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The purpose of tax law: A perspective on financial instruments' fair value adjustments in Portugal

António Martins¹ and Daniel Taborda²

Abstract

In recent Portuguese tax arbitration cases two opposing lines have emerged concerning fair value loss deduction in equity instruments listed in financial markets, one arguing for loss restriction, another sustaining full loss deduction. Both are based on an interpretation of corporate tax rules. The purpose of this paper is to discuss both perspectives, using case analysis to arrive at a consistent interpretation. We conclude that the rational or purposive element should be of paramount importance in the interpretation of relevant tax rules, and no loss restriction should apply.

Key words: fair market value, corporate tax, financial instruments, loss deduction

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1. INTRODUCTION

Until 2014 the Portuguese corporate income tax code (CITC — enacted by Decree Law 442-B/1988, 30 November) established, in its article 45, §3, that losses on equity instruments were not fully tax deductible, but rather only up to 50% of their amount. In 2010, with the introduction of an IFRS based financial accounting system and the subsequent reform of the CITC, a question emerged: should recognised fair value losses in equity instruments held by firms be subjected to this tax limitation?³

Two argumentative lines have been offered in litigation cases decided in Portuguese tax arbitration courts. One has argued for full deduction, given the purpose of the 50% deduction, anchored in fighting tax avoidance.⁴ Potentially avoiding transactions were linked to the *manufacturing* of capital losses, by conveniently timing realisation. As this could not be possible in a fair value accounting paradigm, where market prices underline loss recognition by investors, the argument was that a full loss deduction should be the proper consequence. The alternative arbitration judicial perspective argued for the restriction of loss deduction derived from fair value adjustments, because a literal reading of the CITC does not allow discrimination between different types of losses in equity instruments.

The purpose of this paper, drawing on legal interpretation and case analysis, is to discuss the following research question: which interpretation is appropriate, when the literal and purposive elements related to the mentioned corporate tax rule are considered? Or, to put it in another way, should fair value losses in certain equity instruments be fully or partially deductible (symmetric or non-symmetric treatment of gains and losses) in the computation of investors' tax base?

Our conclusion is that, given the accounting principles underlining fair value, it does not make sense to apply the aforementioned tax restriction on accounting losses. In a fair value setting, financial instruments have market prices and the occurrence of losses is not dependent on the will of the taxpayer, being a consequence of price movements that investors cannot control. Given the purpose of the restrictive loss rule, extending it to fair value is, in our view, an unjustified interpretation of the law.

To explore the issue this paper is organised as follows: Section 2 presents a review of accounting and tax literature related to fair value; Section 3 explains the methodology; Section 4 details arguments used in divergent arbitration courts' decisions on fair value loss deduction related to financial instruments; Section 5 offers our view on the appropriate interpretation, Section 6 explores policy implications to tax legislators; and Section 7 offers some conclusions.

³ 'Fair value' is intended as 'fair market value', given that financial instruments analysed here are equity instruments with quoted market prices.

⁴ The term 'purpose' of the law means its 'teleology' or 'rationale'.

2. LITERATURE REVIEW

2.1 Some accounting issues related to fair value

The International Accounting Standard Board (IASB) and the Financial Accounting Standard Board (FASB) have adopted a conceptual path where fair value accounting is increasingly used in the preparation of companies' financial statements.

Accounting measurement of assets based on historical costs is insulated from the volatility of market prices. This static record is sometimes seen as more reliable, since historical information is easily documented. However, asset values can become impaired and written down, generating losses. Thus, even in an historical cost accounting paradigm unrealised losses can be the basis for adjusting asset values and influence net income. However, on the other hand, unrealised gains are typically not recognised, given the conservatism applied in the preparation of financial information.

The debate concerning fair value-accounting has increased due to the last financial crisis, reflecting an old accounting issue: the tradeoff between relevance and reliability (Laux & Leuz, 2009). This debate has had several consequences. For example, following the 2008 global financial crisis, the IASB decided to allow financial instruments' reclassification. This decision responded to the claims that losses derived from fair value accounting affected net income and increased the credit crisis, creating a self-fulfilling mechanism (Ballas et al., 2012).

Accepting that markets aggregate preferences and reduce informational asymmetries, market values (that are supposed to capture internally generated intangible assets, like goodwill) are seen as a better guide to managerial decisions. Supplying publicly, timely and comprehensive information to support economic decisions, giving special attention to investors, reducing the cost of capital and promoting foreign investment, as well as improving its global transparency and comparability, all led to the widespread acceptance of fair market value (Benston, 2008).

Furthermore, fair value improves comparability, which is a key characteristic of financial statements. Among other requirements, the measurement of the financial effects of similar transactions and other events must be carried out in a consistent way by different entities. Cairns et al. (2011) analysed the use of fair value measurement by 228 listed companies in the UK and Australia, under IFRS adoption in 2005. Their findings indicate that, when fair value was a mandatory requirement, within and between countries comparability was enhanced through the increasing use of fair value accounting for financial instruments and share-based payments.

As Barth (2007) states, there is basically no real alternative to a fair value based model. Laux and Leuz (2009) stress that even critics of fair value accounting do not defend a return to historical cost accounting. They note that it is difficult to support historical cost accounting as a viable alternative for liquid assets. An approach based on historical costs inappropriately reflects the current fundamental value of assets and liabilities.

Results from Siekkinen (2016) suggest that fair value in asset measurement is more relevant than historical values, while BarHava and Rozen (2015) found that fair value estimates provide relevant and representationally faithful information when compared to historical cost values. Empirical evidence obtained from Elbannan and Elbannan

(2015) also shows a relationship between fair value reporting and incorporation of firm-specific information into stock prices.

Accounting standards prescribe a three-level hierarchy of fair value measurement inputs: Level 1 reflects quoted prices in active markets; Level 2 applies to cases for which there are observable inputs related to the existence of a market with similar (not identical) items used as a basis for comparison; and Level 3 inputs are unobservable and correspond to the absence of a comparable market, thus making use of a theoretical model to derive hypothetical market prices. At this last level, reliability is lower and managerial opportunism and potential abuse may occur.

Considering its significant influence on investors' decisions, increasing the value relevance of financial statements is a major purpose of fair value reporting. In the absence of an active market to measure assets and liabilities, the range of evaluation methods and information sources are difficult and complex. They involve subjectivity and uncertainty, offering managers judgment discretion and leading to potentially distorted financial statements. Auditors must evaluate if fair value measurements in financial statements are reasonable, and decide if adjustments are required. Smith-Lacroix et al. (2012) emphasise the change of auditor role due to fair value accounting, similar to an arbitrator who mediates discrepancies over subjective values, often estimated by valuations experts, whose authority is difficult to challenge. Griffin (2014) found that auditors are most likely to require adjustments in fair value estimates when subjectivity and imprecision are both high.

In some cases, fair values are not recognised, but rather disclosed. Concerning investment properties, firms either recognise fair values on the balance sheet, with positive and negative effects in net income or through equity changes (fair value model), or disclose fair values in the footnotes, recognising those assets on the balance sheet at depreciated cost subject to impairment (cost model). Muller et al. (2015) gathered evidence on the relative importance of recognitions and disclosure.

If, on the accounting side, fair value is at the center of an ongoing debate, the tax consequences of its adoption are also a major issue for legislators, firms and tax practitioners.

2.2 An overview of tax issues related to fair value taxation

The design and application of a tax system has several well-known policy goals. Firstly, it must raise revenue to support public expenditure. Secondly, it should strike a delicate balance between principles such as fairness, efficiency and simplicity (Slemrod & Bakija, 2008). In this process, tradeoffs are inevitable. For example, a fairer system based on a careful tuning of deductions in personal income tax can add some complexity.

Finally, in recent decades, policy makers have made international competition a significant goal of tax systems. Corporate income taxation is a favoured area, where variables like tax rates, tax benefits and special treatment for intangibles, to name a few, have been used to lure foreign investors (Miller & Oates, 2014).

A financial accounting system has an overriding goal — to adopt a set of principles and rules that, when applied, produce a true and fair view of an entity's economic and

financial position. As such, accounting income and taxable income are influenced by different priorities and policy goals.

Given the complexities in the computation of fair value for several types of assets, liabilities and equity instruments (especially when market prices are not available) it is understandable that tax legislators have to give detailed consideration to the treatment of fair value gains and losses.

In general terms, three solutions are possible as far as fair value taxation is concerned. A first option is to relegate fair value to the accounting domain, while continuing to base taxation on the realisation principle. That is, to shield taxable income from fluctuations in the fair value of assets that, in accounting terms, are recognised under this measurement criterion. This would lead to an even greater gap between book and taxable income.

At the other extreme, full acceptance of the tax impact of fair value could be considered. In this scenario, fair value gains and losses recognised by the accounting system would be automatically included in the computation of the tax base, and greater convergence between the accounting and tax consequences of fair value is achieved.

Finally, an intermediate solution could be devised, in which only in certain limited, well defined, cases changes in fair value have tax consequences.

Solutions adopted in many countries show that the decision is not easy. As stated Cavana et al (2013, p. 52) for the Italian case:

...the wide use of fair value in the measurement of financial assets required by IAS 39 is one of the most controversial issues in the debate about the suitability of IFRS for tax purposes because, as a general tax principle, capital gains or losses should assume relevance only at realization. Nevertheless the Italian Tax Code accepts IFRS valuation for certain categories of financial assets. For example, fair value has fiscal relevance for all financial assets held for trading, for bonds and similar assets designated at 'fair value through profit or loss'...

Using a sample of 31 companies that have been part of the Portuguese Stock Index-20 (PSI-20) between 2005 and 2012, Cardao-Pito and Barros (2016) found that fair value accounting had a negative impact on Portuguese tax revenues. In 2010, CITC was revised and established restrictions to the tax effects of fair value accounting. However, a number of accounting measurements remained acceptable for fiscal purposes with several implications in corporate taxation. That is the case — as we shall see later — of fair value adjustments on financial investments when the participation on equity is lower than 5%.

Shuldiner (1992) argues that taxation of financial instruments has been challenged by the absence of a uniform theory and the evolution and technical sophistication of these assets, degenerating into uncertain and inconsistent rules. Some of these problems could be eliminated, switching the current realisation system for a mark-to-market accounting system for some financial instruments. Innovation and complexity in financial instruments has prompted some criticism to tax systems based on realisation rules (Hasen, 2003).

Fair value accounting reflects market volatility on reported earnings. These variations may be called artificial, in the sense of being unrealised. However, in the particular case of financial instruments, fair value taxation seems to gather some supporters, given its significant effects on a company's income tax bill. In fact, in comparison to the realisation principle, the most obvious difference between the two approaches is the time at which tax is due.

If acquisition and disposal dates occur in different fiscal periods, fair value taxation anticipates tax effects, as price variations will be reported annually, irrespective of any real(ised) profit or loss. If the tax rate remains constant over the years, which is not common in Portugal, the only difference is the time of taxation. However, even if the total amount of tax paid is the same, time is valuable in financial decisions. Under the realisation principle, assets appreciations are not taxed when they occur. Taxation is deferred until realisation (sale or exchange). This requirement is based on the fact that receiving a benefit, which is usually associated with increasing liquidity, triggers a legitimate tax collection, as stated by Kwall (2011) and Shuldiner (1992).

In a mark-to-market system assets are valued and taxed on the change in value over the period. However, the adoption of this system faces political problems and administrative costs. Investors resist paying taxes without a cash inflow, and it may be expensive to perform asset valuation every year. A realisation system is more stable, and triggers less valuation issues (Jager et al., 2012).

Another question that may arise is the underlying rationale of an exception to the realisation principle. It highlights the importance of an old issue, the book-tax relationship, which is at the core of the divergence between taxable and accounting income. The tax system is not designed to provide forward-looking economic information, but aligning taxation and financial reporting of financial instruments seems rational (Jager et al., 2012; Maroun, 2015).

A mixed tax system seems inevitable. As argued by (Shuldiner, 1992; Jager et al., 2012), accepting the existence of different financial instruments justifies the maintenance of an hybrid approach, with the realisation principle for some instruments and fair value taxation for others.

In the light of these considerations, the Portuguese solution to tax fair value adjustments in financial instruments — allowing a restricted and well defined acceptance, see section 4 — is quite understandable. However, the tax authorities' interpretation of fair value loss restriction based on a rule that was historically linked to the realisation principle is, in our view, excessive and economically unjustified.

3. METHODOLOGY

This paper's approach is based on the observation of a legal phenomenon (judicial decisions) and uses cases (law interpretation) in order to derive conclusions (answer the question of the feasibility of fair value losses limitations).

Our objective is to explain, interpret and critically analyse an existing legal rule. The ambiguous interpretation of this rule is reflected on contradictory judicial decisions.

This paper aims to understand the precedents, meaning and scope of some CITC clauses, in order to capture its real nature and implications. Understanding the reason behind the existing law leads to suggestions for improvements, removing uncertainty and providing a coherent framework. In this sense, Gestel and Micklitz (2014, p. 314) argue that:

academic legal research should primarily be engaged with trying to understand what is behind the law on a certain subject, why lawmakers operate as they do, why they look for legal answers to certain societal problems instead of pursuing alternatives to law and why the law says what it says instead of pondering about how the answer to a legal problem can be embedded in the legal system.

The problem that leads to the research question is identified through analysis of arbitration cases. Narratives contained in cases often capture real life complexities and contradictions (Flyvbjerg, 2006). From the observation of a certain real-life situation a process of investigation that increases knowledge may arise, becoming useful to a wider group of agents, such as taxpayers, tax practitioners and policymakers. Therefore, case analysis is of paramount relevance in the methodology adopted in this paper.

4. FAIR VALUE CASES AND TAX ARBITRATION COURTS CONTRADICTORY RULINGS

Portugal has had tax arbitration courts since 2011 (Decree Law 10/2011, 20 January). These courts can rule on cases involving amounts up to 10 million euro. Arbitrators must apply established tax law, as any state tax judicial court, and rulings must be delivered in six months. Many companies value the expediency of arbitration courts, especially medium and large firms as well as Portuguese affiliates of foreign companies, in complex matters like transfer pricing, intercompany debt or anti-abuse clauses. The number of tax cases decided in such courts increased from 26 in 2011 to 850 in 2014.

Since 2013, arbitration courts have dealt with the limitation on loss deduction established in article 45, §3 of the CITC. Typically, a tax audit focused on recognised fair value losses — through profit and loss accounts — on equity instruments. The taxpayer assumed losses were fully deductible, based on article 18, §9, a) of CITC. However, the tax authorities have applied article 45, §3 and disallowed the deduction of 50% of the recorded loss. These cases are usually litigated mainly by holding companies, the main investors in financial equity instruments.

The relevant legal rules of the Portuguese CITC are article 18, §9, a) inserted in the CITC in 2009 stating:

The accounting adjustments resulting from fair value do not affect taxable income, being recognized as revenues or expenses in the tax period in which assets that originated them are sold or liquidated, except when: a) they are related to financial instruments recognized at fair value through profit or loss account, provided that, in the case of equity instruments, they have a price taken from a regulated market and the taxpayer does not hold an equity participation higher than 5%.

Article 45, §3, inserted in the CITC in 2003, states:

The negative difference between capital gains and losses realized by the sale of equity instruments, and other losses related to equity components, contributes to taxable income only in the proportion of 50% of its value.

As far as article 18, §9, a) is concerned it is understandable that the tax relevance of fair value has been, as a rule, limited to certain types of assets by the Portuguese tax legislators. The widespread adoption of fair value as measurement criterion with full tax implications could lead to undesirable fluctuations in the tax base. Furthermore, after 2010 the Portuguese public finance situation implied the need for an external bail out and a strong emphasis in maximising tax receipts.

Thus, for financial assets that are legally defined in article 18, §9, a), regular trading in a regulated market, liquidity, a percentage of participation that, as a rule, does not imply price making capacity, and public disclosure of prices, all give fair value some economic and legal support, and also a degree of objectivity, which reduces legislative concerns related to the respective tax adoption.

As far as article 45, §3, is concerned, we must stress that it was set up in 2003, when fair value was not an accounting or tax issue. It was enacted to fight the manipulative use of the realisation principle in generating capital losses to offset operating income. As such, its teleology has nothing to do with fair value.

4.1 Arbitration rules and their fundamentals

The first arbitration case (Process 108/2013) ruled for the taxpayer, based on the following arguments:

1. Article 18, §9, a) of the CITC allows full deduction of fair value losses on equity instruments and the restrictive regime established under article 45, §3, does not apply. That is, tax implications of fair value in equity instruments are fully and completely stated in article 18, §9, a), and article 45 is therefore irrelevant.
2. The purpose of article 45, §3, is objectively connected with realised losses. It intends to discourage the convenient timing of losses by taxpayers to reduce taxable income in a certain year. By timing realisation in a profitable year firms could manage or manipulate taxable income. In a fair value paradigm, given that equity holdings must be below 5% to grant tax relevance to fair value gains or losses, the taxpayer is mostly a price taker, because accounting standards demand market quotation. Thus, taxpayers cannot use fair value to manage or manufacture losses. In the case of article 45, §3, the *ratio legis* (fighting avoidance) is quite distinct from the purpose of denying fair value full loss deduction.
3. The Portuguese Constitution states (article 104) that companies are taxed based on their real income. 'Real', or effective, meaning that the accounting income is the starting point to compute the tax base, and adjustments are added or subtracted (e.g., adding non-deductible provisions or subtracting non-taxed capital gains).

In this legal paradigm, taxes should not fall on a firm that has no ability to pay, revealed by an increase in net wealth (or equity) in certain year. To illustrate, suppose a holding company presenting as its sole asset a portfolio of equity instruments recorded at fair

value. Suppose, also, that the evolution of the market price of such a portfolio is observed in table 1. If the loss restriction established in article 45 is applied, we arrive at the following result:

Table 1 — Market value of a portfolio recorded at fair value

Year end	Market price	Fair value gain/loss	Taxable gain/deductible loss	Total net taxable income
1	1000			
2	500	-500	-250 (50%*500)	
3	800	300	300	
4	1000	200	200	300+200-250 =250

If the interpretation of tax authorities is followed, we arrive at an inconsistent outcome: a profitless firm with no increase in economic wealth between years 1 and 4, revealing no ability to pay, has to bear the corporate income tax on the amount of 250. The constitutional rule would be severely strained, and this is an additional argument to reject tax authorities' line of reasoning.

4. Moreover, the wording of article 45, §3, mentions 'losses'. For holdings, whose main or core activity is to manage portfolios, fair value reductions in assets are expenses (ordinary) not losses (extraordinary or peripheral to operations).

Contrarily, another arbitration case (Process 25/2014) ruled for the tax authorities, based on the following motives:

1. Article 45, §3, does not qualify restricted losses. By writing 'other losses related to equity components' the legislator did not spare fair value losses from the code limitation. Thus, the interpreter cannot do what the legal wording does not allow.
2. In financial markets, prices are quite often manipulated. The objectiveness of fair value and its supposed immunity to manipulation should not be taken as decisive arguments against tax authorities' interpretation of article 45, §3.
3. The Constitutional Court has already decided that the real income taxation principle is not violated by the restriction of certain types of losses (Ruling 85/2010). Therefore, no particular problem is created by restricting fair value losses.
4. The semantics concerned with 'expenses' and 'losses' are irrelevant, because the accounting notion of expenses also includes losses.

Faced with two opposing interpretations, what is our perspective on this thorny issue?

5. A DISCUSSION OF ALTERNATIVE JUDICIAL VIEWS AND OUR PERSPECTIVE

Let us begin by discussing the purpose of article 45, §3 of the CITC, enacted by Budget Law 2003 (Law 32-B/2002, 30 December). Its stated goal was to fight tax avoidance

potentially arising from the timing of realised capital losses. Firms could book losses in profitable periods, thereby manipulating the corporate tax base.

The adoption of the fair value paradigm in Portugal happened in 2010. In 2003 it was still quite distant. Thus, specific concerns about fair value losses can hardly be seen as a factor in interpreting article 45, §3, in the sense it was also designed to restrict fair value losses.

Moreover, in financial participations under 5%, when fair market value losses have tax relevance, firms holding portfolios of financial assets are not usually price makers. Therefore, the potential for timing transactions in order to influence market prices and recognised fair value changes is an unconvincing motive for applying loss restriction.

Arguing that the wording of article 45, §3, by stating 'other losses' means 'all losses, including fair value', is forgetting that the law's interpretation must go beyond the literal sense, if, as is the case, the meaning is not straightforward given the birth and evolution of the legal rule.

Regarding constitutional issues, and the taxation of real income, we detect a crucial argument against the tax authorities' interpretation. The CITC has a core principle — taxable income is based on profit plus other (if taxable) net equity increases. As table 1 makes abundantly clear, a non-symmetrical taxation of fair value gains and losses can lead to a situation in which a company pays taxes even if its profit or net equity increase is nil. This goes against the very foundation of corporate tax base definition in the Portuguese law. It follows that, when recording fair value gains and losses in holding companies, under the 5% participation threshold, full taxation of gains and full deduction of losses must be the appropriate interpretation.

The fact the Constitutional Court has ruled that expense or loss restraining is admissible, is not, in our view, a decisive argument. In fact, the Court has ruled that in order to fight tax avoidance and evasion, and to achieve a fairer distribution of the tax burden, some booked expenses (e.g. recreational, capital losses with related entities, non-documented costs) can be restricted. In many countries, extensive lists of non-deductible costs in computing the corporate tax base can also be found.

Yet the fair market value issue discussed here is distinct. In this case there is no avoidance opportunity, and the expense or loss in a holding company has a clear business purpose. The admission of loss restriction would imply paying taxes even if no profit is booked or, worse, in certain cases even if a net accounting loss is booked. This would be an excessively wide interpretation of the constitutional precedent of admitting certain loss restrictions as a fairness enhancing device.

Regarding the accounting question (expenses versus losses) our analysis is based on accounting standards and the financial accounting literature. Elaborating on the distinction between expenses and losses, and drawing on the Statement of Financial Accounting Concepts 6, issued by the FASB, expenses are defined as outflows from delivering or producing goods, rendering services, or carrying out other activities that constitute the entity's ongoing major or central operations. On the other hand, losses are defined as decreases in equity from peripheral or incidental transactions.

Items that are revenues for one entity may be gains for another, and items that are expenses for a certain firm may be losses for another. To illustrate, investments in

securities that may be sources of revenues and expenses for insurance or investment companies may be sources of gains and losses in manufacturing or merchandising companies.

This important doctrinal source stresses the distinctive nature of losses by linking them to peripheral activities of an entity. The same economic phenomenon can be classified as an expense in some cases and as a loss in others, depending on the economic activity developed by business entities.

In the Portuguese doctrine, Machado (1998) points out that losses do not relate to the core or productive activities originating revenues. Revenue, as defined by the Conceptual Structure of the Portuguese Financial Accounting System (SNC), stems from regular activities of an entity.

In the international literature, Libby et al. (2009) define losses as decreases in assets (or increases in liabilities) from peripheral transactions.

Article 45, §3, states that what is restricted is deductibility of 'other losses', not 'other expenses'. Accepting the conceptual distinction between expenses and losses, and bearing in mind the concrete case of holdings, it can be argued that their normal activity is the acquisition, managing and sale of shares. Holding securities listed on a regulated market, whose accounting value is affected by price changes, is not a peripheral phenomenon or fortuitous activity. Fair value gains and losses in these equity instruments are regular economic consequences emerging from holdings' activity as defined by law (Decree law 495/88, 30 December).

We venture that the purpose of article 45, §3, the relation between accounting concepts and the wording of this tax rule, and the real income taxation principle established in the Portuguese Constitution, all argue for the full deduction of fair value losses, when requirements stated in article 18, §9, a) of the CITC are observed.

A final remark on this issue. We are aware that, in many countries, loss restriction rules do exist. Firstly, loss carry over (or carry back) can be limited in time. Secondly, capital losses derived from financial instruments are often restricted to offset operating gains. (This was the rationale of article 45, §3, but in a realisation paradigm, not in a fair value setting). Thirdly, loss carry over can be restricted in its amount. If a firm has a tax loss of 1000 in year 1, and a tax profit of 1000 in year 2, and if a 50% restriction applies, then in year 2 the tax profit is 500, and not zero, as it would be if full deduction applied.

However, the issue here is quite distinct. Tax authorities were applying to fair market value losses a restriction that was created to avoid the manufacturing of losses in a realisation paradigm. The essential feature of fair market value losses discussed in the previously analysed cases is that they emerge from observable and quoted market prices, not from the hypothetical convenience and timing of realisation. Thus, to apply article 45, §3, to losses with such a nature is, in our view, inconsistent with the purpose of that tax limitation rule.

6. SOME POLICY IMPLICATIONS

In previous sections of this paper we highlighted the complexities of devising a tax solution to accommodate the increasing importance of fair value in financial accounting. In many circumstances, the preferred option of legislators is to restrict the tax relevance

of fair value. A general acceptance of fair value for tax purposes raises an (in our view, understandable) concern with the possibility of taxable income manipulation. Valuation based on financial models could be a dangerous tool for reducing the tax base, if fair value was granted total acceptance in corporate income taxation.

A total disregard of fair value for tax purposes seems also an excessive solution. When reliable market prices do exist, accounting values are determined outside the influence of managers and the possibility of manipulation is reduced. As such, the convergence between accounting and tax values is an acceptable solution. Financial instruments, with market prices, are thus a good starting point to adapt the tax law when financial accounting systems move towards a fair value based paradigm.

However, even if fair value tax relevance is limited to this type of assets, any legislator must ponder several thorny issues:

1. Should fair value have tax relevance for financial (equity) instruments independently of the participation of the investor?
2. If a threshold is established, how to deal with changes in the financial participation above/below that threshold?
3. Should there be a symmetric treatment of gains and losses?

In many countries, business law establishes a threshold for the so called 'qualified equity participations'. Thus, when a shareholder acquires a number of shares above a certain percentage, this is considered a relevant holding and must be disclosed to market participants. In the Portuguese case it is 2%, but this was not followed in the fair value tax threshold, which is 5%.

It can be argued that for participations under this threshold, an investor is considered not to have a strategic position, and is basically a price taker. However, in many cases, holdings around 5% are strategic and can exert important influence on corporate events such as mergers, spin offs and take overs.

In our view, establishing a threshold has good economic rationale, particularly given the attribution of tax relevance to fair value should be strongly related to a low probability of price manipulation by investors.

Another reason argues for a low threshold: an investor with a low participation has a higher degree of market liquidity, given the easier tradability of assets. A tax liability triggered by a fair value measurement has, therefore, a corresponding higher liquidity on the side of the taxpayer to pay the tax due.

However, this option is plagued with a problem that is mentioned above — how to deal with fair value gains and losses arising when the investor's position goes above/below the threshold? That is, supposing the limit is 5%, if for example, a gain is built when the investor has 6% (tax irrelevant) and for some reason the participation goes to 4.5% (when the fair value gain has tax relevance), how to deal with such cases?

The problem can become even more complex, because a change in the investor's percentage of participation can arise from several causes such as the sale of stock, or dilution by new share issuance that investors do not buy.

The Portuguese solution to this issue was to fiction a realisation when the participation goes above/below the threshold (article 46 of the CITC). For example, let us suppose that a portfolio of shares, representing 6% of the investee's equity, is bought in year 1, by 1000. In year 4 the portfolio has a fair value of 1600. Then, if in year 4 the participation goes to 4%, it is presumed that the gain (600) is realised. The fair value gains and losses only become tax relevant after year 4. If, in year 5, the fair value is 1800, then a taxable gain of 200 is recognised. It seems an ingenious solution, but introduces an inevitable higher degree of complexity in fair value taxation of financial instruments.

Regarding the symmetric treatment of gain and losses, we venture that symmetry is the right option. In fact, the loss limitation related to some realised capital gains is understandable, given the taxpayer has a timing option to realise them and to manipulate taxable income. But, when moving to fair value on equity instruments, with market observable prices, the possibility of manipulation of taxable income is not dependent on the will of the taxpayers. Therefore, taxation of gains and full deduction of losses seems the proper way to legislate.

Additionally, a legislator introducing fair value clauses in a corporate tax code based on the realisation principle must carefully comb the code for rules with wording like 'any loss...' or 'any gain...'. In a fair value environment, the economic nature of gains and losses may be a decisive reason to insulate them from general rules that may have been set up with other policy goals in mind.

7. CONCLUSION

Fair value accounting is often criticised for introducing optimism and inflating equity or earnings with non-realised gains. However, non-realised losses are also recognised, bringing potential problems to light. These anticipated results prevent hiding or delaying the disclosure of serious financial difficulties.

Furthermore, from an accounting perspective, historical cost is losing its appeal as a measurement alternative. The real challenge is to make fair value accounting more reliable, in particular when market information is not always available, requiring assumptions and significantly relying on judgment.

Concerning financial instruments taxation, the literature shows there is a considerable acceptance of fair value profit and loss recognition in detriment to the realisation approach.

After Portugal adopted an IFRS accounting based system, the tax relevance of fair value in equity instruments was clearly limited in scope. Moreover, tax authorities, in auditing, argued that a 50% fair value loss restriction would apply to fair value, inducing an asymmetric treatment of gains and losses.

We deem this position economically unjustifiable and not supported by the teleology of this loss restriction rule. Being set up to counter the manipulation opportunities of the tax base in an environment where the realisation principle was the rule for taxing financial instruments' gains and losses, it has no place in a fair value setting such as the one defined in article 18, §9, a) of the Portuguese CITC.

Therefore, faced with two contradictory perspectives of tax arbitration courts, we strongly supported the full deduction of recognised fair value losses in equity instruments.

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Encouraging superannuation income streams with tax-free earnings to be taken in a form that provides longevity insurance

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Abstract

Australia's superannuation system allows those entering retirement to take their benefits in the form of an income stream which benefits from tax-free earnings. Currently, very few income stream benefits are taken in the form of a lifetime annuity even though such an instrument provides an excellent form of longevity insurance. The Australian Government is currently implementing changes that expand the tax-free earnings net to include Deferred Life Annuities and Group Self-Annuitisation Schemes. This paper finds that this is a positive move that will potentially benefit many retirees. The government is also considering implementing some behavioural tools which include a regime under which superannuation trustees choose a pre-packaged bundle of income stream products that include annuities. Members entering retirement would actively choose to adopt these products. It is argued that such a regime would be a negative policy development that would result in many retirees annuitising to a non-optimal extent.

Key words: superannuation, annuities, retirement policy, income streams

1. INTRODUCTION

Australia has had compulsory superannuation for more than 20 years. During that time, the system has changed substantially. As the population ages, rules that affect the operation of the superannuation system for those in retirement will become increasingly important.

Under the current law, retirees able to access their superannuation are given close to unfettered freedom as to how they receive their funds. They can take their superannuation in any combination of a lump sum or a superannuation income stream, with the income streams option benefitting from tax-free earnings.² For those who choose to take all or part of their funds in the form of an income stream, only a small minority do so in the form of a lifetime annuity.³ This is surprising, given that lifetime annuities provide a return free from investment and longevity risk, and if appropriately indexed, from inflation risk as well.⁴ A risk-free income stream can be appealing to many retirees at a time in their life when their ability to earn income from labour is often limited.

Recently, there has been policy discussion and legislative changes regarding superannuation income streams, some of which has concentrated on increasing the uptake of life annuities and similar instruments. Specifically, the government has started the process of legislating to broaden the range of life annuities that are covered by the superannuation system and so benefit from tax-free earnings. There has also been policy discussion about behavioural techniques that could increase the uptake of superannuation income streams, and in particular encourage partial annuitisation of superannuation funds. Proposed behavioural policies include presenting those about to enter retirement with a pre-arranged package of income streams that typically include partial annuitisation as well as mandating certain disclosures on superannuation benefit statements.

Part 2 of this article describes the relevant current law, with an emphasis on superannuation income streams. Part 3 then examines the reasons for the traditional unpopularity of annuities in Australia and in many overseas jurisdictions. Part 4 critically evaluates reforms made to expand the range of annuity-like instruments that qualify as superannuation income streams that can benefit from tax-free earnings. Part 5 describes and evaluates proposed behavioural tools to harness the behavioural biases which could, among other things, increase the uptake of annuities. Part 6 concludes this assessment.

² *Income Tax Assessment Act 1997* (Cth) ss 295-385, 295-390, 295-395, *Income Tax Assessment Regulations 1997* (Cth) reg 995.1.01.

³ David Murray, Kevin Davis, Craig Dunn, Carolyn Hewson and Brian McNamee, *Financial System Inquiry Final Report* (2014) 120 <http://fsi.gov.au/files/2014/12/FSI_Final_Report_Consolidated20141210.pdf>.

⁴ 'Investment risk' refers to the risk of assets under-performing more than expected (which includes declining in value). 'Inflation risk' refers to the cumulative effect of inflation reducing the consumption ability of an income stream over time. 'Longevity risk' is the risk of outliving one's retirement savings. See Janemarie Mulvey and Patrick Purcell, 'Converting Retirement Savings into Income: Annuities and Periodic Withdrawals' 2-4 (R40008 Congressional Research Service Report for Congress, 2008).

2. CURRENT LAW REGARDING SUPERANNUATION TAXATION

Australia's superannuation system is characterised by individual accounts. In most cases, employers must make compulsory contributions to these accounts where the employee earns at least \$450 a month.⁵ Employers' mandated contributions are currently set at a rate of 9.5% of salary, although from 1 July 2021 this will start to increase incrementally to 12%.⁶ Voluntary contributions can also be made by the account holders and their employers.⁷ Account funds are invested, and in general can only be accessed for personal use in retirement.⁸

Superannuation is subject to highly concessional tax treatment. Specifically, it is potentially taxed at three points. The first is when funds are contributed to the superannuation account, the second is when the superannuation investments earn a return, and the third is when funds are withdrawn from the superannuation system.

2.1 Superannuation contributions

Superannuation contributions paid by the employer, as well as tax-deductible payments made by individuals to their own superannuation accounts (both termed concessional contributions)⁹ are taxed at the rate of 15% in the hands of the fund.¹⁰ As of 1 July 2017 most individuals are able to make such tax-deductible concessional contributions to their own superannuation accounts.¹¹ Superannuation contributions paid out of post-tax income or savings are termed non-concessional contributions, and given that they are post-tax, are not subject to a contributions tax.¹²

2.2 Superannuation income streams and taxation of earnings

As a background to the taxation of superannuation earnings, superannuation accounts can be either in accumulations or income stream modes. Taxpayers will usually have their accounts in accumulations phase during their working lives, at which time the account can receive contributions. In general, taxpayers who reach their superannuation preservation age and satisfy a condition of release will be able to access their superannuation.¹³ Previously the preservation age was 55, but is now rising incrementally to 60.¹⁴

A taxpayer who reaches the relevant preservation age and fulfils any other necessary conditions of release is allowed unfettered access to their superannuation funds;¹⁵ they can take it in in any combination of a lump sum and income stream. The law does not prescribe a default choice for members regarding the form of retirement benefits to be taken.

⁵ *Superannuation Guarantee (Administration) Act 1992* (Cth).

⁶ *Ibid* s 19(2).

⁷ *Income Tax Assessment Act 1997* (Cth) ss 291-25, 292-90.

⁸ *Superannuation Industry (Supervision) Regulations 1994* (Cth) sch 1 Item 101, reg 6.01.

⁹ *Income Tax Assessment Act 1997* (Cth) s 292-25.

¹⁰ *Ibid* s 295-160.

¹¹ *Income Tax Assessment Act 1997* (Cth) ss 280-10, 290-150, 290-160 as amended by *Treasury Laws Amendment (Fair and Sustainable Superannuation) Act 2016* (Cth) sch 5.

¹² *Ibid* s 292-90.

¹³ *Superannuation Industry (Supervision) Regulations 1994* (Cth) Sch 1.

¹⁴ *Ibid* reg 6.01.

¹⁵ *Ibid* sch 1 Item 101, reg 6.01.

If a taxpayer withdraws funds in the form of an income stream, all or a portion of their accumulations account is converted into an income stream account. Such accounts cannot receive further deposits once created.¹⁶ There are two main forms of income stream accounts: account-based pensions and annuities.¹⁷ In reality, the overwhelming number of retirees choose an account-based pension.¹⁸ In the case of an account-based pension, the funds are invested and the holder is allowed to make withdrawals at will.¹⁹ However, account-based pensions are subject to age-based minimum withdrawal limits.²⁰ There are no maximum withdrawal limits. In other words, the operation of an account-based pension is in many ways similar to a superannuation account in accumulations mode, except for the minimum withdrawals and the account's inability to receive deposits.

The other income stream option is an annuity. Here the taxpayer uses a lump sum portion of their superannuation balance to purchase a regular annuity income stream.²¹ Such annuities can be either term or life annuities.²² A retiree with a life annuity will receive an income stream for the rest of their lives, meaning that their income is free from investment and longevity risk, and if indexed, from inflation risk as well.²³ The annuity payments are usually received regularly, and until 1 July 2017 had to be paid at least annually.²⁴ Annuity income streams can be either fixed or indexed to a set percentage, the Consumer Price Index (CPI), or to Average Weekly Earnings (AWE). If the income stream is linked to CPI or AWE, the indexation factor can be capped by the annuity contract.²⁵

Earnings of accounts supporting a superannuation income stream (whether that be an account-based pension or annuity) are tax-free.²⁶ In contrast, earnings of an accumulations superannuation account are taxed at the rate of 15%.²⁷ This is still highly concessional compared with investments held in the name of a full-time salary earner, which are taxed at normal individual marginal tax rates, although some concessions are available for directly held investments, including the 50% discount to which most capital gains are subject.²⁸ Under recent legislation, from 1 July 2017 each taxpayer will be limited to assets worth a maximum of \$1.6 million benefiting from tax-free income streams.²⁹

¹⁶ Ibid sub-regs 1.05(1)(a)(ii), 1.06(1)(a)(ii).

¹⁷ *Income Tax Assessment Act 1997* (Cth) s 307-70, *Income Tax Assessment Act Regulations 1997* (Cth) reg 995-1.01. As discussed in Part 4 of this article, as from 1 July 2017, there is a third type of income stream which has its main requirements specified in *Superannuation Industry (Supervision) Regulations 1994* (Cth) reg 1.06A.

¹⁸ Australian Prudential and Regulation Authority, *June 2016 Annual Superannuation Bulletin*, 21 <<http://www.apra.gov.au/Super/Publications/Documents/2017ASBEXCEL201606%20-%20PDF.pdf>>.

¹⁹ *Superannuation Industry (Supervision) Regulations 1994* (Cth) reg 1.06.

²⁰ Ibid sub-reg 1.06(9A).

²¹ Ibid sub-regs 1.05(1), 1.05(11A).

²² Ibid sub-reg 1.05(11A).

²³ Mulvey and Purcell, above n 4, 2–4.

²⁴ *Superannuation Industry (Supervision) Regulations 1994* (Cth) reg 1.05 later amended by *Treasury Laws Amendment (Fair and Sustainable Superannuation) Regulations 2017* (Cth).

²⁵ Ibid sub-regs 1.05(11A), 1.05(13).

²⁶ *Income Tax Assessment Act 1997* (Cth) ss 295-385, 295-390, 295-395, *Income Tax Assessment Regulations 1997* (Cth) reg 995.1.01.

²⁷ *Income Tax Rates Act 1986* (Cth) ss 26(1), 27(1), 27A.

²⁸ *Income Tax Assessment Act 1997* (Cth) div 115.

²⁹ *Treasury Laws Amendment (Fair and Sustainable Superannuation) Act 2016* (Cth) sch 1, pt 1.

