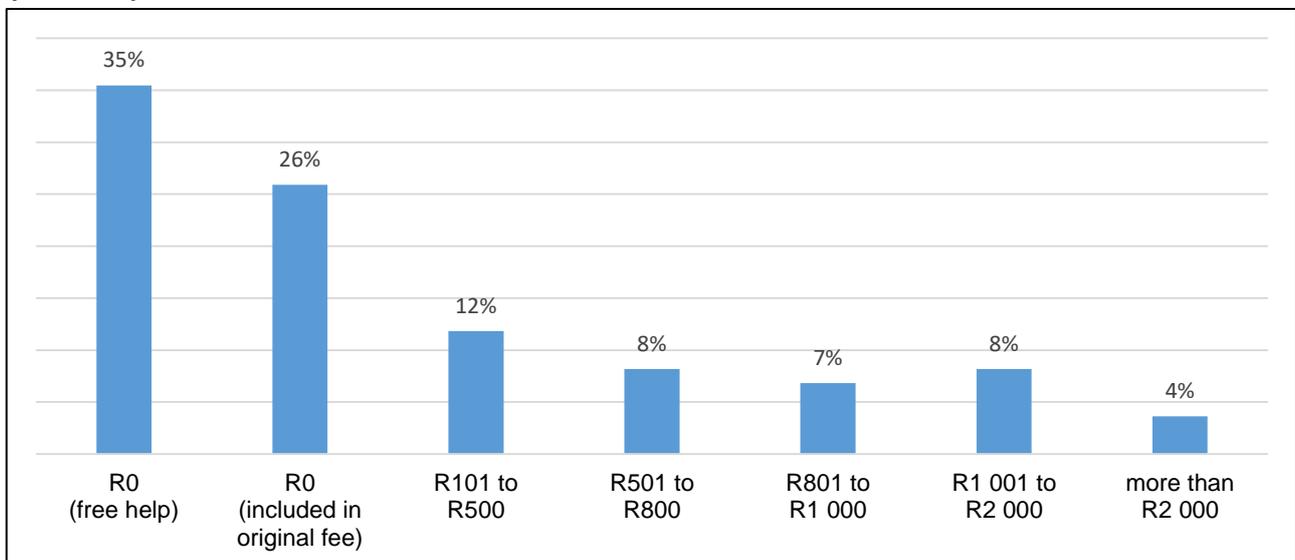
Source: Own data

The midpoints of the range options (R200, R650, R900 and R1 500) were awarded to the respondents, while the median of the open category (R4 000) was used as the maximum for those respondents.

In summary, respondents spent on average *4.6 hours* to lodge an objection, and *R1 018.82* was paid on average for assistance to lodge an objection by the 85 respondents who incurred additional[158] costs for assistance. Only 65% of the respondents who lodged an

---

[158] The respondents who indicated that they paid R0 for assistance were excluded.

objection indicated that their disputes had been resolved at the time of completing the questionnaire. However, since no further questions were asked relating to the time since the objection was lodged, no conclusions can be drawn from the observation regarding whether or not the dispute was resolved.

Taxpayers who are not satisfied with the outcome of an objection may take the next step in attempting to resolve the dispute, namely the ADR process.

5.12.5. Appeal using the ADR process

As explained in Section 4.5.2, in respect of appeals using the ADR process, respondents could indicate time and costs relating to the 2017 and 2018 years of assessment. This analysis therefore considered and compared the information relating to both these years. Approximately 2% of the respondents (248 of the 10 260 respondents), indicated that they had appealed against a decision regarding an objection using the ADR process for either the 2017 or the 2018 year of assessment, even though only 217 and 203 provided hours and costs respectively. The split between the two different years of assessment was 38% and 62% for 2017 and 2018.

Considering the time estimates first, the average hours spent by the 80 (for the 2017 year) and 137 (for the 2018 year) respondents were 7.92 hours and 8.26 hours respectively (after winsorization of the outliers[159]). Regarding the cost estimates, the majority (approximately 70%) of respondents who provided information regarding the amount paid for assistance with their appeal using the ADR process indicated that no cost was incurred, which either meant they handled the ADR process themselves or obtained free help. Therefore, the nil values were not taken into account for the winsorizing of amounts paid. The average amount spent by respondents who obtained paid assistance for their appeal was R1 178.50 for 2017 and R1 755.64 for 2018.

Comparing the information between the two years, it seems as if the average time spent by taxpayers on the ADR process increased slightly (4%[160]), while the average costs for assistance with the ADR process increased by almost 50%[161] from 2017 to 2018. Only 228 of the 248 respondents who indicated that they had appealed against a decision regarding

---

[159] For example, the maximum hours provided were 4 380 and 3 720. The 95th percentile was 69.4 and 48.2 hours for the two years respectively.
[160] (8.26 – 7.92)/7.92.
[161] (R1 755.64 – R1 178.50)/R1 178.50.

an objection using the ADR process also answered the question whether or not the appeal had been resolved. In respect of both years of assessment, the majority of respondents (71% and 55% respectively) indicated that the appeal had been resolved (see Table 5.12), even though some respondents indicated that they were not happy with the outcome (see Table 5.13).

Table 5.12: Percentage of appeals resolved for the different years of assessment

	2017 year (N = 92)	2018 year (N= 136)
Yes	70.65%	55.15%
No	27.17%	40.44%
Unsure/Invalid answer	2.18%	4.41%
Total	**100%**	**100%**

Source: Own data

Table 5.13: Answers provided to question whether dispute has been resolved

	N	%
2017 year		
"Yes"	63	68%
"Yes but not satisfied."	1	1%
"Believe so but waiting for the response."	1	1%
"No"	25	27%
"0"	1	1%
"5"	1	1%
	92	**100%**[162]
2018 year		
"Yes"	73	54%
"Yes but still not happy with the outcome."	1	1%
"Yes from their side. I never got an answer as to why none of my medical expenses were refunded and it has put me into debt review."	1	1%
No	55	40%
"0"	2	1%
"Did not received my documents."	1	1%
"I don't know stopped following up."	1	1%
"No official confirmation, but they haven't requested anything further."	1	1%
"Not really."	1	1%
	136	**100%**[163]

Source: Own data

From Table 5.13 it is clear that not all disputes had been resolved and not all respondents were satisfied with the outcomes of the ADR process. If any of these respondents were to escalate an unresolved dispute, they would have to follow the litigation protocol by appealing to the Tax Board, the Tax Court, the High Court and lastly the Supreme Court of Appeal, if

---

[162] Due to rounding the total is only 99%.
[163] Due to rounding the total is 101%.

necessary, which means it may take some time before the dispute is resolved. For example, the average days to finalisation of appeals referred to the Tax Board and the Tax Court are 282 and 400 days respectively (OTO, 2020:40). The question regarding further litigation was therefore widened to include both the 2018 year of assessment and prior years of assessment.

5.12.6. Appeal to Tax Board, Tax Court, High Court and/or Supreme Court of Appeal

Fewer than 1% of the respondents (82 of the 10 260 respondents) indicated that they had appealed against a decision to the Tax Board, the Tax Court, the High Court and/or the Supreme Court of Appeal in respect of **any** year of assessment. The respondents were asked to state to which year/years of assessment the appeal related. Based on the answers received, five groups were established. The groups and numbers of respondents in each group were the following:

- 2018 – 15 respondents;
- 2017 – 16 respondents;
- 2011 to 2016 – 26 respondents;
- 2010 or earlier – 15 respondents; and
- Invalid answer/can't remember – 10 respondents.

Without taking the nil values into account, the average time spent by the 61 respondents who provided the time spent was 14.4 hours, while the average cost indicated by the 14 respondents who provided their cost was R3 210.71. Since this study focused only on the 2017 and 2018 years of assessment, only the statistics (ignoring nil values) regarding those years are presented in Table 5.14. The mean time spent is indicated in green and the mean cost is indicated in orange.

Table 5.14: Statistics for time spent and costs incurred on further litigation during 2017 and 2018

	2017 year		2018 year	
	Time (Hours)	Cost (R)	Time (Hours)	Cost (R)
N	14	2	11	4
Mean	5.27	7 500.00	5.82	1 012.50
5% Trimmed Mean	4.96		5.85	986.11
Median	2.25	7 500.00	6.00	775.00
Std. Deviation	5.75	9 192.39	3.60	671.29
Minimum	0.10	1 000.00	1.00	500.00
Maximum	16.00	14 000.00	10.00	2 000.00

Source: Own data

From Table 5.14 it is clear that the average time spent by the respondents on further litigation was between 5 and 6 hours during both the 2017 and 2018 years. The average cost incurred by the two respondents for their 2017 assessment was R7 500, while the average cost incurred by the four respondents who appealed their 2018 assessment was R1 012.50. Further research is necessary to determine to which stage of the appeal process the reported time and costs relate – the Tax Board, Tax Court, High Court and/or Supreme Court of Appeal. Further research could also shed light on the timelines to conclude the different appeal processes.

5.12.7. Summary

The tax compliance cost of the post-filing activities is the sum of the rand-equivalent of the time spent by the respondents, and the out-of-pocket costs incurred in respect of each of these post-filing activities. Table 5.15 contains the mean, median and maximum post-filing tax compliance costs for the 5 141 respondents who incurred any of these activities using the six different time valuation methods discussed in Section 5.7.3.

Table 5.15: Tax compliance cost of post-filing activities (rounded)

	Method 1 R	Method 2 R	Method 3 R	Method 4 R	Method 5 R	Method 6 R
Mean	774	1 086	788	1 072	779	802
5% Trimmed mean	450	631	465	657	483	488
Median	228	300	234	339	254	254
Maximum	43 814	66 758	50 825	49 909	39 482	43 815

Source: Own data

Table 5.15 illustrates that, on average, the tax compliance costs of *post-filing* activities were between R774 and R1 086, depending on the valuation method used. Method 1 resulted in the lowest mean (shown in green), 5% trimmed mean and median, while Method 2 resulted in the highest mean (shown in orange) post-filing tax compliance costs. The next section discusses the calculation of the *total* tax compliance costs.

5.13. TOTAL TAX COMPLIANCE COSTS OF RESPONDENTS

In calculating the total tax compliance costs for all 10 260 respondents, the tax compliance costs up to submission of the income tax return (Section 5.9), the compliance costs associated with provisional tax returns (Section 5.10) and the compliance costs of post-filing activities (Section 5.12) were combined. However, since only 1 433 and 5 141 of the respondents had tax compliance costs as a result of provisional tax returns and post-filing activities respectively, the effect of those costs on the *total* tax compliance costs of *all* respondents was reduced. Table 5.16 contains a summary of the total tax compliance costs of all 10 260 respondents (including the separate components) using the six different time valuation methods discussed in Section 5.7.3.

Table 5.16: Total tax compliance costs (rounded)

	Method 1 R	Method 2 R	Method 3 R	Method 4 R	Method 5 R	Method 6 R
Mean	2 648	3 742[164]	2 706	3 490	2 544	2 702
Up to submission	2 149	3 049	2 200	2 822	2 055	2 192
Provisional tax returns[165]	111	148	111	131	99	108
Post-filing[166]	388	544	395	537	390	402
5% Trimmed mean	1 762	2 379	1 811	2 458	1 864	1 900
Median	1 041	1 358	1 060	1 476	1 159	1 141
Maximum	149 375	293 750	204 238	133 503	87 171	115 094
Std. Deviation	5 967	9 216	6 129	6 499	4 339	5 067

Source: Own data

---

[164] Due to rounding, the separate parts only added up to R3 741.
[165] These averages are now between R99 and R148, calculated as R709 x 1 433/10 260 and R1 059 x 1 433/10 260 (see Section 5.10) to take into account the respondents who did not have tax compliance costs relating to provisional tax returns.
[166] These amounts were calculated by multiplying the amounts from Table 5.15 with 5 141/10 260 to account for respondents who did not have post-filing tax compliance costs.

Table 5.16 shows that the average total tax compliance costs of the 10 260 respondents was R2 544 (indicated in green) to R3 742 (indicated in orange), depending on the method used to value the respondents' time. Maximum total tax compliance costs were R87 171 to R293 750. Of the total tax compliance costs, 81%[167] relate to tax compliance activities up to submission of the income tax return, while 4%[168] related to provisional tax returns and 15%[169] to post-filing activities. In Germany, Blaufus *et al.* (2019:936) found that only 5.6% of the total time burden (0.51 of the 9.13 hours) of individual taxpayers related to post-filing activities. Another way to consider the composition of the total tax compliance costs is splitting these costs between the time value and out-of-pocket costs (see Table 5.17).

Table 5.17: Composition of total tax compliance costs based on time value and out-of-pocket costs in monetary terms and percentage of total compliance costs

	Method 1	Method 2	Method 3	Method 4	Method 5	Method 6
Value of time spent by respondent	**1 870**	**2 964**	**1 928**	**2 712**	**1 766**	**1 924**
Up to submission of income tax return	1 520	2 420	1 570	2 192	1 425	1 563
Relating to provisional tax returns	76	114	77	97	65	74
Relating to post-filing activities	274	430	281	423	276	288
Value of time spent by family member/friend	**48**	**48**	**48**	**48**	**48**	**48**
Out-of-pocket costs	**730**	**730**	**730**	**730**	**730**	**730**
Up to submission of income tax return	581	581	581	581	581	581
Tax planning/tax advice (R42)						
Tax practitioner fees (R193)						
Sundry expenditure (R346)						
Relating to provisional tax returns	34	34	34	34	34	34
Relating to post-filing activities	114	114	114	114	114	114
Average total tax compliance costs	**2 648**	**3 742**	**2 706**	**3 490**	**2 544**	**2 702**
Value of time spent by respondent	**70.6%**	**79.2%**	**71.2%**	**77.7%**	**69.4%**	**71.2%**
Up to submission of income tax return	57.4%	64.7%	58.0%	62.8%	56.0%	57.8%
Relating to provisional tax returns	2.9%	3.0%	2.8%	2.8%	2.5%	2.7%
Relating to post-filing activities	10.3%	11.5%	10.4%	12.1%	10.8%	10.6%
Value of time spent by family member/friend	**1.8%**	**1.3%**	**1.8%**	**1.4%**	**1.9%**	**1.8%**
Out-of-pocket costs	**27.6%**	**19.5%**	**27.0%**	**20.9%**	**28.7%**	**27.0%**
Up to submission of income tax return	21.9%	15.5%	21.5%	16.6%	22.8%	21.5%
Relating to provisional tax returns	1.3%	0.9%	1.3%	1.0%	1.4%	1.3%
Relating to post-filing activities	4.3%	3.1%	4.2%	3.3%	4.5%	4.2%
Total tax compliance costs	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Own data

---

[167] Calculated by dividing the costs up to submission of the income tax return by the total tax compliance costs, for example, R2 149/R2 648 and R3 049/R3 742.
[168] Calculated by dividing the costs relating to the provisional tax return by the total tax compliance costs, for example, R111/R2 648 and R148/R3 742.
[169] Calculated by dividing the costs relating to the post-filing activities by the total tax compliance costs, for example, R388/R2 648 and R544/R3 742.

From Table 5.17 it is clear that value of time spent is the largest component of the total tax compliance costs, varying between 69% (indicated in green) and 79% (indicated in orange) of the total costs, depending on the valuation method used. This is in line with the observation by Eichfelder and Vaillancourt (2014:121) that the time effort "cost category accounts on average for about 70% of the cost burden".

The respondents were asked to imagine that the tax system in South Africa was abolished and then to estimate how much they think they would save by no longer having to spend time and costs in complying with their tax affairs. The question clarified that their estimate should not consider the tax that they would no longer have to pay, but only tax compliance costs that would be saved. The question was answered by 7 171 respondents. At the low end, 951 (13%) of these respondents indicated "0" (or a negative amount) and a further 164 (10%) of these respondents indicated between R1 and R100. At the high end, 1 198 (17%) of these respondents indicated R10 000 or more, with the highest values being R10b and R1b respectively. After winsorizing,[170] the mean estimate of respondents' estimates regarding the tax compliance costs that they would save if the tax system in South Africa was abolished was R7 147.19, with the 5% trimmed mean estimate being R4 607.99 and the median R1 000.

However, given that all respondents had incurred at least some time on tax compliance activities and tax compliance costs could therefore not be Rnil, winsorizing was applied based on the 25th (R200)[171] and 75th (R5 000)[172] percentile values, which resulted in a mean of R2 074.14, a 5% trimmed mean of R2 015.71 and a median of R1 000, which are more in line with the calculations in Table 5.16.

A Pearson's correlation between the respondents' estimates discussed above and their total tax compliance costs, calculated using the different time valuation methods (see Table 5.16), revealed a statistically significant correlation[173] between the respondents' estimates (but only after winsorizing) and all six methods. The strongest correlation (albeit still weak) between the respondents' estimates and the calculated tax compliance costs occurred

---

[170] The 5th percentile value was Rnil and the 95th percentile value was R60 000.
[171] Lowest percentile value above Rnil.
[172] For consistency.
[173] At the 1% level of significance.

where Method 5 was used to value respondents' time, and the 25th and 75th percentile values were used for the winsorizing, namely 0.208.[174]

5.14. TESTING FOR REGRESSIVITY

Regressivity was tested for by dividing the total tax compliance costs of each respondent by the mid-value[175] of that respondent's tax bracket.[176] Since valuation Methods 1 and 5 displayed the best correlation to the respondents' own estimates of their tax compliance costs (as discussed in Section 5.13 above), the results of these two methods are provided in Figure 5.29 (the results of all valuation methods displayed a similar trend).

Figure 5.29: Mean percentages of total tax compliance cost (based on valuation Methods 1 and 5) to the mid-value of tax brackets and corresponding trends

Total tax compliance cost divided by taxable income per income tax bracket

	Not exceeding R189 880	R189 881 to R296 540	R296 541 to R410 460	R410 461 to R555 600	R555 601 to R708 310	R708 311 to R1 500 000	Exceeding R1 500 000
Valuation method 1	1.72%	0.73%	0.61%	0.55%	0.71%	0.53%	0.56%
Valuation method 5	1.73%	0.70%	0.58%	0.53%	0.62%	0.49%	0.52%
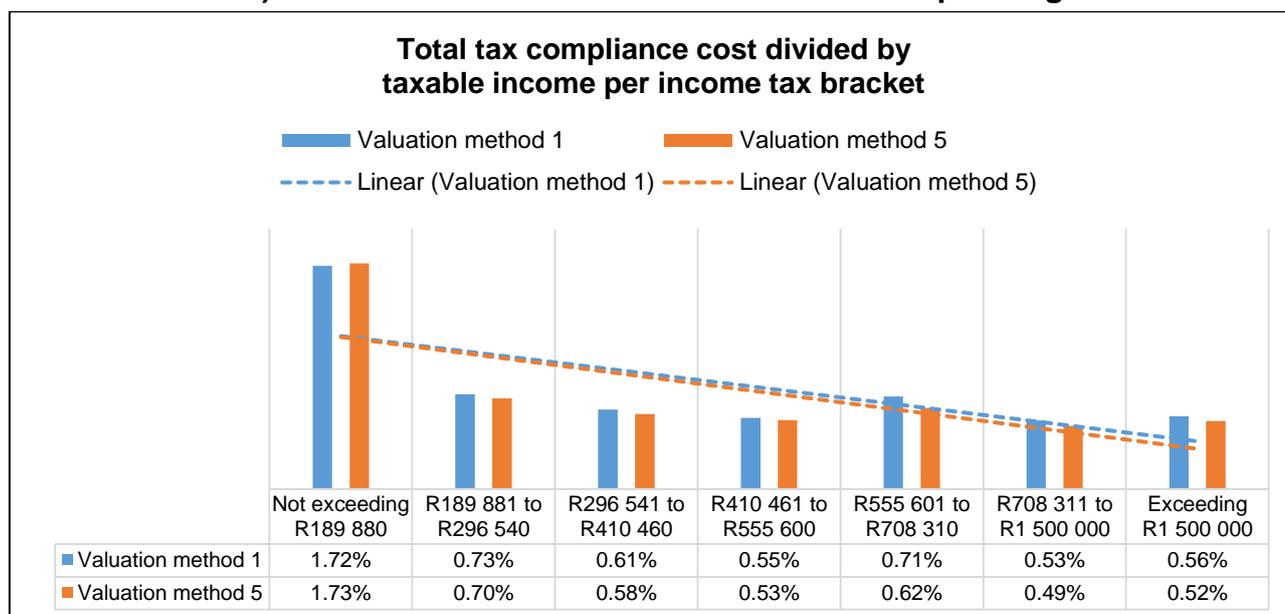
Source: Own data

From the declining trends in Figure 5.29 it can be concluded that the respondents in the lower income tax brackets bear a higher tax compliance cost burden in relation to their taxable income than the respondents in the higher income tax brackets. This trend confirms the regressivity reported in previous studies, for example, the studies by Blažić (2004), Chattopadhyay and Das-Gupta (2002), Evans *et al.* (1997), Marcuss *et al.* (2013) and Sandford *et al.* (1989).

---

[174] The second strongest correlation between the respondents' estimate and the calculated tax compliance costs occurred where Method 1 was used, resulting in a correlation coefficient of 0.192.
[175] For the last open tax bracket, namely exceeding R1 500 000, a value of R1 750 000 was used.
[176] Ignoring the respondents who did not indicate their tax bracket.

Lastly, the findings of this study were extrapolated to the total individual taxpayer population to determine the tax compliance costs of individual taxpayers in South Africa.

5.15. TOTAL TAX COMPLIANCE COSTS OF INDIVIDUAL TAXPAYERS FOR THE 2018 TAX YEAR

This chapter endeavoured to determine, amongst other things, whether or not the tax compliance costs of the respondents could be extrapolated to the population, namely individual taxpayers who are required to submit an income tax return.[177] Based on the demographic characteristics discussed in Section 5.2, the sample was found to be a good distribution of the population and no further weighting was therefore applied. A lower and upper bound result is provided, based on the lowest average total tax compliance costs of R2 544 and on the highest average total tax compliance costs of R3 742, as determined in Section 5.13.

For the 2018 tax year, 21 104 375 individuals were registered for PIT (National Treasury & SARS, 2019:3), but only 6 562 568 of them were required to submit an income tax return (National Treasury & SARS, 2019:38). Therefore, the total tax compliance costs for the individuals who were required to submit an income tax return was estimated to range from R16.7 billion[178] to R24.6 billion[179]. When these amounts are expressed as a percentage of tax revenue from PIT, namely R462.9 billion (National Treasury & SARS, 2019:20) for the 2018 tax year, the percentage ranges from 3.61% to 5.31%, which compares well to most ratios from other studies indicated in Table 3.1. For example, Blaufus *et al.* (2014) reported a ratio ranging from 3.1% to 4.7%; Diaz and Delgado (1995) reported a ratio of 3.3%, and Evans *et al.* (1997) reported a ratio ranging from 4% to 5.6%. Lastly, as a percentage of the gross domestic product (GDP) of 4.7 trillion (National Treasury & SARS, 2019:8), the ratios vary from 0.36% to 0.52%, which also compares well internationally. For example, Tran-Nam *et al.* (2014:169) reported the taxpayer compliance costs of the Australian individual taxpayers as 0.43% of the GDP, and in Canada these costs were between 0.26% and 0.37% of the GDP (Vaillancourt *et al.*, 2013:37).

---

[177] Despite the fact that some respondents may have voluntarily submitted an income tax return.
[178] Calculated as R2 544 x 6 562 568.
[179] Calculated as R3 742 x 6 562 568.

5.16. CONCLUSION

As this chapter has shown, as part of the analysis of the empirical evidence collected in Phase 2, the representativeness of the responses was assessed against the full population of individual taxpayers who submitted income tax returns for the 2018 year of assessment. The sample was found to be a good representation based on demographic characteristics such as taxpayer's location, age, gender and level of income. It was argued that complexity relating to the medical tax credit provisions may be a possible reason for *voluntary* submissions of income tax returns, while other complexities (such as complex sources of income) result in respondents' opting for paid assistance, which is a known determinant of tax compliance costs.

The time and costs spent by respondents on all the different tax compliance activities was split between three activity groups, namely activities relating to submitting the income tax return, those relating to provisional tax returns, and those subsequent to assessment (post-filing activities). The winsorizing of outliers and application of the median for open categories were explained. Statistical tests were performed to obtain a better understanding of the time and costs provided by the respondents, based on various demographic characteristics.

The tax compliance cost for each of the activity groups was calculated based on six valuation methods, before calculating the total tax compliance costs for all respondents and extrapolating it to the South African individual income taxpayers who were required to submit an income tax return for the 2018 tax year. It was concluded that the tax compliance costs were regressive, and that the total tax compliance costs of individual taxpayers in respect of the 2018 year of assessment were between R2 544 and R3 742. This chapter has therefore met the first objective of this study, namely to calculate the tax compliance costs of individual taxpayers in South Africa in relation to the submission of their income tax returns and the activities subsequent to the submission of the returns (post-filing activities) by using the empirical data from the 2018 year of assessment. When these costs were expressed as a percentage of tax revenue from PIT (between 3.61% and 5.31%) and a percentage of the GDP (between 0.36% and 0.52%), it was found that these ratios compare well internationally. However, comparisons between different tax compliance cost studies should be done with great caution because many differences may exist between the different studies, for example, the valuation methods of time and differences in definitions and tax regimes (Sandford, 1995:405-408).

Since the same questionnaire was used in both phases of this study, except for minor adjustments (see Section 4.5.2) and the same valuation methods as those explained in Section 5.7.3 could be employed, the tax compliance costs in respect of the 2017 year of assessment were also calculated, as discussed in the next chapter.

CHAPTER 6:

CALCULATION OF TAX COMPLIANCE COSTS FOR
THE 2017 YEAR OF ASSESSMENT

6.1. INTRODUCTION

In Chapter 5, the tax compliance costs of individual taxpayers in South Africa were calculated for the 2018 year of assessment, based on the responses of 10 260 individual taxpayers collected during Phase 2 of this study. In this chapter, the empirical evidence obtained from the responses of 752 individual taxpayers during Phase 1 is analysed using the same methodology as that described in Chapter 5 to deal with outliers, missing values, range and open categories. Then, applying the same methodology to value the respondents' time as explained in Section 5.7, the tax compliance costs for the 2017 year of assessment are calculated. This calculation not only provides further evidence relating to the first objective of this study, but also allows for a comparison between the tax compliance costs in the 2017 and 2018 years of assessment.

The empirical analysis commences with an examination of the representativeness of the responses, which revealed that the results would have to be weighted (Section 6.2). This is followed by an overview of the time and costs spent on different activities (Section 6.3). The calculation of the total tax compliance costs of the respondents is performed in Section 6.4 and the extrapolation thereof to the population, after applying weighting factors, is presented in Section 6.5.

6.2. REPRESENTATIVENESS OF RESPONSES

Responses were obtained from 752 respondents in nine provinces, but responses from Gauteng were overrepresented while those from all other provinces were underrepresented, as is shown in Figure 6.1.

Figure 6.1: Geographic location
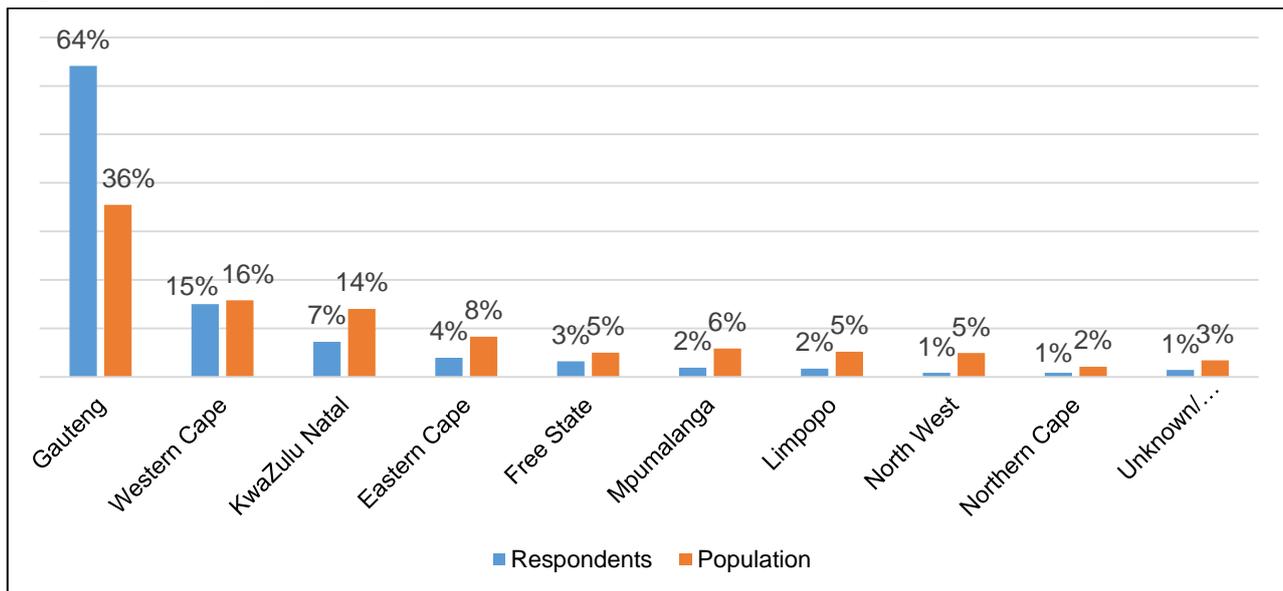
Source: National Treasury and SARS (2019:49)

This overrepresentation of respondents residing in Gauteng is significant, because, according to the National Treasury and SARS (2019:49), the *percentage of taxable income* from taxpayers in Gauteng (42%) and the *percentage of PIT assessed* from those taxpayers (47%) was even higher than the *percentage of individual taxpayers* residing in Gauteng (36%[180]), as shown in Table 6.1. In the other provinces, the percentages of taxable income and PIT assessed remained constant or decreased in relation to the number of taxpayers.

Table 6.1: Geographical distribution of assessed individual taxpayers for the 2017 year of assessment based on number of taxpayers, taxable income and tax assessed[181]

Geographic location	Number of taxpayers	Taxable Income	Tax Assessed
Gauteng	36%	42%	47%
Western Cape	16%	16%	17%
KwaZulu-Natal	14%	13%	11%
Eastern Cape	8%	7%	6%
Free State	5%	4%	3%
Mpumalanga	6%	5%	5%
Limpopo	5%	5%	4%
North West	5%	4%	3%
Northern Cape	2%	2%	1%
Unknown province	3%	3%	2%

Source: National Treasury and SARS (2019:49)

---

[180] Percentage used in comparison in Figure 6.1.
[181] Due to rounding, some columns do not add up to 100%.

Therefore, since the sample was possibly skewed towards respondents with higher taxable income based on their geographic location, as discussed above, the taxable income of the respondents was compared to the taxable income of the assessed individuals for the 2017 year of assessment to confirm this finding. It was not possible to perform an exact comparison, due to different cut-off points[182] in the taxable income categories; nevertheless, Figure 6.2 provides a visual comparison of the taxable income of the respondents and of the population. The respondents who indicated that they did not know in which tax bracket they fell, or who preferred not to indicate their tax bracket, were not taken into account in the comparison.

Figure 6.2:   Taxable income distribution
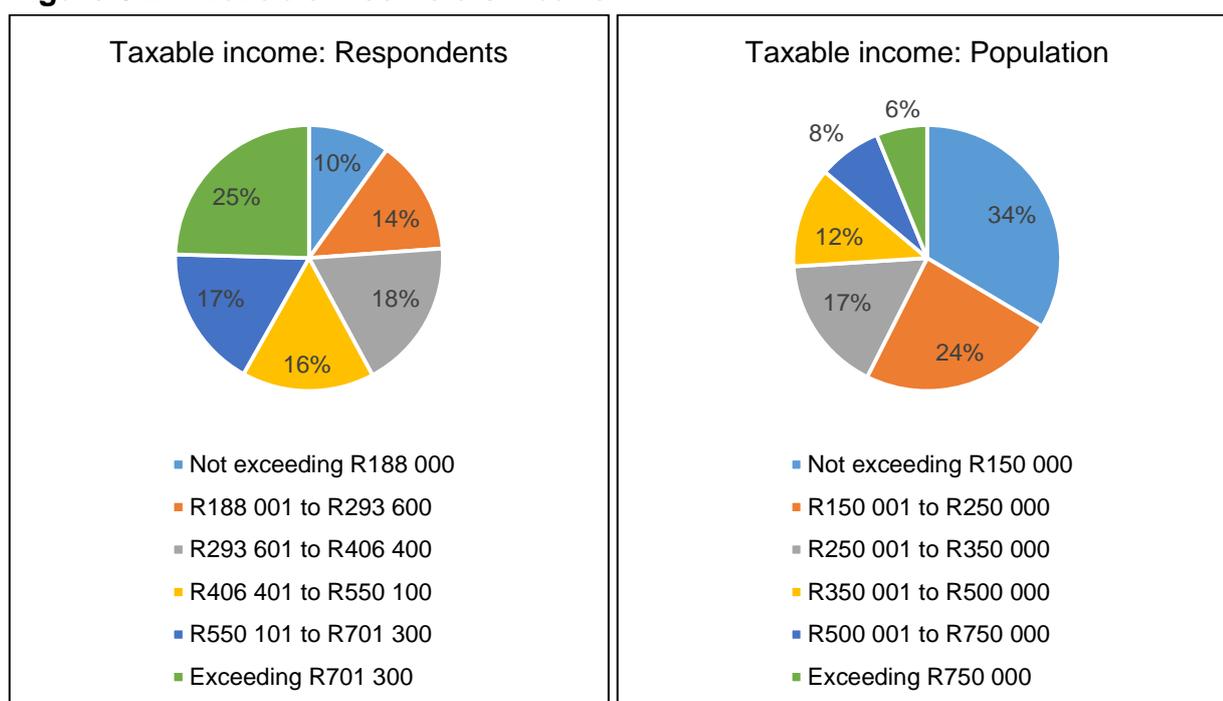
Source: Own data and National Treasury and SARS (2019:62)

From Figure 6.2 it is clear that, even though the taxable income categories differ slightly, the sample was significantly skewed towards persons with higher *taxable incomes*. The distribution of *gross income* (based on either monthly or hourly amounts) confirms the skewness of the distribution towards persons with higher income. This is obvious from a visual inspection of Figure 6.3, and is even clearer when compared to the distribution of respondents in Phase 2 (see Figure 5.5 and Figure 5.6). Only 21% of the respondents in Phase 2 earned more than R50 000 per month, whereas 39% (28% + 10% + 1%) of the

---

[182] The taxable income brackets used in the survey were based on the actual tax brackets for the 2017 year of assessment. SARS publishes broader taxable income categories to enable comparisons over different years of assessment since tax brackets change every year.

respondents in Phase 1 earned more than R50 000 per month. Furthermore, only 21% of the respondents in Phase 2 earned more than R500 per hour, compared to the 61% (21% + 40%) who did so, as identified in Phase 1 (see Figure 6.3).

Figure 6.3: Distribution of gross monthly or hourly income[183]
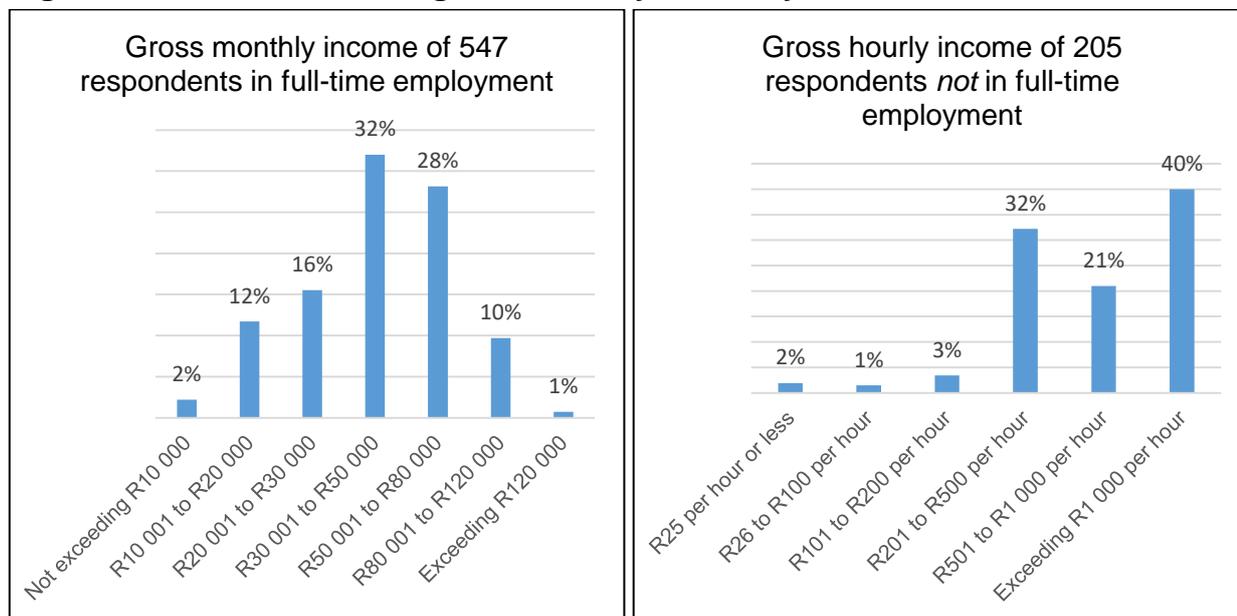
Source: Own data

Given that in the literature income levels have been shown to be a determinant of tax compliance costs (Allers, 1994; Blaufus *et al.*, 2019; Blažić, 2004; Lopes *et al.*, 2012; Pope & Fayle, 1990; Sandford *et al.*, 1989), and given that the sample is significantly skewed towards persons with higher taxable incomes, the tax compliance costs of the respondents in Phase 1 may have overestimated the tax compliance costs of the population (individual taxpayers in respect of the 2017 year of assessment). Therefore weightings had to be applied (see Section 6.5).

With regard to gender, the respondents were evenly divided (50/50), although the population of individual taxpayers (for the 2017 year of assessment) consisted of more male (55%) than female (45%) individuals (National Treasury & SARS, 2019:67). The literature shows that male taxpayers tend to spend more time on tax compliance activities than females (Allers, 1994), but gender was not used for weighting purposes in the current study.

---

[183] Due to rounding the percentages in the graphs do not add up to 100%.

The distribution of the age groups of the respondents was similar to that of the population, even though the available population groupings were not perfectly aligned to the respondents' groupings (Figure 6.4).

Figure 6.4:   Age distribution[184]
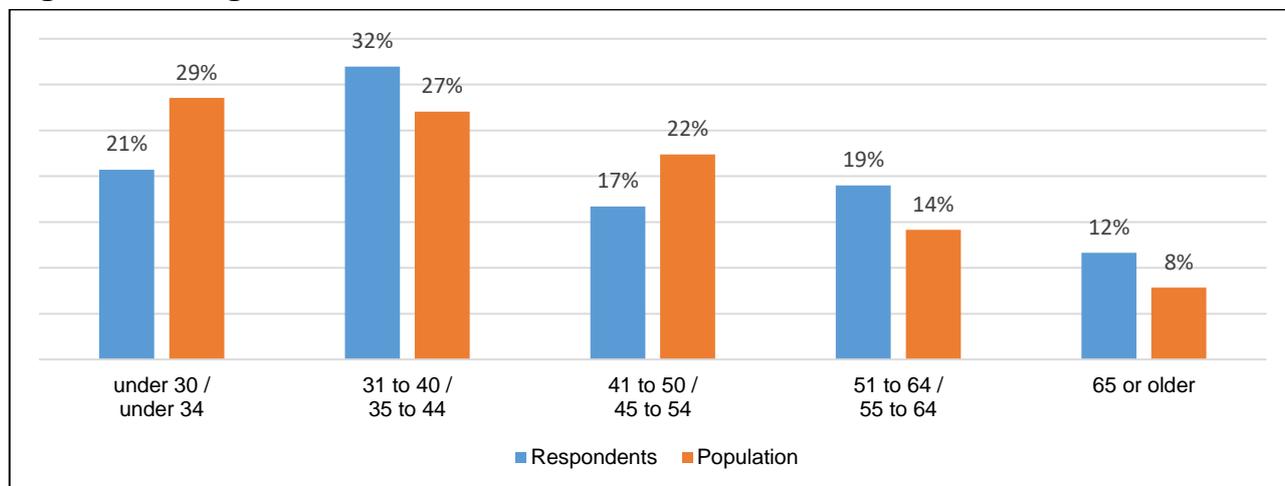
Source: Own data and National Treasury and SARS (2019:66)

The percentage taxable income was the highest for the taxpayers aged 35 to 44 (29%), followed by the taxpayers aged 45 to 54 (27%) (National Treasury & SARS, 2019:66). Therefore, since 49% of the respondents (32% plus 17%) and 49% of the population (27% plus 22%) were aged between "31 and 50" and "35 and 54" respectively, age was not considered for weighting purposes.

Although the education levels and tax knowledge of the population were unknown, a comparison was done with the respondents in Phase 2 (as presented in Figure 5.7). Figure 6.5 indicates that the majority (67%) of respondents in Phase 1 had a postgraduate level of education, while only 20% of respondents in Phase 2 had a qualification higher than graduate level. Furthermore, Figure 6.5 shows that 44% of the respondents had "good" and 23% had "excellent" tax knowledge (this result is understandable, given that SAICA members were the origin of the snowball sample for Phase 1), while only 20% of the respondents in Phase 2 had "good" and 3% had "excellent" tax knowledge.

---

[184] Due to rounding, the respondents' distribution percentages added up to 101% instead of 100%.

Figure 6.5: **Highest education level and tax knowledge of respondents**[185]
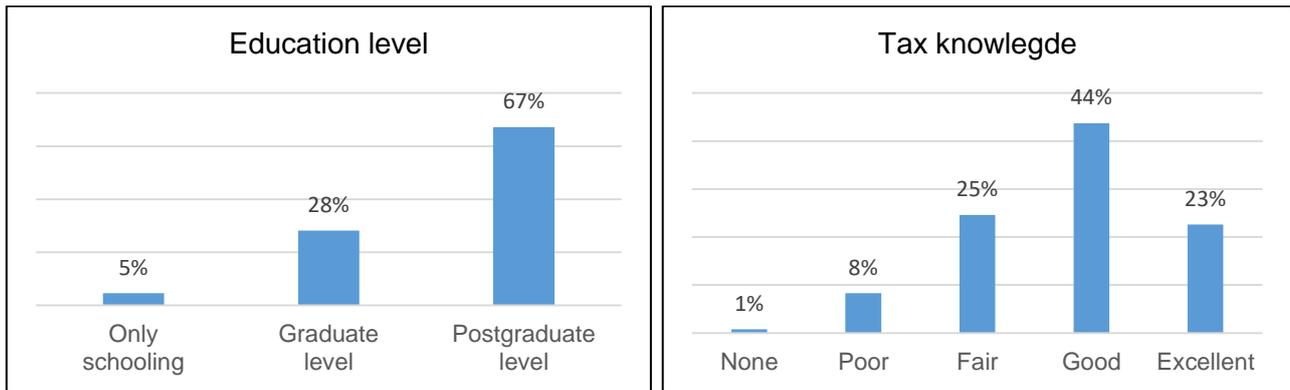
Source: Own data

Therefore, based on Figure 6.5 above (and the comparison with the distribution of respondents in Phase 2), the earlier finding that this sample was skewed towards higher income earners was confirmed, since, generally speaking, higher education results in higher income (Rupert, Schweitzer, Severance-Lossin & Turner, 1996). Furthermore, the sample was skewed towards self-employed respondents (taxpayers earning business income, either as a sole proprietor or as a partner in a partnership) since 14.8% of the respondents (see Figure 6.6) were self-employed, compared to only 4.4% of assessed taxpayers for the 2017 year of assessment's being self-employed (National Treasury & SARS, 2019:58).

Figure 6.6: **Employment status of respondents**
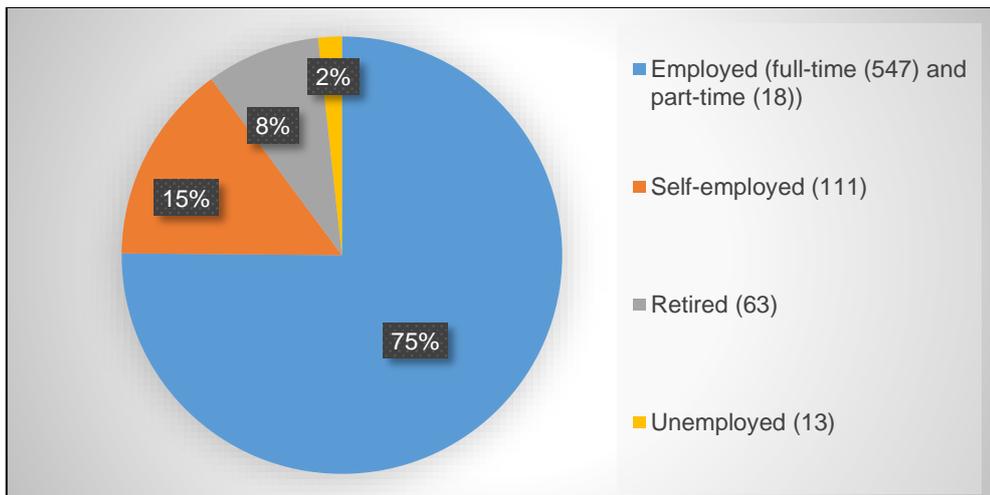
Source: Own data

The sample contained almost four times the number of self-employed respondents as the population. Since the literature shows that the tax compliance cost burden of self-employed

---

[185] Due to rounding, the respondents' tax knowledge percentages add up to 101% instead of 100%.

taxpayers is typically significantly higher than that of individuals earning employment income (for example, Allers (1994), Guyton *et al.* (2003), Lopes *et al.* (2012) and Sandford *et al.* (1989)), employment status was taken into account when applying a weighting to calculate the tax compliance costs of this sample of individual taxpayers in South Africa for the 2017 year of assessment (Section 6.5).

The last aspect relating to representativeness to be considered was the use of paid assistance, since it has been found to be a determinant of tax compliance costs, for example, by Guyton *et al.* (2003) and Steyn (2011). Given the earlier finding that two thirds of the respondents had above average tax knowledge, it was not surprising that 75% of the respondents submitted their income tax returns themselves (see Figure 6.7). However, this high percentage was not a problem from a tax compliance cost estimate perspective – it seems to have decreased the use of family members/friends/SARS employees, but not the use of a tax practitioner. Thus the 19% of respondents who used tax practitioners for assistance with submitting their income tax returns (see Figure 6.7) was comparable to the 18% of respondents who used paid assistance in Phase 2 (see Section 5.4).

Figure 6.7: Type of assistance
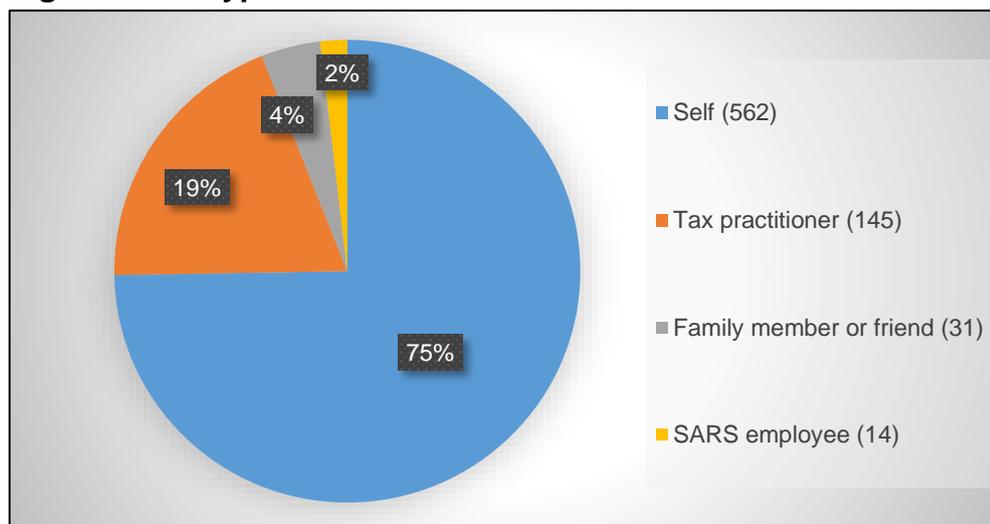
Source: Own data

In summary, the responses were not representative of the population, so the results had to be weighted to estimate the tax compliance costs of the population (see Section 6.5). The next section provides an overview of time and costs spent on different activities by the respondents.

6.3. TIME SPENT ON AND COSTS OF TAX COMPLIANCE ACTIVITIES

The discussion of the time spent on tax compliance activities by respondents and costs is divided into three parts, namely time and money spent on activities up to the submission of the income tax return, on the provisional tax returns, and subsequent to the submission of the income tax return (post-filing activities).

6.3.1. Activities up to submission of the income tax return

Respondents who submitted their income tax returns themselves spent on average 16.82 hours[186] in total on the activities up to submission of their income tax returns. Respondents who obtained help, spent on average 15.59 hours. From Figure 6.8, it is clear that, on average, recordkeeping was the most time-consuming activity.

Figure 6.8: Comparative average times (in hours) between respondents who submitted their income tax return themselves and those who obtained help
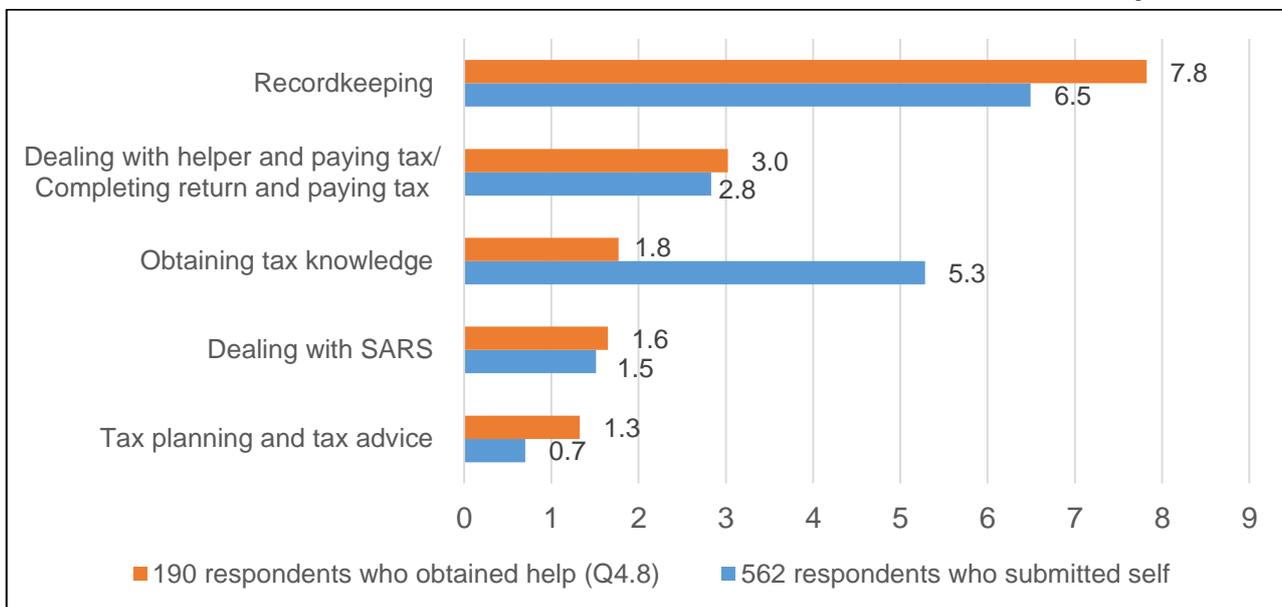
Source: Own data

Figure 6.8 also shows that obtaining tax knowledge was the second-most time-consuming activity for respondents who submitted their own tax returns, while the second-most time-consuming activity for respondents who obtained help was their interaction with the person

---

[186] As for Phase 2 (see Section 4.7.1), respondents in Phase 1 with unrealistic hourly values for activities in either Q4.3 or Q4.8 (i.e. exceeding 500 hours), as well as respondents whose hours exceeded the 99.5th percentile values were removed from the dataset as part of the data cleaning process. Therefore, all remaining hours were deemed possible and acceptable, so winsorizing was not applied to Q4.3 and Q4.8 in Phase 1 (similar to Phase 2, as discussed in Section 5.6.1). These average hours are therefore the mean hours spent. These hours are, however, higher than those in Phase 2, possibly due to the skewness of the sample (higher income earners), which was corrected with the weighting factors.

who helped them with the returns. Apart from the time spent by all respondents on the various tax compliance activities, time was also spent by family members or friends who assisted some of the respondents. On average, family members or friends who assisted the 31 respondents spent 1.71 hours[187] to provide the assistance, and that time was estimated to be worth R1 608.71 (see Table 6.2).

