

Tax Compliance Costs For the Small and Medium Enterprise Business Sector: Recent Evidence from Australia

Chris Evans

Phil Lignier

School of Taxation and Business Law

School of Accounting & Corporate Governance University of Tasmania

University of New South Wales

Binh Tran-Nam

School of Taxation and Business Law

University of New South Wales

Discussion Paper: 003-13







TAX COMPLIANCE COSTS FOR THE SMALL AND MEDIUM ENTERPRISE BUSINESS SECTOR: RECENT EVIDENCE FROM AUSTRALIA*

Chris Evans[†]

Phil Lignier[§]

Binh Tran-Nam[◊]

Tax Administration Research Centre Seminar

University of Exeter Business School

26 September 2013

*This paper is part of an Australian Research Council (ARC) Linkage project being conducted by the authors in conjunction with Rick Krever (Monash University) and Jeff Pope (Curtin University), together with the Institute of Chartered Accountants in Australia (ICAA). The Australian Taxation Office (ATO) assisted with sample selection and the support of Andrew Wirth is in particular appreciated. The views expressed in this paper are those of the authors and not necessarily those of the ARC, ICAA or ATO.

[†] School of Taxation and Business Law, The University of New South Wales, and International Fellow, Tax Administration Research Centre, University of Exeter <cc.evans@unsw.edu.au>.

[§] School of Accounting and Corporate Governance, University of Tasmania, Australia

 $^{\diamond}$ School of Taxation and Business Law, The University of New South Wales, Australia.

1 Introduction

The burden imposed by taxation systems on business taxpayers, in particular on small and medium business taxpayers, has been a much debated topic in many academic and practitioner forums. As has been noted previously (Evans, 2008: 447), that burden typically consists of three elements. In the first place there are the taxes themselves, whether they are taxes on the profits, the products or the employees. Secondly, there are the efficiency costs (variously referred to as deadweight losses or excess burden), involving tax-induced market distortions. And finally there are the operating costs of the tax system: the costs to the government (ultimately borne by taxpayers) of administering and collecting the taxes (usually referred to as administrative costs), and the costs incurred by taxpayers in complying (or sometimes not complying) with their tax obligations (usually referred to as compliance costs).

Once labelled as the "hidden costs of taxation" (Sandford, 1973), tax compliance costs have become an established field of international study, thanks to the efforts of many tax scholars around the world, particularly Sandford (see, for example, Sandford, 1973; Sandford and Hasseldine, 1992; Sandford, 1995). As a result there are now a large number of published empirical studies on tax compliance costs using the methodology, and refinements of it, developed by Sandford. Over the past four decades, tax compliance cost studies have spread from 'initial' countries (USA, Canada, Germany and the UK) to virtually all parts of the globe, including Western Europe (Ireland, Netherlands, Spain, Portugal, Sweden and Switzerland), Australasia (Australia and New Zealand), Asia (Singapore, Malaysia, Hong Kong, India, South Korea), Eastern Europe (Croatia and Slovenia), Africa (Tanzania, Ethiopia and South Africa) and South America (Brazil). The World Bank has recently sponsored various surveys of business tax compliance costs in many developing countries including Armenia, Burundi, Georgia, India, Kenya, Lao PDR, Nepal, Peru, South Africa, Ukraine, Uzbekistan, Vietnam and Yemen (see Coolidge, 2012).

Previous research has provided ample evidence that the tax compliance costs are significant for Small and Medium Enterprises (SMEs) in most Organisation for Economic Cooperation and Development (OECD) tax jurisdictions. They are particularly high in absolute terms and relative to the size of the business, whether measured by reference to turnover, income, number of employees or any other proxy. The research also shows that those compliance costs do not appear to be diminishing over time (Evans, 2008). The rise of tax compliance costs for the small business sector in Australia was confirmed by a recent small-scale survey (Lignier and Evans, 2012).

This paper presents the preliminary outcomes of a large-scale survey conducted in Australia in early 2013 that investigated the tax compliance costs from all taxes (federal and state/territory) for Australian business taxpayers (and particularly the SME business sector) in the 2012 fiscal year. The study was part of a broader project designed to assess and address tax system complexity, and was complemented by surveys identifying the compliance burden of Australian non-business taxpayers and of large and international business taxpayers

(separately reported). The overall project was funded by the Australian Research Council in collaboration with the Institute of Chartered Accountants in Australia, and vital assistance was provided by the Australian Taxation Office (ATO). It is the first independent large-scale survey of tax compliance costs conducted in Australia since the introduction of the Goods and Services Tax (GST) in 2000. The research will have implications for academics, tax policy-makers and administrators, as well as for practitioners in the SME and related sectors.

The main objectives of the study were to assess the level of the tax compliance burden through the identification and estimation of typical internal and external costs incurred while complying with tax obligations, and to identify the principal drivers of those tax compliance costs as perceived by taxpayers. A further objective was to establish to what extent tax compliance costs for the sector may or may not have changed in the period since the last major survey of SME business compliance costs in the 1995 fiscal year (Evans et al, 1997).

A postal survey (which also gave the opportunity for online responses) was sent to nearly 10,000 business taxpayers selected by the ATO on the basis of disproportionate, stratified, random sampling. A sample of 682 usable responses was collected, resulting in a 7.5 per cent response rate.

Preliminary analysis of the survey results suggest that the average gross tax compliance costs for the SME business sector were A\$13,313 per firm per year, an apparent increase of 150 per cent in constant dollar terms since 1995 (Evans et al, 1997).¹ Internal time spent by owners and employees was valued at A\$7,750, and the average firm incurred further costs of A\$5,653 in external tax services. While a small decrease in internal tax compliance hours has occurred since 1995, the average amount spent on external services has more than doubled in constant dollar terms.

Average gross compliance costs in absolute terms increased as the firm grew in size: A\$2,844 for a micro business (annual turnover <A\$75,000); A\$9,356 for a small entity (annual turnover: A\$75,000-A\$1,999,999); A\$47,411 for a medium sized entity (annual turnover A\$2 million-A\$50 million). However, the compliance burden measured as a proportion of turnover was much more significant for micro businesses (A\$75.84 per A\$1,000 of turnover) than for small businesses (A\$14.09) or medium entities (A\$3.34). Confirming recent findings (Lignier & Evans, 2012), GST led all other tax obligations in terms of compliance time, representing between 33 per cent (medium sized entities) and 50 per cent (micro businesses) of total hours spent internally on tax related activities.

Another key outcome of this study was the clear perception among respondents that the complexity of tax laws, the frequency of tax changes and the administrative requirements imposed by the ATO were significant drivers of tax compliance costs for their business. This perception was particularly strong among medium sized entities, as was the opinion that

¹ Note that this estimate of 150 per cent is subject to qualifications and may be at the upper end of the likely increase. See Section 4.4 below for a more detailed analysis.

compliance with obligations imposed by state/territory taxes (for example payroll tax) was especially costly.

The remainder of this paper is structured as follows. After a brief review of the literature on tax compliance costs (Section 2), Section 3 describes the implementation of the survey and discusses some of the conceptual issues relevant to this research. Results are presented and analysed in Section 4, while in Section 5 the outcomes of this study are summarised and their implications are discussed in the context of the existing research in this area.

2 Literature review

2.1 Business taxpayers face significant compliance costs and the impact is heavier on SMEs

The cost of complying with regulations, and most prominently the cost of complying with tax obligations, has been a topic of interest for a number of years among academics, government policy makers and business organisations. Contemporary research in the area was pioneered by Sandford (1973) and later by Sandford et al (1989), who examined the cost of complying with Valued Added Tax (VAT) and other taxes for taxpayers in the United Kingdom (UK) in the 1970s and 1980s. Further empirical research of tax compliance costs has been undertaken in many OECD and non-OECD countries since Sandford's seminal work in 1973. In Australia, the costs of tax compliance of business taxpayers have been examined in a number of studies including work by Pope (1995), Evans et al (1996; 1997), Tran-Nam et al (2004), McKerchar et al (2006), and Lignier and Evans (2012).