2.3 Withdrawal of superannuation benefits

Although the earnings of superannuation income streams are tax-free, receipt of the income stream withdrawals in the hands of the retiree is potentially subject to tax. In the case of an account-based pension this will be the amount withdrawn, and in the case of an annuity this will be the annuity payments. To the extent that an income stream receipt can be traced back to non-concessional contributions, it will not be subject to tax,³⁰ this is referred to as ‘the tax-free component’.³¹ The rest of the income stream receipt will include portions traceable to the concessional contributions and earnings; this is referred to in the legislation as ‘the taxable component’.³² In general, taxable components received by those at least 60 years of age are tax-free,³³ while those received by those who have reached preservation age but are under 60 will be taxed at their marginal tax rate, subject to a 15% offset.³⁴ As the preservation age has been legislated to rise to 60, increasingly the overwhelming number of retirees who get income stream payments will not pay tax on them.³⁵

3. ADVANTAGES OF LIFE ANNUITIES AND THEIR LACK OF POPULARITY IN AUSTRALIA

Life annuities are unpopular in Australia³⁶ and many other countries.³⁷ Specifically, although in dollar terms just over 50% of superannuation benefits are taken in the form of an income stream rather than a lump sum,³⁸ only about 7% of income stream accounts are annuities (including both life and term annuities).³⁹ The unpopularity of life annuities, despite their provision of a number of marked advantages, is known internationally as ‘the annuity puzzle’.⁴⁰ A number of possible explanations for their lack of popularity have been suggested, although the relative importance of each reason and the precise ways in which the reasons relate to each other are far from certain.

3.1 Advantages of lifetime annuities

A traditional life annuity offers an income stream that is free from investment risk, longevity risk, and if indexed, to inflation risk as well.⁴¹ Given that retirees are generally at a time in their lives where their ability to earn income from their labour is limited, it is logical that a risk-free income stream would be of value to many. Further, theoretically annuities can provide more income in retirement as compared to account-

³⁰ *Income Tax Assessment Act 1997* ss 301-10, 301-15.

³¹ *Ibid* subdiv 307-C.

³² *Ibid* subdiv 307-C.

³³ *Ibid* s 301-10.

³⁴ *Ibid* s 301-25.

³⁵ *Superannuation Industry (Supervision) Regulations 1994* (Cth) reg 6.01.

³⁶ Murray et al., above n 3, 125.

³⁷ Jeffrey R Brown, ‘Financial Education and Annuities’ 181–82 (2008/3 OECD Journal: General Papers, OECD, 19 Feb 2009). Although Murray et al., above n 3, 125 claims that they are popular in many other jurisdictions, this is not necessarily the case in most jurisdictions where annuities are not mandated.

³⁸ Australian Prudential and Regulation Authority, above n 18, 12.

³⁹ *Ibid* 21.

⁴⁰ Jeffrey R Brown, Marcus D Casey and Olivia S Mitchell, *Who Values the Social Security Annuity? New Evidence on the Annuity Puzzle* (National Bureau of Economic Research, Working Paper No 13800, December 2007) <<http://www.nber.org/aging/trc/papers/orrc07-02.pdf>>.

⁴¹ Mulvey and Purcell, above n 4, 2–4.

based pensions.⁴² This is due to the fact that a phased withdrawal product such as an account-based pension presents the retiree with a trade-off between under-consuming and thus self-insuring against the risk of living materially longer than their actuarially expected age, and not under-consuming but facing the real risk of running out of funds if one does live longer than actuarially expected.⁴³ A lifetime annuity, on the other hand, sidesteps this problem by in effect basing annuity payments on expected longevity, with those living longer than expected benefiting at the cost of those living shorter than expected.⁴⁴

3.2 Reasons for lack of popularity

There are a number of reasons why life annuities are unpopular. Some of these reasons relate to the inherent nature of such annuities. These reasons include a desire to bequeath wealth,⁴⁵ wanting to maintain liquidity for unforeseen expenditure,⁴⁶ and the availability of other investment opportunities.⁴⁷ Further, a bequest motive need not in many cases rule out partial annuitisation of retirement funds, given that retirees do, to some degree, trade-off wealth to be used by themselves and for their heirs.⁴⁸ Also, the ability of many to receive the age pension further discourages annuitisation as pre-existing annuities (such as the age pension) dampen annuity demand.⁴⁹ While it could be argued that the government could theoretically change this by drastically reducing entitlements to the age pension, the reality is that this is highly unlikely to occur, meaning that this could be considered a largely unchangeable reason for limited annuity demand.

There are, however, reasons for not annuitising which could to some extent be abated by government policies. One of these concerns the price of annuities,⁵⁰ given that the evidence indicates that the expected income stream of annuities exceeds their price.⁵¹ This itself is attributable to several factors. The first is that annuity issuers have costs, and also need to make a profit. The second concerns what is known as the ‘adverse selection’ effect, which is a phenomenon resulting from asymmetrical access to

⁴² Jeffrey R Brown, ‘Rational and Behavioral Perspectives on the Role of Annuities in Retirement’ (Working Paper No. 13537, National Bureau of Economic Research, October 2007) 4–6, 35.

⁴³ Ibid.

⁴⁴ Ibid.

⁴⁵ Jeffrey R Brown, Jeffrey R Kling, Sendhil Mullainathan and Marian V Wrobel, ‘Why Don’t People Insure Late-Life Consumption? A Framing Explanation of the Under-Annuitization Puzzle’ (2008) 98 *American Economic Review (Papers and Proceedings)* 304, 307. But see Jeffrey R Brown, ‘Private Pensions, Mortality Risk, and the Decision to Annuitize’ (2001) 82 *Journal of Public Economics* 29, 56–58; Brown, Casey and Mitchell, above n 40, 11.

⁴⁶ Sid Browne, Moshe Milevsky and Thomas Salisbury, ‘Asset Allocation and the Liquidity Premium for Illiquid Annuities’, (2003) 70 *Journal of Risk and Insurance* 509.

⁴⁷ Moshe A Milevsky, ‘Optimal Annuitization Policies: Analysis of the Options’ (2001) 5(1) *The North American Actuarial Journal* 57, 65–66.

⁴⁸ Thomas Davidoff, Jeffrey R Brown and Peter A Diamond, ‘Annuities and Individual Welfare’ (2005) 95 *American Economic Review* 1573, 1583.

⁴⁹ Irena Dushi, and Anthony Webb, ‘Household Annuitization Decisions: Simulations and Empirical Analyses’ (2004) 3 *Journal of Pension Economics and Finance* 109, 131–34; Fedor Iskhakov, Susan Thorp and Hazel Bateman, ‘Optimal Annuity Purchases for Australian Retirees’ (2015) 91 *Economic Record* 139, 146.

⁵⁰ Monika Büttler, Stefan Staubli and Maria Grazia Zito, ‘The Role of the Annuity’s Value on the Decision (Not) to Annuitize: Evidence from a Large Policy Change’ 27 (Discussion Paper No DP6930, Center for Economic Studies, August 2008); Brown, Casey and Mitchell, above n 40, 8.

⁵¹ Jeffrey R Brown, Olivia S Mitchell and James M Poterba, ‘The Role of Real Annuities and Indexed Bonds in an Individual Accounts Retirement Program’ 58 (Working Paper No 7005, National Bureau of Economic Research, 1999) <<http://www.nber.org/papers/w7005.pdf>>.

information in certain markets such as annuity markets.⁵² Specifically, in the annuity market, annuity purchasers are skewed towards those who believe they will have high longevity, which leads to higher annuity prices due to longer payout periods, which then leads to a spiral of ever-higher annuity prices and the purchaser base being increasingly skewed towards those perceiving themselves as likely to have high longevity.⁵³ These two factors are interlinked, in that higher annuity prices due to costs and need to make a profit can increase the adverse selection effect.⁵⁴

Another reason for low annuity demand that could be abated is that of incomplete annuity markets.⁵⁵ Specifically, in some cases there is an insufficient range of annuity products to reflect the needs of some retirees.⁵⁶ Examples include the fact that traditional annuity products do not give the holder access to the equity premium available on share investments, and that they only offer the holder a limited ability to liquidate the annuity in case of a consumption shock such as long-term nursing home care.⁵⁷ Further, there is some equivocal evidence that another potentially rectifiable issue negatively affecting annuity demand is that consumers lack education concerning how they operate.⁵⁸ There is also evidence that supply side constraints have limited the annuity market due to factors such as the limited ability of annuity issuers to insure against some of their risks.⁵⁹

Behavioural reasons also contribute to low annuity demand, which also could in theory be abated to some degree by government policy. Specifically, research has indicated that people are loss-averse, and so disvalue a dollar lost more than they value a dollar gained.⁶⁰ This means that as far as annuities are concerned, people will be more averse to the risk of dying shortly after purchasing their life annuities, compared with the potential upside of outliving their predicted life expectancy and receiving more annuity payments than expected.⁶¹ Further, an interrelated but separate factor is the human tendency to overweigh small risks,⁶² meaning that people will perceive the risk of an early death to be higher than is actually the case.⁶³ Another interrelated behavioural factor is that buying annuities from large institutions is potentially viewed by a retiree as an unfair bet with that institution.⁶⁴

⁵² George A Akerlof, 'The Market for "Lemons": Quality Uncertainty and the Market Mechanism' (1970) 84 *Quarterly Journal of Economics* 488.

⁵³ Amy Finkelstein and James Poterba, 'Selection Effects in the United Kingdom Individual Annuities Market' (2002) 112 *The Economic Journal* 28, 29–30.

⁵⁴ William Gentry and Casey Rothschild, 'Enhancing Retirement Security Through the Tax Code: The Efficacy of Tax-Based Subsidies in Life Annuity Markets' (2010) 9 *Journal of Pension Economics & Finance* 185, 190.

⁵⁵ Brown, above n 37, 15–17.

⁵⁶ Ibid.

⁵⁷ Ibid.

⁵⁸ Ibid 20–22.

⁵⁹ Hazel Bateman and John Piggott, 'Too Much Risk to Insure? The Australian Non-market for Annuities' in Olivia S Mitchell, John Piggott and Noriyuki Takayama (eds), *Securing Lifelong Retirement Income: Global Annuity Markets and Policy* (Oxford University Press, 2011) 81, 101.

⁶⁰ Daniel Kahneman and Amos Tversky, 'Prospect Theory: An Analysis of Decision Under Risk' (1979) 47 *Econometrica* 263, 279.

⁶¹ Wei-Yin Hu and Jason S Scott, 'Behavioral Obstacles in the Annuity Market' (2007) 63(6) *Financial Analysts Journal* 71, 76.

⁶² Kahneman and Tversky, above n 60, 280–84.

⁶³ Hu and Scott, above n 61, 76.

⁶⁴ Rami Hanegbi, 'Security in Uncertain Times: Policies for Increasing the Popularity of Life Annuities Among Retirees' (2013) 20 *Virginia Journal of Social Policy & the Law*, 473, 489–90.

Other interrelated behavioural reasons also contribute to diminished annuity demand. One of these is related to ‘framing’, in that people commonly perceive annuities as poor investments given that their discounted expected income stream exceeds their price.⁶⁵ In contrast, when people see annuities from a consumption perspective, they find them substantially more attractive because such annuities help maximise consumption, as they provide a form of longevity insurance, which alleviates the need for people to under-consume so as to self-insure against such a risk.⁶⁶ The importance of framing is reflected by international evidence that found that annuitisation rates are increased by retirement plan member benefit statements including predicted annuitised entitlements.⁶⁷ Another behavioural reason is that of ‘mental accounting’, in that a typical retiree upon purchasing an annuity will be giving up an entitlement to a lump sum in return for a series of comparatively low payments, which can instinctually seem like a bad deal.⁶⁸ This is related to another behavioural reason, that of the ‘illusion of wealth’, where at least up to a certain point, lump sums are subjectively perceived as more adequate for funding retirement than their annuitised equivalent.⁶⁹ Also worth mentioning is that one more behavioural reason for low annuity demand is the ‘illusion of control’, where some people have a bias towards overvaluing and overestimating the control that they have over a lump sum amount which leads to a reluctance to lose control of their funds through annuitisation.⁷⁰

3.3 Reforms

In 2014 the government undertook an inquiry into the Australian financial system. Consequently, in mid-2014 the interim Financial System Inquiry Report (‘Interim Report’) was released,⁷¹ followed by the release of the final Financial System Inquiry Report (‘Final Report’).⁷² These reports included policy discussions regarding increasing the development and uptake of superannuation income streams.⁷³ Broadly, the Final Report’s recommendations could be placed into two categories. The first type of policy recommendation involves expanding the range of annuity-like instruments constituting a superannuation income stream that can benefit from tax-free earnings.⁷⁴ The second type involves harnessing the power of behavioural tools. One of the behavioural tools suggested by the Final Report is to offer those about to enter retirement a pre-packaged collection of income streams, called Comprehensive Income Products for Retirement (CIPR). These would typically include annuities or annuity-like instruments.⁷⁵ Another such tool is to mandate superannuation benefit statements to include the member’s income stream entitlements along with the amount of

⁶⁵ Brown, Kling, Mullainathan and Wrobel, above n 45, 304, 305–07.

⁶⁶ Ibid.

⁶⁷ Shlomo Benartzi, Alessandro Previtero and Richard H Thaler, ‘Annuitization Puzzles’ (2011) 25(4) *Journal of Economic Perspectives* 143, 155–56.

⁶⁸ Ibid 157.

⁶⁹ Daniel G Goldstein, Hal E Herschfield and Shlomo Benartzi, ‘The Illusion of Wealth and its Reversal’ (2016) 53 *Journal of Marketing Research* 804, 805–09.

⁷⁰ Brown, above n 42, 25–26.

⁷¹ David Murray, Kevin Davis, Craig Dunn, Carolyn Hewson and Brian McNamee, *Financial System Inquiry Interim Report* (2014) <http://fsi.gov.au/files/2014/07/FSI_Report_Final_Reduced20140715.pdf>.

⁷² Murray et al., above n 3.

⁷³ Murray et al., above n 71, Ch 4; Murray et al., above n 3, Ch 2.

⁷⁴ Murray et al., above n 3, 120–21.

⁷⁵ Ibid 117.

accumulated funds.⁷⁶ The government stated, in its response to the Final Report, that it would participate in reform relevant to superannuation income streams.⁷⁷

More detailed discussion relating to expanding annuity-like instruments that constitute superannuation income streams was covered in a 2014 discussion paper, which invited submissions.⁷⁸ After consultation, a further paper was released in 2016, making several policy recommendations about widening instruments that constitute superannuation income streams which benefit from tax-free earnings.⁷⁹ The government has recently enacted legislation which begins the process of implementing these changes.⁸⁰

In contrast, the reform process concerning CIPRs is only in the preliminary stage. Recently, the government has released a discussion paper relating to the development of CIPRs, and invited submissions.⁸¹ Any possible legislative reform will necessarily take some time to eventuate, and would not commence before mid-2018.⁸² There have been no recent government announcements regarding mandating disclosure of income stream benefits on superannuation member statements.

4. BROADENING TYPES OF LIFE ANNUITIES

As discussed, the government has recently begun to make legislative changes to expand the class of annuities and annuity-like instruments that constitute superannuation income streams that can benefit from tax-free earnings.⁸³ Specifically, these policies are aimed at including Deferred Life Annuities (DLA) and Group Self-Annuitisation (GSA) schemes into the regime. It is worth examining how these instruments operate, the policy behind allowing these instruments to fall under the superannuation tax-free earnings net, and the implementation of the changes.

4.1 Deferred life annuities

A DLA is a lifetime annuity that commences payment only once the holder reaches a pre-determined future age.⁸⁴ For instance, a 65 year old, rather than purchasing an immediate annuity, could purchase an annuity that commences payments only when they reach 80 years of age.

DLAs have several advantages that make them potentially more attractive than immediate life annuities. The first relates to their lower cost. A deferred annuity

⁷⁶ Ibid 267.

⁷⁷ Commonwealth of Australia, *Improving Australia's Financial System. Government Response to the Financial System Inquiry* (2015) <https://static.treasury.gov.au/uploads/sites/1/2017/06/Government_response_to_FSI_2015.pdf>.

⁷⁸ Commonwealth of Australia, *Review of Retirement Income Stream Regulation* (21 July 2014) <<https://www.actuaries.asn.au/Library/Events/Other/2014/GovtRetirementIncomesDiscPaper.pdf>>.

⁷⁹ Commonwealth of Australia, *Retirement Income Streams Review* (May 2016) 2, 10–12 <<https://static.treasury.gov.au/uploads/sites/1/2017/06/Review-of-Retirement-Income-Streams.pdf>>.

⁸⁰ *Treasury Laws Amendment (Fair and Sustainable Superannuation) Act 2016* (Cth) sch 8.

⁸¹ Commonwealth of Australia, *Development of the Framework for Comprehensive Income Products for Retirement* (December 2016) <https://consult.treasury.gov.au/retirement-income-policy-division/comprehensive-income-products-for-retirement/supporting_documents/CIPRs_Discussion_Paper_1702.pdf>.

⁸² Ibid 8.

⁸³ *Treasury Laws Amendment (Fair and Sustainable Superannuation) Act 2016* (Cth) sch 8; Commonwealth of Australia, above n 79.

⁸⁴ Murray et al., above n 3, 126.

potentially covers a smaller portion of the retiree's life than an immediate annuity therefore it will cost substantially less than an immediate annuity. Consequently, because less money is spent on the annuity, less money is 'wasted' on the costs and possible profit margin that such an annuity entails.⁸⁵ In other words, because a DLA is targeted at the portion of a retiree's life where longevity is at its most uncertain, its costs are lower than an immediate annuity.

The second reason why a DLA is potentially more appealing than an immediate one is the fact that people have an innate tendency to overestimate small risks (and underestimate large risks).⁸⁶ These biases makes a DLA relatively attractive because the overweighing of the small risk of early death and the subsequent loss of the annuity purchase price is less relevant, as a DLA would not cover payments for the early part of retirement, regardless.⁸⁷ On the other hand, a DLA, like an immediate life annuity, still benefits from the bias of people tending to underestimate the large risk of dying before a very late age (such as 100) – a bias that contributes to making all life annuities more attractive than they would be without it.⁸⁸

Overall, there appears to be a strong case for bringing DLAs into the tax-free earnings superannuation net. Ultimately, the primary purpose of superannuation is to provide retirees with an income in retirement.⁸⁹ As discussed, annuities play an important role in this by providing superior risk-free retirement incomes, as compared with account-based pensions. Given that DLAs can play an important role in providing longevity insurance, and are potentially more attractive to some retirees than immediate life annuities, they should be accorded the same tax-free treatment as immediate lifetime annuities.

4.2 Group self-annuitisation schemes

GSA schemes, as their name suggests, involve the pooling of funds by participants, with the survivors at any point in time receiving a regular income stream.⁹⁰ The nature of these schemes distinguishes them from traditional life annuities in two ways. Firstly, systematic longevity risk – the risk of community-wide life expectancies rising more than forecast – is passed on to the annuity holders, meaning that any such rise would lead to lower annuity payments.⁹¹ Secondly, there is a greater investment risk, although this ultimately depends on how the annuity purchase price proceeds are invested.⁹²

Due to their different characteristics, pooled annuities such as GSA schemes have several advantages over traditional life annuities. The first is that they are cheaper, and so carry higher expected incomes than traditional annuities.⁹³ One of the main reasons

⁸⁵ Jason S Scott, John G Watson and Wei-Yin Hu, 'What Makes a Better Annuity?' (2011) 78 *Journal of Risk and Insurance* 213, 228–39; Benartzi, Previtero and Thaler, above n 67, 157.

⁸⁶ Kahneman and Tversky, above n 60, 280–84.

⁸⁷ Hu and Scott, above n 61, 76. But see Richard L Kaplan and Kate S Poorbaugh 'What's the Matter with Retirement Savers' (2014) 47 *Connecticut Law Review* 1281, 1309 where the authors argue that this feature is a negative of DLAs, as the annuity holder's fear of getting no annuity payment is only increased in a DLA as compared to a traditional annuity given that the DLA has a later commencement of annuity payments.

⁸⁸ Ibid.

⁸⁹ See Superannuation (Objective) Bill 2016 (Cth) s 5(1).

⁹⁰ Murray et al., above n 71, 4–27.

⁹¹ Murray et al., above n 3, 125.

⁹² Ibid.

⁹³ Murray et al., above n 71, 4–27.

for this is related to the passing-on of systematic longevity risk to the annuity purchasers. In a traditional life annuity, the annuity issuer, because it must insure against such a risk, needs to hold a larger amount of extra capital than would otherwise be the case, and this inflates the annuity price.⁹⁴ Although ways to outsource such risk have been suggested,⁹⁵ ultimately each has its own problems,⁹⁶ and at best this approach would only abate the situation to a relatively minor extent.⁹⁷ On the other hand, in a pooled annuity this risk is borne by the annuity holders. Further, a pooled annuity arrangement is by its nature akin to an agreement with other retirees. This is likely to add to their appeal, as people are much more likely to annuitise if they see the purchase of an annuity as a mutual collective agreement rather than an unfair bet with an insurance company.⁹⁸

Other advantages of GLA schemes flow from the fact that currently Australian prudential regulations allow only life insurance companies to directly offer life annuities.⁹⁹ In essence, this means that apart from cases where superannuation funds have registered as life insurance companies,¹⁰⁰ in most cases superannuation funds that offer life annuities are merely acting as resellers. If the relaxation of rules includes allowing superannuation companies to offer GSA schemes, it could potentially increase their popularity. This is because enabling superannuation funds to offer life annuities directly to their members would cut out the ‘middleman’, and thus potentially reduce costs, and also because many of the popular superannuation funds are industry funds and thus not-for-profit and likely to lead to even further downwards pressure on the price of the annuities.¹⁰¹ Further, a proliferation of industry fund offerings, given their non-profit nature,¹⁰² would be likely to further strengthen the perception of annuities issued directly by these funds as a collective agreement between former workers and themselves, rather than an unfair bet with a profit-making organisation.¹⁰³ Also, people are more likely to trust those with whom they have had long-term positive dealings,¹⁰⁴ and as people have often had a longstanding relationship with their superannuation fund,

⁹⁴ Andrew Ngai and Michael Sherris, ‘Longevity Risk Management for Life and Variable Annuities: Effectiveness of Static Hedging using Longevity Bonds and Derivatives’ (Research Paper No. 2010ACTL03, Australian School of Business, University of New South Wales Business School, 12 April 2010) <http://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID1587890_code858089.pdf?abstractid=1587890&mirid=1>.

⁹⁵ David Blake and William Burrows, ‘Survivor Bonds: Helping to Hedge Mortality Risk’ (2001) 68 *Journal of Risk and Insurance* 339, 347.

⁹⁶ Ibid 345.

⁹⁷ Michael Sherris and John Evans, *Longevity Management Issues for Australia’s Future Tax System* (24 August 2009) 15 <http://taxreview.treasury.gov.au/content/html/commissioned_work/downloads/Longevity_Management_Issues.pdf>.

⁹⁸ Hanegbi, above n 64, 489–90.

⁹⁹ *Life Insurance Act 1995* (Cth) ss 9, 17, 20, 21.

¹⁰⁰ See, for example, ‘Regulators must end the UniSuper farce’ *The Canberra Times* (online) 5 March 2013 <<http://www.canberratimes.com.au/national/public-service/regulators-must-end-the-unisuper-farce-20130303-2fe1b.html>>.

¹⁰¹ HWL Hebsworth Lawyers, *Rules of the Industry Funds Forum* (21 July 2011) Industry Funds Forum, Rule 3.1 <[http://www.industryfunds.org.au/Files/Uploads/File/About/RULES%20\(21%20July%202011\).pdf](http://www.industryfunds.org.au/Files/Uploads/File/About/RULES%20(21%20July%202011).pdf)>.

¹⁰² Ibid.

¹⁰³ Hanegbi, above n 64, 489–90.

¹⁰⁴ Wouter Poortinga and Nick F Pidgeon, ‘Trust, the Asymmetry Principle, and the Role of Prior Beliefs’ (2004) 24 *Risk Analysis* 1475, 1475.

they are likely to see an annuity purchased directly from that fund as a continuation of their relationship.

Importantly, to the extent that GSA schemes do provide cheaper annuities, this is likely to create a ‘virtuous cycle’ in which any adverse selection effects are less apparent, which then leads to even cheaper annuities.¹⁰⁵

Overall, there is good reason to extend the tax-free net to GSA schemes, given their comparative price advantage for those willing to trade-off some risk. Further, in net terms, they present a lower behavioural disincentive to annuitise. Allowing people to enter annuity-like instruments is generally consistent with the purpose of superannuation, which is to provide retirees with retirement income.¹⁰⁶

4.3 Recent government action

4.3.1 Background of recent reform

Originally, DLAs and GSA schemes were not regarded as superannuation income streams, and so could not benefit from tax-free earnings.¹⁰⁷ The case for widening the category of annuities covered by superannuation tax concessions was flagged in 2013, when the previous Australian Labor Party (ALP) government indicated that it would implement changes to allow DLAs to constitute superannuation income streams.¹⁰⁸ However, the current Liberal/National government announced, upon winning power, that it would not automatically implement the proposals but would rather consider the process as part of a broader review of retirement income streams.¹⁰⁹

Later, in 2014, the Final Report of the Financial System Inquiry recommended that the law be changed so that DLAs and GLA schemes could benefit from the earnings tax exemption.¹¹⁰ In its response, the government indicated that it would legislate to remove impediments to the development of income-stream products.¹¹¹

Further, in 2014, the Retirement Income Stream Regulation discussion paper also raised the issue of DLAs and GSA schemes being brought under the tax-free earnings umbrella of superannuation retirement income streams, and invited public submissions on this issue.¹¹² This was followed in 2016 by the release of the final paper on Retirement Income Stream Regulation.¹¹³ The paper recommended that DLA and GSA schemes should constitute superannuation income stream and so benefit from tax-free earnings.¹¹⁴

¹⁰⁵ Gentry and Rothschild, above n 54, 190.

¹⁰⁶ Superannuation (Objective) Bill 2016 (Cth) s 5(1).

¹⁰⁷ Murray et al., above n 3, 125.

¹⁰⁸ Bill Shorten and Wayne Swan, ‘Reforms to Make the Superannuation System Fairer’ (Media Release, 14 September 2010) <<http://ministers.treasury.gov.au/DisplayDocs.aspx?doc=pressreleases/2013/020.htm&pageID=&min=brs&Year=&DocType=0>>.

¹⁰⁹ Arthur Sinodinos, ‘Integrity Restored to Australia’s Taxation System’ (Media Release, 14 December 2013) <<http://axs.ministers.treasury.gov.au/media-release/008-2013/>>.

¹¹⁰ Murray et al., above n 3, 120–21.

¹¹¹ Commonwealth of Australia, above n 77, 13.

¹¹² Commonwealth of Australia, above n 78, 13–15.

¹¹³ Commonwealth of Australia, above n 79.

¹¹⁴ Ibid 2, 15.

4.3.2 Recent legislative changes for DLAs

The government has recently enacted legislation making widespread changes to the taxation of superannuation,¹¹⁵ including implementation of the legislative measures necessary to bring DLAs into the tax-free earnings net as from 1 July 2017.¹¹⁶

Under these legislative changes, an annuity instrument can constitute a superannuation income stream despite not making payments in a particular financial year.¹¹⁷ This means that the earnings of investments supporting such instruments can be tax-free even if those earnings only support future annuity payments. These legislative changes introduced a rule so that the DLA earnings tax exemption will only apply where a taxpayer is otherwise able to access their superannuation.¹¹⁸ For example, a taxpayer who has reached preservation age but continues to work typically cannot access their superannuation until they either cease employment,¹¹⁹ or reach the age of 65.¹²⁰ This will mean, for instance, that someone who is 61 and working, and has purchased a DLA that will start making payments when they are 75, cannot benefit from its tax-free earnings status until they satisfy a superannuation condition of release, such as ceasing employment on reaching the age of 65.¹²¹

There have since been further regulatory modifications to the income tax¹²² and superannuation regulations¹²³ to complete the changes that enable DLAs to benefit from tax-free earnings. These include introducing the term ‘deferred superannuation income stream’ into the regulations.¹²⁴

Given the strong case of allowing DLAs to benefit from tax-free earnings, the legislative and regulatory amendments to facilitate this appear to be a positive policy move.

4.3.3 Recent changes regarding GSA schemes

Consistent with the government’s earlier announcements, the Explanatory Memorandum for the amending legislation that has implemented the legislative changes relating to making DLA earnings tax free also made it clear that future laws would be changed so as to make GSA scheme earnings eligible for tax-free treatment.¹²⁵ However, this amending legislation did not in itself bring GSA schemes into the tax-free net.

A framework for the proposed laws enabling tax-free earnings from GSA schemes was originally spelt out in the 2016 final paper on Retirement Income Stream Regulation.¹²⁶

¹¹⁵ *Treasury Laws Amendment (Fair and Sustainable Superannuation) Act 2016* (Cth).

¹¹⁶ *Ibid* sch 8.

¹¹⁷ *Income Tax Assessment Act 1997* (Cth) ss 307-75, 307-80, 995-1.

¹¹⁸ *Ibid* 307-80(2)(c).

¹¹⁹ *Superannuation Industry (Supervision) Regulations 1994* (Cth) sch 1 Item 101, reg 6.01(7).

¹²⁰ *Ibid* sch 1 Item 106.

¹²¹ Explanatory Memorandum, *Treasury Laws Amendment (Fair and Sustainable Superannuation) Bill 2016* (Cth) [10.36].

¹²² *Income Tax Assessment Regulations 1997* (Cth) sub-reg 995-1.01(1) as amended by *Treasury Laws Amendment (2017 Measures No. 1) Regulations 2017* (Cth) Sch 1, Items 7–9.

¹²³ *Superannuation Industry (Supervision) Regulations 1994* (Cth) regs 1.03, 1.05 as amended by *Treasury Laws Amendment (2017 Measures No. 1) Regulations 2017* (Cth) Sch 1, Items 11–15.

¹²⁴ *Ibid* sub-reg 1.03(1).

¹²⁵ Explanatory Memorandum, *Treasury Laws Amendment (Fair and Sustainable Superannuation) Bill 2016* (Cth) [10.6–10.9].

¹²⁶ Commonwealth of Australia, above n 79.

The framework proposed in this paper utilised some simple rules to determine whether an annuity-like instrument should constitute a superannuation income stream. The main criterion was the maximum percentage that the holder of such an income stream could commute back to a lump sum.¹²⁷ This maximum percentage decreased with the period during which the instrument had made payments, and was proposed to be calculated on a 'straight line' basis, between the date of commencement of the annuity or annuity-like instrument and the holder's expected life expectancy.¹²⁸ Under this proposal, an eligible instrument that started payment to a retiree at age 75 where that retiree has a life expectancy of 85, could at most allow the retiree, when aged 80, to receive 50% of the price of the annuity as capital returned in exchange for giving up future payments. As these proposed guidelines only prescribed a maximum, it would be open for the annuity instrument to allow a smaller percentage to be commuted into a capital sum. An instrument which allowed no capital commutation would also fall within the guidelines.

The proposed guidelines were more relaxed in prescribing the maximum amount of capital that the annuity-like instrument can return to a nominated beneficiary upon the death of an annuity holder. Specifically, they allowed 100% capital return for half of the time between commencement of the instrument and the predicted life expectancy of the deceased.¹²⁹ However, after this halfway point, it was proposed that the schedule that was to apply regarding the minimum amount of capital that could be returned was the same as for a living annuity holder.¹³⁰

The government has recently enacted these changes to the regulations to enable GSA schemes to constitute superannuation income streams that benefit from tax-free earnings. Specifically, changes made to the income tax¹³¹ and superannuation regulations¹³² have utilised the principles contained in the Retirement Income Stream Regulation paper to determine whether certain income stream instruments fall under the tax-free earnings net.

Specifically, the new regulations apply from 1 July 2017 and specify four main conditions for such instruments to come under the tax-free earnings net.¹³³ Firstly, the taxpayer must have satisfied a specified condition of release, such as retiring after attaining preservation age or being at least 65 years old.¹³⁴ Secondly, after the payments commence, such payments must be payable for the rest of the life of the beneficiary.¹³⁵ Thirdly, payments from the instrument cannot be unreasonably deferred after they have commenced.¹³⁶ In other words, the terms of the annuity-like instrument must not make it overly likely that the beneficiary would not be entitled to payments for a number of years once the payments commence.¹³⁷ Fourthly, consistent with the principles in the

¹²⁷ Ibid 10–12.

¹²⁸ Ibid.

¹²⁹ Ibid 12.

¹³⁰ Ibid.

¹³¹ *Income Tax Assessment Regulations 1997* (Cth) sub-reg 995-1.01(1) as amended by *Treasury Laws Amendment (2017 Measures No. 1) Regulations 2017* (Cth) Sch 1, Item 9.

¹³² *Superannuation Industry (Supervision) Regulations 1994* (Cth) regs 1.03, 1.06, 1.06A, 1.06B as amended by *Treasury Laws Amendment (2017 Measures No. 1) Regulations 2017* (Cth) Sch 1, Items 11, 16, 20.

¹³³ *Treasury Laws Amendment (2017 Measures No. 1) Regulations 2017* (Cth) Item 2.

¹³⁴ *Superannuation Industry (Supervision) Regulations 1994* (Cth) sub-regs 1.06(1)(a), 1.06A(3)(a).

¹³⁵ Ibid sub-reg 1.06A(3)(b).

¹³⁶ Ibid sub-reg 1.06A(3)(c).

¹³⁷ Explanatory Statement - *Income Tax Assessment Act 1997, Retirement Savings Accounts Act 1997, Superannuation Industry (Supervision) Act 1993, Treasury Laws Amendment (2017 Measures No. 1) Regulations 2017* 5–6.

Retirement Income Stream Regulation paper, there is a maximum amount of capital that the income stream can be commuted to. Specifically, the maximum commutation amount for life benefits is calculated on a straight-line basis from the date of the instrument's commencement to the actuarial life expectancy of the holder,¹³⁸ though for death benefits a full commutation is allowed for half that period.¹³⁹ For deferred instruments, the commencement day is the later of when it was acquired and the beneficiary fulfilling a condition of release such as retiring or reaching the age of 65.¹⁴⁰

This new framework allows annuity-like instruments such as GSA schemes that comply with its rules to constitute superannuation income streams. It also potentially allows a variety of other annuity-like instruments to constitute superannuation income streams. For instance, an annuity issuer could offer a hybrid instrument that on the one hand (unlike a GSA scheme instrument) insures against systematic longevity risk, but on the other hand gives returns based on investment return performance. Further, this scheme allows such annuity-like instruments to be issued directly by superannuation funds,¹⁴¹ which, as discussed, has advantages as compared to traditional life annuities that can for the most part only be directly issued by life insurance companies.

Given the potential appeal of GSA schemes outlined earlier, this could potentially result in a much higher uptake of such instruments, as compared with traditional life annuity instruments. At the same time, while being consistent with the aim of the superannuation system currently being legislated,¹⁴² this also reinforces the policy rationale of superannuation: that income streams are there to support the retirement of the retiree rather than providing a tool for intergenerational wealth transfer.¹⁴³ The main downside of the wide guidelines these new rules have is that there is a possibility that retirees may be presented with instruments that contain hidden risks and features of which they are not yet fully aware. Ideally, existing and future laws would minimise the risk of this happening.

5. USING BEHAVIOURAL TOOLS TO INCREASE THE ATTRACTIVENESS OF ANNUITIES

The government has flagged the use of behavioural tools as a way to increase annuitisation levels amongst retirees. These reforms have yet to be legislated and the process is at a much earlier stage of implementation than the expansion of the categories of annuities covered by the superannuation system. The main behavioural tool under consideration is to offer anyone about to retire a CIPR – a pre-arranged set of income stream products that typically includes annuitising part of the retirement funds.¹⁴⁴ This will not be implemented before 1 July 2018.¹⁴⁵ It has also been recommended that superannuation benefit statements include member entitlements were they to take their benefits in the form of an income stream.¹⁴⁶ Although this was suggested in a context

¹³⁸ *Superannuation Industry (Supervision) Regulations 1994* (Cth) sub-reg 1.06A(3)(d), reg 1.06B.

¹³⁹ *Ibid.*

¹⁴⁰ *Ibid* sub-regs 1.03(1), 1.06B(2).

¹⁴¹ *Ibid* regs 1.03, 1.06, 1.06A, *Income Tax Assessment Regulations 1997* (Cth) sub-reg 995.1.01(1).

¹⁴² See *Superannuation (Objective) Bill 2016* (Cth) s 5(1).

¹⁴³ Commonwealth of Australia, above n 79, 11.

¹⁴⁴ Murray et al., above n 3, 117.

¹⁴⁵ Commonwealth of Australia, above n 81, 8.

¹⁴⁶ Murray et al., above n 3, 267.

other than increasing annuitisation,¹⁴⁷ there is evidence that certain income stream disclosures on benefit statements can increase annuitisation rates.¹⁴⁸

5.1 Soft compulsion through CIPRs

The Final Report considered whether annuitisation of superannuation funds should be mandatory, but recommended against it, stating that it would remove flexibility and result in poor outcomes for some individuals.¹⁴⁹ However, it did recommend a form of ‘soft compulsion’ (soft compulsion).¹⁵⁰ Specifically, it recommended that superannuation fund trustees preselect a set of income-stream products, and offer this set of products, referred to as a CIPR, to their members prior to them entering retirement.¹⁵¹ For instance, a CIPR would have a combination of an account-based pension and an annuity or an annuity-type product.¹⁵² The report argued that this would balance the flexibility of account-based pensions and the longevity and investment risk protection that annuities and annuity-type products have.¹⁵³ The annuity and annuity-type products could be immediate, deferred, or a combination of the two.¹⁵⁴ Upon retirement, the members could then either confirm that they wished to take their superannuation benefits in a form consistent with their preselected CIPR, or in the alternative take their benefits in another form that they choose.¹⁵⁵ Importantly, retirees would have to make an active choice upon retirement when electing to take the CIPR.¹⁵⁶

The government stated, in its response to the Final Report, that it agrees to support the development of this regime of preselection of retirement income streams.¹⁵⁷ However, it made it clear that this policy was not ready to be implemented in legislation, and that when such a policy is implemented, it will take into account the future findings of current government inquiries.¹⁵⁸

The Final Report’s recommendations appear to be a radical change from the current law in its use of soft compulsion for income streams including annuities. This raises the issue of whether using this form of soft compulsion is a legitimate policy tool for increasing the uptake of annuities.

When evaluating the use of soft compulsion, it needs to be kept in mind that compulsion is a matter of degree. At its most extreme, in theory annuitisation could be mandated for retirement savings, as has been the case in certain jurisdictions.¹⁵⁹ At reduced levels of compulsion, some degree of annuitisation might require the member to opt out of a default choice. In general, making something into a default choice that can be opted out of heavily influences behaviour for a range of decisions,¹⁶⁰ including retirement

¹⁴⁷ Ibid.

¹⁴⁸ Benartzi, Previtero and Thaler, above n 67, 155–56.

¹⁴⁹ Murray et al., above n 3, 126.

¹⁵⁰ Ibid 117.

¹⁵¹ Ibid.

¹⁵² Ibid.

¹⁵³ Ibid 121–22.

¹⁵⁴ Ibid 127–30.

¹⁵⁵ Ibid 117.

¹⁵⁶ Ibid.

¹⁵⁷ Commonwealth of Australia, above n 77, 13.

¹⁵⁸ Ibid.

¹⁵⁹ Murray et al., above n 71, 4–19.

¹⁶⁰ See, for example, Riccardo Rebonato, ‘A Critical Assessment of Libertarian Paternalism’ 37 (2014) *Journal of Consumer Policy* 357, 360 where it is pointed out that the dramatic difference in organ donor

decisions.¹⁶¹ Although there is a partial safeguard in that if a default is drastically against people's interests, then they will generally opt out of it,¹⁶² there is some evidence that default annuitisation can lead to people making annuitisation decisions that are not necessarily in their interests.¹⁶³ A softer form of compulsion than utilising a default option would be to require members to make an active choice to annuitise part of their retirement.¹⁶⁴ The proposed CIPR regime is an example of such a relatively soft type of compulsion and so could not be considered as having the same impact on decision making as a default.