Table 6.2: Time and value of time spent by family members or friends to submit respondents' income tax return

	Time (in hours) spent by family members or friends	Total value of time spent by family members or friends
Mean	1.71	R1 608.71
5% Trimmed mean	1.52	R1 303.23
Median	0.50	R560.00

Source: Own data

Lastly, the activities up to submission of the income tax return also resulted in some out-of-pocket costs such as *sundry expenditure* (for example, data bundles, internet café, petrol, telephone, stationery and taxation books) and *payments to tax practitioners*. Respondents were required to indicate the sundry expenditure incurred up to the point of submitting the income tax return (if they submitted it themselves) or handing records over to the person who submitted the income tax return on their behalf (if help was obtained). The results are set out in Table 6.3.

Table 6.3: Sundry expenditure incurred up to submission of income tax return

	Respondents who submitted their income tax returns themselves	Respondents who obtained help to submit their income tax returns
N	**562**	**190**
Mean	R446.89	R811.08
5% Trimmed mean	R287.07	R651.21
Median	R50.00	R400.00

Source: Own data

Based on the mean values in Table 6.3, respondents who obtained help with the submission of their income tax returns, on average, incurred approximately double the amount of sundry expenditure than those who submitted their own income tax returns. With regard to payments to tax practitioners, 41 of the 145 respondents who paid a tax practitioner for assistance to submit their income tax return paid an additional amount for tax planning and

---

[187] These hours compare well with the average estimate of 1.6 hours by respondents in Phase 2 (see Section 5.6.2).

advice. Moreover, 39 of the 562 respondents who submitted their income tax returns themselves indicated that they also paid for tax planning and advice. The statistics of the amounts paid to tax practitioners are contained in Table 6.4.

Table 6.4:   Statistics of amounts paid to tax practitioners

	Respondents who obtained paid help to submit their income tax returns		Respondents who submitted their income tax returns themselves
	Amount paid for submission of income tax return	Additional payment for tax planning and advice	Amount paid for tax planning and advice
N	145	41	39
Mean	R3 001.48	R2 009.90	R1 422.18
5% Trimmed mean	R2 286.12	R1 661.00	R1 344.09
Median	R1 500.00	R1 000.00	R1 000.00

Source: Own data

From the mean values in Table 6.4, it is clear that, on average, respondents paid approximately R3 000 to tax practitioners for submitting their income tax return, while additional tax planning and advice ranged roughly between R1 400 and R2 000.

Obtaining an ATR (see Section 4.5.1 for an explanation of its purposes) seems similar to obtaining tax planning and advice, in the sense that it relates *indirectly* to tax compliance, but it would probably also be covered by Tran-Nam *et al.*'s (2014:141) comprehensive approach as a tax-related activity. Only one respondent spent time on and incurred costs for obtaining an ATR. Apart from the application fee of R35 000, the respondent spent 80 hours and paid a further R50 000 for assistance with the application. Therefore, given that the ATR process affected only 0.1% of the respondents in Phase 1, and that the questions relating to the ATR process were removed from the questionnaire distributed during Phase 2 to reduce the length of the questionnaire, the time spent on ATR and cost to this one respondent for ATR was not taken into account in calculating the tax compliance costs in Phase 1. This ensures comparability with the results of Phase 2. However, ATR may be considered for future research, because the cost, if it is correctly recorded, appears to be high, and this may be the reason for very few taxpayers making use of ATR.

In summary, the 752 respondents spent on average 16.5 hours on tax activities up to the submission of their income tax return, and they spent R539 in sundry expenditure (see Table 6.5). Not all respondents employed the services of tax practitioners, family members or

friends, but the average costs/value of services of those who did are also provided in the table.

Table 6.5: Summary of time and costs up to submission of income tax return

	Time spent by respondents	Sundry expenses	Payments to tax practitioner for submission	Payments to tax practitioner for planning and advice	Value of family member or friend's time
N	752	752	145	80	31
Mean	16.51[188]	R538.91[189]	R3 001.48	R1 723.38[190]	R1 608.71

Source: Own data

The conversion of the respondents' time to a rand-equivalent is reported in Section 6.4.

6.3.2. Activities relating to provisional tax returns

Not all individual taxpayers are provisional taxpayers, so the submission of provisional tax returns only affected 273 respondents. Since some respondents submitted the returns themselves and some obtained free assistance, not all 273 respondents incurred costs. Furthermore, some respondents obtained help without spending any time on the submission of their provisional tax returns. The average time spent and costs incurred by the respondents who are provisional taxpayers and who provided information regarding time and/or costs are provided in Table 6.6, as well as the 5% trimmed mean and median values.

Table 6.6: Time and costs spent on provisional tax returns

	Time spent	Costs incurred
N	255	112
Mean	3.27 hours	R958.50
5% Trimmed mean	2.96 hours	R861.88
Median	2.00 hours	R525.00

Source: Own data

The conversion of the respondents' time to a rand-equivalent is reported in Section 6.4.

6.3.3. Post-filing activities

The different post-filing activities have already been explained in detail in Section 5.12, where the responses obtained in Phase 2 were analysed. Therefore, for the purposes of this

---

[188] Weighted average: (16.82 hours x 562/752) + (15.59 hours x 190/752) = 12.57 + 3.94 = 16.51.
[189] Weighted average: (R446.89 x 562/752) + (R811.08 x 190/752) = R333.98 + R204.93 = R538.91.
[190] Weighted average: (R1 422.18 x 39/80) + (R2 009.90 x 41/80) = R693.31 + R1 030.07 = R1 723.38.

chapter, the time spent on post-filing activities and costs incurred by respondents are presented without repeating the discussion of exactly what these activities entail. Table 6.7 summarises the statistics relating to the time spent on and costs incurred in fulfilling verification and audit requests from SARS.

Table 6.7: Time spent on and costs incurred in fulfilling verification and audit requests

	Verification			Audit	
	Time	**Sundry**	**Paid help**	**Time**	**Paid help**
N	**322**	**216**	**24**	**174**	**41**
Mean	1.26 hours	R215.74	R654.17	2.79 hours	R1 076.83
5% Trimmed mean	1.17 hours	R126.79	R575.00	2.31 hours	R905.08
Median	0.75 hours	R75.00	R650.00	1.50 hours	R650.00

Source: Own data

From Table 6.7, it is clear that fulfilling audit requests was more time-consuming and expensive than fulfilling verification requests. Respondents who did not agree with their assessments could first object, then appeal. This was followed by further litigation if they were still not satisfied. Table 6.8 contains the statistics on the time spent on and costs incurred by respondents in relation to objections and appeals.

Table 6.8: Time and costs relating to objecting to and/or appealing the 2017 assessment

	Objection		Appeal	
	Time spent	**Paid help**	**Time spent**	**Paid help**
N	**49**	**15**	**19**	**5**
Mean	3.38 hours	R1 628.33	2.39 hours	R1 600.00
5% Trimmed mean	2.69 hours	R1 523.15	2.22 hours	R1 611.11
Median	1 hour	R1 500.00	2 hours	R2 000.00

Source: Own data

Table 6.8 shows that on average, respondents spent more time on objecting to an assessment than on subsequent appeal procedures, but, based on the median, appeal procedures were more time-consuming. The average cost was approximately R1 600, irrespective of whether or not assistance was obtained with an objection or appeal. No respondents indicated that they were involved in further litigation relating to their 2017 year of assessment, which is understandable, given that the objection and appeal timeframes would probably still have been in effect when the questionnaire was distributed during Phase 1. Phase 2 yielded some information of further litigation relating to the 2017 year of assessment, namely an average time of 5.27 hours and cost of R7 500 (see Table 5.14).

6.4. TOTAL TAX COMPLIANCE COSTS OF RESPONDENTS

In order to calculate the total tax compliance costs, the time spent by respondents on all activities (as summarised in Table 6.9) was first converted to a rand value. Thereafter that rand value was added to all the other rand values discussed in Section 6.3 (namely, the value of time spent by family members or friends, sundry expenditure and payments to tax practitioners). As pointed out earlier, not all respondents spent time on provisional tax returns and post-filing activities, so the hours in Table 6.9 were calculated after taking into account nil values for respondents who did not spend time on a specific activity. (Calculations are shown in the footnotes to the table.)

Table 6.9:   Summary of time spent on all tax related activities

	Up to submission of the income tax return	Provisional tax returns	Post-filing activities	Total
N	**752**	**752**	**752**	**752**
Average time	16.5 hours	1.1[191] hours	1.5[192] hours	**19.1 hours**
% of total time	87%	6%	8%	**100%**

Source: Own data

The same methods and maximum limitations were then applied to obtain different hourly rates at which to convert a respondent's time spent to a rand value (as discussed in Section 5.7). Table 6.10 provides the statistics on these conversions.

Table 6.10:   Value of total time spent by 752 respondents (rounded)

	Method 1 R	Method 2 R	Method 3 R	Method 4 R	Method 5 R	Method 6 R
Mean	9 122	16 502	10 492	14 291	9 138	12 969
5% Trimmed mean	5 022	8 079	5 187	8 973	5 805	7 929
Median	1 779	2 844	1 796	3 407	2 249	2 220
Minimum	34	41	34	42	34	34
Maximum	227 070	722 750	498 698	253 633	169 520	230 900

Source: Own data

From Table 6.10, it is clear that the different time valuation methods had a significant impact on the value of total time spent. On average, the value of total time spent ranged from R9 122 to R16 502.

---

[191] 3.27 hours (Table 6.6) x 255/752.

[192] 1.26 hours x 322/752 (Table 6.7: Verification) + 2.79 hours x 174/752 (Table 6.7: Audit) + 3.38 hours x 49/752 (Table 6.8: Objection) + 2.39 hours x 19/752 (Table 6.8: Appeal) = 1.47.

Table 6.11 contains a summary of the average "out-of-pocket" costs after taking into account nil values for respondents who did not incur costs on a specific activity. (Calculations are shown in footnotes to the table.)

Table 6.11:   Summary of "out-of-pocket" costs

	Up to submission of the income tax return	Provisional tax returns	Post-filing activities	Total
N	752	752	752	752
Average cost	R1 300.99[193]	R142.76[194]	R184.67[195]	**R1 628.42**
% of total cost	80%	9%	11%	**100%**

Source: Own data

Of the total average cost of R1 628.42 indicated in Table 6.11, sundry expenditure comprised 37% (R600.88[196]), payments to tax practitioners for assistance (excluding tax planning and advice) comprised 52% (R844.20), and payments to tax practitioners for tax planning and advice comprised the remaining 11% (R183.34). Therefore, sundry expenditure represented slightly more than a third of the total "out-of-pocket" costs, with payments to tax practitioners making up just less than two-thirds.

To calculate the total tax compliance costs of the respondents, the value of time spent by family members or friends was added to the value of the respondents' time (using the six methods) and to the "out-of-pocket" costs. The statistics are presented in Table 6.12.

Table 6.12:   Total tax compliance costs of respondents (rounded)

	Method 1 R	Method 2 R	Method 3 R	Method 4 R	Method 5 R	Method 6 R
Mean	10 817	18 197	12 187	15 986	10 833	14 664
5% Trimmed mean	6 553	9 579	6 694	10 547	7 359	9 485
Median	2 749	3 966	2 805	4 625	3 270	3 239
Minimum	34	41	34	72	43	34
Maximum	228 345	724 750	500 698	255 100	171 520	231 650

Source: Own data

As Table 6.12 shows, Method 1 resulted in the lowest mean total tax compliance costs of R10 817, while Method 2 resulted in the highest mean total tax compliance costs of R18 197.

---

[193] R538.91 (sundry) + R3 001.48 x 145/752 (paid assistance) + R1 723.38 x 80/752 (tax planning and advice).
[194] R958.50 x 112/752.
[195] R215.74 x 216/752 (verification sundry) + R654.17 x 24/752 (verification paid help) + R1 076.83 x 41/752 (audit) + R1 628.33 x 15/752 (objection) + R1 600 x 5/752 (appeal) = R1 694.74.
[196] R538.91 (up to submission) + R215.74 x 216/752 (verification) = R600.88.

By contrast, Method 5 resulted in the lowest maximum total tax compliance costs of R171 520, compared to the highest maximum of R724 750 under Method 2.

The respondents were asked to imagine that the tax system in South Africa was abolished, and then to estimate how much they thought they would save if they no longer had to spend time and costs in complying with their tax obligations. The question clarified that their estimate should not consider the tax that they would no longer have to pay, but only tax compliance costs that would be saved. The question was answered by 661 respondents. At the low end, 73 respondents indicated "0", and a further 54 respondents indicated between R1 and R100. At the high end, 139 respondents indicated R10 000 or more, with the highest value being R1 000 000. The mean estimate of these respondents regarding the tax compliance costs that they would save if the tax system in South Africa was abolished was R11 977.71, with a 5% trimmed mean estimate of R4 442.58 and a median of R1 800. If winsorizing was applied, the mean dropped to R6 222.98, but the 5% trimmed mean and median remained the same. However, if all the nil values were removed before winsorizing (as all these respondents spent some time on tax compliance activities), then the mean was R5 324.94, the 5% trimmed mean was R4 797.15, and the median was R2 000.

A Pearson's correlation was run between the respondents' estimates, as discussed above, and their total tax compliance costs, calculated using the various time valuation methods (see Table 6.12). This procedure revealed a statistically significant correlation at a 1% level of significance between respondents' estimates and all six methods. The strongest correlation to tax compliance costs was calculated using Method 5 to value respondents' time. The Pearson correlation coefficient with the total tax compliance costs, using time valuation Method 5 was 0.193 (without winsorizing), 0.440 (with winsorizing) and 0.525 if nil values were removed pre-winsorizing, as explained above.

6.5.   TOTAL TAX COMPLIANCE COSTS OF INDIVIDUAL TAXPAYERS FOR THE 2017 TAX YEAR

As noted in Section 6.2, the sample was skewed towards high income earners and self-employed individual taxpayers. The compliance costs calculated in Section 6.4 thus first had to be weighted (to correct for the skewness) before they could be used to estimate the tax compliance costs of the population (individual taxpayers required to submit an income tax return in South Africa for the 2017 year of assessment). It was decided to employ two weighting methods, namely one based on *income levels* and one based on *employment*

status, using the distribution of respondents in Phase 2 (and not the population) to determine the weighting percentages.

The population statistics were not used for the weighting in this study for various reasons. Firstly, as has been pointed out in Section 6.2, only information regarding the *taxable* income (and not the *gross* income) of the population was available. Secondly, even if the weighting was done on the *taxable* income, the population brackets did not align with the brackets used in the questionnaire and many respondents did not know, or preferred not to indicate, their taxable income bracket. Thirdly, even though it is known that only 4.4% of the population were self-employed (National Treasury & SARS, 2019:58), the population percentages relating to the other employment categories[197] were not known and would have to be based on many assumptions, for example, the probable age group of the population as a proxy for the retired respondents. These assumptions were indeed used when the preliminary results from Phase 1 were published (Stark & Smulders, 2019), but the weighting of these results, based on the distribution of respondents in Phase 2, made the results of the different years comparable (notwithstanding the fact that respondents with business income were a little underrepresented in Phase 2[198]).

Apart from deciding on the two weighting method criteria discussed above (income levels and employment status), the time valuation methods for lower and upper bound calculations also had to be chosen. Because the average tax compliance costs using valuation Methods 1 and 5 were very similar (R10 817 and R10 833 respectively, see Table 6.12), both valuation methods were used with the different weighting options to obtain a lower bound result. Method 2 was used to obtain an upper bound result. Based on the various weighting methods employed, the lowest average total tax compliance cost was R4 604[199] and the highest average total tax compliance cost was R12 661.[200] (All the calculations are provided in Appendix E.)

For the 2017 year of assessment, a total of 19 980 110 individuals were registered for PIT, but only 6 399 319 of them were required to submit an income tax return (National Treasury & SARS, 2019:38). Therefore, the total tax compliance costs for the individuals who were

---

[197] Namely full-time employed, part-time employed, retired and unemployed.
[198] Only 3.2% of the sample in Phase 2 indicated that they earned rental, farming or other business income, and assessed individual taxpayers with business income comprised 4.1% of the total number of assessed individual taxpayers in 2018 (National Treasury & SARS, 2019:58).
[199] Valuation Method 1 and weighting based on income.
[200] Valuation Method 2 and weighting based on employment status.

required to submit an income tax return were estimated to range between R29.5 billion[201] and R81.0 billion[202]. When these amounts are expressed as a percentage of tax revenue from PIT, namely R425.9 billion (National Treasury & SARS, 2019:20) for the 2017 year of assessment, the percentage ranged between 6.9% and 19.02%. The lower end of this range is comparable to the 8.3% reported by Guyton *et al.* (2003) for the USA, the 7.9% to 10.8% found by Pope and Fayle (1990) for Australia and the 5% to 7% reported by Slemrod and Sorum (1984) for taxpayers in the state of Minnesota in the USA. The upper end of the range of 19.02% is quite high, but this still significantly lower than the 49% to 56% that Chattopadhyay and Das-Gupta (2002) found in India. Lastly, as a percentage of the South African GDP of 4.4 trillion (National Treasury & SARS, 2019:8), the ratios varied between 0.67%[203] and 1.84%[204] which was quite high, even on the lower end, compared, for example, to Australia's ratio of 0.43% (Tran-Nam *et al.*, 2014:169).

6.6. CONCLUSION

In this chapter, the empirical evidence relating to the 2017 year of assessment was analysed and the tax compliance costs for the 2017 year of assessment were calculated. The empirical analysis commenced with an assessment of the representativeness of the responses collected in Phase 1 against the population of individual taxpayers who submitted income tax returns in respect of the 2017 year of assessment; the sample was found to be skewed towards higher income earners. To address the skewness, weighting factors were later applied to the total tax compliance costs as calculated in the chapter. Therefore, the average total tax compliance costs of the respondents, calculated as between R10 817 and R18 197 before the weighting factors were applied, dropped to between R4 604 and R12 661 when the weighting factors were applied. This chapter has therefore contributed to meeting the first objective of this study, namely to calculate the tax compliance costs of individual taxpayers in South Africa incurred in preparing and submitting their income tax returns and the activities subsequent to submission (post-filing activities) by using the empirical data from the 2017 year of assessment.

---

[201] Calculated as R4 604 x 6 399 319.
[202] Calculated as R12 661 x 6 399 319.
[203] Calculated as R29.5 billion/R4.4 trillion.
[204] Calculated as R81 billion/R4.4 trillion.

From a comparative perspective, there was a decline in the total tax compliance costs: costs decreased from between R4 604 and R12 661 in 2017[205] to between R2 544 and R3 742 in the 2018 year of assessment. Comparing the ratio of the total tax compliance costs as a percentage of tax revenue from PIT between the two years, the percentage decreased from between 6.92% and 19.02% in 2017 to between 3.61% and 5.31% in the 2018 year of assessment. A possible reason for the decline is that SARS pre-populated additional fields in the 2018 income tax return, namely medical aid contributions and retirement annuity fund contributions (SARS, 2018c) in light of Klun's (2009) estimated reduction of tax compliance costs of 73% in Slovenia as a result of the pre-population of tax returns. The reason for the decline could also partly be attributed to the fact that SARS increased the maximum allowable size per document permitted to be uploaded on the e-filing platform from 2MB to 5MB from 23 April 2018, shortly after draft results of Phase 1 of this study were provided to them. This improvement could have reduced tax compliance costs because some respondents no longer had to travel to a SARS branch to submit supporting documents.

In the next chapter, the determinants of the tax compliance costs for individuals in South Africa are ascertained.

---

[205] Or between R4 780 and R13 146, if adjusted for inflation to 2018, with 2018 as the base year with the 3.83% inflation rate from February 2017 to February 2018 (available from https://www.inflation. eu/en/inflation-rates/south-africa/historic-inflation/cpi-inflation-south-africa-2018.aspx).

CHAPTER 7:
DETERMINANTS OF TAX COMPLIANCE COSTS

7.1. INTRODUCTION

In the previous two chapters, the focus was on the empirical evidence collected with the objective of *calculating* the tax compliance costs of individual taxpayers in South Africa in respect of the 2017 and 2018 years of assessment. In this chapter, the emphasis moves to ascertaining the *determinants* of the tax compliance costs of individual taxpayers in South Africa. As explained in Section 1.6, the latest available information (data relating to the 2018 year of assessment) was used for this purpose. Therefore, in the first part of the chapter, the empirical evidence from the rating questions (the scale items) collected in Phase 2 regarding possible determinants of tax compliance costs is analysed (Section 7.2). This analysis includes an explanation of the various statistical tests conducted to establish whether or not these scale items formed unidimensional constructs and to obtain a better understanding of them. In the second part of the chapter (Section 7.3), a CHAID decision tree modelling technique was employed to ascertain the determinants of the tax compliance costs of individual taxpayers in South Africa and the specific groups of taxpayers associated with distinct ranges of the determinants. The respondents' ratings of the constructs (established in the first part of the chapter) and the demographic information about the respondents and other information (such as the use of paid assistance) were used.

7.2. SCALE ITEMS

One of the reasons for including the rating questions (the scale items) in the questionnaire was to consider whether or not taxpayers perceive the tax legislation and tax guidance issued by SARS as complex, since the complexity of tax legislation has been identified as a determinant of tax compliance costs (Evans, 2003; Steyn, 2011; Vaillancourt, 1989). Another reason for including these scale items was to consider the service orientation of SARS, because Eichfelder and Kegels (2014:210) have found empirical evidence that the service orientation of a tax authority (or lack of one) is significantly associated with higher tax compliance costs. From the perspective of the "slippery slope" framework approach, the service orientation of tax authorities is not only relevant for the trust dimension of compliance (voluntary compliance), but also for the power dimension of compliance (enforced compliance): it can result in a cost advantage (for a customer-friendly administration) or a cost disadvantage (for a control-oriented administration) (Eichfelder & Kegels, 2014:212).

The questions in the questionnaire using scale items therefore related to the perceptions of the survey respondents regarding

- reasons for tax compliance (Q11.1);
- complexity[206] (Q11.2);
- SARS's service quality (Q11.4);
- appeal procedures (Q11.5);
- assessments, audits and penalties (Q11.6); and
- SARS's consultation and communication regarding changes to its system (Q11.7).

A 5-point[207] Likert-style rating (1 = strongly disagree, 5 = completely agree) was used to measure these constructs.

The first part of the analysis provides a high-level overview of the extent to which the respondents agreed with the scale items provided, followed by an exploratory factor analysis to determine the underlying factor structure of the constructs cited above (if any). The identified factors that displayed satisfactory reliability, based on their Cronbach Alpha values, were then analysed further.

7.2.1.   High-level overview of respondents' agreement with scale items

The first two sets of scale items (Q11.1 and Q11.2) and the last set (Q11.7) were open to all respondents, but Q11.4 was only open to respondents who answered "yes" to the following question (Q11.3): "Did you have any interaction (via telephone, e-mail or in person) with a SARS official in the last 12 months?" This was done to ensure that only those taxpayers who had actually dealt with SARS directly provided answers to this question, thereby preventing respondents from answering on the basis of hearsay. For the same reason, Q11.5 could only be answered by respondents who had used the ADR process, and Q11.6 by respondents who had been audited.

Table 7.1 sets out the mean of each scale item to provide a high-level exploratory overview of the extent to which the respondents agreed with items. For each item the minimum awarded was 1 (strongly disagree), 3 was neutral, and the maximum was 5 (strongly agree).

---

[206] Relating to tax legislation and SARS guides.
[207] In some instances, the option "don't know" was added as a sixth point.

Table 7.1: Mean ratings of each scale item

	N	Mean
Q11.1		
I pay my taxes to support the state and other citizens.	9695	3.59
I pay my taxes without spending a long time thinking how I could reduce my tax.	9277	3.49
I pay my taxes reluctantly because the tax revenue is not spent appropriately.	9354	3.88
I pay my taxes even though I know that others do not.	9145	3.87
I pay my taxes because the punishment for tax evasion is severe.	9217	3.79
Q11.2		
Tax legislation is easy to read.	9244	2.94
Tax legislation is easy to understand.	9143	2.86
Guides issued by SARS are easy to read.	9250	3.30
Guides issued by SARS are easy to understand.	9217	3.25
It is easy to find the provisions in the tax legislation that apply to me.	8948	3.00
Q11.4		
SARS officials gave me precise answers (i.e. not vague).	4149	3.44
The information obtained from SARS corresponded to my needs.	4116	3.46
The answers provided by SARS were consistent regardless of who provided them (for example staff at different branches).	4104	3.30
SARS officials approached their jobs with professionalism and dedication.	4110	3.45
SARS officials are very capable to perform their jobs.	4105	3.40
Q11.5		
I have been able to express my views during those procedures.	237	2.73
I have had influence over the outcomes arrived at by those procedures.	233	2.42
Those procedures have been free of bias.	232	2.81
Those procedures have been fair and transparent.	231	2.47
Q11.6		
SARS investigates until it finds something.	3031	3.33
SARS primarily aims to punish.	3065	2.92
SARS' penalties are too severe relative to the offence.	2841	3.22
Q11.7		
SARS consults widely about how they might change things to make it easier for taxpayers to meet their obligations.	8619	3.04
SARS goes to great lengths to consult with the community over changes to its system.	8598	2.74
SARS communicates changes to its system clearly and effectively.	8850	2.91

Source: Own data

From Table 7.1, it is clear that all items for Q11.1 and Q11.4 obtained a mean rating higher than 3, indicating for Q11.1 that there was a tendency to agree with coercive and persuasive reasons[208] for tax compliance. For Q11.4 there was a tendency to agree with positive perceptions of SARS's service quality. The mean ratings of all the items for Q11.5 were lower than 3, indicating a tendency among respondents towards negative perceptions of their experiences during appeal procedures. The mean rating for the items in the other questions (Q11.2, Q11.6 and Q11.7) did not consistently tend towards either agreement or

---

[208] Coercive reasons denote the power of a revenue authority to enforce tax compliance (considered in Statement 5). Persuasive reasons refer to the trust dimension in a revenue authority to enhance voluntary tax compliance (considered in Statements 1, 2 and 4) (Kirchler & Wahl, 2010:344). Statement 3 deals with the risk of non-compliance with tax obligations (Smith & Stalans, 1991:36).

disagreement. Overall, the item that obtained the lowest mean rating (strongest disagreement) related to the appeal procedures – it stated: "I have had influence over the outcomes arrived at by those procedures." The item that obtained the highest mean rating (strongest agreement) was "I pay my taxes reluctantly because the tax revenue is not spent appropriately".

An exploratory factor analysis was performed in order to determine whether the items under each question constituted a unidimensional construct – that is, made it possible to establish a single variable representing *reasons for tax compliance* (Q11.1), *complexity (tax legislation and SARS guides)* (Q11.2), *SARS's service quality* (Q11.4), *appeal procedures* (Q11.5), *assessments, audits and penalties* (Q11.6) and *SARS's consultation and communication regarding changes to its system* (Q11.7).

7.2.2. Exploratory factor analysis

An exploratory factor analysis was performed using principal axis factoring as the extraction method, and Promax as the rotation method, as described by Costello and Osborne (2005). The appropriateness of conducting factor analysis was tested using the Kaiser-Meyer-Olkin measure of sampling adequacy, and Bartlett's test of Sphericity (Pallant, 2007:181). A summary of the factor analysis is provided in Table 7.2. (Cases were excluded listwise (and not pairwise) to use only completed cases where relevant.) From Table 7.2, it is clear that the Kaiser-Meyer-Olkin was equal or higher than the acceptable threshold of 0.5, and that Bartlett's Test of Sphericity was statistically significant ($p < 0.001$) for the items in all the constructs (Pallant, 2007:181), indicating that a factor analysis was indeed appropriate for the constructs. For the "*reasons for compliance*" construct, two factors were identified, based on the eigenvalue criterion (an eigenvalue greater than one), thus indicating that the construct was not unidimensional. The items that clustered on the same factor (Factor 1) appear to imply coercive compliance, while the items of Factor 2 appear to imply persuasive compliance. However, as the Cronbach Alpha coefficient values for these factors are only 0.517 and 0.443 respectively (indicated in orange), the reliability of these items was not considered acceptable. Hence, this construct was not considered further, in line with Pallant (2007:6).

Table 7.2:   Summary of the factor analysis of seven constructs

Construct and items	Kaiser-Meyer-Olkin & Bartlett's test	% Variance explained	Factor loadings 1	Factor loadings 2	Cronbach Alpha
Reasons for tax compliance	0.552 $p < 0.001$	31.3 (F1) 27.2 (F2)			
Q11.1.1: I pay my taxes to support the state and other citizens.				0.650	0.443
Q11.1.2: I pay my taxes without spending a long time thinking how I could reduce my tax.				0.446	0.443
Q11.1.3: I pay my taxes reluctantly because the tax revenue is not spent appropriately.			0.600		0.517
Q11.1.4: I pay my taxes even though I know that others do not.			0.623		0.517
Q11.1.5: I pay my taxes because the punishment for tax evasion is severe.			0.382		0.517
Tax legislation complexity	0.500 $p < 0.001$	94.0			
Q11.2.1 Tax legislation is easy to read.			0.937		0.935
Q11.2.2 Tax legislation is easy to understand.			0.937		0.935
Complexity of SARS guides	0.500 $p < 0.001$	95.3			
Q11.2.3 Guides issued by SARS are easy to read.			0.952		0.951
Q11.2.4 Guides issued by SARS are easy to understand.			0.952		0.951
SARS's service quality	0.860 $p < 0.001$	77.9			
Q11.4.1 SARS officials gave me precise answers (i.e. not vague).			0.875		0.929
Q11.4.2 The information obtained from SARS corresponded to my needs.			0.856		0.929
Q11.4.3 The answers provided by SARS were consistent regardless of who provided them (for example staff at different branches).			0.820		0.929
Q11.4.4 SARS officials approached their jobs with professionalism and dedication.			0.828		0.929
Q11.4.5 SARS officials are very capable to perform their jobs.			0.874		0.929
Appeal procedures	0.829 $p < 0.001$	75.3			
Q11.5.1 I have been able to express my views during those procedures.			0.784		0.890
Q11.5.2 I have had influence over the outcomes arrived at by those procedures.			0.798		0.890
Q11.5.3 Those procedures have been free of bias.			0.839		0.890
Q11.5.4 Those procedures have been fair and transparent.			0.854		0.890
Assessments, audits and penalties	0.623 $p < 0.000$	61.5			
Q11.6.1 SARS investigates until it finds something.			0.455		0.683
Q11.6.2 SARS primarily aims to punish.			0.796		0.683
Q11.6.3 SARS' penalties are too severe relative to the offence.			0.711		0.683
SARS's consultation and communication regarding changes to its system	0.736 $p < 0.000$	83.3			
Q11.7.1 SARS consults widely about how they might change things to make it easier for taxpayers to meet their obligations.			0.797		0.900
Q11.7.2 SARS goes to great lengths to consult with the community over changes to its system.			0.924		0.900
Q11.7.3 SARS communicates changes to its system clearly and effectively.			0.878		0.900

Source: Own data

For all the remaining constructs, the analysis identified only one factor in each instance based on the eigenvalue criterion (an eigenvalue greater than 1). The Cronbach Alpha values for the unidimensional constructs for "*tax legislation complexity*" (Q11.2A), "*complexity of SARS guides*" (Q11.2B), "*SARS's service quality*" (Q11.4), "*appeal procedures*" (Q11.5), "*assessments, audits and penalties*" (Q11.6) and "*SARS's consultation and communication regarding changes to its system*" (Q11.7) were all above the acknowledged exploratory threshold of 0.6 and were thus considered satisfactory, as described by Field (2013).

Two of the constructs (*tax legislation complexity* and *complexity of SARS guides*) consist of two items each. Two-item constructs are more prone to estimation problems, especially when the sample size is small (Eisinga, Te Grotenhuis & Pelser, 2013:637; Kline, 2005:172), but the large sample in this study and the very high correlation between the two items (> 0.7) made these constructs admissible and these are therefore considered next. The other four constructs, relating broadly to the service orientation of SARS (*SARS's service quality; appeal procedures*; *assessments, audits and penalties*; and *SARS's consultation and communication regarding changes to its system*) are discussed in Sections 7.2.4 to 7.2.7.

7.2.3. Complexity of tax legislation and SARS guides

Two factor-based variables were constructed (F_Q11.2Legislation and F_Q11.2Guides). These were calculated based on the average rating of the two items in each construct. The average rating of the first two items relating to tax legislation (F_Q11.2Legislation) was 2.89, and that of the next two items, relating to the SARS guides (F_Q11.2Guides) was 3.27.[209] It is clear that tax legislation was considered more complex than the SARS guides, but ideally, both these average ratings should be closer to a 5-rating (in other words, there should be strong agreement that tax legislation and SARS guides are easy to read and understand). Furthermore, it was established that there was a strong positive correlation between respondents' perceptions of tax legislation complexity and their perceptions of the complexity of the SARS guides, since the Pearson's correlation was 0.721, significant at the 1% level (2-tailed). Hence, one can say that there was a tendency for respondents who found the tax legislation complex also to perceive the SARS guides as complex.

---

[209] The last statement: "It is easy to find the provisions in the tax legislation that apply to me" obtained a mean rating of exactly 3 (neutral), and was not taken into account.

Taking into account the literacy rate (that is, the ability to identify words) and reading comprehension levels in South Africa,[210] the researcher explored whether the age and education level of respondents had an effect on their perceptions of complexity. An ANOVA was used to determine whether or not there were statistically significant differences between the age groups and education levels with regard to their mean perception scores for legislation complexity and the complexity of SARS guides respectively. The mean ratings on which the ANOVAs were based are displayed in Table 7.3. The highest (best) ratings are indicated in green and the lowest ratings in orange.

Table 7.3: Mean complexity ratings based on age and education respectively

Construct	Groups	N	Mean	Std. Deviation
Tax legislation complexity	25 or younger	65	2.662	1.016
	26 to 34	1 943	2.746	1.015
	35 to 44	2 378	2.824	1.026
	45 to 54	2 241	2.945	1.008
	55 to 64	1 529	3.060	0.960
	65 to 74	678	3.067	0.927
	75 or older	205	2.849	0.939
	Total	**9 039**	**2.895**	**1.006**
	Only schooling	3 011	2.973	0.984
	Graduate	4 206	2.900	1.000
	Postgraduate	1 815	2.752	1.040
	Total	**9 032**	**2.895**	**1.006**
Complexity of SARS guides	25 or younger	62	3.089	1.022
	26 to 34	1 984	3.162	1.002
	35 to 44	2 425	3.245	0.981
	45 to 54	2 250	3.304	0.956
	55 to 64	1 536	3.397	0.892
	65 to 74	676	3.351	0.867
	75 or older	210	3.202	0.925
	Total	**9 143**	**3.273**	**0.959**
	Only schooling	3 045	3.252	0.945
	Graduate	4 256	3.274	0.953
	Postgraduate	1 834	3.304	0.998
	Total	**9 135**	**3.273**	**0.960**

Source: Own data

Figure 7.1 displays the information in Table 7.3 regarding the respondents' complexity perceptions based on their age and education level in two graphs.

---

[210] According to the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2019), the literacy rate of South Africans for 2017 was 95.32% for persons aged 15 to 24 years and 54.52% for persons 65 years and older. When all persons 15 years and older were taken into account, the rate was 87.05%. However, considering more than just the literacy rate, the "Progress in International Reading and Literacy Study", a study which assesses the reading comprehension and trends in reading literacy, found that South Africa was the lowest performing country out of 50 countries in 2016.

Figure 7.1:   Complexity perceptions based on age and education level
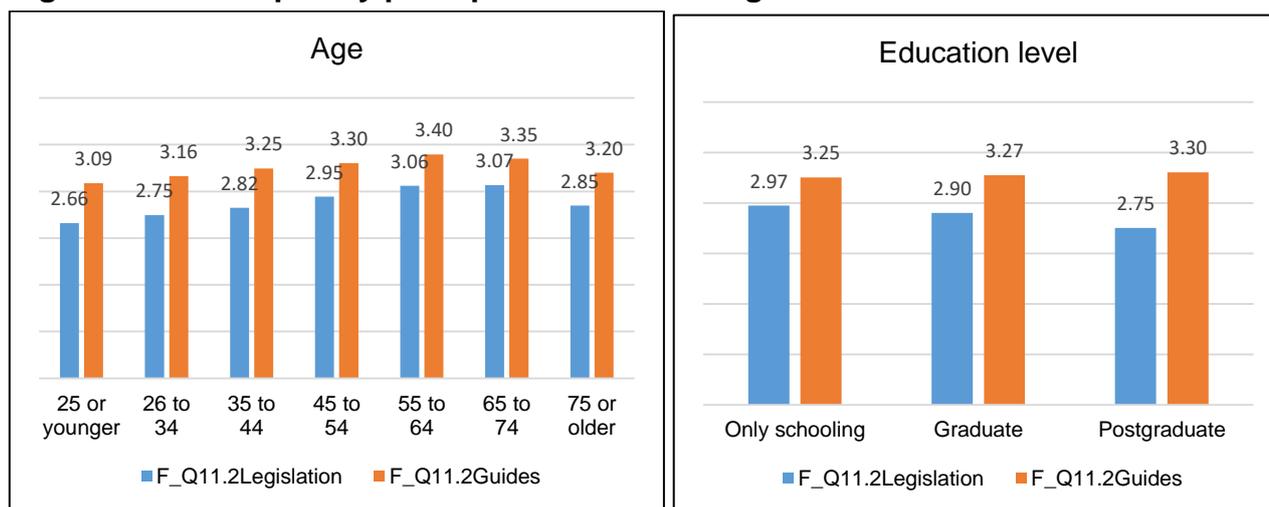
Source: Own data

Based on the results of the ANOVAs, the ratings of the perceptions of both the tax legislation complexity and complexity of SARS guides differed statistically significantly at the 5% level of significance between the age groups, but only the ratings of the perceptions of tax legislation complexity differed statistically significantly at the 5% level of significance between education levels. This did not apply to the ratings of the perceptions of the complexity of SARS guides at p = 0.193 (see Table 7.4). However, because statistical significance is influenced by the large sample sizes in the three instances described, the actual differences in mean ratings between the groups were quite small, as is evident from an effect size (using omega squared[211]) of between 0.006 and 0.013, as indicated in Table 7.4.

Table 7.4:   Welch's ANOVAs[212] between complexity ratings and age and education respectively

	Statistic[a]	df1	df2	Sig.	Omega Squared
Welch's ANOVA (based on age groups)					
Tax legislation complexity	21.781	6	709.516	0.000	0.013
Complexity of SARS guides	11.015	6	688.956	0.000	0.006
Welch's ANOVA (based on education levels)					
Tax legislation complexity	26.461	2	4642.581	0.000	0.006
Complexity of SARS guides	1.644	2	4681.997	0.193	0.000
a. Asymptotically F distributed.					

Source: Own data

---

[211] Calculated using output from SPSS and formula in Excel.
[212] A test of homogeneity of variances was first performed, but because the Levene's statistic had a p < 0.05, the assumption of homogeneity was violated. Welch's ANOVA was therefore used. The associated effect size was omega squared (Ω^2).

Since respondents in all age groups and at all education levels considered SARS's guides easy and understandable (based on average ratings above 3), only legislation complexity was considered further. Because this construct violated the assumption of homogeneity of variances, as assessed by the Levene's test for equality of variance ($p < 0.001$), it was decided to use the Games-Howell post hoc test (multiple comparison test) to determine which specific age groups and education levels differed from the other(s) with regard to the legislation complexity ratings. Age groups were considered first, with a specifically interest in the respondents 25 years and younger, it was found that there was a statistically significant difference between these young respondents' rating of tax legislation complexity and the ratings of the respondents 55 to 64 years ($p = 0.042$) and 65 to 74 years ($p = 0.042$).

Contrary to expectation, respondents in the age group with the highest literacy rate[213] (younger than 25 years) perceived the tax legislation as more complex (as was evident from a lower rating) than the other respondents did. A possible explanation is that younger respondents have had less exposure to tax and specifically tax legislation than older respondents. There was an increase of 0.40 in the average rating from 2.66 in the "25 and younger" group to 3.06 in the "55 to 64-year" group and an increase of 0.41 in the average rating from 2.66 in the "25 and younger" group to 3.07 in the "64 to 74-year" group.

Considering education levels, it was found that there were statistically significant differences between all three education levels of the respondents and their rating of tax legislation complexity ($p < 0.01$[214]). Respondents with higher education levels perceived the legislation as more complex (as is evident from a lower rating) than the other respondents. There was a decrease of 0.07 in the rating from 2.97 in the "only schooling" group to 2.90 in the "graduate" education group and a decrease of 0.22 from 2.97 in the "only schooling" group to 2.75 in the "postgraduate" education group.

More research will have to be done to explore the reasons behind these findings, but a possible explanation could be that taxpayers with higher education levels may have more complex business dealings, which would require consulting more complex provisions of the legislation. This explanation was found plausible when the complexity perceptions of respondents with and without business income were compared (see Figure 7.2). Persons

---

[213] 95.32% for persons who are 15 to 24 years, compared to the 87.05% (all) and 54.52% (persons older than 65 years) (UNESCO, 2019).
[214] The p-values were either $p = 0.006$ or $p < 0.001$.

with business income perceived both the tax legislation and the SARS guides as more complex than respondents without business income did.

Figure 7.2: Complexity perceptions based on business income
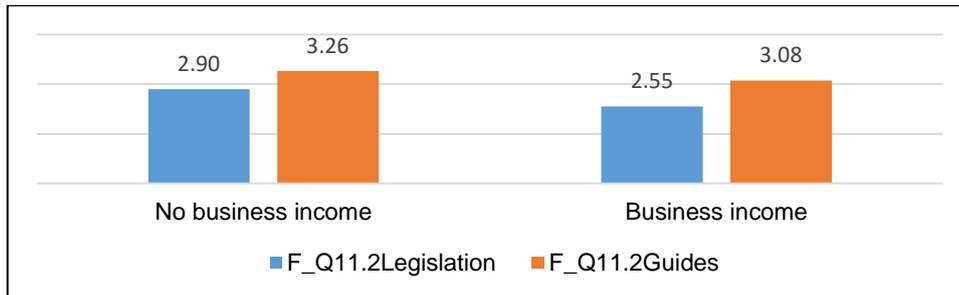
Taking this analysis a step further, it was decided to compare the respondents' perceptions of the complexity of tax legislation and SARS guides, taking their different types of income into account, since different legislation provisions apply to different types of income. This comparison revealed that persons rendering services abroad and persons with trust income found the tax legislation and SARS guides most complex (see Figure 7.3), even though no inferential tests could be performed, because some respondents indicated more than one source of income and observations for each type of income were therefore not independent.

Figure 7.3: Perceptions of the complexity of tax legislation and SARS guides based on different types of income
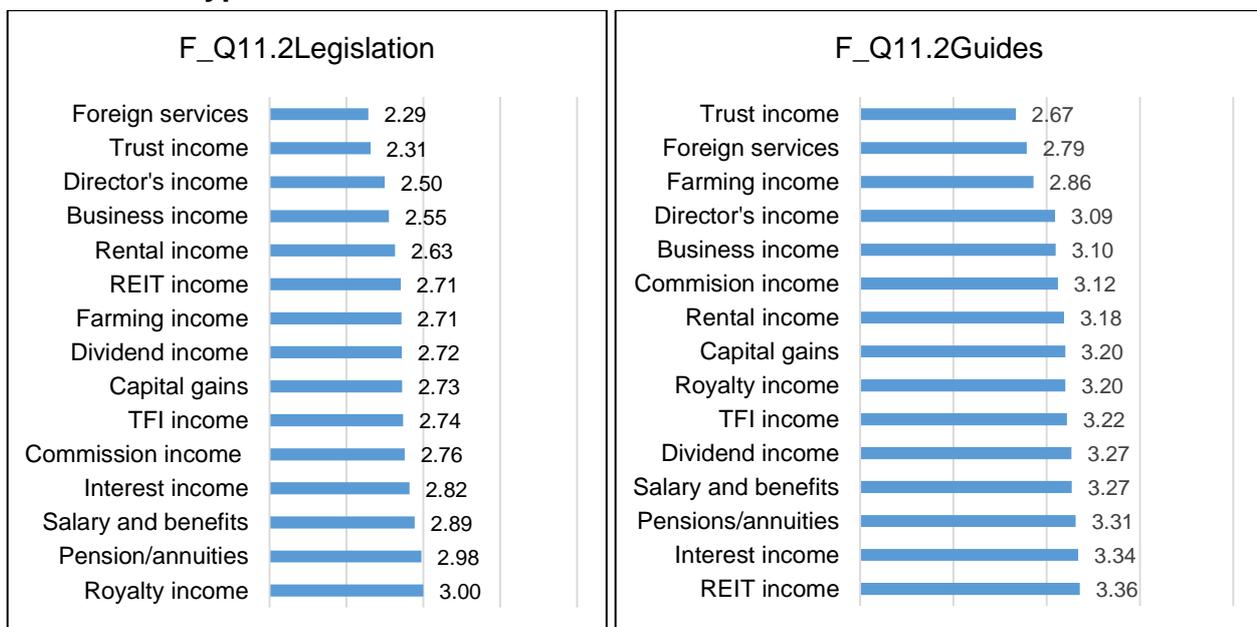
Possible explanations for why persons rendering services abroad and persons with trust income found the tax legislation and SARS guides most difficult are considered next. Firstly, persons rendering services abroad need to consider the double tax agreement (DTA) signed between South Africa and the country where the services were rendered. Even though DTAs are separate documents from the tax legislation, section 108(2) of the *Income Tax Act* (RSA, 1962) results in the provisions of DTAs' forming part of the tax legislation:

> As soon as may be after the approval by Parliament of any such agreement [DTA], as contemplated in section 231 of the Constitution, the arrangements thereby made shall be notified by publication in the *Gazette* and the arrangements so notified shall thereupon have effect as if enacted in this Act [*Income Tax Act*].

The DTA ultimately determines whether or not a person is regarded as a "resident" of South Africa, since the definition in section 1(1) of the *Income Tax Act* (RSA, 1962) contains the following overriding provision:

> "resident" … does not include any person who is deemed to be exclusively a resident of another country for purposes of the application of any agreement entered into between the governments of the Republic and that other country for the avoidance of double taxation.

Being regarded as a resident of South Africa or not is fundamental to the application of the remaining provisions in the *Income Tax Act* (RSA, 1962). Only residents of South Africa are required to include income from a foreign source (such as services rendered in a foreign country) in their gross income. Non-residents are only subject to tax on income from a South African source.

After consulting the DTA and confirming that income from foreign services must be included in the taxpayer's gross income (declared on the income tax return), a complex exemption provision must be considered. This provision contains many criteria, such as types of income and days in and out of South Africa during various 12-month periods, not necessarily coinciding with the tax year, according to section 10(1)(o)(ii) of the *Income Tax Act* (RSA, 1962). A limitation of R1 million[215] to the above exemption was proposed by section 16(1)(*g*) of the *Taxation Laws Amendment Act* (RSA, 2017) with far-reaching consequences.[216] Even

---

[215] During the 2020 budget speech, the Minister of Finance announced that the R1 million limitation would increase to R1.25 million (National Treasury, 2020:46). This increase was not included in the amendment acts promulgated in January 2020. *SARS Interpretation Note 16* (issue 3) on the foreign employment income exemption published on 31 January 2020 contains the R1 million exemption.

[216] For example, a person who renders services in a country with no personal tax such as the United Arab Emirates, or a person who is provided by his/her employer with security services and armed guards in the foreign country is subject to tax in South Africa on those benefits, which are considered fringe benefits.

though the effective date was 1 March 2020, it could have been a further reason for respondents' trying to read and understand the legislation provisions and impact on their own future tax liabilities.

Secondly, there are many complexities imbedded in the trust concept and caused by the unique characteristics[217] of a trust. A variety of complexities arise as a result of difficult terminology,[218] the flow-through principle and attribution rules (Graskie, 2020:33,97). The flow-through principle is built on the notion that a trust is merely a conduit and that income retains its nature while moving through the trust until it reaches the beneficiary (*Armstrong v CIR*). This principle is codified in section 25B of the *Income Tax Act* (RSA, 1962). However, since this flow-through of income can cause income to be split between different beneficiaries, resulting in a reduction of tax to SARS, section 25B is made subject to anti-avoidance provisions in section 7 of the *Income Tax Act* (RSA, 1962), also known as the donor provisions or attribution rules. Therefore, the first layer of complexity arises when a taxpayer who obtains income from a trust must determine whether he/she is actually liable for tax on that amount, or whether it needs to be attributed to someone else.

A second layer of complexity arises where the income received by a person from the trust arose from the disposal of a trust asset, in which case, CGT provisions must be considered. With capital gains, there is not a blanket flow-through provision subject to anti-avoidance rules, but rather limited carved-out provisions to allow the capital gain to be included in the beneficiary's income, according to paragraph 80 of the Eighth Schedule to the *Income Tax Act* (RSA, 1962). These provisions are then made subject to anti-avoidance provisions (paragraphs 68 to 72). A last layer of complexity arises where interest-free or low interest loans are granted to the trust. This layer of complexity not only places a limit on amounts to be attributed, in terms of paragraph 73 of the Eighth Schedule, but it may also cause additional donations tax, in terms of section 7C of the *Income Tax Act* (RSA, 1962).

Further research can therefore be undertaken into possible ways to simplify the tax legislation in South Africa, specifically relating to income from foreign services and trust income. Furthermore, there is evidence that tax compliance costs grow for businesses with

---

[217] Namely, no *legal persona*, flexibility of trust, transferability and protection of assets, separation of formal ownership, tax transparency, lack of statutory directives, income retaining its nature, perpetual succession, real subrogation and trusteeship as an office (Graskie, 2020:33-36).
[218] The definition of a trust includes difficult terminology such as "trust fund", "fiduciary capacity" and "deed of trust", which are not also defined elsewhere – see section 1(1) of the *Income Tax Act* (RSA, 1962).

cross-border transactions (European Commission, 2013:4). Based on the complexities involved, it seems as if any cross-border income of individuals may therefore also result in increased tax compliance costs. Also bear in mind that tax complexity increases tax compliance costs, and may have a negative effect on tax compliance behaviour and resultant revenues for tax authorities (Akhand, 2012:224; Yong *et al*., 2019:789).

7.2.4. SARS's service quality

This construct considers whether the information provided by the administration is helpful to the taxpayer, since an additional tax compliance burden may arise from information procurement (spending time and costs to find relevant information) if that is not the case (Eichfelder & Kegels, 2014:203). The construct also relates to *cognition-based trust*, which Gobena and Van Dijke (2016:34) found to be the mediating mechanism through which procedural justice (see Section 7.2.5) leads to voluntary tax compliance.

A factor-based variable was constructed (F_Q11.4Service) and calculated, based on the average rating of all five items in Q11.4. This *SARS's service quality* rating was 3.41, which means that the opinions of the respondents leaned towards agreement (4) with the statement that the service quality obtained from SARS was good (precise answers, relevant information, and professional and capable staff). An ANOVA was again used to determine whether or not there were statistically significant differences between the age groups with regard to their mean perception scores for SARS's service quality. The mean ratings on which the ANOVA was based are displayed in Figure 7.5.

Table 7.5:   Mean ratings for perceptions of SARS's service quality based on age groups

	N	Mean	Std. Deviation
25 or younger	33	3.249	0.869
26 to 34	1 015	3.342	0.940
35 to 44	1 120	3.365	0.964
45 to 54	941	3.439	0.951
55 to 64	594	3.504	0.940
65 to 74	288	3.517	0.847
75 or older	85	3.567	0.863
Total	**4 076**	**3.411**	**0.943**

Source: Own data

Based on Welch's ANOVA[219] (F(6, 334.658) = 3.803, p = 0.001), the respondents' perceptions differed statistically significantly at the 5% level of significance between the age groups. However, the actual differences in mean ratings between the groups are very small, as is evident from an effect size (using omega squared) of 0.004.