Sandford (1989: 22) defined tax compliance costs as "[t]he costs incurred by taxpayers in meeting the requirements laid on them by the tax law and the revenue authorities [...]". Most published research adheres to the convention established by Sandford and distinguishes between *gross* compliance costs and *net* compliance costs (Sandford et al, 1989,: 13-14). Net compliance costs are defined as the gross compliance costs less tax compliance benefits which include tax deductibility benefits, cash flow benefits, and managerial benefits. Tax deductibility benefits result from the fact that business taxpayers are entitled to tax deductions for some of the compliance costs they incur (Tran-Nam et al, 2000: 233). Cash flow benefits arise because of the difference between the time when the tax is collected by the taxpayer and the time when it is actually handed over to the tax authorities (Tran-Nam et al, 2000: 232). Managerial benefits may be derived by the taxpayers, and in particular business taxpayers, where the more stringent record keeping requirements imposed by tax compliance result in the production of managerial accounting information available for decision making and other business purposes (Sandford et al, 1989: 89; Lignier, 2006: 416).

As noted in the introduction, the overall findings from the tax compliance costs research suggest that tax compliance costs are large and fall disproportionately on small business taxpayers. The growing complexity of tax systems, the introduction of VAT or Goods and Services Tax (GST) legislative regimes (generally associated with high compliance costs) and the increased emphasis placed on self-compliance and self-assessment are among the reasons generally put forward to explain the increasing interest in tax compliance costs research (Sandford, 1995: 375).

In Australia, a series of studies led by Pope (1995) investigated the cost of complying with specific taxes. On average, tax compliance costs for every A\$100 of tax revenue raised were A\$9.15 for personal income tax, A\$22.93 for corporate income tax and A\$10.62 for Fringe Benefits Tax (FBT). Pope (1995: 105) also found that the burden of compliance was proportionally greater upon small businesses where compliance costs represented A\$16.70 for every A\$100 of tax revenue for employer's PAYE and A\$42.10 for FBT.

The first large scale Australian survey investigating the impact of compliance with all federal taxes was conducted by Evans et al in 1995. This study estimated the average gross compliance costs for Australian business taxpayer at A\$5,624,² while the net compliance costs (after deduction of tax deductibility benefits and cash flow benefits) were estimated at A\$2,945 (Evans et al, 1997: 52). The disproportional impact of tax compliance costs on small businesses appeared obvious when tax compliance costs were compared to annual turnover. Thus the average gross compliance costs per A\$1,000 of turnover were only A\$1.84 for large businesses and A\$1.74 for medium businesses, but A\$34.13 for small businesses (Evans et al, 1997: 79), while net compliance costs after deduction of tax deductibility and cash flow benefits were A\$0.98 per A\$1,000 of turnover for medium businesses and A\$24.71 for small businesses.³ Large businesses, which enjoyed significant cash flow benefits, had negative net compliance costs of A\$0.60 per A\$1,000 of turnover (1997: 81).

A smaller scale study by Lignier and Evans (2012: 647) found that in the 2010 fiscal year Australian SMEs with less than 50 full time equivalent (FTE) employees incurred average gross compliance costs of A\$33,944. Although the small sample used in that study warrant some caution in the interpretation of results, the findings from that study would suggest that tax compliance costs in the small business sector in Australia had grown sharply over a 15 year period.

² These are current Australian dollar values as at the June 2012 quarter. Conversions of historical dollar values into current 2012 values are based on the Consumer Price Index (CPI) rates published by the Australian Bureau of Statistics with the index reference base 2011-12. <u>http://www.ato.gov.au/Rates/Consumer-price-index/</u> viewed 30/7/2013. Unless otherwise indicated, all dollar amounts in this paper are expressed in Australian dollars at 2012 current values.

³ The definition of small, medium and large businesses adopted by Evans et al used the then relevant ATO classification based on annual turnover: small businesses annual turnover less than A\$100,000; medium business annual turnover: A\$100,000- A\$9.99 million; large business: annual turnover A\$10 million and above.

2.2 The drivers behind tax compliance costs

From a tax policy perspective, it is important to look beyond the measurement of tax compliance costs and consider the factors that may determine their magnitude. In other words, what are the features of a tax or a tax system that potentially generate high compliance costs? A number of factors are considered by Shaw et al (2008: 20) in their work for the UK Mirrlees Review on administration and compliance costs. The main line of the argument made in that submission is that compliance costs tend to be lower where the tax is simple, i.e. where the tax has one rate or few rates and where it has few borderlines and reliefs. They also note that when looking at the tax system as a whole, the use of common definitions and procedures across different taxes reduces compliance costs for the taxpayers by decreasing the number of calculations that need to be made.

In addition to the underlying complexity of the tax or tax system, the research also indicates that frequency of change can be a significant driver of tax compliance costs. As noted in a KPMG Report (2006: 6) "change creates both cost and uncertainty". Frequent change in legislation, or the introduction of new legislation, can significantly impact upon the compliance burden, and it does not matter whether that change is as a result of the introduction of a relieving provision or the introduction of an integrity measure designed to protect the revenue base. In this sense, "an old tax is a good tax". The notion is that change interferes with the smooth operation of the tax administrative machinery that facilitates the interactions that necessarily occur between taxpayer and revenue authority, which takes time to settle down to cope with change. Research by Evans (2003), which considered the major drivers of the compliance costs of the capital gains tax for personal taxpayers in Australia and the UK, confirmed that "frequency of change" was considered to be one of the two most significant of the causes of the compliance burden – the other being complexity.

The literature also suggests that the nature of the tax itself may also be a driver of compliance costs. Compliance with specific taxes can have a significant impact on overall compliance costs for taxpayers. Taxes such as the VAT or GST in particular are often associated with high compliance costs because they are transaction based taxes that requires comprehensive record keeping and periodical reporting and remitting (Sandford et al, 1981). Hence one plausible explanation of the sharp increase in Australian small business compliance costs between 1995 and 2010 identified by Lignier and Evans (2012) may have been the introduction of the GST in 2000. In fact, in 2010, internal compliance time attributable to the GST was estimated at A\$11,111, representing more than half of total internal costs (Lignier and Evans, 2012: 640).

Another important component of tax compliance costs is the cost of learning about new taxes or about tax changes. The 1995 Evans et al study reveals that nearly 26 per cent of business taxpayers sought external advice about changes in tax laws (Evans et al, 1997: 97). Meanwhile internal time spent annually by all categories of people on tax activities included 14.4 hours spent on learning about existing taxes and 9.36 hours spent on learning about tax

changes (Evans et al, 1997: 100). A similar picture emerges from the 2010 survey with 27 hours spent on average each year learning about tax (Lignier and Evans, 2012: 634).

The processes and procedures used for calculating and remitting the tax may also be a driver of compliance costs. As a general rule, the higher the reliance on the taxpayer to calculate the tax, the higher are the compliance costs (and the lower administrative costs for the tax authorities) (Shaw et al, 2008: 21). The introduction of self-assessment regimes in Australia in the last few decades certainly had a large impact on the shift of the operating costs burden from the tax administration to taxpayers – so much so that there is now overwhelming evidence suggesting that compliance costs considerably exceed administration costs (Slemrod, 2009: 258). Evans (2008: 457) notes that taxpayer compliance costs are often a multiple of between two and six times administrative costs. The widespread introduction and use of withholding regimes (whereby the tax is remitted by someone other than the statutory bearer of the tax liability) has important compliance costs implication for businesses who must, as a result, keep a sophisticated record keeping system (Shaw et al, 2008: 24). For example, internal time spent on record keeping in relation to employment withheld taxes and superannuation charges exceeded 25 hours per year according to a 1995 study (Evans et al, 1996: 101).

3 Methodology

This section first discusses some relevant conceptual issues which had to be considered for the conduct of this research project, including the classification of businesses and the measurement of compliance costs. It then describes the procedures used in the selection of the sample, the design of the survey instrument and the implementation of the survey.

3.1 Conceptual issues

Business classification: what is an SME?

The ATO categorises business taxpayers on the basis of annual business income into five categories: *micro* entities: annual turnover under A\$2 million; *small* entities: annual turnover more than A\$2 million but less than A\$10 million; *medium* entities: annual turnover more than A\$10 million but less than A\$100 million; *large* entities: annual turnover more than A\$100 million but less than A\$250 million; and *very large* entities: annual turnover over A\$250 million (ATO, 2013: 3).