It could be argued that this degree of soft-level compulsion leaves the ultimate choice up to the retiree, and so could be argued to preserve self-agency.¹⁶⁵ However, on the other hand, it still utilises behavioural biases to influence retirees to act in a certain manner, and thus could still be seen to be a form of compulsion.¹⁶⁶ Specifically, even though the proposed use of soft compulsion is one of forcing an 'active decision', and this falls short of having default participation, there is evidence that it would nevertheless bias people's decision making, compared with not being forced to make a decision.¹⁶⁷ Ultimately, any form of compulsion is a balancing act. On the one hand, the government uses various form of compulsion to act in people's own good, including mandatory seat belts, drug regulation, tobacco and cigarette excise, and compulsory superannuation contributions. On the other hand, people's self-agency is an important social value that should be preserved where possible, and this includes the arena of retirement decisions.¹⁶⁸

Although the government has a role in alleviating some behavioural biases, the mere existence of behavioural biases is not itself sufficient to justify government intervention. In accordance with arguments for policies to be 'evidence based',¹⁶⁹ if the government is proposing to legislate 'nudging' tools in the name of making people act in their own self-interest,¹⁷⁰ it should only do so when there is evidence that that they are effective in getting people to act in a manner likely to increase their well-being. Such tools need

rates between Germany (12%) and Austria (almost 100%) is due to Austria having organ donation as its default that can be actively opted out of.

¹⁶¹ John Beshears, James J Choi, David Laibson and Brigitte C Madrian, 'How are Preferences Revealed?' 92 *Journal of Public Economics* (2008) 1787, 1788.

¹⁶² Cass R Sunstein, 'Nudges vs. Shoves' 210 *Harvard Law Review Forum* (2014) 210, 213.

¹⁶³ Hazel Bateman, Christine Eckert, Fedor Iskhakov, Jordan Louviere, Stephen Satchell and Susan Thorp, 'Default and Naïve Diversification Heuristics in Annuity Choice' (2017) 42 *Australian Journal of Management* 32, 49–50.

¹⁶⁴ Richard H Thaler and Shlomo Benartzi, 'Save More Tomorrow: Using Behavioral Economics to Increase Employee Saving' (2004) 122 *Journal of Political Economy* S164, S185–86.

¹⁶⁵ Cass R Sunstein, Christine Jolls and Richard H Thaler, 'A Behavioral Approach to Law and Economics', (1998) 50 *Stanford Law Review* 1471, 1548–50.

¹⁶⁶ John Beshears, James J Choi, David Laibson and Brigitte C Madrian, 'The Importance of Default Options for Retirement Saving Outcomes: Evidence from the United States' (Working Paper No 12009, National Bureau of Economic Research, January 2006) <<http://www.nber.org/papers/w12009.pdf>>.

¹⁶⁷ Gabriel D Carroll, James J Choi, David Laibson, Brigitte C Madrian and Andrew Metrick, 'Optimal Defaults and Active Decisions' (2009) 124 *Quarterly Journal of Economics* 1639, 1670–71.

¹⁶⁸ Australian Law Reform Commission, *Access All Ages—Older Workers and Commonwealth Laws* 8 (March 2013) <http://www.alrc.gov.au/sites/default/files/pdfs/publications/whole_final_report_120_.pdf>.

¹⁶⁹ Ian Sanderson, 'Evaluation, Policy Learning and Evidence-Based Policy Making' (2002) 80 *Public Administration* 1; William Solesbury, 'Evidence Based Policy: Whence it Came and Where it's Going' (Working Paper No 1, ESRC UK Centre for Evidence Based Policy and Practice, October 2001).

¹⁷⁰ Cass R Sunstein, 'The Ethics of Nudging' (2015) 32 *Yale Journal on Regulation* 413, 434.

to be held up to increased scrutiny when they are paternalistic and such tools depend on behavioural biases, as is the case with this proposal.¹⁷¹

With these principles in mind, soft compulsion to encourage annuitisation appears to be far from a positive policy step. This is because the ideal amount of annuitisation is unknown, and various factors contribute to under-annuitisation.¹⁷² The very term ‘annuity puzzle’ in the literature, as well as the large number of reasons suggested for the lack of popularity of annuitisation is testament to this.¹⁷³ Further, the extent to which any given individual would benefit (or otherwise) from annuitisation is highly variable. The ideal amount of annuitisation appears to vary greatly according to individual circumstances,¹⁷⁴ including risk aversion, marital status, financial wealth,¹⁷⁵ bequest motive,¹⁷⁶ and consumption patterns.¹⁷⁷ These uncertainties combine to suggest that soft compulsion to encourage annuitisation is suboptimal policy, given the general lack of evidence that it increases welfare in the aggregate.¹⁷⁸ The use of such paternalism on the basis of the government and experts ostensibly having better knowledge than retirees regarding the use of retirement funds cannot be justified when the evidence suggests that they lack such knowledge.¹⁷⁹

5.2 Disclosure of member benefits

There is evidence that where retirement fund benefit statements include projected annuitised income stream benefits in addition to lump sum balances there is a substantial difference in annuitisation rates.¹⁸⁰ It is logical that benefit statements that include the account holder’s potential income stream is more likely to make them perceive the retirement funds as the source of an income stream rather than a source of a given amount of wealth. Consequently, there is an argument for superannuation fund statements not only to contain the current balance, but to also state the projected income stream in the event that the funds were converted to a life annuity.

The Financial System Inquiry Final Report recommended that superannuation funds be mandated to state members’ projected income stream on their statements.¹⁸¹ Although

¹⁷¹ Ibid 427, 429.

¹⁷² See, for example, Dushi and Webb, above n 49, 137–38, arguing that annuitisation is suboptimal for a large percentage of the population; see also Brown, above n 40, 19–20, presenting evidence that many people do not benefit from annuitisation; compare Davidoff, Brown and Diamond, above n 48, 1588–89, arguing that annuitisation offers a large benefit to many people.

¹⁷³ Brown, Kling, Mullainathan and Wrobel, ‘above n 45, 304.

¹⁷⁴ Davidoff, Brown and Diamond, above n 48, 1588.

¹⁷⁵ Dushi and Webb, above n 49, 132–33, 140.

¹⁷⁶ Brown, Kling, Mullainathan and Wrobel, above n 45, 307.

¹⁷⁷ Davidoff, Brown and Diamond, above n 48, 1587–88.

¹⁷⁸ See Peter D Lunn, ‘Are Consumer Decision-making Phenomena a Fourth Market Failure?’ (2015) 38 *Journal of Consumer Policy* 315, 327–28, where it is suggested that governments should provide empirical evidence to justify use of such behavioural tools.

¹⁷⁹ See Nicolas Cornell, ‘A Third Theory of Paternalism’ (2014) 113 *Michigan Law Review* 1295 where the author suggests that the benchmark for evaluating such paternalism is judged by the implied expression of the paternalistic policy.

¹⁸⁰ Benartzi, Previtero and Thaler, above n 67, 155–56. See also Monika Büttler, Stefan Staubli, Maria Grazia Zito, ‘The Role of the Annuity’s Value on the Decision (Not) to Annuitize: Evidence from a Large Policy Change’ 8 (Discussion Paper No DP6930, Center for Economic Studies, August 2008) where the authors speculate that the reason the Swiss Pension System has high annuitisation rates is partly due to the fact that much more space is devoted in benefit statements to annuity entitlements than to equivalent lump sum entitlements.

¹⁸¹ Murray et al., above n 3, 267.

this was recommended primarily as a way to increase member engagement,¹⁸² it has the potential to increase annuitisation rates, depending on the form of the disclosure. However, the Final Report's disclosure recommendation was made in the context of compliance with Australian Securities and Investments Commission (ASIC) regulations,¹⁸³ which are premised on funds being invested in an account-based pension rather than being annuitised.¹⁸⁴ Consequently, it does not follow that income stream benefits disclosed in such a manner would necessarily increase annuitisation rates.

If the CIPR regime is to be adopted, member statement forecasts could instead be based on the CIPR mix offered by that fund. As discussed, the proposed CIPR regime involves offering retirees a bundle of retirement products that typically only involve partial annuitisation (annuitisation including not only annuities but also annuity-like products).¹⁸⁵ This is likely to strengthen the CIPR regime and will further encourage people to take on a CIPR and so annuitise to the extent promoted by the CIPR of their particular superannuation fund¹⁸⁶, which might have little bearing on their individual circumstances. However, given that the CIPR regime appears to be suboptimal policy, another option might be for superannuation funds to disclose a full annuitisation figure on member statements. While full annuitisation might not be the ideal for many, given that such statements would also disclose the lump sum entitlement, this would without implicit bias allow retirees to decide to what extent they wish to annuitise. Unlike income stream projections based on the superannuation fund's CIPR, it would not make generalised assumptions about the best amount of annuitisation for each member – an important consideration, given the variability of individual circumstances.

5.3 Government response to calls for behavioural policies to encourage uptake of income streams

5.3.1 Response regarding CIPRs

The government has recently released a discussion paper which spells out a proposed framework and implementation system for CIPRs. This paper is called the Development of the Framework for Comprehensive Income Products for Retirement ('CIPR Paper') and it invited submissions on a variety of related issues.¹⁸⁷ The basic framework is consistent with what was proposed in the Final Report – that superannuation trustees offer those entering retirement with a CIPR, which will consist of a mix of income stream products.¹⁸⁸

The CIPR Paper makes it clear that CIPRs are not instruments to promote the use of annuities over other instruments.¹⁸⁹ Rather, in general they are aimed at combining a

¹⁸² Ibid.

¹⁸³ Ibid.

¹⁸⁴ Australian Securities and Investments Commission, *Regulatory Guide 229: Superannuation Forecasts* (November 2014) 9–11 <<http://download.asic.gov.au/media/2257747/rg229-published-13-november-2014.pdf>>.

¹⁸⁵ Murray et al., above n 3, 117.

¹⁸⁶ See Benartzi, Previtero and Thaler, above n 67, 155–56, which presents overseas evidence that retirement benefit statements that include income stream projections based on full annuitisation are correlated with higher annuitisation rates. It could be speculated that benefit statements that include income stream projections based on partial annuitisation would promote some degree of annuitisation, though research does not appear to have directly examined this issue.

¹⁸⁷ Commonwealth of Australia, above n 81.

¹⁸⁸ Murray et al., above n 3, 117.

¹⁸⁹ Commonwealth of Australia, above n 81.

‘package’ of account-based pensions and annuities as well as annuity-like products.¹⁹⁰ The annuity-like products includes DLAs and GSA schemes.¹⁹¹ The paper suggested that there be minimum requirements, such as the CIPR providing a higher income than would be expected from a taxpayer using all their money to convert to an account-based pension (the gulf between the two having a minimum percentage).¹⁹² The paper left open the question of whether the long-term aim should be to mandate that all larger superannuation funds offer CIPRs or merely to facilitate their ability to do so.¹⁹³ It also left open the question of how each trustee will get approval for its CIPRs; specifically, whether it will do so with a regulator, a third-party like an actuary, or according to a self-regulating regime.¹⁹⁴

The CIPR Paper appeared to be of the view that for simplicity, there are strong arguments for each superannuation trustee having only one CIPR on offer.¹⁹⁵ Though it was not fully closed to the possibility of funds offering more than one CIPR, it suggested that the main problem with such a regime would be the difficulty of matching different CIPRs with different cohorts of members.¹⁹⁶ With the more highly preferred system involving only one CIPR per superannuation fund, the main requirement for that CIPR would be that it benefited the ‘majority’ of members.¹⁹⁷ This approach would be reinforced by the fact that the ‘safe harbour’ protection against breaches of fiduciary duties arising from offering a CIPR would be afforded to trustees that offer a CIPR which, along with complying with other minimum requirements, is of benefit to the ‘majority of the members’.¹⁹⁸ The only exception suggested by the CIPR Paper to this ‘one size fits all’ approach is that this ‘safe harbour’ protection not be extended to trustees that offer CIPRs to those with low superannuation balances or those with a terminal condition.¹⁹⁹

As discussed, although CIPRs are not intended to be pure annuity products, they are intended to include an annuity component,²⁰⁰ meaning that the intention is to use a measure of soft compulsion to annuitise retirement savings. Also, as discussed, soft compulsion towards annuitisation is on balance suboptimal policy. The evidentiary problem noted earlier – uncertainty about the ideal proportion of annuitisation – is equally applicable to what is proposed in the CIPR Paper. Added to this is the substantial discretion proposed in the CIPR Paper to be given to trustees regarding the makeup of the CIPR: the extent to which the CIPR is made up of an annuity; the types of annuity-like instrument;²⁰¹ the minimum guarantee period of the annuity-like products in the CIPRs;²⁰² and whether such CIPRs will be joint or single²⁰³ are all proposed to be in the discretion of the trustee of the superannuation fund. This will result in a situation where CIPRs can vary widely from one superannuation fund to

¹⁹⁰ Ibid 22–24.

¹⁹¹ Ibid 18.

¹⁹² Ibid 17.

¹⁹³ Ibid 27–28.

¹⁹⁴ Ibid 29–30.

¹⁹⁵ Ibid 24–25.

¹⁹⁶ Ibid.

¹⁹⁷ Ibid 15.

¹⁹⁸ Ibid 27.

¹⁹⁹ Ibid 34.

²⁰⁰ Ibid 22–24.

²⁰¹ Commonwealth of Australia, above n 81, 22–24.

²⁰² Ibid 42.

²⁰³ Ibid 43.

another. It is unclear how the membership of one large superannuation fund will differ from another, and how this will justify the variations between CIPRs. The two inter-related issues of substantial uncertainty about the ideal amount of annuitisation and the likely marked differences in CIPRs on offer both reinforce the likelihood that the proposed regime in the CIPR Paper will result in suboptimal outcomes for many.

Further, the particular regime promoted in the CIPR Paper adds a twist to the related issue canvassed earlier regarding the dramatically different annuitisation needs on individual retirees. Specifically, the fact that each superannuation fund should preferably only have one CIPR, which need only advantage the majority of those to whom it is offered, could disadvantage a substantial minority of members even if it is presumed it would advantage the majority. Such a one size fits all approach, which needs only to ostensibly advantage 50.1% of the membership, necessarily accepts the trade-off that many might be disadvantaged by it. In addition, the CIPR Paper takes no account of the impact that the age pension has on annuity requirements. As discussed, pre-annuitised wealth dampens annuity demand,²⁰⁴ and modelling indicates that this is specifically applicable to potential recipients of the Australian age pension.²⁰⁵ As the age pension is means tested, such modelling has found that those with lower superannuation balances are more likely to be negatively impacted by annuitisation than those with higher balances.²⁰⁶ While such research was based on traditional annuity products,²⁰⁷ it is logical that it would also apply to annuity-like instruments such as GSA schemes. This is a further reason why the one size fits all approach of the CIPR Paper is ill-suited to a heterogeneous group of retiring superannuation members. While advocates of soft compulsion may argue that those disadvantaged by such a regime can choose to not to enter into it,²⁰⁸ that argument ignores the strong likelihood that inertia and lack of understanding will mean many people do elect to go with it, given the evidence that forcing people to choose does lead many to make a decision in the affirmative.²⁰⁹ Further, the CIPR Paper's reservations regarding a system where superannuation funds offer multiple CIPRs (based on the difficulties of matching different CIPRs with different cohorts)²¹⁰ have strong validity, meaning that such an alternative might result in even worse outcomes.

5.3.2 Response regarding member statements disclosing income stream benefits

The government, in its official response to the Financial System Inquiry, has accepted the Final Report's recommendation on this issue, and stated that member statements should include retirement income projections, as long as it is practicable and cost-effective to do so.²¹¹ At this stage there have been no other developments regarding this issue, and no details about when and how it is proposed to be implemented have yet been released.

²⁰⁴ Dushi and Webb, above n 49, 131–34.

²⁰⁵ Iskhakov, Thorp and Bateman, above n 49, 146.

²⁰⁶ Ibid 152–53.

²⁰⁷ Ibid 142–43.

²⁰⁸ Richard H Thaler and Cass R Sunstein, 'Libertarian Paternalism' (2003) 93 *American Economic Review: Papers and Proceedings* 175, 178–9.

²⁰⁹ Carroll et al, 'Optimal Defaults and Active Decisions', above n 167, 1670–71.

²¹⁰ Commonwealth of Australia, above n 81, 24–25.

²¹¹ Commonwealth of Australia, above n 77, 14.

6. CONCLUSION

Lifetime annuities have the potential to provide retirees with a secure, low-risk income in their retirement. Such security can positively contribute to their financial and emotional wellbeing. The implemented laws aimed at increasing the breadth of annuity-like instruments that can benefit from the tax-free earnings regime from which traditional life annuities have been benefiting is a very positive move. They will assist retirees in obtaining cheaper, more flexible annuity-type instruments, and although this will in some instances be at the cost of increased risk, for various reasons such instruments will potentially appeal to many.

On the other hand, the proposed regime of offering CIRPs to those entering retirement is suboptimal policy. Such a proposal aims at using people's behavioural biases to point them towards the retirement decisions that are best suited for them. However, for a variety of reasons discussed in this article, such a regime is likely to result in a degree of annuitisation that is far from ideal for many. Further, depending on the instruments offered in a particular CIPR, there may be little chance for a retiree to reverse their decision to annuitise their retirement savings.

There is definitely much policy work to be done regarding the retirement phase of the superannuation system. It is hoped that any future changes will be based on common sense and evidence, given their potential impact on people's wellbeing.

Tax professionals' profiles concerning tax noncompliance and tax complexity: Empirical contributions from Portugal

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Abstract

This paper analyses the profiles of tax professionals with the greatest propensity for tax noncompliant behaviour. Data were collected in 2013 using a questionnaire applied to Portuguese tax professionals. From the profiles we argue that the propensity for noncompliance is greater among professionals responsible for medium-sized enterprises in contexts of high tax complexity. In particular, in terms of voluntary tax noncompliance, we noted greater vulnerability to the pressures exerted by employers/clients for participation in aggressive tax planning schemes among young women, as well as professionals working in in-house departments of accounting and taxation.

Key words: tax noncompliance, tax complexity, tax professionals, Portugal

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1. INTRODUCTION

Nowadays, taxpayers increasingly resort to the use of tax professionals in order to solve problems of complexity and uncertainty surrounding tax laws. As a result, tax professionals⁴ have progressively come to substitute for taxpayer's own efforts in order to comply (Hite & Hasseldine, 2003; McKerchar, 2005; OECD, 2008; Saad, 2014).

In the Portuguese case, due to the peculiarities of the tax system, business activities and incomes are mostly required by law to have tax returns prepared by certified accountants.⁵ These professionals are the only ones authorized by the Portuguese tax authorities to deal with business tax issues. Moreover, due to the complexity of the Portuguese tax system, many individual taxpayers also pay for professional advice (Lopes, 2008; Pinho et al., 2011; Borrego, 2015).

Consequently, in Portugal, tax professionals (certified accountants), rather than taxpayers, are the ones who deal with tax complexity. Therefore, it is useful for tax policy to investigate the profile of tax professionals and their relationship to tax compliance and perceived tax complexity.

This paper therefore aims to analyse the profile of those Portuguese tax professionals with the highest propensity for intentional (aggressive) or unintentional (non-aggressive) tax noncompliant behaviour. Thus, in 2013, a questionnaire was sent out seeking tax professionals' self-evaluation of their perception of tax compliance and tax complexity. This paper presents the results of 994 responses to this survey from tax professionals in active service.

We believe the conclusions of this survey contribute to current scholarship by presenting new empirical evidence from a country about which there is a lack of previously published studies of this scale. Moreover, this work is innovative, as it identifies the demographic, technical and professional profiles of tax professionals with the greatest tendency to noncompliance, using a multiple correspondence analysis, a methodology traditionally used in other social sciences.

The paper is divided into five parts, not including the introduction: literature review, research hypotheses, research methodology, data analysis and discussion of results. In the final section, we draw some conclusions and suggest further avenues of research.

2. LITERATURE REVIEW

In order to clearly delineate the scope of this study it is important to explore definitions of tax noncompliance contained in previously published tax literature.

According to Devos (2005, p. 223) '... there is no standard all-embracing definition of tax (non)compliance adopted across all tax compliance studies'. Slemrod (2007), who agrees with Devos (2005), sees the major reason for this lack of consensus as the use of

⁴ Tax professionals include: tax preparers, tax practitioners, tax agents, tax accountants, tax consultants, tax advisers and tax intermediaries hired by taxpayers to comply with their tax obligations. However, in this paper, notwithstanding the general concept of tax professionals, we use the term tax professionals to refer to certified accountants.

⁵ Contabilistas Certificados (CC) or Técnicos Oficiais de Contas (TOC).

a variety of concepts with different meanings, such as 'evasion', 'noncompliance', 'misreporting' and 'tax gap' (Slemrod, 2007).

This study uses the definition of the OECD (2010), which states that tax noncompliance includes all the intentional or unintentional schemes for reducing or avoiding tax payments. Intentional tax noncompliance includes, for example, the underreporting of incomes, the misrepresentation of expenses, and the deliberate misclassification of incomes. Unintentional noncompliance situations involve some errors, mistakes and omissions, as well as the committing of other unintended faux pas by taxpayers, or those who represent them, without any intention of reducing or evading taxes.

These definitions of tax noncompliance help us to understand that the study of tax noncompliance is much more complex and broader than the mere study of tax evasion (and tax fraud), tax avoidance, tax planning, tax shelters,⁶ tax flight,⁷ and the shadow or cash economy. Tax noncompliance includes all tax compliance failures, whether they are intentional or unintentional.

The study of tax noncompliance in the taxpayer context began in the 1970s, when the first studies based on the traditional theory of tax evasion were undertaken (Allingham & Sandmo, 1972). However, a desire to understand the impact of paid tax professionals' activity on tax compliance only commenced in the 1980s in the United States, later extending to other countries. Although four decades have now elapsed, the role of tax practitioners in tax (non)compliance remains a pertinent issue. This is mainly due to the lack of published studies relative to the impacts of their activity on taxpayers' tax compliance.

In terms of international tax literature, there are some studies which enable us to understand the key role of tax practitioners (tax professionals) in tax systems. The tax issues relating to tax professionals most widely considered in previous studies are the determinants of their profile and attitudes to tax compliance tasks as well as the way they deal with tax complexity (Ayres et al., 1989; Reckers et al., 1991; Green, 1994; Cuccia, 1994; Samelson & Schloemer, 2001; O'Donnell et al., 2005; McKerchar, 2005; Bloomquist et al., 2007; OECD, 2008).

In relation to tax professionals' tax compliance behaviour, as can be seen in Table 1, some studies identify the determinants as having positive and negative effects on their attitudes (Ayres et al., 1989; Reckers et al., 1991; Schisler, 1994, 1995; Sakurai & Braithwaite, 2003; O'Donnell et al., 2005; Ventry & Borden, 2014; Dzienkowski & Peroni, 2016).

The determinants in Table 1 suggest the importance applied to penalties for tax compliance. These indicate that it is possible to apply the traditional theory of tax evasion, as set out by Allingham and Sandmo (1972) and based on the theory of crime from Gary Becker (1968), to the context of tax professionals.

⁶ Standardised schemes of very aggressive tax planning involving large amounts. They are designed and sold to their clients by investment bank lawyers and tax advisers.

⁷ Relocation of companies aimed at achieving tax savings.

Table 1: Main determinants with impact on tax professionals' tax compliance

Type of impact	Determinants
Positive	• The fear of the possible penalties that they (or their clients/employers) may incur • The perception of tax justice and equity • Specialised tax knowledge • Professional ethic
Negative	• The fear of losing the client or being dismissed • Self-propensity to take risks • The tax aggressiveness of their clients/employers • Perception of tax system complexity • Specialised tax knowledge • In unintentional tax noncompliance behaviour: Clients'/employers' size (smaller) • In intentional tax noncompliance behaviour: Clients'/employers' size (larger)

Source: Ayres et al., 1989; Reckers et al., 1991; Schisler, 1994; 1995; Sakurai and Braithwaite, 2003; O'Donnell et al., 2005; Bloomquist et al., 2007; Ventry & Borden, 2014; Dzienkowski and Peroni, 2016.

In relation to the size of tax professionals' clients (or employers), Ayres et al. (1989) and Bloomquist et al. (2007) establish a relationship between the size of firms in which tax professionals carry out their functions and their propensity to commit mistakes in tax returns, which constitutes unintentional tax noncompliance. They conclude that tax professionals who work for larger firms commit fewer errors (unintentional tax noncompliance) resulting from tax complexity.

Moreover, some studies actually indicate that larger taxpayer entities experience fewer tax complexity problems, and have more ability to derive benefits from tax complexity through aggressive tax planning schemes (intentional tax noncompliance) (OECD, 2001; EC, 2004, 2007; McKerchar et al., 2005; Lopes, 2012).

Regarding the influence of age and gender on tax professionals' attitudes towards tax compliance, there are no studies (as far as we know) which discuss the effects of these two independent variables on tax noncompliance, in the tax preparer's context. This justifies the absence of these variables in Table 1. However, such studies do exist in relation to taxpayers. According to these studies, older taxpayers and women are less prone to tax noncompliance (Klepper et al., 1991; Long & Caudill, 1993; McKerchar, 2002; Schuetze, 2002; Erard & Ho, 2003; Kastlunger et al., 2010; Torgler & Valev, 2006, 2010; Hofmann et al., 2017).

The role of tax complexity in the creation of opportunities to use ambiguities and loopholes in tax laws for their clients' (employers') benefit (*i.e.* tax aggressiveness) is necessarily related to the individual tax professional's tax knowledge (O'Donnell et al., 2005; Stephenson, 2007). As can be seen in Table 1, the contribution that this specialised tax knowledge makes to tax compliance can be either positive or negative (O'Donnell et al., 2005; Stephenson, 2007; Bonner et al., 1992; Samelson & Schloemer, 2001).

In this context it is important to ask: do tax professionals employ their tax knowledge in order to resolve ambiguity and doubts in tax legislation interpretation created by tax complexity, thus contributing positively to tax compliance, or is the opposite the case?

There are some studies which explore this tripartite relationship: tax knowledge, perception of tax complexity and tax (non)compliance. This research commonly divides the types of relationship into three categories: positive; negative and a combination of both (Reckers et al., 1991; Klepper et al., 1991; Newberry et al., 1993; Erard, 1993; Christian et al., 1994; Cuccia, 1994; Mills et al., 1998; O'Donnell et al., 2005; Stephenson, 2007). These are outlined below:

1. Positive — the studies conclude that a higher level of tax professionals' tax knowledge provides them with greater competence to deal with tax complexity and thus ensure greater compliance. Moreover, a higher level of tax knowledge offers professionals a greater perception of the chance of being discovered and an understanding of the rigorousness of punishment for taxpayers and for themselves.
2. Negative — the studies verify that the greater that tax professionals' tax knowledge is, the more able they are to identify the more complex issues and uncertainties of tax laws. As a result, they can employ this knowledge to favour their customers' or employers' interests (which may increase their clients'/employers' tax noncompliance).
3. A combination of both — with regard to less complex and ambiguous tax matters, tax professionals often use their privileged level of tax knowledge to deal with tax complexity, in order to comply more scrupulously with tax legislation. In contrast, in terms of more complex and ambiguous matters, they also make use of their level of tax knowledge to deal with tax complexity for the benefit of their clients or employers, in order to be less compliant.

This research brings into sharp focus tax professionals' highest level of tax knowledge, in an environment of tax complexity, as a variable which tends to reduce the unintentional tax noncompliance level and increase the conditions for intentional tax noncompliant behaviour, or more aggressive advice (tax aggressiveness). In this context, GAO (2006), Bloomquist et al. (2007) and Laffer et al. (2011) also clearly state that tax complexity provides opportunities for both intentional or unintentional tax noncompliance, from a tax preparer's perspective.

Drawing on the literature review, in the following sections we set out our research hypotheses and methodology. Then we present and discuss the results of our empirical study with regard to Portuguese tax professionals' profiles concerning tax noncompliance and perceptions of tax complexity. We then compare these results with results found in international tax literature.

3. RESEARCH QUESTIONS AND HYPOTHESES

3.1 Research questions

The intention of this paper is to achieve two main goals. Firstly, we will try to design a socio-demographic, professional and technical overview of the Portuguese tax

professionals with the greatest propensity to tax noncompliance. Secondly, we will attempt to ascertain the perception of tax professionals as regards tax complexity and its consequences in terms of tax compliance.

We propose to answer the following research questions:

Question 1: How great is the propensity of tax professionals to engage in tax noncompliant behaviour?

Question 2: What is the demographic, technical and professional profile of Portuguese tax professionals with the greatest propensity to tax noncompliant behaviour?

To address these research questions, we define five research hypotheses as well as two explicative models, as follows.

3.2 Research hypotheses

Regarding the demographic characteristics of age and gender, in prior published research relating to paid tax professionals, there is no evidence to suggest that the propensity to engage in tax noncompliance (unintentional or intentional) is different depending on those characteristics. Nevertheless, in terms of taxpayers' age and gender, there are some studies which conclude that younger taxpayers and as well as men in general are less likely to comply with tax laws (Klepper et al., 1991; Long & Caudill, 1993; McKerchar, 2002; Schuetze, 2002; Erard & Ho, 2003; Kastlunger et al., 2010; Torgler & Valev, 2006, 2010; Hofmann et al., 2017). This study seeks to ascertain whether these differences between taxpayers are also observable among tax professionals. Our neutral research hypotheses are as follows:

H1: Tax professionals' propensity to engage in tax noncompliance (intentional or unintentional) is not related to their age.

H2: Tax professionals' propensity to engage in tax noncompliance (intentional or unintentional) is not related to their gender.

With regard to tax knowledge, there is some empirical evidence to support the existence of a relationship between paid tax professionals' tax knowledge and their capacity to deal with tax complexity, in order to comply or not (Ayres et al., 1989; O'Donnell et al., 2005; Stephenson, 2007). We believe that different levels of tax knowledge are reflected in their attitudes towards tax compliance. Therefore, we present the following neutral research hypothesis:

H3: Tax professionals' propensity for tax noncompliance (intentional or unintentional) is not related to their level of tax knowledge.

To draw a profile of Portuguese paid tax professionals, it is also important to understand whether there is a relationship between the size of their customers'/employers' companies and the way they deal with tax noncompliance opportunities, as well as their probability to commit errors or omissions. The literature suggests that there is a lower propensity to engage in involuntary tax noncompliance in the largest firms, but more ability to derive benefits from tax complexity and ambiguity through tax aggressiveness in those companies (Ayres et al., 1989; OECD, 2001; EC, 2004, 2007; McKerchar et al., 2005; Bloomquist et al., 2007; Lopes, 2012). Our neutral research hypothesis is as follows:

H4: There is no relationship between the size of companies⁸ in which tax professionals carry out their functions and their tax noncompliant behaviour (intentional or unintentional).

Concerning the impact of tax complexity on tax noncompliant behaviour (intentional or unintentional), the conclusions of studies present in the literature suggest that they are related. GAO (2006), Bloomquist et al. (2007) and Laffer et al. (2011) conclude that tax complexity increases opportunities for both voluntary and involuntary tax noncompliance. Thus, our next neutral research hypothesis is:

H5: Tax professionals' perception of tax system complexity in general⁹ is not related to their tax noncompliant behaviour (intentional or unintentional).

4. RESEARCH METHODOLOGY

In order to collect the data, following the suggestion of Raupp and Beuren (2006), we used a survey addressed to Portuguese paid tax professionals (certified accountants). Our target population was Portuguese certified accountants in active service in February 2013, a total of 38,614 members.

To introduce our questionnaire in paper format, we addressed the 2,391 members present in the regulatory entity's tax seminars of February 2013,¹⁰ thus benefiting from a convenience sample.¹¹ Furthermore, we placed the same questionnaire online on the forum of the Portuguese Organization of Certified Accountants (OTOC¹² — now named OCC¹³) and in other blogs/forum/websites frequented by Portuguese tax professionals. It is important to emphasise that in this questionnaire, professionals were invited to undertake a self-evaluation of their perceptions and performance in the areas of tax complexity and tax compliance.

The questionnaire (Appendix A), aimed to fulfill the following objectives:

1. To construct a socio-demographic, professional and technical characterisation of the respondents (Questions 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 20);
2. To characterise their self-evaluation of their perception regarding tax system complexity (Questions 11, 12, 13, 14, 15, 16, 19 and 22);
3. To evaluate their perceived need for tax updating¹⁴ and how important professionals believe this to be for their activities (Questions 17, 18, 20 and 21);

⁸ In order to understand the size of the clients/employers of the tax professionals, we used two indicators: the turnover of the largest customer that they have or have had (Question 10), and the way that certified accountants organise their activity. In Portugal it is the professionals who work in in-house accountancy and taxation departments who are usually responsible for larger companies (Question 8).

⁹ By using two ranges: lower complexity and higher complexity.

¹⁰ Tax seminars of voluntary frequency whose objective is to create a forum for permanent tax updating.

¹¹ The regulatory entity (OCC) was not able to participate in order to obtain a representative (random) sample for this study.

¹² Ordem dos Técnicos Oficiais de Contas — denomination of the regulatory body of the profession in 2013.

¹³ Ordem dos Contabilistas Certificados — current denomination of the regulatory body of the profession.

¹⁴ Permanent fiscal update, through frequency of seminars, autonomous study and other means, which are necessary due to the constant fiscal changes.

4. To assess their self-evaluation concerning the impact of tax complexity on their unintentional tax noncompliance (Questions 23, 24, 25 and 26); and
5. To assess their self-evaluation regarding the impact of tax complexity on their propensity to engage in intentional tax noncompliance schemes (Questions 27 and 28).

We collected 1,258 paper questionnaires and 334 online questionnaires, amounting to a total of 1,567 valid questionnaires. Our response rate was about 52% in relation to the professionals present at the tax seminars, and 4.1% in terms of our target population. This is in line with other international studies with 1% (see McKerchar, 2005).¹⁵

Taking in to consideration our convenience sample (bias and lack of representativeness), we had to deal with the bias of data concerning two important variables: age of the professionals and years of experience in the profession (see Tables I and II, Appendix B). Thus, we used a table of random numbers to generate a smaller but stratified random sample of 994 questionnaires ('new sample'), with similar distribution among the target population (provided by the regulatory entity of the profession, in February 2013).¹⁶

5. RESULTS AND DISCUSSION

5.1 Tax professionals' profile and perception of tax system complexity

Portuguese tax professionals present some interesting features. Around 44% are more than 50 years old and only 16% are 35 years old or below. With regard to gender, there is a good balance, with men representing 54.8% of professionals currently active.

However, when we categorise age by gender, we observe that in the lower age group there are a greater number of women, while in the older age group there is a preponderance of men; for example, among younger tax professionals (35 years old and below), women outnumber men by more than two to one, whereas among the older professionals (> 65 years old) there are very few women.

Data suggest that although this profession has been predominantly a male domain in the past in the future there will be a preponderance of women, should the observed tendency continue. This is an appealing line for future research. We validated this change by using a crosstab and Pearson Chi-Square, with the result: $\chi^2(3) = 204.3$; $p = 0.000 < 0.05$; we verify that the observed difference is statistically significant and quite relevant (contingency coefficient = 0.42).

In relation to the technical and professional characteristics of our sample, we can verify that 75.1% of Portuguese paid tax professionals hold a university degree. This is as a result of the rules of access to the profession. Moreover, 73.7% of professionals have

¹⁵ This questionnaire was applied online, only by including a link in the Australian Taxation Office's Newsletter.

¹⁶ In fact, we used five 'auxiliary variables': gender (2 categories), age (3 categories), geographical dispersion (5 categories), professional experience (2 categories) and academic degree (3 categories). This leads to a rather large number of groups, in order to use the re-weighting method.

more than 10 years' professional experience, which is similar to the 66.5% verified in the United Kingdom (UK) by Green (1994).¹⁷

As regards the size of customers' (or employers') companies, we can observe that more than half of the tax professional respondents (71.7%) are responsible for small–medium sized enterprises (SMEs) with a turnover of up to €2 million. This is compatible with the data published by the Portuguese National Statistical Institute¹⁸ relative to business size in Portugal, and corroborates data presented in Lopes (2009) from the Portuguese tax professionals' customer portfolio. We can also confirm that tax professional respondents generally work in accountancy and taxation offices (69.9%), a lower percentage than the 88% observed by Green (1994) in the UK, denoting less use of outsourcing services in the case of Portugal. Thus, Portuguese tax professionals work predominantly in firms of accountancy and taxation, mostly responsible for SMEs. The tendency to work in in-house departments of accounting and taxation is slightly higher in men than in women, at 52% and 48%, respectively.

In terms of the time spent in tax updating, the mean is 21.17 hours (21 hrs 10 min.) per month. This is in line with McKerchar's (2005) study in Australia, with 21.6 hours per month (21 hrs 36 min.) spent in tax updating.¹⁹ In contrast, Green (1994) presents this statistic in relative terms — according to her study, UK chartered accountants spend 78% of their professional time in tax updating.

In order to better understand Portuguese certified accountants' level of tax knowledge, we constructed an additive index referred to as the *Tax Knowledge Index*, with a scale ranging from 3 to 12, and using the following variables: 'academic graduation plus curriculum with courses in taxation'; 'time spent on tax updating'; and 'years of tax experience'. As a result of this index, we can verify that there is a high level of tax knowledge among Portuguese paid tax professionals. The majority fall between Levels 8 and 10 on the index (43.2%), while on Level 9 we find the highest number: 246 (24.7%). The median is 9 (Q1 = 8 and Q3 = 10) and the tax professionals at the levels above the mean value (8.85) are 61.1%, which is lower than the 77% verified in McKerchar (2005).

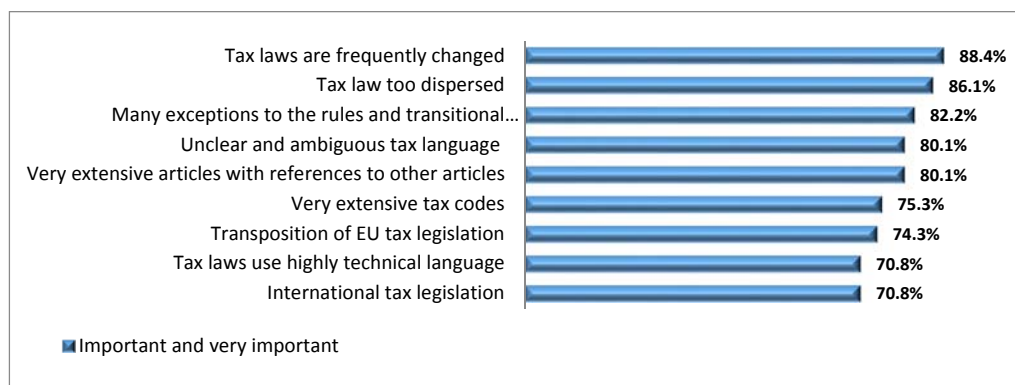
A large majority (89.1%) of respondents classified their perception of tax system complexity in relation to the tax system as a whole as either complex or very complex (a high level of tax complexity perceived), while only 10.9% ranked the Portuguese tax system as straightforward (with a low level of complexity). These results are in line with data from the World Bank (2013a; 2013b), which rates Portugal as one of the top countries in terms of tax bureaucracy in Europe, only surpassed by Italy and some Eastern European countries.

Figures 1 and 2 represent the determinants of tax complexity from the Portuguese tax professionals' perspective: Figure 1 relates to legislative (or legal) tax complexity, while Figure 2 relates to complexity of tax compliance.