The Games-Howell post hoc test[220] (multiple comparison test) was used to determine which age groups were statistically significant different from the others with regard to their perceptions of SARS's service quality. The only statistically significant differences in perceptions of SARS's service quality were found between the respondents in the "26 to 34 year" group and those in the "55 to 64 year" group (p = 0.016) and the "65 to 74 year" group (p = 0.044), as indicated by the arrows in Figure 7.4. Even though there were also differences between the perceptions of SARS's service quality of other age groups, these differences were not statistically significant.

Figure 7.4:   Perceptions of SARS's service quality based on age
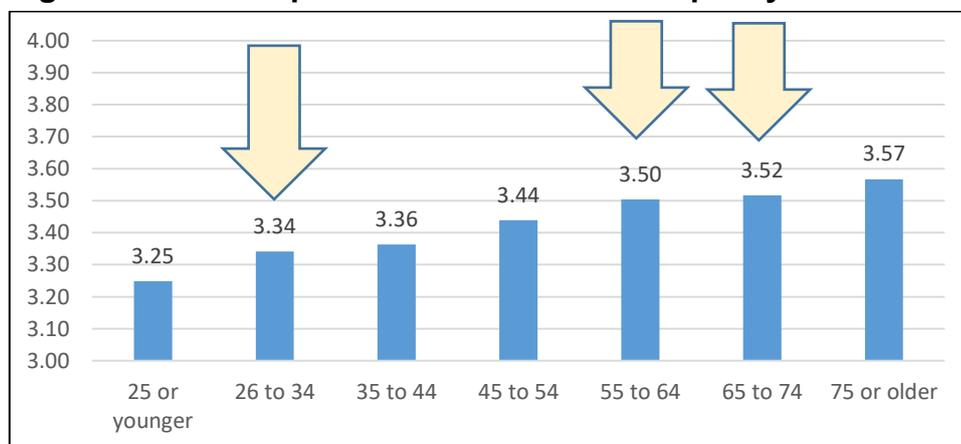
Source: Own data

Therefore, the increases of 0.16 in the rating from 3.34 in the "26 to 34 year" group to 3.50 in the "55 to 64 year" group and 0.18 in the rating from 3.34 in the "26 to 34 year" group to 3.52 in the "64 to 74 year" group were statistically significant, even though the differences were small. A possible reason the older respondents had a better experience than the younger respondents when interacting with SARS could be that there was an expectation gap, since millennials in South Africa may also "expect something more", as has been reported by Serafimovikj, Badarovski, Jovanov and Sofijanova (2017:152) in their

---

[219] Test of homogeneity of variance failed and therefore Welch's ANOVA was used.
[220] Due to the violation of the assumption of homogeneity of variances, as assessed by the Levene's test for equality of variance (p < 0.05).

Macedonian study. However, Tjondro, Santosa and Prayitno (2019:11) found that millennials in Indonesia had a more positive perception of service-oriented tax officers than baby boomers, so further research is necessary to draw any conclusions from the findings in the current study.

An ANOVA was also used to determine whether or not there were statistically significant differences between the education levels of respondents with regard to their mean perception scores for SARS's service quality. The mean ratings on which the ANOVA was based are displayed in Table 7.6.

Table 7.6:   Mean ratings for perceptions of SARS's service quality based on education levels

	N	Mean	Std. Deviation
Only schooling	1 346	3.456	0.908
Graduate	1 887	3.375	0.951
Postgraduate	840	3.417	0.975
Total	**4 073**	**3.410**	**0.943**

Source: Own data

The ANOVA was only statistically significant at the 10% level, with a very small effect size (F(2, 4070) = 2.945, p = 0.053, eta squared = 0.001). Based on the Tukey HSD post hoc test, the only statistically different means were found between the "only schooling" group and the "graduate" education group (p = 0.042), as indicated with arrows in Figure 7.5.

Figure 7.5:   Perceptions of SARS's service quality based on education level
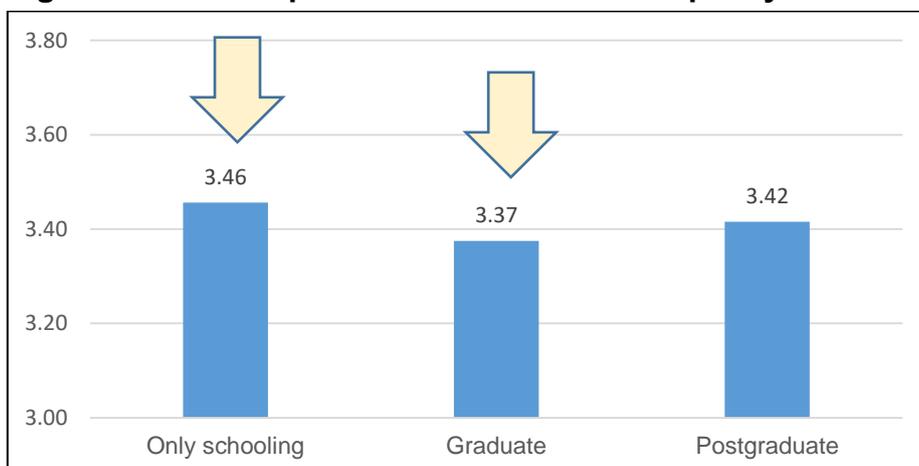
Source: Own data

Therefore, persons with no further education after school had a slightly more positive perception of the service quality provided by SARS, as can be seen in Figure 7.5, which could possibly be ascribed to their being unfamiliar with what to do and appreciative of assistance. Again, further research is necessary to draw any conclusions from this observation. Since the SARS's service quality construct could be influenced by SARS personnel in different provinces or the personnel available to assist taxpayers living abroad, a Kruskal-Wallis H test[221] was used to explore whether the distribution of perceptions differed between respondents in different provinces. The mean ratings on which the Kruskal-Wallis H test was based are displayed in Table 7.7.

Table 7.7: **Mean ratings for perceptions of SARS's service quality based on province**

	N	Mean	Std. Deviation
Eastern Cape	257	3.477	0.910
Free State	163	3.519	0.936
Gauteng	1 897	3.370	0.947
KwaZulu Natal	472	3.548	0.882
Limpopo	128	3.697	0.934
Mpumalanga	211	3.368	0.951
North West	130	3.354	0.991
Northern Cape	84	3.683	0.738
Western Cape	717	3.327	0.963
n/a (not living in South Africa)	16	3.000	1.145
Total	**4 075**	**3.411**	**0.943**

Source: Own data

It was found that the distribution of the service quality perception ratings was statistically significantly different between provinces, $\chi^2(9) = 51.255$, $p < 0.001$. Pairwise comparisons were then performed using Dunn's (1964) procedure, with a Bonferroni correction for multiple comparisons. This post hoc analysis revealed statistically significant differences between only six province comparison groups (all $p \leq 0.001$) and not between any other group combinations. This finding is presented in Figure 7.6, where blue lines represent the statistically significant differences between the groups, based on the province the respondents reside in.

---

[221] This test was used instead of an ANOVA because of the small number of respondents living abroad. If these 16 respondents living abroad were, however, not taken into account, the ANOVA result would have been $F(8,4050) = 5.35$, $p < 0.001$, with a Welch's statistic of 5.939, $p < 0.001$, since the Levene's test of homogeneity was violated.

Figure 7.6: Pairwise comparisons of province groupings with statistically significant differences indicated in blue
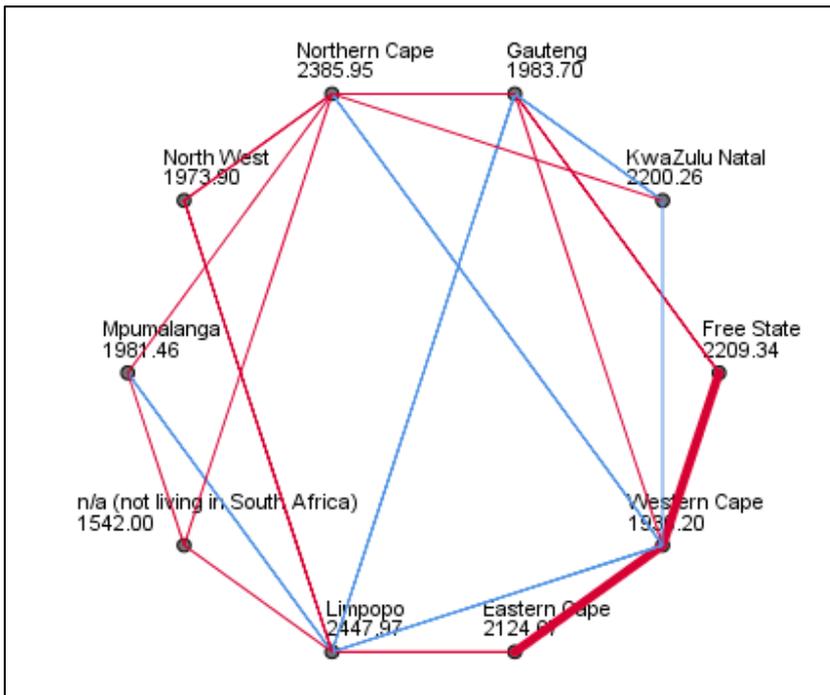
Source: Own data (SPSS output)[222]

Therefore, considering only the mean ratings relating to provinces where statistically significant differences were found (see Table 7.8), it was concluded that respondents in the Western Cape, Gauteng, and Mpumalanga perceived SARS's service quality less positively than respondents in Limpopo. The perceptions of respondents in KwaZulu Natal were, however, more positive than the perceptions of respondents in either Gauteng or the Western Cape. Lastly, perceptions of respondents in the Northern Cape were more positive than the perceptions of respondents in the Western Cape.

Table 7.8: Mean ratings for SARS's service quality – comparisons between provinces found to be statistically significant

	Mean
Western Cape	**3.327**
KwaZulu Natal	3.548
Northern Cape	3.683
Limpopo	3.697
Gauteng	**3.370**
KwaZulu Natal	3.548
Limpopo	3.697
Mpumalanga	**3.368**
Limpopo	3.697

Source: Own data

---

[222] Each node shows the sample average rank.

To determine whether or not the perceptions of SARS's service quality were influenced by the types of income of the respondents, the ratings of persons were compared based on their specific types of income. Keeping in mind that a respondent might have indicated more than one type of income and that no inferential tests were therefore performed, only in three cases was an average rating lower than neutral (3) found. Thus more negative perceptions of SARS's service quality were observed. As depicted in Figure 7.7, these perceptions were held by persons with business income (2.96), trust income (2.91) and director's income (2.71). The results may be partly ascribed to the complexity of trusts discussed above.

Figure 7.7: Perceptions of SARS's service quality based on different types of income
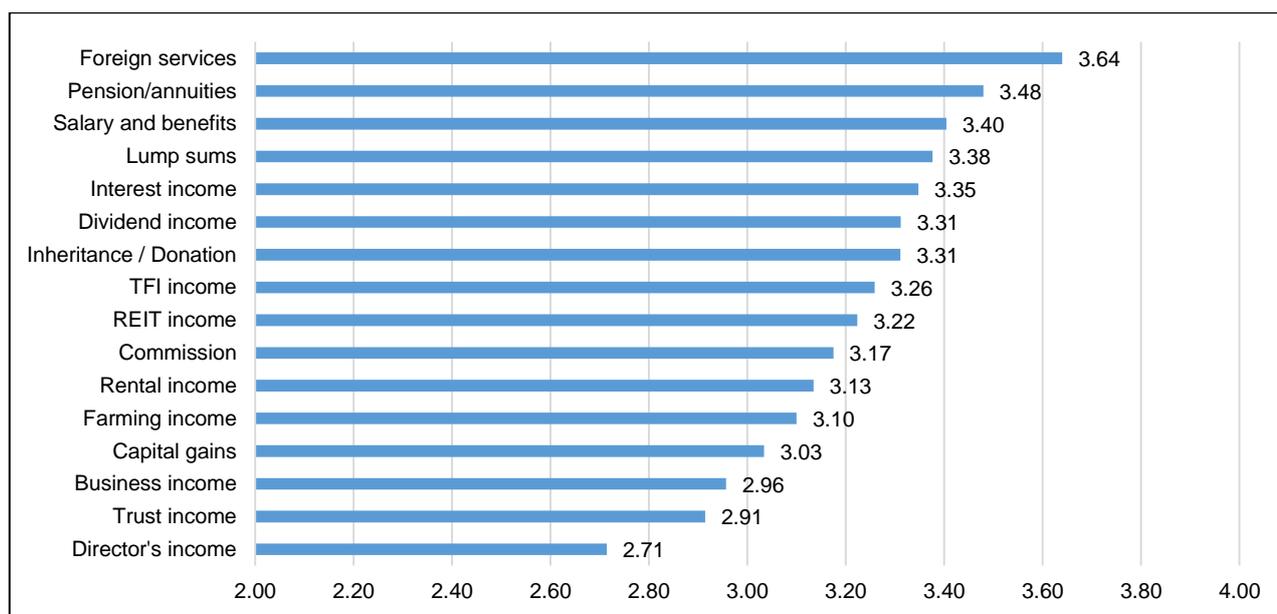
Source: Own data

From Figure 7.7 it is also clear that the best rating (the most positive perception of SARS's service quality) was awarded by persons with foreign income (3.64). This finding could therefore not be explained by the complexity levels discussed earlier, even though there was a positive medium strength correlation between respondents' perceptions of complexity and their perceptions of SARS's service quality. The Pearson's correlation between legislation complexity and the perceptions of SARS's service quality was 0.384. The correlation between the complexity of SARS guides and perceptions of SARS's service quality was 0.439 (significant at the 1% level, 2-tailed).

Lastly, the perceived quality of SARS's service seemed to be lower for respondents in higher tax brackets, based on the mean ratings of respondents in the different tax brackets (see Figure 7.8).

Figure 7.8: Perceptions of SARS's service quality based on income tax brackets
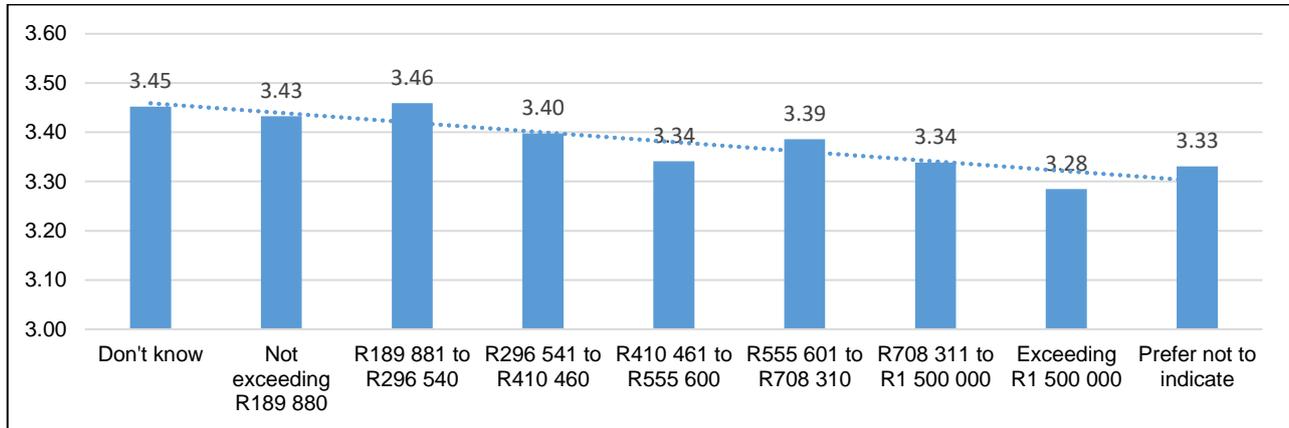
Source: Own data

Figure 7.8 shows that these values differ only marginally between the groups, namely between 3.28 and 3.46. Based on an ANOVA, no statistically significant differences were found with regard to perceptions of SARS's service quality based on the respondents' income tax bracket groups ($F_{(8, 4077)} = 1.241$ $p = 0.271$).

7.2.5. Appeal procedures

This construct deals with procedural justice, which is the perceived fairness of decision-making processes and procedures (Gobena & Van Dijke, 2016:25). Its evaluation is based on the perceptions of approximately 2.2% of the respondents, namely those who used the ADR process to appeal the outcome of an objection. It is recommended that authorities in developing nations, which tend to focus on coercion in their relationship with their citizens, should invest in creating a procedurally just tax environment, since it has been found that procedural justice is more effective in stimulating voluntary tax compliance, whereas injustice undermines voluntary compliance (Gobena & Van Dijke, 2016:32).

A factor-based variable was constructed (F_Q11.5ADR) and calculated, based on the average rating of the four items in Q11.5 open to those respondents who indicated that they had appealed against a decision regarding an objection using the ADR process. The *appeal procedures* rating was 2.60, which means that the opinions of the respondents leaned towards disagreement (2) with the items that suggested that they could express their views

during the procedures and/or influence the outcomes, and that the procedures were fair, transparent and free of bias.

The issue was explored whether or not the perceptions of the appeal procedures differed between respondents in different provinces or between respondents with different education levels, tax knowledge, age groups and income tax brackets. In most instances, the number of respondents dropped below 30 and the Kruskal-Wallis H non-parametric test was therefore used instead of the ANOVA to determine whether or not there were statistically significant differences between the groups. Furthermore, some age groups[223] and income tax brackets[224] were combined for purpose of this analysis. The mean ratings on which the Kruskal-Wallis tests and ANOVA were based, as well as the results of these tests, are indicated in Table 7.9 (the lowest rating in each group is indicated in orange).

Table 7.9: Statistics for perception ratings of appeal procedures based on province, education, tax knowledge, age and income tax bracket

(ANOVA or Kruskal-Wallis test results in brackets)	N	Mean	Std. Deviation
Province ($\chi^2(8) = 7.898$, p = 0.444)			
Eastern Cape	16	2.570	0.984
Free State	7	2.143	1.079
Gauteng	112	2.691	0.963
KwaZulu Natal	24	2.781	0.912
Limpopo	6	2.313	1.054
Mpumalanga	14	2.777	0.951
North West	6	2.396	1.200
Northern Cape	6	2.396	0.625
Western Cape	39	2.362	0.900
Total	**230**	**2.600**	**0.952**
Education ($F(2, 227) = 0.866$, p = 0.422)			
Only schooling	78	2.715	0.881
Graduate	110	2.538	0.988
Postgraduate	42	2.548	0.988
Total	**230**	**2.600**	**0.952**
Tax knowledge ($\chi^2(4) = 2.060$, p = 0.725)			
No knowledge	7	2.589	1.214
Poor	33	2.424	0.904
Average	120	2.675	0.870
Good	63	2.548	1.040
Excellent	7	2.607	1.506
Total	**230**	**2.600**	**0.952**

---

[223] The "25 or younger" and "26 to 34" sets were combined to form a new group namely "34 or younger". The "65 to 74" and "75 or older" sets were combined to form a new group namely "65 or older".

[224] The "R708 311 to R1 500 000" and "exceeding R1 500 000" sets were combined to form a new group "exceeding R708 310". Respondents who indicated that they did not know or preferred not to indicate their tax bracket were also combined.

(ANOVA or Kruskal-Wallis test results in brackets)	N	Mean	Std. Deviation
Age ($\chi^2(4) = 3.067$, p = 0.547)			
34 or younger	51	2.696	0.935
35 to 44	71	2.641	1.030
45 to 54	57	2.586	0.911
55 to 64	38	2.362	0.934
65 or older	13	2.750	0.810
Total	**230**	**2.600**	**0.952**
Income tax bracket ($\chi^2(6) = 11.346$, p = 0.078[225])			
Not exceeding R189 880	29	2.940	0.879
R189 881 to R296 540	38	2.855	0.971
R296 541 to R410 460	35	2.664	0.886
R410 461 to R555 600	29	2.431	0.938
R555 601 to R708 310	28	2.295	0.838
Exceeding R708 310	34	2.390	1.114
Don't know/Prefer not to indicate	37	2.564	0.895
Total	**230**	**2.600**	**0.952**

Source: Own data

From Table 7.9, it is clear that the mean ratings of all the demographic groups were lower than 3, which shows that all the respondents had more negative views regarding the appeal procedures, irrespective of demographic group. However, from the p-values in Table 7.9, it is also evident that neither the Kruskal-Wallis tests nor the ANOVA indicated any statistically significant differences with regard to perceptions of appeal procedures between the respondents in different demographic groups at the 5% significance level (all the p-values were greater than 0.05) and there were only marginal differences between the means. However, there were statistically significant differences at the 10% significance level (p = 0.078) with regard to the appeal procedures perceptions between the respondents in different income tax brackets groups. No post hoc tests were performed due to the significance level cut-off of 5% for the Kruskal-Wallis non-parametric test.

7.2.6. Assessments, audits and penalties

This construct is based on items regarding the coercive power of tax authorities, which is the power that compels taxpayers to pay their taxes out of fear of tax audits and subsequent penalties, instead of their belief that taxes help to finance common public goods (Gobena & Van Dijke, 2016:34; Kastlunger, Lozza, Kirchler & Schabmann, 2013:43).

---

[225] Since the lowest number in this group was just under 30 (namely 28), the one-way ANOVA was also performed. It also indicated that there was no statistically significant difference at the 5% significance level between respondents in different income tax brackets: $F(6, 223) = 2.071$, p = 0.058.

A factor-based variable was constructed (F_Q11.6Audit) and calculated, based on the average rating of the three items in Q11.6 open to respondents who indicated that they were audited. The *assessments, audits and penalties* rating was 3.16, which means that the opinions of the respondents leaned slightly towards agreement (4) with the items suggesting that SARS investigates until it finds something, SARS primarily aims to punish, and SARS's penalties are too severe relative to the offence.

ANOVAs were used to explore whether or not the perceptions regarding the *assessments, audits and penalties* differed between respondents in different provinces or between respondents with different education levels, tax knowledge, age groups and income tax brackets. The mean ratings on which the ANOVAs were based, as well as the results of the ANOVAs, are indicated in Table 7.10. The highest (most negative) rating in each group is indicated in orange.

Table 7.10: Statistics for perception ratings of assessments, audits and penalties based on province, education, tax knowledge, age and income tax bracket

(ANOVA[226] or Welch's ANOVA[227] results in brackets)	N	Mean	Std. Deviation
Province[228] ($F(8, 2668) = 1.071$, p = 0.381, eta squared = 0.003)			
Eastern Cape	179	3.179	0.777
Free State	122	3.148	0.819
Gauteng	1248	3.153	0.819
KwaZulu Natal	334	3.113	0.787
Limpopo	77	3.178	0.719
Mpumalanga	151	3.283	0.727
North West	97	3.299	0.820
Northern Cape	34	3.128	0.817
Western Cape	435	3.130	0.784
Total	**2677**	**3.159**	**0.799**
Education ($F(2, 1365.559) = 3.631$, p = 0.027, eta squared = 0.027)			
Only schooling	906	3.215	0.779
Graduate	1242	3.123	0.786
Postgraduate	541	3.154	0.860
Total	**2689**	**3.160**	**0.800**
Tax knowledge ($F(4, 261.724) = 1.996$, p = 0.096, omega squared = 0.002)			
No knowledge	53	3.346	0.934
Poor	451	3.238	0.818
Average	1482	3.143	0.762
Good	598	3.124	0.840
Excellent	104	3.141	0.891
Total	**2688**	**3.159**	**0.799**

---

[226] For province and age, since the assumption of homogeneity of variance was not violated in these two instances.

[227] For education, tax knowledge and income tax brackets because of the violation of the assumption of homogeneity of variance.

[228] Respondents living abroad were excluded from this analysis.

(ANOVA[226] or Welch's ANOVA[227] results in brackets)	N	Mean	Std. Deviation
Age ($F(4, 2685) = 12.881$, $p < 0.001$, eta squared = 0.019)			
34 or younger	516	3.188	0.789
35 to 44	684	3.272	0.800
45 to 54	651	3.190	0.770
55 to 64	483	3.113	0.822
65 or older	356	2.913	0.783
Total	**2690**	**3.160**	**0.800**
Income tax bracket ($F(6, 1048.28) = 1.067$, $p = 0.381$, omega squared = 0.000)			
Not exceeding R189 880	428	3.153	0.826
R189 881 to R296 540	541	3.136	0.768
R296 541 to R410 460	442	3.196	0.801
R410 461 to R555 600	265	3.154	0.812
R555 601 to R708 310	214	3.213	0.822
Exceeding R708 311	352	3.082	0.869
Don't know/Prefer not to indicate	449	3.198	0.730
Total	**2691**	**3.160**	**0.799**

Source: Own data

From the results of the ANOVAs (see Table 7.10), it is clear that statistically significant differences are only present between age groups ($p < 0.001$) and education levels ($p = 0.027$) at the 5% level of significance, but with a very small effect size (based on an eta squared of 0.019 for age and an omega squared of 0.002 for education). Post hoc tests were conducted to determine where these differences were.

The Tukey HSD Post Hoc multiple comparison test for *age* indicates that the perceptions of respondents who are 65 years or older regarding assessments, audits and penalties were statistically significantly different from those of all other age groups (all p-values ≤ 0.003). The only other age groups that differed statistically significantly from each other were the "35 to 44 year" and "55 to 64 year" groups ($p = 0.006$). The respondents who were 65 years and older were the most positive group (with a mean rating of 2.913) in their perceptions of assessments, audits and penalties, while the respondents who were 35 to 44 years were the most negative group (with a mean rating of 3.272). A possible reason could be that most of the respondents in the "65 or older" group were retired without active income, which could be an indicator of less complex tax affairs. Furthermore, most of these respondents did not incur any penalties, which could have contributed to their perception that the auditing of their tax returns was not aimed at punishing them.

The Games-Howell Post Hoc multiple comparison test for *education* level indicates that the perceptions of respondents with only a school education regarding assessments, audits and

penalties were statistically significantly different from those of the respondents with graduate level education (p = 0.020). Based on the mean ratings provided in Table 7.10 above, the respondents who had only a school education had a more negative perception (with a mean rating of 3.215). A possible reason could be that a lower education level may result in accidental errors. Penalties for those errors found during audits may feel too severe to the respondent, but further research is necessary to support this speculation.

7.2.7.   SARS's consultation and communication regarding changes to its system

This last construct also dealt with procedural justice (similar to the *appeal procedures* construct), but considered a different aspect of it, namely consultation. Murphy (2004:200) found that consultation was one of the three items of procedural justice that appeared to be the most important predictors of trust (the others were neutrality and fairness).

A factor-based variable was constructed (F_Q11.7Consult) and calculated, based on the average rating of the three items in Q11.7 open to all respondents. The average rating was 2.89. This means that the opinions of the respondents leaned towards disagreement (2) with the items that stated that SARS consults widely about how it might change things to make it easier for taxpayers to meet their obligations, that it goes to great lengths to consult with the community over changes to its system, and that it communicates changes to its system clearly and effectively.

ANOVAs were again used to explore whether the perceptions regarding *SARS's consultation and communication regarding changes to its system* differed between respondents based on the different demographic groupings. The mean ratings on which the ANOVAs were based, as well as the ANOVA results, are indicated in Table 7.11, with the lowest (most negative) rating in each group indicated in orange.

Table 7.11: Statistics for SARS's consultation and communication regarding changes to its system perception ratings based on province, education, tax knowledge, age and income tax bracket

(ANOVA[229] or Welch's ANOVA[230] results in brackets)	N	Mean	Std. Deviation
Province[231] ($F_{(8, 8117)}$ = 5.297, p < 0.001, eta squared = 0.003)			
Eastern Cape	498	2.960	0.938
Free State	359	3.082	0.916
Gauteng	3786	2.831	0.958
KwaZulu Natal	942	2.935	0.944
Limpopo	254	2.995	0.960
Mpumalanga	412	2.969	0.920
North West	300	2.919	0.984
Northern Cape	154	2.965	0.973
Western Cape	1421	2.862	0.931
Total	**8126**	**2.885**	**0.950**
Education ($F_{(2, 4109.914)}$ = 42.038, p < 0.001, omega squared = 0.010)			
Only schooling	2764	2.997	0.929
Graduate	3810	2.871	0.943
Postgraduate	1588	2.723	0.976
Total	**8162**	**2.885**	**0.950**
Tax knowledge ($F_{(4, 850.540)}$ = 51.913, p < 0.001, omega squared = 0.025)			
No knowledge	186	2.613	1.130
Poor	1478	2.591	0.923
Average	4491	2.935	0.899
Good	1725	3.012	0.991
Excellent	290	3.036	1.126
Total	**8170**	**2.885**	**0.950**
Age ($F_{(4, 3348.072)}$ = 15.025, p < 0.001, omega squared = 0.007)			
34 or younger	1854	2.758	0.937
35 to 44	2164	2.873	0.9915
45 to 54	2029	2.947	0.9560
55 to 64	1354	2.990	0.930
65 or older	770	2.873	0.839
Total	**8171**	**2.885**	**0.950**
Income tax bracket ($F_{(8, 1391.383)}$ = 5.657, p < 0.001, omega squared = 0.005)			
Don't know	1246	2.930	0.945
Not exceeding R189 880	1396	2.980	0.955
R189 881 to R296 540	1590	2.932	0.938
R296 541 to R410 460	1366	2.853	0.942
R410 461 to R555 600	825	2.836	0.950
R555 601 to R708 310	601	2.772	0.975
R708 311 to R1 500 000	803	2.773	0.928
Exceeding R1 500 000	100	2.827	1.118
Prefer not to indicate	246	2.828	0.922
Total	**8173**	**2.885**	**0.950**

Source: Own data

---

[229] For province, since the assumption of homogeneity of variance was not violated in this instance.
[230] For education, tax knowledge, age and income tax bracket, as a result of the violation of the assumption of homogeneity of variance.
[231] Respondents living abroad were excluded from this analysis.

From the results of the ANOVAs (as provided in Table 7.11), it is clear that there were statistically significant differences ($p < 0.001$) between all demographic groups, even though the effect sizes were very small. The biggest effect was between the "tax knowledge" groups, indicated by the omega squared of 0.025. Post hoc tests were conducted to determine where these differences were, and the statistically significant differences are shown in Table 7.12.

Table 7.12: Extract from post hoc multiple comparison tests between demographics of respondents regarding SARS's consultation, and communication on changes to SARS's system

Tukey HSD		Sig.
Province		
Free State	Gauteng	0.000
Free State	Western Cape	0.003
Games-Howell		Sig.
Education		
Only schooling	Graduate	0.000
Only schooling	Postgraduate	0.000
Graduate	Postgraduate	0.000
Tax knowledge		
No knowledge	Good	0.000
No knowledge	Excellent	0.001
No knowledge	Average	0.002
Poor	Good	0.000
Poor	Average	0.000
Poor	Excellent	0.000
Average	Good	0.039
Age		
34 or younger	35 to 44	0.001
34 or younger	45 to 54	0.000
34 or younger	55 to 64	0.000
34 or younger	65 or older	0.018
35 to 44	55 to 64	0.004
55 to 64	65 or older	0.026
Income tax bracket		
Don't know	R708 311 to R1 500 000	0.007
Don't know	R555 601 to R708 310	0.028
Not exceeding R189 880	R708 311 to R1 500 000	0.000
Not exceeding R189 880	R555 601 to R708 310	0.000
Not exceeding R189 880	R296 541 to R410 460	0.013
Not exceeding R189 880	R410 461 to R555 600	0.017
R189 881 to R296 540	R708 311 to R1 500 000	0.003
R189 881 to R296 540	R555 601 to R708 310	0.016

Source: Own data

Based on the mean ratings in Table 7.11, and considering only statistically significant differences contained in Table 7.12, the findings show that the respondents in the *Free State* held more positive perceptions of SARS's consultation and communication on changes to

its system than respondents in either Gauteng ($p < 0.001$) or the Western Cape ($p = 0.003$). The perceptions of respondents were more negative when their *education levels* increased ($p < 0.001$). The perceptions of respondents with average, good or excellent *tax knowledge* were more positive than those with no or poor tax knowledge ($p \leq 0.002$). A possible reason for the observation regarding *education levels* may be that respondents with higher education levels could have more complex tax affairs (Mathieu *et al.*, 2010:358). They would therefore like to be consulted more by the revenue authority on ways to make it easier for them to meet their tax compliance obligations, and notified in advance if changes are made to the system (for example, e-filing changes). Moreover, it is submitted that higher education levels do not necessarily result in increased tax knowledge, since tax knowledge is a specific field of study. Respondents with better tax knowledge may feel better equipped to deal with last-minute changes to the tax system (resulting in a more positive rating of this construct). By contrast, respondents with little or no tax knowledge may need more communication from SARS regarding changes to its system, and therefore these respondents may provide a less positive rating of this construct. These explanations remain speculative, however, and further research is needed to draw conclusions from these findings.

Evaluating the perceptions of respondents by *age* group, it was found that respondents younger than 35 years were the most negative. Their rating was statistically significantly different from the rating of respondents in all the other age groups regarding SARS's consultation and communication on changes to its system ($p \leq 0.018$). A possible reason for this could be an expectation gap, given that millennials are "masters of social media" (Serafimovikj *et al.*, 2017:153), where a lot of information and opinions are exchanged. Thus their negative rating may stem from SARS's not consulting enough on and communicating changes to its system via social media, but further research would need to be conducted to confirm this speculation. Statistically significant differences ($p = 0.004$) were also found between two other age groups. The "35 to 44 year" group was more negative than the "55 to 64 year" group ($p = 0.004$). The "55 to 64 year" group was more positive than respondents 65 years and older ($p = 0.026$). Further research is needed to explain these differences.

Lastly, considering the groups based on *income tax bracket*, it was found that the perceptions of respondents in the lower income tax brackets[232] were statistically significantly more positive than those of respondents in the higher brackets ($p \leq 0.028$) regarding SARS's

---

[232] It is assumed that respondents who have indicated that they do not know their income tax bracket are probably in the lower income tax brackets.

consultation and communication regarding changes to its system. A possible reason for this observation may be that respondents in the higher income tax brackets may have more complex tax affairs (Mathieu *et al.*, 2010:358). They would therefore like to be consulted with more regularly by the revenue authority on ways to make it easier for them to meet their tax compliance obligations, and be notified in advance if changes are made to the system (for example, e-filing changes).

Some correlations have already been discussed under *complexity of tax legislation and SARS's guides*, and *SARS's service quality* to determine whether there was a relationship between the respondents' perceptions. The next section considers the correlation between all the constructs, namely tax legislation complexity, the complexity of SARS's guides, SARS's service quality, appeal procedures, assessments, audits and penalties, and SARS's consultation and communication regarding changes to its system.

7.2.8. Correlation between constructs

Table 7.13 contains the Pearson correlation coefficients between the six constructs discussed above. These correlations were calculated for those cases that have a value for both constructs (indicated with N). These correlations thus only reflect the relationships for that subset of responses.

Table 7.13: Pearson correlation coefficients between the six constructs

		Tax legislation complexity	Complexity of SARS's guides	SARS's service quality	Appeal procedures	Assess-ments, audits and penalties
Complexity of SARS's guides	Pearson Correlation	0.721**				
	N	8824				
SARS's service quality	Pearson Correlation	0.384**	0.439**			
	N	3788	3850			
Appeal procedures	Pearson Correlation	0.337**	0.431**	0.726**		
	N	215	220	167		
Assessments, audits and penalties	Pearson Correlation	-0.134**	-0.159**	-0.219**	-0.155	
	N	2579	2600	1512	128	
SARS's consultation and communication regarding changes to its system	Pearson Correlation	0.509**	0.506**	0.564**	0.597**	-0.177**
	N	7774	7822	3477	210	2489
** = statistically significant at $p < 0.001$						

Source: Own data

From Table 7.13, it is clear that the only constructs between which there was no correlation were *appeal procedures* and *assessments, audits and penalties* (indicated in orange); only 128 cases in that subset were investigated. It is also important to remember that the *assessment, audits and penalties* construct was based on negative items, which explains the negative correlations of that construct with the other constructs (as respondents' ratings for this construct decreased, their ratings for the other constructs tended to increase). The correlation between all other constructs was positive (as the respondents' ratings increased for one construct, their ratings for another construct tended to increase). The strongest correlation was between *SARS's service quality* and *appeal procedures* (indicated in green). This correlation could indicate that as SARS's service quality improves, so does the procedural justice perceived by taxpayers with regard to appeal procedures; or, as procedural justice with regard to appeal procedures improves, so does SARS's service quality.

The next section uses the respondents' ratings of the six constructs (discussed above) and other variables (possible determinants) to ascertain the determinants of the tax compliance costs of individual taxpayers in South Africa. The technique that was used for this purpose was a CHAID decision tree modelling technique.

7.3. CHAID DECISION TREES

The CHAID decision tree modelling technique starts by finding independent variables that have a statistically significant association with or best explain the dependent or target variable. In this study, the dependent variable was tax compliance costs. The possible determinants were the independent variables. It then assesses the category groupings, or interval breaks in the case of continuous variables, to pick the most significant combination – the independent variables homogeneous in respect of the dependent variable (Thomas & Galambos, 2004:257). These subgroups of the independent variables continue to generate more subgroups for significant variables (determinants), making the relationships between the subgroups visible. In other words, the CHAID analysis shows the determinants and their interactions with the dependent variable via a tree diagram using the chi-square or F statistics, Bonferroni method and category merger algorithm (Kass, 1980:120; Önder & Uyar, 2017:611). The independent variable with the strongest association with tax compliance costs (the best determinant) becomes the first branch in a tree with a leaf for each category that is significantly different relative, in this case, to tax compliance costs (Thomas & Galambos, 2004:257).

It was therefore important to consider carefully the potential determinants of tax compliance costs that were specified as independent variables for this CHAID decision tree modelling technique. As has been pointed out in Chapter 3, Guyton *et al.* (2003:678) divided the determinants of tax compliance costs into three groups, namely those relating to taxpayer characteristics, to tax compliance methods, and to tax return complexity. Tran-Nam *et al.* (2014:161) seemed to combine elements of the last two groups by stating that the use of paid tax agents is an indicator of tax complexity and is therefore an important determinant of tax compliance costs. Based on the data obtained in this study, the *taxpayer characteristics* that were included as independent variables were employment status, taxable income, location, gender, age, education level and tax knowledge.

The *tax compliance method* was represented by the variable on the type of assistance ("self", "free help", "paid help" or "SARS employee" as discussed in Section 5.4). Information regarding *complexity* was obtained from respondents' ratings of the constructs "tax legislation complexity" and "SARS guides complexity" and these factor-based variables were therefore also included as independent variables. It is proposed that the finding by Eichfelder and Kegels (2014:210) that a (lack of) *service orientation* by a tax authority is

significantly connected with higher tax compliance costs results in a fourth group of determinants of tax compliance costs. The respondents' ratings of the remaining four constructs (namely SARS's service quality, appeal procedures, assessments, audits and penalties, and SARS's consultation and communication regarding changes to its system) relate to SARS's service orientation. These were therefore also included as independent variables.

In the first CHAID tree, the dependent variable was the *total* tax compliance costs, calculated by using valuation Method 1.

7.3.1. Total tax compliance costs (Method 1)

In Figure 7.9, node 0 (also known as the "trunk" of the tree) indicates the actual mean of the total tax compliance costs of the 10 260 respondents, using valuation Method 1[233] (abbreviated as TOTAL CC, Method 1, in the tree), namely R2 647.97.[234] As a reminder, for this valuation method, the hourly wage rate of self-employed respondents was limited to R1 500, the hourly wage rate of respondents with part-time income was limited to R750, and for respondents not in the active work force, a limit of R150 was applied.

Figure 7.9: Total tax compliance costs (Method 1) CHAID tree with first layer of branches
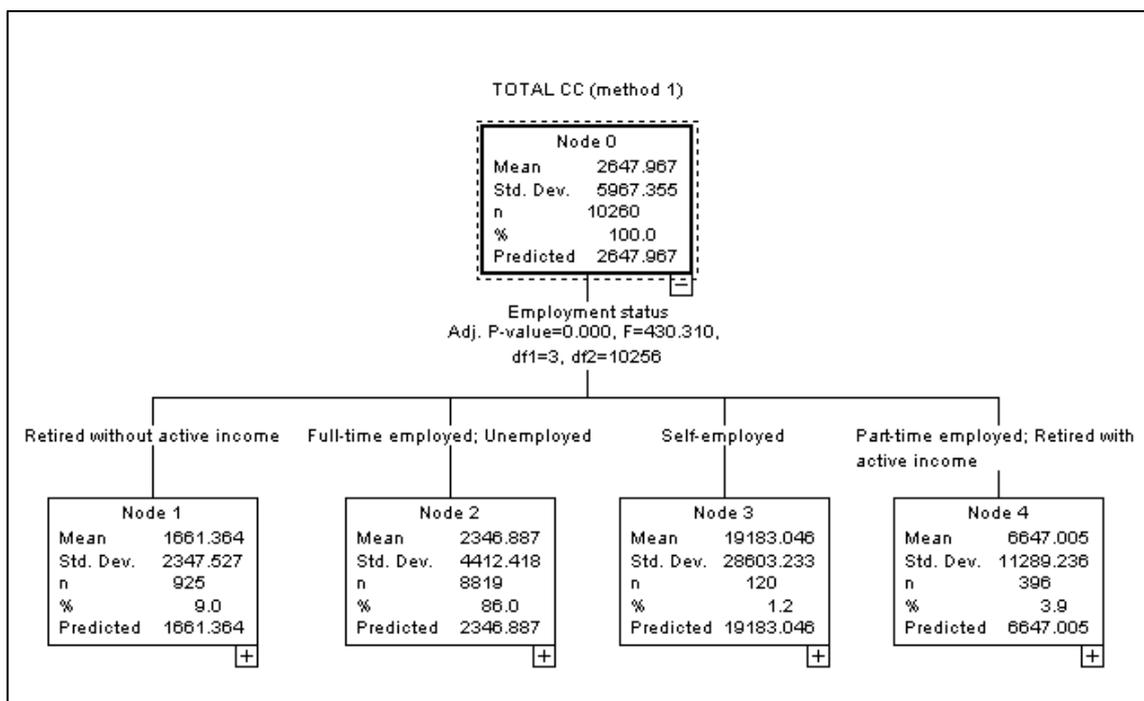
Source: Own data (SPSS output)

---

[233] The first of the six methods to value an hour spent by respondents, as described in Section 5.7.2.
[234] Calculated in Section 5.13 – see Table 5.16.

From Figure 7.9, it is clear that for valuation Method 1, the best determinant of the respondents' tax compliance costs was their *employment status*, indicated as the first layer of "branches". The retired respondents without active income had the lowest average tax compliance costs (R1 661.36), and self-employed respondents' average tax compliance costs were the highest (R19 183.05). This corresponds to the findings of other studies, for example, those by Allers (1994), Guyton *et al.* (2003), Lopes *et al.* (2012), Sandford *et al.* (1989) and Slemrod and Sorum (1984), that employment status is a determinant of tax compliance costs, and that self-employed individuals tend to have higher tax compliance costs than full-time employed individuals.

The second-best determinant of these respondents' tax compliance costs (the next layer of "branches") depended on their employment status (the first layer of "branches"). For self-employed respondents, the second-best determinant was their perceptions relating to *SARS's consultation and communication of changes to its system* (discussed in Section 7.2.7), and *type of assistance* was the second best determinant for respondents who were retired and/or employed part-time (see Figure 7.10).

Figure 7.10: Total tax compliance costs (Method 1) CHAID tree with second layer of branches for respondents who were self-employed, employed part-time or retired
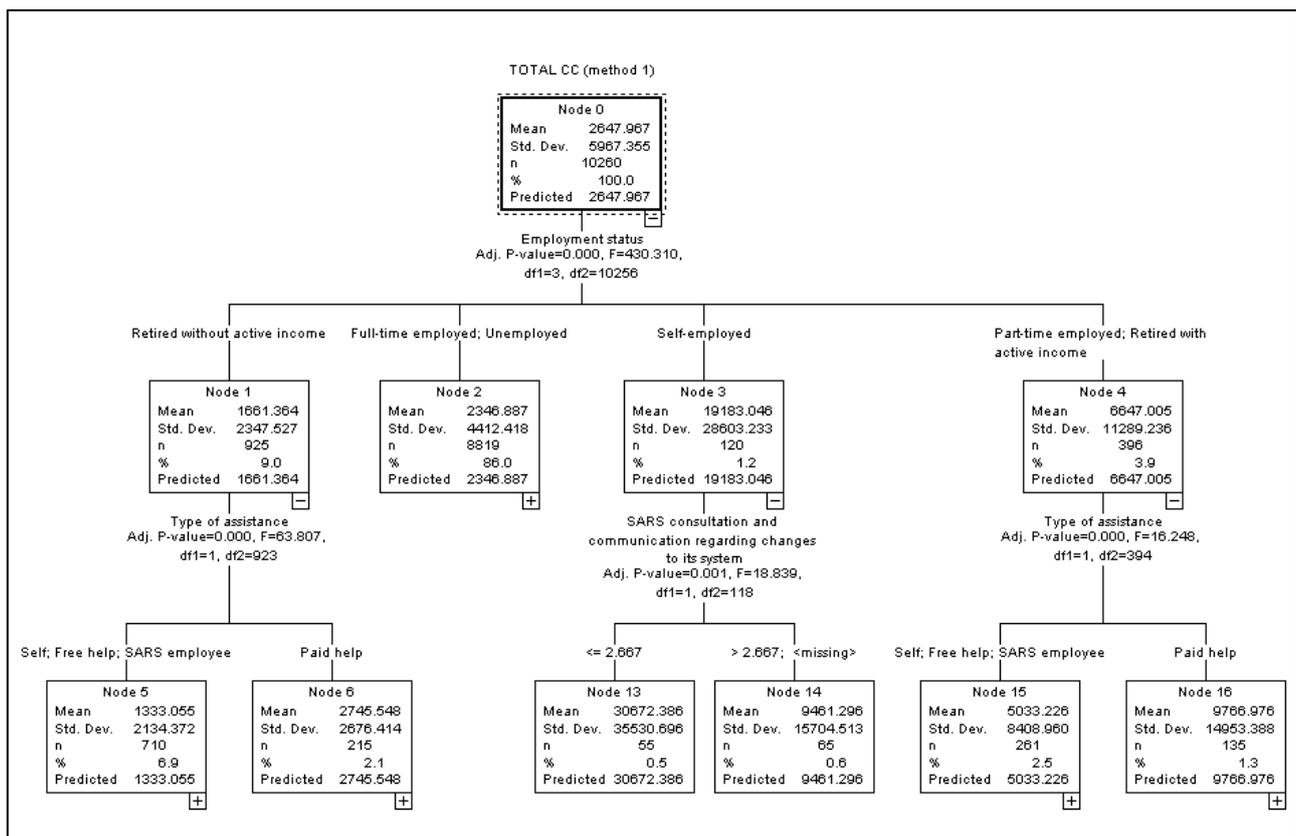
Source: Own data (SPPS output)

Further determinants for the respondents who were employed full-time or unemployed (Node 2) were considered separately (see Figure 7.12) to ensure readability of the CHAID tree diagram in Figure 7.10, which clearly shows that respondents who used paid help had on average almost double[235] the tax compliance costs than those who submitted income tax returns themselves, obtained free help from a family member or friend, or received assistance from a SARS employee. This applied for the retired without active income group, and for the part-time employed and retired with active income groups. This finding that the use of paid assistance was a determinant of tax compliance costs corresponds to the literature, for example, the studies by Blaufus *et al.* (2019) and Guyton *et al.* (2003).

Furthermore, the total tax compliance costs of self-employed respondents with a negative perception[236] of SARS's consultation and communication on changes to its system were on average three times[237] the costs of respondents who had a less negative perception[238] of SARS's consultation and communication regarding changes to its system. This finding is in line with the finding by Eichfelder and Kegels (2014:210) that the lack of service orientation of a tax authority increases tax compliance costs.

When the CHAID tree was expanded to the last layer (also known as "twigs"), three determinants emerged, namely *SARS's consultation and communication of changes to its system, education level* and *gender* (see Figure 7.11)*. However, no further layer for self-employed respondents was formed, given the small number of respondents with this employment status.[239] The second layer was thus closed in the next CHAID tree to enhance readability.

---

[235] Comparing Nodes 5 and 6 (R1 333.06 and R2 745.55) and Nodes 15 and 16 (R5 033.23 and R9 766.98).
[236] That was an average rating of 2.667 or less.
[237] Comparing Nodes 13 and 14 (R30 672.39 and R9 461.30).
[238] Keeping in mind that a rating of 3 was neutral, a rating above 2.667 may still be negative. Furthermore, respondents who did not answer these perception questions were indicated as "missing" and were grouped with the respondents who had a rating of more than 2.667.
[239] The second layer of nodes (Nodes 13 and 14) consisted of only 55 and 65 respondents each, and the minimum number of cases for a new node was set at 40.

Figure 7.11: Total tax compliance costs (Method 1) CHAID tree with last layer of branches for part-time employed and retired respondents
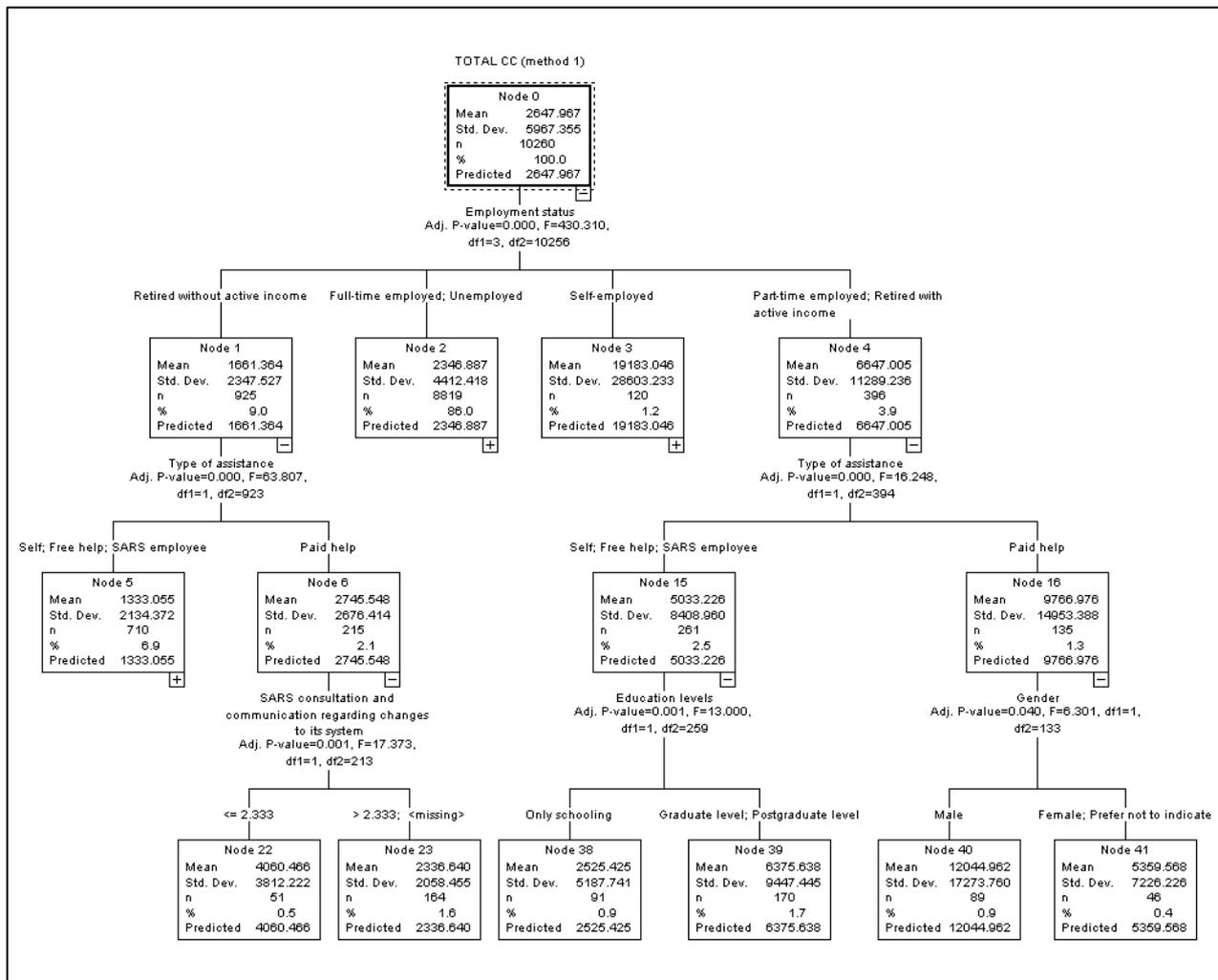
Source: Own data (SPSS output)

Considering the last layer of determinants presented in Figure 7.11, it was found that the tax compliance costs of retired respondents without active income, who used paid assistance, were further influenced by their perceptions of SARS's consultation and communication regarding changes to its system. A negative perception rating[240] resulted in almost double[241] the tax compliance costs than a less negative[242] (or no) perception.