While the scope of this survey was the general population of business taxpayers, a separate survey of large business taxpayers was undertaken concurrently to the present research. There were two reasons for conducting two separate surveys. Firstly, logistical reasons made it easier to implement a distinct survey for the population of large businesses as these entities are managed separately by specialised sections of the ATO and could therefore be

approached directly.⁴ Secondly, previous research undertaken, mostly in the United States (US) and Canada, indicates that tax compliance costs issues confronting large businesses are quite different from those confronting smaller entities. Therefore a distinct survey instrument was appropriate for this cohort of business taxpayers.⁵ As a result of this strategy, the study reported in this paper focuses solely on a sample of business taxpayers ranging from micro businesses to medium sized entities (effectively businesses with an annual turnover up to A\$100 million). Results for the large business sector will be separately presented.⁶

It is worth noting that the ATO business size classification differs significantly from other business classifications commonly used in Australia, and from the definition of a "small business entity" in section 328-110 of the 1997 Income Tax Assessment Act (ITAA). The Australian Bureau of Statistics (ABS), for example, classifies business entities by employment size rather than by turnover size. According to the ABS classification, entities are classified as a micro business if they employ less than 5 people, a small business if they employ 20 people or more but less than 20 people, a medium business if they employ 20 people or more but less than 200 people and a large business if they employ 200 people or more (ABS 2002). In addition the ITAA provides a number of reliefs and concessions (including capital gains tax deferrals and exemptions) for what it terms "small business entities". For these purposes a small business entity is an entity with an annual turnover of less than \$2 million.

Tax compliance cost studies, with very few exceptions, have tended to use annual turnover, rather number of employees, as the criteria for business size.⁷ This is the case of the more recent surveys of tax compliance costs in Australia (Evans et al, 1997; Lignier & Evans, 2012). For these reasons, the business classification adopted for this research project was determined on the basis of annual turnover; however the categories differed slightly from the size categories defined by the ATO. Two thresholds were considered significant in respect of tax compliance obligations: the GST threshold of A\$75,000 under which entities may opt not to register for GST⁸ and the A\$2 million threshold corresponding to the ITAA definition of a small business entity. This second threshold is significant in respect of the different small business concessions which cease to be available once the business grows over A\$2 million. For the purpose of this research, entities under the A\$75,000 turnover threshold are referred to as "micro businesses" and those over A\$2 million and up to A\$100 million are referred to as SMEs.

⁴ Two dedicated branches of the ATO manage relationships with very large businesses: the Key Client Management unit (KCM) and the Client Relationship Management unit (CRM).

⁵ For a review of tax compliance costs in the large business sector, see Slemrod and Blumenthal (1996); Erard (2001); Slemrod and Venkatash (2002).

⁶ Paper to be presented at National Tax Association Conference, Tampa, November 2013.

⁷ An example of a study using the number of employees as a determinant of size is Allers' study of business compliance costs in the Netherlands (Allers, 1994).

⁸ Section 23-15(1), A New Tax System (Goods and Services Tax) Act 1999.

Measurement of compliance costs: what should be included?

Although there is some debate in the literature about the precise meaning of tax compliance costs and how these costs can and should be measured, most authors adhere to the convention that breaks down gross tax compliance costs into three broad components:

- explicit costs represented by monetary outgoings paid to external parties, such as tax agents and tax advisers;
- implicit costs represented by the time spent by taxpayers, unpaid helpers and internal paid employees; and
- non-labour costs (also referred to as incidental costs) corresponding to business overhead costs such as equipment, computers, stationery, travel etc (Tran-Nam et al, 2000: 236).

Beside those measureable costs, taxpayers may also experience psychic costs in the form of stress, anxiety and frustration imposed upon them by complying with their obligations and dealing with tax authorities (Tran-Nam et al, 2000: 234). Psychic costs, although not insignificant, are typically subjective and difficult to measure, and for this reason were excluded from the scope of this study.

The valuation of incidental costs is also problematic and requires an accounting system providing reliable tracking and apportionment of overhead costs; such an accounting system is often not present in small businesses. For this reason, and also because incidental costs are likely to be negligible in small entities, they have often been disregarded in compliance costs studies (Sandford et al, 1989: 12).

The measurement of explicit costs should be straightforward in theory as they are represented by cash expenditures incurred by the taxpayer. In practice, however, difficulties in measurement may arise, especially in the case of SMEs where tax related and other of types services such as accounting services are often provided by the same third party and the costs are not easily disentangled. This problem is made even more complex by the fact that it is not always clear in the mind of the taxpayers whether a particular activity (for example record keeping) should be classified as "accounting" or as "tax related". The current survey attempted to address this problem by asking respondents to report accounting and tax related expenditures separately, but also by asking respondents to identify any overlap between the two functions.

The same disentanglement issue exists in relation to internal time. In an effort to avoid confusion between accounting and tax related activities, the questionnaire asked respondents to report separately time spent on core accounting functions such as customer billing and cash monitoring and "pure" tax compliance activities.

Measurement and valuation of compliance time

Measurement of compliance time was based on time spent on various tax related activities reported by survey respondents for the 2012 fiscal year (1 July 2011 to 30 June 2012). The questionnaire required respondents to report *annual* hours. There are disadvantages and advantages in collecting annual time rather than monthly or quarterly time. Recurrent tax compliance activities are typically performed on a regular basis with different periodicities. For instance, record keeping may be carried out on a weekly or monthly cycle, Business Activity Statements (BAS) completed on a quarterly cycle, but other tasks relating to income tax returns preparation, Fringe Benefits Tax calculation (with a 31 March year end) or tax planning activities will generally be performed once a year. Consequently, respondents may well recall the number of hours they spent each week or month on record keeping, each quarter on completing their BAS etc. However, collecting data for different taxes with different reporting cycles would have made the questionnaire extremely complex and could have presented a potential threat to the validity of the data.

Historically some surveys have asked respondents to provide a monthly average where the activity was not performed every month (Evans et al, 1996: Appendix 2-9). However, for the purposes of the current study, it was considered that it would be easier for respondents to report and calculate annualised times (by multiplying instead of dividing) as this would minimise the risk of getting poor quality data.

Respondents were asked to write "zero" where no time was spent on a particular activity for a particular tax, in accordance with Sandford's position that where no time is spent on the tax, the answer should be counted as "zero" (Sandford, 1995: 396). Previous experience with time data collection suggests that some respondents would still leave cells blank even when asked to enter "zero", making it impossible to differentiate between a blank cell meaning "zero" time spent on the activity and a cell left blank because the respondent had either skipped the question or could not recall the time. In view of this experience, the researchers agreed that where respondents had answered a question collecting data about internal time, a blank cell would be interpreted as meaning that "zero" time was spent on the particular tax activity.

A second issue related to implicit costs is how to value internal time. This is another contentious issue which has been abundantly discussed in the literature.⁹ For tax compliance activities undertaken by employees of the business, the labour costs can be satisfactorily valued at the prevailing before tax market rates for different categories of personnel. Following the methodology used in the study of tax compliance costs undertaken by the New Zealand Inland Revenue in 2009 (Inland Revenue, 2010: 26), hourly rates available from the Survey of Employee Earnings carried out by Hays Personnel (Hays, 2013) were used in the current study to value employee time.

⁹ For a discussion of the time valuation issue see Pope (1995: 101).

Valuing time spent on tax activities by unemployed proprietors and unpaid helpers is more problematic. As in the case of the New Zealand survey, the questionnaire asked respondents to value their time and the time of unpaid helper (Question 20). However, as time valuations made by respondents are typically widely dispersed with some excessive values, it was believed important to benchmark them against the prevailing market rates for corresponding functions. Respondent-reported valuations for owner's time were benchmarked against the market rate for finance managers, while the bookkeeper salary rate was used to benchmark valuations for unpaid helpers.

3.2 Sample selection

The possibility of generalisation of the findings of the research to the general business population is dependent on a rigorous sampling process that leads to the selection of a representative sample. A major hurdle for business tax compliance costs surveys is the availability of a sample which is truly representative of the general population. As the ATO have access to the records of the entire population of business taxpayers, their collaboration to this research project was considered essential. The sampling process was also the subject of a rigorous auditing and approval process by the Statistical Clearing House (SCH) branch of the ABS.

The sampling frame provided by the ATO included all business taxpayers who had lodged a tax return in respect of the 2011 financial year. As explained above, "very large businesses" were excluded from the sampling frame as they were managed through a specific section of the ATO. Also excluded were sole proprietors with a business income under A\$20,000, and taxpayers where prosecution or active compliance activity was currently undertaken. After exclusion, the sampling frame included almost 2.2 million business taxpayers.

The sample for the survey was selected by applying disproportionate stratified random sampling techniques to the population of business taxpayers. Given the objectives of the project, the prevalent response rates for this type of survey (between 5 and 10 per cent) and the amount of resources available to the researchers, it was decided to select a gross sample of about 10,000 business taxpayers.