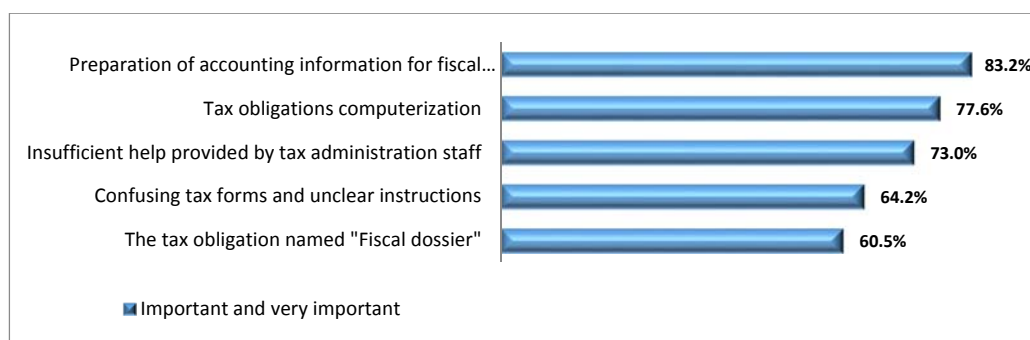
¹⁷ This should be treated cautiously as there is a gap of 20 years between the studies.

¹⁸ Instituto Nacional de Estatística (INE) — the Portuguese National Institute of Statistics.

¹⁹ See note 14 above.

Figure 1: Determinants of legislative tax complexity — professionals' perspectives

With reference to legislative tax complexity (see Figure 1 above), tax professionals allocate a high level of relevance to all determinants, with special emphasis on tax law changes and tax law dispersion, with an 88% and 86% allocation, respectively.

Figure 2: Determinants of complexity of tax compliance — professionals' perspectives

As can be seen from Figure 2, Portuguese certified accountants accord a high level of importance to all determinants, in particular to the preparation of accounting information for fiscal purposes and to tax obligation of adoption of information technology (IT) (computerisation), with 83% and 78%, respectively. This is in line with the previous studies of Long and Swingen (1987), Green (1994) and McKerchar (2005).

According to the self-evaluation undertaken by Portuguese tax professionals, perception of tax complexity might introduce some distortions into tax compliant behaviour, which could potentially impact on their intentional or unintentional tax noncompliance. Approximately half of the certified accountant respondents (45.9%) admitted to a relationship between tax complexity and their unintentional tax noncompliant behaviour (mainly errors, mistakes, misinterpretations and omissions).²⁰

Regarding the participation of tax professionals in intentional tax noncompliance schemes (intentional under-reporting of income, intentional misrepresentation of expenses, deliberate misclassification of income and other premeditated means of entirely avoiding or reducing the payment of taxes), and because it is a very sensitive issue, the question was framed from a hypothetical perspective. The survey sought to

²⁰ Only 4.9% of respondents did not want to answer Question 25 (see Appendix A).

ascertain whether they would agree to participate in aggressive tax planning schemes that take advantage of tax complexity, ambiguities and loopholes in tax laws, if offered the chance. Only 65.6% of the tax professionals surveyed claimed that they would peremptorily refuse to participate in such schemes.²¹ The remainder of respondents to this question fell into the categories 'accept' and 'consider whether to accept or not'.²²

We also considered whether it was important to understand the determinants of the professionals' position with regard to aggressive fiscal planning schemes (intentional tax noncompliant behaviour).

Figure 3 (below) presents the determinants considered by Portuguese certified accountants (self-evaluation) as 'important' or 'very important' for deciding their attitudes towards aggressive tax planning proposals.²³

According to the self-evaluation undertaken by tax professionals (Figure 3), there are three main determinants in decisions regarding tax aggressiveness made by tax professionals: (i) their sense of personal and professional ethics; (ii) their level of tax morality; and (iii) their need to preserve their professional reputation. It is important to note that these data do not correspond with the international tax literature, which instead highlights a fear of penalties as well as the importance of customers and the apprehension of losing them (or being dismissed). In contrast, these were variables to which the Portuguese paid tax professionals appear to attach relatively little importance. Fear of punishment is thus not a sufficient deterrent in terms of tax compliance in Portugal.

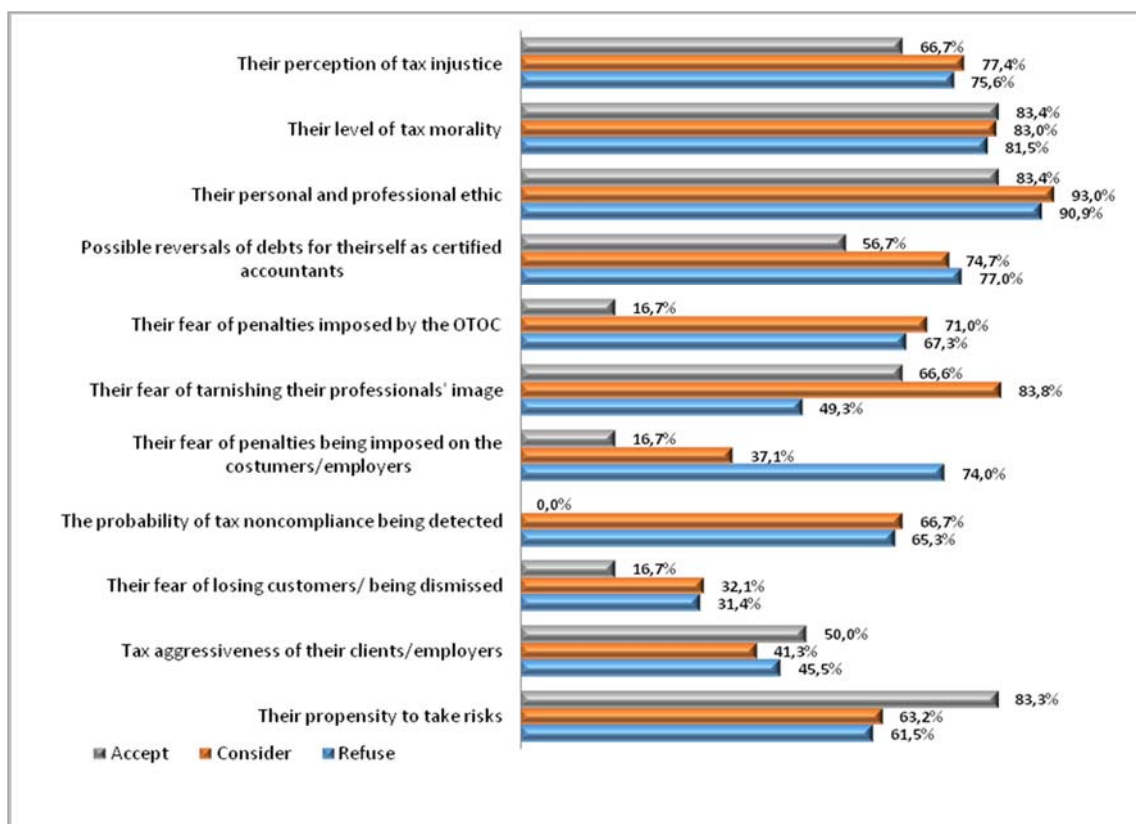
Thus, for tax policymakers and tax authorities alike, as well as for the organisation responsible for regulating this profession (OCC), it is necessary to address alternative means of reducing intentional or unintentional tax noncompliance among Portuguese certified accountants. It should be noted, however, that in Portugal the tax punishments for noncompliance do not fall directly on tax professionals, which could explain the lack of concern regarding such penalties.

²¹ Only 7.9% of respondents did not want to answer Question 27 (see Appendix A).

²² These options are: 'refuse', 'accept' and 'consider', respectively.

²³ Combination of data from answers to Questions 27 and 28 (see Appendix A).

Figure 3: The determinants of tax aggressive behaviour of Portuguese tax professionals, categorised by attitudes towards aggressive tax planning proposals



In the next section, we analyse whether tax professionals' demographic, technical and professional data and their perception of tax complexity are related to their tax noncompliant behaviour, thereby testing our research hypotheses.

5.2 Testing the research hypotheses

In order to test our research hypotheses, we examine the relationship between the independent and dependent variables: unintentional tax noncompliant behaviour and intentional tax noncompliant behaviour (tax aggressiveness). Table 2 presents the statistical hypotheses.

Due to the characteristics of our data (lack of data normality, as well as to the use of nominal and ordinal variables frequently based on five-point type-Likert scales), and in order to analyse the relations between dependent and independent variables, we use the following nonparametric tests: χ^2 ; the Mann-Whitney test; and the Kruskal Wallis test. Furthermore, to measure the strength and direction of the relation between variables we use the Spearman Correlation.

Table 2: Statistical hypotheses

H		Statistical hypotheses
H1	H1.1	H₀: There are no differences in tax professionals' propensity for unintentional tax noncompliance, depending on the age of the professional; H_a: There are differences in tax professionals' propensity for unintentional tax noncompliance, depending on the age of the professional.
	H1.2	H₀: There are no differences in tax professionals' propensity for tax aggressiveness, depending on the age of the professional; H_a: There are differences in tax professionals' propensity for tax aggressiveness, depending on the age of the professional.
H2	H2.1	H₀: There are no differences in tax professionals' propensity for unintentional tax noncompliance, depending on the gender of the professional; H_a: There are differences in tax professionals' propensity for unintentional tax noncompliance, depending on the gender of the professional.
	H2.2	H₀: There are no differences in tax professionals' propensity for tax aggressiveness, depending on the gender of the professional; H_a: There are differences in tax professionals' propensity for tax aggressiveness, depending on the gender of the professional.
H3	H3.1	H₀: There are no differences in tax professionals' propensity for unintentional tax noncompliance, depending on their level of tax knowledge; H_a: There are differences in tax professionals' propensity for unintentional tax noncompliance, depending on their level of tax knowledge.
	H3.2	H₀: There are no differences in tax professionals' propensity for tax aggressiveness, depending on their level of tax knowledge; H_a: There are differences in tax professionals' propensity for tax aggressiveness, depending on their level of tax knowledge.
H4	H4.1	H₀: There are no differences in tax professionals' propensity for unintentional tax noncompliant behaviour, depending on the turnover ²⁴ of the largest companies in which professionals carry out their functions; H_a: There are differences in tax professionals' propensity for unintentional tax noncompliant behaviour, depending on the turnover of the largest companies in which professionals carry out their functions.
	H4.2	H₀: There are no differences in tax professionals' propensity for unintentional tax noncompliant behaviour, depending on the way they organise their activity; ²⁵ H_a: There are differences in tax professionals' propensity for unintentional tax noncompliant behaviour, depending on the way they organise their activity.
	H4.3	H₀: There are no differences in tax professionals' propensity for tax aggressiveness, depending on the turnover of the largest companies in which professionals carry out their functions;

²⁴ We use the turnover of the largest company for which the professional is/was responsible as an indicator of the size of the companies with which the professional usually deals.

²⁵ Measure of size of clients/employers.

H	Statistical hypotheses
	H_a : There are differences in tax professionals' propensity for tax aggressiveness, depending on the turnover of the largest companies in which professionals carry out their functions.
H4.4	H₀ : There are no differences in tax professionals' propensity for tax aggressiveness, depending on the way they organise their activity; H_a : There are differences in tax professionals' propensity for tax aggressiveness, depending on the way they organise their activity.
H5	H5.1
	H₀ : There are no differences in tax professionals' unintentional tax noncompliant behaviour, depending on their perception of tax system complexity; ²⁶ H_a : There are differences in tax professionals' unintentional tax noncompliant behaviour, depending on their perception of tax system complexity.
H5.2	H₀ : There are no differences in tax professionals' propensity for tax aggressiveness, depending on their perception of tax system complexity; H_a : There are differences in tax professionals' propensity for tax aggressiveness, depending on their perception of tax system complexity.

Table 3 presents the relationship between Portuguese tax professionals' characteristics and their unintentional tax noncompliant behaviour (Question 25 — Appendix A). In this analysis we exclude the non-answers to Question 25, since although they represent replies from 4.9% of respondents, the results of the other two options are very well defined, not being dependent on the submissions of this 4.9% of respondents.

²⁶ By using a dichotomous variable: lower complexity versus higher complexity. Lower complexity includes the ranks: 'very simple' (0.01%), 'simple' (1.29%) and 'neither simple nor complex' (9.6%) and higher complexity includes the ranks 'complex' (49%) and 'very complex' (40.1%).

Table 3: Effects of socio-demographic, professional and technical variables on Portuguese tax professionals' unintentional tax noncompliant behaviour (in a complex tax context)²⁷

H	Variables	χ^2 (df)	Kruskal -Wallis (df)	Mann- Whitney (df)	<i>p</i> -value	Correlation
H1.1	Professionals' age	13.91** (3)	13.89 (920)	—	0.003**	—
H2.1	Professionals' gender	8.03** (1)	—	96173.5 (925)	0.005**	rho=-0.093 p=0.002**
H3.1	Professionals' tax knowledge	3.61 (5)	—	—	0.607	—
H4.1	The size of professionals' customers or employers (turnover)	7.25 (4)	—	—	0.123	—
H4.2	The way professionals organise their activity	1.17 (1)	—	—	0.279	—
H5.1	Professionals' perception of tax system complexity	9.910** (1)	—	76087.5 (895)	0.006**	rho = 0.103; p = 0.002 **

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.001$

As the null hypothesis of H1.1, H2.1 and H5.1 are rejected, the results of the analysis indicate there is a statistically significant relationship between Portuguese tax professionals' unintentional tax noncompliant behaviour (caused by tax complexity) and the following independent variables: (i) tax professionals' perception of tax system complexity; (ii) tax professionals' age; and (iii) tax professionals' gender.

The tax professionals with the highest propensity for unintentional tax noncompliant behaviour are those whose ages range from 35 to 50, while those below that age range demonstrate the lowest propensity.

The tax professionals with the highest propensity for unintentional tax noncompliance are men.

The tax professionals with the highest perception of tax system complexity are those who are assumed to commit more errors, mistakes and omissions (unintentional tax noncompliant behaviour).²⁸

In particular, the statistically significant relationship between unintentional tax noncompliance and tax complexity should lead tax policymakers to consider the need to simplify the Portuguese tax system, especially its legal aspects. According to Borrego

²⁷ Question 25 (see Appendix A).

²⁸ At this point we must bear in mind that the measurement of this variable is performed by self-evaluation on the part of professionals.

(2015) and Borrego et al. (2015), Portuguese tax professionals perceive a higher level of complexity in tax laws than in compliance tasks.

It thus appears that professionals' tax knowledge and the size of companies in which they carry out their functions have no statistically significant relationship with their unintentional tax noncompliant behaviour (H3.1, H4.1 e H4.2).

Table 4 presents the relationship between tax professionals' characteristics and their intentional tax noncompliant behaviour ('tax aggressive behaviour').

According to the data shown (Table 4), there is a statistically significant relationship between Portuguese tax professionals' propensity for tax aggressive behaviour and their age, the way they organise their activity and the size of professional's customers or employers (H1.2, H4.3 and H4.4).

In an environment of perceived high tax complexity, the relationship between tax aggressive behaviour and specialists' ages is negative: that is, the younger are more likely to engage in intentional tax noncompliant behaviour. In general, this can be explained by the greater propensity of younger people to take risks and the fact that older professionals may possess a higher sense of tax morality (Erard & Ho, 2003; Torgler & Valev, 2006; Alm & Torgler, 2006; Sá, 2014).

These conclusions are in line with the possibility that younger tax professionals are more likely to engage in tax aggressive schemes. We point out that the reason for that, in the specific context of these tax professionals, is the fact that they are more economically dependent on their clients or employers than older professionals with larger customer portfolios. In our opinion, this deserves the attention of both the regulatory authority and academia in terms of future research and tax policy.

The statistically significant influence of the way that tax professionals organise their activity on their tax aggressive behaviour leads us to conclude that those with the highest propensity for tax aggressive behaviour are the ones who work in in-house accountancy and taxation departments.

Table 4: Effects of socio-demographic, professional and technical variables on Portuguese tax professionals' tax aggressive behaviour (in complex tax context)²⁹

H	Variables	χ^2 (df)	Kruskal- Wallis (df)	Mann- Whitney (df)	p-value	Correlation
H1.2	Professionals' age	23.58*** (3)	23.56 (889)	—	0.000***	$\rho = -0.143$; $p = 0.000$ ***
H2.2	Professionals' gender	0.15 (1)	—	—	0.703	—
H3.2	Professionals' tax knowledge	3.63 (5)	—	—	0.603	—
H4.3	The size of professionals' customers or employers (turnover)	8.59* (4)	—	—	0.072*	—
H4.4	The way professionals organise their activity	7.50** (1)	—	76087.5 (895)	0.006**	$\rho = 0.092$; $p = 0.006$ **
H5.2	Professionals' perception of tax system complexity	0.50 (1)	—	—	0.479	—

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.001$

Although we cannot dissociate these results concerning tax aggressiveness from the firms' size (this relation is significant at the level of 10% ($p < 0.1$)), we believe they may also primarily be influenced by the greater economic dependence of tax professionals who work in in-house departments on their employers. This is in comparison with those who have their own accountancy and taxation offices with a large portfolio of clients.

Data suggest that Portuguese tax professionals' gender, their tax knowledge and their perception of tax system complexity (Table 4) have no statistically significant relationship with their aggressive tax behaviour (H2.2, H3.2 and H5.2).

Tables 5 and 6 (below) present the findings of our statistical tests with regard to the profiles of the above, and compare them with the results reported in the international tax literature regarding tax professionals (Table 5) and taxpayers (Table 6). Therefore, for each variable Tables 5 and 6 show a first line containing the international literature results, as well as a second line with the new findings, that is, the results of this research.

²⁹ Question 27 (see Appendix A).

Table 5: Results of statistical tests and their comparison with the Tax Literature Review (I)

Independent variables	Confrontation with literature	Greater propensity for	
		Unintentional tax noncompliance	Tax aggressiveness (intentional tax noncompliance)
Tax knowledge	Literature review	Lower tax knowledge	Higher tax knowledge
	Our findings	No relation	No relation
Clients'/employers' size ³⁰	Literature review	Work with/in the smallest companies	Work with/in the biggest companies
	Our findings	No relation	Work with/in the biggest companies
Perception of tax complexity	Literature review	More complexity perceived	More complexity perceived
	Our findings	More complexity perceived	No relation perceived

Analysis of data in Table 5 reveals that our conclusions do not corroborate the importance attributed in international literature to the level of tax knowledge in the context of tax professionals' intentional or unintentional tax noncompliant behaviour. However, this difference might be due to differences in how 'tax knowledge' is measured. In addition, in Portugal a degree in accounting (with a considerable emphasis on taxation), followed by continuous updating — two of the three indicators that comprise the professionals' tax knowledge index — are mandatory for those entering this profession. This can slant the results from this indicator towards excessively high values.

In relation to the impact of tax complexity, the results corroborate the literature in the context of unintentional noncompliant behaviour, and contradict it in terms of the scope of tax aggressiveness, because we cannot establish a statistically significant relationship.

As regards the influence of their clients'/employers' size on their tax compliant behaviour, the results corroborate the literature in the tax aggressive behaviour context, and contradict it with regard to the scope of unintentional tax noncompliant behaviour.

In summary, we corroborate:

1. The higher propensity of professionals who work in larger companies for intentional tax noncompliant behaviour;
2. A positive relationship between tax professionals' perception of tax complexity and their propensity for unintentional tax noncompliance.

³⁰ By using the tax professionals' way of organising their activity (those who work in in-house accountancy and taxation departments usually have responsibility for larger companies) as an indicator.

We do not corroborate:

1. The important role attributed to the level of tax knowledge in the tax professionals' tax compliance context;
2. The higher propensity for professionals who work in small companies to engage in unintentional tax noncompliant behaviour;
3. The relationship between tax professionals' perception of tax complexity and their propensity for intentional tax noncompliance.

Table 6 summarises the results of statistical tests relating to Portuguese tax professionals' age and gender, and compares them with the findings from the literature related to taxpayers (because there are no results in the literature in the tax professionals' context).

Table 6: Results of statistical tests and their comparison with the Tax Literature Review (II)

Independent variables	Taxpayers versus professionals	Greater propensity for	
		Unintentional tax noncompliance	Tax aggressiveness (intentional tax noncompliance)
Age	Taxpayers	—	Younger
	Portuguese tax professionals	Older	Younger
Gender	Taxpayers	—	Men
	Portuguese tax professionals	Men	Without a statistically significant difference

These emphasise the previously mentioned fact that the propensity for tax aggressive behaviour is higher among younger people, be they taxpayers or professionals. Moreover, we were unable to conclude that the professionals' gender had no impact on their behaviour relating to fiscal aggressiveness, contrary to the taxpayer tax literature review.

Regarding the impact of the taxpayers' and professionals' gender and age on their involuntary tax noncompliance, the literature does not present any conclusions. However, the data does suggest a greater propensity among older and male professionals.

After performing this analysis, and being aware that we cannot ignore the fact that the interrelationship between variables could influence the results, we will now proceed to a multivariate analysis in order to complement the profile. The following section therefore offers an analysis of multiple correspondences in order to unite our two dependent variables with the majority of our independent variables in the same profile.

5.3 Analysis of multiple correspondences

Analysis of multiple correspondences is used in terms of nominal categorical data and allows us to detect and represent underlying structures in a data set. This is very useful for drawing behavioural profiles.

We undertook two analyses of multiple correspondences, in order to obtain two profiles: the profile of tax professionals with the greatest tendency for unintentional tax noncompliant behaviour, and the profile of tax professionals with the highest propensity for intentional tax noncompliant behaviour (tax aggressive behaviour).

In relation to the propensity for unintentional tax noncompliance, our analysis allows us to identify two profiles which are more tax noncompliant. Table 7 presents these findings.³¹

From the analysis of data in Table 7, we highlight the relation between higher perception of tax system complexity and the greater propensity for unintentional tax noncompliance. This relation justifies the attention of the tax policymakers to this problem.

The profiles of the most tax noncompliant also deserve the attention of the regulatory authority for this profession and the tax authority, because when we fuse age with gender, those are the groups with more professionals: 54.4% of female professionals are in the age group from 35 to 50 and 48.7% of male professionals are in the 50 to 65 age group.

Table 7: Profiles of tax professionals with the greatest propensity to unintentional tax noncompliance

Profile 1	Profile 2
• Gender: male; • Age: > 50 to 65; • Tax Knowledge Index level: high; • Clients'/employers' turnover: > €2 million; • Perception of tax system complexity: high.	• Gender: female; • Age: > 35 to 50; • Tax Knowledge Index level: medium; • Clients'/employers' turnover: inconclusive; • Perception of tax system complexity: high.

Although the levels of tax knowledge of both profiles are medium and high, the data suggest that these levels of tax knowledge may not be sufficient to deal with the problems created by tax complexity in involuntary tax noncompliant behaviours in the context of tax professionals.

In relation to the professionals' propensity for intentional tax noncompliance, the analysis of multiple correspondences allows us to generate two profiles which are more tax noncompliant (more tax aggressive). Table 8 shows the results of the analysis.³²

From the analysis of data in Table 8, we emphasise the relationship between a higher perception of tax system complexity and the propensity for more aggressive behaviour

³¹ Although the values of reliability analysis obtained through Cronbach's Alpha are low (0.555 and 0.233, for dimension 1 and 2, respectively), it is important to note that there are some factors that may influence these values. First of all, as we are working in the social sciences area, some variables are difficult to measure, for example, the variable 'perception of tax system complexity' (high/low) on a five-point Likert scale. Secondly, we use an index, the *Tax Knowledge Index*, in substitution for three manifest variables, which may also contribute to the decrease in Cronbach's Alpha values.

³² The values of Cronbach's Alpha are low (0.550 and 0.276, for dimension 1 and 2, respectively). In addition, the notes on the values of Cronbach's Alpha in Footnote 31 are equally valid for this note.

and advice in the taxation field (intentional tax noncompliance). The relationship between tax complexity and tax aggressiveness justifies the attention of the tax policymakers.

Thus, according to the results from the analysis of multiple correspondences, tax professionals who simultaneously meet the requirements of one of the two profiles presented in Table 8 are more prone to intentional tax noncompliant tax behaviour.

It is important to note that the profiles are very similar between men and women, with the exception of the age with the greatest propensity for fiscal aggressiveness. These profiles also represent a very large group among tax professionals.

The propensity for noncompliance (unintentional and intentional) is highest in the professionals responsible for medium-sized enterprises, in contexts of perceived high tax complexity. In particular, in the case of intentional tax noncompliance, we note greater vulnerability to the pressure exerted by employers/clients for professionals' participation in aggressive tax planning schemes among young women and professionals working in in-house departments of accounting and taxation.

Table 8: Profiles of tax professionals with the greatest propensity to intentional tax noncompliance

Profile 1	Profile 2
• Gender: male; • Age: > 35 to 50; • Tax Knowledge Index level: high; • Clients'/employers' turnover: > €2 million; • Perception of tax system complexity: high; • Way of organizing their activity: in-house accountancy and taxation departments.	• Gender: female; • Age: Up to 35; • Tax Knowledge Index: medium; • Clients'/employers' turnover: > €2 million; • Perception of tax system complexity: high; • Way of organising their activity: in-house accountancy and taxation departments.

After defining those profiles, based on the two dependent variables, it seems important to construct models to explain them.

5.4 Tax noncompliance in terms of Portuguese tax professionals: The explicative models

To perform these multivariate analyses, we used logistic regressions (the 'enter' method), since the dependent variables of both models are dichotomous.

Prior to these explanatory models, in order to simplify their creation, we constructed indices with some independent variables, namely:

1. The *Tax Knowledge Index* (an additive index), pp. a latent variable which replaces the following manifest variables: 'academic graduation plus curriculum with courses in taxation'; 'time spent on tax updating'; and 'years of tax experience'.

2. The Legal³³ Tax Complexity Index, the Complexity of Tax Compliance Index in the Tax Professionals Context and the Complexity of Tax Compliance Index in the Tax Authorities Context: three synthetic indices (latent variables), which replace the 14 manifest variables presented in Figures 1 and 2, thus reducing their large number. The statistical technique used to create these indices was the Principal Component Analysis.³⁴

5.4.1 Model 1 — Tax professionals' unintentional tax noncompliant behaviour

In this model the dependent variable is 'tax professionals' propensity for unintentional tax noncompliant behaviour', a dichotomous variable (yes/no).³⁵ The independent variables are those presented in Table 9.

Table 9 summarises the results of the explicative model of the predictors of tax professionals' propensity for unintentional tax noncompliant behaviour.

Table 9: Tax professionals' propensity for unintentional tax noncompliant behaviour

Independent variables (Predictors)	B	Wald	Exp(B)
Age (A)	0.119	1.419	1.126
Gender (Dummy) ^(a) (B)	0.409**	5.977	1.506
Tax knowledge Index ³⁶ (C)	0.044	0.682	1.045
Customers' (employers') turnover (D)	0.112	2.016	1.119
Ways of organising their activity (Dummy) ^(b) (E)	0.110	0.442	1.116
Legal Tax Complexity Index (F) ³⁷	0.199*	2.791	1.220
Complexity of tax compliance Index — tax professionals' context (G) ³⁸	-0.55	0.287	0.946
Complexity of tax compliance Index — tax authorities' context (H) ³⁹	0.017	0.025	1.017
Perception of tax system complexity (Dummy) ^(c) (I)	-0.489*	3.478	0.613
Perception about the relation of tax system complexity with the increase in unintentional tax noncompliance (J)	0.420***	24.965	1.521
Relation of tax complexity to the increase in the fear of making errors (L)	0.211**	4.108	1.235
Constant	-4.131***	26.340	0.016
Nagelkerke R ²	0.122***		

Reference categories: ^(a)Female; ^(b)In-house tax department; ^(c)High complexity
 * $p < 0.1$; ** $p < 0.05$; *** $p < 0.001$

The estimated final model is represented by the following equation:

³³ Or legislative.

³⁴ Statistical technique which allows us to create synthetic indices.

³⁵ The proportion of those who said 'Do not want to answer' that question is 4.6%. Those answers were excluded from the analysis.

³⁶ Index previously created.

³⁷ Index previously created.

³⁸ Index previously created.

³⁹ Index previously created.

$$-4.131 \text{ (Constant)} + 0.119\mathbf{A} + 0.409\mathbf{B} + 0.044\mathbf{C} + 0.112\mathbf{D} + 0.110\mathbf{E} + 0.199\mathbf{F} - 0.55\mathbf{G} \\ + 0.017\mathbf{H} - 0.489\mathbf{I} + 0.420\mathbf{J} + 0.211\mathbf{L}$$

The model explains 12.2% of the propensity for unintentional tax noncompliant behaviour among Portuguese tax professionals. It is important to note that there are other published studies with similar results. For instance, Cuccia and Carnes (2001) present a model of 25% of explicative capacity, concerning the relationship between tax complexity and tax equity perceptions. In contrast, Kasipillai and Jabbar (2006) use results of 15.9% to explain an association between taxpayers' gender and their tax noncompliant attitudes. Finally, Bonner et al. (1992) show results of 9%, 12%, 14%, 19% and 27%, by using a stepwise method, in a study concerning the ability of tax professionals to identify tax planning opportunities.

Furthermore, the model correctly classifies 64.5% of the respondents.

As regards the suitability of the model for the data, we noticed a likelihood ratio, which revealed the model as suitable, because $p < 0.001$ ($p\text{-value} = 0.000$) and there are only small differences between the values estimated by the model and the observed values. According to the Hosmer and Lemeshow test, with a $p\text{-value} = 0.234$ (> 0.05), this model seems suitable for the data.

We conclude that the independent variables with a statistically significant impact on the propensity of tax professionals for unintentional tax noncompliant behaviour, motivated by tax complexity, have the following effects: (i) men are up to 1.506 times more susceptible to tax noncompliance than women; (ii) the higher their level in the *Legal Tax Complexity Index*, the greater their propensity for tax noncompliance; (iii) tax professionals with a low perception of tax system complexity are up to 0.613 times less likely to engage in tax noncompliance than those who have a higher perception of tax system complexity, thus the high levels of tax complexity have a positive relation with tax noncompliance; and (iv) professionals who have a higher perception of the relationship of tax system complexity to the increase in unintentional tax noncompliance and the increase in the fear of committing errors have a higher propensity (1.521 and 1.235 times, respectively) for tax noncompliant behaviour.

From these results, we conclude that tax complexity provides a statistically significant explanation for some propensity for unintentional tax noncompliant behaviour among Portuguese tax professionals.

5.4.2 Model 2 — Tax professionals' propensity for tax aggressive activities

In this model the dependent variable is 'tax professionals' propensity to engage in tax aggressive activities' (intentional tax noncompliant behaviour), a dichotomous variable (refusal/no refusal).⁴⁰ The independent variables are those presented in Table 10.

Table 10: Tax professionals' propensity for tax aggressive behaviour

Independent variables (Predictors)	B	Wald	Exp(B)
Age (A)	-0.338**	7.800	0.713
Gender (Dummy) ^(a) (B)	0.366*	3.452	1.442

⁴⁰ 'No refusal' includes those who answered 'accept' and 'consider whether to accept or not'. Those who responded 'Do not want to answer' (7.9%) were excluded from the analysis.

Independent variables (Predictors)	B	Wald	Exp(B)
Tax knowledge Index (C)	-0.012	0.034	0.989
Customers' (employers') turnover (D)	0.178**	3.864	1.194
Ways of organising their activity (<i>Dummy</i>) ^(b) (E)	-0.288	2.256	0.749
Legal Tax Complexity Index (F) ⁴¹	0.379**	7.144	1.461
Perception of tax system complexity (<i>Dummy</i>) ^(c) (G)	-0.099	0.108	0.906
Propensity to take risks (H)	-0.006	0.004	0.994
Clients'/employers' tax aggressiveness (I)	-0.087	0.820	0.917
Fear of losing customers/being dismissed (J)	0.322***	13.557	1.380
Fear of the probability of noncompliance detection (L)	-0.073	0.529	0.930
Fear of punishments imposed by tax authorities on their customers/employers (M)	-0.044	0.146	0.957
Fear of tarnishing their professional image (N)	-0.099	0.528	0.906
Fear of punishment imposed by OCC ⁴² (O)	0.051	0.217	1.053
Fear of customers'/employers' debts being reversed (P)	0.068	0.487	1.070
Personal and professional ethics (Q)	-0.104	0.414	0.901
Tax morality (R)	-0.443**	11.451	0.642
Perception of tax justice (S)	0.005	0.002	1.005
Constant	0.753	0.728	2.124
<i>Nagelkerke R²</i>	0.151***		

Reference categories: ^(a)Female; ^(b)In-house tax department; ^(c)High complexity
 * $p < 0.1$; ** $p < 0.05$; *** $p < 0.001$

The estimated final model is represented by the following equation:

$$0.753 \text{ (constant)} - 0.338A + 0.366B - 0.012C + 0.178D - 0.288E + 0.379F - 0.099G \\ - 0.006H - 0.087I + 0.322J - 0.073L - 0.044M - 0.099N + 0.051O + 0.068P - \\ 0.104Q - 0.443R + 0.005S$$

Table 10 summarises the results of the model, which explain the propensity to engage in tax aggressive tasks (intentional tax noncompliant behaviour) of tax professionals, in Portugal.

This model correctly classifies 71.5% of the respondents and explains 15.1% of tax professionals' propensity for intentional tax noncompliant behaviour (tax aggressiveness). However, this is a low value, showing some relationship between the variables. This is because it is difficult to explain and measure individual attitudes and perceptions, as highlighted by the results of Bonner et al. (1992) and Kasipillai and Jabbar (2006).

The model is suitable for the data, with $p < 0.001$ ($p\text{-value} = 0.000$) (as the Hosmer and Lemeshow test, with a $p\text{-value} = 0.812$ (> 0.05), attests); we also found that the values estimated by the model are very close to those observed.

According to the results presented in Table 10, we verify that the independent variables, which have a statistically significant relation to the propensity for tax professionals' intentional tax noncompliance, have the following effects: (i) younger tax professionals are more prone to tax aggressive behaviour; (ii) men are up to 1.442 times more prone

⁴¹ This index was previously created.

⁴² It is the regulatory entity of this profession.

to tax aggressive behaviour than women; (iii) those professionals who work for larger firms are most prone to tax aggressive behaviour; (iv) the higher the level in the *Legal Tax Complexity Index* the greater the propensity for tax aggressive behaviour; (v) the greater the fear of losing the client (or of being dismissed) the higher the propensity for tax aggressive behaviour; and (vi) the higher the professionals' level of tax morality, the lower the propensity to be tax aggressive.

We highlight the non-existence of a statistically significant relationship between tax professionals' own propensity to take risks and their propensity for intentional tax noncompliant behaviour. Moreover, we note the absence of any statistically significant relation to their tax aggressiveness of other variables presented in the international tax literature, such as professionals' tax knowledge, their customers' (or employers') tax aggressive behaviour, and all the types of punishments proposed in the questionnaire. Those findings are not in line with the traditional theory of tax evasion (regarding the fear of punishment) in tax professionals' decisions advocated by some scholars (Cuccia, 1994).

6. CONCLUSION

If we study the profile of Portuguese tax professionals, and categorise the age data by gender, we note that there has been an increase in the number of professional women in recent years. This suggests that although it has been predominantly a male domain in the past, if this trend continues, women will come to dominate numbers in the near future.

We also conclude that the majority of tax professionals have a degree, and their level of tax experience is high (73.7% of respondents have more than ten years' experience). Tax professionals mostly organise their activities by outsourcing, via accountancy and taxation offices (69.9%), with customers' portfolios composed essentially of SMEs.

Our *Legal Tax Knowledge Index*, allows us to evaluate specialised fiscal knowledge, classified as medium-high among those surveyed: Levels 8 and 10 of the Index contain the majority of tax professionals (43.2%) while 61.1% of tax professionals are at levels above the mean value. In future, the *Legal Tax Knowledge Index* values will increase, because the tax professionals with the fewest qualifications are mainly those who are nearing retirement age.

Portuguese tax professionals perceive their tax system as having a high level of complexity (89.1%). This result corresponds with international literature on the subject (Green, 1994; McKerchar, 2005).

By means of self-evaluation, 45.9% of tax professionals admitted to having engaged in unintentional tax noncompliance, due to tax complexity, at least once. We can also confirm, through self-evaluation, that only 65.6% of tax professionals report that they peremptorily refuse to engage in tax aggressive schemes. Thus, Portuguese tax professionals demonstrate a moderate tendency to engage in tax noncompliance (intentional or unintentional).

In addition, using the analysis of multiple correspondences, we define the profiles of Portuguese tax professionals most prone to tax noncompliant behaviour (intentional or unintentional).

In terms of the profiles with most propensity to unintentional tax noncompliance, the first profile consists of men whose ages range from '>50 to 65', classified on a high level of the *Legal Tax Knowledge Index*, whose clients (or employers) with the highest turnovers are placed in the category '> €2 million', and who have a high perception of tax system complexity. The second profile is characterised by women whose ages range from '> 35 to 50', on a medium level of the *Legal Tax Knowledge Index*, and whose perception of tax system complexity is high.

The presence of a high level of perceived tax system complexity in both profiles, suggests a relationship between the high perception of tax complexity and the commitment of errors, omissions and other forms of involuntary faux pas. These profiles should therefore command the attention of the entity which represents this profession (OCC) and of the policymakers. Despite the high level of tax knowledge of professionals in these profiles (medium and high levels), the data suggest that technical knowledge is insufficient to solve the problems of involuntary tax noncompliance caused by the high levels of perceived tax complexity.

The results obtained emphasise the importance of simplifying the Portuguese tax system, as well as the need to identify the most problematic areas in tax complexity perceived by professionals.

The profile with most propensity to intentional tax noncompliance consists of men or women whose ages range from '>35 to 50' and 'up to 35', respectively. This group is classified on a high or medium level of the *Legal Tax Knowledge Index*, and has clients (or employers) with the highest turnovers in the category '> €2 million'. They also demonstrate a high perception of tax system complexity. It is important to note the presence of a high level of perceived tax system complexity in this profile, which suggests a relationship between the high perception of tax complexity and the propensity of tax professionals to be tax aggressive.

Significantly, we identify a profile suggesting that younger women have a high propensity for intentional tax noncompliance, although the literature states that in general men are more likely to resort to tax noncompliance than women, particularly in its aggressive form. Evidence suggests that women in this profession are more exposed to pressures from clients and employers; it is possible that many holding their first professional position are thus more apprehensive about losing their jobs. This is an area requiring future research.

It is also important to emphasise that, in the case of women, there is an almost total overlap in the profile of women most susceptible to involuntary tax noncompliance and voluntary tax noncompliance. In other words, they have a propensity for both types of tax noncompliance (voluntary and involuntary), which makes concerns regarding the behaviour of professionals within these profiles even more relevant.

The profile of women with noncompliant behaviour (choices, judgments and counselling) does provide other causes for concern, in particular because the number of women entering this profession has been more than twice that of men in recent years. If this trend continues, the number of tax professionals (women) included in this profile will grow, which could significantly raise the levels of tax noncompliance in the future.

Using the variables of our study, we constructed an explicative model of tax professionals' unintentional tax noncompliant behaviour, that results from tax

complexity. Such behaviour can be predicted based on the following variables: 'gender', with men as the more tax noncompliant, 'legal tax complexity', 'perception of tax system complexity' and the relationship established by tax professionals between the high level of tax system complexity, and the increase in unintentional tax noncompliance, all with positive impacts on tax noncompliance. These results are in line with the tax literature review.

We also constructed an explicative model of tax professionals' propensity for tax aggressive behaviour. We found that 'age' and 'gender', with younger men as the more tax aggressive, 'legal tax complexity', the 'size of taxpayers that engage them', the 'fear of losing customers/being dismissed', all with a positive impact, and tax morality, with a negative impact, are the variables that explain the propensity for tax aggressive behaviour among tax professionals in Portugal. Those results, regarding 'age', 'gender', 'legal tax complexity', 'size of taxpayers that engage them' and 'fear of losing customers/being dismissed' are in line with the international literature.

These constructions lead us to consider the possibility that younger professionals can exhibit more tax aggressive behaviour because of greater dependence on their clients/employers. In addition, if we compare the level of dependence based on the way tax professionals organise their work, those who are employed in in-house departments of accountancy and taxation are more dependent on their employers than those who are self-employed and have a diversified portfolio of customers.⁴³ These issues are intrinsically linked to the importance attributed to the fear of losing customers/being dismissed.