The tax compliance costs of respondents who were employed part-time or retired respondents with active income, and who *did not* use paid assistance[243], were further influenced by their education level. The tax compliance costs of respondents with graduate

---

[240] A rating of 2.333 or less.
[241] Comparing Nodes 22 and 23 (R4 060.47 and R2 336.64).
[242] Keeping in mind that a rating of 3 was neutral, and therefore a rating above 2.333 may still be negative.
[243] They either completed the income tax returns themselves, or obtained free help from a family member or friend or a SARS employee.

or postgraduate levels of education were on average two-and-a-half times[244] the tax compliance costs of those who only had a schooling level education. Level of education was also reported as a determinant of tax compliance costs, for example, by Mathieu *et al.* (2010), Allers (1994) and Klun (2004).

The tax compliance costs of respondents who were employed part-time or retired with active income, and who used paid assistance, were further influenced by their gender. The tax compliance costs of male respondents were on average more than double[245] the tax compliance costs of the female respondents.[246] Allers (1994) and Blaufus *et al.* (2014) also reported that men spent more time on their income tax return than women.

The different determinants of the tax compliance costs of respondents who were employed full-time and unemployed respondents are now considered. For these respondents, the second best determinant was their income tax bracket (see Figure 7.12). It is important to remember that the groupings are not done manually. Category groupings, or interval breaks in the case of continuous variables, are done by means of the CHAID technique, which picks the most significant combination – the independent variables homogeneous in respect of the dependent variable (Thomas & Galambos, 2004:257). A CHAID analysis shows the determinants and their interactions with the dependent variable using the chi-square or F statistics, Bonferroni method and category merger algorithm (Kass, 1980:120; Önder & Uyar, 2017:611).

A possible explanation for grouping both full-time employed and unemployed taxpayers together is that it is reasonable to expect that their main source of income would be indicated on an IRP5. If a now unemployed person has worked for part of the year, that information pulls through on the tax return. Furthermore, with regard to income levels, it is possible that a now unemployed person may have received a lump sum on retrenchment or loss of employment that increased his/her taxable income. However, these possible reasons are speculations, and the researcher does not have enough information to substantiate these claims.

---

[244] Comparing Nodes 38 and 39 (R2 525.43 and R6 375.64).
[245] Comparing Nodes 40 and 41 (R12 044.96 and R5 359.57).
[246] Respondents who preferred not to indicate their gender were grouped with the female respondents.

Figure 7.12: Total tax compliance costs (Method 1) CHAID tree with a second layer of branches for respondents employed full-time or unemployed
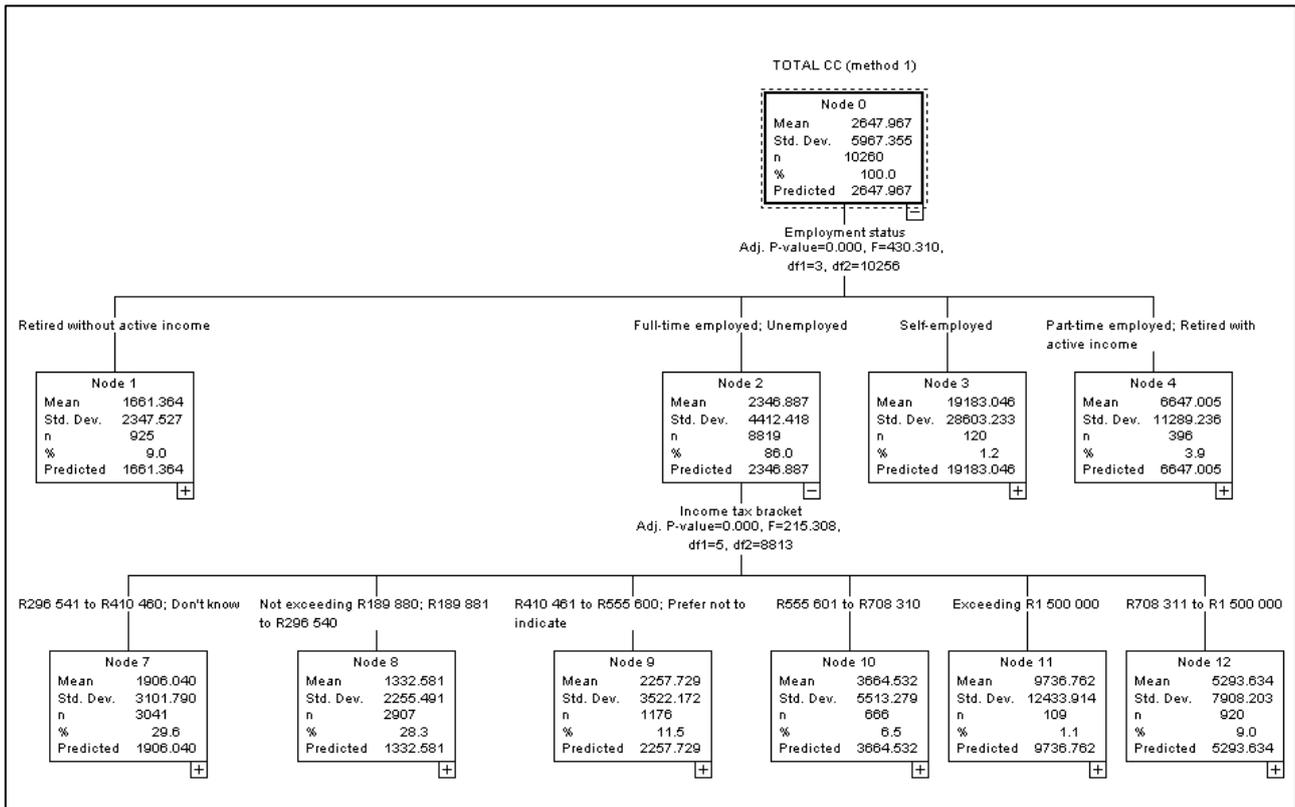
Source: Own data (SPSS output)

From Figure 7.12, it is clear that the average tax compliance costs increased from the lowest tax brackets to the highest tax brackets,[247] namely from R1 332.58 for those respondents whose taxable income fell in the lowest two tax brackets, to R9 736.76 for those respondents whose taxable income exceeded R1 500 000. This can probably be partly attributed to higher hourly rates used by persons in the higher tax brackets to value their time spent on tax-related activities. It also corresponds to the findings of other studies that showed that a taxpayer's income level is a determinant of tax compliance costs, for example, the studies by Allers (1994), Blaufus *et al.* (2019), Blažić (2004), Pope and Fayle (1990), and Sandford *et al.* (1989).

Expanding the CHAID tree to the last layer, focusing on these respondents who were employed full-time or unemployed, two of the previously discussed determinants (*SARS's consultation and communication regarding changes to its system* and *type of assistance*) and two new determinants emerged (*SARS's service quality* and *tax legislation complexity*). Nodes 7, 8 and 12 were split further, based on type of assistance with similar conclusions

---

[247] Note that the order in which the output nodes are presented cannot be changed, for example, to reflect mean values in increasing sequence from left to right.

(as discussed in previous CHAID trees) that the average tax compliance costs of respondents who obtained paid help were double the average tax compliance costs of those who did not obtain paid help. Node 9 was also split further, based on SARS's consultation and communication regarding changes to its system, with a more negative rating resulting again in a higher average tax compliance cost. The new determinants applicable to Nodes 10 and 11 are shown in Figure 7.13.

Figure 7.13: Total tax compliance costs (Method 1) CHAID tree with last layer of branches for respondents employed full-time or unemployed
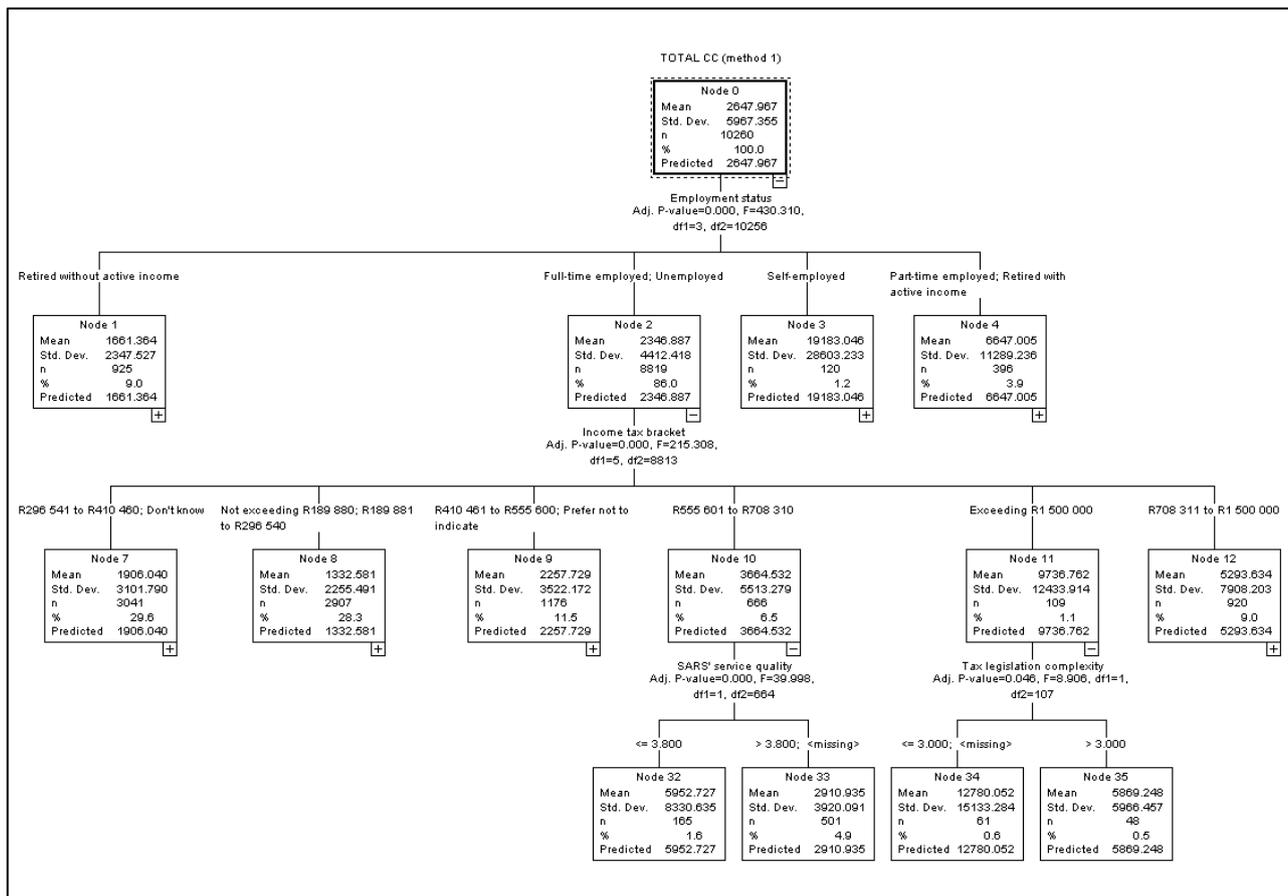
Source: Own data (SPSS output)

Considering the last layer of determinants presented in Figure 7.13, it was found that the tax compliance costs of respondents who were employed full-time or unemployed and whose taxable income was R555 601 to R708 310 were also influenced by their perceptions of SARS's service quality. The tax compliance costs of respondents with a very positive[248] perception of SARS's service quality were approximately half[249] the costs of respondents

_____

[248] Namely an average rating of 3.8. Note that persons who did not provide a rating for SARS's service quality because they did not have interactions with SARS were grouped with the respondents who provided a rating higher than 3.8.
[249] Comparing nodes 32 and 33 (R5 952.73 and R2 910.94).

with a less positive[250] perception. This finding supports that by Eichfelder and Kegels (2014:210) that a lack of service orientation of a tax authority increases tax compliance costs.

Lastly, the tax compliance costs of respondents who were employed full-time or unemployed whose taxable income exceeded R1 500 000 were further influenced by their perceptions of the complexity of legislation. The tax compliance costs of the respondents who had a rating above 3 (and therefore did not regard the legislation as complex) were just less than half[251] the tax compliance costs of respondents who gave a neutral rating or considered the legislation complex.[252] This finding confirmed that tax legislation complexity is a determinant of tax compliance costs (Evans, 2003), especially for high income individuals in a South African context.

Table 7.14 provides an overview of the spread of the CHAID decision tree in the form of a gains table, sorted from the highest mean total tax compliance costs to the lowest. Node 13 (the highest mean total tax compliance costs of R30 672 and highlighted in orange) represented the self-employed respondents with a negative perception[253] of SARS's consultation and communication regarding changes to its system (see Figure 7.10). Retired respondents without active income who did not use paid assistance and had a positive perception[254] of SARS's consultation and communication regarding changes to its system (Node 21[255]) had the lowest mean total tax compliance costs, of R737 (indicated in green).

---

[250] Keeping in mind that a rating of less than 3.8 is still positive until it drops below 3.
[251] Comparing Nodes 34 and 35 (R12 780.05 and R5 869.25).
[252] Respondents who did not provide a rating were grouped with respondents giving a rating of 3 or less.
[253] An average rating of 2.667 or less.
[254] An average rating of more than 3.667. Note that this branch split in five categories, namely "<= 1.333", "1.333 to 2.667", "2.667 to 3", "3 to 3.667" and "> 3.667".
[255] This node branched off from Node 5 in Figure 7.11, but was not discussed further.

Table 7.14: Gains table for nodes

Node	N	Percentage	Mean
13	55	0.5%	30 672.39
34	61	0.6%	12 780.05
40	89	0.9%	12 044.96
14	65	0.6%	9 461.30
37	269	2.6%	7 712.93
39	170	1.7%	6 375.64
32	165	1.6%	5 952.73
35	48	0.5%	5 869.25
41	46	0.4%	5 359.57
29	99	1.0%	5 219.42
36	651	6.3%	4 293.95
22	51	0.5%	4 060.47
25	521	5.1%	3 581.02
17	42	0.4%	3 529.74
28	303	3.0%	3 014.32
33	501	4.9%	2 910.93
30	244	2.4%	2 864.71
38	91	0.9%	2 525.42
23	164	1.6%	2 336.64
31	833	8.1%	1 727.95
18	164	1.6%	1 680.80
24	2 520	24.6%	1 559.74
27	1 020	9.9%	1 284.11
20	259	2.5%	1 220.05
26	1 584	15.4%	1 042.10
19	144	1.4%	917.57
21	101	1.0%	737.08
	10 260	100.0%	2 647.97

Source: Own data (SPSS output)

Node 24 represents the highest percentage of the respondents (namely 24.6%) with a predicted tax compliance cost of R1 559.74. This node branched off from Node 7[256] (see Figure 7.12) and represents those respondents who did not obtain paid assistance. Node 26 contains the second-highest percentage of the respondents (namely 15.4%) with a predicted tax compliance cost of R1 042.10. This node branched off from Node 8[257] (see Figure 7.12) and represents those respondents who submitted their income tax returns themselves.

It was further explored whether or not the CHAID tree diagrams that predict the total tax compliance costs would be different with the other five valuation methods.

---

[256] Respondents who were employed full-time or unemployed and who either fell into the "R296 541 to R410 460" income tax bracket or did not know their income tax bracket.
[257] Respondents who were employed full-time or unemployed and whose taxable income was R296 540 or less.

7.3.2. Total tax compliance costs (Methods 2 to 6)

Using the other five valuation methods in the CHAID tree diagrams, it was found that with all methods, either the respondents' *employment status* or their *income tax bracket* were the best determinant (namely the first layer of "branches"). However, new determinants emerged that were not found in the CHAID tree relating to valuation Method 1. The discussion below therefore focuses on these new determinants, and also points out the terminal nodes in the various trees with the highest and lowest mean total tax compliance costs for that valuation method. Node 0 in all the CHAID trees again indicates the actual mean total tax compliance cost for that specific valuation method, as calculated in Chapter 5 (Section 5.13, Table 5.16), namely R3 741.63 (Method 2), R2 705.78 (Method 3), R3 489.79 (Method 4), R2 544.07 (Method 5) and R2 701.88 (Method 6).

For valuation Method 2,[258] the one new determinant (*assessments, audits and penalties)* and the terminal nodes with the highest and lowest mean total tax compliance costs are shown in Figure 7.14. For the sake of readability, all other branches are not displayed. As indicated in Figure 7.14, the tax compliance costs of respondents who had a taxable income of R555 601 to R708 310 and who are either retired without active income, or employed full-time, were further influenced by their perceptions of *assessments, audits and penalties.* The total tax compliance costs of respondents with a negative perception rating[259] were approximately one-and-a-half times[260] more than those of respondents with a neutral or positive perception, and almost three times[261] the total tax compliance costs of respondents who were not audited and therefore did not provide their perception rating (indicated as "<missing>"). This finding is linked to the power dimension of the "slippery slope" framework approach and supports the finding of Eichfelder and Kegels (2014:210) that a tax authority's lack of service orientation increases tax compliance costs.

---

[258] As a reminder, this method was used before tax hourly wage rates, and the maximums were based on the winsorized values of R3 000 (self-employed), R1 500 (employed part-time or retired) and R787.50 (unemployed).
[259] A rating of more than 3.
[260] Comparing Nodes 38 and 39 (R7 489.40 and R11 167.84).
[261] Comparing Nodes 39 and 40 (R11 167.84 and R3 998.37).

Figure 7.14: Total tax compliance costs (Method 2) CHAID tree with new determinant, highest and lowest terminal nodes
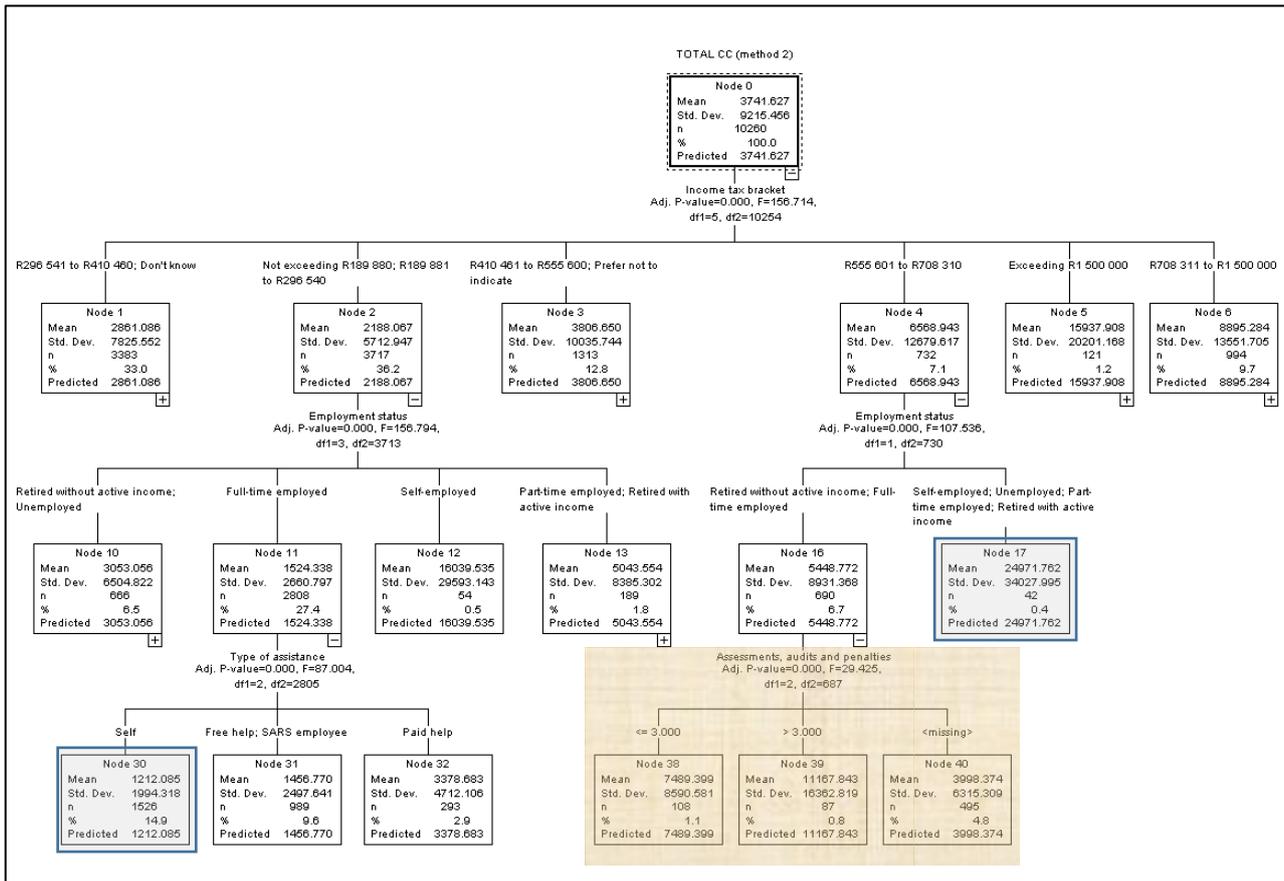
Source: Own data (SPSS output)

Figure 7.14 also shows that Node 17 (the highest mean total tax compliance costs of R24 971.76) represented respondents who were in the "R555 601 to R708 310" income tax bracket, and who were either self-employed, employed part-time, retired with active income, or unemployed. Node 30 (the lowest mean total tax compliance costs of R1 212.09) represented respondents who were in the lowest two income tax brackets,[262] were employed full-time and submitted their income tax returns themselves.

For valuation Method 3,[263] no new determinant was found. The respondents in the terminal node with the highest mean total tax compliance costs (Node 14: R26 389.80) were the same as those for valuation Method 1, namely the self-employed respondents with a negative perception[264] of *SARS's consultation and communication regarding changes to its system*. The respondents in the terminal node with the lowest mean total tax compliance costs (Node 24: R1 010.97) were the same as those for valuation Method 2, namely

---

[262] Namely, "not exceeding R189 880" and "R189 881 to R296 540".
[263] The valuation method was the same as Method 2, except that *after tax* hourly wage rates were used.
[264] An average rating of 2.667 or less.

respondents who were employed full-time and were in the lowest two income tax brackets, and who submitted their income tax returns themselves. Both of these terminal nodes are indicated in Figure 7.15, but for the sake of readability, other branches are not displayed.

Figure 7.15: Total tax compliance costs (Method 3) CHAID tree with highest and lowest terminal nodes
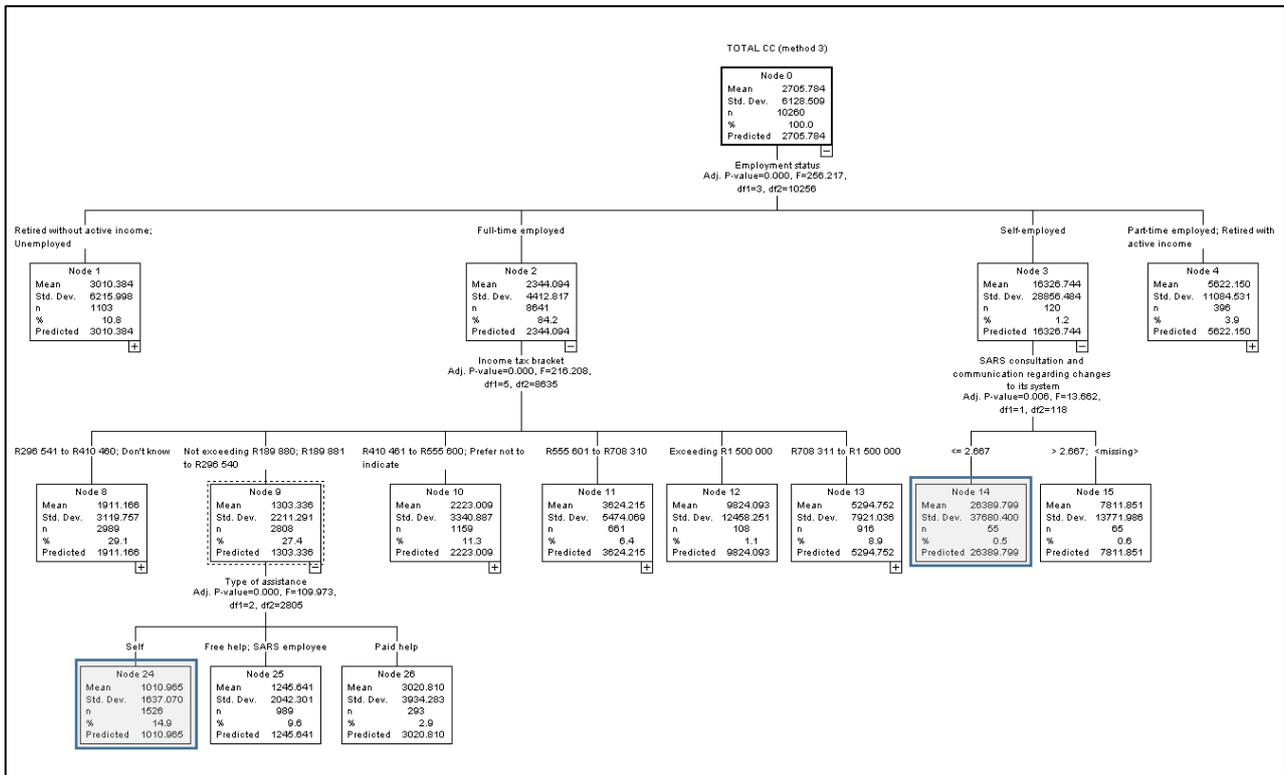
Source: Own data (SPSS output)

For valuation Method 4,[265] the one new determinant (*complexity of SARS's guides*) and the terminal nodes with the highest mean total tax compliance costs (Node 22: R21 530.37) and lowest mean total tax compliance cost (Node 33: R1 096.50) are indicated in Figure 7.16.

---

[265] Using the same hourly before tax wage rate for respondents falling in the same income tax bracket.

Figure 7.16: Total tax compliance costs (Method 4) CHAID tree with new determinant, highest and lowest terminal nodes
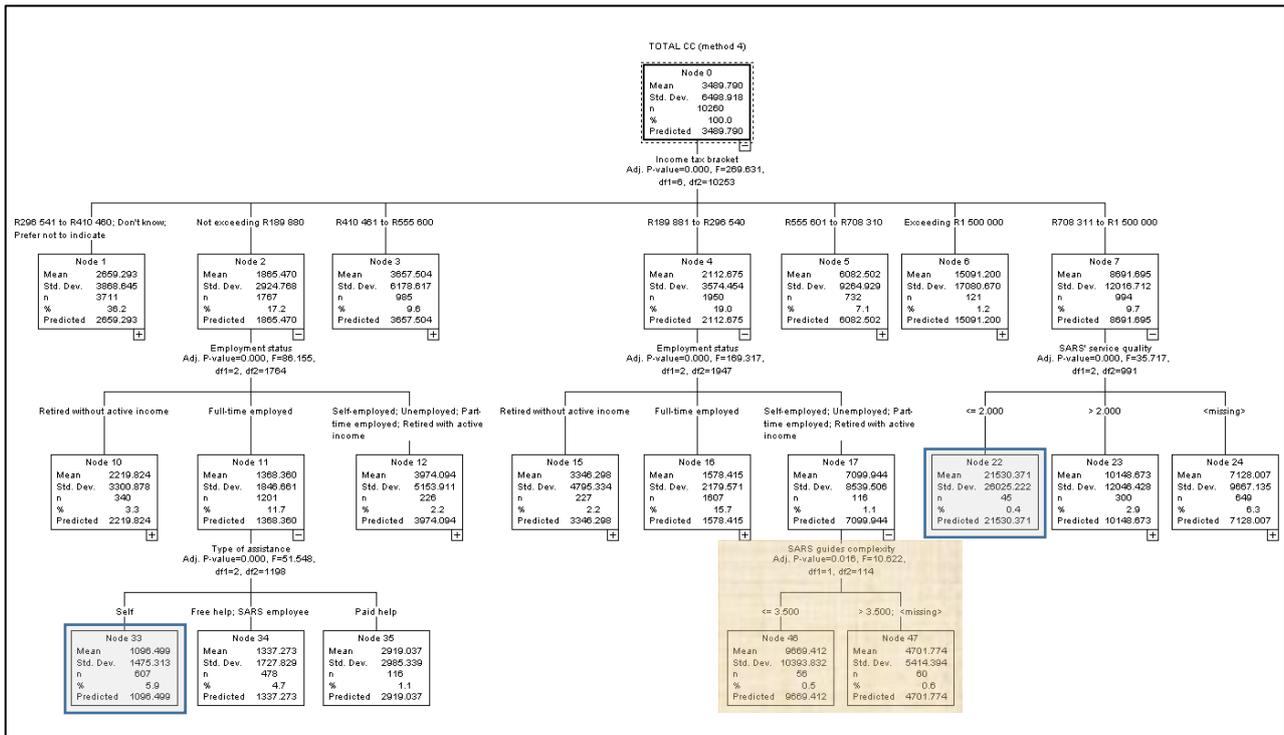
Source: Own data (SPSS output)

As indicated in Figure 7.16, the tax compliance costs of respondents whose taxable income was in the second-lowest bracket (namely "R189 881 to R296 540") and who were either self-employed, employed part-time, retired with active income or unemployed were also influenced by their perceptions of the *complexity of SARS's guides*. The total tax compliance costs of respondents with a less positive perception rating[266] of the *complexity of SARS's guides* were approximately double[267] those of respondents with a positive perception rating in excess of 3.5 (or no rating) of the *complexity of SARS's guides*. Therefore, even though the split was in excess of a 3 rating, further simplification of the SARS guides could reduce tax compliance costs, especially those guides that are used by persons who are not in full-time employment or who are earning not only a pension.

Figure 7.16 also shows that respondents in the "R708 311 to R1 500 000" income tax bracket with a very negative perception[268] of SARS's service quality had the highest mean total tax compliance costs (more than double[269] those of respondents with a less negative perception and three times[270] those of respondents who did not have any interactions with

---

[266] A rating of 3.5 or less, keeping in mind that a rating of less than 3.5 is still positive until it drops below 3.
[267] Comparing Nodes 46 and 47 (R9 669.41 and R4 701.77).
[268] A rating of 2 or less.
[269] Comparing Nodes 22 and 23 (R21 530.37 and R10 148.67).
[270] Comparing Nodes 22 and 24 (R21 530.37 and R7 128.01).

SARS, and therefore did not provide a rating[271] in the same tax bracket). Lastly, Figure 7.16 shows that respondents employed full-time in the lowest tax bracket who submitted their own income tax returns had the lowest mean total tax compliance costs.

For valuation Method 5,[272] no new determinant was found. The respondents in the terminal node with the highest mean total tax compliance costs (Node 16: R13 650.81) were the same as those for valuation Method 2, namely respondents in the "R555 601 to R708 310" income tax bracket who were either self-employed, employed part-time, retired with active income or unemployed. The respondents in the terminal node with the lowest mean total tax compliance costs (Node 32: R1 007.74) were again[273] the respondents who were employed full-time, in the lowest two income tax brackets, and submitted their income tax returns themselves. Both of these terminal nodes are indicated in Figure 7.17, but for the sake of readability, other branches are not displayed.

Figure 7.17: Total tax compliance costs (Method 5) CHAID tree with highest and lowest terminal nodes
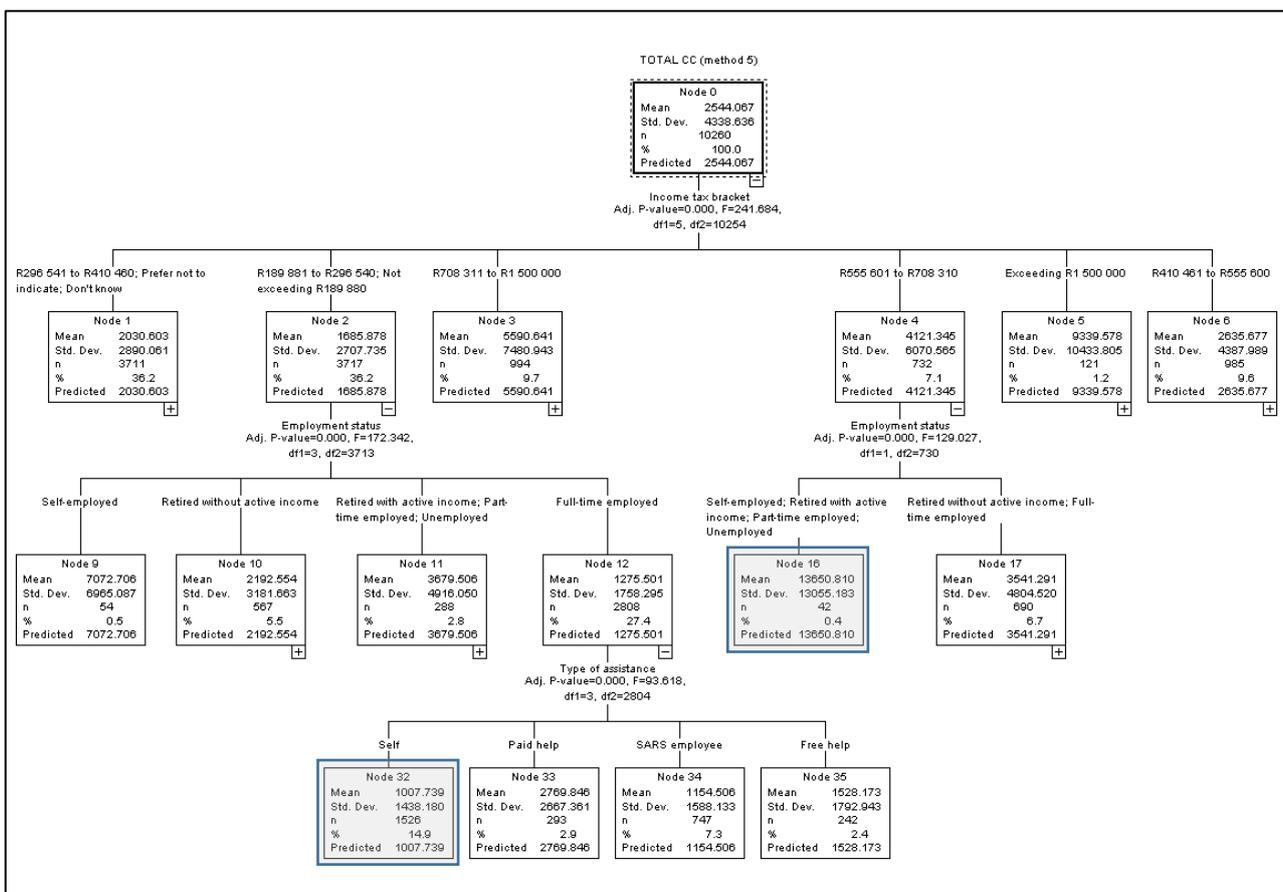
Source: Own data (SPSS output)

---

[271] Indicated as "missing" in the tree diagram.
[272] As with valuation Method 4, but after applying the marginal tax rate for the relevant income tax bracket.
[273] As with valuation Method 3.

For the last valuation method (Method 6), no new determinant was found and the respondents in the terminal node with the highest mean total tax compliance costs (Node 16: R21 042.63) were the same as those for valuation Method 1, namely self-employed respondents with a negative perception[274] of *SARS's consultation and communication regarding changes to its system*. The respondents in the terminal node with the lowest mean total tax compliance costs (Node 28: R1 010.99) were again respondents who were employed full-time, in the lowest two income tax brackets, and submitted their income tax returns themselves. Both of these terminal nodes are indicated in Figure 7.18, but for the sake of readability, other branches are not displayed.

Figure 7.18: Total tax compliance costs (Method 6) CHAID tree with highest and lowest terminal nodes
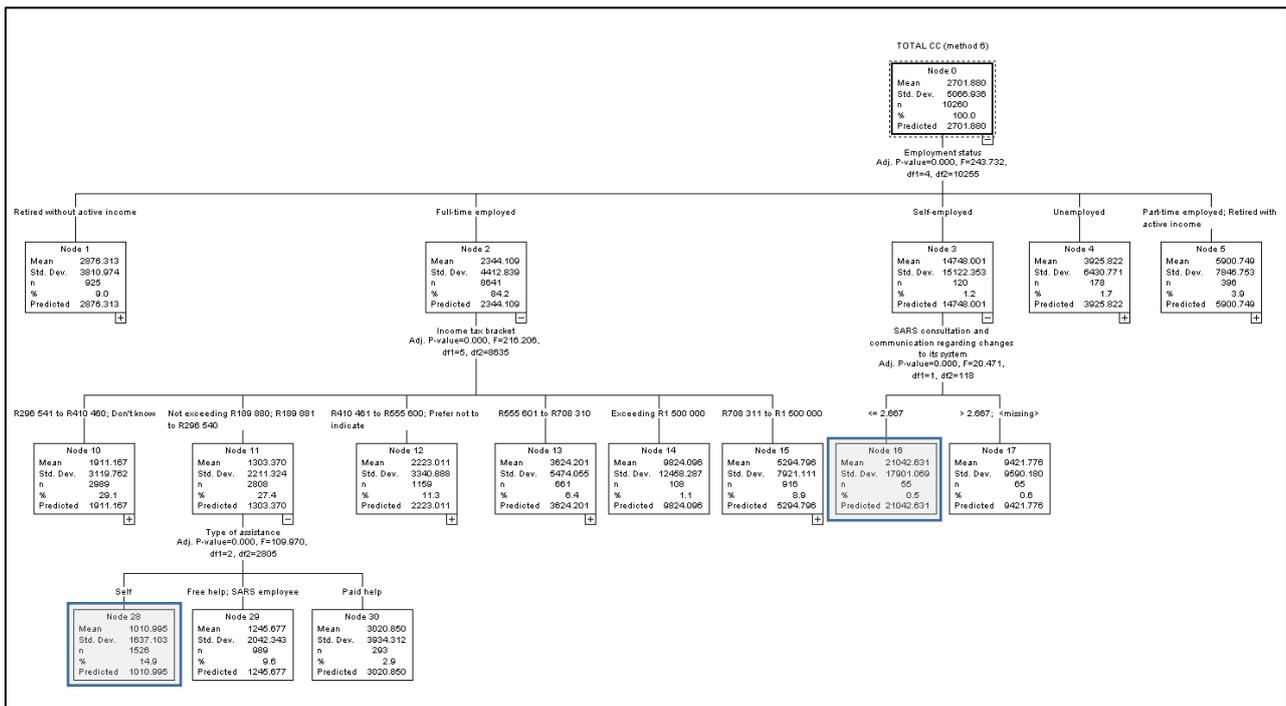
Source: Own data (SPSS output)

Based on all the CHAID tree diagrams discussed above, employment status and income tax bracket were found to be the best determinants of total tax compliance costs (the independent variables that had the strongest association with total tax compliance costs). Other determinants (the independent variables with strong associations with total tax compliance costs) were type of assistance, gender, education level, tax legislation complexity, SARS's guides' complexity, SARS's service quality, assessments, audits and penalties and SARS's consultation and communication regarding changes to its system.

---

[274] A rating of 2.667 or less.

Location, age, tax knowledge and appeal procedures did not emerge as determinants of *total* tax compliance costs, because the other variables had a stronger relationship to the *total* tax compliance costs and the CHAID technique only allows up to *three* levels. It was, however, decided to isolate these independent variables purely to gain more specific insight into their impact on total tax compliance costs and associated groups because other tax compliance cost studies have noted some of these variables as determinants of tax compliance costs, such as appeal procedures, noted by Blaufus *et al.* (2019) and age, reported by Blažić (2004).

7.3.3. Isolated independent variables

For the purpose of gaining insight into the impact of location, age, tax knowledge and appeal procedures on total tax compliance costs and the associated groups, the total tax compliance costs based on Method 1 were used as the dependent variable. The resultant CHAID tree is presented in Figure 7.19.

From Figure 7.19 it is clear that the total tax compliance costs of respondents with a negative experience of the *appeal procedures* (an average rating of 2 or less out of 5) were on average double[275] the costs of respondents with a less negative experience (an average rating of more than 2 out of 5) and approximately five times the costs of respondents who did not appeal their income tax assessment using the ADR process. This finding is in line with the finding by Blaufus *et al.* (2019:928) that appeal procedures increase tax compliance costs. With regard to *age*, three subgroups were formed among the respondents who did not use the ADR process. Respondents who were 34 years or younger (or did not indicate their age) had the lowest tax compliance costs (Node 5). The 35 to 44-year-old respondents on average had slightly higher tax compliance costs (Node 6) than the younger age group, while respondents who were 45 years and older on average had the highest tax compliance costs (Node 4). This is in line with Blažić's (2004) finding that older persons spend more time on tax compliance activities. Lopes *et al.* (2012) also found that the elderly have higher psychological costs, caused by anxiety and stress, than younger taxpayers.

---

[275] Comparing Nodes 1 and 2 (R12 596.08 and R6 568.66).

Figure 7.19: Total tax compliance costs (Method 1) CHAID tree with only location, age, tax knowledge and appeal procedures
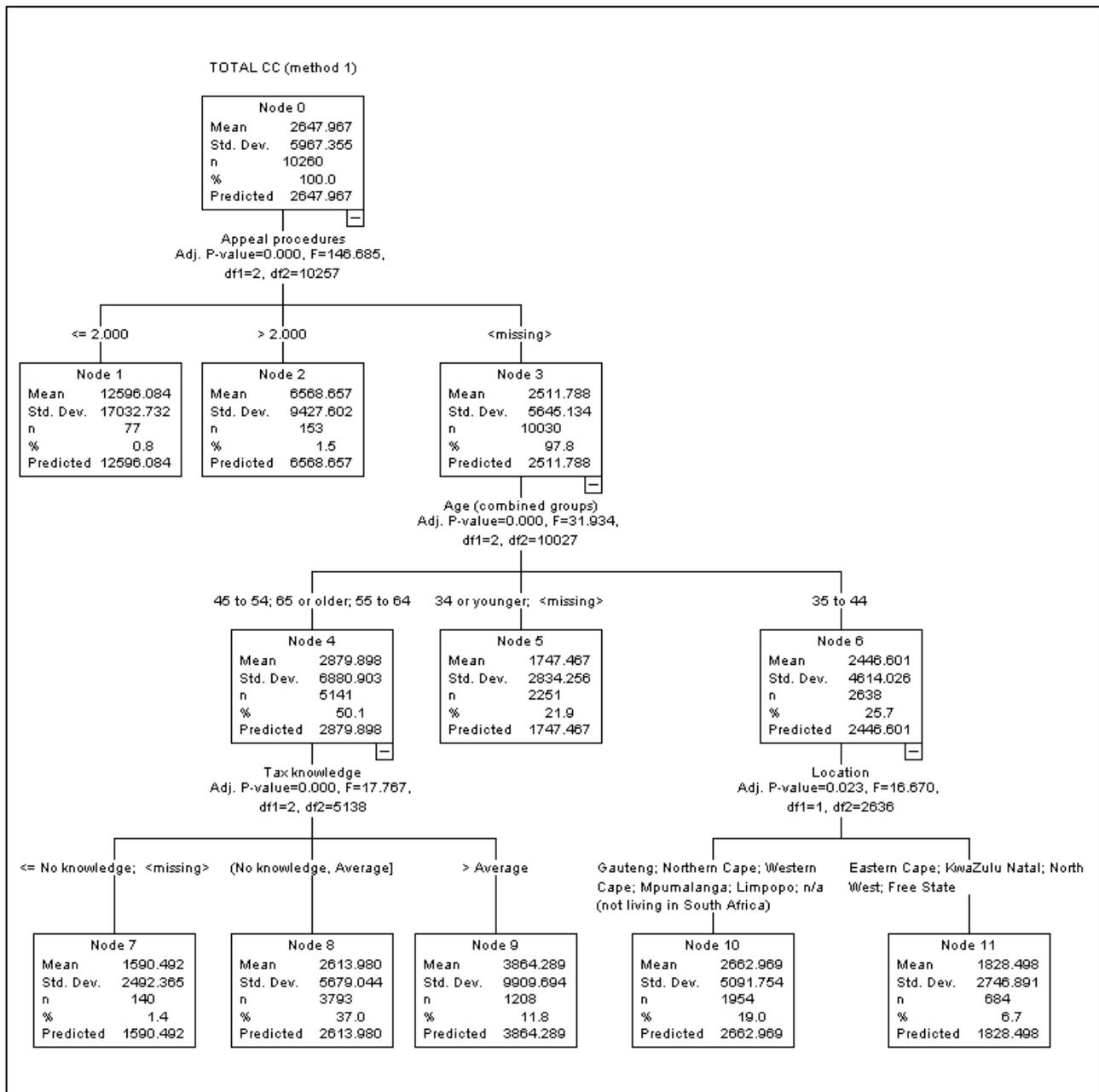
Source: Own data (SPSS output)

The last layer in Figure 7.19 contains the effect of *tax knowledge* and *location* on total tax compliance costs. A relationship between the level of tax knowledge and total tax compliance costs was only apparent for respondents 45 years and older. For these respondents, as their tax knowledge increased, so did their total tax compliance costs (comparing Nodes 7, 8 and 9). Lastly, a relationship between location and total tax compliance costs was only visible for respondents who were 34 to 44 years old. The total tax compliance costs of these respondents residing in Gauteng, the Northern Cape, the Western Cape, Mpumalanga, or Limpopo, or not living in South Africa at all, were, on

average, approximately 50% more than the total tax compliance costs of respondents residing in the Eastern Cape, KwaZulu Natal, North West and the Free State province.

A few prior studies have found that sources of income and type of tax return were determinants of tax compliance costs, for example, Allers (1994), Blaufus *et al.* (2019), Guyton *et al.* (2003), Pope and Fayle (1990), and Sandford *et al.* (1989). Including *employment status* as one of the original 14 independent variables (discussed at the start of Section 7.3) to a large extent already catered for the sources of income and type or tax return (for example, business income). However, it was decided to explore the sources of income and types of expenditure further, since some respondents who were employed full-time could also have a more complex return as a result, for example, of a claim against a travel allowance, which would not have been ascertained as a determinant of tax compliance costs based on employment status.

7.3.4. Sources of income and types of expenditure

A potential concern regarding multicollinearity between the different sources of income and types of expenditure was first addressed by running a multicollinearity test. Based on a variance inflation factor (VIF) threshold of 10, as recommended by Pallant (2007:156), no multicollinearity was detected between the set of independent variables. Therefore, for this CHAID analysis, the 20 different sources of income provided to respondents in Question 3.1 and the 11 types of expenses provided in Question 3.2 were used as the independent variables, and the total tax compliance costs (using valuation Method 1) was selected as the dependent variable. In the resultant CHAID tree, presented in Figure 7.20, "<=0" means that the respondents did not have that specific source of income or type of expenditure, while ">0" means that the respondents selected that source of income or type of expenditure.

Figure 7.20: Total tax compliance costs (Method 1) CHAID tree with sources of income and types of expenditure
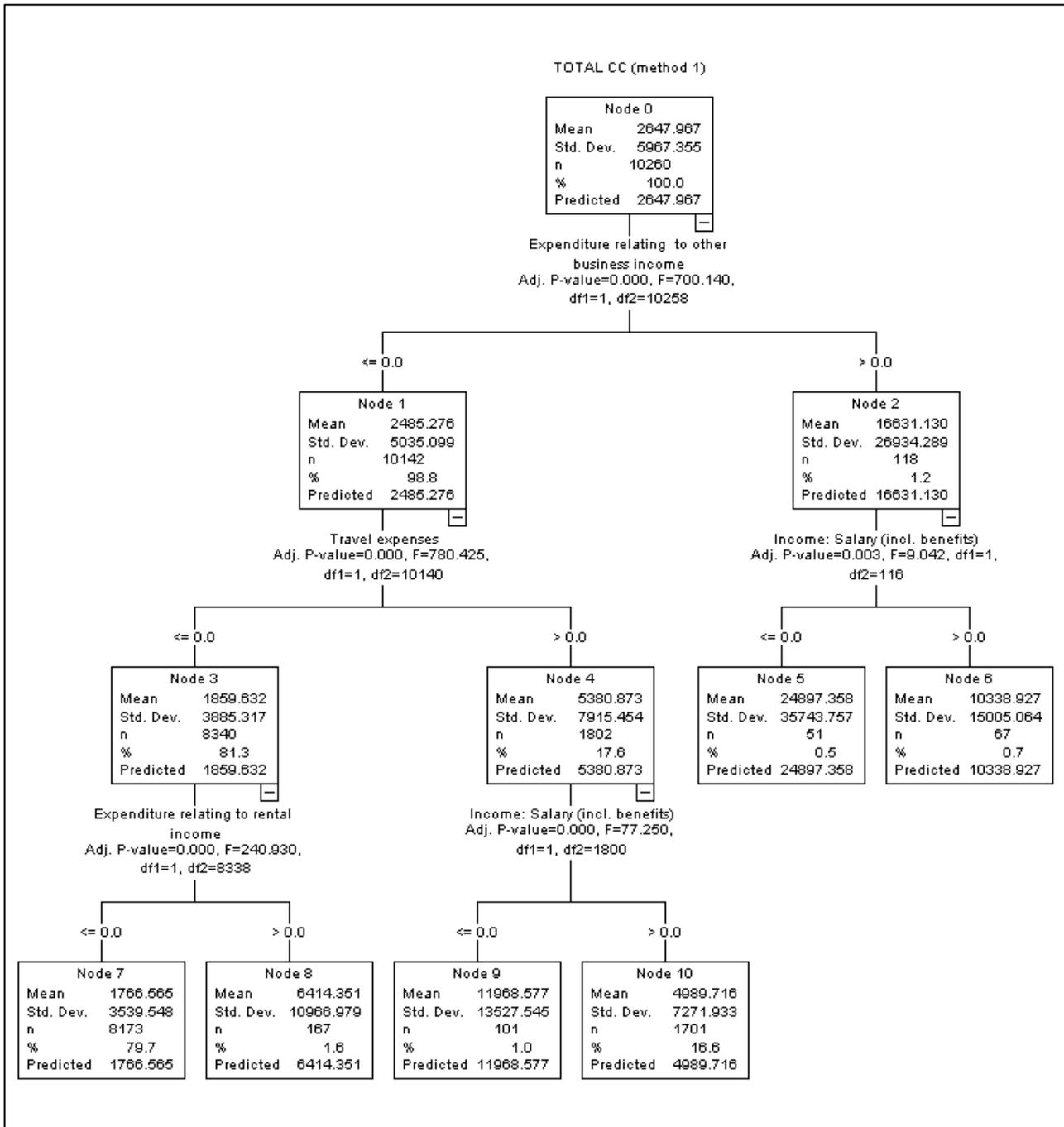
Source: Own data (SPSS output)

As is illustrated in Figure 7.20, the best determinant from all income sources and types of expenditure was "*expenditure relating to other business income*" (other than farming and rental) which aligns well with the fact that employment status was found to be the best determinant of the total tax compliance costs (see Figure 7.9). The tax compliance costs for respondents with this type of expenditure was significantly higher than for respondents who did not have such expenditure (comparing Nodes 1 and 2). For the respondents who did not have "*expenditure relating to other business income*", the second best determinant was

"*travel expenses*". Respondents who incurred travel expenses had almost three times the tax compliance costs as respondents who did not incur travel expenses (comparing Nodes 3 and 4). Having travel expenses necessitates keeping a logbook, and results in a more complex tax return, because additional information is required. Furthermore, the tax compliance costs of respondents who incurred travel expenses without receiving a salary (for example, earning commission income) was slightly more than double the tax compliance costs of respondents earning a salary (comparing Nodes 9 and 10). Lastly, for respondents who incurred neither "*expenditure relating to other business income*" nor "*travel expenses*", "*expenditure relating to rental income*" was a determinant of tax compliance costs. The tax compliance costs of respondents who incurred expenditure relating to rental income was more than three times the tax compliance costs of respondents who did not incur such costs (comparing Nodes 7 and 8). Declaring expenditure relating to rental income also resulted in a more complex tax return, because additional information must be declared.