The primary classification retained for the selection of the sample was based on three of the ATO business size categories: micro entities, small entities and medium entities.¹⁰ An additional category was created for superannuation funds, as for this type of entity asset value was more indicative of size than "turnover".

The secondary classification retained for sample stratification was legal form SMEs and asset values for superannuation funds. In addition, superannuation funds that were not self-

¹⁰ As noted earlier, micro entities according to the ATO classification include entities with an annual income under A\$2 million. For the purpose of this research, this group was split into two sub-categories: micro-businesses (annual income under A\$75,000) and small businesses (annual income A\$75,000-A\$1,999,999).

managed superannuation funds (SMSF) were treated as a separate category. The average sampling ratio was around 3.8 per 1,000; however SME and larger superannuation funds needed to be oversampled to obtain sub-samples of a reasonable size. The result of the sampling process is summarised in Table 1:

	Population	Sample	Sample ratio
Micro businesses			
(ATO definition):			
Sole traders	570,139	2,193	0.0038
Partnerships	284,826	1,095	0.0038
Trusts	259,066	996	0.0038
Companies	571,996	2,200	0.0038
Total Micro businesses	1,686,027	6,485	0.0038
Small and medium businesses (ATO definition)			
Sole traders	3,208	321	0.1001
Partnerships	7,931	397	0.0501
Trusts	23,791	397	0.0167
Companies	62,659	835	0.0133
Total Small and medium businesses	97,589	1,949	0.0200
Superannuation funds: SMSF			
Asset value is zero (0)	4,822	-	0
More than 0 to less than A\$200,000	93,966	261	0.0028
A\$200,000 to less than A\$500,000	99,925	278	0.0028
A\$500,000 to A\$1 million	87,963	244	0.0028
More than A\$1 million	102,296	284	0.0028
All other Superannuation Funds	4,520	452	0.1000
Total Superannuation funds	393,492	1,519	0.0039
TOTAL	2,177,108	9,953	0.0038

 Table 1: Summary of sampling process used in the survey

3.3 Survey instrument design

At all stages of the questionnaire design, the researchers were guided by the objectives of the research as well as the user-friendliness of the questionnaire. The design of the survey instrument was an iterative process that went through four broad stages: first drafting of the questionnaire; cognitive and pilot testing; revision of the initial draft; and approval by the SCH.

The cognitive and pilot testing phase took place over the period September-October 2012. The questionnaire was administered to ten business entities selected through convenience sampling. In addition, the questionnaire was sent for cognitive testing to the following organisations: a tax agent, the ICAA, the business survey methodology section of the SCH and the Revenue Analysis Branch of the ATO.

As a result of feedback received from the pilot and cognitive testing stage, amendments were made to the wording of some questions resulting in a user friendly instrument that was both simple and coherent. Attention was also paid to the integrity of the questionnaire, in particular checking that responses collected met the objectives of the survey. Following these revisions, the questionnaire received the final approval from the SCH in November 2012.

The final paper questionnaire¹¹ was structured into four sections and included 29 questions. Section A 'Background information' collected demographic data about the business (industry sector, legal form, turnover, number of employees) as well as well as information about the nature of its tax compliance obligations. Section B 'External tax services and external tax costs' contained questions about external tax services and related expenditures incurred by the business, while Section C 'Internal time spent on accounting and tax compliance' collected internal time data. Finally, Section D 'Your views' probed respondents' opinions about the potential determinants of tax compliance costs and their perceptions about the benefits of tax compliance.

3.4 Survey implementation

The survey was administered to the sample of business taxpayers as a paper survey sent via the mail system. However, the covering letter accompanying the survey form contained a URL link and a QR code giving participants the possibility to complete the survey online. Three reasons justified the choice of a predominantly postal administration for this survey. Firstly, the database of taxpayers held by the ATO is based on postal addresses, not on email addresses. Secondly, it was anticipated that a sizeable proportion of taxpayers would not have access to the internet or would not be interested in completing "yet another" online survey. Thirdly, comparative research on survey implementation indicates that mail surveys have generally delivered a higher response rates than electronic surveys Shih and Fan (2008).

The survey complied with the ethical requirements of the Human Research Ethics Panel at the University of New South Wales (UNSW). In order to maintain anonymity, the addressing of envelopes and the mail dispatch was organised by the ATO with the researchers having no access to recipients' details. However, the questionnaire gave respondents the option of voluntarily disclosing their contact details if they wished to participate in a data verification exercise or receive a final report of the survey.

The questionnaire was mailed out from the ATO mailing room at the beginning of February 2013. In order to boost the response rate, a letter of endorsement signed by the Second

¹¹ The electronic questionnaire included identical questions to the paper questionnaire. However, the structure and the numbering of the questions had to be slightly amended to fit the requirements of the electronic survey platform (Survey Monkey).

Commissioner of Taxation was enclosed with the questionnaire and the cover letter. Two weeks after the first mail-out, reminder postcards were sent by the ATO to all respondents.

A helpline was set up by the researchers to assist respondents with the completion of the questionnaire or with technical issues with the electronic survey. The research team received a total of 90 enquiries following the initial mail-out and the reminder postcard. The vast majority of the enquiries were motivated by the fact that the recipient of the survey form was either not in business or the business had closed, both situations resulting in the recipient being classified as "out of frame".

3.5 Response rate

The mail-out of the postal survey resulted in a net sample of 682 usable responses which, after deduction of out of frame and undeliverable questionnaires, translates into a response rate of around 7.5 per cent. The detailed calculation of the response rate is shown in Table 2. Whilst this response rate was much lower than the 30.6 per cent achieved by Evans et al (1996: 35), it was significantly higher than the 4.5 per cent obtained for the electronic survey carried out by Lignier and Evans (2012: 626). Despite the relatively modest response rate, the research team believe that the large number of responses permits meaningful analysis.

Table 2: Calculation of survey response rate

Gross sample frame (send out size)	9,975
Less out of frame responses (from enquiries)	(76)
Less returned to sender	(803)
Net sample frame (i)	9,096
Paper questionnaires received	627
Online completed questionnaires	56
Number of responses	683
Less unusable responses	(1)
Net sample of usable responses (ii)	682
Response rate (ii/i)	7.50%

In a significant majority of cases, the survey was completed by the business proprietor (76 per cent). The respondent was a manager other than proprietor in 9 per cent of cases and an accountant employee of the business in 5 per cent of cases. Less than 5 per cent of responses came from external accountants.

3.6 Non-response bias

Even where a relatively satisfactory response rate is achieved, it is still important to consider whether there is 'response bias' in the study and, if there is, to attempt to identify its extent and impact. Response bias arises if there are systematic differences in some key characteristics between respondents and non-respondents (Evans, 2003: 136). Testing for non-response bias establishes whether or not the result of the survey would have substantially

changed had non-respondents responded (Cresswell, 2003: 160). While there are a variety of methods available to test for non-response bias, the research team decided to use a wave analysis approach. Wave analysis identifies respondents' answers to key questions in the survey instrument by reference to the point of time when they responded to the survey. An analysis is then conducted to determine whether responses to the selected questions changed significantly from period to period. The procedure assumes that those who return surveys in the later part of the response period are 'quasi non-respondents' (Cresswell, 2003: 160).

A wave analysis was conducted on the paper survey responses. For the purposes of the analysis, paper survey responses were divided into three waves: those who responded early in the survey process; those who responded in the middle of the process; and those who responded late. The early wave was identified as comprising the first 100 questionnaires received and the late wave as the last 100 questionnaires received. The responses of the early and late groups were then compared statistically using a non-parametric Chi square (χ^2) test. The question selected for this analysis was Question 27 in the questionnaire. This question asked respondents about their view on whether the tax compliance costs incurred by their business were significant. Table 3 presents the frequency distributions of responses to Question 27 for the early wave and the late wave.¹²

View	Strongly disagree	Disagree	Neutral/ Don't know	Agree	Strongly agree
Early wave (first 100 responses)	2	4	16	39	39
Late wave (last 100 responses)	3	3	18	38	38
a a 1.					

Table 3: Frequency distributions of responses for early and late responses

Source: Survey data.

The computed χ^2 was 0.9012 compared with a critical χ^2 value with four degrees of freedom at 9.4877. Thus the difference between the early and late waves in terms of responses to Question 27 was not statistically significant. As the main assumption of this analysis is that late respondents are quasi non-respondents, it can be concluded from the above testing that no non-response bias was detected for this survey.