We highlight the lack of importance of all forms of punishment for tax noncompliance, which suggests that the traditional theory of tax evasion (Allingham & Sandmo, 1972) is not very important in the Portuguese case, particularly in the context of tax professionals. In Portugal, punishment for noncompliance falls directly on tax professionals' clients/employers, not on the professionals themselves, which could explain their lack of concern over penalties. Consequently, the results of this Portuguese study are not consistent with the conclusions in the international tax literature review.

Once again, the high number of male professionals and female professionals ranked within the age range of the professionals classified as the most tax aggressive justifies concern about the fiscal aggressiveness of these professionals. It is important for the regulators of the profession and tax policymakers to consider ways to reduce the tendency of these professionals to be tax aggressive, including instituting principles of fiscal citizenship, as well as increasing fear of losing professional credentials.

In addition, Portuguese tax professionals' tax morality is an important predictor in this model. Our results concerning the importance of tax morality in the behaviour of Portuguese professionals is contrary to those found in the international literature, and thus previous studies around tax professionals' behaviour towards tax compliance do not attach significant importance to this variable. In addition, it is also contrary to the literature on taxpayers' tax morality in Portugal, which shows Portugal as a country with low tax morality (Alm & Torgler, 2006; Sá, 2014).

⁴³ This is a line of future research that needs to be further investigated to verify whether or not there is a statistically significant relationship, or a correlation caused by the fact that larger firms are most likely to rely on in-house accounting staff.

Conclusions regarding the impact of this variable are significant. According to the self-evaluation carried out by Portuguese tax professionals, the effect of tax morality seems to replace the negative impact that the fear of punishment has in many tax systems, especially in relation to tax aggressiveness.

In relation to the impact of tax complexity on tax professionals' tax noncompliant behaviour (intentional or unintentional), particularly with regard to its legal aspect, tax system complexity emerges as a serious problem. This deserves the attention of policymakers, tax authorities, the regulatory authority for this profession and academia, in order to unite efforts to minimise its negative effects on tax professionals' compliance activities.

Finally, as suggestions for future research, we point out the importance of gender in the behaviour of tax professionals towards tax (non)compliance, particularly with regard to the determination of causes of difference, as well as the vulnerability of young professionals in relation to employer and customer pressures.

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APPENDIX A: QUESTIONNAIRE (ENGLISH VERSION)

Certified Accountants' perception of tax complexity and tax compliance

- 1 - This questionnaire is part of the research of a doctoral dissertation.
 2 - Please note that the information collected is confidential.
 3 - You should not fill in this survey if you are not the TOC responsible for, at least, one entity.
 4 - Thanks for your cooperation, it is very important.

PART I - IDENTIFICATION AND PROFESSIONAL EXPERIENCE

1. Gender: ☐ M ☐ F 2. Age: 3. District of residence:

4. Complete academic degree: Up to 9th grade ☐ Up to 12th grade ☐ University ☐ 5. Did you attend any course on tax matters? Yes ☐ No ☐
 (You should only answer question 5, if you have chosen the last option in question 4.) (Include the years before the profession's regulation)

6. Indicate approximately the number of hours of external training, in the tax area in 2011/2012: Up to 24 h ☐ > 24h to 48h ☐ > 48h ☐ 7. Number of years of experience as TOC:
 (Presented by OTOC, APECA, APOTEC, etc.)

PART II - PROFESSIONAL ACTIVITY CHARACTERIZATION

8. How do you organize your professional activity?
 Office of accountancy/tax. ☐ Company of other sector ☐ Other ☐ (You only should answer question 9, if you have chosen the 1st option in question 8.) (specify)

9. What is your customers' portfolio composed of?

	Quantity
Micro companies (≤ 10 employees)	
Small companies (> 10 to 50 employees)	
Medium companies (> 50 to 250 employees)	
Large Companies (> 250 employees)	
TOTAL	

10. Please indicate the turnover of the largest company for which you are/were responsible for, over the last 5 years:

Up to 500,000 €	
> 500,000 € to 2 million €	
> 2 million € to 10 million €	
> 10 million € to 50 million €	
> 50 million €	

PART III - CERTIFIED ACCOUNTANTS' PERCEPTION OF PORTUGUESE TAX SYSTEM COMPLEXITY

11. How do you classify the Portuguese tax system as far as its complexity?
 Very simple ☐ Simple ☐ Neither simple nor complex ☐ Complex ☐ Very Complex ☐

12. Effects on tax system complexity of the legislative changes in the last 5 years:
 Much simpler ☐ Simpler ☐ Unchanged ☐ More complex ☐ Much more complex ☐

13. Effects on tax system complexity of the technological changes in the last 5 years:
 Much simpler ☐ Simpler ☐ Unchanged ☐ More complex ☐ Much more complex ☐

14. In your opinion, what is the most complex tax?

	VAT	Corporate tax	Income tax	Others
In the legislative perspective				
In the compliance perspective				

15. Classify the areas below, according to their importance in the compliance complexity:

	No importance	Very little importance	With some importance	Important	Very important
The tax obligation named "Fiscal dossier"					
Preparation of accounting information for fiscal purposes					
Confusing tax forms and unclear instructions					
Tax obligations computerization					
Insufficient help provided by tax administration staff					
Others:					

16. Classify the areas below, according to their importance in the legislative complexity:

	No importance	Very little importance	With some importance	Important	Very important
Unclear and ambiguous tax language					
Tax laws are frequently changed					
Tax laws use highly technical language					
Very extensive tax codes					
Very extensive articles with references to other articles					
Many exceptions to the rules and transitional arrangements					
Tax law too dispersed					
Transposition of EU tax legislation					
International tax legislation					
Others:					

17. How often do you rely on the following to ensure you are fiscally updated?

	Never	Rarely	Sometimes	Frequently	Always
Individual study of tax laws and instructions of tax returns					
Exchanges of points of views with other certified accountants					
Contact with local and regional services of tax administration					
Contact with the call center of tax administration					
Contact with the technician office of OTOC					
Frequency of the free seminars provided by OTOC					
Administrative interpretations of tax laws					
Frequency of professional training					
Newspapers and magazines about tax matters					

18. How important is it for you to be fiscally updated on the following?

	No importance	Very little importance	With some importance	Important	Very important
Proper compliance of tax obligations					
Better management/tax planning					
Better knowledge of penalties applied to tax noncompliance					
Others:					

19. Up to what extent do you agree with the following statements?

	Strongly disagree	Disagree	I do not agree or disagree	Agree	Strongly agree
Tax complexity is due to the economic complexity					
Tax complexity benefits the State					
Tax complexity benefits the taxpayers					
Tax complexity benefits the major economic groups					
Others:					

20. Indicate the number of hours you spend monthly, on average, ensuring that you are fiscally updated:

Hours

21. Considering the time you spent on tax updates, how much time would you say you allocate to each tax?

VAT	Corporate	Income tax	Others	TOTAL
				100%

22. Named possible changes to the Portuguese tax system, which in your opinion might reduce its level of tax complexity:

Legislative stabilization	
Simplification and clarification of the legislative language	
Simplification of the tax forms and inclusion of examples	
Introduction of the prior consultation in the process of legislative change	
Reduction of the exceptions to the rules and the special arrangements	
Simplification of the small companies' tax obligations	
Creation of a tax code for non-residents' taxation	
Others:	

23. Up to what extent do you agree with the following statements regarding the impact of tax complexity on the activity conducted by TOC?

	Strongly disagree	Disagree	I do not agree or disagree	Agree	Strongly agree
It increases the involuntary tax noncompliance					
It increases the voluntary tax noncompliance					
It increases the sense of tax injustice and inequity					
It increases the fear of punishment in case of tax noncompliance					

PART IV - CERTIFIED ACCOUNTANTS' PERCEPTION IN RELATION TO TAX (NON)COMPLIANCE**24. Considering the total amount of time you dedicate to your tax activities, indicate, approximately the percentages allocated to:**

In complying with tax obligations	
In tax planning (more advantageous solutions)	
TOTAL	100%

25. In the course of your activity, has tax complexity ever resulted in situations of non-aggressive tax noncompliance behaviour?

Yes ☐ No ☐ Do not want to answer ☐

(if your answer is not YES, please skip to question 27).

26. If your answer to the previous question was YES, please classify the statements below regarding frequency, supplementing them with the various options. TAX COMPLEXITY HAS ALREADY LED YOU TO TAX NONCOMPLIANCE DUE TO ...

	Never	Rarely	Sometimes	Frequently	Always
Technical and confusing language of tax laws					
Complexity of tax forms and their instructions					
Ignorance of some tax obligations					
Ignorance of some legislation changes					
Inability to comply with all tax obligations on time					
Differences in interpretation between tax administration staff and TOC					
Use of tax laws' ambiguities and gaps in taxpayers' favour					
Others:					

27. If a customer / employer suggested the use of potential gaps or ambiguities of the tax laws in abusive scheme of tax planning, what would your reaction be?

Refuse ☐ Consider ☐ Accept ☐ Do not want to answer ☐

28. Classify, according to their importance, the factors which you take into account in your decision:

	No importance	Very little importance	With some importance	Important	Very Important
Your propensity to take risks					
Tax aggressiveness of your clients/employers					
Your fear of losing customers/ being dismissed					
The probability of tax noncompliance being detected					
Your fear of penalties being imposed on the costumers/employers					
Your fear of tarnishing your professionals' image					
Your fear of penalties imposed by the OTOC					
Possible reversals of debts for yourself as certified accountant					
Your personal and professional ethic					
Your level of tax morality					
Your perception of tax injustice					
Others:					

29. Please state any suggestions you may have to improve. If you desire, you can make suggestions for improvement of the tax system, to reduce legislative and administrative tax complexity and to increase voluntary tax compliance

Thank you for your cooperation.

NOTES:

TOC [Técnico Oficial de Contas]: the denomination of Portuguese Certified Accountants in 2013

OTOC [Ordem dos Técnicos Oficiais de Contas]: the denomination of TOCs' regulatory entity, in 2013.

AECA and APECA are accountants professional associations.

GST compliance and challenges for SMEs in Malaysia

Yong Mun Ching,¹ Jeyapalan Kasipillai² and Ashutosh Sarker³

Abstract

Malaysia introduced GST in April 2015 to reduce its budget deficit. This study investigates how the introduction of GST impacts SME owners in the retail sector. We conducted semi-structured face-to-face interviews with owners of GST-registered SMEs within the context of the theory of reasoned action model. Findings reveal mixed results on the attitudes and perceptions of the interviewees. Compliance costs are proportionally higher among SMEs and these enterprises are often not adequately prepared to accommodate the new tax provision into their existing businesses. The study identifies the relationships among the factors that influence the intention and compliance behaviour of GST taxpayers.

Keywords: goods and services tax, small and medium-sized enterprises, qualitative study, tax compliance

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1. INTRODUCTION

One of the major concerns of goods and services tax (GST) introduction is its strong impact on small and medium-sized enterprises (SMEs). Malaysia introduced a GST in April 2015 in order to generate sustainable revenue streams and in the hope that its implementation would reduce its budget deficit to 3% in 2015 (2010: 7.4%; 2012: 4.5%; 2013: 3.9% and 2014: 3.5%) (Kraal & Kasipillai, 2016). In 2017, the revenue collection is expected to expand at around 3% to MYR219.7 billion, with a targeted fiscal deficit of 3% of GDP in 2017, compared with 3.1% in 2016.⁴ In 2015, SMEs contributed 36.3% to Malaysia's economy (GDP), a steady growth from 32.5% in 2011. SMEs employed 65.5% of the country's workforce in 2015. As Malaysia endeavours to achieve the status of a developed nation by 2020, the country deals with varied tax-collection and revenue-generation issues. To lessen its vulnerable reliance on income from petroleum, which constitutes more than 40% of federal government revenue in 2014, the country replaced the sales tax and services tax with a GST. The government sought to achieve a steady source of revenue by broadening the tax base (Alappatt & Shaikh, 2014; Narayanan, 2014; Shaari, Ali & Ismail, 2015). The GST contributed MYR41.2 billion in 2016 compared to a predicted figure of MYR18 billion from the sales tax and services tax.⁵ In addition, the GST will cast the revenue net wider by capturing the entire economic chain that includes the shadow economy, estimated at 30% (Zhou, Tam & Heng-Contaxis, 2013). Although the government has taken several measures to reduce the compliance burden for tax-paying owners of SMEs, such as providing them with e-vouchers to upgrade or purchase GST-compliant software and training (Mokhtar, 2015), it has yet to address compliance issues facing SMEs.

This study investigates the major challenges encountered by GST-registered SMEs in Malaysia, namely GST-compliance readiness, compliance costs and attitudes. To this end, we pursue a qualitative approach (Creswell 2009; 2013) and use the theory of reasoned action (TRA) model (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1977). The research strategy used in this study is phenomenology, which allows us to report our findings to closely resemble the participants' experience in implementing GST and their perception towards its introduction. This paper uses the abbreviations GST and value added tax (VAT) interchangeably.⁶

In line with our research strategy, we conducted semi-structured face-to-face interviews, which included 16 interrelated questions (see Appendix 1) that focused on the research objective, with nine owners of GST-registered SMEs in the retail sector in the state of Selangor and the Federal Territory (Kuala Lumpur) of Malaysia. Interviews were conducted at the premises of the businesses between 16 July and 16 September 2015. The results indicate that business owners are inadequately prepared to accommodate the new tax system into their existing business, while also experiencing high stress levels from complying with burdensome compliance costs. These compliance costs include both tangible costs (initial, recurring and non-compliance costs) as well as hidden costs

4 'PM Najib Razak's 2017 Budget speech', New Straits Times Online, 21 October 2016, <<http://www.nst.com.my/news/2016/10/182202/full-text-pm-najib-razaks-2017-budget-speech>>.

5 'Budget 2016: GST will boost national revenue by RM21bil', The Star, 23 October 2015, <<http://www.thestar.com.my/News/Nation/2015/10/23/Budget-2016-GST-boosted-revenue-by-RM21bil>>; 'Customs Department targets 2017 GST Collection of RM42 billion', New Straits Times Online, 21 January 2017, <<http://www.nst.com.my/news/2017/01/206096/customs-dept-targets-2017-gst-collection-rm42-billion>>.

6 A consumption tax is called a value added tax (VAT) in European countries but it is commonly labelled as GST outside Anglo jurisdictions such as Australia, New Zealand, Singapore and Malaysia.

(psychological and social costs). After reviewing the tax literature, we identified three factors influencing GST implementation among SMEs: GST taxpayers' perception of fairness, GST compliance readiness of businesses and external factors (developments) that affect the business.

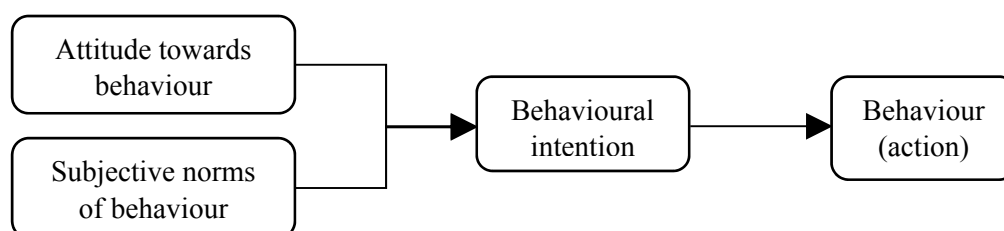
This study identifies the perception of fairness regarding the GST system, the GST compliance readiness of businesses and external factors influencing the behavioural intention of taxpayers. Further, the degree of support from family members, friends, fellow retailers and external consultants, known as subjective norms (perceived social influence), also determine the behavioural intention of taxpayers. The identification of factors influencing the behavioural intention of taxpayers is crucial because taxpayers could be influenced and nurtured to engage in GST-compliance activities over time.

2. THEORETICAL PERSPECTIVE

The TRA, which is a theory of social behaviour, was developed by Martin Fishbein and Icek Ajzen. According to Ajzen and Fishbein (1980), human beings are assumed to be rational and consider the outcomes of their actions before they make a decision to perform, or not to perform, a given behaviour. Behavioural and tax-compliance studies have widely used the TRA model to analyse tax compliance (Bidin & Shamsudin, 2013; Ishak, Othman & Omar, 2015).

Figure 1 illustrates the theoretical relationships of behavioural attitude, subjective norms, intention and action as expounded by the TRA. A behavioural intention to take action or not to take action (e.g., pay or not to pay tax) is assumed as the immediate factor that influences behaviour (e.g., tax compliance or non-compliance). The TRA model uses two components, namely attitude (personal) and subjective norms (social influence) to predict behavioural intention.

Figure 1: Theory of reasoned action



Source: Adapted from Ajzen and Fishbein (1980)

Attitude refers to a person's belief and involves evaluation of certain implications as a result of a particular behaviour. Subjective norms are 'perceived social pressure' exerted on an individual to take, or not to take action (Bidin & Shamsudin, 2013). As such, generally individuals will intend to take an action when they have a positive evaluation on the action, and when they believe that their social groups think they should do it. In this study, the TRA framework is used to analyse the motivating factor (behavioural intention) that affects actual behaviour of GST taxpayers. Desirable compliance behaviour among taxpayers can be influenced or persuaded via engaging in activities that enhance attitude and subjective norms of taxpayers' behaviour.

Using the TRA as its theoretical framework in a survey of 103 respondents in the manufacturing sector in the states of Kedah and Perlis in Malaysia, Bidin and Shamsudin (2013) affirmed that subjective norms and attitude have a significant and positive influence on the intention to comply with GST. In our study the most significant factor influencing compliance intention behaviour was subjective norm (social pressure), which refers to peers or business partners.

3. LITERATURE REVIEW

Our literature review covers the theoretical underpinning of the study and we examine prior studies in the areas of compliance behaviours and empirical studies on GST (or VAT) implementation experiences in five countries, namely Ethiopia, Bangladesh, Singapore, New Zealand and Australia. New Zealand applied GST from 1986, Bangladesh in 1991, Singapore from 1994, Australia in 2000 and Ethiopia in 2003. Other than Ethiopia, all of them are Commonwealth countries and they have all economically benefitted from introducing this new consumption tax.

3.1 Empirical studies on GST implementation

Our review of the experiences of implementing GST in five countries, namely Ethiopia, Bangladesh, Singapore, New Zealand and Australia assisted in tracing common issues and hidden costs faced by taxpayers in these countries. Certain GST implementation problems and issues in Ethiopia and Bangladesh are anticipated to arise in Malaysia too. In the case of Bangladesh, some of the common challenges in GST implementation, after more than two decades of implementation, include: difficulty in understanding the legal provision; lack of availability on updated version of law; excessive and unnecessary documentation; delay in getting refunds; disappointing computerised accounting system; and financial hardship (Bala, 2010). A study of compliance costs and problems in the Ethiopian VAT system by Yesegat (2008) highlighted major problems, including insufficient tax administration resources and gaps in administration in the areas of refunding, filing, invoicing, audits and penalties. The author also identified little tax awareness among the public, weak educational programs, and lack of trust between the taxpayers and administrators as the major challenges to the VAT system.

In Australia, SMEs incur high compliance costs, mainly due to tax complexity and compliance burden to determine whether their goods and services are exempt from GST (MYOB Business Monitor, 2015). This study reported that complying with Australia's GST rules costs small businesses more than AUD13.5 billion a year. Hence, GST compliance is the major source of red-tape burden that adversely affects small business. Similar GST compliance burdens are evident in the Malaysian context as Malaysian SMEs have to ascertain, in some instances, whether goods and services they supply are exempt or zero-rated. Contrastingly, the critical success factors for GST implementation in New Zealand and Singapore are largely contributed by their well-planned implementation strategies, coupled with the design of GST system, which are easy to administer. A single GST rate is used in both countries, which covers a broad range of goods and services with minimal exemptions and exceptions. According to Sussman (2007) 'exceptions' to the general GST rules are also referred to as 'refinements' and they provide more specific outcomes while increasing tax complexity.

The more complex the rules are, the more likely taxpayers will not understand or comply with them.

Very few academic studies have been conducted in relation to challenges faced by SMEs during the post-GST implementation period in Malaysia. The Associated Chinese Chambers of Commerce and Industry of Malaysia (ACCCIM) conducted a nation-wide survey in June–July 2015 to evaluate challenges faced by companies in Malaysia. Relevant sections of the findings are used to compare with the results of our study.

3.2 Tax compliance behavioural studies

We identified a number of factors (e.g., level of income, tax rate, tax complexity, probability of audit, knowledge of peer behaviour, perception of fairness of system, gender, age and use of tax preparers) commonly used by past researchers to study tax non-compliance behaviour among individual taxpayers and sole-proprietors (Oh & Lim, 2011a). In a study conducted on behavioural intention of tax non-compliance among 196 sole proprietors in a district of Johor (Malaysia), Oh and Lim (2011b) suggest that the attitude of taxpayers towards future expected tax cost and fairness of tax system, subjective norms variables (unapproved tax and accounts preparer) and demographic variables (gender and age) all have a positive influence on their behavioural tax non-compliance intention. Our research, however, focused on examining the effects of two factors, namely tax complexity and perception of fairness of system that would impact compliance behaviour of GST taxpayers, consistent with the relationships expounded in the TRA model.

3.3 Tax complexity

In a gap analysis of intention of non-compliance studies by Oh and Lim (2011a), the authors comment that assessment of impact of tax complexity on tax compliance is complicated due to the effects of two factors, namely perception of fairness and opportunity for non-compliance. The authors suggest that reducing tax complexity may lead to lower non-compliance, which results from wrong interpretation of rules, omissions, unintentional errors and intentional under-reporting. Accordingly, reducing the complexity of the tax system may enhance perception of the fairness of the tax system and eventually result in lower incidences of non-compliance.

Based on these findings, non-compliance behaviour may be prevalent among Malaysian SMEs, given the tax complexity and compliance requirements of the newly enacted Goods and Services Tax (GST) Act 2014. The enforcement of GST is regulated by the GST Act 2014, which has 165 pages with 197 sections, and it must be read together with the GST Orders and GST-related regulations (Kasipillai, 2015). Non-compliance with GST laws and regulations may expose SMEs to penalties, fines or even imprisonment for directors. In addition, penalties are imposed for late registration, late filing of GST returns, filing of incorrect returns, and not maintaining full and accurate records. Consequently, the inherent complexity of GST law and regulations coupled with GST compliance costs may cause negative perception of fairness of GST tax among the business community. According to the World Bank's Doing Business Report 2017, Malaysia's ranking has recently dropped by one place to 23rd position among 190

economies.⁷ This is largely attributable to Malaysia's performance in 'starting a business' and 'paying taxes' indicators. The report indicates that the Malaysian government made starting a business more difficult by requiring companies with annual revenue in excess of MYR500,000 to register as GST payers.⁸ With regard to the 'paying taxes' indicator, the World Bank report notes that although the introduction of an online system for filing and paying GST has made the tax payment easier, replacement of sales tax with GST has actually made this process more complex. This is because GST covers a broader spectrum of industries when compared to sales tax which merely previously covered manufacturing companies.

3.4 Perception of fairness of tax system

In a study covering Australian taxpayers and perception of the tax system, Saad (2010) argues that complexity in tax law contributes to a negative perception of the system which promotes unwillingness to comply. Furthermore, taxpayers who perceive themselves as victims of tax unfairness increase their non-compliance activities while their morale improves when they are treated with respect by tax officials (Oh & Lim, 2011a). On a macro level, the public have been perceiving GST negatively mainly due to concerns over its impact on general price level; its regressivity on lower income households; potential rise in the GST rate over time if government spending is not managed well; and that the GST revenue is used irresponsibly to mitigate problems in wasteful public spending and leakages (Narayanan, 2014). To conclude, negative perception towards the fairness of GST and tax complexity may have a negative impact on the attitudes of SME taxpayers, thus increasing non-compliance behaviour, consistent with assumptions underpinning the TRA.

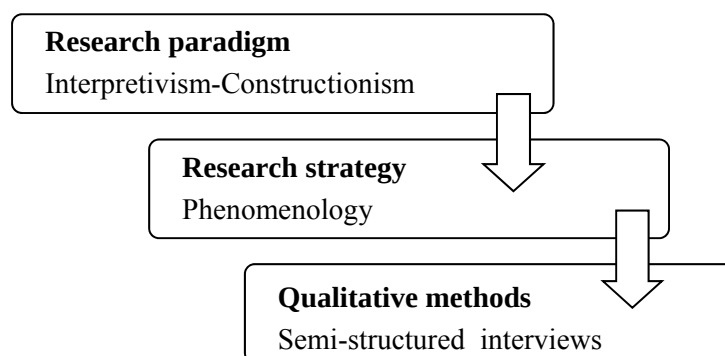
4. METHODOLOGY

4.1 Qualitative approach

This study pursues a qualitative approach which involves various levels of reflection, from the personal history of the researchers to the research philosophy and theory that establish the research framework (Creswell, 2013). The research framework underpinning this study is illustrated in Figure 2.

⁷ 'Malaysia ranked 23rd by World Bank for ease of doing business', *The Star*, 26 October 2016, <<http://m.thestar.com.my/story.aspx?hl=Malaysia-ranked-23rd-by-World-Bank-for-ease-of-doing-business&sec=business&id=%7BC9B25371-C4F2-4A7D-8950-2BB62B37E820%7D>>.

⁸ Royal Malaysian Customs: Goods and Services Tax: Guide on Registration as at 24 February 2016, para 5, <http://gst.customs.gov.my/en/rg/SiteAssets/specific_guides_pdf/REGISTRATION_24022016c.pdf>.

Figure 2: Framework for research

The research paradigm for this study is interpretivism-constructionism, which focuses on subjective and shared meanings in investigating how people (individuals and groups) interpret and understand social events and their setting (Eriksson & Kovalainen, 2008). According to Creswell (2013), social constructivism is often referred as interpretivism in which diverse and multiple interpretations of human experiences will lead researchers to discover complexity and variations in opinions. This paradigm allows for a better understanding of the historical and cultural environments of the participants in this study, thus rendering a more holistic investigation of the GST experience among SMEs in Malaysia.

The research strategy adopted in this study is phenomenology, which normally uses the interview method and targets to remain close to participants' stories (Grant & Giddings, 2002). In applying a phenomenological stand, the researcher writes and rewrites the stories until they are satisfied that the interpretation of the stories reflects the participants' lived experience. When doing a phenomenological research, a researcher refocuses the investigation not on descriptions of tangible objects, but rather on the description of the experience that the participants describe. In doing so, the researcher investigates the experience based on what is made available and aware during the research process (Polkinghorne, 1989). Hence, phenomenology allows for recognition of the experiential reality of meanings as well as tangible details of an experience. This implies that a meaning attached to an experience is the same although there are various ways the experience is described by the participant.

In this study, the experience of GST implementation and perception related to GST introduction form the basis for understanding the participants' lived experience and how meaning is attached to GST preparedness and readiness. Consequently, challenges encountered by SMEs in GST implementation are interpreted and presented from the perspective of the participants so that the findings reflect their lived experience. According to Grant and Giddings (2002), 'methods' are the instruments used for collecting and analysing data. In this study, we conducted semi-structured face-to-face interviews with participants using 16 interview questions (see Appendix 1) that are devised to address three broad research areas as follows:

1. Participants' attitudes and perceptions toward GST implementation and regulations;

2. GST readiness which covers steps undertaken to prepare for GST implementation, challenges encountered, the extent of support received from consultants and trade associations or chambers of commerce and the extent of support and interactions the businesses had with Royal Malaysian Custom Department (RMCD); and
3. Compliance costs, including initial costs, recurring costs, psychological costs and non-compliance costs relating to GST rules and regulations and Price Control and Anti-Profiteering Act 2011 (PCAP Act 2011).

4.2 Population and sampling

This study investigates retailers' concerns, challenges encountered and hidden costs from GST compliance efforts. The retail sector is selected for this study due to its significance to the economy; for example, the sector generated MYR343.7 million in sales value (36.1% of total sales in Malaysian distributive trade sector) in 2014. In terms of employment, the retail sector hired 968,818 or 59.9% of the total workforce, which incurred salaries and wages totalling MYR20.7 million annually, or 51% of total salaries and wages in the distributive trade sector in Malaysia (Department of Statistics Malaysia, 2014a) (See Table 1).

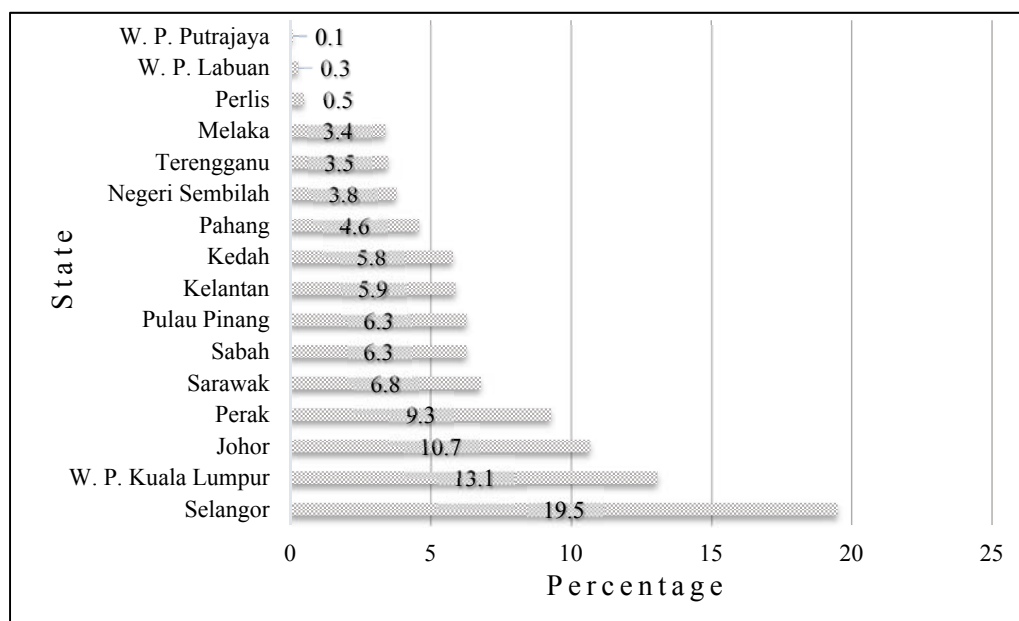
Table 1: Principal statistics of distributive trade sector by sub-sector for 2014

Trade sector	Sales value		Persons engaged		Salaries & wages	
	MYR million	%	No.	%	MYR million	%
Wholesale	471.9	49.6	405,797	25.1	14.1	34.7
Retail	343.7	36.1	968,818	59.9	20.7	51.0
Motor vehicles	135.7	14.3	243,345	15.0	5.8	14.3
Total	951.3	100.0	1,617,960	100.0	40.5	100.0

Source: Department of Statistics Malaysia (2014a)

Data collection is confined to the retail sector in the SME category and located in the state of Selangor and the Federal Territory (Kuala Lumpur) of Malaysia. Based on the latest Economic Census conducted by the Department of Statistics in Malaysia in 2010, more than 30% of SME businesses are situated in these two states (see Chart 1).⁹

⁹ The Economic Census is conducted once in every five years. The 2015 Economic Census has yet to be completed as of 31 August 2017.

Chart 1: Profile of SMEs in Malaysia (2010)

Source: Department of Statistics Malaysia (2014b)

We adopted convenience and snowballing sampling procedures to recruit participants until data collection reached a saturation point. At this point no new or relevant information emerged with respect to the themes gathered earlier in the research. In qualitative research it is common to use convenience sampling procedures to facilitate access to individuals (Eriksson & Kovalainen, 2008). Furthermore, it is very difficult to recruit participants for exploratory research that investigates sensitive matters such as GST, revenue and business profitability. We succeeded in recruiting five participants using initial convenience sampling. From these contacts, the researchers snowballed to recruit more participants.

4.3 Procedures

The trustworthiness of this study is affirmed by the researchers maintaining a detailed trail of decisions made during the data collection and analysis process, including measures undertaken to collect data ethically, recruit participants and transcribe interviews. The researchers also undertook self-reflection throughout the study to ensure that personal biases and interests were consciously set aside in the process of data gathering, evaluation and interpretation. An ethical approval for data collection from Monash University Human Research Ethics Committee (see Appendix 2) was obtained prior to approaching potential participants. Each participant was provided with an explanatory statement, which explained the purpose of this research. Later, each participant was requested to sign a voluntary participation consent form which included permission for the interview to be audio-recorded.

The data collection reached saturation level by the ninth interview. Upon the completion of the nine interviews, we conducted another interview with a senior tax advisor, Dr John (pseudonym)¹⁰ in order to obtain his perspective on some of the major

¹⁰ Dr John refers to Dr Veerinderjeet Singh and he has over 35 years of experience in the tax profession. Dr Singh is a renowned tax consultant, reputable academician as well as a widely acclaimed author and

findings that surfaced from the interviews. As such, his views were used to compare with the findings of this study while adding another dimension to the phenomena under study. The interviews were recorded using a digital recorder and transcribed verbatim to ensure accuracy of data and to ease the process of organising, analysing and interpreting the text data. The transcriptions were later sent to the respective participants for confirmation ('member's checking'). In doing so, each participant was given an opportunity to validate and amend (if any) inputs that were provided during the interview.

5. DATA ANALYSIS

The researchers manually analysed the textual data by reading the interview transcripts (161 pages in total), highlighting the relevant quotes on the transcripts and transferring them to excel worksheets. Creswell (2012) explains that manual analysis is preferred by some qualitative researchers when the sample size is small (i.e. less than 500 pages of transcripts and field notes). The researchers read the textual data several times to get a general sense of data and pre-designed codes for each segment of the data. Next, these individual codes were grouped into sub-themes, which were then grouped into few major themes.

Methodological rigour was achieved by performing triangulation and 'member's checking' as recommended by Creswell (2012). We sent minutes of interview to each participant for confirmation (member's checking) to ensure accuracy of textual data. Triangulation was conducted via corroboration of data from different sources and themes. The main findings were discussed with Dr John and compared with the results of a GST survey conducted by ACCCIM (2015), GST development in the news and empirical studies. This earlier survey carried out by ACCCIM (2015) is relevant to compare with our findings since one-third of the respondents (963) are from the wholesale and trading businesses. The respondents are members of trade and sector-specific organisations, which include shopping malls, construction and building materials sector, sundry goods merchants, retailers and manufacturers.

5.1 Demographic profile of participants and retailers

The demographic profile of participants by ethnicity, years of experience, education and gender are tabulated in Table 2. All of the participants in this study are business owners with at least a secondary education, which suggests that they have basic level of literacy to understand and handle GST implementation in their respective business.

Table 2: Profile of participants

Retailer	Ethnicity	Years of experience	Highest form of education	Gender
1	Chinese	8	Bachelor of Accounting	Male

tax observer. He is currently the Group Executive Chairman of Axcelasia Incorporated, a globally integrated professional services group. Earlier, Dr Singh was an Executive Director/Partner at Ernst & Young Tax Consultants Sdn Bhd and past-Executive Director/Partner at Arthur Andersen. Dr Singh was also past president of the Chartered Tax Institute of Malaysia and he currently serves in the GST Monitoring Committee of the Ministry of Finance, Malaysia.

2	Indian	12	Master of Logistics	Male
3	Chinese	10 +	Form Five (Ordinary Level)	Female
4	Malay	30	Diploma of Beauty Therapy	Female
5	Chinese	3	Bachelor of Accounting	Female
6	Chinese	36	HSC (Higher School Certificate)	Male
7	Chinese	30	Diploma of Accounting	Female
8	Chinese	15	Bachelor of Science (Pharmacy)	Female
9	Chinese	23	Form Five (Ordinary Level)	Female

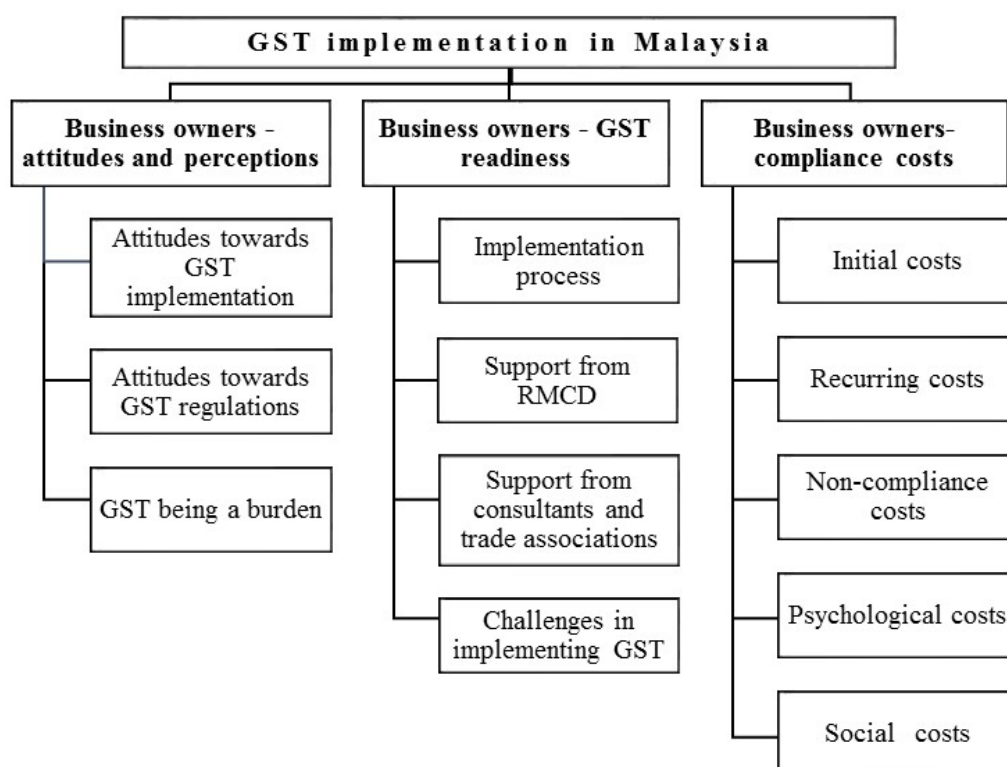
The demographic profile of retail businesses covered in this study vary in terms of types of business, years of operation, revenue size (estimate) and number of staff (see Table 3). Most of the businesses are well-established and have been in operation for more than 10 years, except for Retailer 5, a young female entrepreneur, who commenced her business in 2013. Except for Retailers 7 and 9, all of the retailers have been using computer systems in managing and controlling their operations and financial performance prior to 1 April 2015. In the case of Retailers 7 and 9, they are considered traditional businesses, given that they operate without using IT system in any aspects of their businesses. Instead, manual book-keeping is used to generate estimate financial results on a yearly basis.

Table 3: Demographic profile of retailers

Retailer	Type of retail business	Years of operation	Revenue in (MYR'000)	No. of staff
1	Fashion accessories	29	14,000	133
2	Newspapers, magazines and convenience products	12	700	3
3	Stationery, furniture and office automation products	12	900	0
4	Beauty products and treatments	30	900	3
5	Clothing, shoes and handbags	2	2,000	12
6	Educational books and stationeries for university students	23	15,000	36
7	Home delivery of fresh and frozen meat, vegetables, fruit, soft drinks and sundry goods	30	1,200	3
8	Pharmaceutical products and toiletries	10	1,400	3
9	Sundry goods, tobacco, liquors and hardware items	52	6,000	7

5.2 Themes

We constructed thematic portrayals of participants' lived experience with GST implementation using a phenomenological approach. Three main themes and 12 sub-themes emerge from our data analysis. The three main themes are business owners' attitudes and perceptions, GST readiness and compliance costs. The sub-themes provide a richer interpretation of the GST implementation experience among taxpayers, as shown in Figure 3.

Figure 3: Thematic map of GST implementation in Malaysia

5.2.1 Theme 1: Business owners — attitudes and perceptions

According to TRA, one of the determinants which affects behavioural intention to take action or not to take action (to pay tax or not to pay tax) is attitude. This refers to a person's evaluation of certain implications as a result of a particular behaviour. Generally, a person intends to take an action when one views the action positively and vice versa. Hence, this theme explains the application of the TRA in understanding GST taxpayer's behavioural intention, which eventually leads to their actions.