The last consideration in ascertaining the determinants of tax compliance costs related to post-filing activities, since *post-filing* tax compliance costs may place a significant burden on (typically only a few) taxpayers (Eichfelder & Vaillancourt, 2014:128).

7.3.5.   Post-filing tax compliance costs

It was found that the best determinant of post-filing tax compliance costs (for all six valuation methods), was *SARS's service quality*. The CHAID tree diagram for post-filing activities using valuation Method 1 is shown in Figure 7.21. For the sake of readability, Node 4, representing respondents with the most positive rating[276] of SARS's service quality, is not expanded further in the diagram.

---

[276] Exceeding 3.8 or respondents who did not have interactions with SARS and therefore did not provide a rating (indicated as "<missing>"). These respondents had the lowest mean post-filing tax compliance costs.

Figure 7.21: Post-filing tax compliance costs (Method 1) CHAID tree with all three layers and indicating highest terminal node

CC postfiling (method 1)

Node 0
Mean 773.918
Std. Dev. 2096.724
n 5141
% 100.0
Predicted 773.918

SARS' service quality
Adj. P-value=0.000, F=97.435, df1=3, df2=5137

- <= 1.800 → Node 1: Mean 2686.236; Std. Dev. 5609.280; n 247; % 4.8; Predicted 2686.236
- (1.800, 2.800] → Node 2: Mean 1289.803; Std. Dev. 2796.628; n 479; % 9.3; Predicted 1289.803
- (2.800, 3.800] → Node 3: Mean 849.637; Std. Dev. 2058.703; n 946; % 18.4; Predicted 849.637
- > 3.800; <missing> → Node 4: Mean 545.876; Std. Dev. 1303.924; n 3469; % 67.5; Predicted 545.876

Node 1 – Income tax bracket, Adj. P-value=0.002, F=21.358, df1=1, df2=245
- Don't know; Prefer not to indicate; R189 881 to R296 540; Not exceeding R189 880; R296 541 to R410 460 → Node 5: Mean 1475.539; Std. Dev. 2547.147; n 156; % 3.0; Predicted 1475.539
- R410 461 to R555 600; R555 601 to R708 310; R708 311 to R1 500 000; Exceeding R1 500 000 → Node 6: Mean 4761.717; Std. Dev. 8242.074; n 91; % 1.8; Predicted 4761.717

Node 2 – Type of assistance, Adj. P-value=0.000, F=29.080, df1=1, df2=477
- SARS employee; Self → Node 7: Mean 943.636; Std. Dev. 1973.096; n 378; % 7.4; Predicted 943.636
- Free help; Paid help → Node 8: Mean 2585.359; Std. Dev. 4534.286; n 101; % 2.0; Predicted 2585.359

Node 3 – Type of assistance, Adj. P-value=0.000, F=63.916, df1=1, df2=944
- SARS employee; Self; Free help → Node 9: Mean 661.684; Std. Dev. 1567.708; n 836; % 16.3; Predicted 661.684
- Paid help → Node 10: Mean 2278.077; Std. Dev. 3948.040; n 110; % 2.1; Predicted 2278.077

Node 7 – Assessments, audits and penalties, Adj. P-value=0.007, F=12.400, df1=1, df2=376
- <= 3.000; <missing> → Node 14: Mean 718.071; Std. Dev. 1554.534; n 268; % 5.2; Predicted 718.071
- > 3.000 → Node 15: Mean 1493.197; Std. Dev. 2667.540; n 110; % 2.1; Predicted 1493.197

Node 9 – Income tax bracket, Adj. P-value=0.000, F=46.132, df1=1, df2=834
- Don't know; R189 881 to R296 540; Not exceeding R189 880; R410 461 to R555 600; R296 541 to R410 460 → Node 16: Mean 491.233; Std. Dev. 1236.105; n 682; % 13.3; Predicted 491.233
- Prefer not to indicate; R555 601 to R708 310; R708 311 to R1 500 000; Exceeding R1 500 000 → Node 17: Mean 1416.539; Std. Dev. 2430.854; n 154; % 3.0; Predicted 1416.539

Node 10 – Assessments, audits and penalties, Adj. P-value=0.007, F=13.121, df1=1, df2=108
- <= 2.667; <missing> → Node 18: Mean 960.817; Std. Dev. 1610.552; n 54; % 1.1; Predicted 960.817
- > 2.667 → Node 19: Mean 3548.292; Std. Dev. 5004.466; n 56; % 1.1; Predicted 3548.292

Source: Own data (SPSS output)

From Figure 7.21, it is clear that the mean post-filing tax compliance costs of respondents with the most negative rating (<=1.8) of SARS's service quality and whose taxable income exceeded R410 460 (Node 6) were more than three times[277] the costs of respondents with the same rating of SARS's service quality but with a taxable income of R410 460 or less (Node 5). Furthermore, comparing the mean post-filing tax compliance costs of the highest terminal node (Node 6) with the mean post-filing tax compliance costs of respondents with a rating of SARS's service quality higher than 3.8,[278] the costs were almost nine times[279] higher. The other branches confirmed that the use of paid help and a more negative rating of assessments, audits and penalties increased (post-filing) tax compliance costs (as was the case in the total tax compliance cost CHAID tree diagrams).

---

[277] Comparing Nodes 5 and 6 (R1 475.54 and R4 761.72).
[278] Or no rating (indicated as "<missing>").
[279] Comparing Nodes 4 and 6 (R545.88 and R4 761.72).

7.4. CONCLUSION

In the analysis of the empirical evidence from the rating questions (the scale items) in the first part of the chapter, six unidimensional constructs were formed, namely "*tax legislation complexity*", "*complexity of SARS guides*", "*SARS's service quality*", "*appeal procedures*", "*assessments, audits and penalties*" and "*SARS's consultation and communication regarding changes to its system*". Statistical tests (ANOVAs and Kruskal-Wallis tests) were conducted to determine whether or not there were any statistically significant differences with regard to the respondents' ratings of these constructs between the respondents in different demographic groups. Differences did indeed emerge, and possible reasons for the statistically significant differences were provided. It was shown that respondents perceived *tax legislation* to be complex (with an average rating of 2.89), even though the *SARS guides* were perceived as easier to read and understand (with an average rating of 3.27) and could assist taxpayers in understanding the tax legislation. Ideally, both these average ratings should be closer to a rating of 5. Furthermore, the service orientation of SARS was found to lean towards being customer friendly, based on its *service quality* rating of 3.41 (SARS was rated as giving precise answers and relevant information and as having professional and capable staff). However, it also leaned towards being control-oriented, based on the negative ratings of three constructs, namely *appeal procedures,* and also *assessments, audits and penalties* and in respect of *SARS's consultation and communication regarding changes to its system.*

In the second part of this chapter, the CHAID decision tree modelling technique was used to ascertain the determinants of the tax compliance costs of individual taxpayers in South Africa. This was done by considering the respondents' ratings of the six constructs (established in the first part of the chapter), as well as other characteristics of the respondents and the type of assistance they used to comply with their tax obligations as possible determinants (these were the independent variables in the CHAID decision tree modelling technique). This technique showed the "best" determinants (up to three levels) based on the independent variables that had the strongest association with tax compliance costs and their effects on the tax compliance costs. The technique enabled identification of specific groups of taxpayers associated with distinct ranges of these independent variables. It was found that *employment status* and *income tax bracket* were the best determinants of *total* tax compliance costs, while *SARS's service quality* was the best determinant of *post-filing* tax compliance costs. Other determinants of total tax compliance costs were type of

assistance, gender, education level, tax legislation complexity, the complexity of SARS guides, SARS's service quality, assessments, audits and penalties and SARS's consultation and communication regarding changes to its system. *Location*, *age*, *tax knowledge* and *appeal procedures* did not emerge as determinants in the CHAID analyses due to other variables having a stronger relationship with costs, but were isolated to gain insight into their impact on total tax compliance costs and the associated groups. Furthermore, by exploring income sources and types of expenditure, it was found that "*expenditure relating to other business income*", "*travel expenses*", "*expenditure relating to rental income*" and "*salary income*" were determinants of tax compliance costs. Therefore, the determinants that emerged from the CHAID analyses in this study matched determinants from the three groups identified by Guyton *et al.* (2003:678), namely taxpayer characteristics, tax compliance methods, and tax complexity. The determinants also related to the proposed fourth group, namely the service orientation of SARS – customer-friendly versus control-oriented, as identified by Eichfelder and Kegels (2014).

This chapter has therefore met the second objective of this study, namely to ascertain the determinants of the tax compliance costs for individuals in South Africa. Chapter 8 evaluates suggestions on how the tax compliance costs of individuals in South Africa can be reduced.

CHAPTER 8:
SUGGESTIONS ON HOW TAX COMPLIANCE COSTS
CAN BE REDUCED

8.1. INTRODUCTION

In the previous chapter, the CHAID decision tree modelling technique was used to ascertain various determinants of tax compliance costs of individuals in South Africa. This chapter provides suggestions on how future tax compliance costs can be reduced further[280] (as explained in Section 1.6). The process commenced by analysing the data obtained in respect of the 2018 year of assessment from the open-ended question, in which the respondents were given an opportunity to provide suggestions on how tax compliance costs could be reduced. These suggestions were then evaluated.

The chapter's report on the empirical analysis commences with a general discussion of the responses received (Section 8.2). Then respondents' suggestions are discussed in eight main categories which emerged from the analysis (Sections 8.3 to 8.10). The suggestions are evaluated (Section 8.11) in the context of the theoretical framework presented in Chapter 2, the determinants of tax compliance costs found in the previous chapter, and the changes already implemented by SARS since the data collection.

8.2. GENERAL OBSERVATIONS OF RESPONSES RECEIVED

Of the 4 270 respondents who responded to Question 12.1, fewer than half did not provide a suggestion or raise a concern that could be addressed to reduce tax compliance costs. Most of these 1 903 respondents stated: "not applicable"; "negligible time/cost spent", "none", "nil", "don't know", "not sure" or "do not understand the question". Some stated that they do not think it is possible to reduce tax compliance costs, while others felt that it did not matter what they thought, because they believed the government would not listen. However, some of these respondents elected not to provide any suggestions because they are happy with the way e-filing works and the excellent service they received from SARS.

---

[280] In light of the finding that tax compliance costs have decreased from the 2017 to the 2018 year of assessment (see Section 6.6).

Examples of these positive responses are the following:

- "I have no problems with SARS. I do my tax return as soon as the season opens and have never had any problems. My compliments to SARS for treating me in a very respectful manner. 👆☺️😲"

- "As an old man and retired I really cannot suggest anything. I am happy with how SARS treats me. Thank you for that."[281]

- "E-filing is easy to use, effective, quick, saves time and costs. Therefore, ensure e-filing is always state of the art."

The remaining 2 367 respondents' suggestions were coded into eight main categories with different subcategories, where it was deemed necessary to do so. Given that Q12.1 was at the end of a long questionnaire, it was encouraging that many respondents took the time to provide detailed responses with innovative ideas. It also confirmed the importance of this research. The average length of a response was 28 words. The following response (emphasis added) was the longest (333 words) and highlighted various issues that could be addressed to reduce tax compliance costs, such as the e-filing system, telephone assistance, data costs and SARS's services in general:

> Get the *online system* back to running well and efficiently. *Customer service* between 2012 and 2017/2018 was really not good at all and the *telephonic assistance* was very poor. Staff handling telephone queries in the call centre did not seem to be *trained* to handle the queries that were being put to SARS staff. *Data is expensive* and so are *cell phone calls* and when you have to wait for up to 45 minutes and still not get any help, it is really frustrating. It is also not helpful when staff "pass the query" on to another person and you (the taxpayer) have to start explaining the problem all over again, with someone new. Have SARS implement a tax *toll-free line* for people who cannot afford to pay. SARS should *call taxpayers back*. Never once did SARS call me back or offer to do so. As a result, I simply stopped being tax compliant even though I did not want to do so as I was *unable to change my details and access the online system*. My tax practitioner is still waiting for me to tell her if I ever received my penalties back from SARS, which she objected to, on my behalf. Why is this? SARS demands compliance but does not offer excellent *customer care and service*. They need to step up to the plate! Explain to the South African taxpayer when the *system changes* and why. E.g. when my retirement fund deductions no longer gave me a tax break and I still do not know why. In 2012 and 2013 I got tax back – about R4 000, but from 2014 to 2017 it went down to a couple of cents each year, but no-one could tell me why this was so. After being non-tax compliant for 5 years, I was too scared to approach SARS to sort it out, so I searched around from friends for a "friendly" tax practitioner. *SARS needs to be that friendly person and face for taxpayers.*

---

[281] This respondent even provided his name and contact details.

The following response (emphasis added) was the second longest (285 words) and suggested an easier e-filing system, more training and explanations on how tax is calculated, a tax deduction for travel costs and time lost when obligated to visit a SARS branch in person, incentive for early tax submissions and satellite branches during the filing season:

> Make the *system easier* for people to submit their tax returns. This will ensure less time spent on the system. If SARS spends more time to *train/explain how people can do their own returns*, especially people who are your normal blue and white collar 9 to 5'ers, then less money would have to be spent on tax consultants to do this. When people enter their tax submissions on the system, have a *pop-up communication* come up to *explain* where this submission will be included and how it impacts the total tax submission. *Explain* how the specific retirement or medical or travel expense claim fits into a formula to provide which specific answer – this will go a far way to have people *understand better* how their input affects the total submission. *Give hints* on the system on how people can legally optimize their tax submission – instead of creating the idea that SARS is just sitting there to collect as much as possible, even if they know that the taxpayer could benefit more if [the submission was] done differently or correctly. *Provide incentives for early tax submissions* to allow taxpayers to be able to curb/counter some of the costs incurred in having to submit tax returns. *Should a person have to visit a tax office formally (mine is in another town about 70 km away), allow that taxpayer to claim that trip as part of his/her travel expenses as well as loss of income (leave) for the long period to spend there (on 2 occasions it took me 2 days in Standerton).* This should help towards reducing/recouping costs and also serve to have online support a lot more efficient. Or alternatively *create satellite SARS offices* during the time of tax submissions.

From the above two quotes it is clear that some responses contained more than one suggestion and the number of suggestions in the different categories therefore do not add up to the total analysed responses of 2 367 (thus percentages based on these 2 367 responses also do not add up to 100%). The suggestions are discussed under the eight main categories (which included subcategories where appropriate), marking the central ideas in bold:

- Category 1: Government-related and tax policy;
- Category 2: The e-filing system, IT and the SARS website;
- Category 3: Improvement of SARS's services;
- Category 4: Training taxpayers;
- Category 5: Post-filing services;
- Category 6: Simplification;
- Category 7: Provisional tax; and
- Category 8: Psychological costs.

8.3. CATEGORY 1: GOVERNMENT-RELATED AND TAX POLICY

The highest percentage (37%[282]) of suggestions on how tax compliance costs could be reduced related to Category 1, which included issues related to the taxation expense itself and the government's use of the revenue. These answers were given despite the reminder contained in Q12.1 that "tax compliance costs may include external costs (e.g. costs of tax practitioners), internal costs (own time spent) and non-labour costs (e.g. internet and travel costs), but does *not* include the cost of the *tax itself* (the tax liability)". The description of tax compliance costs was based on the definition of the term in the literature, for example, by Marcuss *et al.* (2013:840), Pope (1989:134) and Slemrod and Sorum (1984:2). The fact that respondents regarded the amount of tax they paid and the (mis)use of that revenue as interconnected with tax compliance costs is considered further in Section 8.11, where the suggestions are evaluated. The three subcategories were government spending, tax policy, and regulations and enforcements.

8.3.1. Government spending

Many respondents expressed disappointment with the level of corruption in government and stated that the money should be claimed back and used for the "things" they paid taxes for. The "things" that respondents regarded as important and on which they would like their tax money to be spent include infrastructure (for example, roads), education, housing, jobs, medical care, security and water and sanitation. Respondents also mentioned that they would like to see Eskom sorted out, and the cost of electricity and municipal rates reduced, the rand strengthened and living expenses reduced.

The following response is a good summary of the emotions expressed by the respondents regarding government spending:

> Knowing where and how your tax contribution is being spent would go a long way to get more people to pay tax – as right now it feels like you pay tax and the money vanishes and then a year later a budget speech comes out and you can only hope your money actually got used in the meantime in the allocated percentages. Then things like load shedding happen, roads get worse, services degrade and you cannot help but despair that your hard-earned money that you entrusted SARS with, was squandered. Visibility into this would be amazing as then one could take solace in what our tax contribution was spent on.

---

[282] Calculated as 870 of the 2 367 responses. Category 2 was the second largest category (708 of 2 367 responses, equalling 30%) and related to suggestions on how tax compliance costs could be reduced. All other categories represented 24% or less of the responses. Bearing in mind that some responses affected more than one category, these percentages did not add up to 100%.

One respondent suggested clarity, similar to the "blockchain principle"[283] on how and what tax money is spent on.

8.3.2. Tax policy

Many respondents expressed how hard they had to work to make ends meet and stated that their tax expenses were too high, not leaving enough to cover their basic living expenses. They also suggested that the income tax rate be lowered because of the high VAT rate and expensive fuel and medical costs. Other suggestions stemming from the hardships mentioned were that single parents and pensioners should be taxed at a lower rate (if taxed at all). Pensioners argued that they had paid tax all their working lives and should not need to pay tax any longer once they retired. Other groups of individuals that were mentioned for consideration for special tax concessions were soldiers and other government workers, and individuals with start-up businesses. Respondents also complained that their bonuses were severely taxed. A bonus is added to the annual equivalent of the taxpayer's monthly income and therefore taxed at the marginal rate based on that tax bracket. Responses revealed that the respondents did not understand this calculation and therefore they were disappointed by the amount of bonus left after tax had been withheld. Moreover, respondents who expressed their view that the government does not spend the tax revenue appropriately (as discussed in Section 8.3.1 above) felt strongly that the amount of tax should be reduced.

Respondents also suggested additional tax deductions that should be allowed, for example, all costs relating to tax compliance activities (for example, tax practitioner fees and travelling costs to a SARS branch), rent and electricity payments, home loans, domestic workers' wages, public transport, all medical expenses and expenses to support parents. Some suggested that tax compliance costs should be *refunded (in full or even partly)* by SARS, for example tax practitioner's fees and doctor's fees relating to the completion of disability forms.

A tax policy suggestion, with the view to reducing tax compliance costs, was to implement more withholding taxes, for example, on interest earnings and disposal of fixed property at a low flat rate to be collected by financial institutions and transfer attorneys.

---

[283] The respondent did not expand on this suggestion, but the power of blockchain is derived from the fact that instead of being managed by a single centralised entity such as a government or a corporation, blockchain is managed by the very people that use them, resulting in the democratisation of trust, creating a "truth ledger" that is "virtually impossible to be altered" (Blockchain Council, 2020).

8.3.3. Regulations and enforcements

Many respondents expressed the view that the tax compliance burden could be lighter on diligent taxpayers if everybody paid his/her fair share. Respondents felt strongly that the tax net should be cast wider to rein in the cash economy and dishonest citizens and foreigners (for example, the owners of spaza shops). It was further suggested that "high flyers" be identified and investigated, and appropriate steps be taken where corruption is found. Respondents also suggested that it should be made easier to blow the whistle on those who are not paying tax, and that SARS should follow up on tip-offs received from the public.

A few respondents suggested that tax practitioners' fees be regulated. Furthermore, some respondents felt that employers and third parties should be forced to supply IRP5s and IT3s on time and employees should not be held accountable for mistakes made by employers (for example, where an employer did not pay over the employees' tax to SARS). Respondents also requested that SARS and third parties (for example, financial service providers) use the same terminology to ensure correct completion of the income tax return.

8.4. CATEGORY 2: E-FILING SYSTEM, INFORMATION TECHNOLOGY AND THE SARS WEBSITE

Of the 2 367 responses analysed, 30% mentioned one or more aspects of the e-filing system,[284] IT or the SARS website that could be improved, making this the second largest category to which suggestions related. This indicates the importance of these suggestions to reduce tax compliance costs. The seven subcategories were simplification, tax calculators, browser compatibility, pre-population of forms, a SARS app and data costs, communication channels and content, and online storage of information.

8.4.1. Simplification

This was by far the most commonly allocated subcategory relating to the e-filing system, IT and the SARS website. Respondents stated that e-filing used to be "simple, clear and uncomplicated", but said that it was not so anymore. Many respondents suggested that the e-filing system and the SARS website could be simplified by making it more *user-friendly,* which would also reduce mistakes and the resultant penalties. Suggestions included **pop-up messages** when the cursor hovers over a description to give a brief summary of what is needed or an explanation of the impact of the item on the total tax calculation. For example,

---

[284] The need for e-filing *training* is covered in Section 8.6.3.

the pop-up could explain how a specific retirement, medical or travel expense claim fits into a formula to provide a specific answer, helping taxpayers to understand how their input affects the total submission. It was also suggested that the system could provide **hints** on how a taxpayer could benefit from doing something differently or **alerts** if information was omitted. Respondents suggested that the e-filing system should be more like the Taxtim "wizard" system, which offers a step-by-step process, prompting applicable questions. Using **fewer acronyms and less (difficult) jargon** was also cited as a way that the website and the e-filing system could be made more user-friendly.

Other e-filing, IT or SARS website aspects or processes that could be simplified are the following:
- recovery of login details and passwords to access the e-filing system;
- readability of a tax form on the screen;[285]
- access to codes that need to be added to e-filing documents;
- the phrasing of questions on the tax return;[286]
- allowing tax payments to be made from foreign bank accounts; and
- the wording on assessments.[287]

8.4.2.   Tax calculators

Respondents requested more online (or offline) tax calculators to assist them with calculations of deductions against travel allowances, the calculation of medical rebates and home-office expenses. Respondents also asked for a "formula to calculate tax", clearly indicating their tax bracket, actual tax and rebates, so that they would know beforehand how much tax they owed (if any). One respondent suggested an interactive "play" area on e-filing where SARS recommends changes to tax affairs to maximise tax benefits.

8.4.3.   Browser compatibility

One respondent explained that the SARS e-filing system uses a proprietary form of portable document format (pdf) based on a technology called "X forms" to communicate information. This means that documents issued by the system are only accessible through a Microsoft

---

[285] Furthermore, if a taxpayer wishes to print and work on hard copy because of the difficulties of reading what is on the screen, the printing is expensive due to the black boxes at the bottom of each page.
[286] Not all taxpayers are familiar with the tax legislation and questions should therefore not be phrased with only a reference to a section in the tax legislation without any explanation.
[287] It was suggested that the wording be made less confusing, for example, by clarifying where an amount is owed or refundable.

Windows computer with the Adobe Acrobat reader (these pdfs are not compatible with Linux, for example). Some respondents commented that they did not own such a device and had to borrow one to submit their income tax returns, or they were forced to visit a branch. The suggestion is that e-filing be moved to a **device-neutral platform or system** to reduce the time taken to submit tax returns and make e-filing more accessible to persons whose primary internet access device is not a personal computer. Many respondents complained about **browser compatibility** problems. According to some respondents, this is not difficult to fix and should be addressed by SARS as a matter of urgency. One respondent stated that he had to pay R350 for someone to assist him to print a copy of his assessment, since he could not do so on his device, while others paid IT specialists for assistance. The following response reflects the sentiment of respondents in this subcategory: "Stop forcing me to download packages of third party software just for me to view a document via e-filing".

8.4.4.   Pre-population

Respondents made suggestions regarding additional fields that could be pre-populated on the income tax return to reduce tax compliance costs, such as **interest and dividend** income. If, however, pre-population is not possible, it was suggested that taxpayers be allowed to *add* each investment provider separately (e.g. Allan Gray, Sanlam, Old Mutual, etc.), then type in *codes* and *amounts* as given on the statement without trying to figure out where to include which amount and tallying all the different groups of investment income. Relating to the difficulty of determining where to include these amounts received from investments (if they could not be pre-populated), it was recommended that all financial institutions issue *standardised tax certificates* with tax codes. It was also pointed out that obtaining tax certificates relating to tax-free investment accounts was difficult and that the problem could be alleviated by pre-population.

One respondent commented that some invoices and receipts faded with time and suggested that **pharmacies and hospitals** provide information regarding visits and payments directly to SARS. It was also suggested that **logbook information** from "authorised service partners" be automatically imported. The respondent did not elaborate, but this argument could include maintenance costs and service records from reputable repair centres or even fuel expenses from petrol stations. Lastly, a few respondents added that taxpayers should not be required to submit supporting documentation (discussed further under Section 8.7.3) or certificates reflecting these pre-populated amounts (unless of course there was a

discrepancy that needed to be corrected). An apt summary of this subcategory is found in the following response:

> Use the data received from external stakeholders i.e. Banks; Insurance houses, Medical aid, Pensions etc. The taxpayer can then dispute the amount if required. This will provide SARS with a much improved process efficiency, data accuracy and lower audit costs. It will also benefit majority of the taxpayers.

8.4.5.   SARS app and data costs

Even though SARS has an *e-filing* app that allows taxpayers to submit their annual income tax returns on their smartphone, tablet or iPad and receive their assessment, it was clear that taxpayers are not all aware of this app. Many respondents also suggested that a **new SARS app** be created (or the current e-filing app be expanded) to be used for more purposes than just the e-filing of the income tax return. For example, respondents expressed the need for a platform to **enter costs and supporting documents throughout the year**, such as motor vehicle expenses, medical costs and subsistence expenses, which would then be available in the correct format at the end of the tax year for e-filing purposes.

One respondent expanded on this by suggesting that every taxpayer has an online profile, so that each month, or per occurrence, landlords may scan and upload the expenditure related to rentals (municipal bills, plumbers' receipts, electricians, garden service, etc.). It would then take less time to compile the submission at the end of the financial year, because the taxpayer would merely need to log on, select the expense category, upload, name the file, and add the amount to a running tally. Another need that the SARS app could address is to allow taxpayers to **log their mileage manually** during the year in an easy way for business and private travel that would satisfy SARS's requirements. The respondent added that data-based global positioning system (GPS) apps are too expensive to use, as data costs in South Africa are still among the highest in the world.

Many respondents also expressed the need for an **online chat** function, not only for assistance with the completion and submission of the income tax return, but also for assistance with technical tax queries. This could be facilitated by an app.

Furthermore, respondents suggested that the e-filing app should be available offline or that **no data costs** should apply when the app is downloaded or used. Data costs were mentioned by many respondents as an aspect that should be addressed to reduce tax compliance costs. One suggestion was that "**once-off redeemable vouchers** can be

created for e-filing to lessen the cost of internet connection". A related suggestion was that SARS could provide the taxpayers with a simple Unstructured Supplementary Service Data **(USSD) code** that can be used on cell phones (and which is free for the taxpayer). This USSD line could help taxpayers make queries, report troubleshooting matters and, most importantly, initiate a communication line with SARS to aid taxpayers in submitting their income tax returns free of charge.

8.4.6. Communication channels and content

Respondents expressed the need to be kept more informed via email, social media, WhatsApp and/or text messages, for example, reminders of the opening and closing date of the tax season and step-by-step guides with easy-to-understand explanations, especially with regard to changes made to the e-filing system.

Respondents also suggested that SARS communicate with taxpayers personally via email when letters and notices are issued, instead of just loading them on the e-filing platform, given that in terms of Rule 3(3) of the Rules for Electronic Communication, a letter sent via a taxpayer's e-filing profile is deemed to have been delivered irrespective of whether the taxpayer acknowledges receipt (*SIP Project Managers (Pty) Ltd v CSARS*, 2020:6). A further suggestion was that SARS should attach the letters to the email to avoid taxpayers' having to go to the website. Frequent communication (weekly) with the taxpayer regarding outstanding tax affairs was also suggested to reduce tax compliance costs and penalties.

8.4.7. Online storage of information[288]

Respondents felt strongly that certain information, such as disability forms (also known as the ITR-DD forms), should be **kept on the system** and taxpayers should not be required to obtain and upload a new form every one or five years,[289] since it is very costly to consult with a doctor/specialist to certify that the taxpayer is still disabled. One respondent remarked that he/she did not understand why it is necessary to present proof of disability every five years since "a loss of a limb is permanent; it would not regrow" and therefore it places an unnecessary burden on an amputee. Respondents also felt that SARS officials could

---

[288] Some of the suggestions under this subcategory also tie in with the submission of supporting documentation that will be discussed further under category 5.
[289] The ITR-DD form is valid for one year in the case of a disability that is of a temporary nature. If the disability is of a permanent nature, the validity of the ITR-DD form has increased from a period of five years to ten years as from the 2020 year of assessment if the disability remains moderate to severe (SARS, 2020b).

perhaps look at information submitted in previous years, for example, a retired older taxpayer will probably have *bona fide* additional medical expenses every year.

Some respondents suggested that their supporting documents be **uploaded at the same time that their income tax return is filed** (either via e-filing, or with the assistance of a SARS official at a branch) and then stored on the e-filing system. Any request for supporting documentation should then exclude the documents already uploaded (and also documents relating to pre-populated amounts such as IRP5s). Alternatively, whenever supporting documents are submitted at a branch, they should be copied and safely stored to avoid multiple requests for the same documents.

8.5. CATEGORY 3: IMPROVEMENT OF SARS'S SERVICES

Suggestions by 568 respondents (24%) related to one or more aspects of SARS's services (excluding services relating to the e-filing system, as discussed in Section 8.4) and training services (see Section 8.6) that could be improved. The five subcategories were improved efficiency and knowledge of staff, guidance in more languages, improvement in relation to branches, access to SARS officials, and the eradication of unethical behaviour.

8.5.1. Improved efficiency and knowledge of staff

Most suggestions (45%) related to this subcategory. Respondents suggested **more efficient and better trained SARS officials**, at branches and at the call centre, for improved telephonic support. This should reduce the long waiting times (standing in branch queues or being put on hold to speak to a call centre agent) and also the frustration when a query is passed on to another person and the taxpayer has to start explaining the problem all over again. The following response is a good summary of the suggestions in this subcategory:

> Decent phone assistance. Booking time slots for identified topics at an office and then have really competent people manning that area. Not being moved around from counter to counter with queues and frustrations.

It was suggested that taxpayers be **able to rate the person(s) they dealt with.** This suggestion is only relevant for branch visits, since taxpayers are always afforded an opportunity to rate a call centre agent. Lastly, a respondent commented on the difficulty, as a deaf person, of having to work through an interpreter at a SARS branch. Maybe a SARS

staff member at each branch could be trained to be able to communicate directly with a person with such a **disability** so that nothing gets lost in translation.

8.5.2. Improvement in relation to branches

The waiting times at branches proved to be a major concern for taxpayers. Some respondents mentioned that they had to take leave from work and travel many kilometres to a SARS branch, but they were not even helped on the day, due to the long waiting times. They had to return another day. The tax compliance costs associated with this concern relate to both time and out-of-pocket costs. A suggestion to reduce these costs is to allow taxpayers to **schedule an appointment**. The long waiting times could also be reduced if branches **extend their working hours** during the filing season, and are open on Saturdays. A **self-help desk** at the branches was another suggestion to shorten waiting times. Some respondents suggested that pensioners be assisted at a **dedicated counter for the elderly** and that the **available (free and secure) parking** be improved. Lastly, it was suggested that **payments** be accepted at SARS branches for taxpayers who do not have online banking facilities and are otherwise required to incur costs to travel to a bank to make payments.

8.5.3. Guidance in more languages

The suggestion to provide guidance in more languages than English was made by eight respondents. It may, however, not be viable to translate all the SARS guides into all 11 official languages, but perhaps an effort can be made to provide a glossary of terms explaining some of the **difficult tax (system) jargon in all 11 official languages**. Crucial information regarding e-filing may be translated in more languages.

8.5.4. Access to SARS officials

Just over a third (36%) of the responses in Category 3 mentioned this subcategory. The respondents wanted more access to SARS officials, which included, specifically, more branches. Respondents suggested that more **mobile branches** be deployed (similar to voting stations) to areas that offer essential services to rural communities (for example, municipalities and government service centres), but emphasised that these branches must have the same authority as full branches. The visiting schedules of such mobile branches must be widely communicated. Some also suggested that these mobile branches provide computers with internet access for taxpayers who want to use e-filing but do not have access to, or the means to access, the internet.

Respondents also suggested that SARS officials could visit **shopping malls** to assist taxpayers with their e-filing or even assist taxpayers at their **workplace** (particularly factories where employees do not have access to computers). SARS has done this in the past – for example, in 2010 and 2011, SARS issued media releases (SARS, 2010, 2011) that SARS officials would be available to assist taxpayers to file their income tax returns at service points in various shopping malls. These media releases also contained information regarding the workplace visits where SARS officials visited places of work to assist employees. Similar media releases could not be found for later years. The following response is an example of this suggestion:

> I think workplaces and community organisations should be able to host an e-filing team that comes and helps people e-file. Host provides the internet connection and private consultation spaces, waiting area. Taxpayers bring their specified documents and take turns to sit with the e-filing team member. E-filing team member's duty is to ensure compliance, educate on e-filing for future use, and assist taxpayer to minimise tax due e.g. guidance on claiming expenses. Literally the only SARS document a taxpayer would ever have to read is the "documents to bring with you" list. It would be a dream and the cost of a practitioner would be saved. I would not have to worry about legislation as the e-filing team member would tell me each year if any changes had occurred relevant to me.

Furthermore, it was suggested that access to telephonic support be improved by making a **toll-free number** available to prevent expensive cell phone calls, notwithstanding that as a result of the Independent Communications Authority of South Africa's (ICASA) regulations, SARS's existing toll-free number was also available at no charge from all cell phone networks (ICASA, 2016).

8.5.5. Eradication of unethical behaviour

A small number of 25 respondents felt very strongly that unethical behaviour within SARS is unacceptable. A respondent stated that tax compliance costs can be "vastly reduced if SARS and its officials apply the law correctly to taxpayers instead of trying to rob them in an effort to boost collections". Another respondent provided an alarming example of struggling with an application form, and the SARS employee requested a top-up of her air time so that she could "help" him with the form. There was no easy way to identify her, or to report this solicitation of a bribe to SARS.

8.6.   CATEGORY 4: TRAINING OF TAXPAYERS

The answers of 20% of the respondents were categorised as relating to one or more training need. The three subcategories related to PAYE training, general tax training and e-filing training. Some respondents suggested that SARS could address these training needs by means of a **YouTube channel** where video clips on technical tax issues and step-by-step e-filing assistance could be made available – they seemed unaware that SARS has had a YouTube channel (SARS TV) since 2013. More **roadshows** (with hardcopy **booklets**) to facilitate the training needs of taxpayers were suggested, and one respondent suggested that SARS invest more in its **search engine optimisation (SEO)** strategy to make it easier for taxpayers to find answers relating to tax if they perform a Google search.

8.6.1.   PAYE training

It became clear from the responses in this subcategory that many respondents did not understand how the employees' tax system ties in with the final income tax return submission, especially if they owed an amount to SARS on assessment. Some respondents regarded the amount due to SARS as a "penalty", and some were of the view that the only reason why they owed SARS money was that their employers made mistakes. On the other hand, some respondents thought that the employer had incorrectly withheld too much PAYE and then the taxpayer had to wait long to get the money back from SARS. Many respondents stated that they did not understand why some taxpayers got money back from SARS on assessment and they did not, commenting on all the tax that they had paid to SARS every month.

The PAYE training should therefore address issues including

- working for more than one employer;

- taxation of overtime and performance bonuses (specifically relating to the tax rate);

- the valuation of fringe benefits and allowances for PAYE purposes (which may differ from the valuation for normal income tax purposes, such as travel allowance and use of company cars);

- the two different medical rebates (or credits) and the fact that only the "medical scheme fees tax credit" may be taken into account by an employer (unless the employee is 65 years or older); and

- when the "additional medical expense tax credit" results in a refund to the taxpayer.[290]

Lastly, one respondent suggested that all taxpaying employees should have compulsory "tax education" in their respective work environments as part of their induction process, which would assist with their understanding of the tax laws that affect them and help to resolve any issues quickly and via the correct channels. This suggestion would allow custom-made training based on the employee's remuneration package.

8.6.2. General tax training

Training of any tax topic not specific to the PAYE system or e-filing were grouped into the "general tax training" subcategory. Many respondents felt that general tax training **at school level** would be helpful to reduce tax compliance costs, since taxpayers would have a better understanding of how taxation works by the time they need to submit their own income tax returns. Respondents also suggested that **more "self-help info"** be provided, especially relating to the expenses that can be claimed. One respondent stated that he just wanted to comply without being punished because he did not fully understand what he can or cannot claim. This was confirmed by responses such as "educate me on … whether there are any deductions for house bond payments and what extra I can do to pay less tax" and suggestions regarding a comprehensive list available of what is allowed/disallowed.

Furthermore, training regarding medical rebates is not just important for employees (as addressed in the PAYE training above), but for all taxpayers who incur medical expenses, whether or not they are members of a medical aid scheme. Many respondents commented that they did not understand how the medical rebates work, what supporting documentation

---

[290] This credit is a rebate which in itself is non-refundable, but which is used to reduce the normal tax a person pays and could therefore result in a refund of employees' tax or provisional tax that had been paid to SARS.

they needed to keep and what format it should take. In particular, a workshop for the caregivers of disabled persons was requested to understand why certain expenses were not approved by SARS.

Examples of other general tax training need topics were

- the requirement to submit an income tax return;
- interest earned and unit trust declarations;
- the keeping of travel logbooks;
- provisional tax returns vs. income tax returns;
- explaining the tax return submission process; and
- explaining penalties.

One respondent requested a table/booklet that clearly indicates the tax bracket, how much tax is supposed to be paid and the rebates, "like it was in the 80's and 90's" so that taxpayers would know beforehand how much tax was owed (if any). Since information regarding tax brackets and rebates is available on the SARS website, this suggestion could indicate that the relevant guides are not easy to find, or that the rebates are not as straightforward as they used to be in the 1980s and 1990s (for instance, the medical tax credits were previously treated as deductions and not as rebates). (Refer to the discussion of the additional medical expenses tax credit in Section 5.3.)

8.6.3. E-filing training

Many respondents conveyed the message that their tax compliance costs could be greatly reduced if they could complete and submit their own tax returns on e-filing, which they wanted to do, but did not feel adequately equipped to do. For example, one respondent stated that he would like to learn how to do e-filing to save fuel travelling to a branch and not to have to queue and wait for assistance from a SARS consultant, but said that new technology was not easy to understand at his age. Therefore, a **step-by-step assistance booklet or YouTube video** of how to complete and submit an income tax return was requested.[291] Another respondent suggested an automated process, using **artificial intelligence (AI)** to assist and guide taxpayers with the completion of their income tax

---

[291] As pointed out at the beginning of this category, SARS has already provided numerous guides and videos and should maybe just market it some more.

returns. The respondent added that with AI (at the end of the process) the taxpayer could be informed on where further savings could be obtained in the following tax year.

Respondents used words and phrases such as "daunting", "unsure", "difficult jargon", "intimidating" and "stressful" when describing their e-filing experiences, and requested training with examples and step-by-step assistance to alleviate such feelings and reduce tax compliance costs by empowering them to complete their own income tax returns.

8.7.   CATEGORY 5: POST-FILING

The suggestions relating to post-filing were grouped under communication regarding refunds and contact person, selection for verification or audit, and supporting documentation.

8.7.1.   Communication regarding refunds and contact person

Some respondents felt that SARS communicated well until the assessment was done, after which "the refund seems to fall into a black hole" and it was time-consuming to keep following up and chasing refunds. It was suggested that taxpayers be given an indication of when payment could be expected. Furthermore, time could be saved if the same issue was not dealt with over and over by different consultants, but was handled by only one person.

8.7.2.   Selection for verification or audit

Some respondents merely stated "stop auditing me" as a suggestion to reduce tax compliance costs. This sentiment was shared by many respondents who stated that they has been selected for an audit for many consecutive years, submitting the same (or similar) supporting documents without any adjustments made to their assessments. Some respondents felt strongly that requests for supporting documentation (discussed next, in Section 8.7.3), whether it for verification or audit purposes, were merely a **delay tactic** by SARS with regard to their receiving their refunds and could result in unnecessary hardship, as is clear from this response:

> For the last few years SARS audited every tax return, mainly because of my and my wife's large medical expenses, I think. These expenses were unavoidable and exceeded the benefits of my medical scheme. Audits require additional interaction between my tax practitioner and SARS, for which I had to pay. It almost doubled the cost to me even though I meticulously keep records as well as a summary of all expenses paid by myself and the reason therefor. I also include the statement provided by my medical scheme. The audits also cause a delay of about six weeks in finalising the tax assessment and the repayment of excess tax deducted from my pension.

8.7.3.   Supporting documentation

Respondents suggested that **clearer communication** from SARS with regard to exactly which supporting documents must be submitted would definitely reduce tax compliance costs. Vague requests result in various attempts by taxpayers to satisfy their obligation to submit supporting documents to SARS. Communication should specify that documents already in SARS's possession (for example, IRP5s and medical certificates that are reported by third parties to SARS and pre-populated on the income tax return) need *not* be submitted again. Furthermore, it was suggested that adequate investigation be done before correspondence is sent to a taxpayer to avoid the "back and forth" in requesting more supporting documents.

Taxpayers suggested **consistency** in respect of what is required from one year to the next (for example, adding a proof of payment that was not required in prior years and purchasing a logbook to record business and private travel and still being asked for supporting documents). It was also suggested that SARS **inform all taxpayers beforehand** exactly what documents must be kept as supporting documents (and the format, for example, of additional medical expenses incurred) to ensure that taxpayers had the required documentation if their income tax returns were selected for verification or audit. One respondent expanded on this last suggestion:

> I would like to see a table format of what deductibles are possible, descriptions of the requirements, and clearly indicated requirements for submissions. I would also like to see in table format EXACTLY what supporting documents are required (and in what format / layout) to enable me to save more tax via good recordkeeping on my side.

Obtaining supporting documentation (for example, medical documents in person from hospitals) can be costly and it was suggested that SARS assist taxpayers by reimbursing travel costs incurred to obtain documentation or obtain more detail directly from third parties. Another aspect of supporting documentation is the expense of making **photocopies** of all the receipts and payments. It was suggested that SARS accepts a schedule thereof to save costs, especially because many receipts cannot be fed through a photocopier and must first be pasted on paper. One taxpayer stated that his supporting documents consisted of "more than 90 pages".

Uploading the supporting documents on e-filing presents a challenge to many respondents, forcing them to travel to a SARS branch. The functionalities of the e-filing system should, therefore, be improved to make it easier for taxpayers to upload their supporting documents in different formats and also from mobile phones, without limiting the size of documents. A

related suggestion was that the "link" to upload documents remain open so that a document that was accidentally missed could still be uploaded by the taxpayer (allowing more than one opportunity to ensure all supporting documentation is uploaded). If taxpayers were to submit their supporting documents at a branch, it was emphasised that these documents need to be **stored safely** (and receipt is acknowledged) to avoid them having to resubmit the documents later. One respondent even suggested that printing and scanning stations be available at the branches (when obtaining help with the submission of the income tax return) for documents to be uploaded and saved on the system in the event of an audit. Furthermore, mobile branches should be given authority to accept supporting documentation so that taxpayers are not forced to travel long distances to full branches to submit their documentation.

8.8.   CATEGORY 6: SIMPLIFICATION

The answers of 7% of the respondents related to this category, which consisted of two subcategories, namely simplification of *tax legislation* and simplification of *processes*.[292] The majority (79%) of responses in this category related to concerns that could be addressed regarding tax legislation, with the remaining 21% pointing out tedious and complicated processes that could be streamlined or simplified.

8.8.1.   Simplification of legislation

The two main concerns that SARS should address regarding the legislation were the difficulty of the terminology used and the frequency of legislation changes. The National Treasury is responsible for writing the legislation, but the general public is under the impression that it is SARS's responsibility. This response is an apt summary of the sentiment expressed by respondents who raised the issue of terminology and suggested that simpler language be used:

> SARS must look at ways of simplifying tax language and legislation to ensure that ordinary citizens can comprehend the terminology, understand its impact on them and obligations they have towards tax compliance. Once this is achieved it would greatly reduce the cost of tax compliance as people would not spend time on research and trying to find clarity on tax related issues, as they would know precisely what they need to do and then ensure their compliance speedily.

---

[292] This category did not include comments relating to the simplification of e-filing, since e-filing and IT-related aspects have been dealt with separately under Category 4 in Section 8.6.

The frequency of legislation changes is generally associated with uncertainty and an increase in tax compliance costs. It was suggested that the frequency of changes be reduced and that the communication surrounding changes be improved. The following response is a good example of these suggestions:

> Changes to tax legislation should be minimised but when it occurs it should be communicated clearly to the taxpaying public. Take for example the disastrous introduction of donations tax on interest free loans to trusts based on an imputed interest rate a few years ago (first on trusts, then on companies partly owned by trusts). Several drafts of this legislation have been produced, the latest of which now suggests that any person who is a beneficiary of a trust (a connected party) who advances a loan to a company completely unrelated to the trust will also be subject to donations tax on this loan. Discriminatory, illogical and poor thinking by tax policy makers and legislators.

8.8.2. Simplification of processes

Responses in this subcategory mainly related to processes that require taxpayers to travel physically to a SARS branch to complete processes that should be made available for online completion. Suggestions ranged from common processes, such as changing banking details, the surname and/or physical address of taxpayers that could not be done using an online platform, to more detailed suggestions relating to turnover tax declarations (TT03), tax directive information, verification of foreign documents (where taxpayers are living abroad), a sole importer's licence, and the double taxation treaty relief form (RST01) that could not be submitted or verified using an online platform. Submitting form RST01 is especially problematic for taxpayers who do not live in South Africa, which is evident from the suggestion in the following response:

> To avoid tax deduction from my monthly pension I have to follow the RST01 Nil Tax directive procedure of SARS every year, using snail mail to ATO [Australian Tax Office] and the completed application to SARS, Pretoria. This method is fraught with time delays I have experienced (28-day turnaround times for both revenue offices), unreliable postal services, substandard service on the part of revenue officials, notwithstanding following the required procedure in good time, and it is strongly recommended that it be reviewed and a more efficient and cost effective electronic method of RST01 application be introduced.

One respondent also made the point that some elderly taxpayers are bedridden and are unable to report to a local branch to request or empower someone to deal with their tax affairs. The respondent suggested that the previous system of manual submission be allowed for these elderly taxpayers that are also completely computer illiterate (like his 94-year-old mother). Lastly, one respondent suggested that the application process for a tax clearance certificate be simplified.

8.9. CATEGORY 7: PROVISIONAL TAX

There were not many comments regarding provisional tax, but a few practical suggestions were made to reduce tax compliance costs relating to this kind of tax.

A suggestion was made that second provisional tax payments should be due one month after year-end. The respondent indicated that it will "greatly reduce the cost of forecasting and dealing with queries from SARS relating to how the forecast was calculated" and it would also reduce SARS's time spent on dealing with under-estimations.

It was also suggested that retired individuals (who do not carry on a business) should be exempt from having to submit provisional tax returns since it is "complicated and a cost burden (recruiting outside help) to people with dwindling resources". The respondent stated that he only earns investment income and occasionally sells shares and that it is grossly unfair that he needs to pay someone thousands of rand per year for assistance. Another retired respondent also commented on the provisional tax burden and not being able to deregister.

Lastly, a respondent stated that there is sometimes cause for confusion regarding how to declare one's taxable income on a provisional tax return (where the taxpayer has to apply all the exclusions, exemptions etc.) as opposed to the declarations on the annual income tax return (gross amounts are declared, and the e-filing system then applies the necessary exemptions, exclusions and calculations). It was proposed that the provisional tax return be in a similar format as the income tax return, but summarised, to make it easier to complete the provisional tax return as accurately as possible.

8.10. CATEGORY 8: PSYCHOLOGICAL COSTS

Even though respondents were required to provide suggestions on how tax compliance costs could be *reduced*, some of the respondents stated that they are "happy" to pay for assistance or that they would "rather" pay for assistance than save costs by completing and submitting their own tax returns. One respondent stated: "Tax compliance costs will never be reduced because the public would rather pay someone to deal with SARS than deal with them themselves." Examples of other reasons given by respondents for why they would rather pay for assistance were their **fear of making mistakes**, **ensuring their tax affairs are in order** and their wanting **to reduce the stress** associated with tax compliance. These

respondents effectively indicated that their emotional wellbeing is worth the amount paid for assistance.

As discussed in Section 3.2, many researchers point out that the psychological costs of taxation refer to the stress, anxiety and frustration experienced by taxpayers, especially the old, retired and widowed, in dealing with their tax affairs (Ibrahim, 2017:172; Lopes & Martins, 2013:54; Pope, 1989:126, 2000:8; Tran-Nam & Evans, 2002:403; Yesegat *et al.*, 2017:81-82). A tax system that contains uncertainty, is unpredictable and inconvenient exposes a taxpayer to needless psychological costs, thereby increasing their overall tax compliance costs (Yesegat *et al.*, 2017:81-82). It is therefore submitted that psychological costs (as a part of tax compliance costs) should not only be offset by payments to tax practitioners (as respondents in this category indicated doing), but also be reduced by implementing suggestions in most of the aforementioned categories, especially *simplification* of legislation, processes and e-filing, *improvement of SARS's services* and *training* of taxpayers.

8.11. EVALUATION OF SUGGESTIONS IN THE CONTEXT OF THE THEORETICAL FRAMEWORK, DETERMINANTS, AND CHANGES ALREADY IMPLEMENTED

In the theoretical framework presented in Chapter 2 (see Figure 2.3), various approaches employed by revenue authorities to ensure or improve tax compliance were considered in the context of the underpinning theories. It was pointed out that traditional economic and deterrence theories focus on the coercive power of authorities to prevent tax evasion (resulting in forced tax compliance) such as imprisonment, penalties and tax audits. The psychological and sociological theories, on the other hand, built on ethics and tax morale, focus on the cooperative approach and its positive dimensions, such as trust and respect, motivation, mutual understanding and taxpayer service to improve tax compliance. The framework showed that a multi-faceted approach does not discard the importance of the *trust* and *power* (enforcement) facets of the slippery slope framework and responsive regulation approaches, but rather emphasises the importance of the *service* facet to ensure or improve tax compliance. Furthermore, the framework showed that there is a relationship between the *services* that taxpayers receive from tax authorities and tax compliance costs. The analysis of the suggestions in the first part of this chapter indicates that *all* three facets affect tax compliance costs.

Suggestions listed in Category 1 (Section 8.3) (government-related and tax policy) and Category 5 (Section 8.7) (post-filing: selection for verification or audit) emphasised the importance of the *trust* and *power* facets – not only trust in the tax authorities and a realisation of the power of those authorities, but also in relation to those facets regarding the government as a whole. Examples of suggestions relating to trust were more visibility of what tax money is spent on, more tax concessions to relieve hardship, and the rooting out of corruption. Suggestions relating to power included broadening the tax net, punishing dishonest taxpayers, but not abusing power by selecting the same taxpayer every year for an audit subsequent to many audits that did not reveal any misrepresentation by the taxpayer. Akhand (2012:224) argues that education, training and a reduction of knowledge gaps increase mutual understanding, which in turn enhances trust (as indicated in the theoretical framework). The suggestions in Category 4 (training of taxpayers) could therefore also be seen as relating to trust.

Suggestions in Category 2 (e-filing system, IT and the SARS website), Category 3 (improvement of SARS's services), Category 4 (training of taxpayers) and Category 5 (post-filing) are directly related to the *service* facet. Suggestions included improvement of current services (for example, training revenue authority staff and taxpayers), as well as new services that could be introduced to reduce tax compliance costs (for example, data free apps).