4 The survey results

4.1 Was the sample representative?

The external validity of the findings from this study is dependent on how representative the sample of responses is in relation to key demographic characteristics of the general population of business taxpayers. Demographic information collected by the questionnaire related to business size

 $^{^{12}}$ Since a few respondents did not offer an answer to Question 27, the first (last) 100 responses came from more than 100 respondents.

(measured by number of employees and turnover), legal form, industry sector and whether the entity was a profit or non-profit organisation.

Respondents were asked to describe the main activity of the business (Question 4) rather than selfclassify into a set list of activity sectors. This approach was adopted as researchers believed that many respondents would not be able to categorise their activity accurately. The downside of this approach was that many respondents chose not to answer the question. A total of 350 usable responses were collected (51 per cent of total responses); reported activity descriptions were then coded by the researchers into the Australian and New Zealand Standard Industrial Classification (ANZSIC) (1993).¹³

The comparison with the population of Australian businesses at 30 June 2012 revealed that the representation of activity sectors in the sample was comparable to the general population but for a few discrepancies (ABS, 2013: 13). Finance and insurance (18.3 per cent in the survey against 7.8 per cent in the general population) and property services (20.6 per cent against 10.5 per cent) were over-represented in the sample, but construction (6.3 per cent against 16.2 per cent) was under-represented. Not-for-profit organisations constituted only a small fraction of the sample (around 6 per cent) and therefore did not need to be analysed as a separate statistical group.

Business size was reported by annual turnover and number of employees. Distribution of annual turnover in the sample was compared to the ATO statistics for 2010-11 (Table 4).¹⁴ Medium sized businesses appeared to be over-represented in the sample compared to micro and small businesses. This was an intended result of disproportionate sampling in order to obtain a sufficient number of medium businesses. A few respondents (less than 10) reported an annual turnover which would put them in the "large business" category. These entities were generally excluded from the analysis.

Business categories: annual turnover	Count	Sample	Population*
		(%)	(%)
Micro & small businesses (less than A\$2 million)	446	75.3	94.5
Medium businesses (A\$2 million and over)†	146	24.7	5.5
Total valid answers	592	100.0	100.0
No answer	8		
Total	600		

Table 4: Sample distribution by turnover (excluding superannuation funds)

* Source: ATO population statistics (2010-11) excluding micro businesses with annual income <A\$20,000.

†A few respondents in the sample reported a turnover over A\$100 million, the upper threshold for the ATO definition of an SME.

The distribution by number of employees (Table 5) indicates a sample distribution broadly reflecting that of the general population, with a slight under-representation of non-employing businesses and over-representation for businesses with more than five employees.

¹³ It seems that a significant proportion of respondents had some difficulty in describing the main activity of their business. This result confirms the research team's initial assumption that asking respondents to self-classify their activity might lead to unreliable results.

¹⁴ It was decided not use the ABS data as a benchmark for turnover representativeness because of the different category definitions.

Number of employees*	Count	Sample	Population _†
		(%)	(%)
0	341	50.1	61.2
1-4	151	22.2	23.8
5-9	55	8.1	10.0
10-19	54	7.9	10.8
20-49	44	6.5	2.0
50-199	31	4.6	3.8
200 or more	5	0.7	0.3
Total valid answers	681	100.0	100.0
No answer	1		
Total	682		

Table 5: Sample distribution by number of employees

* Employee defined as employee for whom the business paid the 9% Superannuation guarantee as at 30/6/2012. † Source: ABS (2013): 'Counts of Australian businesses at 30/6/2012'.

The analysis by legal form (Table 6) shows a very similar distribution between sample and population with a small over-representation of SMSFs. This appears to be consistent with the over-representation of the finance and insurance activity sector reported above.

Table 6:	Sample	distribution	bv	legal	form
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~ ,		

Legal form	Count	Sample	Population*
		(%)	(%)
Sole proprietorship (only one owner)	177	26.3	26.3
Partnership	100	14.9	13.4
Trust	78	11.6	13.0
Private (proprietary) company	210	31.2	20.2
Public company	10	1.5	29.2
Incorporated association	18	2.7	-
Unincorporated association	1	0.1	-
Superannuation fund (self-managed)	69	10.3	17.9
Superannuation fund (other)	4	0.6	0.2
Other legal form	6	0.9	-
Total valid answers	673	100.0	100.0
No answer	9		
Total	682		

* Source ATO statistics 2010-11.

Overall, the demographic characteristics of the sample appeared to reflect the characteristics of the general population of business taxpayers in Australia, apart from the fact that medium sized businesses were over-represented compared to small and micro businesses. This minor

discrepancy can easily be overcome by breaking down the analysis into business size categories, a strategy which is adopted in the ensuing analysis.

# 4.2 External costs of tax compliance

# External tax services and external tax advice

As might be expected, a very high proportion of business taxpayers in the sample (85 per cent) incurred expenses for external tax services during the 2011-12 tax year. The proportion was even higher for the small business (87 per cent) and medium business (90 per cent) categories. Almost all taxpayers who paid for external tax services were also seeking tax advice. This advice was predominantly provided by an accountant/registered tax agent, but advice was also sought from lawyers (10 per cent of respondents) and financial consultants (10 per cent). Four per cent of respondents indicated that they sought advice from the ATO or a state/territory revenue office.

There were many reasons for seeking tax advice (Table 7). The complexity of tax matters (chosen by almost 60 per cent of respondents) ranked at the top of the list followed by the willingness to maximise tax deductions (35 per cent). Nearly 27 per cent of respondents also believed that it was cost effective. Taxes about which external advice was sought included income tax (83 per cent of all taxpayers who sought external advice) and GST (52 per cent). A significant proportion (40 per cent) of taxpayers liable for payroll tax¹⁵ sought advice about this particular obligation.

Reason for seeking external tax advice	Count	Per cent
Tax matters are too complicated	391	59.3
Wish to improve understanding of tax matters	165	25.0
Need expert opinion on specific tax issue	188	28.5
Need expert opinion about legislative change	88	13.4
Wish to maximise deductions/ tax offsets	230	34.9
Believed it would reduce the chance of an audit	86	13.1
Believed it was more cost effective	176	26.7
Other reason	43	6.5
Total	659*	100.0*

# Table 7: Why was external tax advice sought?

* Percentages add up to more than 100% because of multiple answers.

These results are very similar to the findings from the Evans et al study undertaken in 1995. It was found then that 82 per cent of small businesses and nearly 90 per cent of medium

¹⁵ The threshold for payroll tax liability (determined by total annual payroll) varies depending on the state or territory involved (from A\$500,000 in Victoria to A\$1.75 million in the Northern Territory) (as at January 2013).

businesses sought external tax advice (Evans et al, 1996: 107).¹⁶ Tax complexity and maximisation of tax deductions were, as in 2012, the two most reported reasons for seeking external tax advice: respectively by 68 per cent and 45 per cent of small business; and by 78 per cent and 52 per cent of medium business.

#### Tax related expenditures and accounting costs

Respondents were invited to report their total expenditure on external services during the 2012 financial year and the breakdown of this expenditure between different types of services. In an effort to disentangle the accounting/tax overlap discussed in Section 3 of this paper, the questionnaire (Question 17) asked respondents to identify any overlap and to estimate the amount of accounting services included in the expenditure on tax services. The mean gross expenditure ¹⁷ (before adjustment) on external services was A\$5,563 (median A\$3,000) (Table 8). After adjustment for the tax/accounting overlap, the mean expenditure was reduced to A\$4,256 (median A\$2,000). Further analysis of the gross amount of external costs before adjustment for the accounting overlap (not reported in tabular form) indicates that A\$4,109 was spent on preparation and lodgement of federal tax, A\$114 on state or territory taxes and A\$625 on tax planning and tax advice.

	External costs	Adjusted external costs
Valid answers	547	547
No answer or excluded	135	135
Total	682	682
Mean	A\$9,232	A\$7,898
5% trimmed mean	A\$5,563	A\$4,256
Median	A\$3,000	A\$2,000

#### Table 8: Total expenditure on external tax services

An analysis by business size (Table 9) shows that the *absolute* expenditure increased with the size of the business: A\$938 for micro businesses, A\$3,659 for the small business category and A\$15,556 for the medium category. However, the *relative* average expenditure in relation to turnover did not reflect the same pattern. For micro businesses, the average expenditure was A\$25 per A\$1,000 of turnover, and decreased to A\$5.51 for small businesses and A\$1.09 for medium businesses. As with most previous empirical research, therefore, a pattern of strong regressivity emerges: tax compliance costs are borne disproportionately by small businesses.