Further investigation into the attitudes and perceptions of participants reveals a number of factors that influence these attitudes and perceptions. Their attitudes and perceptions towards GST acceptance, readiness and implementation are interpreted and presented under three sub-themes below, namely attitudes towards GST implementation, attitudes towards GST regulations and perception of the GST as a burden.

(i) Attitudes towards GST implementation

Generally, participants expressed negative views towards GST implementation. However, we do note a number of positive views, such as the perception of GST as a more effective and transparent mechanism to collect tax for national development purposes. Furthermore, GST periodic reporting to RMCD has resulted in an improved audit trail within business entities as each transaction is now documented and reported to RMCD. Having said that, Retailer 4 commented that some businesses actually view improved transparency in business dealings negatively as they can no longer be involved in creative accounting such as manipulation of financial results.

Another positive view we observed was that GST implementation is seen to have indirectly caused a reduction in illegal and unregistered businesses in Malaysia. Illegal business evades taxation and regulatory oversight, and is estimated to account for 20% to 50% of the Malaysian economy.¹¹ This account was highlighted by Retailer 9:

Prior to 1 April 2015, one of my suppliers confided in me that her business was negatively affected by closure of about 20 businesses (customers) that were not legally established. Some of these businesses were owned by Indonesians in Chow Kit market. This is indeed a piece of good news for me and other Malaysian business owners who are doing business legally.

On the other hand, two-thirds of the participants noted that the timing of GST implementation coincided with an uncertain economic outlook and depreciation of the Malaysian currency, which had a cumulative negative impact on business in the post-GST period. Products that contain imported components became more expensive as a result of a depreciating Malaysian Ringgit against major currencies, which in turn reduces the purchasing power of consumers and leads to lower retail sales. These opinions of the participants are consistent with the findings from the Retail Group Malaysia (independent retail research firm), which reported an 11.9% drop in second quarter sales of 2015 when compared to previous year, the worst quarterly sales performance since 1997/98 Asian financial crisis.¹² Retail Group Malaysia add that an uncertain political development in the country has also contributed to weak consumer sentiment. Against this backdrop, one third of participants were worried and stressed over their ability to cope with the increased costs of doing business following GST implementation as there are inadequate tax incentives to ease the burden of SMEs.

(ii) Attitudes towards GST regulations

Our study reveals a prevailing negative attitude towards GST regulations. Seven out of nine participants viewed GST regulations as detrimental to their businesses because compliance costs further increase the escalating cost of doing business in Malaysia. Major factors that caused GST to be seen as burden are elaborated under next sub-theme: GST being a burden. None of the participants viewed GST as beneficial to their businesses, which suggests that the government's assistance in the form of training and education has not inculcated positive attitude among businesses. On the other hand, 43% of the respondents to the ACCCIM (2015) survey considered GST implementation to have had an adverse effect on their business while 30% of them were in favour of GST, possibly due to them being able to claim input-tax credits. It appears that the education programs conducted by trade associations and chambers of commerce have left some positive influence on the respondents to the survey.

Despite a prevailing negative attitude among the participants, our study found a neutral attitude among two participants who noted that GST had little impact on their business performance. One of them (Retailer 5) sells fast fashion products to middle-to-high

¹¹ 'Govt sees red over black economy, promises action', *The Star*, 25 August 2015, <<http://www.thestar.com.my/News/Nation/2015/08/25/Govt-sees-red-over-black-economy-promises-action/>>.

¹² 'Retail Group again cuts retail sales growth after Q2 sales tumble', *The Star*, 3 September 2015, <<http://www.thestar.com.my/Business/Business-News/2015/09/03/Retail-Group-again-cuts-retail-sales-growth-after-Q2-sales-tumble/?style=biz>>.

income groups indicating that the GST has had little effect on the purchasing power of middle-to-high income consumers. The other participant (Retailer 2) commented:

There are many factors that influence business performance. However, some businesses have a tendency to blame GST for their lacklustre business performance.

(iii) GST being a burden

GST compliance costs were considered burden by all of the participants. They elaborated on the magnitude of compliance costs, ranging from initial investment in IT software and hardware, to recurring costs in submission of GST returns to RMCD and finally to hidden costs associated with stress (psychological costs). Most participants experienced stress and anxiety as a result of acclimatising to the new regulatory environment within a short time frame. About half of the participants viewed the GST implementation period to be too short for most SMEs. The time pressure was more intensely experienced by two retailers (traditional businesses) who transformed their manual book-keeping into a computerised system.

Potential compliance costs emerge as one major source of anxiety among participants. One stated that he closed two of his businesses before GST implementation date, partly due to the anticipated burden of compliance costs under the new regulatory regime. Another participant (Retailer 3) commented:

There are only two of us in this business. In the past, we did not prepare financial results on a quarterly basis, but instead once a year. Now, I am under pressure (stressed) to ensure that the quarterly financial results are accurate for GST reporting purposes. Our workload has increased tremendously.

From a working capital perspective, most participants claimed to have had to increase their cash flow requirement as a result of: the higher cost of products and services; upfront remittance to RMCD on output tax relating to uncollected credit sales; and input tax relating to stocks that are written off. One participant (Retailer 2), however, mentioned that his cash-flow position has actually improved from collecting GST upfront and paying RMCD three months later.

GST implementation promotes transparency and accountability in businesses since they have to maintain accurate and complete record-keeping at an individual transaction basis. However, enhanced business transparency is considered a burden by some business owners, making it more difficult to manipulate financial results or/and to camouflage unusual business transactions. GST implementation also requires businesses to transform their way of doing business with the use of IT systems, which was not well received by certain small traders. For example, Retailers 7 and 9 viewed computerisation of their business as a burden. They failed to recognise the managerial benefits from using an IT system in the long run, including provision of timely financial results and better control over business operations. This predicament suggests a lack of understanding and appreciation of modern ways of doing business among certain business owners, who consequently view the GST as a burden.

5.2.2 Theme 2: Business owners — GST readiness

‘Readiness’ is a measure of being GST-compliant by participants. In this regard, GST readiness of a business depends on a number of factors, which are closely related and

dependent upon each other. The main factors include attitude and capability of the business owner to manage GST requirements, the business resource capacity and the availability of support from trusted advisors, RMCD and the government. We further discussed business owners' GST readiness in terms of four sub-themes namely: implementation process; support from RMCD; support from consultants and trade associations; and challenges in implementation.

(i) Implementation process

The GST implementation process for businesses, including SMEs, generally spans a 1–2 year period and involves a number of phases before the new system can go live. Significant amounts of time and resources are involved in information gathering, training, data migration and business process. Further, the implementation period also varies in accordance with the type of business supplies required, which all attract different GST rates. For example, participants (Retailers 3 and 5) that supply stationery and clothing are subject to the standard-rate of 6%. The implementation process for these businesses are more straightforward and involve less administrative work, particularly when compared to businesses (Retailers 7, 8 and 9) that supply products with mixed GST rates, that is, both zero and standard rates.

In this study, most of the participants were the primary drivers for their GST-readiness projects. They have invested significant amount of time and resources in preparing their businesses for GST implementation, including attending trainings and seminars. Seven out of the nine participants used existing resources to handle GST compliance requirements, thus resulting in increased overtime for both the owners and staff. In contrast, two of the participants employed additional staff to meet GST reporting requirements. Five participants also reported educating themselves by attending training sessions. In order to keep abreast with latest GST developments, participants noted regularly checking GST updates on the official RMCD GST website, reading books on GST and reviewing Q & As (Questions and Answers) on GST in Chinese newspapers. One participant (Retailer 1) commented:

Besides attending courses, both my accountant and I are heavily involved in GST implementation. We have been spending considerable time in reading GST-related materials and checking the customs website regularly to keep ourselves updated on the latest developments.

Support from family members, friends and fellow retailers emerges as one of the critical success factors in transitioning a business to the new tax regime. One participant (Retailer 8) stressed the importance of using a social media tool, 'WhatsApp' to accelerate her understanding of GST requirements. She commented:

Support group is very important in educating ourselves on GST matters. There are about 10 to 20 of us in few GST online support groups. In my first GST submission to RMCD, I relied on these support groups.

(ii) Support from the RMCD

The RMCD of Malaysia plays an important role in providing the necessary support, training and infrastructure on GST. Hence the degree of support rendered by the RMCD affects the level of ease in GST implementation. In this study, we gathered opinions on the extent of participants leveraging the support and resources from the RMCD in their GST readiness efforts, as well as their level of interaction with the RMCD. In terms of

monetary support, the RMCD offered a GST e-voucher of MYR1,000 to businesses for purchase of accounting software. While all participants appear to have been aware of the GST e-voucher, only four of them actually claimed the vouchers. Five of the nine participants did not claim the e-vouchers because they missed the deadline set by the RMCD. The amount of each e-voucher was generally viewed as immaterial by the participants when compared to the initial cost of GST-compliant software. For example, Retailers 2 and 4 spent MYR10,000 to MYR12,000 for full Point of Sales (POS) IT software. According to the ACCCIM (2015) survey, only 52% of the respondents utilised the GST e-vouchers offered for SMEs. This finding indicates that the e-voucher is not wholly cost beneficial or effective in alleviating GST compliance costs.

Besides offering e-vouchers, the RMCD also organised complimentary GST workshops and training sessions to the public during the pre and post GST implementation period. However, only one out of the nine participants surveyed attended the training, either because they were not aware of such training, or they were not successful in registering for it. Instead, they incurred costs in attending private GST training or seminars. In contrast, the study by ACCCIM (2015) revealed that about 68% of respondents attended workshops or training courses provided by RMCD although many of the queries posed by the respondents as yet remain unanswered.

In terms of the provision of necessary infrastructure to facilitate GST compliance, most of the participants expressed frustration over the usefulness of the official RMCD GST website. For instance, Retailer 1 stated that the GST website does not provide clear guidelines and clarification on 'grey areas' such as mixed input tax credit. He noted:

The basic support from RMCD is to provide consistent and clear-cut rules on its official website. When we download information from the website, some of the guides are still in draft versions until now. Further, there are still a number of grey areas, which we need further clarification. It is difficult to comply with the GST Act if we are not able to get a consistent answer on the website, or by calling GST hotline. Sometimes, custom officers provide varying opinions on specific areas of concern.

With regard to interactions with the RMCD, more than half of the participants stated that dealings with the RMCD via the GST Hotline and emailing are not effective, thus their concerns and queries are not usually addressed in a timely manner. Similar issues were also raised in the ACCCIM (2015) survey — while 70% of the respondents consulted the RMCD via calling GST Hotline or accessing the GST Portal, only 22% reported that their problems were resolved. It thus appears that there is a significant expectation gap in terms of delivery of support and services by RMCD to business communities.

(iii) Support from consultants and trade associations

In this study, 'consultants' refers to approved GST consultants, approved IT (GST compliance IT vendors) consultants, tax advisors and auditors. We wanted to investigate the degree of support from consultants and trade associations because these parties are considered social influences (subjective norms) that impact on the behaviour intention of taxpayers. Besides attitude, subjective norms are also used to predict behavioural intention under the TRA model. This study reveals heavy involvement among IT consultants in supporting businesses for GST implementation. Only one participant complained that she did not get reliable and adequate support from her IT

vendor. Most of the participants seem to view involvement of IT consultants as adequate to address major GST requirements. This stance is taken to contain implementation costs although they are exposed to some risks of not complying with the complex nature of GST law.

While IT consultants provide the necessary knowledge and mechanism to capture GST transactions in the IT system, assessment of the full impact of GST on business, in particular big businesses, requires involvement from approved GST consultants or qualified tax or accounting advisors. With regard to this issue, Dr John explained that consultants work with businesses to identify various types of transaction and decide what the GST effect would be for each of them before proposing solutions to simplify these transactions. One retailer in this study, with turnover exceeding MYR5 million, relied solely on its own internal resources in assessing the full impact of GST because their consultant proposed an exorbitant fee that the business simply could not afford. In order to mitigate the risks of non-compliance, three of the participants (with revenue less than MYR1 million) reported employing GST consultants approved by the Ministry of Finance, Malaysia to review quarterly GST return prior to submission to the RMCD.

Trade associations appear to have little involvement in supporting and educating businesses with regard to GST implementation, perhaps due to lack of interest from participants. Only one participant attended GST training organised by the Malaysian Pharmaceutical Society. Another participant (Retailer 3) is a member of a trade association but did not attend any GST talks or trainings conducted by the association. She commented:

The association is big and I do not like to be involved in its activities. It has invited me to attend GST trainings, but I did not attend any of them. It has also been promoting GST, but I do not understand many aspects of it.

In respect of the minimal role of trade associations in educating the participants in our study, Dr John indicated that perhaps the RMCD appears to have only worked with big trade associations (i.e., Federation of Malaysian Manufacturers and Malaysian International Chamber of Commerce & Industry) and may not have reached various trade associations catering to the needs of small business operators. He commented:

To be fair, I think even if you look at Australia, they had the same issues. I thought Australia did it better because they actually funded associations. They gave them financial allocation to conduct trainings for their members. They did it in a very structured way.

(iv) Challenges in implementing the GST

The GST is generally viewed as a burden to businesses (as elaborated under sub-theme of Theme 1: GST being a burden). However, most of the participants in this study reported using their existing resources to comply with GST compliance matters, resulting in the diversion of resources away from business operations. In addition, cash flow management is one of the major challenges and two-thirds of the participants experienced tighter cash flows in their business, largely as a result of advancing GST payments to their suppliers, lower sales in terms of volume and pricing (i.e., absorption of GST) and higher compliance costs. Tighter cash flow were also experienced by around 61% of the respondents of the ACCCIM (2015) survey.

Another challenge relates to education of staff in compliance with GST rules and regulations. Retailer 1 expressed concern that some of his staff were not receptive to change despite relentless effort made to educate them on GST matters. Other participants were concerned that they may be potentially exposed to the risks of unintentional errors or negligence in terms of actions committed by their staff. With regard to software, two participants voiced concerns about glitches in their GST-compliant software that may potentially affect the accuracy of their GST returns. As such, there is a risk that the RMCD may penalise them for inaccurate filing of GST returns. This issue was also raised by more than half of the respondents of the ACCCIM (2015) survey, who indicated that their GST accounting software does not work properly. For the seven businesses who were using IT systems before GST implementation, none have introduced significant business process changes, except perhaps for additional and more detailed documentation and record-keeping. The two businesses who adopted IT systems for the first time, in contrast, encountered significant changes to business processes and applications as a result of the computerisation of business operations coupled with compliance with GST requirements. One participant (Retailer 9) who computerised her father's business for the first time commented:

Due to GST implementation, we have incurred enormous expenses in buying software and hardware, and in hiring another full-time staff to handle GST requirements. There is a great deal of extra workload and we had to hire an extra staff. I quarrel [argue] a lot with my boss [father] who is 70 years of age as I need to educate him on using IT for the first time.

5.2.3 Theme 3: Business owners — compliance costs

In a new GST regime, GST compliance costs can include both tangible and hidden costs. The tangible costs include initial costs, recurring costs and non-compliance costs. In contrast, the hidden costs include psychological costs and social costs. We further discuss compliance costs in further detail under five sub-themes below, namely initial costs (one-off investment), recurring costs, non-compliance costs, psychological costs and social costs.

(i) Initial costs

In order to meet GST reporting requirements, businesses need to incur considerable initial GST costs, which include investment in IT software and hardware, GST related training, cost of consultants (such as approved GST consultants, tax consultants and auditors) and other internal resources. The higher costs of doing business are however, partially cushioned by a number of tax incentives granted to all businesses. These include the accelerated capital allowance on Information and Communication Technology Equipment for Years of Assessment (YA) 2014 to 2016 (MICPA, MIA & CTIM, 2014) and the double deduction of GST-related training in accounting and ICT for YA2014 and YA2015 (MICPA, MIA & CTIM, 2015). Participants provided an estimate of initial (one-off) costs with regard to implementation of the GST, which can be compared to the size of revenue (Table 4).

Table 4: Analyses of initial costs estimate by size of revenue

Revenue (MYR)	Retailer	Initial cost/revenue (percentage)	Initial costs (in MYR '000)
< 1 million	2, 3 & 4	0.56–1.71	5–12
1–5 million	5, 7 & 8	0.30–0.57	6–8
5–15 million	1, 6 & 9	0.20–0.67	30–50

Compliance costs are fixed, regardless of the size of business, thus GST costs are regressive in nature. In the case of businesses with revenue of less than MYR1 million, the one-off costs were more than 1% of revenue, except for Retailer 3 (cost of MYR5,000, 0.56% of sales) as the business was not using a Point of Sales (POS) system. For a full POS system, initial costs were MYR10,000 and MYR12,000 for Retailers 2 and 4 respectively. Similarly, the relatively low initial cost (below MYR8,000) incurred by businesses with revenue between MYR1–5 million, was also due to Retailers 5 and 7 not using a POS system. Meanwhile an initial cost of MYR8,000 incurred by Retailer 8 was as a result of an upgrade to an existing POS system as well as becoming GST-compliant. The RMCD set 1 October 2015 as the deadline for retailers in the hardware, grocery, bookstores, restaurants, mini-markets, pharmacy and entertainment business to implement a POS system (RMCD, 2015). Businesses that had not implemented POS system (i.e., Retailers 3, 5 and 7) incurred penalties. Three companies with a business turnover of MYR5–15 million incurred costs of MYR30,000–50,000 (0.20%–0.67% of revenue) as a result of using a full POS system.

In this study, we did not perform a cost comparison with other countries' experience since the data was obtained at a different time, and such comparisons are complicated when dealing with different currencies, different tax designs and different compositions of taxed population (Sandford, 1998). Instead, we compared the initial GST costs with the findings of ACCCIM (2015) which reported a wide range of costs from 'below MYR1,000' to 'MYR50,000 and above' (Table 5). According to the survey, most of the respondents (32%) incurred initial costs ranging between MYR10,000–MYR50,000.

Table 5: Initial GST costs — ACCCIM survey

Costs in MYR	Percentage of total respondents
Less than 1,000	4
1,000 – < 3,000	12
3,000 – < 5,000	20
5,000 – < 10,000	21
10,000 – < 50,000	32
50,000 and above	11

Source: ACCCIM (2015)

(ii) Recurring costs

Sandford (1998) describes recurring costs as ongoing or regular costs that are borne by traders who have become familiar with the tax in a manner that best suited them. Therefore, they are costs incurred when the tax has been in place for some years, without

a major change. In compiling the estimated recurring compliance costs for 2015, these costs were inflated with some amount of embedded learning costs in the first year of GST implementation. According to this study, the estimated recurring costs for GST include participants' personal time, hiring of additional staff and costs paid to independent GST consultants (see Table 6).

Table 6: Recurring GST costs analysis

Revenue (in RM)	Retailer	Compliance cost/revenue (percentage)	Estimated compliance costs (in MYR'000)
< 1 million	2, 3 & 4	3.43–6.67	24
1–5 million	5, 7 & 8	1.00–1.80	12–36
5–15 million	1, 6 & 9	Non-Quantifiable (NQ)–0.60	NQ–60

Given the fixed nature of GST recurring costs, these costs have a bigger impact on the profitability of smaller companies. For instance, compliance costs account for 3.43% to 6.67% of revenue (business with revenue of less than MYR1 million), which is considered significant as certain retail businesses, for example, sundry shops, generate low margins. The percentage of cost over revenue reduces to less than 1.9% of revenue in the bigger business (revenue of MYR1–5 million), and to less than 0.7% for business with higher revenue of MYR5–15 million. Thus, GST compliance costs are regressive, with material impact on small businesses, consistent with compliance costs studies conducted in United Kingdom, Netherlands, New Zealand, Germany and Canada (Sandford, 1998). In the case of Singapore, costs were 0.3018% of annual revenue for business with revenue of less than SGD1 million (registered voluntarily) and 0.0086% for those with revenue in excess of SGD50 million (Jenkins & Khadka, 1998).

(iii) Non-compliance costs

Under the new GST regime, traders are potentially exposed to non-compliance costs from breaching rules and regulations of the GST Act 2014 and the PCAP Act 2011. Firstly, non-compliance with GST laws and regulations could arise from a number of factors, namely misinterpretation, omissions, ignorance or intentional non-compliant endeavours (i.e., such as charging of GST without registering with the RMCD). Non-compliance costs are also closely related to the psychological costs borne by business owners. In this study, most of the participants expressed anxiety and worry (psychological costs) over potential penalties arising from unintentional non-compliance with the GST Act 2014, mostly caused by errors/mistakes made by staff as well as lack of familiarity with the new GST system. They were also nervous over the uncertainty surrounding the degree of enforcement by the RMCD. With regard to the degree of enforcement by the RMCD, Dr John commented:

The intention of advisory audits conducted by RMCD in the first year or two is not to penalize unless there is intentional tax evasion on the part of the taxpayers. Genuine mistakes are identified and corrected. If there are some obvious gaps coupled with no efforts made by businesses to rectify the situations, then enforcement may be taken under the GST Act 2014.

In addition, some participants felt it to be unfair for the non-compliance penalty to be so strict (including jail terms) as they also incur costs as GST collection agents for the

government, without gaining any benefit in return. The educational support and other efforts from the RMCD are considered inadequate while businesses have to assume full responsibility for the accuracy of GST collection and book-keeping. Many of the responses from the survey participants included manifestations of the psychological cost (such as anger, frustration and fear) arising from coping with a drastic change in the tax regime. Similarly, in Bangladesh, there were furious criticisms and protests on the inception of the GST in 1991, and the VAT was renamed as the 'Very Anxious Taxation'. Now, however, the VAT is an inevitable part of public life in Bangladesh (Bala, 2010). In response to the issue on non-compliance costs, Dr John commented:

If I were a trader, I would not keep raising this issue of non-compliance costs because at the end of the day, I should aim [to] get it right. So, it is an emotional response because some parties have played this up. However, I do agree that from a structural point of view, if you look at income tax laws and the GST laws perhaps the level of penalties should be similar. Perhaps the government may have felt that many may try to circumvent the GST. Since it was an important part of the government's fiscal reform package, therefore non-compliance needs to be subjected to higher penalties.

Against this backdrop, eight out of nine participants commented that they assumed full responsibility for driving the compliance process in order to mitigate any non-compliance risks. Only one participant (Retailer 5) displayed a lack of interest over this matter and commented that the entire responsibility for GST compliance has passed to her accountants. Four of the participants even took another step further by hiring GST consultants to assist in GST compliance matters.

In a post-GST environment with higher costs in terms of operations, businesses need to devise various pricing strategies in order to sustain their sales. However, this could lead to escalating prices. The government therefore introduced the PCAP Act 2011 with the objective of protecting consumers in Malaysia from excessive price increases in goods and services post-GST. As a result, post GST implementation, businesses must demonstrate that their new pricing policies have been properly reviewed and documented. Failure to do so may cause them to be seen as 'profiteering' under PCAP Act 2011 and thus subject to heavy penalties or even jail sentences (Wan, 2014). In our study, we noted four modes of pricing schemes adopted by participants in order to mitigate the higher costs of doing business namely:

- (i) full absorption of GST (one business),
- (ii) partial absorption of GST (two businesses),
- (iii) retain old prices plus 6% of GST (three businesses) and
- (iv) selective price increases (three businesses).

Most of the participants commented that any new pricing schemes have to be carefully implemented as increases are scrutinised by consumers who are now very price sensitive. However, they were not concerned over non-compliance with PCAP Act 2011 as they were confident that appropriate measures had been taken to review any new price schemes prior to implementation. We found that two-thirds (six) of the participants were aware of the PCAP Act 2011 and its enforcement. One-third of the participants, however, were not aware of the legislation. In contrast, ACCCIM (2015) reported that

51% of the respondents were not aware of the PCAP Act 2011.¹³ In Australia, there is more flexibility in dealing with profiteering and the authorities adopt less stringent methods for dealing with offenders, including compensating of respective customers by offending businesses (Hamilton & Teo, 2015). Where customers can not be identified, offending businesses compensate customers in general by providing free services for a certain period, or by donating any 'unreasonable profits' to charity (Hamilton & Teo, 2015).

(iv) Psychological costs

According to Sandford (1998), psychological costs are those associated with stress and anxiety which are suffered by honest taxpayers due to challenges in coping with a tax, in particular when it is new to them. These costs are lingering hidden costs that may taint participants' attitude towards, and perception of, the GST. Psychological costs may also influence taxpayers into perceiving the GST as an unfair tax forced on them for implementation, potentially leading to non-compliance behaviour.

In this study, we identify a number of stress-triggering factors among participants. These include the burden of compliance costs coupled with fear and anxiety over potential penalties from non-compliance of the GST Act 2014. A qualitative description of psychological costs as a result of non-compliance costs is discussed above (see the sub-theme: non-compliance costs). The level of stress is also compounded by a difficult business environment with declining sales and the overall higher cost of doing business. One business participant (Retailer 2) commented:

The penalty for non-compliance is too severe. It remains to be seen how many businesses would be closed down post-GST since the penalty has made the cost of doing business too costly.

(v) Social costs

Some participants expressed concern over the closure of small or/and traditional (i.e., sundry, hardware and Chinese medicine shops) businesses as a result of not being able to cope with GST requirements, coupled with anxiety and fear (psychological costs) over non-compliance costs. The unexpected outcome of business closure is considered as a social cost to the community in terms of inconvenience in obtaining goods or services. Such incidences also happened after the VAT was introduced in the United Kingdom, when certain traders, many nearing retirement age, made the choice to give up their businesses rather than adapt to the VAT regime (Sandford, 1998). With regard to this matter, Dr John commented:

The structural aspects of the small businesses have been overlooked by the government in which there are still certain segments of the sectors, which are not computerized and yet, the businesses within these segments have reached the registration threshold.

¹³ The new Price Control and Anti-profiteering (Mechanism to Determine Unreasonably High Profit for Goods) Regulations 2016 came into force from 1 January 2017. The new 2016 Regulations apply only to food and beverages and household goods. The aim is to control unreasonable increase in profit for businesses which ultimately sell essential products used by the customers. Source: P.U. (A) 349/2016; Federal Subsidiary Legislation; Issuing Authority: Minister of Domestic Trade, Cooperatives and Consumerism <<http://mltic.my/general/legislation/price-control-and-anti-profiteering-mechanism-to-determine-unreasonably-high-profit-for-goods-regulations-2016-MY18005.html>>.

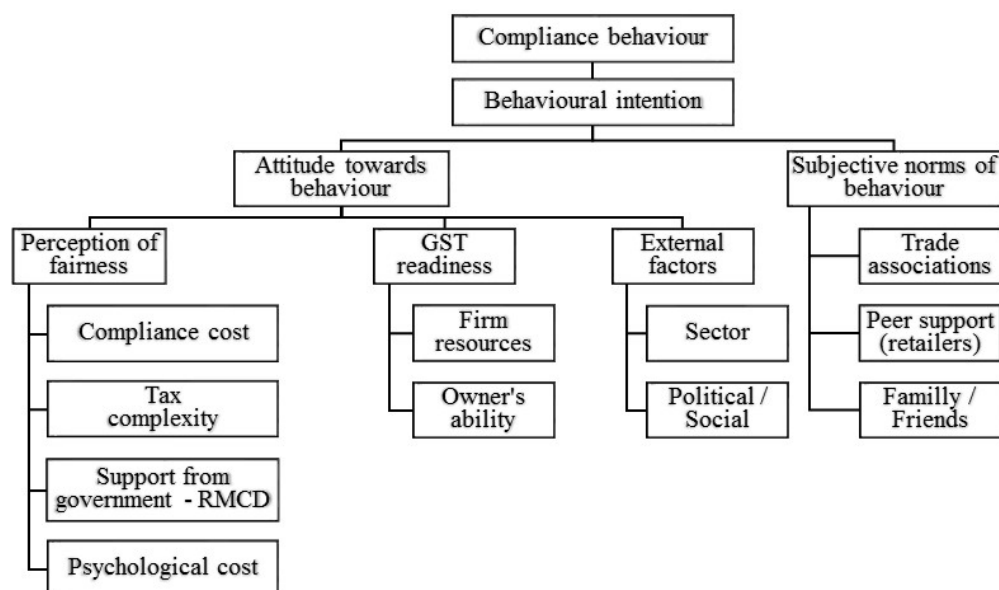
Small businesses, which are not registered for GST will eventually have to register voluntarily to avoid losing clients or face the risk of closing down. It is interesting to note that as of 23 May 2016, there were a total of 38,330 micro businesses (revenue of less than MYR300,000) who have voluntarily registered with the RMCD although the threshold for registration is actually MYR500,000. This registration made up 9.8% of total registration which has reached 389,198 (Ahmad, 2016), indicating that some micro businesses have taken the proactive measure of registering for GST in order to stay competitive under the new GST regime. The remaining non-registered businesses will potentially lose out in terms of pricing and customer base in the long run, as GST-registered customers will no doubt prefer to trade with GST registered businesses, and thus claim input tax on purchases. One participant (Retailer 9) noted:

Many small businesses have closed down, in particular small retailers or convenient stores in small towns and villages. Their sales may not reach MYR500,000 but eventually they have to register for GST in order to survive in the new system. This is an issue that the government needs to review critically.

It thus appears that the government's intervention programmes are not reaching these alienated traders, perhaps due to lack of awareness or even interest on the part of traders, or/and ineffective execution strategy on the part of the government. For example, the government introduced 'The Small Retailer Transformation Program' in 2011. However, by December 2014, only 305 traditional sundry stores had been transformed into modern businesses that could handle GST implementation (Economic Transformation Programme, 2015).

6. THEORETICAL CONTRIBUTION

To our knowledge, this is the first study of its kind to employ a qualitative (phenomenological) approach to understanding the challenges faced by taxpayers (retail sector) with regard to GST implementation in Malaysia. This study examines and evaluates the TRA model and identifies a number of significant factors that affect attitudes towards behaviour and subjective norms of behaviours. These factors influence the behavioural intention that determines GST taxpayers' compliance behaviour, as illustrated in Figure 4.

Figure 4: Application of TRA for GST taxpayers in Malaysia

6.1 Attitude towards behaviour

We identify three main factors that affect attitudes, namely: GST taxpayers' perception of fairness; GST readiness of business; and external factors affecting business operations. Previous studies have shown that a negative perception of fairness towards a tax system may increase non-compliance behaviours among taxpayers (Oh & Lim, 2011b). In our study, we note a number of major factors that influence a taxpayer's perception of fairness, including: high compliance costs; tax complexity; the extent of support from the government; and psychological costs in coping with a new system, all amidst a difficult business environment (external factors). These major factors are closely linked with each other in influencing any perception of fairness among taxpayers. For example, the extent of GST compliance costs are closely associated with the degree of tax complexity and support from the government, which eventually culminate in a certain amount of hidden costs (psychological costs) borne by GST taxpayers.

The degree of GST readiness of a business may influence the attitude of certain taxpayers. Businesses that are more prepared to handle GST implementation tend to have a more positive attitude towards GST. The GST readiness of a business is generally determined by two main components: firm resources and owner's/participant's ability to cope with change. Firm resources include financial resources (i.e., ability to cope with initial and recurring compliance costs and increased working capital requirements); level of infrastructure (IT system and processes); and manpower. In the Malaysian context, most owners are heavily involved in the day-to-day running of the business; hence the owner's ability to deal with the new tax regime is crucial. The ability of the owner is dependent on their level of education, age, working experience and aptitude to adapt to new challenges.

Finally, attitude is also influenced by external factors, including sector-specific developments and political-economic developments (i.e., falling commodities prices, depreciation of the Malaysian Ringgit and slow-down in global economies). Our study

found that these external factors dampened the overall perception and attitude of participants towards GST implementation.

6.2 Subjective norms of behaviour

Subjective norms are perceived as social influences that have an effect on taxpayers' compliance behaviour, either to comply, or not to comply with GST regulations. This factor influences attitude as shown in previous studies (Bidin & Shamsudin, 2013; Oh & Lim, 2011a). Our study found that peer influence and support plays a significant role in accelerating the transition to a new system. However, the scope of social influence is limited to family, friends and fellow retailers. In this study, trade associations played a minimal role in influencing the behavioural intention of taxpayers. Instead, IT consultants were found to take on an influential role in affecting the tax compliance behaviour of GST taxpayers, especially when compared to other consultants, such as GST consultants, tax advisors and auditors. The above discussions surrounding TRA provide a more comprehensive understanding of the various factors that affect taxpayers' compliance behaviour. Consequently, the government should be able to devise long-term strategies to enhance taxpayer compliance behaviour, focusing on areas that deliver the most impact in terms of taxpayer behavioural intention.

7. RECOMMENDATIONS

Our recommendations are geared towards major areas that are considered effective in changing taxpayers' behavioural intention and compliance behaviour, such as perception of fairness in terms of the GST system and the GST readiness of business. Our study suggests that there are areas of improvement in the content and level of user-friendliness on the official RMCD GST website. Studies have found that public service announcements are an effective tool in enhancing taxpayers' perception of fairness of tax (Oh & Lim, 2011b). To minimise communication barriers between the RMCD and taxpayers from different ethnic groups, the RMCD should increase its manpower from various ethnic backgrounds. This would also help to accelerate taxpayer understanding of GST mechanisms, which are currently considered as complex. The official GST website should also consider making available a range of information and services in other languages, such as Chinese and Tamil. With regard to this recommendation, Dr John noted that the RMCD could emulate efforts undertaken by the Australian Tax Office to offer tax guides in different languages so as to cater to diversity in the composition of the population. As at 29 August 2016, GST guides in Australia are available in 29 languages, plus English. These initiatives would reduce the tax complexity of the GST and enhance the perceptions of taxpayers (ethnic group), thus promoting compliance behaviours.

The strict enforcement approach, using penalty and prosecution to enforce compliance, has generated some anxiety and resentment (psychological costs) among honest taxpayers. We recommend that the RMCD's enforcement activities emphasise compliance improvement in the future, rather than penalising past errors. Widdowson (1997) explains that compliance improvement means focusing on building future voluntary compliance instead of just correcting past errors, balancing between assistance and enforcement. While the RMCD has verbally assured taxpayers that such 'advisory audits' will be employed in the first one or two years post-implementation period, we recommend that such an effort be extended for a longer period. This is

particularly important when we consider that Malaysian SMEs are predominantly micro businesses with fewer than five employees. In general terms, financial, human and IT resources are lacking in such micro businesses, and these businesses therefore need more time and support in order to transition to a new regulatory environment.

The government should also critically assess the financial and social impact of closure of small businesses as a result of GST implementation. In addition, a more sympathetic approach could be devised to support this alienated group of SMEs so that they can continue to make a living under the new tax regime. For example, the RMCD should develop closer engagement with smaller trade associations by conducting dialogues, as well as educational and handholding programs with their members. In doing so, the RMCD will be able to reach out to a larger segment of micro businesses and thus gain a better understanding of their GST operational and technical issues.

8. CONCLUSION

The findings of our study are important for GST researchers, policy makers and the RMCD in further improving Malaysia's tax administrative system, particularly in terms of compliance costs and 'ease of administration' to GST registrants. This study focused on GST implementation issues and associated costs impacting SMEs when formulating strategies to encourage voluntary registration among businesses. It could also be useful for policy makers and VAT administrators in India and Gulf Cooperation Countries (GCC) such as Oman and Saudi Arabia which are in the process of designing and implementing an effective and easy-to-administer VAT system.

Leveraging the results of this study, large-scale quantitative or mixed method studies could be conducted across Malaysia, by specific sectors or across sectors. In order to obtain a broader dimension on GST implementation, future studies should include involvement from representatives of trade organisations, chambers of commerce, SME associations, the RMCD and various government agencies involved in the enforcement of the GST Act 2014. Some areas to be covered in future research include the burden of compliance costs, taxpayers' compliance behaviours and the level of understanding of the GST regulations from the perspective of the taxpayers. This study identifies three main factors that affect taxpayer's attitudes towards GST, namely taxpayers' perception of fairness, GST readiness of business and external factors affecting business operations.

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10. APPENDICES

10.1 Appendix 1 — Profile of interviewees and interview questions

Profile of participant:

Gender: Male/Female

Years of experience:

Ethnicity: Malay/Chinese/Indian/Others

Highest formal education:

Type: Senior executives/Owners

Profile of company:

Annual turnover:

No. of employees:

No. of years of operations:

Location:

Type of business:

Detailed research questions:

- 1) The Government has introduced GST with effective from 1 April 2015. What are your views as to the implementation of GST among SMEs? *(relates to perception of taxpayers)*
- 2) Why are businesses not receptive towards a new system? List 3 to 5 potential burdens (if any). *(relates to challenges in implementation i.e., regulatory, financial and psychological costs)*
- 3) What is your view towards GST regulations as whole? Select one statement that best summarise your view: *(relates to attitude of taxpayers)*
 - a) *Positive:* Regulation is generally beneficial to my business as it raises standards of doing business in Malaysia, thus improving the competitiveness of business environment;
 - b) *Negative:* Regulation is generally detrimental to my business because it increases the cost of operation and it makes my life more difficult in running my business; and
 - c) *Neutral:* Regulation makes little difference to my business operations and to my business environment.
- 4) What steps do you undertake to prepare for GST implementation? List 3 to 5 steps. *(relates to GST readiness)*
- 5) Are you aware of the available grant or resources provided by Royal Malaysian Custom Malaysia (RMCD) for SMEs? *(relates to level of support rendered by the Government)*
 1. For example, GST e-voucher of MYR1,000 for GST accounting software;
 2. Have you participated in any GST workshops or trainings courses organised by RMCD?
- 6) List 3 main challenging issues facing your business when implementing GST (Potential challenges identified are cash-flow, resources, business process changes, managing customers, GST software not working well, submission of GST return, claiming of refund, and compliance with GST Act 2014).
- 7) Do you get advice or support from consultants (i.e., accountant, IT services and tax advisors on direct and indirect tax) on the implementation?
- 8) Are your existing available resources adequate to address your concerns?
- 9) If not, how do you comply with GST requirements? What kind of support do you expect from RMCD i.e., consultation via GST Hotline and GST Portal?

- 10) How much have costs of doing business increased from initial GST costs? These include manpower, IT costs and consultancy costs? State roughly how much do you incur when implementing GST (cost then are computed as a % of revenue).
- 11) What is the estimated cost of compliance and how would you absorb this cost in your business? There are 3 options namely (1) full absorption (2) partial absorption (3) pass on all costs to customers.
- 12) Are you aware and concern of the 'Price Control and Anti Profiteering Act 2011'? Select one option (1) Aware and concern (2) Aware, but not concern (3) Not aware
- 13) How do you manage your customers on GST effects on pricing? I.e., Customers refuse to pay.
- 14) Are you concerned over various penalties from late filing, inaccurate filing, etc.?
- 15) *Statement: Non-compliance with severe penalties being imposed.* How would you overcome non-compliance of GST Act?
- 16) What are your recommendations to smoothen the implementation of GST? For example, education, consultation with Customs, penalty.

10.2 Appendix 2 — Approval letter on ethics



Human Ethics Certificate of Approval

This is to certify that the project below was considered by the Monash University Human Research Ethics Committee. The Committee was satisfied that the proposal meets the requirements of the *National Statement on Ethical Conduct in Human Research* and has granted approval.

Project Number: CF15/2713 - 2015001111

Project Title: Challenges encountered by SMEs ('Small and Medium Enterprise') with the implementation of GST ('Goods and Services Tax') in Malaysia: A Qualitative Study

Chief Investigator: Prof Jeyapalan Kasipillai

Approved: **From:** 10 July 2015 **To:** 10 July 2020

Terms of approval - Failure to comply with the terms below is in breach of your approval and the Australian Code for the Responsible Conduct of Research.