The theoretical framework also considers tax compliance costs under the overarching maxims of certainty, convenience and economy. It was pointed out that, with regard to certainty, compliance costs may increase if taxpayers have to expend extra resources to work through various issues arising, for example, from a lack of certainty with regard to the tax legislation. Convenience (or the lack thereof) from a tax compliance cost perspective could relate to the administrative procedures that taxpayers have to follow in order to comply with their tax obligations. The last maxim, economy, is violated if a tax system results in high compliance costs as a result, for example, of complexity in the system or the stress, anxiety and frustration experienced by taxpayers (the psychological costs of taxation) trying to comply with their tax obligations. All these maxims came up in the respondents' suggestions. Suggestions in Category 6.1 (simplification of legislation) and Category 4 (training of taxpayers) dealt with the certainty maxim, while suggestions in Category 6.2 (simplification of processes) and Category 7 (provisional tax) related to the convenience maxim. Lastly, suggestions in Category 8 (psychological costs) exposed the violation of the maxim of

economy and pointed to suggestions from other categories that could assist in dealing with this maxim and consequently reduce the tax compliance costs (for example, *simplification* of legislation, processes and e-filing, *improvement of SARS's services* and *training* of taxpayers).

Furthermore, several suggestions on how tax compliance costs can be reduced related to the "variable" determinants of tax compliance costs that emerged from the CHAID diagrams in Chapter 7 (see Section 7.3). These determinants and suggestions (according to categories) are summarised in Table 8.1. (The "fixed" determinants of tax compliance costs based on the demographic characteristics of taxpayers were employment status, income level, education level and gender.)

Table 8.1: Determinants of tax compliance costs and related suggestions (according to category) on how tax compliance costs can be reduced

Determinants	Suggestion category
SARS's service quality	Category 3: Improvement of SARS's services
SARS's consultation and communication regarding changes to its system	Category 4: Training of taxpayers (e-filing)
Tax knowledge	Category 4: Training of taxpayers (technical)
Assessments, audit and penalties	Category 5: Post-filing
Tax legislation complexity	Category 1: Government-related and tax policy Category 6: Simplification (legislation)
Complexity of SARS guides	Category 6: Simplification (processes)
Type of assistance	Category 1: Government-related and tax policy Category 2: E-filing system, IT and the SARS website Category 3: Improvement of SARS's services Category 4: Training Category 5: Post-filing Category 6: Simplification Category 7: Provisional tax Category 8: Psychological costs (It is argued that suggestions from all categories may assist taxpayers to complete their own tax returns without requiring paid assistance.)

Source: Own interpretation

From Table 8.1 it is clear that all "variable" determinants can be addressed by suggestions from one or more of the suggestion categories. The demographic characteristics of a taxpayer may be "fixed", but implementation of suggestions from various categories may still reduce the *effect* of some of these determinants on tax compliance costs. For example, the CHAID tree in Figure 7.9 shows that, on average, self-employed respondents' tax compliance costs were 11.5 times higher than those of retired respondents without active

income (i.e. R19 183 vs R1 661). Furthermore, the CHAID tree in Figure 7.10 illustrates that the total tax compliance costs of self-employed respondents with a negative perception of SARS's consultation and communication regarding changes to its system were, on average, three times those of self-employed respondents who had a less negative perception of SARS's consultation and communication regarding changes to its system. Therefore, even though "employment status" may be a fixed characteristic, training, simplification and other improvement suggestions may reduce the effect of this determinant on tax compliance costs.

Lastly, it is important to evaluate the suggestions in the context of changes that SARS has implemented subsequent to the collection of the data. In a media release on 27 August 2020, SARS (2020c) makes it clear that it is "continuing on its journey" to make "filing season a seamless and easy process to help taxpayers fulfil their legal obligations", and additional changes may therefore have been implemented prior to the completion of this study. According to this media release (SARS, 2020c) and the SARS website (SARS, 2020d), significant changes have indeed been made that do address some of the suggestions put forward by respondents (as discussed in Sections 8.3 to 8.10). These changes are the following:

- SARS has instituted awareness campaigns (#YourTaxMatters to South Africa) that show the importance of tax and what the taxes are spent on (this addresses suggestions in Section 8.3.1).
- SARS has enhanced its "capability to detect and make it costly for non-compliant taxpayers" (SARS, 2020c), which may broaden the tax net, as suggested in Section 8.3.3.
- Login details and passwords (as suggested in Section 8.4.1) can now be easily recovered via the homepage of the SARS website.
- Auto-assessment of individual taxpayers is now possible for some taxpayers. In respect of the 2020 income tax return, SARS has auto-assessed some taxpayers, based on the data received from employers, financial institutions, medical schemes, retirement annuity fund administrators and other third party data providers. If these taxpayers accepted the outcome, they did not have to complete a return, because SARS effectively completed it on their behalf. However, taxpayers who were auto-assessed but either earned income that was not reflected on the auto-assessment or needed to claim tax-deductible expenses such as travel expenses against a travel allowance, needed to reject the auto-assessment and complete a tax return. Therefore, auto-assessment simplified the e-

filing system (as suggested in Section 8.4.1) for taxpayers who could merely "accept" the auto-assessment, and also removed post-filing obligations (suggested in Section 8.7) for those taxpayers, since no further supporting documentation was required.

- Pre-population of additional information has been increased. In respect of the 2020 income tax return, SARS has for the first time pre-populated investment income (see the suggestion in Section 8.4.4).

- Browser compatibility (as suggested in Section 8.4.3) has been improved with the introduction of html5 technology, which has replaced the outdated Adobe forms technology and caters for visually impaired clients via software compatibility.

- Guidance is given in more languages (as suggested in Section 8.5.3). For example, the YouTube video on using e-filing is available in all 11 official languages.

- Appointments can be scheduled (addressing suggestions in Sections 8.5.2 and 8.5.4). The opportunity to schedule an appointment at a SARS branch was introduced in May 2020 (SARS, 2020e:2), mainly in response to the COVID-19 pandemic, but it addresses the suggestion made in Section 8.5.2. Taxpayers can also book a virtual session with a SARS agent (via video or voice call), which would be especially helpful for the elderly, the disabled or those who live far from a tax branch, even outside the Republic. (The suggestion regarding SARS's branches being open on Saturdays was addressed in October 2019, but this suggestion is no longer important, given the new appointment system.)

- The SARS website has been redesigned. The new look of the website makes it easier to find information (see suggestions in Section 8.4.1), and it highlights and facilitates additional (and improved) services. For example, it now contains links to online services such as the YouTube step-by-step tutorials (as suggested in Section 8.6.3) and also facilitates the scheduling of appointments discussed in the previous point.

- Training is offered to taxpayers (as suggested in Section 8.6). SARS has added YouTube video links relating to e-filing training on the website (referred to in the previous point), and has increased awareness of the training material available on YouTube, formal publications and frequently asked questions (FAQs) on the website. According to the media release (SARS, 2020c), SARS has "targeted Government employees (national, provincial and local government) to educate and enable them to file their returns using [the] enhanced MobiApp and eFiling".

- Submitting supporting documentation is easier (see the suggestion in Section 8.7.3). With the booking system mentioned earlier, a taxpayer receives confirmation in real time of the booking slot with the case number, and is also advised of the supporting

documents to take along to the appointment. Furthermore, while e-filing is still the recommended method to upload supporting documents, uploading has also been made possible via the website.

- Processes have been simplified, for example, adding or changing banking details (see suggestion in Section 8.8.2). Previously, taxpayers physically had to visit a branch to effect changes, but additional methods are now explained on the SARS website. These now include submission via email. Additional measures have, however, been put in place to ensure authenticity of information, for example, the taxpayer must provide an image of him-/herself holding the proof of identity, as well as a written note containing the case number and the date on which the documents are uploaded or sent to SARS (SARS, 2020f).

- Communication regarding refunds has improved (see suggestion in Section 8.7.1). The media release provides clear timelines regarding refunds: if an assessment is not selected for audit or verification, the refund (if due) is paid within three business days. However, if the assessment is selected for audit or verification, the process should be concluded within 21 business days from the date when all required supporting documents are received. Once a completion notification is issued, the refund is made within three business days.

- Progress of audit cases is more transparent. The following announcement on 17 August 2020 on the SARS website addresses suggestions on post-filing (see suggestion in Section 8.7):

  SARS will now send you, step-by-step progress notification of your Personal Income Tax (PIT)…audit cases. These can be viewed via e-filing or the SARS MobiApp… at which stage your case is e.g. supporting documents received, case allocated to auditor, audit finalised etc. Additionally, SARS will issue real time automated SMS and email notification updates, as your case moves from one step to the next. SARS encourages Individual Taxpayers … to use our digital channels for improved communication and efficient service delivery. This will also avoid you having to hold the line for our Contact Centre or visit a SARS branch.

From the above, it is clear that SARS has already made significant improvements that address many of the suggestions put forward by respondents on how tax compliance costs can be reduced. Suggestions that could still be considered (even though some may not be directly under the control of SARS) are as follows:

From Category 1: Government-related and tax policy (see Section 8.3)

- Use "blockchain principle" for clarity on how tax money is spent and what tax money is spent on.

- Make tax policy changes, for example, reduce the tax rate for pensioners and allow tax compliance costs (such as fees paid to tax practitioners for tax compliance assistance and payments to medical professionals for the completion of disability forms) to be tax deductible.

- Allow disability forms to be valid for more than a year.

- Broaden the tax net by following up on tip-offs received from the public.

- Ensure that taxpayers are *not* held responsible for mistakes made by their employers.

From Category 2: E-filing system, IT and the SARS website (see Section 8.4)

- Allow payments on e-filing to be made from foreign bank accounts.

- Obtain more information directly from third parties (for example, pharmacies, hospitals and insurance brokers).

- Expand the use of the SARS MobiApp to other services and make it available at no cost for data.

- Communicate regularly via social media.

- Create a platform where costs and supporting documents can be added throughout the year, for example, expenditure related to rental income such as municipal bills, plumbers' receipts, electricians and garden service's receipts.

From Category 3: Improvement of SARS's services (see Section 8.5)

- Enhance the skills of SARS officials to be able to assist taxpayers, not just with administrative queries but also with technical queries, ensuring that consistent answers are given to taxpayers.

- Allow taxpayers to rate the person(s) that they deal with.

- Train some staff members to be able to communicate directly with a person who is deaf so that nothing gets lost in translation.

From Category 4: Training of taxpayers (see Section 8.6)

- Provide more technical training for taxpayers (for example, on PAYE and medical tax credits).

- Provide more administrative training for taxpayers (for example, on e-filing and keeping logbooks).

From Category 5: Post-filing (see Section 8.7)

- Keep information on what are deemed acceptable supporting documents consistent from one year to the next (for example, with regard to requiring proof of payment or additional travel information, apart from having only a logbook with business and private travel).
- Inform taxpayers at the commencement of the year of assessment exactly what documents must be kept as supporting documents (and the format, for example, of additional medical expenses incurred) to ensure they have the required documentation if their income tax returns are selected for verification or audit.

From Category 6: Simplification (see Section 8.8)

- Simplify legislation (for example, medical tax credits).
- Simplify processes (for example, double tax treaty relief).

From Category 7: Provisional tax (see Section 8.9)

- Change the due date for the submission of the second provisional tax return from 28 February to 31 March (one month after the end of individual taxpayers' year of assessment).
- Use a similar e-filing format for the provisional tax return to that of the income tax return. Currently, a taxpayer has to declare net amounts (apply all the exclusions and exemptions) on a provisional tax return, as opposed to the gross amounts that are declared on the income tax return, where the e-filing system applies the necessary exemptions, exclusions and calculations.
- Even though formal deregistration is not required if a taxpayer is no longer required to submit IRP6 returns (SARS, 2012), SARS may want to inform the public, as TaxTim (2016) does, on the steps to follow to remove provisional tax as a tax type for that taxpayer.

From Category 8: Psychological costs (see Section 8.10)

- As explained earlier, psychological costs could be reduced by implementing suggestions in most of the aforementioned categories, especially *simplification* of legislation, processes and e-filing, *improvement of SARS's services* and *training* of taxpayers. For example, if SARS officials are better equipped to assist taxpayers with technical and

administrative tax queries, it can reduce tax compliance costs and stress, as is evident from the following comment received from one of the respondents:

> The greatest help I would like to see is a facility to direct my tax questions on the law or the procedure for implementing my tax declarations to a knowledgeable individual who would understand what I am asking about. The Call Centre does not fill that role. There are times when I need this advice. In the past I have been able to get it from a knowledgeable friend. He is now dead. If a need arises in the future, I will have to go to a Tax Practitioner. I think that this is wrong. Every year the system seems to get more complicated and user unfriendly. You count the cost in terms of rand and cent, but I do so in terms of mental and physical stress. There is a difference, believe it or not.

8.12. CONCLUSION

In the first part of this chapter, suggestions from the respondents on how tax compliance costs can be reduced were analysed and presented in the following eight categories that emerged during the analysis: government-related and tax policy; e-filing system, IT and the SARS website; improvement of SARS's services; training of taxpayers; post-filing; simplification; provisional tax; and psychological costs.

In the second part of the chapter, the suggestions were evaluated in the context of the theoretical framework, the determinants of tax compliance costs that emerged from the CHAID trees in Chapter 7, and also changes implemented by SARS since the collection of the data. This evaluation has highlighted the role of all the suggestion categories, not only in promoting tax compliance through the different theoretical approaches, but also in meeting the overarching maxims presented in the theoretical framework. Furthermore, the evaluation has illustrated that all suggestion categories could play a part in addressing one or more of the determinants of tax compliance costs found in Chapter 7. Lastly, the changes made by SARS since the collection of the data were shown already to have addressed many of the respondents' suggestions on how tax compliance costs can be reduced. Nevertheless, examples of suggestions that could still be considered (even though some may not be directly under the control of SARS) were provided.

This chapter has met the last objective of this study, namely to provide suggestions on ways to reduce tax compliance costs for individual taxpayers in South Africa. The last chapter summarises the key findings of this study, reflects on the contribution of the study and its limitations, and makes recommendations for future research.

CHAPTER 9:
CONCLUSION AND RECOMMENDATIONS

9.1. INTRODUCTION

The aim of the study was to assess the tax compliance costs of individual taxpayers in South Africa. This chapter summarises the findings in relation to the objectives and the need for the research, and demonstrates its original contribution to the body of knowledge in the taxation field in general, and on the South African taxation system in particular. In order to achieve this, the chapter commences with a chapter-by-chapter overview of the study (Section 9.2). This overview is followed by a summary of the key findings in relation to the objectives of the study, which were formulated to meet the aim of the study (Section 9.3). Thereafter, the theoretical, methodological and practical contributions of this study are highlighted (Section 9.4). Lastly, the limitations of the study are presented, with recommendations for future research (Section 9.5), before concluding remarks are offered (Section 9.6).

9.2. OVERVIEW OF THE STUDY

In the first chapter, the importance of revenue authorities' adopting a service-oriented approach was shown in the context of three theoretical approaches, namely the responsive regulation approach, the "slippery slope" framework approach and the multi-faceted approach to improve tax compliance. The chapter also emphasised the importance of individual taxpayers in South Africa, in light of the large contribution of PIT to the country's tax revenue and highlighted the problem that no comprehensive research into their tax compliance costs had been done prior to this study. Apart from presenting the aim and objectives of the research, the chapter also provided the study's delineations of the scope, key terms and concepts, as well as the research methodology used in the study.

In Chapter 2, the theoretical foundation for the study was considered. Theories underpinning tax compliance behaviour and tax compliance costs were identified and defined. The theories explaining taxpayer compliance behaviour were divided into two groups: the traditional economic and deterrence theories on the one hand, and the psychological and sociological theories on the other. The literature on these theories has established (amongst other things) that positive interactions with and the trustworthiness of revenue authorities can improve taxpayer compliance behaviour. The theories underpinning tax compliance

costs are strongly based on Adam Smith's maxims (equity, certainty, convenience and economy) regarding a good tax system. Lastly, after examining the interrelationship between tax compliance behaviour and tax compliance costs, Chapter 2 concluded with a theoretical framework for the study.

A literature review of studies that calculated tax compliance costs of individual taxpayers was presented in Chapter 3. The focus of the review was the use of different terminology and measurement methodologies, and the findings of those studies. With regard to the use of different terminology, specifically the terms "tax compliance burden" and "tax compliance costs" were considered. It was found that these terms are similar in respect of the main underlying elements, namely time and costs. The differences detected relate mainly to the different authors' views of the activities or costs that should form part of the calculation of the tax compliance burden, but could also relate to the extent to which a taxpayer obtains value from being able to deduct tax compliance costs for tax purposes. It was pointed out that in the South African context, these terms would generally mean the same, since only 4% of assessed individual taxpayers have business income and most individuals in South Africa are therefore not entitled to a tax deduction for tax compliance costs. With regard to the measurement methodologies used to value an individual taxpayer's time, a variety of available methods were discussed and the reasoning behind using more than one method for this study was presented. Lastly, the review of the findings highlighted the gap in the literature with regard to research on tax compliance costs on individual taxpayers in South Africa and the need for the current research.

The research methodology of this study was set out in Chapter 4, which contained details regarding the research philosophy (positivism), paradigm (functionalist), and design (quantitative) followed to meet the objectives of the study. The quantitative research design entailed using an online questionnaire to collect the data, enabling various statistical tests to be performed to analyse the data, calculate tax compliance costs and ascertain the determinants of tax compliance costs. The reasons for and impact of using different sampling and data collection methods were explained. The data relating to the 2017 year of assessment (referred to as Phase 1) were obtained using snowball sampling, whereas the data relating to the 2018 year of assessment (referred to as Phase 2) were obtained from a random sample made possible with the assistance of SARS. It was pointed out that the sample in Phase 1 was skewed towards higher income taxpayers, while the sampling method used in Phase 2 resulted in a representative sample based on geographical location,

the age, gender and income of the respondents, when compared to those of the population, even though respondents with business income[293] were slightly underrepresented. Furthermore, given the crucial role that the questionnaire played in this study, Chapter 4 provided an in-depth discussion of the design, content and pilot testing of the questionnaire in respect of each of the two phases. The comprehensive data cleaning process was described to put the numbers of usable responses (namely 752 from Phase 1 and 10 260 from Phase 2) into perspective. The statistical tests used during the data analysis process were described. Chapter 4 also contained an explanation of the processes employed to enhance and ensure the quality and management of the data. Lastly, relevant ethical considerations that the study adhered to were addressed.

Chapters 5 and 6 presented the *analyses* of the empirical data related to the calculation of the tax compliance costs of individual taxpayers in South Africa, and the *calculations of these compliance costs*, based on the survey data collected in respect of the 2017 and 2018 years of assessment. At the end of Chapter 6, after applying appropriate weighting factors to the 2017 results necessitated by the skewed sample, the tax compliance costs of individual taxpayers in respect of the 2017 year of assessment were compared to those in respect of the 2018 year of assessment.

Chapter 7 commenced with an in-depth *analysis* of the empirical evidence from the rating questions (the scale items) collected in respect of the 2018 year of assessment. This analysis was followed by a CHAID decision tree modelling technique to *ascertain the determinants* of the tax compliance costs of the respondents, using the empirical findings from the first part of the chapter, and the demographic and other information about the respondents (such as their use of paid assistance with the submission of the income tax return).

Chapter 8 presented the *analysis* of the empirical data relating to the respondents' suggestions of possible ways to reduce tax compliance costs for individual taxpayers in South Africa. These suggestions were evaluated in the context of the theoretical framework, the determinants of tax compliance costs, and the changes implemented by SARS subsequent to the collection of the data, to *provide suggestions* for future consideration.

---

[293] Only 3.2% of the sample indicated that they earned rental, farming or other business income. Assessed individual taxpayers with business income comprised 4.1% of the total number of assessed individual taxpayers in 2018 (National Treasury & SARS, 2019:58).

9.3. SUMMARY OF FINDINGS IN RELATION TO THE RESEARCH OBJECTIVES

The findings are considered separately in relation to each research objective. The first objective was to calculate the tax compliance costs of individual taxpayers in South Africa in relation to the submission of their income tax returns and the activities subsequent to their submission of the returns (post-filing activities). The second objective was to ascertain the determinants of the tax compliance costs for individual taxpayers in South Africa. The third was to provide suggestions on ways to reduce tax compliance costs for individual taxpayers in South Africa.

9.3.1. Objective 1: Calculate the tax compliance costs

The first objective was met in respect of the 2017 and 2018 years of assessment. This was achieved in three steps. First, the hours spent by the respondents on each tax-related activity was ascertained. The time was then multiplied by an hourly rate using various methods (as explained in Section 5.7 and referred to in Section 9.4.2 below). Next, this time value was added to the respondents' out-of-pocket costs (arising from payments to tax practitioners for assistance and from sundry expenditure). The tax-related activities that were considered for purposes of this calculation ranged from recordkeeping, tax planning, obtaining tax knowledge and completing the income tax return (and provisional tax returns where applicable) to post-filing activities such as fulfilling verification and audit requests, and objecting to and appealing an assessment issued by SARS.

Because the sample's data were skewed in respect of the 2017 year of assessment (see Section 9.2), weightings based on gross income levels and employment categories were applied. The average total tax compliance cost was estimated at R4 604 to R12 661 for individual taxpayers in South Africa for their income tax obligations in respect of the 2017 year of assessment. No weighting was applied to the data for the 2018 year of assessment – the average total tax compliance cost was estimated at R2 544 to R3 742 for individual taxpayers in South Africa for the 2018 year of assessment. It was shown that the tax compliance costs of individual taxpayers in South Africa were regressive, similar to the findings reported, for example, by Blažić (2004), Chattopadhyay and Das-Gupta (2002), Evans *et al.* (1997), Marcuss *et al.* (2013) and Sandford *et al.* (1989).

Comparatively, between the 2017 and 2018 years of assessment, the ratio of the total tax compliance costs as a percentage of tax revenue from PIT reduced from between 6.92%

and 19.02% in 2017 to between 3.61% and 5.31% in the 2018 year of assessment. A possible reason for the reduction is that SARS pre-populated additional fields in the 2018 income tax return, namely medical aid contributions and retirement annuity fund contributions (SARS, 2018c). This finding supports the findings of Klun (2009), who estimated that a reduction in tax compliance costs of 73% in Slovenia was achieved as a result of the pre-population of tax returns. The decrease in costs could also be attributed to the fact that SARS increased the maximum allowable size per document that is permitted to be uploaded on the e-filing platform from 2MB to 5MB before the commencement of the 2018 income tax return filing season. This could have resulted in some respondents no longer having to travel to a SARS branch to submit supporting documents, reducing costs to them.

When the 2018 estimates of the tax compliance costs calculated in this study are compared to those estimated internationally, the ratio of the total tax compliance costs as a percentage of tax revenue from PIT – between 3.6% and 5.3% in the 2018 year of assessment – compares well to the ratios from most other studies. For example, Blaufus *et al.* (2014) reported a ratio ranging from 3.1% to 4.7%; Diaz and Delgado (1995) reported a ratio of 3.3%, and Evans *et al.* (1997) reported a ratio ranging from 4% to 5.6%. Lastly, as a percentage of GDP, the ratio between 0.36% and 0.52% for the 2018 year of assessment is in line with the finding of Tran-Nam *et al.* (2014:169) of 0.43% of GDP. It is also comparable to Vaillancourt *et al.*'s (2013:37) finding of between 0.26% and 0.37% of GDP.

9.3.2. Objective 2: Ascertain the determinants of tax compliance costs

The CHAID decision tree modelling technique was used to ascertain the determinants of the tax compliance costs of individual taxpayers in South Africa. Apart from establishing the determinants of tax compliance costs, this technique also showed the "best" determinants based on the independent variables that had the strongest association with tax compliance costs, and their effect on the tax compliance costs for specific groups of taxpayers. It was found that *employment status* and *income tax bracket* were the best determinants of total tax compliance costs.

With regard to *employment status*, self-employed respondents had, on average, higher total tax compliance costs than individuals who were employed full-time. This result is in line with the findings of various prior studies, for example, those by Allers (1994), Guyton *et al.* (2003), Lopes *et al.* (2012), Sandford *et al.* (1989) and Slemrod and Sorum (1984). The self-

employed individuals also had higher total tax compliance costs than retired and unemployed respondents, and those who were employed part-time.

With regard to *income tax bracket*, the respondents in higher income tax brackets had higher total tax compliance costs than respondents in the lower income tax brackets. This finding confirmed that level of income is a determinant of tax compliance costs, and is in line with the findings of Allers (1994), Blaufus *et al.* (2019), Blažić (2004), Pope and Fayle (1990) and Sandford *et al.* (1989), for example.

Other determinants of total tax compliance costs (based on averages) emerged using the CHAID decision tree modelling technique. *Type of assistance* was one of these: paid assistance for submitting a tax return resulted in higher tax compliance costs compared to other methods of submission. *Gender* played a role, since male respondents had higher tax compliance costs than female respondents. *Education level* affected tax compliance costs, which increased as the level of education increased. The complexity of *tax legislation* and *SARS guides* affected costs – respondents who regarded the legislation as complex had higher tax compliance costs than those who regarded it as easy, and the more complex the SARS guides were perceived to be, the higher the tax compliance costs. Negative perceptions around *assessments, audits and penalties* (the control-orientation of SARS) resulted in higher tax compliance costs compared to positive perceptions. Moreover, positive perceptions that *SARS's consultation and communication regarding changes to its system* was customer-friendly resulted in lower tax compliance costs compared to negative perceptions.

The fact that location, age, tax knowledge and appeal procedures did not emerge as determinants in the initial CHAID trees meant that the variables mentioned above had a stronger relationship with the total tax compliance costs. When these variables were, however, considered in isolation to gain insight regarding their impact on total tax compliance costs and the associated groups, it was found that *appeal procedures* increased tax compliance costs (especially if respondents had a negative perception of those procedures). Furthermore, tax compliance costs increased with *age* (older taxpayers had higher tax compliance costs) and with *tax knowledge* (that is, tax compliance costs increased as level of tax knowledge increased). Lastly, a relationship between *location* and total tax compliance costs was only shown for respondents who were 34 to 44 years old. The total tax compliance costs of these respondents residing in Gauteng, the Northern Cape

and Western Cape, Mpumalanga or Limpopo, or not living in South Africa were, on average, approximately 50% higher than the total tax compliance costs of respondents residing in the Eastern Cape, KwaZulu Natal, North West or Free State province.

Furthermore, by exploring the income sources and types of expenditure separately, it was found that *expenditure relating to other business income*, *travel expenses*, *expenditure relating to rental income* and *salary income* were determinants of tax compliance costs. All these types of expenditure increased the tax compliance costs, whereas *salary income*, decreased the tax compliance costs.

The best determinant of *post-filing* tax compliance costs was *SARS's service quality*. It was found that the mean post-filing tax compliance costs of the respondents with the most negative rating of *SARS's service quality* (namely ≤1.8 out of 5) were approximately five times higher than the mean post-filing tax compliance costs of the respondents with the most positive rating of SARS's service quality (namely ≥3.8 out of 5). This finding is significant in the light of the report by the Office of the Tax Ombud on the delays experienced by taxpayers with regard to SARS's dealing with disputes (OTO, 2020:34-56).

In summary, the list of determinants that emerged from the analyses contained determinants from the three groups identified by Guyton *et al.* (2003:678), namely taxpayer characteristics, tax compliance methods, and tax complexity. The list also contained determinants from the proposed fourth group (Eichfelder & Kegels, 2014), namely the service orientation of SARS (customer-friendly and control-oriented).

9.3.3. Objective 3: Provide suggestions to reduce tax compliance costs

This objective was met by analysing the suggestions provided by the respondents and discussing them under eight main categories that emerged from the analysis. These categories were: government-related and tax policy; e-filing system, IT and the SARS website; improvement of SARS's services; training of taxpayers; post-filing; simplification; provisional tax, and psychological costs. The suggestions were evaluated in the context of the theoretical framework of this study, the determinants of tax compliance costs and the changes that SARS has already implemented since the data were collected. It was shown that SARS has made significant improvements, especially taking into account the changes made to the 2020 income tax returns, which addressed many of the respondents' suggestions on how tax compliance costs can be reduced. Refer to Section 8.11 for a full

list of suggestions from each category that can still be considered in future in order to reduce tax compliance costs (even though some of the concerns raised may not be directly under the control of SARS).

9.4. CONTRIBUTION OF THE STUDY

The contribution of this study is considered from the perspective of its theoretical, methodological and practical contributions.

9.4.1. Theoretical contribution

The body of knowledge relating to tax compliance costs (its measurement and determinants) is vast and comprehensive. However, prior to the commencement of this study, no published information was available regarding the tax compliance costs of individual taxpayers in *South Africa.* This research sought to fill this gap by estimating the tax compliance costs of individual taxpayers in South Africa and ascertaining the determinants of those costs. Both of these objectives were achieved, as discussed in Sections 9.3.1 and 9.3.2 above. Some of the initial findings have also been presented at the Atax 13th International Tax Administration Conference, and were published in the resulting special edition of the *eJournal of Tax Research* (Stark & Smulders, 2019).

Furthermore, in evaluating suggestions on how the tax compliance costs of individual taxpayers could be reduced in South Africa (see Section 9.3.3 above) in the context of the theoretical framework, it was shown how tax compliance costs interact with the different factors that influence tax compliance behaviour. In the theoretical framework presented in Chapter 2 (see Figure 2.3), the different approaches employed by revenue authorities to ensure (or improve) tax compliance were considered in light of the underlying theories. It was pointed out that the traditional economic and deterrence theories focus on the coercive power of authorities to prevent tax evasion (resulting in forced tax compliance), using measures such as imprisonment, penalties and tax audits. The psychological and sociological theories on the other hand, build on ethics and tax morale, and rely on a cooperative approach with positive dimensions such as trust and respect, motivation, mutual understanding and taxpayer service to improve tax compliance. The theoretical framework showed that the multi-faceted approach does not discard the importance of the *trust* and *power* (enforcement) facets of the slippery slope framework and responsive regulation approaches, but rather emphasises the importance of the *service* facet to ensure (or enhance) tax compliance. Furthermore, the theoretical framework showed that there is a

relationship between the *services* that taxpayers receive from the tax authorities and tax compliance costs. The analysis of the respondents' suggestions on how tax compliance costs could be reduced indicated that *all* three facets could affect tax compliance costs.

Suggestions listed in Category 1 (government-related and tax policy) and Category 5 (post-filing: selection for verification or audit) emphasised the importance of the *trust* and *power* facets, not only in and of the tax authorities, but also in relation to the government as a whole. Examples of suggestions relating to trust are ensuring greater visibility of and transparency regarding what tax money is spent on, allowing more tax concessions to relieve hardship, and rooting out corruption. Suggestions relating to power include broadening the tax net, punishing dishonest taxpayers, but not abusing power by selecting the same taxpayer every year for an audit subsequent to many audits which have not revealed any misrepresentation by the taxpayer. Akhand (2012:224) has indicated that education, training and the reduction of knowledge gaps increase mutual understanding, which in turn enhances trust (as indicated in the theoretical framework). Suggestions in Category 4 (training of taxpayers) could therefore also be seen as relating to trust.

Suggestions in Category 2 (e-filing system, IT and the SARS website), Category 3 (improvement of SARS's services), Category 4 (training of taxpayers) and Category 5 (post-filing) are directly related to the *service* facet. Suggestions included improvements to current services (for example, training revenue authority staff and taxpayers), as well as new services that could be introduced to reduce tax compliance costs (for example, data-free apps).

The theoretical framework also considers tax compliance costs under the overarching maxims of certainty, convenience and economy. It was pointed out that, with regard to certainty, compliance costs could increase if taxpayers have to spend extra resources to work through various issues, arising, for example, from a lack of certainty in the tax legislation. Convenience (or a lack thereof) from a tax compliance cost perspective could relate to the administrative procedures that taxpayers have to follow in order to comply with their tax obligations. The last maxim, economy, is violated if a tax system results in high compliance costs, for example, as a result of the complexity of the system, or the stress, anxiety and frustration experienced by taxpayers (the psychological costs of taxation) when they try to comply with their tax obligations. The analysis and evaluation of the respondents' suggestions on how tax compliance costs could be reduced revealed that there were

challenges relating to all these maxims. Some suggestions listed in Category 6.1 (simplification of legislation) and Category 4 (training of taxpayers) dealt with the certainty maxim, while suggestions in Category 6.2 (simplification of processes) and Category 7 (provisional tax) related to the convenience maxim. Lastly, suggestions in Category 8 (psychological costs) exposed the violation of the maxim of economy and pointed to suggestions from other categories that could assist in dealing with this maxim and consequently reduce the tax compliance costs of individual taxpayers (for example, *simplification* of legislation, processes and e-filing, *improvement of SARS's services* and *training* of taxpayers).

9.4.2. Methodological contribution

This study has made two methodological contributions. The first relates to the effectiveness of using various methods to value an individual taxpayer's time, and the second relates to the usefulness of the CHAID decision tree modelling technique to ascertain determinants of tax compliance costs.

Different methods of valuing time may lead to substantially different estimates of tax compliance costs (Yesegat *et al.*, 2017:81): for example, Vaillancourt *et al.* (2013) calculated an upper- and lower-bound estimate of tax compliance costs using before- and after-tax hourly wage rates respectively. In the current study, six different valuation methods were applied to value the time of respondents (see the detailed explanation in Section 5.7) in order to estimate the tax compliance cost of individual taxpayers in South Africa. These valuation methods considered before- and after-tax adjustments, and different limitations and treatment for taxpayers in certain employment categories or income tax brackets. Using these different methods provided a lower- and upper-bound estimate of tax compliance costs. Further insight was obtained on which method correlated best with respondents' own estimates: the method which had the best correlation to the estimates provided by respondents was Method 5. This method used the *mean after-tax* hourly rate of respondents in a specific income tax bracket for all the respondents in the same employment category whose taxable income fell within that income tax bracket.

The second methodological contribution is associated with the application of the CHAID decision tree modelling technique to ascertain the determinants of tax compliance costs, instead of performing a regression analysis, as was used in other tax compliance cost studies, for example, the studies by Blaufus *et al.* (2019), Slemrod and Sorum (1984) and

Vaillancourt *et al.* (2013). This technique offers a number of advantages over more commonly used statistical techniques (such as regression analysis) because it is nonparametric and nonlinear (Önder & Uyar, 2017:610). Furthermore, missing data do not present a problem. Normality and homogeneity assumptions of the data are not required, and linear relations between variables are neither assumed nor necessary. The technique can be applied to continuous or discrete dependent and independent variables, and the output is highly visual and easy to interpret with multiple trees (Önder & Uyar, 2017:610-611; You, Si, Zhang, Zeng, Leung & Li, 2015:3358). The CHAID outcomes thus ascertained the determinants, as a regression analysis would have done, but the technique also determined the breakdown of which individuals fall into which specific groups, according to the determinants that statistically significantly predicted the dependent variable. This breakdown enabled a better understanding of the influence that the specific values of the continuous determinants, such as the service quality rating of the South African Revenue Service (SARS), and the categorical determinants, such as education level and employment status, have on tax compliance costs. The CHAID analysis provided an additional level of insight and usability of the results which would not have been possible with regression analysis.

9.4.3. Practical contribution

The study originated from a larger project initiated by SAICA: members complained that, in their experience, there had been a significant increase in tax compliance costs because various additional compliance and disclosure requirements had been imposed by SARS (SAICA, 2016). SAICA's aim was therefore to estimate the total cost to comply with tax administration in South Africa, across all taxes and in respect of all compliance activities undertaken by individuals, as well as small, medium and large businesses in South Africa. The current study formed part of this research initiative, focusing on the tax compliance activities undertaken by *individuals* in South Africa, to try to verify the concerns mentioned above. Some of the recommendations highlighted by the initial findings of this study have already been implemented by SARS and, as has been pointed out in Section 9.3.1, these changes could be partly responsible for the decrease in tax compliance costs from the 2017 to the 2018 year of assessment.

The signing of a Memorandum of Understanding between SARS and UNISA was a further indication that this research was of practical importance. The results are formally presented in this thesis, but SARS has had access to the raw data and suggestions from respondents

on how tax compliance costs could be reduced. It is therefore submitted that this research may already have informed some of the improvements that SARS has since made to its system (see Section 8.11). Furthermore, the tax compliance cost calculations provide a baseline against which SARS's improvement efforts can be measured.

Lastly, the practical importance of the assessment of the tax compliance costs of individual taxpayers in South Africa is evident from the nine strategic objectives that SARS has included in its *Strategic Plan 2020/21 to 2024/25* (SARS, 2020a:5) as opposed to the five outcomes that were set in the previous five-year strategic plan (SARS, 2016:37). Table 9.1 shows a comparison of these objectives.

Table 9.1:   Comparison of strategic outcomes and objectives of SARS

Strategic Plan 2016/17 to 2020/21	Strategic Plan 2020/21 to 2024/25
Increased customs and excise compliance. Increased tax compliance.	Detect taxpayers and traders who do not comply, and make non-compliance hard and costly.
Increased cost effectiveness and internal efficiencies.	Demonstrate effective resource stewardship to ensure efficiency and effectiveness in delivering quality outcomes and performance excellence.
Increased public trust and credibility.	Build public trust and confidence in the tax administration system.
Increased ease and fairness of doing business with SARS.	Provide clarity and certainty for taxpayers and traders of their obligations.
	Make it easy for taxpayers and traders to comply with their obligations.
	Develop a high performing, diverse, agile, engaged and evolved workforce.
	Increase and expand the use of data within a comprehensive knowledge management framework to ensure integrity, derive insight and improve outcomes.
	Modernize systems to provide digital and streamlined online services.
	Work with and through stakeholders to improve the tax ecosystem.

Source: SARS (2016:37) and SARS (2020a:5)

From Table 9.1, it is clear that six of the new objectives have replaced the previous outcome of "increased ease and fairness of doing business with SARS" to deal with various aspects that could reduce tax compliance costs. The action-oriented phrasing (each of the nine objectives now starts with a verb) underlines a dynamic and specific new approach. This confirms SARS's commitment to reducing tax compliance costs and the practical contribution of this study.

9.5. LIMITATIONS OF THE STUDY AND RECOMMENDATIONS FOR FUTURE RESEARCH

In the delineations of the study in Section 1.5, the limitations of the *scope of the study* were justified. Firstly, it was explained that the study would not take the tax deductibility benefits of tax compliance costs into account, because of the low percentage of *individual* taxpayers in South Africa who have a business income and are therefore allowed to claim such a tax deduction. Secondly, for the same reason, this study only calculated tax compliance costs in relation to income tax payable by individual taxpayers – other taxes that self-employed individual taxpayers may be liable for, such as VAT, were not considered. It is recommended that future research target individual taxpayers with business income and include not only the deductibility benefits of their tax compliance costs, but also more tax types, such as VAT.

The pay-now-argue-later rule was not considered in isolation and may or may not have been included in the compliance costs relating to the tax disputes. Due to the contentiousness of the rule, a comprehensive study of the compliance costs of the pay-now-argue-later rule could be done to determine whether the rule is balanced or not, since the Constitutional Court only established in the *Metcash Trading Ltd v CSARS and Another* case that the pay-now-argue-later rule is constitutional. The compliance costs of the rule were not interrogated and are still not settled in our law and tax system.

A fourth limitation of the scope of the study was not taking into account the tax compliance costs incurred by third parties in calculating and reporting on amounts paid to individual taxpayers. For example, employers have to withhold employees' tax from the remuneration paid to their employees (the individual taxpayers) and pay it over to SARS on their behalf; other institutions, such as banks and retirement funds, have to issue tax certificates for the interest, pension and/or annuities paid to their members or clients (the individual taxpayers). Medical schemes need to issue tax contribution certificates to individual taxpayers, reflecting the medical contributions made by the individual taxpayers in order for these taxpayers to be able to claim a medical scheme fees credit in their tax returns. It is recommended that future research include the tax compliance costs of third parties to adhere to withholding or reporting obligations related to individual taxpayers to supplement the findings of the tax compliance costs of the individual taxpayers.

The fifth limitation regarding the scope of this study was that no attempt was made to quantify psychological costs. This decision was made because of measurement problems, even though it is acknowledged that these costs do form part of tax compliance costs. It is therefore recommended that future research endeavour to find innovative ways to quantify or report on psychological costs associated with tax compliance.

Limitations related to aspects of the research methodology (as described in Chapter 4) are considered next. With regard to the online survey *data collection technique* used in this study, it is acknowledged that one limitation of this technique, namely non-response and bias as a result of misunderstandings, could have been addressed if face-to-face surveys (interviews) had been conducted. Nevertheless, as has been explained in Section 4.3, for the purposes of this study, the advantages of an online questionnaire outweighed its disadvantages, so face-to-face interviews were not conducted. Pilot testing and questionnaire design features such as display logic were used to mitigate misunderstandings as far as possible. Another limitation of an online survey technique is its systematic bias against individuals who may not have access to electronic communication. Even though this limitation was partly mitigated by the income tax return submission threshold, some taxpayers under this threshold still need to submit an income tax return to obtain tax relief, and thus this bias may have been present in this study. It is recommended that future research expand on the quantitative approach of this study by following a qualitative approach, and conducting face-to-face interviews with individual taxpayers regarding their tax compliance costs.

The risk of misunderstandings was mitigated by the pilot testing and a number of display logic features (as mentioned above), but a critical evaluation of the *data collection instrument* (the questionnaire design) highlighted a few inherent limitations that arose from misunderstanding and the misreading of some questions (as is pointed out in the various "lessons learnt" boxes in Chapter 5). It is recommended that future research include pop-up messages as part of the questionnaire design to explain certain tax terms (such as provisional tax and verification requests). Furthermore, cross-checks could be performed while the questionnaire is being completed, either to prompt reconsideration by or clarification from the respondent where necessary. For example, the monthly salary and the income tax bracket could be compared for reasonable correlation or annual income be shown after monthly income is entered, which would reveal an error. Employment status and income sources could be compared to the provisional tax registration requirements, and

income sources and types of expenditure could be compared for correspondence. Time and cost estimates could be flagged if they grossly exceed reasonable estimates.

However, even with such cross-checks in place, an inherent limitation (and criticism levied against all *questionnaire*-based tax compliance cost studies) is over- and underestimation of time spent and costs incurred, as reported by respondents. This limitation was addressed by removing extreme values during the data cleaning process, and winsorizing (based on the 5th and 95th percentile values) during the data analysis process. Nevertheless, it is acknowledged that it is not possible to eliminate this limitation completely. Furthermore, once the time estimates are considered reasonable, the next inherent limitation to tax compliance cost studies is determining the value to be placed on these time estimates. In this study, even though this limitation was addressed by using six different time valuation methods, it is acknowledged that other valuation methods (which were not applied in this study) could have affected the final calculation of tax compliance costs. It is recommended that future research consider using these other valuation methods, and are completely transparent on how all these estimation limitations have been dealt with.

Another limitation relating to the *design of the questionnaire* is the trade-off between reducing the length and including additional questions. The questionnaire used in this study was long, which could have contributed to a lower response rate (even though the response rate was acceptable). Nevertheless, there are still some questions that were not asked. Examples of additional questions that could have been included are whether or not the respondent voluntarily submitted an income tax return without obtaining a refund (discussed in Section 5.3), and how long the timelines to conclude the different appeal processes were (see Section 5.12.6). It is recommended that future research consider shortening the questionnaire by removing some questions (for example, reasons for the respondent's completing his/her own tax return versus obtaining help and questions relating to penalties and interest), even if a new question or two is added. Alternatively, the long questionnaire could be split into smaller questionnaires for use in different surveys. For example, separate questionnaires could be deployed for tax compliance costs relating to the income tax return submission, provisional tax return submission and post-filing tax activities, using the SARS database to select relevant samples. Furthermore, if the questionnaire is split into smaller parts, it could be explored if the provisions of section 222 of the *TAA* relating to understatement penalties, or section 234 of the *TAA* that criminalise certain offences relating to the non-compliance with tax legislation, increases the tax compliance costs of taxpayers

who may be frightened and therefore obtain the assistance of a tax practitioners at additional cost.

With regard to the *sampling methods*, the main limitation of snowball sampling, as used in Phase 1, is the fact that it is a nonprobability sampling method (see Section 4.4.1), which resulted in a skewed sample. This limitation was mitigated by testing for non-response bias and applying weighting factors. In Phase 2, a stratified random sample was possible, which resulted in a representative sample of the population. The researcher was, however, not able to access the SARS database to control the sample selection and distribution process of the questionnaire, because the taxpayers' right to privacy is protected. This limitation was mitigated by many meetings between the researcher and SARS that contributed to a better understanding of the stratification of the population. It is recommended that future research build on the collaboration enjoyed with SARS for this study to enable stratified random sampling, as opposed to a nonprobability sampling alternative.

There were also a few limitations with regard to the *data analysis*. Firstly, while there is no single way to analyse and interpret qualitative empirical data, it was considered appropriate to follow an inductive reasoning process during the analysis and interpretation of the open-ended question asking for respondents' suggestions on how tax compliance costs can be reduced. Therefore, even though the analysis might not have yielded exactly the same categories if it had been performed by someone else, the researcher and co-coder took great care to ensure that the categories were identified as comprehensively as possible, conscientiously reading the responses several times and applying careful judgement when extracting and analysing quotes. It is therefore recommended that, even though there will always be subjective decisions involved in similar research as explained above, transparency with regard to those decisions be maintained to assist researchers with their own decisions in future research. Future research could also consider the use of categories from other studies to evaluate the suggestions of respondents on how to reduce tax compliance costs, for example, tax structure simplification, institutional reform, procedural reform, automation, monitoring and client feedback, and tax policy process reform, as included in Chattopadhyay and Das-Gupta's (2002:66) six-pronged approach.

Secondly, there is no single recommended procedure to deal with outliers that are the result of neither a data entry error nor measurement error, but genuine responses. Therefore, applying other acceptable procedures than those used in this study would result in a different

estimate of tax compliance costs, notwithstanding that the decisions made for the purposes of this study were done in consultation with a statistician. This is an inherent problem for which no solution has yet been found.

Various limitations arose with regard to the *findings* that led to speculative arguments because no further information was available. It is recommended that future research be performed to confirm or disprove these speculations. Examples of these speculative arguments are the following:

- older respondents may have a better experience than the younger respondents when interacting with SARS as a result of an expectation gap, since millennials are known to "expect something more";

- respondents with no further education after school may have a more positive perception of the service quality provided by SARS as a result of their being unfamiliar with what to do and appreciative of assistance;

- the more negative perceptions regarding assessments, audits and penalties among respondents who have only schooling could be attributed to the possibility that these respondents make more accidental errors, and feel that the penalties for those errors (found during audits) are too severe;

- respondents with better tax knowledge may feel better equipped to deal with last-minute changes to the tax system, whereas respondents with no or limited tax knowledge may need more communication from SARS regarding changes to its system (hence, these respondents may have had a less positive rating of communication received from SARS in this regard);

- respondents younger than 35 years were the most negative regarding SARS's consultation and communication regarding changes to its system, which could be related to an expectation gap, given that millennials are "masters of social media" where a lot of information and opinions are exchanged, and their negative rating may stem from SARS's not consulting enough on and communicating changes to its system via social media; and

- respondents with foreign service and/or trust income rated the tax legislation and SARS guides most difficult; simplification of the tax legislation in this regard may reduce tax compliance costs (even though inferential tests could not be performed because some respondents indicated more than one source of income and observations for each type of income were therefore not independent).

Lastly, if follow-up research is conducted with the purpose of *monitoring* the tax compliance costs of individuals in South Africa, only the questions relating to the cost components would be necessary. In that case, instead of the many scale questions, respondents could be asked to provide their opinion (on an agreement scale) of a few key statements, such as the following (adapted from Tran-Nam *et al.*, 2014):

- tax laws have become more complicated since 2018;
- e-filing has become easier since 2018;
- SARS's service quality has improved since 2018;
- the SARS website is useful in helping me to understand how to comply with my tax obligations;
- my tax compliance costs are significant;
- the stress and anxiety arising from complying with my tax obligations is getting worse; and/or
- the SARS initiatives such as auto-assessment and pre-population have reduced my tax compliance costs.

9.6. CONCLUDING REMARKS

PIT is South Africa's largest source of tax revenue, and the contribution of PIT to total tax revenue has more than doubled in monetary terms over a period of five years, compared to CIT. To put this into perspective, only 24% of the South African population are registered taxpayers, of whom 49% have a taxable income below the income tax return submission threshold and do not pay PIT (National Treasury, 2020:41; Statistics South Africa, 2019:8). The entire PIT contribution is therefore carried by 12% of the population, with less than 1% of the population contributing more than half of the total revenue from PIT (National Treasury, 2020:41). It is thus crucial to ensure that individual taxpayers perceive SARS as service-oriented and trustworthy, in order to promote voluntary compliance and safeguard the inflow of these contributions. SARS should also do its utmost not to impose a high compliance burden on these individuals, since a large compliance burden may induce taxpayers to "cheat in attempt to recoup their costs associated with preparing and filing their return" (Erard & Ho, 2003:100). Sandford (1994:306) also warns that "heavy compliance costs reduce voluntary compliance and thus have a detrimental effect on tax revenue". With this in mind, it was encouraging that this research showed a reduction in the tax compliance costs of individual taxpayers in South Africa between the 2017 and 2018 years of assessment. There was also a reduction in the ratio of the total tax compliance costs as a

percentage of tax revenue from PIT, comparable to the ratios reported in most other international studies.

However, as the CHAID tree diagrams illustrated, the tax compliance costs of individual taxpayers differ significantly, based on various determinants. It may therefore be prudent for SARS to make concerted efforts to address those determinants which are under its control to lower tax compliance costs, especially where these costs are shown to be very high. For example, it was found that the tax compliance costs of self-employed individuals were (on average) the highest, compared to those of indiviuals with all the other employment statuses: the costs for self-employed individuals were 11.5 times those of retired respondents without active income, and 8 times those of respondents employed full-time. It was also found that the tax compliance costs of self-employed individuals who had a negative perception of SARS's consultation and communication regarding changes to its system were (on average) three times the tax compliance costs of self-employed respondents who had a less negative perception of SARS's consultation and communication regarding changes to its system. In light of the importance of PIT discussed above and considering that South Africa needs entrepreneurs (self-employed individuals) who can create jobs, SARS should endeavour to improve its process of consultation and communication regarding changes to its system, particularly to these taxpayers.

An example of an area under the control of the South African government, rather than SARS, that should be addressed to reduce tax compliance costs is tax legislation complexity. It was shown that, for full-time employed taxpayers, the tax compliance costs of taxpayers in the highest tax bracket were (on average) seven times more than those of taxpayers in the lowest two income tax brackets. Tax legislation complexity was the second-best determinant of the tax compliance costs of these high-income taxpayers. The taxpayers in the highest income tax bracket who gave a neutral rating or considered the legislation complex had (on average) double the tax compliance costs than taxpayers in the highest income tax bracket who did not regard the legislation as complex. National Treasury should therefore continue to seek ways to simplify tax legislation, especially considering that more than a quarter of the total revenue from PIT is borne by individuals whose taxable income falls in the highest income tax bracket (National Treasury, 2020:41).

These two examples are not exhaustive of the findings of this study, but are presented here to highlight the additional level of insight and usability of the results provided by the CHAID

analysis, which could assist with tailor-made efforts to reduce tax compliance costs. This study is only the first step of the research journey relating to the tax compliance costs of individual taxpayers in South Africa. Such research on tax compliance costs cannot rely on a once-off measurement. Efforts can now be focused on effective policy measures and legislative changes to reduce tax compliance costs, increase tax compliance, and continually monitor the tax compliance costs of individual taxpayers in South Africa.

LIST OF REFERENCES

African Tax Administration Forum (ATAF). 2017. *African tax outlook 2017.* 2nd ed. Pretoria: ATAF.

Akhand, M. 2012. Coercion or persuasion? Making large corporations tax compliant in Bangladesh. PhD thesis: University of Birmingham, Birmingham.

Allers, M. 1994. *Administrative and compliance costs of taxation and public transfers in the Netherlands.* Groningen: Wolters Noordhof.

Alm, J. 1999. Tax compliance and administration. *Journal of Public Administration and Public Policy*, 72:741-768.

Alm, J. & Torgler, B. 2011. Do ethics matter? Tax compliance and morality. *Journal of Business Ethics*, 101(4):635-651. doi.org/10.1007/s10551-011-0761-9.

Andrews, D., Nonnecke, B. & Preece, J. 2003. Electronic survey methodology: A case study in reaching hard-to-involve internet users. *International Journal of Human-Computer Interaction*. 16(2):185-210. doi.org/10.1207/s15327590ijhc1602_04.

Anieting, A. & Mosugu, J. 2017. Comparison of quota sampling and snowball sampling. *Indian Scholar*, 3(3):33-36.