¹⁶ In the Evans et al study, a business was classified as "small" if its annual turnover was less than A\$100,000 (A\$155,200 in 2012 dollars), and "medium" if its annual turnover was between A\$100,000 and A\$10 million (A\$155,200 to A\$15.2 million in 2012 dollars).

¹⁷ Unless otherwise specified, reported means for this study were 5% trimmed means.

Annual turnover (2012 FY)		Adjusted expenditure on external tax services		
	Valid N	Trimmed Mean (A\$)	Median	
			(A\$)	
Micro (A\$0-A\$74,999)	168	938	625	
Small (A\$75,000-A\$1,999,999)	260	3,659	2,500	
Medium (A\$2 million and over)	119	15,556	11,270	

# Table 9: Adjusted external costs of tax compliance: breakdown by business size

The breakdown by type of services (Table 10) shows that the expenditure relating to the preparation and lodgement of federal tax documents increased with the size of the firm but increased relatively faster in the medium group compared to the other two groups. It seems that as the entities grew beyond a certain size, they incurred new expenditures relating to the state/territory taxes as well as tax planning costs.

# Table 10: Expenditure on specific tax services (not adjusted for accounting overlap):Breakdown by business size (Trimmed means)

Annual turnover (2012 FY)	Valid N	Preparation or lodgement of federal tax documents (A\$)	Preparation or lodgement of state/territory tax documents (A\$)	Tax planning and advice (A\$)
Micro (A\$0-A\$74,999)	152	1,143	0	13
Small (A\$75,000-A\$1,999,999)	240	3,594	44	371
Medium (A\$2 million and over)	114	12,733	1,082	3,466

In contrast to this trimmed mean cost of external tax advice in 2012 of A\$4,256 per firm, the mean cost of external tax advice reported by Evans et al 1995 was A\$1,563 per firm (if large businesses were excluded). The breakdown by size category in 1995 revealed mean external costs of A\$790 for small entities and A\$4,358 for medium sized entities (Evans et al, 1997: 33). More recently, in 2010 Lignier and Evans found that the SMEs they surveyed had average external costs of A\$12,850 (2012: 641). These comparisons call for three comments.

- Firstly, neither of the two earlier studies adjusted external costs for the accounting overlap; therefore the comparisons should probably be made with external costs before adjustment (mean: A\$5,563) rather than with adjusted external costs.
- Secondly, the different business size thresholds used in the 1995 study make comparisons for each size category hazardous.
- Thirdly, the sample used in the 2010 was comparatively small (152 units) and skewed towards larger SMEs.

Bearing these comments in mind, a preliminary view can be formed that since 1995 external costs for all firms (excluding large firms) have increased by a magnitude of about 150 per

cent in current dollar values. Moreover, when comparisons are made at the level of the business size category, it appears that the increase was far less pronounced for micro businesses than for small and medium sized entities. Finally, it is noted that the external costs for the medium sized entities in the current study are broadly consistent with the results from the 2010 study.

# 4.3 Internal costs of tax compliance

Respondents were invited to report internal time spent by themselves, employees and unpaid friends and relatives on different tax related activities (Question 21). A subsequent question (Question 24) asked them to report internal time spent on different taxes. As discussed in the methodology section (Section 3), data about *annual* time was collected by this survey.

# Time spent on tax related activities

The different tax activities identified for this survey were adapted from the list of activities used by Evans et al in 1995 and were similar to those used in the 2010 survey. All aspects of tax compliance were covered including information gathering (tax seminars and learning about tax), recording of information, lodgement as well as dealing with the tax authorities and external tax advisers/ agents.

Business taxpayers in the survey sample spent an average of 157 hours per year on their tax compliance activities (Median 65 hours) (Table 11). The most time consuming activities were recording tax information (62 hours), completing tax returns (32 hours) and dealing with external tax advisers (17 hours). In addition, business taxpayers spent an average of 10 hours per year learning about tax and attending tax seminars.

Tax compliance activity description	Mean	5% trimmed mean (hours)	Median
	(hours)		(hours)
Learning about tax	17.7	9.3	3.0
Attending tax seminars	3.5	0.8	0
Recording information	152.2	62.1	20.0
Completing tax returns and paying tax	66.0	32.1	12.0
Dealing with ATO and State/Territory revenue	7.8	2.5	0
Dealing with external tax adviser	35.0	16.7	5.0
Other tax compliance activities	6.9	0.1	0
Total*	289.6	156.9	65.0

#### Table 11: Annual internal time spent specific tax compliance activities

* Individual times do not add up to totals for trimmed means and median.

A breakdown of annual time by business size (Table 12) confirms that internal compliance time increased with business size: micro businesses spent an average of 39 hours per year on

tax compliance, but that time increased to 115 hours for small businesses and to 641 hours for medium sized enterprises. As was noted for external costs, the number of hours spent on tax compliance increased more sharply between the small and the medium group than between the micro and the small group. This was noticeable across all types of compliance activities, but particularly significant for time spent dealing with tax authorities and time spent dealing with tax advisers.

	Micro	Small	Medium
	(hours)	(hours)	(hours)
Valid N	188	270	117
Tax compliance activity			
Learning about tax	3.5	7.5	30.0
Attending tax seminars	0.2	0.2	6.2
Recording information	13.5	45.3	289.7
Completing tax returns/paying tax	8.2	27.8	112.5
Dealing with ATO etc	0.4	1.3	12.3
Dealing with external tax advisers	3.6	14.6	65.6
Other tax compliance activities	0.3	0	2.1
Total	38.8	114.8	641.1

 Table 12: Annual time (hours) spent on specific tax activities: breakdown by business

 size (Trimmed means)

* Individual times do not add up to totals for trimmed mean calculation.

The comparison with the Evans et al 1995 survey reveals a relatively stable pattern in terms of the time spent by business taxpayers on tax compliance activities (Table 13).¹⁸ Annualised compliance time from the 1995 study was 174 hours (92 hours for small entities and 313 for medium size entities) compared to 157 hours reported by the current study. Comparison between individual activities also reveals a relative consistency in the findings. However, some caution should be exercised in these comparisons as Evans et al reported ordinary means while trimmed means are reported for the current study.

¹⁸ For comparison purposes, only data from the small and the medium businesses were taken into account to calculate the annual average for the Evans et al 1995 study.

Tax compliance activity description	Evans et al 1995* (hours)	Lignier & Evans 2010 (hours)	Current survey (hours)	
Learning about tax	19.1	27.0	9.3	
Attending tax seminars	N/A	N/A	0.8	
Recording information	66.8	74.0	62.1	
Completing tax returns and paying tax	53.9	323.0	32.1	
Dealing with ATO etc	4.8	7.0	2.5	
Dealing with external tax advisers	23.9	56.0	16.7	
Other tax compliance activities	6.1	6.0	0.1	
Total	174.4	493.0	156.9	

#### Table 13: Annual compliance time (hours): comparison with previous research

* The mean calculated excluding large businesses.

Source: Evans et al (1996), Table 7.58, p 125; Lignier & Evans (2012), Table 8, p 632.

Annual compliance times reported by Lignier and Evans in 2010 were generally much higher than for the current study. Considering the different characteristics in the populations surveyed already noted, a meaningful comparison can only be made between that study and the findings for the medium sized business group in the current research: the average annual compliance time of 641 hours (Table 12) in the current study appears consistent with the average annual time of 584 hours¹⁹ reported by Lignier and Evans for businesses with an annual turnover between A\$1 million and A\$10 million (2012: 633).

#### Time spent on specific taxes

Respondents were also invited to report time spent on different taxes by way of a separate question in the survey instrument.²⁰ The results (Table 14) indicate that GST (43 hours) was the most time consuming tax representing almost 40 per cent of total internal costs. Other tax obligations associated with high compliance time included income tax (21 hours), employee withholding taxes (14 hours) and employee superannuation (10 hours).

¹⁹ Average calculated over three categories for comparison purposes.

²⁰ Asking respondents to report compliance time in two different questions inevitably led to discrepancy in the totals. This was an issue also noted by Evans et al. However it is generally considered that time reported in relation to specific tax activities is more reliable than time in relation to specific taxes.