1. The Chief investigator is responsible for ensuring that permission letters are obtained, if relevant, before any data collection can occur at the specified organisation.
2. Approval is only valid whilst you hold a position at Monash University.
3. It is the responsibility of the Chief Investigator to ensure that all investigators are aware of the terms of approval and to ensure the project is conducted as approved by MUHREC.
4. You should notify MUHREC immediately of any serious or unexpected adverse effects on participants or unforeseen events affecting the ethical acceptability of the project.
5. The Explanatory Statement must be on Monash University letterhead and the Monash University complaints clause must include your project number.
6. **Amendments to the approved project (including changes in personnel):** Require the submission of a Request for Amendment form to MUHREC and must not begin without written approval from MUHREC. Substantial variations may require a new application.
7. **Future correspondence:** Please quote the project number and project title above in any further correspondence.
8. **Annual reports:** Continued approval of this project is dependent on the submission of an Annual Report. This is determined by the date of your letter of approval.
9. **Final report:** A Final Report should be provided at the conclusion of the project. MUHREC should be notified if the project is discontinued before the expected date of completion.
10. **Monitoring:** Projects may be subject to an audit or any other form of monitoring by MUHREC at any time.
11. **Retention and storage of data:** The Chief Investigator is responsible for the storage and retention of original data pertaining to a project for a minimum period of five years.

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A cross-cultural study of religiosity and tax compliance attitudes in Malaysia and Turkey

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Abstract

Ensuring compliance in tax collection is very crucial as tax is one of the basic elements of public financing in almost all countries. The issue of compliance in tax research has been explored over many years from different perspectives. Initially, it started with a negative assumption of taxpayers' compliance attitudes and recently the research has shifted to a more positive attitude of taxpayers. One of the factors that is expected to shape taxpayers' compliance attitudes is religiosity. Even though a number of studies have started to explore this issue recently, not many studies have used primary data because the majority of the studies were relying on secondary data. Therefore, this study is comparing the impact of religiosity and its components on both tax compliance components, voluntary and enforced tax compliance, in Malaysia and Turkey. Surveys distributed to individual taxpayers were used in both countries. Religiosity is found to have a significant impact on voluntary tax compliance that influences taxpayers' positive attitudes in both countries. Even though religiosity seems to be an influential factor with respect to tax compliance behaviour, this study has shown that in certain circumstances, it might appear irrelevant.

Key words: voluntary tax compliance, enforced tax compliance, religiosity, Malaysia, Turkey

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1. INTRODUCTION

Tax is one of the basic elements of public financing. However, tax is not just a public financing instrument, but also a mechanism that determines the level of social solidarity and social participation of the country. During the period from the earliest times of mankind to the present day, the basic discussion about taxation has been about the legitimacy of taxation. Although this debate continues today, it appears that part of the subject related to tax compliance has reached more remarkable dimensions. In other words, although it plays a vital role in financing public goods, the reluctant and unstable behaviour of taxpayers at the point of paying taxes has led to an intensification of research on tax compliance. The facilitation of international financial transactions, especially with the globalisation process, and increase in the mobility of certain commodities subject to trade and capital, have transformed tax compliance from a national into a global problem of interest to all countries.

Related to the concept of tax compliance, although there are many definitions, the tax compliance definition of Roth et al. (1989) is fairly inclusive and most acceptable. They agree with the definition of tax compliance to be defined as 'the taxpayers file all required tax returns at the proper time and the returns accurately report tax liability in accordance with the rules, regulations and court decisions applicable at the time the return is filed' (Roth et al., 1989, p. 2). Besides this definition made within the context of public finance, there are also other researchers who evaluate the concept of tax compliance on a broader scale. For example, according to Andreoni et al. (1998), tax compliance is not only a fiscal issue, but basically the full implementation of laws, and is a concept that also incorporates the composition of elements such as organisation problem, labour supply and morality.

The strongest tradition in the literature on tax compliance behaviour is that it is a preference of the individual's tax payment or nonpayment decisions, also referred to as the 'crime economy' and this is the paradigm of neo-classical tax compliance which advocates that it is associated with tax audits and punishments. This paradigm is based on economic theories and consists mainly of tax compliance models that focus on deterrence. The basis of deterrence creates convincing and forceful persuasive approaches. While deterrence is sometimes in a preventive form such as increasing tax audits, sometimes it can be found in a structure containing power such as the application of tax penalties (Fischer et al., 1992). Neo-classical paradigm defines taxpayers as individuals who have an excellent moral understanding, avoid risk, pursue utility maximisation, and can undertake tax evasion when the expected utility exceeds costs (Milliron & Toy, 1988). Thus, it is possible to prevent tax evasion which is defined in a highly rational way in terms of neo-classical paradigm, but only with applications that increase tax evasion costs such as tax penalties and audits.

In the 1960s, Becker's studies were the basis of the crime economy approach, or in other words, of the economic deterrence model. According to Becker (1968), who evaluates illegal behaviours from an economic point of view, the rational person's decision about tax compliance determines the costs to be incurred by tax evasion and the costs to be incurred as a result of punishment. In the 1970s, Allingham and Sandmo (1972) developed the basic structure of the neo-classical paradigm by developing the criminal behaviour theory that Becker put forward. Allingham and Sandmo's created economic model of rationality evaluates taxpayers as rational individuals who are trying to maximise their expected utility (Thomas, 2015). This model compares the costs that

will end up with taxpayer complying tax laws and the costs that will be incurred by tax evasion costing and taxpayers prefer the low cost option. The featured point in Allingham and Sandmo's (1972) model is an assumption that tax evasion can be precisely determined and punished. According to the new model, these two deterrent tools can replace each other and substitute one another. In other words, even if the tax audit rate is low, the high tax penalties will have a similar deterrent effect. Therefore, if the tax audit rate is 100% in the model, little punishment will still bring about a deterrence effect (Allingham & Sandmo, 1972). The first and most important critique of the crime economy approach stems from the fact that this approach is solely based on taxpayer financial position of tax compliance or incompatibility behaviour (Webley, 1991). According to this understanding, the state compelling power is the one and only sole factor that provides for the compulsory tax compliance of the state, such as tax inspection and punishment. However, this paradigm cannot explain why taxpayers are still required to declare their tax incomes in some countries despite the low level of audit and low tax penalties, especially the income obtained without the knowledge of third parties.

Many empirical studies on the subject have shown that the deterrent effect of tax inspection and punishment is not very strong, and even those compelling tools have revealed limited effects on tax compliance behavior (Kirchler & Wahl, 2010). This is the case in the tax compliance studies using a socio-psychological approach and initiating a process that leads to the inclusion of non-economic factors in research. The socio-psychological approach argues for and defends those non-economic factors in shaping the behaviour of taxpayers towards tax compliance. However, the insufficiency of earlier studies in explaining the behaviour of tax compliance alone has led to the emergence of a socio-psychological approach (Schmölders, 1959).

According to this approach, both the economic and the non-economic factors must be evaluated together so that the big picture of taxpayers' compliance behaviour can be clearly viewed (Kirchler & Wahl, 2010). In short, this mixed approach focuses not only on taxpayers' own behaviour on tax compliance (Groenland & Veldhoven, 1983), but at the same time takes into account the effects of the tax authority practices that enforce taxpayers' compliance behaviour (McKerchar & Evans, 2009). One of the areas of investigation of this approach is, how do personal moral values affect tax compliance? In this area, it has a few small but remarkable studies in the literature such as the impact of ethics (Song & Yarbrough, 1978), civic duty (Slemrod, 1998), religions (Benk et al., 2015), moral obligation (Bobek & Hatfield, 2003), willingness to pay (Torgler et al., 2008) and religiosity (Torgler, 2006) on tax compliance or tax evasion. Although it is pleasing to see that the work in this area, particularly the study in religiosity, is gradually expanding, it is still considered as insufficient to truly understand taxpayers' compliance behaviour. This is because most of the tax compliance studies that focus on religiosity as one of the independent variables only investigate the impact of religiosity in total regardless of religions (for example, Torgler, 2006; Richardson, 2008; Mohdali & Pope, 2014). Hence, the real impact of a specific religion on tax compliance is hardly explained. Therefore, this study aims to investigate the effects of religiosity that derives from Muslims on both voluntary and enforced tax compliance in two countries, Malaysia and Turkey. These two countries were selected in this comparison study because the majority of their citizens are Muslims. According to the latest census, approximately 62% of Malaysian citizens (Department of Statistics Malaysia, 2011) and 98% of Turkish citizens (Turkish Statistical Institute, 2014) from the total population are Muslims. Even though these two countries are considered to be Islamic countries,

there is a possibility that their citizens might have different attitudes towards tax compliance due to their different geographical locations. Therefore, this study aims to determine whether the level of religiosity and its dimensions affect the attitude towards tax compliance in countries with similar religious beliefs. We also think that this research will add important contributions to the literature since this is the first comparative and cross-cultural study that focuses solely on the impact of religiosity of Muslims on tax compliance.

This paper is organised as follows. Following the introduction in part one of the paper is Part Two that briefly reviews the literature on religiosity and tax compliance. Part Three proceeds to outline the methodology which was employed in this study. Part Four presents the statistical findings including the demographics and overall assessment and provides a comparative analysis of the two countries of respondents and summarises the main research findings. Finally, Part Five notes the study's conclusions, discussions, limitations and offers some suggestions for further research.

2. LITERATURE REVIEW

Religion has a very important role in shaping the lifestyle, economic and social life of the individual. Religion is one phenomenon that makes sense of difficult to understand events or that makes them acceptable for the individual in a specific context. With a broader definition, religion is a social institution that systemises the belief and worship of God, to supernatural powers and various sacred beings (Oxford Living Dictionaries, n.d.). Religiosity can be defined as the level of belonging, belief or activities to an individual's religion (Himmelfarb, 1975). On another definition, Allport and Ross (1967) describe religiosity through internal and external religious orientations. External religious orientations can be easily observed by watching the behaviour of the individual, such as worship and religious rituals. Similarly, Glock (1962) has divided religiosity into five dimensions. The religious followers are expected to adhere to the first four dimensions that are religious beliefs, practice, experience and knowledge and then translate these dimensions into the fifth dimension that is behaviour. However, it is difficult to identify and observe internal religious orientations (Kurpis et al., 2008). Previous studies have examined religiosity mostly in terms of religious commitment and religious affiliation (Pope & Mohdali, 2010). Religious affiliation is defined as the belief that the individual is belonging to religions such as Christianity, Islam, Buddhism or other religions. Religious commitment is the application of religious values, beliefs, and rituals to everyday life (Worthington et al., 2003). There are two different forms of religious commitment. It is possible to express these in the form of intrapersonal religious commitment resulting from individual beliefs and attitudes and interpersonal religious commitment, which arises from the association with the religious community or organisation to which the individual belongs. Allport (1961) emphasises that both elements of religion are vital in determining the level of religiosity because both elements can influence each other.

When previous studies are examined, it is viewed that religiosity has a significant effect on the formation of positive moral values and thus the prevention of deviant behaviours (Johnson et al., 2001). The most important reason for this is that all religions should endeavour to support moral doctrines and strive for the formation of a moral climate (Kurpis et al., 2008). According to Stack and Kposowa (2006), deviant behaviour in all religions is prohibited and damned. Moreover, the fact that religious people have better

mental and physical health than non-religious individuals also increases the effect of religiousness on reducing deviant behaviours (Hackney & Sanders, 2003). Finally, religiosity also has the perception of the aggressive punishment of deviant behaviours (Casey & Scholz, 1991).

It is a striking fact that there are few studies of religiosity that overlook the effects of tax evasion, tax morality, or tax compliance (Mohdali & Pope, 2014). The first study-work on the subject in the literature belongs to Tittle and Welch (1983). This study examines the prohibitive effects of religiosity on various deviant behaviours, including tax evasion, and has shown that it is a significant important effect on religiosity and compliance with rules (Tittle & Welch, 1983). Petee et al. (1994) found that in the study of religiosity, religiosity has the power of informal sanction in preventing tax evasion. Grasmick et al. (1991) emphasise two dimensions of religious identity and church attendance in their study and express that religiosity is quite impressive in reducing tax evasion. As we have seen, previous studies have generally focused on the effects of religiosity on negative taxpayer attitudes, which are expressed as tax evasion and tax cheating.

The number of studies examining the effects of religiosity on positive taxpayer attitudes such as tax compliance and tax ethics is also limited. In this regard, it is apparent that the studies by Torgler have been done using the World Values Survey and European Values Survey data. Torgler's studies have been conducted in more than 30 countries including Canada (Torgler, 2003), Turkey (Torgler et al., 2008), Germany (Feld & Torgler, 2007), countries in Asia (Torgler, 2004) and countries in Europe (Torgler & Schneider, 2007). When the findings of these studies are evaluated, it appears that religiosity has a positive effect on tax morality. Stack and Kposowa's (2006) and Richardson's (2008) studies also support Torgler's findings. Similarly Benk et al. (2015) found that the level of religiosity positively influences tax compliance especially for Christians and Muslims. The mixed methods findings by Mohdali and Pope (2014) has clearly shown that even though significant, little can be explained by religiosity levels that derive from the four main religions in Malaysia namely Islam, Buddhism, Christianity and Hinduism in shaping Malaysian taxpayers' compliance attitudes. They also found that the most influential religiosity commitment is intrapersonal religiosity on voluntary tax compliance. Further, Benk et al. (2016) have conducted a survey to only Muslims as their respondents and they have found similar findings and that only interpersonal religiosity influences tax compliance.

In summary, religiosity is found to have a significant impact on negative taxpayer behaviours such as tax evasion as well as positive taxpayer behaviours, like tax morality and tax compliance. However, the fact that religiosity-tax compliance studies are scarce in number also reveals that this area has been neglected; only recently has it been given some attention. This study is expected to provide additional insights into tax compliance particularly by comparing religiosity levels from the same religion but from different geographical locations in providing better understanding of this issue.

In conclusion, the test hypotheses of this study are as follows:

H₁ Religiosity is a positive determinant of all dimensions of tax compliance in both Malaysia and Turkey.

H_{1a} Religiosity is a positive determinant of voluntary tax compliance in both Malaysia and Turkey.

H_{1b} Religiosity is a positive determinant of enforced tax compliance in both Malaysia and Turkey.

3. METHODOLOGY

3.1 Participants

The respondents from Malaysia were individual taxpayers who represented the majority of salaried taxpayers and the remaining were self-employed taxpayers. Due to the inaccessibility of data on taxpayers according to their religion, the population of Muslim taxpayers was estimated based on the percentage of Malay population from the 2010 Census (Department of Statistics Malaysia, 2011), that yielded approximately three million taxpayers. This approach was used because ethnicity is commonly associated with religion as clearly shown in Article 160 of the Constitution of Malaysia that a 'Malay' is a person who adheres to Islam, normally speaks the Malay language and adopts Malay Customs. A sample size was aimed at a minimum of 200 as suggested by Fowler (1993) which was considered as adequate to describe a huge population.

The self-administered survey was considered the best method for this survey because of the involvement of two delicate issues namely religion and tax compliance (Bourque & Fielder, 1995). Surveys were distributed to 17 companies that agreed to distribute questionnaires to their employees in Klang Valley and Putrajaya. The mixed-mode surveys were employed due to the request of the companies involved in this survey. For each company, an intermediary was assigned by the company to help the researchers in distributing and collecting the questionnaires. For the companies that opted for printed questionnaires, the questionnaires were delivered to the intermediaries to be distributed to their staff and collected after two weeks. For those that opted for the online survey, a survey link was emailed to the intermediaries and a couple of follow ups were sent to the intermediaries to ensure sufficient response would be received.

Even though the mode of data collection was different, the same set of questions was used to avoid any possible bias. However, as highlighted by de Leeuw et al. (2008) despite reasonable efforts having been made, the mode effects are still to be anticipated but the effect is only minimal. From the total of 300 questionnaires delivered, the total responses received was 240, however the response rate cannot be determined because calculating the sample who chose not to participate in the online survey was not possible (de Vaus, 2002).

The respondents from Turkey on the other hand were selected from self-employed taxpayers from the city of Malatya, Turkey. Convenience sampling method was used and face to face interviews were done to fill up the questionnaires. Participation in the study was voluntary and they were assured that their answers would remain confidential. Out of the 1550 questionnaires distributed to the self-employed taxpayers, only 408 responses were received and after careful consideration, only 403 were considered to be usable responses and the response rate was yielded at 26%. Even though it can be argued that the sample size from both countries is not even, both countries have met the minimum of 150 responses which has been emphasised by Fowler (1993) as acceptable to describe accurately the population of 15 million.

3.2 Measures

Both of the current studies used the same items for all three variables namely religiosity (REL), voluntary tax compliance (VTC) and enforced tax compliance (ETC). The items for religiosity were adapted from the Religious Commitment Inventory (RCI-10) (Worthington et al., 2003) (see Appendix A). Some of the items were amended to suit the context of each country but the meaning for each item was maintained. There were 10 items that represented religiosity on a 5-point Likert scale (1 = not at all true of me and 5 = totally true of me). An individual with a score of 38 or higher out of a total score of 50 was considered to be highly religious (Worthington et al., 2003).

The respondents were required to indicate their attitudes regarding tax related issues specifically attitudes about complying with tax laws. The items for tax compliance variables were represented by voluntary and enforced tax compliance which were adapted from Kirchler and Wahl (2010) on a 5-point Likert scale (1 = strongly disagree, 5 = strong agree). There were five items for voluntary tax compliance and four items represented enforced tax compliance (see Appendix A).

The measures that we used in this study were originally in English. For this reason at first, we translated them into Turkish and Malaysian languages and made some modifications. Later, levels of comprehension of the questions in the questionnaire form were tested on 50 people with different educational backgrounds by conducting a pilot survey. It was noted that these questions were easy to understand.

4. FINDINGS

A descriptive analysis was performed to understand the backgrounds of the respondents from both countries. The majority of the Malaysian respondents (approximately 80% of the total respondents) were of tertiary education level. This was in contrast with the respondents from Turkey, the majority of whom had high school as their highest education level. As for the gender, the distribution between Malaysian respondents appeared to be even but for Turkish respondents, almost all of the respondents were male. The highest number of respondents in terms of age for both Malaysian and Turkish respondents were 25 to 44 year olds (80% and 43%, respectively). However, the Turkish respondents appeared to be more even in all age groups as compared to the Malaysian respondents, of whom the youngest group was represented by only less than 2% of the total Malaysian respondents. This study only focused on the Muslim and individual taxpayers. Two types of Malaysian individual taxpayers, namely salaried and self-employed taxpayers were included in the study but for the Turkish, only self-employed taxpayers were included. The details of the demographic characteristics of the respondents are presented in Table 1.

Table 1: Demographic Details

Characteristics		Malaysia (n=240)		Turkey (n=403)	
		n	%	n	%
Education	High School and below	49	20.4	354	87.8
	Under and Postgraduate	191	79.6	49	12.2
Gender	Male	115	47.9	375	93.1
	Female	125	52.1	28	6.9
Age	18 – 24	4	1.7	101	25.1
	25 – 44	192	80.0	174	43.2
	45 and above	44	18.3	128	31.7
Individual taxpayer	Salaried	212	88.3	-	0
	Self-employed	28	11.7	403	100

The attitudes of people towards tax compliance were explored based on the descriptive analyses conducted and comparison of data from Malaysia and Turkey. Both countries showed an inclination towards positive attitudes of complying with tax laws and there was no significant difference between the mean of VTC and ETC for both countries. Among the highest mean scores indicated by the Malaysians were VTC3 (duty as a citizen), VTC1 (sense of responsibility) and VTC4 (moral value) between 3.892 and 3.700. While for the Turkish, among the highest mean scores were VTC1 (sense of responsibility) and VTC5 (better facility), 3.877 and 3.765, respectively. The findings indicated that Malaysian taxpayers were considered to be highly religious since the score of REL was more than 38 (Worthington et al., 2003). The details of the comparison analysis of the mean for all variables are presented in Table 2.

Table 2: Comparison of Tax Compliance Attitudes and Religious Levels between Malaysians and Turkish

Variable	Country	Mean	SD	<i>t</i>	Sig. (<i>p</i>)
VTC	Malaysia	3.698	0.636	-0.391	<i>p</i> = n.s
	Turkey	3.672	1.025		
ETC	Malaysia	3.372	0.671	-0.381	<i>p</i> = n.s
	Turkey	3.348	0.909		
	Malaysia	38.729	4.278		
REL	Turkey	34.793	7.279	-8.636	<i>p</i> = 0.00
	Turkey	22.287	4.479		

In contrast, Turkish taxpayers indicated a lower score of REL (less than 35) that can be considered as less religious. The *t*-test indicated a significant difference between these two means. On the other hand, despite the variance between the level of religiosity between Malaysian and Turkish taxpayers, the people from both countries show an inclination towards compliance attitudes.

A comparison of religiosity levels for both countries showed that the mean for the Malaysian highly religious people was slightly higher as compared to the Turkish but there was a huge gap between the low religious levels for both countries. Turkish people pointed to a lower mean for less religious people as compared to the Malaysians. Comparisons of high and low levels of religiosity for each country indicated statistically significant differences between the two levels for both countries. This indicates a wide

gap between the people who are highly and less religious for both countries. The details of this comparison are shown in Table 3.

Table 3: Comparison of Religiosity Levels between Malaysia and Turkey

Country	Religiosity Level	Mean	SD	<i>t</i>	Sig. (<i>p</i>)
Malaysia	Low	34.405	2.606	-19.090	<i>p</i> = 0.00
	High	41.278	2.745		
Turkey	Low	31.319	6.792	-18.409	<i>p</i> = 0.00
	High	40.592	3.267		

The respondents with different religiosity levels were then compared with their tax compliance attitudes for both countries. The findings indicated that their VTC attitudes showed statistically significant differences between people who have different religious levels for both countries (Malaysia ($p < 0.01$) and Turkey ($p < 0.05$)). However, for the attitudes towards ETC, there was no significant difference for the Malaysians even though the Turkish showed a statistically significant difference ($p < 0.05$) between those highly and less religious people as clearly shown in Table 4.

Table 4: Comparison of Tax Compliance Attitudes with Religiosity Levels between Malaysia and Turkey

Variable	Country	Religiosity Level	Mean	SD	<i>t</i>	Sig. (<i>p</i>)
VTC	Malaysia	Low	3.539	0.643	-3.007	<i>p</i> < 0.01
		High	3.791	0.616		
	Turkey	Low	3.576	1.000	-1.266	<i>p</i> < 0.05
		High	3.833	1.048		
ETC	Malaysia	Low	3.301	0.608	-2.455	<i>p</i> = n.s.
		High	3.414	0.704		
	Turkey	Low	3.264	0.907	- 2.412	<i>p</i> < 0.05
		High	3.488	0.898		

In the correlation analyses, Malaysians were found to have a significant positive relationship between religiosity and voluntary tax compliance ($r = 0.223$, $p < 0.01$) and no significant relationship was found with enforced tax compliance ($r = 0.101$, $p = \text{n.s.}$). As for the Turkish, religiosity was found to have significant positive relationships with both tax compliance components, voluntary tax compliance ($r = 0.224$, $p < 0.01$) and enforced tax compliance ($r = 0.179$, $p < 0.01$).

Single regression analyses were performed to examine the influence of religiosity on tax compliance dimensions, namely voluntary tax compliance (Model 1) and enforced tax compliance (Model 2) for both countries. The regression analysis in Model 1 (Malaysia) produced an adjusted $R^2 = 0.046$, $F(1, 238) = 12.510$, $p = 0.000$ and Model 1 (Turkey) produced an adjusted $R^2 = 0.048$, $F(1, 401) = 21.265$, $p = 0.000$. The regression analysis in Model 2 (Malaysia) produced an adjusted $R^2 = 0.006$, $F(1, 238) = 2.48$, $p = \text{n.s.}$ and Model 2 (Turkey) produced an adjusted $R^2 = 0.030$, $F(1, 401) = 13.245$, $p = 0.000$. Based on the findings, it seems that highly religious people in Turkey will comply with tax laws in both conditions, voluntarily or being enforced by the tax authority. This is in contrast with the Malaysian highly religious people because they are only willing to comply voluntarily but when they are forced to comply, their

religiosity will be less likely to influence their compliance attitudes. The details of these two models for Malaysia and Turkey are presented in Table 5. Thus hypothesis 1a is fully supported, but hypothesis 1b is partially supported.

Table 5: Findings of the Single Regression Analyses

Country	Variable	Voluntary Tax Compliance (Model 1)			Enforced Tax Compliance (Model 2)		
		B	SE	β	B	SE	β
Malaysia	REL	0.033	0.009	0.223***	0.016	0.010	0.102
Turkey	REL	0.032	0.007	0.224**	0.022	0.006	0.179***

*Significant at $p < 0.05$, **Significant at $p < 0.01$ and *** Significant at $p = 0.00$.

5. DISCUSSIONS AND CONCLUSIONS

In both countries, voluntary tax compliance is found to have the highest mean score perceived by individual taxpayers as compared to enforced tax compliance. This may indicate a high tendency of individual taxpayers in Malaysia and Turkey to willingly comply with tax laws which is in line with the findings from prior research (Riahi-Belkaoui, 2004; Loo et al., 2010). One of the potential explanations for this strong positive attitude may be because of the tax system implemented in both countries. In Malaysia, salaried individual taxpayers are subject to the Scheduled Tax Deduction (STD) scheme. Therefore, being salaried taxpayers, an estimation of tax payment for a year will be deducted by their employer on a monthly basis. Since the majority of the Malaysian respondents in this study are salaried taxpayers, it is apparent that they do not have much opportunity not to comply with tax laws hence the positive compliance attitudes viewed. Similarly, individual taxpayers in Turkey are mostly subject to withholding tax. According to Article 94 of Turkish Income Tax Code, all self-employed individuals who are required to withhold taxes also need to report their true income. Self-employed taxpayers are subject to a withholding tax on all kinds of payments and collection in relation to their business and services. They may also have opportunities to get salary at holiday times or hours. Therefore, there is a similarity between the two countries' taxpayers. The portion held by the employer on behalf of the employees will be paid directly to the government. Hence the lack of opportunity in avoiding tax might shape their voluntary tax compliance attitudes.

Highly religious people were viewed as having a higher mean for voluntary and enforced tax compliance as compared to less religious people for both countries. However, the mean for voluntary tax compliance appeared to be higher as compared to enforced tax compliance. Religiosity is also found to have a significant influence on both tax compliance components in Turkey but only on voluntary tax compliance in Malaysia. These findings probably can be explained based on the religious values held by the respondents. The religious values regardless of religion are expected to shape the attitudes and beliefs of an individual and drive his/her behaviour. In other words, the values from religion are highly considered as a source of morality (Thornton & Camburn, 1989). This is strongly supported by a study by Torgler and Murphy (2004) where a moral obligation was measured based on the respondents' religiosity. This was clearly reflected in the mean scores of one of the items in VTC, that VTC1 for both countries that revealed the strong sense of responsibility in fulfilling their duty as taxpayers.

In conclusion, the findings from both studies in Malaysia and Turkey are in line with the majority of other studies that find religiosity has a significant influence on tax compliance attitudes. This study provides further insight that religious commitment that arises as a result of one's beliefs and attitudes can better shape a taxpayer's compliance behaviour. The findings from the comparative study of the two countries probably offer better understanding of how the people from different backgrounds but with the same religious values make their tax compliance decisions. This is clearly evident from the findings derived from two different types of individual taxpayers in these countries namely salaried (majority in Malaysia) and self-employed (majority in Turkey) taxpayers. The results yielded different findings for enforced tax compliance. Religiosity appears to play an important role in influencing those who have opportunity to avoid or evade when they are forced to comply with tax laws. This is conflicting with those who have less opportunity to avoid or evade tax. In other words, even though religiosity seems to be an influential factor of tax compliance behaviour, in certain circumstances, it might appear to be irrelevant.

Despite its contribution, these studies have their own limitations. Both studies involved sensitive issues namely religion and tax compliance and there is a possibility that the respondents were not comfortable to disclose their true opinions on these issues. Further, both studies assumed that the inner values of all respondents are derived from the religious values only even though it can be argued that they may derived from the moral values that are stemmed from their own principles with no influence of religion. The fact that none of the Turkish taxpayers come from the salaried group has also limited the analysis between different group of taxpayers. It is also suggested that future research should be conducted on a comparative study of countries in different regions to further understand the role of religiosity in influencing taxpayers' compliance attitudes with different cultural backgrounds. Even though with its limitations, the findings of these studies have provided better insights in understanding taxpayers' complex attitudes.

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7. APPENDIX

7.1 Appendix A

Scale Items

Tax Compliance Items (Kirchler & Wahl, 2010)

A-Voluntary Tax Compliance (VTC)

Q: When I pay my taxes as required by the regulations, I do so...

1. ...because to me it's obvious that this is what you do
2. ...to support the states or other citizens
3. ...because I like to contribute to everyone's good
4. ...because for me it's the natural thing to do
5. ...because I regard it as my duty as citizen

B-Enforced Tax Compliance (ETC)

Q: When I pay my taxes as required by the regulations, I do so...

1. ...because a great many tax audits are carried out
2. ...because the tax office often carries out audits

3. ...because I know that I will be audited
4. ...because the punishments for tax evasions are very severe
5. ...because I do not know exactly how to evade taxes without attracting attention

Religiosity Items (Worthington et al., 2003)

1. I make financial contributions to my religious organisation.
2. I enjoy spending time with others of my religious affiliation.
3. I keep well informed about my local religious group and have some influence in its decisions.
4. I enjoy working in the activities of my religious organisation.
5. My religious beliefs lie behind my whole approach to life.
6. I spend time trying to grow in understanding of my faith.
7. It is important to me to spend periods of time in private religious thought and reflection.
8. Religious beliefs influence all my dealings in life.
9. Religion is especially important to me because it answers many questions about the meaning of life.
10. I often read books and magazines about my faith.

7.2 Appendix B

Factor Analysis

Before factor analysis, data was tested using three initial analyses: the correlation matrix, Bartlett's test of Sphericity and the Kaiser–Meyer–Olkin measuring sampling adequacy to ensure it is appropriate to proceed with a factor analysis. Results of these three analyses support factorability of the dataset. Evidence for the presence of the zero-order correlations among all items are moderately inter correlated (average range correlation = 0.139 - 0.750). Bartlett's test of Sphericity is 5222.30, $p < 0.000$ and the Kaiser–Meyer–Olkin measure of sampling adequacy is 0.876.

Table 6: Factor Analysis Results

Item No.	<i>Factor 1</i>	<i>Factor 2</i>	<i>Factor 3</i>
REL1	0.629		
REL2	0.712		
REL3	0.389		
REL4	0.580		
REL5	0.686		
REL6	0.679		
REL7	0.685		
REL8	0.714		
REL9	0.714		
REL10	0.646		
VTC 1		0.819	
VTC 2		0.798	
VTC 3		0.778	
VTC 4		0.809	
VTC 5		0.797	
ETC 1			0.835
ETC 2			0.867
ETC 3			0.618
ETC 4			0.688
ETC 5			0.835
Eigenvalue	5.481	3.413	1.614
Percent of Variance	28.846	17.961	8.494
Cumulative Percent	25.222	46.807	55.300

Factor 1 is labelled '**Religiosity (REL)**', it is constituted by 10 items and accounts for 28.846% of the total variance of the items. The item values loaded ranged from 0.389 to 0.714. **Factor 2** is labelled '**Voluntary Tax Compliance (VTC)**', it is constituted by five items and accounts for 17.961% of the total variance of the items. The item values loaded ranged from 0.778 to 0.819. **Factor 3** is labelled '**Enforced Tax Compliance (ETC)**', it is constituted by five items and accounts for 8.494% of the total variance of the items. The item values loaded ranged from 0.618 to 0.867.

The role and dimensions of taxpayer commitment in tax compliance behaviour

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Abstract

Commitment is assumed to be a type of motivation that influences taxpayer behaviour. Generally, commitment is defined as an obliging force that gives direction to behaviour. This is experienced as a mind-set which in turn characterise different dimensions of commitment. These dimensions, namely affective, normative and continuance commitment, have not previously been investigated in a tax compliance behaviour context. The present paper aims to conceptualise these dimensions and proposes a model of commitment that will help us to understand taxpayers' compliance. Empirical findings confirm the prevalence of the affective and continuance dimensions in the population surveyed, while the normative dimension could not be distinguished. The results endorse the validity of the role of commitment in tax compliance behaviour and warrant further investigation into the presence of the three dimensions of taxpayer commitment.

Key words: Tax compliance, commitment, affective commitment, normative commitment, continuance commitment, social behaviour

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1. INTRODUCTION

Taxpayer commitment, as a factor influencing tax compliance behaviour, has been addressed in the tax compliance literature mainly as a ‘type of motivation’ (see Gangl, Torgler & Kirchler, 2015) and as a ‘broad attitudinal kind of response by taxpayers to the expectations of authorities’ (see Braithwaite, 2002). Meyer and Herscovitch (2001) propose that commitment is different from motivation or general attitudes: although this proposition is not made within the context of tax compliance behaviour research, their argument that commitment should have a ‘core essence’ regardless of the context in which it is studied, opens up the prospect of investigating the role of commitment in tax compliance behaviour. In reviewing a number of previous studies, Meyer and Herscovitch (2001, p. 301) observe that ‘commitment may influence behaviour independently of other motives and attitudes and, in fact, might lead to persistence in a course of action even in the face of conflicting motives or attitudes’. In a tax compliance context, this may imply that taxpayer commitment can play an important role in explaining high levels of compliance, even in conditions of low trust, where there are perceptions of unfairness of the tax system or a weak relationship between taxpayer and tax authority. As Meyer and Herscovitch (2001, p. 301) declare, ‘commitment can lead individuals to behave in ways that, from the perspective of neutral observers, might seem contrary to their self-interest’.

The term ‘committed motivation’ was introduced in the tax compliance literature as ‘committed tax cooperation’ by Gangl, Hofmann and Kirchler (2015, p. 20). They propose that committed motivation is characterised by ‘taxpayers’ feelings that paying taxes is a customary thing to do and a moral obligation also followed by fellow citizens’. Meyer and Herscovitch (2001) maintain that the concept of commitment is a multi-dimensional construct and that these dimensions may have different effects on behaviour. It is therefore submitted that commitment has more relevance in a tax compliance context than is currently ascribed to it and an investigation into how taxpayer commitment and its various dimensions could influence tax compliance behaviour is merited.

The present paper aims to explore the rationality of the dimensions of commitment and to propose a model of commitment in a tax compliance behaviour context. The paper further aims to empirically assess the strength of the relationship between these dimensions and the tax compliance intention of individuals.

2. BACKGROUND

Governments, especially in developing countries, are striving more than ever to mobilise greater tax revenue to deliver public services, relieve poverty, reduce inequality and build infrastructure (OECD, 2013). Although it appears that governments are increasingly reaching out to inform and engage taxpayers and aim to build a culture of compliance, Olsen (2015, p. 31) remarks on the peculiarity of the United States (US) tax authority on being incurious about ‘what makes taxpayers tick’. She believes that understanding taxpayer behaviour is ‘at the core of being a wise and effective administrator’ and that failure to do so will result in continuous once-off compliance strategies which may be expensive and inefficient. Similarly, Carroll (1987) has called for a better understanding of the many varieties of taxpayer behaviour, and Olsen (2015, p. 3) declares that ‘the holy grail of tax administration is an understanding

of why taxpayers comply with tax laws and how we can apply that understanding to promote voluntary compliance’.

Research in tax compliance behaviour indicates that most people are willing to be compliant and are more concerned with *how* to comply than *whether* to comply (Onu & Oats, 2015). This is congruent with the recognition expressed by many tax authorities worldwide that the majority of their taxpayers are compliant (see SARS, 2017; Australian Taxation Office, 2015; Canada Revenue Agency, 2013; New Zealand Inland Revenue, 2014). Nevertheless, considerable effort from the tax authorities is still concentrated on discouraging non-compliance. A summary of research done by the Organisation for Economic Co-operation and Development (OECD) in 2009 on the focus areas of compliance strategies by tax authorities, reveals that almost 40% of strategies aim at enforcement, penalties, sanctions or policy and process changes in an effort to deter non-compliance (Bornman, 2014).

An Information Note on Understanding and Influencing Taxpayers’ Compliance Behaviour by the OECD contains an extensive review of compliance literature on the subject of factors influencing taxpayer behaviour, as well as results from a survey done among 18 participating countries’ revenue bodies. The factors identified in this Information Note include deterrence, personal and social norms, opportunities for non-compliance, fairness and trust (as exhibited by the revenue authorities and perceived by the taxpayers), and economic factors (OECD, 2010). Devos (2014) explains that factors such as norms, fairness and trust are regarded as social, psychological or behavioural factors since they pertain to the human element involved in individual taxpayer compliance decisions.

Devos (2014) also points out that various studies in the last five decades conducted from a social psychology perspective have examined variables ranging from social norms and personal characteristics to fairness perceptions and taxpayer education and awareness. A factor that has received much attention from researchers since the early 1960s is ‘tax morale’ (also referred to as willingness to comply). Torgler (2003, p. 5) defines tax morale as the ‘intrinsic motivation to pay taxes’ which is strongly associated with ‘willingness to comply’.³ Torgler, who studied the concept of tax morale in depth, indicates that tax compliance is actually the final observable outcome of a process during which an individual’s tax morale is shaped.

Important to the present research is the notion that tax morale is *shaped*, as noted by Torgler (2003), and that various factors contribute to this. Kornhauser (2007) states that internal factors, such as a sense of integrity and altruism, as well as external factors such as social norms, procedural justice and trust in government all shape a taxpayer’s willingness to comply. These factors are supported by Torgler and Schaffner (2007) and Feld and Frey (2007) who indicate that factors such as tax administration, tax system, tax awareness, compliance perceptions, trust in officials and others, as well as the willingness to obey, all have a relatively strong impact on tax morale. Cummings et al. (2008) add that this intrinsic willingness arises from the moral obligation to pay taxes or the belief in contributing to society by paying taxes. Many studies have been conducted in terms of identifying and analysing the factors that impact on a taxpayer’s willingness to comply (see, for example, Murphy (2005) and Levi, Tyler & Sacks (2008) on procedural justice; Wenzel (2002 and 2007); Kirchler, Niemirowski & Wearing (2006); Braithwaite (2007); Bowers & Robinson (2012) on fairness perceptions; and

³ In the present study, preference is given to the use of the term ‘willingness to comply’.

Alm, McClelland & Schulze (1999); Wenzel (2005) on social norms). Yet little attention has been paid to the concept of *taxpayer commitment*. In studies that do mention commitment, it is rarely well defined, usually used in the context of being a type of motivation and mostly presented as a one-dimensional construct.

Gangl et al. (2015) argue that taxpayers differ in their motivation to pay taxes and suggest that different motivations to pay taxes correspond to different levels of reported tax compliance. They identify three main motivations of tax compliance according to the slippery slope framework: enforced, voluntary and committed motivation. Their recent study suggests that both enforced and committed motivations relate to tax compliance, the former in a negative and the latter in a positive way.

Therefore, although the concept of commitment has been used in previous studies in a tax compliance context, it has not been sufficiently investigated. Commitment, as a driver of behaviour, has been reported on extensively in organisational behaviour literature however and useful insights can be drawn from that field and applied to tax compliance behaviour. This paper aims to present a perspective on understanding taxpayers' willingness to comply with tax laws in which taxpayer commitment as a state of being is considered as a factor that contributes to the shaping of this willingness. Accordingly, factors studied in previous research, such as personal and social norms, perceived legitimacy of the tax system, fairness and trust, and tax morale are discussed with respect to commitment.

The next section presents the research objective, while Section 4 reviews the literature on previous social or behavioural investigations into understanding tax compliance behaviour and further reviews the concept of commitment as found in tax compliance literature. Section 5 describes the research methodology, while Section 6 presents a perspective on taxpayer commitment as a driver of tax compliance behaviour. In Section 7, the empirical results from a survey to support this perspective are discussed. The final section presents the conclusion and recommendations for further study.