Blaufus, K., Eichfelder, S. & Hundsdoerfer, J. 2014. Income tax compliance costs of working individuals. *Public Finance Review*, 42(6):800-829. doi.org/10.1177/1091142113488162.

Blaufus, K., Hechtner, F. & Jarzembski, J.K. 2019. The income tax compliance costs of private households: Empirical evidence from Germany. *Public Finance Review*, 47(5):925-966. doi.org/10.1177/1091142119866147.

Blažić, H. 2004. Personal income tax compliance costs at an individual level in Croatia. *Australian Tax Forum*, 19(3):325-352.

Bobek, D.D., Hageman, A.M. & Kelliher, C.F. 2013. Analyzing the role of social norms in tax compliance behavior. *Journal of Business Ethics*, 115(3):451-468. doi.org/10.1007/s10551-012-1390-7.

Blockchain Council. 2020. *What is the principle of the blockchain? And how it is applied to life?* [Online] Available from: https://www.blockchain-council.org/blockchain/what-is-the-principle-of-the-blockchain-and-how-is-it-applied-to-life/ [Accessed: 2020-09-30].

Blumenthal, M. & Slemrod, J. 1992. The compliance cost of the US individual income tax system: A second look after tax reform. *National Tax Journal*, 45(2):185-202.

Braithwaite, V. 2007. Responsive regulation and taxation: Introduction. *Law & Policy. Wiley Online Library*, 29(1):3-10. doi.org/10.1111/j.1467-9930.2007.00242.x.

Brewer, M., Saez, E. & Shephard, A. 2010. Means-testing and tax rates on earnings. In: Mirrlees, J.A. (chair), Adam, S., Besley, T., Blundell, R., Bond, S., Chote, R., Gammie, M., Johnson, P., Myles, G. and Poterba, J.M. (eds), *Dimensions of tax design: The Mirrlees Review* (pp. 90-173). New York, NY: Oxford University Press.

Burrell, G. & Morgan, G. 1979. *Sociological paradigms and organizational analysis*. London: Heinemann.

Chattopadhyay, S. & Das-Gupta, A. 2002. *The compliance cost of the personal income tax and its determinants*. New Delhi: National Institute of Public Finance and Policy.

Coolidge, J. 2012. Findings of tax compliance cost surveys in developing countries. *eJournal of Tax Research*, 10(2):250-303.

Costello, A.B. & Osborne, J. 2005. Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research, and Evaluation*, 10(1):7-15.

Creswell, J.W. 2013. *Research design: Qualitative, quantitative, and mixed methods approaches*. 4th ed. Thousand Oaks, CA: Sage.

Crouse, T. & Lowe, P.A. 2018. Snowball sampling. In: Frey, B.B. (ed.), *The SAGE encyclopedia of educational research, measurement, and evaluation* (p.1532). Thousand Oaks, CA: Sage. doi. org/10.4135/9781506326139.

Da Silva, F.P., Guerreiro, R. & Flores, E. 2019. Voluntary versus enforced tax compliance: The slippery slope framework in the Brazilian context. *International Review of Economics*, 66(2):147-180. doi.org/10.1007/s12232-019-00321-0.

Daniel, J. 2012. Choosing the type of nonprobability sampling. In: Daniel, J. (ed.), *Sampling essentials: Practical guidelines for making sampling choices* (pp. 81-124). Thousand Oaks, CA: Sage. doi.org/10.4135/9781452272047.

Davis Tax Committee (DTC). 2017. *Report on tax administration September 2017*. [Online] Available from: https://www.polity.org.za/article/davis-tax-committee-final-reports-2017-11-13 [Accessed: 2018-02-21].

Delgado, M.L., Salinas, J. & Sanz, J.F. 2001. Hidden tax burden of the personal income tax: Evidence from the recent tax reform in Spain. *Australian Tax Forum*, 16:463-482.

Diaz, C. & Delgado, M.L. 1995. The compliance costs of personal income tax in Spain. In: Sandford, C. (ed.), *Tax compliance costs measurement and policy* (pp. 210-225). Bath: Fiscal Publications.

DTC – see Davis Tax Committee

Dunn, O.D. 1964. Multiple comparisons using rank sums. *Technometrics*, 6(3):241-252.

Eichfelder, S. & Kegels, C. 2014. Compliance costs caused by agency action? Empirical evidence and implications for tax compliance. *Journal of Economic Psychology*, 40:200-219. doi.org/10.1016/j.joep.2012.08.012.

Eichfelder, S. & Schorn, M. 2012. Tax compliance costs: A business-administration perspective. *FinanzArchiv: Public Finance Analysis. Mohr Siebeck.* 68(2):191-230. doi.org/10.1628/001522112x639981.

Eichfelder, S. & Vaillancourt, F. 2014. Tax compliance costs: A review of cost burdens and cost structures. *Hacienda Pública Española/Review of Public Economics*, 210(3):111-148. doi.org/10.7866/hpe-rpe.14.3.5.

Eisinga, R., Te Grotenhuis, M. & Pelzer, B. 2013. The reliability of a two-item scale: Pearson, Cronbach, or Spearman-Brown? *International Journal of Public Health,* 58(4):637-642. doi.org/10.1007/s00038-012-0416-3.

Erard, B. & Ho, C.C. 2003. Explaining the U.S. income tax compliance continuum. *eJournal of Tax Research,* 1(2):93-105.

Etikan, I., Alkassim, R. & Abubakar, S. 2016. Comparision[294] of snowball sampling and sequential sampling technique. *Biometrics & Biostatistics International Journal*, 3(1):55-56. doi.org/10.15406/bbij.2016.03.00055.

European Commission. 2013. *Taxation papers No 40 – A review and evaluation of methodologies to calculate tax compliance costs.* [Online] Available from: https://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/gen_info/economic_analysis/tax_papers/taxation_paper_40.pdf [Accessed: 2017-06-20].

---

[294] Misprint in the original.

Evans, C. 2003. Studying the studies: An overview of recent research into taxation operating costs. *eJournal of Tax Research*, 1(1):64-92.

Evans, C. 2008. Taxation compliance and administrative costs: An overview. In: Lang, M., Obermair, C., Schuch, J., Staringer, C. & Weninger, P. (eds), *Tax compliance for companies in an enlarged European community* (pp. 447-468). London: Kluwer Law International.

Evans, C., Ritchie, K., Tran-Nam, B. & Walpole, M. 1997. *A report into taxpayer costs of compliance.* Canberra: Australian Government Publishing Service.

Evans, C. & Tran-Nam, B. 2014. Tax compliance costs in New Zealand: An international comparative evaluation. *New Zealand Journal of Taxation Law & Policy*, 20(4):339-361*.*

Field, A. 2013. *Discovering statistics using IBM SPSS Statistics.* London: Sage.

Fink, A. 2003. Data management. In: Fink, A. *The survey kit: How to manage, analyze and interpret survey data* (pp. 1-24). Thousand Oaks, CA: Sage. doi.org/10.4135/9781412984454.

Flanagan, J.C. 1954. The critical incident technique. *Psychological Bulletin*, 51(4):327-358. doi.org/10.1037/h0061470.

Frecknall-Hughes, J. 2014. *The theory, principles and management of taxation: An introduction.* London: Routledge.

Gangl, K., Muehlbacher, S., De Groot, M., Goslinga, S., Hofmann, E., Kogler, C., Antonides, G. & Kirchler, E. 2013. "How can I help you?" Perceived service orientation of tax authorities and tax compliance. *Public Finance Analysis*, 69(4):487-510. doi.org/10.1628/001522113x675683.

Gobena, L.B. & Van Dijke, M. 2016. Power, justice, and trust: A moderated mediation analysis of tax compliance among Ethiopian business owners. *Journal of Economic Psychology*, 52:24-37. doi.org/10.1016/j.joep.2015.11.004.

Graskie, M.A. 2020. A comparative study of the complexity of trust tax legislation in selected Southern African Development Community countries. Unpublished MCom thesis, University of Pretoria, Pretoria.

Gueydi, S. & Abdellatif, M.M. 2018. The transformation of tax administration functions in the automatic exchange of information era – a developing country's perspective. *eJournal of Tax Research,* 16:780-800.

Guyton, J.L., O'Hare, J.F., Stavrianos, M.P. & Toder, E.J. 2003. Estimating the compliance cost of the US individual income tax. *National Tax Journal*, 56(3):673-688.

Hansford, A. & Hasseldine, J. 2012. Tax compliance costs for small and medium sized enterprises: The case of the UK. *eJournal of Tax Research,* 10(2):288-303.

Highfield, R., Evans, C. & Walpole, M. 2018. The development and testing of a diagnostic tool for assessing VAT compliance costs: Pilot study findings. *eJournal of Tax Research,* 16:620.

Hoelter, L., Pienta, A. & Lyle, J. 2016. Data preservation, secondary analysis, and replication: Learning from existing data. In: Wolf, C., Joye, D., Smith T.W. & Fu, Y. (eds), *The SAGE handbook of survey methodology* (pp. 651-661). London: Sage. doi.org/10.4135/9781473957893.

Hofmann, E., Voracek, M., Bock, C. & Kirchler, E. 2017. Tax compliance across sociodemographic categories: Meta-analyses of survey studies in 111 countries. *Journal of Economic Psychology*, 62:63-71. doi.org/10.1016/j.joep.2017.06.005.

Hoynes, H. 2010. Means-testing and tax rates on earnings: Commentary by Hilary Hoynes. In: Mirrlees, J.A. (chair), Adam, S., Besley, T., Blundell, R., Bond, S., Chote, R., Gammie, M., Johnson, P., Myles, G. and Poterba, J.M. (eds), *Dimensions of tax design: The Mirrlees Review* (pp. 174-183). New York, NY: Oxford University Press.

Hudson, J. & Godwin, M. 2000. The compliance costs of collecting direct tax in the UK: An analysis of PAYE and National Insurance. *Journal of Public Economics,* 77(1):29-44. doi.org/10.1016/s0047-2727(99)00088-2.

Ibrahim, I. 2017. *Theoretical issues for tax compliance costs study.* International Conference on Accounting Studies (ICAS), Putrajaya, Malaysia, 18-20 September.

ICASA – see Independent Communications Authority of South Africa

Independent Communications Authority of South Africa (ICASA). 2016. *Numbering plan regulations*. [Online] Available from: https://www.icasa.org.za/legislation-and-regulations/numbering-plan-regulations [Accessed: 2020-09-19].

Internal Revenue Service (IRS). 2019a. *Your rights as a taxpayer*. [Online] Available from: https://www.irs.gov/forms-pubs/about-publication-1 [Accessed: 2020-02-22].

Internal Revenue Service (IRS). 2019b. *2019 Instructions 1040 and 1040-SR.* [Online] Available from: https://www.irs.gov/form1040 [Accessed: 2020-02-22].

IRS – see Internal Revenue Service

James, S. 2012. *A dictionary of taxation*. 2nd ed. Cheltenham: Edward Elgar. doi.org/10.4337/9781781002575.

Kass, G.V. 1980. An exploratory technique for investigating large quantities of categorical data. *Applied Statistics*, 29(2):119-127. doi.org/10.2307/2986296.

Kastlunger, B., Lozza, E., Kirchler, E. & Schabmann, A. 2013. Powerful authorities and trusting citizens: The Slippery Slope Framework and tax compliance in Italy. *Journal of Economic Psychology*, 34:36-45. doi.org/10.1016/j.joep.2012.11.007.

Kerr, J. 2012. Tax return simplification: Risk key engagement, a return to risk. *eJournal of Tax Research*, 10:465-482.

Kirchler, E. 2007. *The economic psychology of tax behaviour*. Cambridge: Cambridge University Press.

Kirchler, E., Hoelzl, E. & Wahl, I. 2008. Enforced versus voluntary tax compliance: The "slippery slope" framework. *Journal of Economic Psychology*, 29(2):210-225. doi.org/10.1016/j.joep.2007.05.004.

Kirchler, E. & Wahl, I. 2010. Tax compliance inventory TAX-I: Designing an inventory for surveys of tax compliance. *Journal of Economic Psychology,* 31(3):331-346. doi.org/10.1016/j.joep.2010.01.002.

Kline, T.J. 2005. Reliability of test scores and test items. In: Kline, T.J. *Psychological testing: A practical approach to design and evaluation* (pp. 167-184). Thousand Oaks, CA: Sage. doi.org/10.4135/9781483385693.

Klun, M. 2004. Compliance costs for personal income tax in a transition country: The case of Slovenia. *Fiscal Studies*, 25(1):93-104. doi.org/10.1111/j.1475-5890.2004.tb00098.x.

Klun, M. 2009. Pre-filled income tax returns: Reducing compliance costs for personal income taxpayers in Slovenia. *Financial Theory and Practice,* 33(2):219-233.

Klun, M. & Blažić, H. 2005. Tax compliance costs for companies in Slovenia and Croatia. *FinanzArchiv: Public Finance Analysis*, 61(3):418-437. doi.org/10.1628/001522105774978967.

Laerd Statistics. 2015. *One-sample t-test using SPSS Statistics. Statistical tutorials and software guides.* [Online] Available from: https://statistics.laerd.com/ [Accessed: 2020-03-25].

Lerman, A.H. & Lee, P.S. 2004. Evaluating the ability of the individual taxpayer burden model to measure components of taxpayer burden: The alternative minimum tax as a case study. *IRS Research Bulletin, Proceedings of the 2004 IRS Research Conference*, 139-172.

Lewis, E.F., Hardy, M. & Snaith, B. 2013. An analysis of survey reporting in the imaging professions: Is the issue of non-response bias being adequately addressed? *Radiography*, 19(3):240-245. doi.org/10.1016/j.radi.2013.02.003.

Lignier, P. & Evans, C. 2012. The rise and rise of tax compliance costs for the small business sector in Australia. *Australian Tax Forum*, 27:615-672.

Lopes, C.M., De Basto, J.X. & Martins, A. 2012. Compliance costs of individual income taxation: Some empirical evidence from Portugal. *Journal of Higher Education Theory and Practice,* 12(4):151-164.

Lopes, C.M. & Martins, A. 2013. The psychological costs of tax compliance: Some evidence from Portugal. *Journal of Applied Business and Economics*, 14(2):53-61.

Luttmer, E.F.P. & Singhal, M. 2014. Tax morale. *Journal of Economic Perspectives*, 28(4):149-168. doi.org/10.1257/jep.28.4.149.

Malmer, H. 1995. The Swedish tax reform in 1990-1991 and tax compliance costs in Sweden. In: Sandford, C. (ed.), *Tax compliance costs measurement and policy* (pp. 226-262). Bath: Fiscal Publications.

Marcuss, R., Contos, G., Guyton, J., Langetieg, P., Lerman, A., Nelson, S., Schafer, B. & Vigil, M. 2013. Income taxes and compliance costs: How are they related? *National Tax Journal,* 66(4):833-854. doi.org/10.17310/ntj.2013.4.03.

Mathieu, L., Waddams Price, C. & Antwi, F. 2010. The distribution of UK personal income tax compliance costs. *Applied Economics,* 42(3):351-368. doi.org/10.1080/00036840701604370.

McKerchar, M.A. & Evans, C. 2009. Sustaining growth in developing economies through improved taxpayer compliance: Challenges for policy makers and revenue authorities. *eJournal of Tax Research,* 7(2):171-201.

Mengistu, T. 2016. Compliance cost of employment income tax payers in Addis Ababa city administration. Unpublished Master's dissertation, Addis Ababa University, Addis Ababa.

Mera, A. 2011. Compliance cost of individual income tax payers in Addis Ababa. Unpublished Master's dissertation, Addis Ababa University, Addis Ababa.

Middleton, F. 2019. Reliability vs validity: What's the difference? [Online] Available from: https://www.scribbr.com/methodology/reliability-vs-validity/ [Accessed: 2020-06-26].

Moshoette, A. (AMoshoette@sars.gov.za) 2018. Individuals. [Email to:] Stark, K. (Karen.stark@up.ac.za) 30 August 2018.

Moshoette, A. (AMoshoette@sars.gov.za) 2019a. FW: Approved letters. [Email to:] Stark, K. (Karen.stark@up.ac.za) 13 March 2019.

Moshoette, A. (AMoshoette@sars.gov.za) 2019b. FW: [GVI #294709] INT001-1050: Bulk Email: Cost of Tax Compliance Survey REPORT. [Email to:] Stark, K. (Karen.stark@up.ac.za) 10 April 2019.

Murphy, K. 2004. The role of trust in nurturing compliance: A study of accused tax avoiders. *Law and Human Behavior*, 28(2):187-209. doi.org/10.1023/b:lahu.0000022322.94776.ca.

National Treasury. 2017. *Budget Review 2017*. [Online] Available from: http://www.treasury.gov.za/documents/national%20budget/2017/review/FullBR.pdf [Accessed: 2020-11-02].

National Treasury. 2018. *Budget Review 2018*. [Online] Available from: http://www.treasury.gov.za/documents/national%20budget/2018/review/FullBR.pdf [Accessed: 2020-11-02].

National Treasury. 2019. *Budget Review 2019*. [Online] Available from: http://www.treasury.gov.za/documents/national%20budget/2019/review/FullBR.pdf [Accessed: 2020-11-02].

National Treasury. 2020. *Budget Review 2020*. [Online] Available from: http://www.treasury.gov.za/documents/National%20Budget/2020/review/FullBR.pdf [Accessed: 2020-03-15].

National Treasury and SARS. 2019. *2019 Tax Statistics.* Pretoria. Available from: http://www.sars.gov.za/About/SATaxSystem/Pages/Tax-Statistics.aspx [Accessed: 2020-01-12].

OECD – see Organisation for Economic Co-operation and Development

OECD/FIIAPP – see Organisation for Economic Co-operation and Development /International and Ibero-American Foundation for Administration and Public Policies

Office of the Tax Ombud (OTO). 2018. *Tax Ombud Annual report 2017/18.* [Online] Available from: http://www.taxombud.gov.za/Documents/Tax%20Ombud% 20Annual%20Report%2017_18.pdf [Accessed: 2018-09-10].

Office of the Tax Ombud (OTO). 2020. *Tax Ombud's systemic investigations report.* [Online] Available from: http://www.taxombud.gov.za/Documents/SYSTEMIC INVESTIGATIONREPORT2020.pdf [Accessed: 2020-09-26].

Önder, E. & Uyar, S. 2017. CHAID analysis to determine socioeconomic variables that explain students' academic success. *Universal Journal of Educational Research*, 5(4):608-619. doi.org/10.13189/ujer.2017.050410.

Oppenheim, A.N. 1966. *Questionnaire design and attitude measurement.* New York, NY: Basic Books.

Organisation for Economic Co-operation and Development (OECD). 2004. *Compliance risk management: Managing and improving tax compliance.* https://www.oecd.org/ tax/administration/33818656.pdf [Accessed: 2020-11-05].

Organisation for Economic Co-operation and Development (OECD). 2015. *OECD Economic surveys: South Africa 2015.* Paris: OECD Publishing. doi.org/10.1787/eco_surveys-zaf-2015-en.

Organisation for Economic Co-operation and Development/International and Ibero-American Foundation for Administration and Public Policies (OECD/FIIAPP). 2015. *Building tax culture, compliance and citizenship: a global source book on taxpayer education.* Paris: OECD Publishing. doi.org/10.1787/9789264205154-en.

OTO – see Office of the Tax Ombud

Oxford Learner's Dictionaries. n.d. [Online] Available from: https://www.oxford learnersdictionaries.com/us/definition/english/burden_1?q=burden [Accessed: 2020-08-06].

Pallant, J. 2007. *SPSS survivor manual.* 3rd ed. Buckingham: Open University Press & Maidenhead: McGraw-Hill Education.

Pieterse, D., Gavin, E & Kreuser, F. 2018. Introduction to the South African Revenue Service and National Treasury firm-level panel. *South African Journal of Economics*, 86(S1):6-39. doi.org/10.1111/saje.12156.

Polinsky, M. A. & Shavell, S. 2000. The economic theory of public enforcement of law. *Journal of Economic Literature,* 38:45-76. doi.org/10.1257/jel.38.1.45.

Pope, J. 1989. The compliance costs of personal income taxation – a review of the issues. *Australian Tax Forum*, 6(2):125-142.

Pope, J. 1993. The compliance costs of taxation in Australia and tax simplification: The issues. *Australian Journal of Management*, 18(1):69-89. doi.org/10.1177/031289629301800104.

Pope, J. 1995. The compliance costs of major taxes in Australia. In: Sandford, C. (ed.), *Tax compliance costs measurement and policy* (pp. 101-125). Bath: Fiscal Publications.

Pope, J. 2000. *The administrative and compliance costs of international taxation: An introduction for research students*. Perth, Australia: School of Economics and Finance, Curtin Business School, Curtin University of Technology.

Pope, J. & Fayle, R. 1990. The compliance costs of personal income taxation in Australia 1986/87: Empirical results. *Australian Tax Forum*, 7(1):85-126.

Ramaphosa, C. 2019. *State of the Nation Address (SONA) 2019*. [Online] Available from: https://www.gov.za/speeches/president-cyril-ramaphosa-2019-state-nation-address-7-feb-2019-0000 [Accessed: 2019-04-08].

Republic of South Africa (RSA). 1962. *Income Tax Act, No. 58 of 1962.* [Online] Available from: https://www.acts.co.za/income_tax_act_1962 [Accessed: 2019-04-09].

Republic of South Africa (RSA). 1996. *Constitution of the Republic of South Africa, Act 108 of 1996* [Online] Available from: https://www.gov.za/documents/ constitution/Constitution-Republic-South-Africa-1996-1 [Accessed: 2019-04-09].

Republic of South Africa (RSA). 1997. *South African Revenue Service Act, No. 34 of 1997.* [Online] Available from: https://www.gov.za/sites/default/files/ gcis_document/201409/a34-97.pdf [Accessed: 2019-04-09].

Republic of South Africa (RSA). 2011. *Tax Administration Act, No. 28 of 2011*. [Online] Available from: https://www.acts.co.za/tax_administration_act_2011_ act_no_28_of_2011_ [Accessed 2019-04-09].

Republic of South Africa (RSA). 2014. *Rules promulgated under section 103 of the Tax Administration Act, 2011. Government Gazette,* 550(37819):1-48 [Online] Available from: https://www.sars.gov.za/AllDocs/LegalDoclib/SecLegis/LAPD-LSec-TAdm-PN-2014-05%20-%20Notice%20550%20GG%2037819%2011 %20July%202014.pdf [Accessed 2020-04-06].

Republic of South Africa (RSA). 2017. *Taxation Laws Amendment Act, No. 17 of 2017.* *Government Gazette,* 1451(41342): [Online] Available from: https://www.sars. gov.za/AllDocs/LegalDoclib/AmendActs/LAPD-LPrim-AA-2017-07%20- %20Taxation%20Laws%20Amendment%20Act%2017%20of%202017%20GG%20 41341%2018%20December%202017.pdf [Accessed 2020-04-06].

RSA – see Republic of South Africa

Rupert, P., Schweitzer, M.E., Severance-Lossin, E. & Turner, E. 1996. Earnings, education, and experience. *Economic Review*, 32(4):2-12.

SAICA – see South African Institute of Chartered Accountants

Sandford, C. 1973. *Hidden costs of taxation.* London: Institute for Fiscal Studies.

Sandford, C. 1976. Tax compliance costs matter: Chancellor please note. *British Tax Review*, 205-212.

Sandford, C.T. 1994. International comparisons of administrative and compliance costs of taxation. *Australian Tax Forum*, 11:291-309.

Sandford, C. 1995. The rise and rise of tax compliance costs. In: Sandford, C. (ed.), *Tax compliance costs: Measurement and policy* (pp. 1-11). Bath: Fiscal Publications.

Sandford, C., Godwin, M., & Hardwick, P. 1989. *Administrative and compliance costs of taxation.* Bath: Fiscal Publications.

Sapiei, N.S. & Abdullah, M. 2008. The compliance costs of the personal income taxation in Malaysia. *International Review of Business Research Papers*, 4(5):219-230.

SARS – see South African Revenue Service

Saunders, M., Lewis, P. & Thornhill, A. 2019. *Research methods for business students.* 8th ed*.* Harlow: Pearson Education.

Saxton, J. 2005. *Individuals and the compliance costs of taxation*. A Joint Economic Committee Study. Citeseer.

Serafimovikj, G., Badarovski, T., Jovanov, T. & Sofijanova, E. 2017. Expectations and brand experience: Millennials – the generation that can shape the future service quality of companies in a developing economy. *Balkan Social Science Review*, 10(10):151-169.

Singh, J. & Sharma, P. 2008. Compliance costs of individual income tax laws in India and US: An empirical evidence. *Asia Pacific Business Review*, 4(3):22-35. doi.org/10.1177/097324700800400303.

Singh, J. & Sharma, P. 2010. Compliance cost burden of individual income-tax assessees in India: An empirical study. *Management and Labour Studies,* 35(1):7-24. doi.org/10.1177/0258042x1003500101.

Slemrod, J. (ed.). 1992. *Why people pay taxes. Tax compliance and enforcement.* Ann Arbor, MI: University of Michigan Press.

Slemrod, J. & Sorum, N. 1984. *The compliance cost of the US individual income tax system.* National Bureau of Economic Research, Cambridge, MA. doi.org/10.3386/w1401.

Smith, A. [1776] 2010. *The wealth of nations: An inquiry into the nature and causes of the wealth of nations.* Petersfield: Harriman House.

Smith, K.W. & Stalans, L.J. 1991. Encouraging tax compliance with positive incentives: A conceptual framework and research directions. *Law & Policy*, 13(1):35-53.

Smulders, S. & Naidoo, G. 2013. Addressing the small business tax compliance burden – evidence from South Africa. *Journal of Economic and Financial Sciences,* 6(1):33-53. doi.org/10.4102/jef.v6i1.275.

Smulders, S., Stark, K. & Tickle, D. 2019. Statutory and effective complexity for individual. In: Evans, C., Franzsen, R. & Stack E. (eds), *Taxpayers in South Africa Tax simplification: An African perspective* (pp. 204-236). Pretoria: Pretoria University Law Press (PULP).

Smulders, S. & Stiglingh, M. 2008. Annual tax compliance costs for small businesses: A survey of tax practitioners in South Africa. *South African Journal of Economic and Management Sciences*, 11(3):354-371. doi.org/10.4102/sajems.v11i3.464.

Smulders, S., Stiglingh, M., Franzsen, R. & Fletcher, L. 2012. Tax compliance costs for the small business sector in South Africa – establishing a baseline. *e-Journal of Tax Research*, 10(2):184-226.

South African Institute of Chartered Accountants (SAICA). 2016. *Research Grant Program Tax Division: 2016, Total cost of tax collection in South Africa*. Unpublished document prepared for SAICA.

South African Institute of Chartered Accountants (SAICA). 2020. *Accountancy SA. Integritax. Restoring confidence in SARS. Engaging taxpayers in an administratively fair manner.* [Online] Available from: http://cdn.coverstand.com/52861/672365/5dbde73e9e7b9e48a0d4fb9015ca03458b6800da.34.pdf [Accessed: 2020-10-04].

South African Revenue Service (SARS). 2010. *SARS officials to assist taxpayers in their communities.* [Online] Available from: https://www.sars.gov.za/AllDocs/Documents/MediaReleases/2010/SARS-MR-2010-042%20-%20Media%20release%20on%20SARS%20officials%20to%20assist%20taxpayers%20in%20their%20communities%20-%2026%20August%202010.pdf [Accessed: 2020-07-27].

South African Revenue Service (SARS). 2011. *Early bird taxpayers set record for Tax Season.* [Online] Available from: https://www.sars.gov.za/AllDocs/Documents/MediaReleases/2011/SARS-MR-2011-021%20-%20Media%20Release%20on%20Early%20bird%20taxpayers%20set%20record%20for%20Tax%20Season%20-%202%20August%202011.pdf [Accessed: 2020-07-27].

South African Revenue Service (SARS). 2012. *Must a taxpayer deregister with SARS if he/she is no longer liable for provisional tax?* [Online] Available from: https://www.sars.gov.za/FAQs/Pages/2012.aspx [Accessed: 2020-08-19].

South African Revenue Service (SARS). 2016. *Strategic plan 2016/2017 – 2020/2021.* [Online] Available from: http://www.sars.gov.za/About/Pages/Annual-Reports-and-Strategic-Plans.aspx. [Accessed: 2019-04-09].

South African Revenue Service (SARS). 2018a. *Annual Report 2017/18.* [Online] Available from: http://www.sars.gov.za/About/Pages/Annual-Reports-and-Strategic-Plans.aspx [Accessed: 2019-04-09].

South African Revenue Service (SARS). 2018b. *Minister of Finance speaking notes: Opening of Tax Season 2018.* [Online] Available from: https://www.sars.gov.za/AllDocs/Documents/2018%20Tax%20Season/Minister%20of%20Finance%20speaking%20notes%20Opening%20of%20Tax%20Season%202018.pdf [Accessed: 2020-04-04].

South African Revenue Service (SARS). 2018c. *Statement by Acting Commissioner of SARS: Opening of Tax Season 2018.* [Online] Available from:

https://www.sars.gov.za/AllDocs/Documents/ 2018%20Tax%20Season/Opening%20of%20Tax%20Season%202018%20Acting %20Commissioner%20Speech.pdf [Accessed: 2020-09-20].

South African Revenue Service (SARS). 2019a. *Annual Performance Plan 2019/20.* [Online] Available from: http://www.sars.gov.za/About/Pages/Annual-Reports-and-Strategic-Plans.aspx [Accessed: 2020-02-22].

South African Revenue Service (SARS). 2019b. *Being Audited or Selected for Verification.* [Online] Available from: https://www.sars.gov.za/ClientSegments/Individuals/What-If-Not-Agree/Pages/Being-Audited.aspx [Accessed: 2020-05-17].

South African Revenue Service (SARS). 2019c. *Supporting documents for filing.* [Online] Available from: https://www.sars.gov.za/TaxTypes/PIT/Tax-Season/Pages/Supporting%20Docs%20Filing.aspx [Accessed: 2020-05-17].

South African Revenue Service (SARS). 2019d. *Request for reasons.* [Online] Available from: https://www.sars.gov.za/ ClientSegments/Individuals/What-If-Not-Agree/Pages/Request-for-Reasons.aspx [Accessed: 2020-05-17].

South African Revenue Service (SARS). 2019e. *Advance Tax Rulings (ATR).* [Online] Available from: http://www.sars. gov.za/Legal/Interpretation-Rulings/Pages/Advance-Tax-Rulings-ATR.aspx [Accessed: 2020-05-07].

South African Revenue Service (SARS). 2019f. Guide on the determination of medical tax credits (Issue 10). [Online] Available from: https://www.sars.gov.za/TaxTypes/PIT/Pages/Additional-Medical-Expenses-Tax-Credit.aspx [Accessed: 2020-04-06].

South African Revenue Service (SARS). 2020a. *Strategic plan 2020/2021 - 2024/2025.* [Online] Available from: https://www.sars.gov.za/AllDocs/SARSEntDoclib/Ent/SARS-Strat-24%20-%20SARS%20Strategic%20Plan%202020-2021-2024-2025%20-%2011%20May%202020.pdf [Accessed: 2020-09-13].

South African Revenue Service (SARS). 2020b. *Tax and disability.* [Online] Available from: https://www.sars.gov.za/TaxTypes/PIT/Pages/Tax-and-Disability.aspx [Accessed: 2021-03-12].

South African Revenue Service (SARS). 2020c. *New developments in next phase of Individual Filing Season.* [Online] Available from: https://www.sars.gov.za/Media/MediaReleases/Pages/27-August-2020-New-developments-in-next-phase-of-Individual-Filing-Season.aspx [Accessed: 2020-09-20].

South African Revenue Service (SARS). 2020d. *South African Revenue Service.* [Online] Available from: https://www.sars.gov.za [Accessed: 2020-09-19].

South African Revenue Service (SARS). 2020e. *External guide: Book an appointment at a SARS branch.* [Online] Available from: https://www.sars.gov.za/AllDocs/OpsDocs/Guides/GEN-BO-09-G01%20-%20Book%20an%20Appointment%20at%20a%20SARS%20Branch%20-%20External%20Guide.pdf [Accessed: 2020-07-27].

South African Revenue Service (SARS). 2020f. *Need to verify your banking details?* [Online] Available from: https://www.sars.gov.za/ClientSegments/Individuals/Need-Help/Tax-Questions-Answered/Pages/Need-to-verify-your-banking-details.aspx [Accessed: 2020-08-19].

Stark, K. & Smulders, S. 2019. Compliance costs matter – The case of South African individual taxpayers. *eJournal of Tax Research,* 16(3):801-823.

Statistics South Africa. 2019. Mid-year population estimates 2019. [Online] Available from: www.statssa.gov.za/publications/P0302/P03022019.pdf [Accessed: 2020-03-09].

Steyn, F. 2011. An exploratory study of tax compliance costs for individuals as taxpayers in South Africa. Unpublished Master's mini-dissertation, University of Pretoria, Pretoria.

Su, N. 2018. Positivist qualitative methods. In: Cassell, C., Cunliffe, A.L. & Grandy, G. (eds), *The Sage handbook of qualitative business and management research methods: History and traditions* (pp. 17-31). London: Sage. doi.org/10.4135/9781526430212.

TaxTim. 2016. *How to deregister for provisional tax.* [Online] Available from: https://www.taxtim.com/za/answers/how-to-deregister-for-provisional-tax#:~:text=All%20you%20need%20to%20do%20is%20go%20onto,will%20take%20you%20off%20as%20a%20provisional%20taxpayer [Accessed: 2020-08-19].

Thimmesch, A.B. 2015. Testing the models of tax compliance: The use-tax experiment. *Utah Law Review*, 5:1083-1141.

Thomas, E.H. & Galambos, N. 2004. What satisfies students? Mining student-opinion data with regression and decision tree analysis. *Research in Higher Education,* 45(3):251-269*.* doi.org/10.1023/b:rihe.0000019589.79439.6e.

Tjondro, E., Santosa, K.G. & Prayitno, N. 2019. Perceptions of service-orientation and trust of tax officers between Millennials, X, and Baby Boomers. *Jurnal Ilmiah Manajemen*, 9(1):1-18. doi.org/10.22441/mix.2019.v9i1.001.

Torgler, B. 2003. Tax morale: Theory and empirical analysis of tax compliance. PhD thesis: University of Basel, Basel.

Tran-Nam, B. & Evans, C. 2002. The impact of Cedric Sandford on the discipline of tax compliance costs. *Australian Tax Forum*, 17:389-405*.*

Tran-Nam, B., Evans, C. & Lignier, P. 2014. Personal taxpayer compliance costs: Recent evidence from Australia. *Australian Tax Forum*, 29:136-169.

Tran-Nam, B., Evans, C., Walpole, M. & Ritchie, K. 2000. Tax compliance costs: Research methodology and empirical evidence from Australia. *National Tax Journal*, 53(2):229-252. doi.org/10.17310/ntj.2000.2.04.

Tran-Nam, B., Lignier, P. & Evans, C. 2016. The impact of recent tax changes on tax complexity and compliance costs: The tax practitioners' perspective. *Australian Tax Forum*, 31:455-479.

Tyler, T.R. & Smith, H.J. 1998. Social justice and social movements. In: Gilbert, D.T., Fiske S.T., & Lindzey G. (eds), *The Handbook of Social Psychology, Vol. 3* (pp. 595-629). Boston, MA: McGraw-Hill.

UNESCO – see United Nations Educational, Scientific and Cultural Organisation

United Nations Educational, Scientific and Cultural Organisation (UNESCO). 2019. *Literacy rate*. [Online] Available from: http://uis.unesco.org/en/country/ZA [Accessed: 2020-04-10].

Vaillancourt, F. 1989. The administrative and compliance costs of the personal income tax and payroll tax system in Canada*. Canadian Tax Paper 86*. Toronto: Canadian Tax Foundation.

Vaillancourt, F. 2010. *The cost to Canadians of complying with personal income taxes.* Calgary: Fraser Institute.

Vaillancourt, F., Roy-César, É. & Barros, M.S. 2013. *The compliance and administrative costs of taxation in Canada, 2013.* Calgary: Fraser Institute.

Veit 2018. Swimming upstream: Leveraging data and analytics for taxpayer engagement – An Australian and international perspective. *eJournal of Tax Research,* 16(3):474-499.

Wahl, I., Kastlunger, B. & Kirchler, E. 2010. Trust in authorities and power to enforce tax compliance: An empirical analysis of the "Slippery Slope Framework." *Law & Policy*, 32(4):383-406. doi.org/10.1111/j.1467-9930.2010.00327.x.

Yesegat, W.A., Coolidge, J. & Corthay, L.O. 2017. Tax compliance costs in developing countries: Evidence in Ethiopia. *eJournal of Tax Research*, 15(1):77-104.

Yong, S., Lo, K., Freudenberg, B., & Sawyer, A. 2019. Tax compliance in the new millennium: Understanding the variables. *Australian Tax Forum*, 34(4):766-808.

Yong, S. & Martin, F. 2017. Tax compliance of ethnic minority immigrant entrepreneurs: A social capital perspective. *eJournal of Tax Research*, 15(1):51-76.

York, E. 2018. Reviewing different methods of calculating tax compliance cost. *Tax Foundation*. Fiscal Fact No. 608. Washington, DC.

You, Z., Si, Y.W., Zhang, D., Zeng, X., Leung, S.C. & Li, T. 2015. A decision-making framework for precision marketing. *Expert Systems with Applications*, 42(7):3357-3367. doi.org/10.1016/j.eswa.2014.12.022.

LIST OF CASES

Armstrong v CIR 1938 AD 343; 10 SATC 1 (A).

Metcash Trading Ltd v CSARS and Another 2000; 63 SATC 13.

SIP Project Managers (Pty) Ltd v CSARS 2020 (11521/2020) ZAGPPHC.

Appendix A   Survey questionnaire (Phase 1)

(Exported version of online questionnaire. Display logic information is provided in grey blocks.)

Summary
- Introduction (Q1.1)
- Employment status (Q2.1)
- Sources of income and types of expenditure (Q3.1 and Q3.2)
- Activities up to submission of tax return (Q4.1 – Q4.15)
- Verification requests and requests for reasons (Q5.1 – Q5.7)
- Provisional tax, penalties and/or interest (Q6.1 – Q6.4)
- Audit requests (Q7.1 – Q7.3)
- Dispute resolution (Q8.1 – Q8.13)
- Value of time (to calculate cost) (Q9.1 – Q9.3)
- Demographic questions (Q10.1 – Q10.5)
- Scale items (Q11.1 – Q11.7)
- Open-ended questions (Q11.8, Q12.1 – Q12.3)

Q1.1

Please read this before completing the survey

This survey should only be completed by an **individual who is a registered taxpayer** with the South African Revenue Service (SARS) **and who has submitted an income tax return for the 2016/17 tax year (namely for the period 1 March 2016 to 28 February 2017)**.

The survey will take approximately **15 to 20 minutes** to complete. It does not need to be completed in a single session as the system automatically saves a partially completed survey for up to 2 weeks after your last entry.

The purpose of this research is to establish the composition and magnitude of **tax compliance costs** incurred by individuals in South Africa. Tax compliance costs may include external costs (e.g. costs of tax practitioners), internal costs (own time spent) and non-labour costs (e.g. internet and travel costs), but exclude the cost of the tax itself (the tax liability).

This is part of a bigger project to determine the total tax compliance costs of all taxpayers in South Africa which will provide valuable data that will be utilised to enhance the tax system, making it simpler and more streamlined. Please refer to the **Participation Information Sheet** for further information about the project and your rights pertaining to the survey. *(A copy of the participation information sheet (i.e. informed consent) is provided in Appendix C).*

If you would like to discuss the survey or if you need help in completing particular questions please do not hesitate to contact the researcher via email (karen.stark@up.ac.za).

Thank you for your kind cooperation and assistance in completing this survey. By clicking the "NEXT" button you agree to participate in the survey voluntarily and are aware that you are free to withdraw at any time without any penalty.

Q2.1 Which of the following categories best describe your employment status?

o Employed: full-time (40 hours or more per week) (1)
o Employed: part-time (less than 40 hours per week) (2)
o Self-employed (e.g. sole proprietor or in partnership) (3)
o Unemployed, actively looking for work (4)
o Unemployed, NOT looking for work (e.g. home duties or studying)
o Retired

Q2.2 Which of the following best describe the sector that you currently work in or seeking employment in?

o Agriculture, forestry and fishing (1)
o Construction (2)
o Electricity, gas, water supply and waste services (3)
o Mining and quarrying (4)
o Manufacturing (5)
o Wholesale and retail trade (includes specialised repair services) (6)
o Catering and accommodation (includes restaurants and tourism) (7)
o Transport, storage and communications (8)
o Health care (includes medical, dental and veterinary services) (9)
o Educational services (includes teachers and academics) (10)
o Financing, insurance, real estate and business services (11)
o Community, social and personal services (includes public administration, recreation and cultural services) (12)

Q3.1 From which source/s did you earn income in respect of your 2016/17 tax year? *(Choose more than one if applicable.)*

o Unemployed with no income (1)
o Salary (including wages, allowances, benefits and overtime) (2)
o Commission (3)
o Director's income (4)
o Lump sum/s (from employer and/or retirement funds)
o Pension/s (or annuities)
o Business and professional income (including farming and rental income) (7)
o Capital gains (local and foreign from the sale of capital assets) (8)
o Investment income (local and foreign interest/dividends) (9)
o Foreign income (excluding investment income and capital gains) (10)
o Royalty income (11)
o Trust income (12)
o Other (please specify) (13) _____

Q3.2 Which of the following **expenditure** did you incur and declare on your 2016/17 personal income tax return submitted to SARS? *(Choose more than one if applicable.)*

o Expenditure relating to business and professional income (inc. farming and rental income) (1)
o Expenditure relating to commission income (2)
o Travel expenses (3)
o Contribution/s to retirement funds (pension, provident or retirement annuity funds) (4)
o Medical expenses (5)
o Donations (for which section 18A receipts were obtained) (6)
o Other expenses (please specify) (7) _____
o None of the above (8)

Q4.1 Who completed your 2016/17 income tax return?
o   I completed it myself (1)
o   A family member or friend (for free) (2)
o   SARS employee (3)
o   Tax practitioner (4)
o   Other (please specify) (5) _____

> Q4.2 to Q4.7 was only displayed IF Q4.1 = 1 (i.e. if respondent completed own tax return)

Q4.2 Why do you complete your income tax return yourself? *(Choose more than one if appropriate.)*
o   My tax affairs are very simple (1)
o   I am competent in tax matters (2)
o   I wish to keep my tax affairs private (3)
o   I think that tax practitioners charge more than their services are worth (4)
o   I cannot afford to pay a tax practitioner
o   I get enough help from guides on SARS' website
o   I get enough help from SARS' call centre (7)
o   Other (please specify) (8) _____

Q4.3 Estimate the **total time** that you spent on each activity up to the point of completing and submitting your 2016/17 income tax return (thus excluding requests from SARS for further information or supporting documentation) and paying the tax due. Include travel and waiting time if relevant. *Use decimals for fraction of hours (e.g. 0.5 for half hour) and if no time was spent on a particular activity, please type 0.*

	Hours
Learning/updating tax knowledge (including attending tax seminars and workshops) (1)	
Tax planning and tax advice (e.g. relating to structuring tax affairs) (2)	
Recordkeeping (compiling information needed for tax) (3)	
Dealing with SARS (e.g. relating to changing banking or other personal information) (4)	
Calculating tax, completing income tax return and paying tax (5)	

> Q4.4 was only displayed IF Q4.3(2) > 0 (i.e. time was spent on tax planning and tax advice)

Q4.4 How much did you pay for the tax planning and advice? (Do not use symbols or spaces, e.g. 1000 and not R1 000.) _____

> Q4.5 was only displayed IF Q4.3(3) > 0 (i.e. time was spent on recordkeeping).

Q4.5 What was the **biggest** contributing factor to your total time spent on recordkeeping (compiling information needed for tax)?
o   Recordkeeping of income (1)
o   Recordkeeping of **expenditure** relating to business and professional income (2)
o   Recordkeeping of **expenditure** relating to commission income (3)
o   Recordkeeping of travel expenses (against travel allowance) (4)
o   Recordkeeping of medical expenses
o   Recordkeeping of retirement fund contributions
o   Other (please specify) (7) _____

Q4.6 Estimate how much you incurred on **sundry expenditure** (excluding your time) <u>up to the point of completing and submitting</u> your 2016/17 income tax return and paying the tax due? *For example data bundles, internet cafe, petrol, telephone, stationery, taxation books, TaxTim and other like expenses.*
- R0 (1)
- R1 to R99 (2)
- R100 to R299 (3)
- R300 to R499 (4)
- R500 to R999 (5)
- R1 000 to R1 500 (6)
- More than R1 500 (please provide estimate, e.g. 2000 not R2 000) (7) _____

Q4.7 By what means did you submit your 2016/17 income tax return to SARS?
- e-Filing (1)
- Personally at a SARS branch (2)
- Post it to SARS (3)
- Put it in a drop box at a SARS branch (4)

> Q4.8 to Q4.15 was only displayed IF Q4.1 ≠ 1 (i.e. if respondent obtained help to complete and submit income tax return)

Q4.8 Estimate the **total time** that **you** spent up to the point of <u>handing your records over</u> to your family member/friend/tax practitioner or other person to complete and submit your 2016/17 income tax return on your behalf and then paying the tax due. *Include travel time if relevant. Use decimals for fraction of hours (e.g. 0.5 for half hour) and if no time was spent on a particular activity, please type 0.*

	Hours
Learning/updating tax knowledge (incl. attending tax seminars and workshops) (1)	
Tax planning and tax advice (e.g. tax opinions) (2)	
Recordkeeping (compiling information needed for tax) (3)	
Dealing with SARS (e.g. relating to changing banking or other personal information) (4)	
Dealing with family member/friend/tax practitioner (incl. providing information to them)(5)	
Paying the income tax due (6)	

> Q4.9 was only displayed IF Q4.8(3) > 0 (i.e. if respondent indicated time was spent on tax recordkeeping).

Q4.9 What was the **biggest** contributing factor to your total time spent on <u>recordkeeping</u> (compiling information needed for tax)?
- Recordkeeping of income (1)
- Recordkeeping of **expenditure** relating to business and professional income (2)
- Recordkeeping of **expenditure** relating to commission income (3)
- Recordkeeping of travel expenses (against travel allowance) (4)
- Recordkeeping of medical expenses (5)
- Recordkeeping of retirement fund contributions (6)
- Other (please specify) (7) _____

Q4.10 Estimate how much **you incurred** on **sundry expenditure** (excluding your time) up to the point of <u>handing your records over</u> to your family member/friend/tax practitioner or other person to complete and submit your income tax return on your behalf and to pay the tax due? *For example data bundles, internet cafe, petrol, telephone, stationery, taxation books and other like expenses.*
- o   R0 (1)
- o   R1 to R99 (2)
- o   R100 to R299 (3)
- o   R300 to R499 (4)
- o   R500 to R999 (5)
- o   R1 000 to R1 500 (6)
- o   More than R1 500 (please provide estimate, e.g. 2000 (not R2 000)) (7) _____

Q4.11 and Q4.12 were only displayed IF Q4.1 = 2 (i.e. if respondent obtained help from family member or friend for free)

Q4.11 How much time did your **family member or friend** spend on completing and submitting your 2016/17 income tax return?
- o   I don't know (1)
- o   Up to 1 hour (2)
- o   >1 to 2 hours (3)
- o   >2 to 5 hours (4)
- o   >5 to 8 hours (5)
- o   More than 8 hours (please indicate the hours) (6) _____

Q4.12 What do you think is the TOTAL RAND VALUE of the time spent by your friend or family member to submit your 2016/17 income tax return? *(Do not use symbols or spaces, e.g. 1000 not R1 000)*_____

Q4.13 to Q4.15 were only displayed IF Q4.1 = 3 (i.e. if respondent obtained paid assistance)

Q4.13 Why did you need the assistance of a tax practitioner with your 2016/17 income tax return? *Choose more than one if appropriate.*
- o   The stress from complying with my tax obligations is too much. (1)
- o   My income tax return is too complicated. (2)
- o   Tax legislation is too difficult to understand. (3)
- o   Tax legislation changes too often. (4)
- o   I want to maximise my allowable deductions/rebates. (5)
- o   I want to get my tax refund quickly. (6)
- o   My tax practitioner saves me time and/or money. (7)
- o   To reduce the chances of being audited by SARS. (8)
- o   I want to avoid problems encountered in the past. (9)
- o   To ensure I comply with my tax obligations. (10)
- o   An expert opinion was required on a specific tax issue. (11)
- o   I need help to compile my tax records. (12)
- o   For tax planning. (13)
- o   Other (please provide other reason/s) (14) _____

Q4.14 How much did you pay the tax practitioner to complete and submit your 2016/17 income tax return? *(Do not use symbols or spaces, e.g. 1000 not R1 000. Please indicate 0 if not applicable* _____

Q4.15 How much did you pay your tax practitioner EXTRA for tax planning and tax advice (e.g. tax opinions). *(Do not use symbols or spaces, e.g. 1000 not R1 000. Please indicate 0 if not applicable or if it is already included in the fee to complete and submit your income tax return.)* _____

Q5.1 Did SARS request you to submit supporting documents (for verification purposes) in respect of your 2016/17 income tax return?
o Yes (1)
o No (2)
o Not that I am aware of (3)

> Q5.2 was only displayed IF Q5.1 = 1 (i.e. if respondent was requested to submit supporting documentation for verification purposes)

Q5.2 Did you submit the supporting documents yourself?
o Yes (1)
o No (2)

> Q5.3 and Q5.4 were only displayed IF Q5.2 = 1 (i.e. if respondent submitted supporting documentation self)

Q5.3 How long did it take you to prepare and submit supporting and additional verification documents? *(For example, additional medical expense schedule. Please exclude time already taken into account to prepare documents for purposes of submitting the return.)*
o 0 to 15 minutes (1)
o 16 to 30 minutes (2)
o 31 to 59 minutes (3)
o 1 to 2 hours (4)
o more than 2 hours (please estimate number of completed hours) (5) _____

Q5.4 How much did it cost you (excluding your time) to submit your supporting documents *(e.g. travelling, printing or scanning costs)?*
o R0 (1)
o R1 to R50 (2)
o R51 to R100 (3)
o R101 to R200 (4)
o R201 to R500 (5)
o more than R500 (please provide estimate e.g. 1000 not R1 000) (6) _____

> Q5.5 was only displayed IF Q5.2 = 2 (i.e. if respondent obtained help to submit supporting documentation)

Q5.5 How much did you pay to have your supporting documents submitted?
o R0 (free of charge) (1)
o R0 (included in fee charged to complete and submit return) (2)
o R1 to R100 (3)
o R101 to R500 (4)
o R501 to R800 (5)
o R801 to R1 000 (6)
o More than R1 000 (please indicate amount e.g. 2000 not R2 000) (7) _____

Q5.6 Did you (or someone on your behalf) request reasons from SARS for your 2016/17 assessment?
- o   Yes (1)
- o   No (2)
- o   Not that I am aware of (3)

Q5.7 was only displayed IF Q5.6 = 1 (i.e. if respondent requested reasons)

Q5.7 How long did it take to receive the reasons from SARS?
- o   Less than 5 business days (1)
- o   6 to 10 business days (2)
- o   11 to 20 business days (3)
- o   21 to 30 business days (4)
- o   More than 30 business days (please specify) (5) _____
- o   Did not receive reasons yet (please specify number of business days since reasons were requested) (6) _____

Q6.1 Are you a provisional taxpayer?
- o   Yes (1)
- o   No (2)
- o   Don't know (3)

Q6.2 was only displayed IF Q6.1 = 1 (i.e. if respondent is a provisional taxpayer)

Q6.2 Please estimate the total hours and/or cost to complete and submit your first, second and third (if applicable) provisional tax returns in respect of your 2016/17 tax year.
Own hours spent *(Use decimals for fraction of hours (e.g. 0.5 for half hour) (1)* _____
External costs *(e.g. amount paid to tax practitioner)* (2) _____

Q6.3 Did you incur any penalties and/or interest in respect of your 2016/17 tax returns (income tax and/or provisional tax) submitted?
- o   Yes (1)
- o   No (2)
- o   Not that I am aware of (3)

Q6.4 was only displayed IF Q6.3 = 1 (i.e. if respondent incurred penalties and/or interest)

Q6.4 What was the reason for the penalty and/or interest? *Select more than one if applicable.*
- o   Don't know (1)
- o   Late submission (2)
- o   Late payment (3)
- o   Underestimate penalty (4)
- o   Other (please specify) (5) _____

Q7.1 Have you been audited by SARS in respect of your 2016/17 income tax return?
- o   Yes (1)
- o   No (2)
- o   Not that I am aware of (3)

Q7.2 and Q7.3 were only displayed IF Q7.1 = 1 (i.e. if respondent has been audited)

Q7.2 How much **time** did **you** spend to have the audit finalised (or to date if not finalised yet)?
- o   n/a (not handled by myself) (1)
- o   up to 1 hour (2)
- o   >1 to 2 hours (3)
- o   >2 to 5 hours (4)
- o   >5 to 8 hours (5)
- o   more than 8 hours (please indicate the hours) (6) _____

Q7.3 How much did you **pay** a tax practitioner to have the audit finalised (or to date if not finalised yet)?
- o   R1 to R100 (1)
- o   R101 to R500 (2)
- o   R501 to R800 (3)
- o   R801 to R1 000 (4)
- o   R1 001 to R5 000 (5)
- o   R5 001 to R10 000 (6)
- o   More than R10 000 *(e.g. 12000 not R12 000)* (7) _____
- o   I don't know (8)

Q8.1 Have you ever applied for an Advance Tax Ruling?
- o   Yes (1)
- o   No (2)

> Q8.2 to Q8.4 were only displayed IF Q8.1 = 1 (i.e. if respondent applied for an ATR)

Q8.2 How much was the **application fee** <u>paid to SARS</u>? *(Please provide amount without using symbols or spaces, e.g. 1000 not R1 000. If you don't know, please type 0.)* _____

Q8.3 How much **time** did **you** spend on applying for the Advance Tax Ruling?
- o   n/a (not handled by myself) (1)
- o   up to 8 hours (2)
- o   >8 to 16 hours (3)
- o   >16 to 24 hours (4)
- o   More than 24 hours (please estimate the hours) _____

Q8.4 How much did you **pay** for assistance to have the application for an Advance Tax Ruling submitted (excluding the application fee paid to SARS)? *Please provide amount without using symbols or spaces, e.g. 1000 not R1 000 and type 0 if handled yourself.* _____

Q9.1 In respect of your 2016/17 income tax return, did you (or someone on your behalf)

	Yes (1)	No (2)	Not that I am aware of (3)
lodge an objection? (1)			
lodge an appeal? (2)			
litigate further (e.g. tax board or tax court)? (3)			

> Q9.2 to Q9.4 were only displayed IF respondent answered YES to any of the three options in Q9.1 (i.e. if respondent lodged a notice of objection, appeal or litigated further)

Q9.2 How many **hours** did **you** spend (to date) on the dispute (namely the objection, appeal and/or further litigation)? *Use decimals for fraction of hours (e.g. 0.5 for half hour) or indicate 0 if no time was spent.*

	Hours

Objection (1)	
Appeal (2)	
Further litigation (3)	

Q9.3 How much did you **pay** (to date) for assistance regarding the dispute (namely the objection, appeal and/or further litigation)? *(Please provide amount without symbols or spaces, e.g. 2500 not R2 500 and type 0 if you handled it yourself or if it was free of charge.)*

	R
Objection (1)	
Appeal (2)	
Further litigation (3)	

Q9.4 Has the dispute been resolved?
o Yes (1)
o No (2)

Q10.1 was only displayed IF Q2.1 = 1 (i.e. if respondent was full-time employed)

Q10.1 This question is concerned with the value of your time. What is your gross **monthly** salary?
o R5 000 or less (1)
o R5 001 to R10 000 (2)
o R10 001 to R20 000 (3)
o R20 001 to R30 000 (4)
o R30 001 to R50 000 (5)
o R50 001 to R80 000 (6)
o R80 001 to R100 000 (7)
o More than R100 000

Q10.2 was only displayed IF Q2.1 ≠ 1 (i.e. if respondent selected an employment status other than full-time employment)

Q10.2 This question is concerned with the value of your time. What is your **hourly** salary/wage (before tax) or your charge-out rate or what would you be prepared to work for (if not employed)?
o Less than R25 per hour (1)
o R25 to R50 per hour (2)
o R51 to R100 per hour (3)
o R101 to R200 per hour (4)
o R201 to R500 per hour (5)
o R501 to R1 000 per hour (6)
o R1 001 to R2 000 per hour (7)
o R2 001 to R5 000 per hour (8)
o > R5 000 per hour (please provide hourly rate, e.g. 5500 not R5 500) (9) _____

Q10.3 Please indicate the bracket in which your **taxable income** falls in relation to your 2016/17 income tax return?
o Not exceeding R188 000 (1)
o R188 001 to R293 600 (2)
o R293 601 to R406 400 (3)
o R406 401 to R550 100 (4)
o R550 101 to R701 300 (5)
o Exceeding R701 300
o Don't know (7)
o Prefer not to indicate (8)

Q11.1 In which province do you reside?
o   Eastern Cape (1)
o   Free State (2)
o   Gauteng (3)
o   KwaZulu Natal (4)
o   Limpopo (5)
o   Mpumalanga (6)
o   North West (7)
o   Northern Cape (8)
o   Western Cape (9)

Q11.2 What is your gender?
o   Male (1)
o   Female (2)

Q11.3 What is your age?
o   under 21 (1)
o   21 to 30 (2)
o   31 to 40 (3)
o   41 to 50 (4)
o   51 to 60
o   61 to 64
o   65 to 74 (7)
o   75 or older (8)

Q11.4 What is your highest level of education?
o   Primary School (1)
o   Secondary School (2)
o   Tertiary (up to Certificate, Diploma or Degree) (3)
o   Tertiary (Post Graduate) (4)

Q11.5 How would you rate your personal income tax knowledge?
o   No knowledge (1)
o   Poor (2)
o   Average (3)
o   Good (4)
o   Excellent (5)

Q12.1 Please indicate your level of agreement with the following statements:

When I pay my taxes as required by the South African laws and regulations, I do so ...