Taxes	Mean	Mean 5% trimmed	
	mean		
	(hours)	(hours)	(hours)
GST	83.1	43.0	13.5
Income tax (excluding CGT)	40.5	21.0	10.0
CGT	6.6	0.4	0
Employee withholding taxes	38.5	14.4	0
Employee Superannuation	20.1	10.4	0
FBT	5.3	0.8	0
Other federal taxes	3.9	0.2	0
Payroll tax	11.5	3.2	0
Other state/territory taxes	2.4	0.4	0
Total	206.9	117.1	40.0

## Table 14: Annual time spent on specific taxes (hours)

* Individual times do not add up to totals for trimmed means and median.

The analysis by business size (Table 15) reveals that the share of total compliance time between different taxes varied between business size groups. In the micro business group, compliance time was almost entirely spent on GST and income tax (in equal proportions). In the small and medium groups, time spent on GST grew in absolute terms, but employment related taxes (including payroll tax in the medium group) took on an increasing importance. Predictably, tax obligations related to FBT and payroll tax appeared to generate greater compliance time in larger entities.

# Table 15: Annual time (hours) spent on specific taxes: breakdown by business size (Trimmed means)

	Micro	Small	Medium
	(hours)	(hours)	(hours)
Valid N	180	253	117
Tax description			
GST	9.3	36.9	137.6
Income tax (excl. CGT)	9.4	21.2	45.7
CGT	0	0.3	2.0
Employee withholding taxes	0.5	9.6	78.2
Employee Superannuation	0.2	6.5	46.2
FBT	0	0.1	9.9
Other federal taxes	0	0	3.8
Payroll tax	0	0.2	27.0
Other state/territory taxes	0	0.1	3.4
Total	26.2	90.3	443.1

These results are broadly consistent with the findings from Lignier and Evans in 2010, although the hours reported for each tax were much higher than in the current study (Lignier and Evans, 2012: 629). In 1995, Evans et al found that when time was reported by taxes

instead of activities, total annual hours were 73 hours on average (excluding large entities). The total was 43 hours for the "small group" and 124 for the "medium" group. The absence of GST obligations in 1995 precludes any meaningful comparisons; however if the average time spent on GST (43 hours) is added, the total is very close to the average total hours found in this survey (117 hours).²¹

## Valuation of tax compliance time

The method used for valuing tax compliance time differed depending on who was undertaking the activity. Hence, the survey instrument collected information regarding the categories of personnel involved in tax compliance activities (Question 22). The analysis of responses (Table 16) confirms previous findings that owners and unpaid helpers were predominantly undertaking tax compliance work in micro and small businesses (undertaking more than 75 per cent of tax compliance work when both categories of people were added together), while employed personnel performed the majority of tax compliance activities in medium sized entities. This result is broadly consistent with the findings in Evans et al in 1995 where the share of owners was 68 per cent for the small category and 52 per cent for the medium category (Evans et al, 1996: 125).²²

As discussed in Section 3, time spent by non-employed personnel may be valued on the basis of self-valuations subject to benchmarking against average market hourly rates for similar functions, while market hourly rates may be used to value time spent by employees at different function levels.

The self-valuation question was answered by about 30 per cent of respondents. The mean hourly value (5 per cent trimmed mean) reported by respondents was A\$52.16 for owners and \$24.95 for unpaid helpers. There were no significant variations in the mean valuations across business size categories.

²¹ It is also worth noting that the gap between reporting internal time by activities (174 hours) and internal time by taxes (73 hours) was quite considerable in the 1995 Evans et al study - much higher than the gap in the current survey (156 hours and 117 hours respectively). ²² These percentages were calculated on the basis of time spent on different tax activities.

	Micro	Small	Medium
Valid N	179	262	119
Category of people	177	202	117
Business associates (owners etc)	72.0	70.6	34.5
Managers other than owners	2.8	8,8	26.1
Qualified accountants (employees)	14.8	7.9	20.2
Other employees	5.0	6.8	19.1
Unpaid friends and relatives	5.9	6.1	0.2
Total*	100.0	100.0	100.0

# Table 16: Proportion of time spent by different people on tax compliance activities

* Total may differ from 100 per cent because of rounding.

The self-valued hourly rates were then benchmarked against median hourly rates for corresponding functions from the results of the Survey of salary trends published by Hays Australia & New Zealand (2013). The relevant functions were finance manager for owners and bookkeeper for unpaid helpers. The median hourly rates in Australia for these two functions were A\$62.86 and A\$31.43 respectively. As the hourly rates from self-valuations were not significantly different from the benchmark rates, it was decided to retain the mean respondents reported rates for the valuation of tax compliance time spent by owners and unpaid helpers.

The valuations reported were then combined with the number of hours in order to derive values for internal costs of compliance, which – together with the external costs – gave rise to the gross compliance costs discussed in the next part of the paper.

# 4.4 Gross compliance costs

As discussed in Section 3, gross tax compliance costs are represented by the sum of explicit costs (cash expenditures) and implicit costs that need to be calculated. Implicit costs include the value of time spent internally on tax compliance activities. The cost of internal time was valued on the basis of the hourly valuations discussed above. These valuations were then multiplied by the estimated time spent on average by each category of people on tax compliance activities. The calculation was done separately for micro, small and medium businesses.

The average gross compliance costs per year for all firms in the sample were found to be A\$13,313 (Table 17). The calculations for each size category resulted in mean gross compliance costs of A\$2,844 for micro businesses, A\$9,356 for small businesses and A\$47,411 for medium sized enterprises. In all three categories, internal costs were much larger than external costs, about twice as large for micro businesses and medium entities, and about 50 per cent larger for the small business category.

	All	Micro	Small	Medium
	(A\$)	( <b>A</b> \$)	( <b>A</b> \$)	( <b>A</b> \$)
External costs (adjusted)	5,563	938	3,659	15,556
Value of internal time	7,750	1,906	5,697	31,855
Total*	13,313	2,844	9,356	47,411

### Table 17: Annual gross tax compliance costs (A\$)

Although absolute compliance costs per entity in each category increased with firm size, relative costs measured as a proportion of turnover decreased as the firm size grew (Table 18): average gross compliance cost per A\$1,000 of turnover were A\$75.84 for micro businesses, but decreased to A\$14.09 for small firms and A\$3.34 for medium sized entities. This confirms the regressivity of compliance costs predicted by theory and supported by empirical evidence.

 Table 18: Annual gross tax compliance costs per A\$1,000 of turnover (A\$)

	Micro	Small	Medium
	(A\$)	(A\$)	(A\$)
Gross compliance costs per A\$1,000 of turnover	A\$75.84	A\$14.09	A\$3.34

In 1995, Evans et all found that gross costs of tax compliance were A\$5,624 per firm, bearing in mind that the 1995 sample comprised a very small number of large entities (about 1.2 %). When large entities are excluded, the average compliance cost per firm was A\$5,254 (Table 19) (Evans et al, 1997: 52).

	All excluding large entities	Small	Medium
External costs	\$1,563	\$790	\$4,358
Internal costs	\$3,691	\$1,859	\$9,274
Total	\$5,254	\$2,649	\$13,632

# Table 19: Annual gross costs of tax compliance in Evans et al 1995 (in 2012 A\$) Image: Cost of tax compliance in Evans et al 1995 (in 2012 A\$)

The comparison with the findings from the present survey would suggest that gross compliance costs for Australian SMEs have more than doubled over the period 1995-2012. Whilst it was noted earlier that *external* costs seemed to have more than doubled over the same period (see Section 4.2), the increase in *internal* costs (which also roughly doubled since 1995) seems at odds with the previous finding (noted in Section 4.3) that internal time spent on tax compliance activities had on average remained stable.

There are two explanations for this apparent discrepancy. Firstly, the method used in 1995 for the valuation of internal hours differed markedly from the methodology used in this survey. The Evans et al survey used reservation wages rather than self-reported valuations to evaluate time spent by owners and unpaid helpers.²³ Secondly, a significant proportion of the

²³ See Evans et al, 1997, 38 for a detailed explanation of the hourly valuations used in the Evans et al 1995 survey.

increase in internal costs can be attributed to the shift in average weekly earnings, which grew by about 35 per cent in real terms between 1995 and 2012 (ABS, 2013). If internal costs measured in 1995 were restated to reflect these changes in salary costs and inflation, the increase between 1995 and 2012 would be about 50 per cent. This is arguably a truer representation of the evolution of the internal tax compliance burden for business taxpayers. Insofar as external costs also comprise a significant proportion of salary costs, this analysis of the change in costs could be extended to overall compliance costs; the "real" increase in gross compliance costs after correction for the changes in real wages would then be around 85 per cent rather than 150 per cent.