3. RESEARCH OBJECTIVE

The objective of this study is: to investigate the relevance of taxpayer commitment as a factor that shapes the willingness to be tax compliant; to explore the discernibility of these dimensions in individuals; and to determine the correlation between the different dimensions of commitment and tax compliance intention. It is intended that an exposition of commitment and its various dimensions in a tax compliance context can be represented by a model and used as a conceptual tool in order to analyse and understand taxpayers' willingness to comply with tax legislation. This will add to existing literature and provide opportunities for further research in empirically testing the suggested model. In addition, it is proposed that by updating standard assumptions about tax compliance behaviour, new tools and strategies to promote voluntary tax compliance can be inspired.

4. LITERATURE REVIEW

4.1 The tax compliance decision and behaviour

A recent World Development Report on Mind, Society and Behaviour (World Bank, 2015) (World Bank Report) indicates that insights into how people make decisions can lead to designing and implementing interventions by authorities and companies to invoke desired behaviour from citizens and consumers. According to the report, three principles stand out as providing direction for new approaches to understanding behaviour:

1. People make most judgments and most choices automatically, not deliberately: this is called ‘thinking automatically’.
2. How people act and think often depends on what others around them do and think: this is called ‘thinking socially’.
3. Individuals in a given society, share a common perspective on making sense of the world around them and understanding themselves: this is called ‘thinking with mental models’.

The principles of understanding the behaviours mentioned above differ from the standard economic approach with regard to decision making. The latter assumes that people consider all possible costs and benefits from a self-interested perspective before making a rational decision, whereas the above principles consider the psychological and social influences on behaviour (World Bank, 2015).

Researchers have previously tried to understand the tax compliance decision from a variety of perspectives since the classic economic model of tax evasion developed by Allingham and Sandmo in 1972. However, empirical evidence for the validity of the economic model to explain or predict tax compliance behaviour is weak. A pure economic approach is thus too narrow for a comprehensive explanation of tax compliance behaviour (see Kirchler et al. (2007) for a review on the tax compliance decision). Research on tax compliance behaviour has therefore evolved from the classic economic model of tax evasion to a collection of different models, theories and factors contributing to understanding the tax compliance decision (see Kirchler (2007) for an overview).

Studies investigating the behavioural (also referred to as the psychological or social) determinants of tax compliance have increased dramatically since 1981 (Kirchler, 2007), but as far back as 1959 Schmolders (1959, p. 345) argued that ‘psychological analyses’ can assist in explaining many phenomena in economics as well as in public finance. Hasseldine and Bebbington (1991) support this notion and remark that economic-orientated responses to tax evasion by tax authorities are short-term solutions only, and psychological aspects need to be incorporated to improve compliance in the long term.

Interpreting previous research on tax compliance behaviour against the principles gained from the World Bank Report indicates that the role of social norms in tax compliance behaviour may relate to the ‘thinking socially’ principle of understanding decision-making. The Report confirms that human sociality (the tendency of people to be concerned with and associate with each other) suggests that behaviour is influenced by social expectations, patterns of cooperation, social recognition, and social norms (World Bank, 2015).

‘Mental models’, on the other hand, originate from the cognitive side of social interactions, in other words — concepts that reflect the shared understandings of a community. This is often referred to as *culture* (World Bank, 2015). Although mental models are often shared and arise, in part, from human sociality, they differ from social norms as they need not be enforced by direct social pressure. Instead, they capture broad ideas about how the world works and one’s place in it (social norms tend to focus on particular behaviours and needs to be socially enforced). ‘People’s mental models shape their understanding of what is right, what is natural, and what is possible in life’ (World Bank, 2015, p. 12). Tax compliance research on taxpayers’ perceptions and attitudes that shape compliance behaviour (such as fairness and trust and, conceivably, the motivational postures), therefore relates to the ‘thinking within mental models’ principle of understanding human decision-making. In other words, people use these mental models in the decision to be tax compliant or not.

If commitment is a mind-set that compels an individual to a certain course of action, it is thus possible that a *mental model of commitment* can exist which shapes taxpayers’ willingness to be compliant.

4.2 Commitment in the tax compliance literature

Commitment is mainly used in tax compliance literature to describe a form of motivation. Best known and most widely used is Braithwaite’s (2002) concept of ‘commitment as a motivational posture’.

Commitment, as a broad attitudinal kind of response by taxpayers to the expectations of authorities, is introduced by Braithwaite (2002, p. 35) as a ‘motivational posture’. Braithwaite further explains that motivational postures reflect the social distance that individuals wish to place between themselves and the tax authority. Braithwaite, Murphy and Reinhart (2007, p. 138) also note that motivational postures are ‘conglomerates of beliefs, attitudes, preferences, interests, and feelings’ that signal the degree to which an individual feels safe in the regulatory community and accepts the agenda of the authority.

In a hierarchical compliance model developed by the Cash Economy Task Force in Australia in 1998, the posture of commitment is placed at the broad base of the triangular shaped model (Cash Economy Task Force, 1998). This indicates that the majority of taxpayers are committed to comply. Braithwaite (2002) suggests that taxpayers in this category feel that paying taxes is a moral obligation and is in the interest of the collective. In other words, taxes are paid in good will. Other motivational postures in this model are capitulation, resistance and disengagement.

Gangl et al. (2015) use the term ‘committed motivation’ as one of the qualities of tax compliance motivations to describe taxpayers who feel a moral obligation and responsibility to be honest. They propose that this represents an intrinsic motivation to comply with one’s tax obligation and includes the idea of actively contributing to society’s well-being. However, if Armstrong’s (2007) interpretation of commitment and motivation is considered, namely that commitment is a state of being while motivation is more dynamic and is about doing what one wants to do, it can be argued that ‘commitment’ as a driver of behaviour could be investigated separately from ‘motivation’. Armstrong states that highly committed people may be motivated, but people who are motivated may not necessarily be committed and may actually be pursuing their own ends rather than those of their job or the organisation.

It is evident from the above that ‘commitment’ as a driver of the willingness to pay taxes has been addressed in previous studies on tax compliance, although it has been done somewhat one-dimensionally and deserves an exposition of its various dimensions.

Commitment has been studied extensively in an organisational behaviour context and for the present study, literature from this discipline is used to a large extent to develop the dimensions of commitment in a tax compliance context. It is not uncommon for research on tax compliance to build frameworks for understanding tax compliance behaviour using well established concepts from other disciplines. A good example is the ‘psychological contract’, which is used in both the tax compliance and organisational behaviour literature. Tax compliance scholars, Feld and Frey (2007), describe it as the fiscal exchange between state and citizens. In contrast, human resource scholars, Guest and Conway (2004), report that a psychological contract exists between employer and employee. In both cases, trust and shared expectations form the basis of the contract. Similarly, the concept of commitment studied in a organisational behaviour context may be underpinned by valuable principles that could also be applied in a tax compliance behaviour context.

5. METHOD

A two-phase design was followed in the present paper. First, relevant literature on the topic of commitment was systematically reviewed in order to define and discuss the possible dimensions of taxpayer commitment and to develop a model of taxpayer commitment. Thereafter, a survey was conducted and the results statistically analysed in order to empirically corroborate the assumptions made in the model of taxpayer commitment. The participants, survey instrument and method of analysis are discussed below.

5.1 Participants

A paper-based survey was conducted with undergraduate and postgraduate students and staff (academic as well as non-academic) at the University of Johannesburg during September 2016. This date falls in the heart of tax filing season in South Africa. The researchers reasoned that the inclusion of postgraduate students would provide a mix of students of whom some are in full-time employment and thus registered taxpayers. The population of students was purposely selected as groups from different academic programmes, although all the groups’ students had completed at least one semester module of taxation education. Staff participating as respondents were selected using non-probability sampling on a purposive basis to include taxpayers who would have different levels of taxation knowledge. All participants were informed of the purpose of the study, and anonymity and confidentiality were ensured when collecting the data. Ethical clearance was obtained from the Faculty Ethics Committee prior to collecting the data.

The final sample consisted of 260 respondents selected purposely as described earlier. There were 104 (40%) males and 156 (60%) females. The age range was from 17 to 58 years (mean = 24.46, SD = 7.74). The majority of the sample (63.8%) were unemployed (thus mainly undergraduate students) with the remainder (36.2%) holding full or part time employment. Less than 14% of respondents declared their knowledge of taxation

to be poor or insufficient, while the remainder considered their tax knowledge to be adequate or even highly sufficient.

5.2 Survey instrument

A paper-based questionnaire containing Likert-type scales on tax-related questions was used. Two scales presented as Section B and Section C in the questionnaire measured the following concepts: tax compliance intention and dimensions of commitment (Section A pertained to demographic information).

5.2.1 Tax compliance intention scale (Section B)

The items on the scale to measure tax compliance intention were similar to the scale used by Gangl et al. (2013), who developed the scale differentiating two aspects of tax compliance: administrative compliance (e.g. paying on time) and technical compliance (e.g. paying the correct amount). This scale was shown to have reliable internal consistency in the Gangl et al. (2013) study with a Cronbach $\alpha = 0.77$.

The five items used were as follows:

For administrative compliance:

- 1) *To what extent do you think it is important that SARS receives a tax return in time?*
- 2) *To what extent do you think it is important that SARS receives as accurate as possible tax return from you?*
- 3) *To what extent do you think it is important that if after assessment you need to pay additional tax, SARS receives the money before the deadline?*

For technical compliance:

- 4) *To what extent would you consider falsifying or overstating deductions on your tax return?*
- 5) *To what extent would you consider not stating all of your earnings on your tax return?*

Respondents were asked to reflect on their tax obligation and to consider the statements before selecting an option on a 4-point Likert scale where 1 = 'not at all important' (for items 4 and 5 'would never consider') and 4 = 'very important' (for items 4 and 5 'would definitely consider'). The results for items 4 and 5 were therefore reversed for the purpose of the analysis.

5.2.2 Dimensions of commitment scale (Section C)

Section C of the questionnaire was aimed at assessing the various dimensions of commitment as they pertain to tax compliance behaviour. Meyer and Herscovitch (2001) suggest that when investigators into commitment develop measures, they should specify the focal behaviour and target of interest. Consequently, although the questions were borrowed to a large extent from Meyer and Herscovitch's sample items for commitment scales, they were adapted to specify tax compliance behaviour. Some questions were also adapted from Braithwaite's (2002) study on motivational postures

as well as from that of the Gangl et al. (2015) study on committed motivation. A total of 15 statements were used in Section C.

A survey was considered an appropriate instrument for the present research. The authors interpreted results with care, mindful that self-reported beliefs, attitudes and behaviour are not necessarily the same as the actual beliefs, attitudes and behaviour, and that social desirability could play a role in self reporting.

5.3 Statistical analysis

Factor and reliability analyses were run for each scale using SPSS. In addition, Spearman's rank order correlation was used to determine the strength and direction of the relationship between the dimensions of commitment and tax compliance intention. The results are presented in Section 7 of this paper.

6. TOWARDS A MODEL OF COMMITMENT IN TAX COMPLIANCE

A systematic review of relevant literature on the topic of commitment was performed in order to define and extract useful constructs. A descriptive theory grounded in the literature was generated and then applied in a tax compliance context in order to present a model of taxpayer commitment. Conceptually, the starting point was the 2001 meta-analysis on commitment of Meyer and Herscovitch, and the subsequent three-component model of commitment developed by them.

In Meyer and Herscovitch's (2001) attempt to build a general model of commitment, they performed an in-depth review of previous research on the concept of commitment. Some of their propositions are well grounded in existing literature and others are more speculative. They recommend that any future developments in commitment theory be guided by the principle that commitment should have a core meaning regardless of the context in which it is studied.

Armstrong (2007) distinguishes between commitment and motivation in the organisational context as complementary processes that interlink and overlap. He remarks that commitment is a state of being, while motivation is more dynamic and is about doing what you want to do. He states that highly committed people may be motivated, but people who are motivated may not necessarily be committed and may be pursuing their own ends rather than that of their job or the organisation.

The three-component model of commitment (or TCM) advocated by Meyer and Herscovitch (2001) encapsulates three separate streams of earlier commitment research (Solinger, Van Olffen & Roe, 2008). Solinger et al. (2008) also point out that the common thread in commitment research is the notion that commitment is a psychological state that links an individual to an organisation. Based on an interpretation of Armstrong's analysis, the TCM and practical implications of the concept commitment, Bornman (2014) makes the supposition that commitment is generally linked to a cause or institution.

The TCM can be regarded as the dominant model in organisational commitment research, although Solinger et al. (2008) point out that an accumulation of studies has shown that the model is not fully consistent with empirical findings and have thus proposed a revision of scales. However, research produced in 2012 by Meyer et al.

indicates that within the last decade, there has been increased use of the TCM measures outside North America. They do, however, concede that factor analyses from a number of studies of the scales used for the TCM measures still produce mixed results (Meyer et al., 2012).

In the sections below, a systematic process is followed to explain the concept of commitment. The concept is first described in terms of its definition, followed by the dimensions of commitment before the behavioural implications are addressed. The concept of commitment is then applied in the context of tax compliance behaviour by linking previous research on factors of tax compliance to each dimension of commitment.

6.1 What is commitment?

Meyer and Herscovitch (2001, p. 301) define commitment as ‘a force that binds an individual to a course of action of relevance to one or more targets’. They suggest, after reviewing a large number of definitions from the literature, that all of the definitions in general make reference to the fact that commitment is 1) a stabilising or obliging force, and 2) that it gives direction to behaviour. Meyer and Allen (1991) reason that as the concept of commitment is expanded to include desire, need and obligation to remain, it no longer meets the definition of an attitude but can rather be described as a psychological state. As stated earlier in Section 1, Meyer and Herscovitch (2001) are of the opinion that commitment can be clearly distinguished from related constructs such as motives and attitudes, and can influence behaviour even in the absence of extrinsic motivation or positive attitudes. Accordingly, Cialdini (2006) proposes that people have a deep desire to be consistent, thus, once they are committed to something, they are more inclined to go through with it.

The ‘binding force’ mentioned in the definition is experienced as a mind-set and different mind-sets typify different dimensions of commitment. Meyer and Herscovitch (2001) examine different models of commitment concluding that three distinguishable themes emerge to characterise the distinguishable mind-sets, namely: a *desire* to follow a course of action; a *perceived cost* of failing to do so; and a *perceived obligation* to pursue a course of action.

6.2 Committed to what?

From the above paragraphs, it is clear that commitment has a target to which one becomes committed. Meyer and Herscovitch (2001) observe that a potential point of confusion in the commitment literature stems from whether people commit to a course of action or an entity. Based on a review of the literature they conclude that individuals can commit to both entities and behaviours. Two suggestions on the target of commitment are presented: 1) when commitment is directed at an entity the behavioural consequences are often implied, and 2) when commitment is considered to be directed at a course of action, the entity to which that behaviour is relevant can be inferred even if not stated explicitly (Meyer & Herscovitch, 2001). In other words, if taxpayer commitment is directed at the country (as an entity) and thus the interest of the collective, the behaviour of acting in a tax compliant manner can be inferred. Similarly, if the target of commitment is to act in a tax compliant manner, the entity to which that behaviour is relevant is ultimately the country (e.g. seeing the country as the instrument to offer increased possibilities for growth, development and prosperity for all).

Braithwaite (2002) associates commitment (as a motivational posture in tax compliance) with an obligation towards the country and the interest of the collective. Statements considered by Braithwaite (2002) to be good indicators of the posture of commitment are, among others:

1. Paying tax is a responsibility that should be willingly accepted by all taxpayers.
2. Paying my tax ultimately advantages everyone.
3. I think of tax paying as helping the government do worthwhile things.

It would thus appear that the target of commitment in a tax compliance context (according to Braithwaite's motivational posture of commitment) is the country and its citizens.

6.3 Dimensions of commitment

Meyer and Herscovitch (2001) admit that there is some disagreement in the literature on the dimensionality of organisational commitment. However, their analysis of a number of multidimensional frameworks also reveals some important similarities of which the most important one is that different mind-sets are presumed to characterise different dimensions of commitment. For the purposes of their general model of commitment, Meyer and Herscovitch (2001) label the dimensions of commitment with its accompanying mindsets as:

1. affective commitment, accompanied by a mindset of desire;
2. continuance commitment, accompanied by a mindset of perceived cost; and
3. normative commitment accompanied by a mindset of obligation.

Meyer and Allen (1991) state that these dimensions are not mutually exclusive, but that an individual may rather experience all three forms in varying degrees. Further, Meyer and Herscovitch (2001) propose that the strength of the different mind-sets can be measured and, together, can reflect an individual's commitment profile.

Solinger et al. (2008) make a case for the redundancy of the normative dimension of commitment based on findings from different studies that suggest it is difficult to empirically separate normative commitment from affective commitment. However, due to the exploratory nature of the present research in a tax compliance context, empirical proof of all three dimensions will be explored.

The three dimensions are explained and described below using their origins from the organisational behaviour literature and then discussed and applied in a tax compliance context.

6.3.1 *Affective commitment*

Meyer and Herscovitch (2001, p. 308) explain the affective dimension as 'the recognition that there is an important purpose in what one is doing'. The mind-set characterising affective commitment is desire. This means that 'individuals with strong affective (also referred to as moral or value) commitment *want* to pursue a course of action'. Factors that could impact such a mind-set of desire include involvement, shared values and identification. Meyer and Allen (1991) find that Kelman's (1958) taxonomy

of the bases for attitude change are of great relevance to affective commitment, especially the categories of 'identification' and 'internalisation'. 'Identification involves the acceptance of influence in order to maintain a satisfying relationship; internalisation involves acceptance of influence based on shared values' (Meyer & Allen, 1991, p. 75). In other words, 'identification' means individuals are willing to exert effort because of the benefits they derive from the relationship and 'internalisation' means individuals work towards a goal because in doing so they are behaving in a manner consistent with their own values.

In the human resource management context, commitment is about identifying with the goals and values of the organisation (Armstrong, 2007). Everest-Phillips (2008, p. 150) proposes that these goals can be translated as 'long-term state-building' which he describes as 'the process by which states enhance their ability to deliver essential public services, economic growth, political stability, and perceived legitimacy'. In a tax compliance context, it can thus be argued that the target or focus of commitment to tax compliance is the country and its perceived goals.

Based on the above descriptions, it appears that there are two distinct elements in the affective dimension of commitment: 1) there is recognition of a purpose (wanting to make a difference, identification and desire to be involved), and 2) there is a strong internal moral compass (acting consistently with one's own values).

These elements of affective commitment appear to have application in a tax compliance behaviour context. Braithwaite's (2002) description of commitment (that taxpayers with this motivational posture willingly accepts that paying taxes is a moral obligation and is in the interest of the collective) reflects the dimension of affective commitment. This sentiment of 'contributing to the common good' as an indicator of voluntary compliance, is also shared by Wahl, Kastlunger and Kirchler (2010); Wenzel (2007); Pickhardt and Prinz (2014); and Feld and Frey (2006), who all indicate its importance for the psychological contract. Torgler (2003) further suggests that altruism and a sense of integrity positively influence tax morale. It can thus be said that taxpayers' recognition of a *purpose* in paying taxes is that of recognising it as 'contributing to the common good'.

This recognition of a purpose relates to individuals' involvement in, and identification with, their country. MacGregor and Wilkinson's (2012) finding that patriotic individuals are significantly more positive about paying taxes to support their country and are more likely to believe in the progressivity of the tax system than non-patriotic individuals, confirm these factors from a tax compliance perspective. They also find strong evidence that patriotic taxpayers perceive tax evasion (tax cheating) to be unpatriotic. It is suggested that the factors of involvement, shared values and identification mentioned above are reflected in the concept of 'patriotism' as used by Macgregor and Wilkinson.⁴ Additionally, Alm and Torgler (2006), and Torgler and Schneider (2007) find evidence that 'national pride' is positively related to tax morale. Experimental evidence from Gangl, Torgler and Kirchler (2015) also suggests that

⁴ Patriotism is often perceived among the general populace as a love of, and devotion to, one's country, but it can take many forms. One specific form of patriotism that has been well established in the literature is economic patriotism, which is described as the coordinated behaviour of consumers and businesses to make decisions to benefit their national economy (Clift, 2009, as cited by MacGregor & Wilkinson, 2012, p. 161).

patriotism (defined as positive identification and feelings of affective attachment to one's country) seems to increase tax-compliance intention.

Hornik et al. (1995) explain that a psychological attachment to a cause results from internalising and identifying with the goals and values of the cause, and state that it acts as an internal facilitator to commit to the desired behaviour. People feel committed when they are proud of and can identify with their organisation. From a tax compliance perspective, Wenzel (2007) finds that taxpayers who exhibit strong group identification and identify themselves with their nation as a whole indicate more positive tax ethics and attribute greater legitimacy to the tax system. Torgler and Schneider (2007) also declare that citizens perceiving their interests (preferences) to be properly represented in political institutions, have a higher identification with the state and a greater willingness to contribute. The tax compliance literature therefore recognises, albeit indirectly, that affective committed taxpayers display a greater willingness to be tax compliant.

An observation made by Tyler (2006) supports the notion of the *moral compass* (the second distinct element of affective commitment). His research on 'why people obey the law' indicates that an internalised obligation is a characteristic of voluntary compliance and is derived from a person's desire to behave according to his or her own sense of personal morality. It means that a person will refrain from performing an activity if that activity is against his or her personal belief and convictions.

It would thus appear, based on the evidence from the literature presented here and assumptions made, that affective commitment could be discernible as a dimension of taxpayer commitment.

6.3.2 *Continuance commitment*

This dimension of commitment is characterised by the mind-set that 'it would be costly to discontinue a course of action' (Meyer & Herscovitch, 2001, p. 316). Meyer and Allen (1997, as cited by Meyer & Herscovitch, 2001, p. 316) add 'perceived lack of alternatives' as a mind-set that can accompany continuance commitment. This does remind us somewhat of what Braithwaite (2002) describes as a motivational posture of 'capitulation', in other words, a feeling of submission to the tax office with the perception that the tax office is a benign power as long as one acts properly and defers to its authority.

This perception of 'it would be costly to discontinue a course of action' may be interpreted as individuals' perception that the cost of non-compliance in terms of fines and penalties is too high (or even in terms of private psychic cost — see Pickhardt & Prinz, 2014) and therefore they would rather comply with tax laws. However, the literature on the role of deterrence in affecting compliance behaviour is divided. Some research supports the view that deterrence measures can positively affect compliance behaviour, while other research suggests that deterrence-based strategies can sometimes be counterproductive (Murphy, 2005; Pickhardt & Prinz, 2014). This interpretation seems to be speculative and further investigation is required.

The perceived lack of alternatives can also be interpreted as 'limited opportunities for non-compliance'. Kamleitner, Korunka and Kirchler (2012) state that opportunity has often been documented as a major explanatory factor in non-compliance. For example, Pickhardt and Prinz (2014) allude to the fact that it is quite difficult to evade taxes when

a tax administration makes use of third-party reported income (as opposed to self-reported income).

Based on the above discussion, it would appear that continuance commitment could be proposed as a dimension of commitment in a tax compliance context and that cost of non-compliance and limited opportunities for non-compliance could be the drivers of the mind-set of ‘you have no choice but to be compliant’.

6.3.3 Normative commitment

Meyer and Herscovitch (2001, p. 316) explain that normative commitment is ‘characterised by the mind-set that one has an *obligation* to pursue a course of action’. They report two conditions which may cultivate this type of commitment: 1) an individual has internalised a set of norms concerning appropriate conduct; and 2) the individual receives benefits and experiences a need to reciprocate.

Opp (2013) clarifies the term ‘internalised norms’ by stating that it means ‘the goal to follow a norm for its own sake’. It is thus of intrinsic value and does not consider external consequences. In other words, it relates to duty and obligation, and is synonymous with morality. Tyler (2006) argues that everyday compliance with the law is internalised as a social value by individuals when they experience procedurally just actions by authorities. Olsen (2015) reports on a survey which found that 86% of US taxpayers agree that it is ‘not at all acceptable to cheat on income taxes’ — thus illustrating a strong personal sense of integrity and obligation to obey the law. The distinction between affective and normative commitment in this respect is somewhat cloudy and appears to be lying in the mind-set of a desire to do the right thing versus a mind-set of having an obligation to do the right thing.

‘The need to reciprocate’ reminds us strongly of the psychological contract mentioned earlier in Section 4.1. The World Bank Report also indicates that peoples’ social tendencies urge them to value reciprocity and fairness, and cause an inclination to develop and adhere to common understandings and rules of behavior, whether or not they benefit from them individually or collectively (World Bank, 2015). McDonald and Makin (2000, p. 86) hold that this reciprocal obligation is based on ‘social exchange theory’ which suggests that ‘a person receiving a benefit is under a strong normative (i.e. rule governed) obligation to repay it in some way’. Research by Feld and Frey (2007) confirms the psychological contract as a factor shaping taxpayers’ willingness to comply (based on shared expectations and mutual trust between taxpayers and authorities). It can thus be argued that the dimension of normative commitment may be discernible in a tax compliance context as the acceptance of the obligation based on an internalised norm of compliance as an obligation and the need to reciprocate.

Table 1 below synthesises the discussion presented in Section 6 by summarising the underlying drivers of each mind-set to the different dimensions of commitment. In the last column in Table 1 the complementary factors of tax compliance as collected from earlier research are linked to the different dimensions of commitment.

Table 1: A synthesis of the dimensions of commitment, their accompanying mind-sets and drivers and links to factors of tax compliance

Dimension	Mind-set	Drivers	Complementary factors of tax compliance
Affective	Desire (want to)	• Recognition of purpose • Strong internal moral compass	• Contribution to the common good/altruism • Personal norms
Continuance	Perceived cost (no choice)	• Lack of alternatives • Possible deterrence	• Cost of non-compliance (penalties, fines) • Limited opportunity for non-compliance/ lack of alternative
Normative	Obligation (have to)	• Internalised social norms • Need to reciprocate	• Social norm of compliance • Psychological contract

Source: Authors' own summary

6.4 Behavioural implications of commitment

Meyer and Herscovitch (2001) observe that existing research suggests that affective commitment correlates more strongly with behavioural outcomes than continuance and normative commitment. They suggest that this may occur because the 'binding force' is not equal for all commitment dimensions. In other words, individuals who are committed primarily out of desire might have a stronger inclination to act in accordance with their commitment than those who commit primarily out of obligation or to avoid costs. This said, the probability that the focal behaviour (the behaviour to which the individual is bound by his/her commitment) will occur, is still considerably greater in all three dimensions than when commitment, in general, is weak.

Gangl et al. (2015) provide empirical evidence to suggest that committed motivations relate positively to tax compliance (as opposed to enforced motivations which relate in a negative way to tax compliance). The present paper aims to provide empirical evidence on the correlation between the different dimensions of commitment and the tax compliance intention of the selected population.

The present paper also focuses on the role that commitment plays in shaping an individual's willingness to comply with tax laws by applying what is known from the tax compliance literature to the different dimensions of commitment. Understanding the elements, formation and effect of the different dimensions of commitment, can lead to improved tax policy, administration and interventions by tax authorities. If commitment is a force that binds an individual to a course of action of relevance to one or more targets, authorities should consider what this target or goal is for their voluntary

compliant taxpayers. Is it a safe, prosperous country? Is it a country without corruption, or a country with equal opportunities for all?

6.5 A model of commitment for understanding tax compliance behaviour

As suggested earlier in Section 4.1, a *mental model of commitment* can exist which shapes taxpayers' willingness to be compliant. It has been proposed throughout the present paper that other factors of tax compliance that were, and still are, the focus of many studies on tax compliance behaviour, complement and contribute to the various dimensions and mind-sets of commitment. The suggested commitment model provides an additional tool to those that already exist in the literature to use in approaching and understanding tax compliance behaviour. It therefore adds to a horizontal widening of tax compliance literature and provides scholars with new avenues for research.

The model is illustrated in Figure 1 below. Note that commitment is presented as the primary factor persuading the willingness to comply, whereas other factors are secondary in that they influence the various dimensions. Although the model is largely based on the general model of workplace commitment proposed by Meyer and Herscovitch (2001), it is revised to have application in a tax compliance context.



Figure 1: A model of commitment in the context of tax compliance behaviour

(Source: Authors' own design based on Meyer and Herscovitch (2001, p. 317))

7. RESULTS AND DISCUSSION OF THE EMPIRICAL ASSESSMENT OF THE MODEL

The empirical results presented in this section firstly relate to determining whether the tax compliance intention of the population surveyed results in a two-factor solution, namely administrative and technical compliance. Thereafter, it will be determined whether individuals identify with these three proposed dimensions of commitment within a tax compliance context. Further, the correlation and significance of the correlation between each dimension and the individual's willingness to comply will be analysed. The finding reported by Meyer and Herscovitch (2001), namely that affective commitment correlates more strongly with behavioural outcomes than continuance and normative commitment, will also be examined to see if it holds true for tax compliant behaviour.

7.1 Results for the tax compliance intention scale

The five items of the tax compliance intention scale were subject to principal components analysis after the data was found suitable for factor analysis supported by the Kaiser–Meyer–Oklin value at .632 (exceeding the recommended value of .6 (Pallant, 2007)) and the Bartlett's test of sphericity reaching statistical significance.

Principal components analysis revealed the presence of two components with eigenvalues exceeding 1, explaining 44.6% and 25.1% of the variance respectively. The scree plot also supported a two-factor solution. Similar to the findings of Gangl et al. (2013) on the tax compliance intention scale, the factor analysis thus resulted in a two-factor solution with one factor corresponding to administrative compliance and the second to technical compliance.

The pattern matrix shows good discrimination between the two factors while the structure matrix displays a relatively clear two-factor solution (see Table 2 below). Some cross loadings are noted: item 3 (an administrative item) loaded on the technical factor although the loading on the administrative factor is relatively higher (.722 vs .310); item 5 (a technical item) also cross loaded on the administrative factor, but with a relatively higher loading on the technical factor (.906 vs .300).

Table 2: Pattern and structure matrix for tax compliance intention scale

	Pattern matrix		Structure matrix	
	Component		Component	
	Admin	Technical	Admin	Technical
B1 To what extent do you think it is important that SARS receives as accurate as possible a tax return from you?	.846		.836	
B2 To what extent do you think it is important that SARS receives the tax return in time?	.784		.768	
B3 To what extent do you think it is important that if, after assessment, you need to pay additional tax, SARS receives the money before the deadline?	.689		.722	–.310

*rB4 To what extent would you consider falsifying or overstating deductions on your tax return?		-.925		-.912
*rB5 To what extent would you consider not stating all of your earnings on your tax return?		-.890	.300	-.906

*r indicates the scale was reversed for these items

The reliability of the scales measured with the Cronbach Alpha (α) supported a two-factor solution, with $\alpha = 0.67$ for administrative compliance items and $\alpha = .796$ for the technical compliance items. Although $\alpha = .691$ for the items as a single scale is acceptable, it was decided to keep to two factors for tax compliance intention for the purposes of correlation analysis with the dimensions of commitment and not to combine it into a single scale. In a later section, the results of the correlation analysis between these factors and the dimensions of commitment are presented.

7.1.1 Dimensions of commitment

The 15 statements on commitment stated in respect of tax compliant behaviours were analysed using principal component analysis with the purpose of determining the discernibility of the three dimensions of commitment suggested by the literature. The suitability of the data for factor analysis was confirmed with a Kaiser–Meyer–Oklin value at 0.874 and a significant Bartlett’s test of sphericity ($p < .001$).

Factor extraction using principal components analysis, resulted in only two underlying factors or dimensions which explained 35.29% and 11.55% of the variance in the data set. This is evident from the result of Kaiser’s criterion which reveals two factors with an eigenvalue of more than 1.0 and Catell’s scree test indicating two factors above the break in the plot. Another factor could possibly be extracted as it had an eigenvalue of 1.0 and showed a little break after the second factor in the scree plot. The possible third factor also explained a further 6.67% of variance in the data set resulting in a total of 53.5% variance explained.

Following oblimin rotation, the pattern and structure matrix (see Table 3 below) shows that ten items load strongly (above .5) on component 1 (a combined affective/normative dimension) and 4 items load strongly on component 2 (the continuance dimension). One item (statement 16) shows inconsistency in loading neither substantially on the affective scale nor on the continuance scale ($< .46$ on both scales). Although items 22, 23 and 25 also display cross loadings, these items show relatively higher loadings on the continuance scale as is illustrated in Table 3 below.

Table 3: Pattern and structure matrix for commitment scale

	Pattern matrix		Structure matrix	
	Component		Component	
	Affective/ normative	Continuance	Affective/ normative	Continuance
C18 When I pay taxes I do so because my taxes fund important government services.	.771		.770	
C15 When I pay taxes, I really want to do so because it is the right thing to do.	.757		.754	
C19 When I pay taxes, I do so, because it is an important civic duty.	.739		.758	
C12 I think of tax paying as helping the government to do worthwhile things.	.727		.737	
C21 When I pay my taxes I do so because I receive benefits and experience a need to reciprocate.	.717		.715	
C13 Overall, I pay my tax with good will.	.699		.704	
C14 I resent paying tax.	-.645		-.601	
C17 Paying tax is a responsibility that should be willingly accepted by all South Africans.	.610		.614	
C11 When I pay taxes, I do so because it is ultimately in everyone's interest.	.576		.582	
C20 When I pay taxes, I do so because I feel a moral obligation to pay taxes.	.502		.541	
C16 It is important to me to act in a tax compliant manner.	.372	.366	.453	.448
C24 I can't risk putting in less than the required effort to be tax compliant.		.708		.730
C25 I have a lot to lose if I am not tax compliant.		.669	.303	.703
C23 I feel as if I have little choice but to be tax compliant.	-.349	.647		.570
C22 It could be costly for me if I don't pay my taxes.		.618	.308	.656

Following the inconsistency of item 16, it was decided to remove the item and conduct a new principal component analysis. Factor extraction resulted in only two underlying factors with eigenvalues exceeding 1 which explained 36.20% and 12.09% of the variance in the data set. The pattern and structure matrix revealed two factors or dimensions in the data set after Oblimin rotation with factor loadings exceeding .50. Statements 11–20 (excluding 16) represent a single dimension of commitment (which will collectively be named the ‘affective dimension’) and statements 21–25 represent the ‘continuance dimension’ of commitment. Although statement 23 and 25 show crossloadings, the loadings on the continuance scale are significantly higher (loadings for all three statements exceed .60 on the continuance scale and are below .32 on the affective scale).

The theory on the possible dimensionality of commitment in a tax compliance context reviewed in the present research, suggests the existence of three dimensions (affective, normative and continuance). However, Solinger et al. (2008) provide evidence of inconsistencies in empirical research, suggesting that it is difficult to separate normative commitment from affective commitment empirically. This has led earlier researchers to regard the normative dimension as redundant and raises the question about whether the affective and normative dimension are worth being explored as two distinct dimensions in a tax compliance context.

Solinger et al. (2008) are of the opinion that although Meyer and colleagues revised and improved the instruments used for measuring continuance and normative commitment, the underlying problem with these components is conceptual rather than empirical in nature.

It thus appears that a two-dimensional commitment model representing an affective and a continuance dimension best fit the data, not a three-dimensional model. Although a three-dimensional model is imaginable, in line with evidence presented by Solinger et al. (2008), the present study could not empirically distinguish between the normative and affective dimension of the data. Solinger et al. (2008) thus maintain, based on evidence from a number of studies, that the affective component represents the most reliable and strongly confirmed dimension of organisational commitment.

7.2 Correlation analysis

7.2.1 *Relationship of dimensions of commitment to tax compliance intentions*

Similar to Braithwaite’s (2002) assumption that the different qualities of taxpayers’ motivations are related to different types of tax compliance, the present study aims to determine the correlation between the identified dimensions of commitment and the tax compliance intentions. The results of the correlation analysis are presented in Table 4.

Table 4: Spearman's rank order correlation between the tax compliance intention factors and the dimensions of commitment

	1	2	3	4
1. Administrative compliance	—	.331**	.278**	.255**
2. Technical compliance		—	.273**	.143*
3. Affective commitment			—	.319**
4. Continuance commitment				—

** $\rho < .01$ (2-tailed)

* $\rho < .05$ (2-tailed)

Although there are only moderate to weak correlations between the dimensions of commitment and the tax compliance intentions, the relationships are in the direction as expected. In other words, the higher the commitment to being tax compliant, the more positive the intention to comply will be. As the theory on commitment in an organisational behaviour context suggests, the relationship between continuance commitment and tax compliant intention is slightly lower than that of the affective dimension. It could thus be postulated that it is desirable for tax authorities to foster affective commitment and to determine what taxpayers' target of commitment is.

8. CONCLUSION

The present paper has explored the possibility of using a model of commitment to analyse tax compliant behaviour. Taxpayers may hold this as a mental model, in other words, a common perspective on making sense of their tax compliance decision and understanding themselves, thus thinking with a 'commitment model' in the decision to be tax compliant or not.

Based on the general model of commitment proposed by Meyer and Herscovitch (2001), a model specific to tax compliance behaviour was developed. The affective, continuance and normative dimensions appear to be theoretically valid in a tax compliance context although the empirical results could not confirm the existence of the normative dimension. A model indicating the dimensions, their underlying mind-sets and drivers is illustrated with Figure 1 (see Section 6.5), but further research is needed to determine whether all three dimensions can be detected in taxpayers' compliance decisions. The drivers proposed in the model are derived from previous theoretical and empirical findings in the tax compliance literature and were included to support the various mind-sets.

Statistical analysis confirmed a positive (although weak) correlation between taxpayer commitments and their tax compliance intention. In line with Meyer and Herscovitch's (2001) findings, the affective dimension seems to have a slightly stronger correlation than the continuance dimension (since the normative dimension could not be differentiated, no correlation analysis was performed for it). It is therefore suggested that tax authorities should foster affective commitment and help taxpayers see how being tax compliant is relevant to the goals of their country.

8.1 Implications of the model

The proposed model of commitment for tax compliance behaviour has implications for further research and could also be a useful tool for tax authorities and researchers to analyse and understand taxpayers' willingness to comply with tax legislation. Further research could be done to validate the two- or three-dimensionality of the proposed model and to refine the scale for measuring the different dimensions. The drivers (or factors of tax compliance) underpinning the various mind-sets could also be extended to create a more complete model. In addition, the influence of demographical factors such as gender, age, culture and tax knowledge in the different dimensions could be evaluated.

Tax authorities may use the model to, in the words of Olsen (2015, p. 31), try and understand 'what makes taxpayers tick'. By understanding how taxpayers are committed to being tax compliant, tax authorities can foster and encourage these mind-sets, specifically the mind-set of 'desire' that underpins the affective dimension. Meyer and Herscovitch (2001, p. 323) propose that to foster affective commitment, individuals should 'believe in the value of what he or she is doing'. To this extent an initiative to foster committed motivation, cited by Gangl et al. (2015), suggests improved communication on how public goods, such as schools, are financed with tax money.

8.2 Limitations of the research

A large sector of the population surveyed (almost 64%) consists of undergraduate students who are not in full-time employment and who are therefore probably not registered taxpayers and not experienced in paying taxes. The validity of their opinions, as surveyed by the questionnaire to assess the distinguishability of the dimensions of commitment in taxpayers, may therefore be questionable. However, research on tax compliance using student populations is commonly found in the literature (see, for example, Kochler et al., 2013; Kasipillai, Aripin & Amran, 2003; Molero & Pujol, 2012). Moreover, Alm, Bloomquist and McKee (2015) report that the behavioural responses of students are largely the same as those of non-students in laboratory experiments on tax compliance.

The findings of this study depended on the honesty of the respondents and thus it is possible that social desirability may have played a role in responses provided to questions. A factor that may also have played a role in how respondents reacted to questions of this nature is the current political and economic climate. South Africa in particular, is a young democracy and known as a country that has high levels of inequality. To mitigate this, results will need to be gathered over a longer time period and consideration given to the influence of political or economic events.

A third limitation is that all respondents were drawn from a single institution (the University) and institutional culture may have caused bias in respondents' perceptions and beliefs about a phenomenon like tax behaviour. The large group of postgraduate students participating in the study who are all employed at different corporations with no affiliation to the University, may have mitigated this influence, if at all present.

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