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Don't know (6)
...to support the state and other citizens. (Q12.1_1)						
...without spending a long time thinking how I could reduce my tax. (Q12.1_2)						
... reluctantly because the tax revenue is not spent appropriately. (Q12.1_3)						
...even though I know that others do not. (Q12.1_4)						
...because the punishment for tax evasion is severe. (Q12.1_5)						

Q12.2 Please indicate the extent to which you agree with the following statements regarding the South African tax legislation and guidance provided by SARS:

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Don't know (6)
Tax legislation is easy to understand. (Q12.2_1)						
The objectives of the tax legislation are clear. (Q12.2_2)						
Changes to legislation are brought to your attention in reasonable time to comply. (Q12.2_3)						

Q12.3 Did you have any interaction (via telephone, e-mail or in person) with a SARS official in the last 12 months?
o Yes (1)
o No (2)

Q12.4 Please indicate the extent to which you agree with the following statements regarding the administrative quality of service received from SARS and the expertise and abilities of SARS officials:

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
SARS officials gave me precise answers (i.e. not vague). (Q12.4_1)					
The information obtained from SARS corresponded to my needs. (Q12.4_2)					
The answers provided by SARS were consistent regardless of who provided them (for example staff at different branches). (Q12.4_3)					
SARS officials approached their jobs with professionalism and dedication. (Q12.4_4)					
SARS officials are very capable to perform their jobs. (Q12.4_5)					

Q12.5 Please indicate the extent to which you agree with the following statements relating to appeal procedures used to arrive at tax-related decisions:

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I have been able to express my views during those procedures. (Q12.5_1)					
I have had influence over the outcomes arrived at by those procedures. (Q12.5_2)					
Those procedures have been free of bias. (Q12.5_3)					
The rational for decisions by SARS is fair and transparent. (Q12.5_4)					

Q12.6 Please indicate the extent to which you agree with the following statements relating to assessments, audits and penalties:

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Don't know (6)
SARS investigates until it finds something. (Q12.6_1)						
SARS primarily aims to punish. (Q12.6_2)						
SARS' penalties are too severe relative to the offence. (Q12.6_3)						

Q12.7 Please indicate the extent to which you agree with the following statements relating to consultation:

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Don't know (6)
SARS consults widely about how they might change things to make it easier for taxpayers to meet their obligations. (Q12.7_1)						
SARS goes to great lengths to consult with the community over changes to its system. (Q12.7_2)						

Q12.8 Please provide any comments (positive or negative) regarding your interactions with SARS. Please include suggestions for improvement (if relevant).

_____
_____
_____

Q13.1 Please provide any suggestions as to how your tax compliance cost might be reduced (if applicable). Remember, tax compliance costs may include external costs (e.g. cost of paid help), internal costs (value of own time spent) and non-labour costs (e.g. internet and travel costs), but does not include the cost of the tax itself (the tax liability).

_____
_____
_____

Q13.2 Are there any other comments relating to the topic of tax compliance cost or the survey that you wish to bring to the attention of the researcher?

_____

_____

Q13.3 Imagine the tax system in South Africa was abolished. How much do you think you would have saved in terms of the money, time and effort you would no longer have to spend in complying with your 2016/17 tax affairs? Do not count the tax you would no longer have to pay (or the refund that you will no longer receive) – only count the tax compliance costs you would no longer have to incur. *(Please provide amount without using symbols or spaces, e.g. 2000 not R2 000.)* _____

Q13.4 Tick the appropriate box for each statement below?

	Yes (1)	No (2)
I wish to receive a copy of the final report of the survey via e-mail. (1)	o	o
I am willing to be contacted via e-mail for verification of answers in this questionnaire should the need arise. (2)	o	o

Q13.5 was only displayed IF respondent answered YES to either of the questions in Q13.4

Q13.5 Please provide your name and email address. Your response will remain confidential to the researcher and used solely for purpose of this research:
o   Name (1) _____
o   E-mail address (2) _____

Q13.6 was only displayed IF Q2.1 = 3 (i.e. if respondent was self-employed)

Q13.6 Since you have indicated that you are mainly self-employed, would you be willing to also complete the questionnaire on the tax compliance costs for small/medium/micro enterprises (SMME's)?
o   Yes (1)
o   No (2)

Q13.7 was only displayed IF Q13.6 = 1 (i.e. if self-employed respondent was willing to complete further questionnaire)

Q13.7 Thank you very much. Please copy the following URL https://unisafinintel.eu.qualtrics.com/jfe/form/SV_eWqqA7l6te6fPmt to access the SMME questionnaire and press the "NEXT" button to complete this survey.

- END OF SURVEY THANK YOU MESSAGE –

Appendix B   Survey questionnaire (Phase 2)

(Exported version of online questionnaire. Display logic information is provided in grey blocks.)

Summary
- Introduction (Q1.1)
- Employment status (Q2.1)
- Sources of income and types of expenditure (Q3.1 and Q3.2)
- Activities up to submission of tax return (Q4.1 – Q4.15)
- Verification requests and requests for reasons (Q5.1 – Q5.7)
- Provisional tax, penalties and/or interest (Q6.1 – Q6.4)
- Audit requests (Q7.1 – Q7.3)
- Dispute resolution (Q8.1 – Q8.13)
- Value of time (to calculate cost) (Q9.1 – Q9.3)
- Demographic questions (Q10.1 – Q10.5)
- Scale items (Q11.1 – Q11.7)
- Open-ended questions (Q11.8, Q12.1 – Q12.3)

Q1.1

Please read this before completing the survey. This survey should only be completed by an individual who is a registered taxpayer with the South African Revenue Service (SARS) and who has submitted an income tax return for the 2017/18 tax year (namely for the period 1 March 2017 to 28 February 2018). The UNISA College of Accounting Sciences Research Ethics Review Committee has approved this survey (reference no 2017_CAS_042). The survey responses are being collected independently of SARS and the anonymity of all information provided by respondents is guaranteed and cannot be linked back to SARS' database. The data will be saved electronically and stored in a secure password protected database for five years after which it will be deleted.

The survey will take approximately 15 to 20 minutes to complete. The purpose of this research is to establish the composition and magnitude of tax compliance costs incurred by individuals in South Africa. Tax compliance costs may include external costs (e.g. costs of tax practitioners), internal costs (own time spent) and non-labour costs (e.g. internet and travel costs), but <u>exclude</u> the cost of the <u>tax itself</u> (the tax liability).

If you would like to discuss the survey or if you need help in completing particular questions please do not hesitate to contact Karen Stark on karen.stark@up.ac.za, Sharon Smulders on Smuldsa @unisa.ac.za or Aleseng Moshoette on Amoshoette@sars.gov.za.

The data will be utilised to enhance the tax system, making it simpler and more streamlined and your assistance in completing this survey is greatly appreciated. By clicking the "NEXT" button you agree to participate in the survey voluntarily, are aware that you are free to withdraw at any time without any penalty, have had sufficient opportunity to ask questions and that you are aware that the findings of the study will be anonymously processed into a research report and academic publications/ conference proceedings.

Q2.1 Which of the following categories best describe your employment status during the 2017/18 year of assessment?
- ○ Employed: full-time (40 hours or more per week) (1)
- ○ Self-employed (own business) and/or part-time employed (2)
- ○ Retired (with or without part-time employment) (3)
- ○ Unemployed, actively looking for work (4)
- ○ Unemployed, NOT looking for work (e.g. home duties or studying) (5)

Q3.1 From which source/s did you earn income in respect of your 2017/18 tax year? *(Choose more than one if applicable.)*
o   Salary (including wages, allowances, benefits and overtime) (1)
o   Independent contract income (2)
o   Commission (3)
o   Director's income (4)
o   Lump sum/s (from employer and/or retirement funds) (5)
o   Pension/s (or annuities) (6)
o   Rental income (7)
o   Farming income (8)
o   Interest income (local and/or foreign) (9)
o   Dividend income (local and/or foreign) (10)
o   Income from a REIT (Real Estate Investment Trust) (11)
o   Income from a Tax-Free Investment (12)
o   Business income (other than from farming and rental income) (13)
o   Capital gains (local and/or foreign from the sale of capital assets) (14)
o   Other foreign income (for example services rendered outside South Africa) (15)
o   Royalty income (16)
o   Trust income (17)
o   Inheritance / Donation (18)
o   Other (please specify) (19) _____

> The last option was only displayed IF Q2.1 = 4 or 5 (i.e. if delegate was unemployed)

o   Unemployed with no income (20)

Q3.2 Which of the following **expenditure** did you incur and declare on your 2017/18 personal income tax return submitted to SARS? *(Choose more than one if applicable.)*
o   Expenditure relating to rental income (1)
o   Expenditure relating to farming income (2)
o   Expenditure relating to other business income (3)
o   Expenditure relating to independent contract income (4)
o   Expenditure relating to commission income (5)
o   Travel expenses (6)
o   Contribution/s to retirement funds (pension, provident or retirement annuity funds) (7)
o   Medical expenses (8)
o   Donations (for which section 18A receipts were obtained) (9)
o   Other expenses (please specify) (10) _____
o   None of the above (11)

Q4.1 Who completed your 2017/18 income tax return?
o   I completed it myself (1)
o   A family member, friend or colleague (for free) (2)
o   I paid someone to complete it (for example tax practitioner/bookkeeper/accountant) (3)
o   A SARS employee (4)
o   Other (please specify) (5) _____

> Q4.2 to Q4.7 was only displayed IF Q4.1 = 1 (i.e. if respondent completed own tax return)

Q4.2 Why did you complete your income tax return yourself? *(Choose more than one if appropriate.)*
o   My tax affairs are very simple (1)
o   I am competent in tax matters (2)
o   I wish to keep my tax affairs private (3)
o   I think that tax practitioners charge too much (4)
o   I cannot afford to pay someone (5)
o   I get enough help from guides on the SARS website (6)
o   I get enough help from the SARS call centre (7)

o I get enough help online while using e-filing (8)
o Other (please specify) (9) _____

Q4.3 Estimate the **total time** that you **actively** spent on each activity <u>up to the point of completing and submitting</u> your 2017/18 income tax return (thus excluding requests from SARS for further information or supporting documentation) and paying the tax due. Include travel and waiting time if relevant. *Use decimals for fraction of hours (e.g. 0.5 for half hour) and if no time was spent on a particular activity, please type 0.*

	Hours (1)
Recordkeeping (compiling information needed for tax) (Q4.3_1)	
Obtaining tax knowledge (including attending tax seminars and workshops) (Q4.3_2	
Tax planning and tax advice (e.g. tax opinion/s from tax practitioner) (Q4.3_3)	
Dealing with SARS (e.g. relating to changing banking details) (Q4.3_4)	
Calculating tax, completing income tax return and paying tax (Q4.3_5)	

Q4.4 was only displayed IF Q4.3_3 > 0 (i.e. if time was spent on tax planning and tax advice)

Q4.4 If you also paid for the tax advice, how much did it cost you? (Do not use symbols or spaces, e.g. 1000 and not R1 000 and indicate 0 if not applicable.) _____

Q4.5 was only displayed IF Q4.3_1 > 0 (i.e. if time was spent on recordkeeping). Furthermore, display logic was also used to only present expenditure options that relate to the expenses indicated by the respondent in Q3.2.

Q4.5 What was the **biggest** contributing factor to your total time spent on <u>recordkeeping</u> (compiling information needed for tax)?
o Recordkeeping of income (1)
o Recordkeeping of **expenditure** relating to rental income (2)
o Recordkeeping of **expenditure** relating to farming income (3)
o Recordkeeping of **expenditure** relating to other business income (4)
o Recordkeeping of **expenditure** relating to independent contract income (5)
o Recordkeeping of **expenditure** relating to commission income (6)
o Recordkeeping of travel expenses (against travel allowance) (7)
o Recordkeeping of medical expenses (8)
o Recordkeeping of retirement fund contributions (9)
o Other (please specify) (10) _____

Q4.6 Estimate how much you incurred on **sundry expenditure** (excluding your time) <u>up to the point of completing and submitting</u> your 2017/18 income tax return and paying the tax due? *For example data bundles, internet cafe, petrol, telephone, stationery, taxation books, TaxTim and other like expenses.*
o R0 (1)
o R1 to R99 (2)
o R100 to R299 (3)
o R300 to R499 (4)
o R500 to R999 (5)
o R1 000 to R1 500 (6)
o More than R1 500 (please provide estimate, e.g. 2000 not R2 000) (7) _____

Q4.7 By what means did you submit your 2017/18 income tax return to SARS?
- o e-Filing (1)
- o Personally at a SARS branch (2)
- o Other (please specify) (3) _____

> Q4.8 to Q4.15 was only displayed IF Q4.1 ≠ 1 (i.e. if respondent obtained help to complete and submit income tax return)

Q4.8 Estimate the **total time** that <u>**you actively**</u> spent on the following (up to the point of <u>handing your records over</u> to the person who completed and submitted your 2017/18 income tax return on your behalf and then paying the tax due). *Include travel time if relevant. Use decimals for fraction of hours (e.g. 0.5 for half hour) and if no time was spent on a particular activity, please type 0.*

	Hours (1)
Recordkeeping (compiling information needed for tax) (Q4.8_1)	
Obtaining tax knowledge (including attending tax seminars and workshops) (Q4.8_2)	
Tax planning and tax advice (e.g. relating to structuring tax affairs) (Q4.8_3)	
Dealing with the SARS (e.g. relating to changing banking details) (Q4.8_4)	
Dealing with person who assisted you (e.g. providing information to them) (Q4.8_5)	
Paying the income tax due (Q4.8_6)	

> Q4.9 was only displayed IF Q4.8_1 > 0 (i.e. if respondent indicated time was spent on tax recordkeeping). Furthermore, display logic was also used to only present expenditure options that relate to the expenses indicated by the respondent in Q3.2.

Q4.9 What was the **biggest** contributing factor to your total time spent on <u>recordkeeping</u> (compiling information needed for tax)?
- o Recordkeeping of income (1)
- o Recordkeeping of **expenditure** relating to rental income (2)
- o Recordkeeping of **expenditure** relating to farming income (3)
- o Recordkeeping of **expenditure** relating to other business income (4)
- o Recordkeeping of **expenditure** relating to independent contract income (5)
- o Recordkeeping of **expenditure** relating to commission income (6)
- o Recordkeeping of travel expenses (against travel allowance) (7)
- o Recordkeeping of medical expenses (8)
- o Recordkeeping of retirement fund contributions (9)
- o Other (please specify) (10) _____

Q4.10 Estimate how much **you incurred** on **sundry expenditure** (excluding your time) up to the point of <u>handing your records over</u> to the person who completed and submitted your 2017/18 income tax return on your behalf and to pay the tax due? *For example data bundles, internet cafe, petrol, telephone, stationery, taxation books and other like expenses.*
- o R0 (1)
- o R1 to R99 (2)
- o R100 to R299 (3)
- o R300 to R499 (4)
- o R500 to R999 (5)
- o R1 000 to R1 500 (6)
- o More than R1 500 (please provide estimate, e.g. 2000 (not R2 000)) (7) _____

> Q4.11 and Q4.12 were only displayed IF Q4.1 = 2 (i.e. if respondent obtained help from family member or friend for free)

Q4.11 How much time did your **family member or friend** spend on completing and submitting your 2017/18 income tax return?
- o I don't know (1)
- o Up to 1 hour (2)
- o >1 to 2 hours (3)
- o >2 to 5 hours (4)
- o >5 to 8 hours (5)
- o More than 8 hours (please indicate the hours) (6) _____

Q4.12 What do you think is the TOTAL RAND VALUE of the time spent by your friend or family member to submit your 2017/18 income tax return? *(Do not use symbols or spaces, e.g. 1000 not R1 000)* _____

> Q4.13 to Q4.15 were only displayed IF Q4.1 = 3 (i.e. if respondent obtained paid assistance)

Q4.13 Why did you need the assistance of a tax practitioner (or another professional person) with your 2017/18 income tax return? *Choose more than one if appropriate.*
- o The stress from complying with my tax obligations is too much. (1)
- o My income tax return is too complicated. (2)
- o Tax legislation is too difficult to understand. (3)
- o Tax legislation changes too often. (4)
- o I want to maximise my allowable deductions/rebates. (5)
- o I want to get my tax refund quickly. (6)
- o My tax practitioner saves me time and/or money. (7)
- o To reduce the chances of being audited by SARS. (8)
- o I want to avoid problems encountered in the past. (9)
- o To ensure I comply with my tax obligations. (10)
- o An expert opinion was required on a specific tax issue. (11)
- o I need help to compile my tax records. (12)
- o For tax planning. (13)
- o Other (please provide other reason/s) (14) _____

Q4.14 How much did you pay the tax practitioner or other person to complete and submit your 2017/18 income tax return? *(Do not use symbols or spaces, e.g. 1000 not R1 000. Please indicate 0 if not applicable* _____

Q4.15 How much did you pay your tax practitioner EXTRA for tax planning and tax advice (e.g. tax opinions). *(Do not use symbols or spaces, e.g. 1000 not R1 000. Please indicate 0 if not applicable or if it is already included in the fee to complete and submit your income tax return.)* _____

Q5.1 Did SARS request you to submit supporting documents (for verification purposes) in respect of your 2017/18 income tax return?
- o Yes (1)
- o No (2)
- o Not that I am aware of (3)

> Q5.2 was only displayed IF Q5.1 = 1 (i.e. if respondent was requested to submit supporting documentation for verification purposes)

Q5.2 Did you submit the supporting documents yourself?
- o Yes (1)
- o No (2)
- o Did not yet submit supporting documents (3)

Q5.3 How long did it take you to prepare and submit supporting and additional verification documents? *(For example, additional medical expense schedule. Please exclude time already taken into account to prepare documents for purposes of submitting the return.)*
o   0 to 15 minutes (1)
o   16 to 30 minutes (2)
o   31 to 59 minutes (3)
o   1 to 2 hours (4)
o   more than 2 hours (please estimate number of completed hours) (5) _____

Q5.4 How much did it cost you (excluding your time) to submit your supporting documents *(e.g. travelling, printing or scanning costs)?*
o   R0 (1)
o   R1 to R50 (2)
o   R51 to R100 (3)
o   R101 to R200 (4)
o   R201 to R500 (5)
o   more than R500 (please provide estimate e.g. 1000 not R1 000) (6) _____

Q5.5 How much did you pay to have your supporting documents submitted?
o   R0 (free of charge) (1)
o   R0 (included in fee charged to complete and submit return) (2)
o   R1 to R100 (3)
o   R101 to R500 (4)
o   R501 to R800 (5)
o   R801 to R1 000 (6)
o   More than R1 000 (please indicate amount e.g. 2000 not R2 000) (7) _____

Q5.6 Did you (or someone on your behalf) request reasons from SARS for your 2017/18 assessment?
o   Yes (1)
o   No (2)
o   Not that I am aware of (3)

Q5.7 How long did it take to receive the reasons from SARS?
o   Less than 5 business days (1)
o   6 to 10 business days (2)
o   11 to 20 business days (3)
o   21 to 30 business days (4)
o   More than 30 business days (please specify) (5) _____
o   Did not receive reasons yet (please specify number of business days since reasons were requested) (6) _____

Q6.1 Are you a provisional taxpayer?
o   Yes (1)
o   No (2)
o   Don't know (3)

Q6.2 was only displayed IF Q6.1 = 1 (i.e. if respondent is a provisional taxpayer)

Q6.2 Please estimate the total hours and/or cost to complete and submit your first, second and third (if applicable) provisional tax returns in respect of your 2017/18 tax year.
Own hours spent *(Use decimals for fraction of hours (e.g. 0.5 for half hour) (1)* _____
Costs *(e.g. amount paid for assistance without using symbols or spaces) (2)* _____

Q6.3 Did you incur any penalties and/or interest in respect of your 2017/18 tax returns (income tax and/or provisional tax) submitted?
o   Yes (1)
o   No (2)
o   Not that I am aware of (3)

Q6.4 was only displayed IF Q6.3 = 1 (i.e. if respondent incurred penalties and/or interest)

Q6.4 What was the reason for the penalty and/or interest? *Select more than one if applicable.*
o   Don't know (1)
o   Interest on underpayment of provisional tax (2)
o   Interest on outstanding income tax (3)
o   Penalty on late payment of provisional tax (4)
o   Penalty as a result of underestimation of provisional tax (5)
o   Administrative penalty for non-submission of income tax returns (6)
o   Other (please specify) (7) _____

Q7.1 Have you been audited by SARS in respect of your 2017/18 income tax return?
o   Yes (1)
o   No (2)
o   Not that I am aware of (3)

Q7.2 and Q7.3 were only displayed IF Q7.1 = 1 (i.e. if respondent has been audited)

Q7.2 How much **time** did **you actively** spend with SARS (or fulfilling requests from SARS) to date in respect of the audit?
o   n/a (not handled by myself) (1)
o   up to 1 hour (2)
o   >1 to 2 hours (3)
o   >2 to 5 hours (4)
o   >5 to 8 hours (5)
o   more than 8 hours (please indicate the hours) (6) _____

Q7.3 How much did you **pay** someone (to date) to help you with the audit?
o   R0 (not applicable) (9)
o   R0 (obtained help free of charge) (10)
o   R0 (included in fee charged to complete and submit income tax return) (11)
o   R1 to R100 (1)
o   R101 to R500 (2)
o   R501 to R800 (3)
o   R801 to R1 000 (4)
o   R1 001 to R5 000 (5)

o R5 001 to R10 000 (6)
o More than R10 000 *(e.g. 12000 not R12 000)* (7) _____
o I don't know (8)

Q8.1 In respect of your 2017/18 income tax return, did you (or someone on your behalf) lodge a notice of objection?
o Yes (1)
o No (2)
o Not that I am aware of (3)

Q8.2 to Q8.4 were only displayed IF Q8.1 = 1 (i.e. if respondent lodged a notice of objection)

Q8.2 How many hours did **you actively** spend (to date) in respect of the objection? *Use decimals for a fraction of an hour (e.g. 0.5 for half an hour) or indicate 0 if no time was spent. _____*

Q8.3 How much did you **pay** someone to help you with the objection?
o R0 (not applicable) (1)
o R0 (obtained help free of charge) (2)
o R0 (included in fee charged to complete and submit income tax return) (3)
o R1 to R100 (4)
o R101 to R500 (5)
o R501 to R800 (6)
o R801 to R1 000 (7)
o R1 001 to R2 000 (8)
o More than R2 000 *(e.g. 2500 not R2 500)* (9) _____

Q8.4 Has the dispute been resolved?
o Yes (1)
o No (2)

Q8.5 In respect of your 2017/18 (and/or 2016/17) income tax return, did you (or someone on your behalf) appeal against a decision regarding an objection using the **alternative dispute resolution** process?
o Yes (1)
o No (2)
o Not that I am aware of (3)

Q8.6 to Q8.8 were only displayed IF Q8.5 = 1 (i.e. if respondent used the ADR process)

Q8.6 How many **hours** did **you actively** spend (to date) (e.g. at SARS, fulfilling requests from SARS or with your adviser) in respect of the appeal? *Use decimals for fraction of hours (e.g. 0.5 for half an hour) or indicate 0 if no time was spent.*
o 2016/17 (1) _____
o 2017/18 (2) _____

Q8.7 How much did you **pay** someone (to date) to help you with the appeal?
o 2016/17 (1) _____
o 2017/18 (2) _____

Q8.8 Has the dispute been resolved (Yes/No)?
o 2016/17 (1) _____
o 2017/18 (2) _____

Q8.9 In respect of ANY of your income tax returns, did you (or someone on your behalf) appeal against a decision to the Tax Board, Tax Court, High Court and/or Supreme Court of Appeal?

o Yes (1)
o No (2)

Q8.10 To which year(s) of assessment did it relate? _____

Q8.11 How many **hours** did **you actively** spend (to date if not yet finalised) (e.g. at SARS, in court or with your adviser) in respect of the appeal? *Use decimals for fraction of hours (e.g. 0.5 for half an hour) or indicate 0 if no time was spent.* _____

Q8.12 How much did you **pay** someone (to date) to help you with the appeal? _____

Q8.13 Has the dispute been resolved?
o Yes (1)
o No (2)

Q9.1 This question is concerned with the value of your time. What is your gross **monthly** salary?
o R5 000 or less (1)
o R5 001 to R10 000 (2)
o R10 001 to R20 000 (3)
o R20 001 to R30 000 (4)
o R30 001 to R50 000 (5)
o R50 001 to R80 000 (6)
o R80 001 to R100 000 (7)
o R100 001 to R120 000 (8)
o R120 001 to R150 000 (9)
o R150 000 (please provide monthly salary) (10) _____

Q9.2 This question is concerned with the value of your time. What is your **hourly** salary/wage (before tax) or your charge-out rate or what would you be prepared to work for (if not employed)?
o R25 per hour or less (1)
o R26 to R50 per hour (2)
o R51 to R100 per hour (3)
o R101 to R200 per hour (4)
o R201 to R500 per hour (5)
o R501 to R1 000 per hour (6)
o R1 001 to R2 000 per hour (7)
o R2 001 to R4 000 per hour (8)
o R4 001 to R6 000 per hour (9)
o R6 000 per hour (please provide hourly rate, e.g. 7700 not R7 700) (10) _____

Q9.3 Please indicate the bracket in which your **taxable income** falls in relation to your 2017/18 income tax return?
o Not exceeding R189 880 (1)
o R189 881 to R296 540 (2)
o R296 541 to R410 460 (3)
o R410 461 to R555 600 (4)

- R555 601 to R708 310 (5)
- R708 311 to R1 500 000 (6)
- Exceeding R1 500 000 (7)
- Don't know (8)
- Prefer not to indicate (9)

Q10.1 In which province do you reside?
- Eastern Cape (1)
- Free State (2)
- Gauteng (3)
- KwaZulu Natal (4)
- Limpopo (5)
- Mpumalanga (6)
- North West (7)
- Northern Cape (8)
- Western Cape (9)
- n/a (not living in South Africa) (10)

Q10.2 What is your gender?
- Male (1)
- Female (2)
- Prefer not to indicate (3)

Q10.3 What is your age?
- Younger than 25 (1)
- 25 to 34 (2)
- 35 to 44 (3)
- 45 to 54 (4)
- 55 to 64 (5)
- 65 to 74 (6)
- 75 or older (7)

Q10.4 What is your highest academic level of education?
- Some Schooling (1)
- National Matric Certificate (2)
- Undergraduate (Bachelor's Degree/Advanced Certificate or Diploma) (3)
- Postgraduate (Bachelor Honours Degree/Post Graduate Diploma) (4)
- Postgraduate (Masters / Doctoral degree) (5)

Q10.5 How would you rate your personal income tax knowledge?
- No knowledge (1)
- Poor (2)
- Average (3)
- Good (4)
- Excellent (5)

Q11.1 Please indicate your level of agreement with the following statements:

When I pay my taxes as required by the South African laws and regulations, I do so ...

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Don't know (6)
...to support the state and other citizens. (Q11.1_1)						
...without spending a long time thinking how I could reduce my tax. (Q11.1_2)						
... reluctantly because the tax revenue is not spent appropriately. (Q11.1_3)						
...even though I know that others do not. (Q11.1_4)						
...because the punishment for tax evasion is severe. (Q11.1_5)						

Q11.2 Please indicate the extent to which you agree with the following statements regarding the South African tax legislation and guidance provided by SARS:

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Don't know (6)
Tax legislation is easy to read. (Q11.2_1)						
Tax legislation is easy to understand. (Q11.2_2)						
Guides issued by SARS are easy to read (Q11.2_3)						
Guides issued by SARS are easy to understand. (Q11.2_4)						
It is easy to find the provisions in the tax legislation that apply to me. (Q11.2_5)						

Q11.3 Did you have any interaction (via telephone, e-mail or in person) with a SARS official in the last 12 months?
o   Yes (1)
o   No (2)

Q11.4 was only displayed IF Q11.3 = 1 (i.e. if respondent had an interaction with a SARS official)

Q11.4 Please indicate the extent to which you agree with the following statements regarding the administrative quality of service received from SARS and the expertise and abilities of SARS officials:

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
SARS officials gave me precise answers (i.e. not vague). (Q11.4_1)					
The information obtained from SARS corresponded to my needs. (Q11.4_2)					
The answers provided by SARS were consistent regardless of who provided them (for example staff at different branches). (Q11.4_3)					
SARS officials approached their jobs with professionalism and dedication. (Q11.4_4)					
SARS officials are very capable to perform their jobs. (Q11.4_5)					

Q11.5 was only displayed IF Q8.5 = 1 (i.e. if respondent appealed a decision using the ADR process)

Q11.5 Please indicate the extent to which you agree with the following statements relating to appeal procedures used to arrive at tax-related decisions:

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I have been able to express my views during those procedures. (Q11.5_1)					
I have had influence over the outcomes arrived at by those procedures. (Q11.5_2)					
Those procedures have been free of bias. (Q11.5_3)					
The rational for decisions by SARS is fair. (Q11.5_4)					
The rational for decisions by SARS is transparent. (Q11.5_5)					

Q11.6 Please indicate the extent to which you agree with the following statements relating to assessments, audits and penalties:

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Don't know (6)
SARS investigates until it finds something. (Q11.6_1)						
SARS primarily aims to punish. (Q11.6_2)						
SARS' penalties are too severe relative to the offence. (Q11.6_3)						

Q11.7 Please indicate the extent to which you agree with the following statements relating to consultation:

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Don't know (6)
SARS consults widely about how they might change things to make it easier for taxpayers to meet their obligations. (Q11.7_1)						
SARS goes to great lengths to consult with the community over changes to its system. (Q11.7_2)						
SARS communicates changes to its system clearly and effectively. (Q11.7_3)						

Q11.8 Please provide any comments (positive or negative) regarding your interactions with SARS. Please include suggestions for improvement (if relevant).

_____
_____

Q12.1 Please provide any suggestions as to how your tax compliance cost might be reduced (if applicable). Remember, tax compliance costs may include external costs (e.g. cost of paid help), internal costs (value of own time spent) and non-labour costs (e.g. internet and travel costs), but does not include the cost of the tax itself (the tax liability) or the tax refund.

_____
_____

Q12.2 Are there any other comments relating to the topic of tax compliance cost or the survey that you wish to bring to the attention of the researcher? _____

Q12.3 Imagine the tax system in South Africa was abolished. How much do you think you would have saved in terms of the money, time and effort you would no longer have to spend in complying with your 2017/18 tax affairs? Do not count the tax you would no longer have to pay (or the refund that you will no longer receive) – only count the tax compliance costs you would no longer have to incur. *(Please provide amount without using symbols or spaces, e.g. 2000 not R2 000.)* _____

– END OF SURVEY THANK YOU MESSAGE –

Appendix C   Informed consent

PARTICIPANT INFORMATION SHEET

Dear Sir/Madam

Costs and benefits of tax compliance survey

SAICA, in a joint initiative with the Financial Intelligence Department of the University of South Africa (UNISA), are conducting a survey of small, medium and large businesses as well as of individuals to evaluate and compare the costs/benefits of compliance with the tax system on them as taxpayers. Tax compliance costs are one of the regulatory costs that have a major impact on business and individuals as has been proved in many countries including South Africa.

Research has revealed that tax compliance costs/benefits surveys provide valuable data that can be utilised to enhance a tax system, making it simpler and more streamlined. The current survey will also provide a baseline against which the results of future surveys can be compared and will assist us in comparing compliance costs before and after the implementation of specific tax reforms. Your participation in this survey will therefore assist in enhancing the tax system not only for yourself but for all taxpayers concerned.

This study has received written approval from the Research Ethics Review Committee of the College of Accounting Sciences, UNISA. This survey has been sent to you either in your capacity as the tax manager/finance personnel in a company and/or in your capacity as an individual taxpayer in South Africa. If the survey has been sent to you incorrectly, kindly forward the survey to the correct person for completion. There is no payment or incentive for participating in this study and no costs for completing this study are anticipated.

The survey questionnaire is to be completed online (see links below) and should take approximately **20 minutes**. It does not need to be completed in a single session as the system automatically saves a partially completed survey for up to two weeks since your last entry. The survey will be strictly confidential and all personal information provided by participants will be kept anonymous and any personal/computerised identifiers will be removed unless the participant agrees to provide them and in this case, this information will be kept confidential. Information relating to specific businesses/individuals will not be identified or passed to external parties. Survey responses will be saved electronically and stored in a secure password protected database for five years after which it will be deleted. Further, the survey is completely voluntary and the participants are under no obligation to consent to participation, although participation is encouraged to achieve the desired outcomes. Participants can withdraw at any time, except once the electronic survey has been (electronically) submitted on completion thereof.

Participants' answers may be reviewed by people responsible for making sure that research is done properly, including the transcriber, external coder, and members of the Research Ethics Review Committee of the College of Accounting Sciences, UNISA. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records. The findings of the study, which will be accessible for five years after publication of the results, will be made available to the respondents on the SAICA website and will also be used for academic purposes and will be published in an academic journal/s but individual participants will not be identified in such publications.

The closing date for completion of the survey is 30 March 2018

Please click on the links below to access the survey that is applicable to you as an individual taxpayer or to the business that you are representing (small, medium or large) - please note that by clicking on any of the links below you agree to participate in the survey and that you are aware of its nature, procedure and potential benefits, have read and understood the study as explained above, have had sufficient opportunity to ask questions, that you are prepared to participate in the study and that you are aware that your participation is voluntary and that you are free to withdraw at any time without any penalty and that you are aware that the findings of the study will be anonymously processed into a research report and academic publications/conference proceedings.

Individual taxpayer: click here[295] to access the survey or paste https://pretoria.eu.qualtrics.com/jfe/form/SV_8ejYW1YcGYmnasd into your browser.

Small to medium businesses (annual turnover R0 – R325 million): click here[296] to access the survey or paste https://unisafinintel.eu.qualtrics.com/jfe/form/SV_eWqqA7l6te6fPmt into your browser.

Large corporates (a company with an annual turnover + R325 million): click here[297] to access the survey or paste https://unisafinintel.eu.qualtrics.com/jfe/form/SV_6EYXfBO5F145Ltr into your browser

---

[295] In the original letter, "click here" contained an active hyperlink to the questionnaire.
[296] Same as 4.
[297] Same as 4.

Further questions on the survey:

Should you require any further information or want to contact the researchers about any aspect of this study, please contact one of the following:

Small medium business survey: Heinrich Dixon
Senior Lecturer
Department of Managerial Accounting and Finance
Tshwane University of Technology
dixonhj@tut.ac.za

Large corporates survey: Amanda Singleton
Professor
Department of Accounting Sciences
Nelson Mandela University
amanda.singleton@mandela.ac.za

Individuals survey: Karen Stark
Senior Lecturer
Department of Taxation
University of Pretoria
karen.stark@up.ac.za

Should you have concerns about the way in which the research has been conducted, please contact:

Sharon Smulders

Associate Professor
Department of Financial Intelligence
smuldsa@unisa.ac.za

The above researchers wish to thank you for taking time to read this information and for participating in this study.

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

- 326 -

Appendix D   Ethics approval

UNISA | university of south africa

UNISA COLLEGE OF ACCOUNTING SCIENCES ETHICS REVIEW COMMITTEE

Date 2017-08-22

Dear Ms K Stark

> ERC Reference:
> 2017_CAS_042
>
> Name: Ms K Stark
> Student/ Staff #: 30282527

> **Decision: Ethics Approval from**
> **2017-08-22 to 2022-08-21**

Main researcher: **Ms K Stark**
Karen.stark@up.ac.za

> **Working title of research:**
>
> **Tax Compliance Costs of Individuals in South Africa – an Empirical Study**

Qualification: Postgraduate research

Thank you for the application for research ethics clearance by the Unisa College of Accounting Sciences Research Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period indicated above.

> The application was reviewed by the College of Accounting Sciences Research Ethics Review Committee on 22 August 2017 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment, and approved.
>
> The proposed research may now commence with the provisions that:
> 1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
> 2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the College of Accounting Sciences Research Ethics Review Committee.
> 3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.

4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.

5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.

6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.

7. No field work activities may continue after the expiry date of this certificate.

Note:

The reference number of this certificate should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Yours sincerely,

Ms L Grebe
Chair of CAS RERC
E-mail: grebel@unisa.ac.za
Tel: 012 429 4994
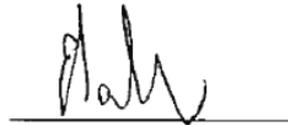
Prof E Sadler
Executive Dean CAS

URERC 25.04.17 - Decision template (V2) - Approve

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

- 328 -

Appendix E   Weighting calculations of results in Phase 1

TOTAL TAX COMPLIANCE COSTS (VALUATION METHOD 1)

	PHASE 1 (752 respondents)			PHASE 2 (10 260 respondents)			PHASE 1 WEIGHTED ON DISTRIBUTION OF PHASE 2
INCOME							
Monthly salary	**Mean**	**N**	**%**	**Mean**	**N**	**%**	**Mean**
R5 000 or less	R 34	1	0%	R 972	39	0%	R 0
R5 001 to R10 000	R 1,454	11	2%	R 1,036	446	5%	R 75
R10 001 to R20 000	R 1,332	64	12%	R 1,091	2,197	25%	R 339
R20 001 to R30 000	R 2,054	85	16%	R 1,437	2,032	24%	R 483
R30 001 to R50 000	R 2,900	175	32%	R 2,361	2,157	25%	R 724
R50 001 to R80 000	R 5,276	154	28%	R 4,052	1,155	13%	R 705
R80 001 to R100 000	R 7,525	51	9%	R 5,915	310	4%	R 270
R100 001 to R120 000	R 4,760	2	0%	R 8,295	144	2%	R 79
More than R120 000	R 40,240	4	1%	R 10,176	161	2%	R 750
	R 3,931	**547**	**100%**	**R 2,344**	**8,641**	**100%**	**R 3,425**
Hourly wage	**Mean**	**N**	**%**	**Mean**	**N**	**%**	**Mean**
Less than R50	R 1,779	4	2%	R 628	218	13%	R 239
R51 to R100	R 455	3	1%	R 1,135	233	14%	R 66
R101 to R200	R 2,529	7	3%	R 2,253	356	22%	R 556
R201 to R500	R 8,978	66	32%	R 3,975	477	29%	R 2,645
R501 to R1 000	R 27,943	43	21%	R 8,572	221	14%	R 3,814
More than R1 000	R 50,778	82	40%	R 16,829	114	7%	R 3,575
	R 29,191	**205**	**100%**	**R 4,270**	**1,619**	**100%**	**R 10,896**
Mean total tax compliance costs	**R10,817**			**R2,648**			**R4,604**
	(R3 931 x 547/752) + (R29 191 x 205/752)			*(R2 344 x 8 641/10 260) + (R4 270 x 1 619/10260)*			*(R3 425 x 8 641/10 260) + (R10 896 x 1 619/10 260)*
	Table 5.12: Method 1			*Table 6.16: Method 1*			***Based on income and fulltime/non-fulltime ratio***
EMPLOYMENT STATUS	**Mean**	**N**	**%**	**Mean**	**N**	**%**	**Mean**
Full-time employed	R 3,931.15	547	73%	R 2,344	8,641	84%	R 3,311
Part-time employed	R 15,229.81	18	2%	R 7,329	201	2%	R 298
Self-employed	R 43,677.68	111	15%	R 19,183	120	1%	R 511
Unemployed	R 4,582.96	13	2%	R 2,483	178	2%	R 80
Retired with active income	R 24,885.80	20	3%	R 5,944	195	2%	R 473
Retired without active income	R 7,079.84	43	6%	R 1,661	925	9%	R 638
	R 10,817	**752**	**100%**	**R 2,648**	**10,260**	**100%**	**R 5,311**
Mean total tax compliance costs	**R10,817**			**R2,648**			**R5,311**
	Table 5.12: Method 1			*Table 6.16: Method 1*			***Based on employment status***

Note: Due to rounding, some amounts and percentages have nil values.

TOTAL TAX COMPLIANCE COSTS (VALUATION METHOD 2)

	PHASE 1 (752 respondents)			PHASE 2 (10 260 respondents)			PHASE 1 WEIGHTED ON DISTRIBUTION OF PHASE 2
INCOME							
Monthly salary	**Mean**	**N**	**%**	**Mean**	**N**	**%**	**Mean**
R5 000 or less	R 41	1	0%	R 1,018	39	0%	R 0
R5 001 to R10 000	R 1,548	11	2%	R 1,112	446	5%	R 80
R10 001 to R20 000	R 1,518	64	12%	R 1,255	2,197	25%	R 386
R20 001 to R30 000	R 2,582	85	16%	R 1,799	2,032	24%	R 607
R30 001 to R50 000	R 4,016	175	32%	R 3,207	2,157	25%	R 1,002
R50 001 to R80 000	R 7,942	154	28%	R 6,106	1,155	13%	R 1,062
R80 001 to R100 000	R 11,379	51	9%	R 9,131	310	4%	R 408
R100 001 to R120 000	R 7,068	2	0%	R13,037	144	2%	R 118
More than R120 000	R 65,793	4	1%	R15,986	161	2%	R 1,226
	R 5,699	547	100%	R 3,264	8,641	100%	R 4,889
Hourly wage	**Mean**	**N**	**%**	**Mean**	**N**	**%**	**Mean**
Less than R50	R 1,779	4	2%	R 628	218	13%	R 239
R51 to R100	R 455	3	1%	R 1,135	233	14%	R 66
R101 to R200	R 2,529	7	3%	R 2,253	356	22%	R 556
R201 to R500	R 9,622	66	32%	R 5,138	477	29%	R 2,835
R501 to R1 000	R 31,264	43	21%	R11,478	221	14%	R 4,268
More than R1 000	R 104,407	82	40%	R35,062	114	7%	R 7,352
	R 51,546	205	100%	R 6,293	1,619	100%	R 15,315

Mean total tax compliance costs	R18,197	R3,742	R6,534
	(R5 699 x 547/752) + (R51 546 x 205/752)	*(R3 264 x 8 641/10 260) + (R6 293 x 1 619/10260)*	*(R4 889 x 8 641/10 260) + (R15 315 x 1 619/10 260)*
	Table 5.12: Method 2	*Table 6.16: Method 2*	***Based on income and fulltime/non-fulltime ratio***

EMPLOYMENT STATUS	**Mean**	**N**	**%**	**Mean**	**N**	**%**	**Mean**
Full-time employed	R 5,698.76	547	73%	R 3,264	8,641	84%	R 4,800
Part-time employed	R 27,986.75	18	2%	R 8,648	201	2%	R 548
Self-employed	R 55,487.23	111	15%	R23,363	120	1%	R 649
Unemployed	R 30,874.35	13	2%	R 4,569	178	2%	R 536
Retired with active income	R 53,023.30	20	3%	R 6,502	195	2%	R 1,008
Retired without active income	R 56,798.15	43	6%	R 3,854	925	9%	R 5,121
	R 18,197	752	100%	R 3,742	10,260	100%	R 12,661

Mean total tax compliance costs	R18,197	R3,742	R12,661
	Table 5.12: Method 2	*Table 6.16: Method 2*	***Based on employment status***

Note: Due to rounding, some amounts and percentages have nil-values.

TOTAL TAX COMPLIANCE COSTS (VALUATION METHOD 5)

	PHASE 1 (752 respondents)			PHASE 2 (10 260 respondents)			PHASE 1 WEIGHTED ON DISTRIBUTION OF PHASE 2
INCOME							
Monthly salary	**Mean**	**N**	**%**	**Mean**	**N**	**%**	**Mean**
R5 000 or less	R 179	1	0%	R 2,378	39	0%	R 1
R5 001 to R10 000	R 2,216	11	2%	R 1,574	446	5%	R 114
R10 001 to R20 000	R 1,532	64	12%	R 1,314	2,197	25%	R 390
R20 001 to R30 000	R 2,422	85	16%	R 1,536	2,032	24%	R 570
R30 001 to R50 000	R 3,111	175	32%	R 2,308	2,157	25%	R 777
R50 001 to R80 000	R 4,926	154	28%	R 3,831	1,155	13%	R 658
R80 001 to R100 000	R 6,371	51	9%	R 4,688	310	4%	R 229
R100 001 to R120 000	R 3,625	2	0%	R 6,368	144	2%	R 60
More than R120 000	R 15,451	4	1%	R 7,318	161	2%	R 288
	R 3,703	**547**	**100%**	**R 2,286**	**8,641**	**100%**	**R 3,086**
Hourly wage	**Mean**	**N**	**%**	**Mean**	**N**	**%**	**Mean**
Less than R50	R 15,244	4	2%	R 1,718	218	13%	R 2,053
R51 to R100	R 2,897	3	1%	R 2,372	233	14%	R 417
R101 to R200	R 6,220	7	3%	R 3,198	356	22%	R 1,368
R201 to R500	R 16,168	66	32%	R 4,221	477	29%	R 4,763
R501 to R1 000	R 32,096	43	21%	R 5,718	221	14%	R 4,381
More than R1 000	R 43,421	82	40%	R 8,809	114	7%	R 3,057
	R 29,858	**205**	**100%**	**R 3,920**	**1,619**	**100%**	**R 16,039**
Mean total tax compliance costs	**R10,833**			**R2,544**			**R5,130**
	(R3 703 x 547/752) + (R29 858 x 205/752)			*(R2 286 x 8 641/10 260) + (R3 920 x 1 619/10260)*			*(R3 086 x 8 641/10 260) + (R16 039 x 1 619/10 260)*
	Table 5.12: Method 5			*Table 6.16: Method 5*			***Based on income and fulltime/non-fulltime ratio***
EMPLOYMENT STATUS	**Mean**	**N**	**%**	**Mean**	**N**	**%**	**Mean**
Full-time employed	R 3,703.19	547	73%	R 2,286	8,641	84%	R 3,119
Part-time employed	R 19,143.90	18	2%	R 5,707	201	2%	R 375
Self-employed	R 34,415.55	111	15%	R 8,824	120	1%	R 403
Unemployed	R 19,802.27	13	2%	R 4,226	178	2%	R 344
Retired with active income	R 30,591.44	20	3%	R 4,746	195	2%	R 581
Retired without active income	R 25,278.30	43	6%	R 2,663	925	9%	R 2,279
	R 10,833	**752**	**100%**	**R 2,544**	**10,260**	**100%**	**R 7,100**
Mean total tax compliance costs	**R10,833**			**R2,544**			**R7,100**
	Table 5.12: Method 2			*Table 6.16: Method 2*			***Based on employment status***

Note: Due to rounding, some amounts and percentages have nil values.