Comparisons between business size groups are hazardous because of the differences in size criteria. However, it would appear that the increase in gross compliance costs was more pronounced for medium sized entities, which increased by a factor of 3.5 against 2.5 for the whole sample.

In the 2010 study, mean tax compliance costs ranged from A\$20,464 for entities with turnover of less than A\$1 million to A\$69,693 for businesses with an annual turnover of A\$6 million and over (Lignier and Evans, 2012: 647). The amount of average compliance costs for medium size firms reported for the current study (A\$47,411) is well within the range of these results. The difference with the average for the small business group (A\$9,356) could be attributed to the very small size of the sub-sample of the less than A\$1 million category (22 units) used in the 2010 study.

# 4.5 Business taxpayers perceptions on tax compliance costs

The last section of the questionnaire included attitudinal questions designed to gauge respondents' perceptions about compliance costs and to seek their views about which factors were driving these costs for their businesses.

A summary of responses collected in relation to a number of statements about tax complexity and the significance of tax compliance costs is presented in Table 20. The results reveal a general consensus among business taxpayers from entities of all sizes that tax laws have become more complex since 2007: around two third of respondents agreed or strongly agreed with that statement.

The perception about the impact of tax compliance costs on their business was more mixed. Only a small majority (52 per cent) of respondents in micro businesses saw their tax compliance costs as significant. In contrast almost 70 per cent of respondents in medium entities had the same perception. Interestingly, GST – shown by empirical research to be associated with high compliance costs – was not universally seen by participants as a source of significant costs for the business.

# Table 20: Percentage of respondents who agreed or strongly agreed with the following statements

Statement	Percentage of respondents who agreed or strongly agreed			
	All (%)	Micro (%)	Small (%)	Medium (%)
Tax laws have become more complex since 2007	68.4	68.7	64.3	64.1
Tax compliance costs for our business are significant	65.4	52.8	58.0	68.0
Tax compliance costs of GST for our business are significant	56.5	43.2	59.7	59.7

Respondents were also invited to score a number of factors which, on the basis of existing literature (see Section 2), were likely to be drivers of high compliance costs for small businesses and SMEs. A list of eight factors was included in the question: two factors related to industry sector and commercial circumstances, three factors related to tax legislation design (including complexity and frequency of changes) and three factors related to tax administration requirements. Scoring was applied using a scale from zero to ten, with zero meaning no impact and ten implying an enormous impact. For the overall sample, only two factors, complexity of tax laws and compliance requirements imposed by the ATO rated above six out of ten. Two further factors: frequency of tax changes and number of tax the business has to deal with rated above five (Table 21).

This general perception about compliance cost factors was reflected in the analysis by business size, but it seemed to be amplified when the business got larger: factors relating to tax legislation design and changes were rated very high (above seven) by medium enterprise respondents. Unsurprisingly, these larger firms were also sensitive to the fact that they had to deal with a multitude of tax obligations. On the other hand, scores were generally under five among micro businesses. This was consistent with the finding reported earlier that micro businesses had low absolute compliance costs compared to larger entities.

A	< I			,
Drivers of tax compliance costs	All (Secre)	Micro	Small (Secret)	Medium
	(Score)	(Score)	(Score)	(Score)
The industry sector in which your business	4.68	4.18	4.72	5.37
is involved				
The complexity of commercial transactions	3.82	3.35	3.64	4.92
The complexity of tax laws	6.22	5.88	6.10	7.02
The frequency of changes in tax rules	5.43	5.13	5.32	6.13
The number of different taxes that your	5.03	3.86	4.91	7.06
business has to deal with				
The frequency of changes in tax	4.57	4.10	4.44	5.57
administrative practices				
The compliance and regulatory tax	6.20	5.73	6.25	6.81
requirements imposed by the ATO				
The compliance and regulatory tax	4.27	3.60	3.89	6.07
requirements imposed by states/territory				
Other factors	3.55	3.10	3.71	4.52

# Table 21: Drivers of tax compliance costs (Impact scored on a scale from 0 to 10)

# 5 Summary and conclusions

One of the main objectives of this study was to provide an update on the impact of tax compliance costs on SMEs since a similar large scale survey of these costs was undertaken in Australia in 1995. Like the 1995 study, this study sought to evaluate the compliance costs of all taxes on business taxpayers using large scale samples. As in 1995, the ATO involvement in this research was crucial in allowing access to the entire population of business taxpayers and in offering the possibility of collecting a large sample of usable responses that reflected the demographic characteristics of the population. The methodologies used in the measurement of compliance costs were broadly similar between the two surveys, however there were some variation in the time valuation method and in the reporting of internal time by respondents.

Notwithstanding these common features, there were two important differences between the two studies. The GST was introduced in the period after 1995 and was expected to be a major driver of compliance costs reported in 2012. In addition, and unlike the 1995 survey, this survey sought to measure the impact of compliance with state and territory taxes which may be quite significant in the case of larger SMEs.

The outcome of the current survey indicates that overall tax compliance costs for the SME sector have increased from an average of A\$5,254 per firm in 1995 to an average of A\$13,313 in 2012, an apparent increase of 150 per cent in constant dollar terms. This increase is largely accounted for by a significant increase (more than 200 per cent) in the external costs of tax services incurred by businesses, and to a far lesser extent by an increase in the internal costs of compliance.

However, this broad result should be qualified in two ways. Firstly, the different methodologies used in the two studies for the measurement and the evaluation of internal time spent on time compliance can make interpretations of this comparison very tricky. Secondly, even though this comparison takes into account inflation, it does not reflect the changes in real wages between 1995 and 2012. This increase (by about 35 per cent) has a direct impact on the valuation of internal time, but is also likely to affect external costs which are largely made up of labour costs. If the evolution in real labour costs was neutralised, the growth in gross compliance costs per firm would be around 85 per cent.

The collection of data on internal time spent on tax compliance can be a difficult exercise and the results may be fraught with imprecision. This could explain, for instance, the apparent decrease of internal compliance hours in small entities between 1995 and 2012. However, it is also possible that the more widespread introduction of computerised record keeping and tax administration-led initiatives such as pre-filled returns and electronic lodgement may have had a positive effect on the compliance costs burden of micro businesses.

The second important outcome of this research is that there is a clear perception among business taxpayers that the complexity of tax laws and the administrative requirements imposed by the ATO are major drivers of tax compliance. This perception was particularly acute among medium sized enterprises. The relative impact of the tax compliance burden (per dollar of turnover) on micro businesses (A\$76) was much greater than for larger entities (A\$3.34) confirming the findings of many previous studies. Even so, the perception of that burden among this category of taxpayers appeared to be more muted than among larger entities.

As mentioned in Section 2 of this paper, the real impact of the tax burden on business taxpayers should be measured in terms of net compliance costs. This means that the value of the tax compliance benefits including managerial benefits but also cash flow benefits and tax deductibility benefits should be offset against the gross compliance costs value reported above. Further analysis of the rich survey data will allow the estimation of such benefits.

Finally, this research made a deliberate choice in analysing compliance costs in terms of business size rather than on the basis of any other criteria. This decision was based on the findings from earlier research that size is a major driver of tax compliance costs. It is, however, possible that legal form and industry sector may also have an impact on tax compliance costs. Again, it is hoped that further analysis of the data collected by this survey may shed light on these aspects.

# References

Allers, M, 1994, Administrative and compliance costs of taxation and public transfers in the Netherlands, Wolters-Noordhoff, Groningen.

Australian Bureau of Statistics (ABS), 2002, 'Small Business in Australia, 2001', No 1321.0 accessed at http://www.abs.gov.au/ausstats/abs@.nsf/PrimaryMainFeatures/1321.0.

Australian Bureau of Statistics (ABS), 2013, 'Counts of Australian businesses, including entries and exits', 8165.0, 13.

Australian Bureau of Statistics (ABS), 2013, 'Average weekly earnings, Australia, May 2013, 6302.0. Table 3.

Australian Taxation Office (ATO), 2013, *Taxation Statistics 2010-11*, Australian Government Publishing Service, Canberra.

Coolidge, J, 2012, 'Findings of tax compliance cost surveys in developing countries', *eJournal of Tax Research* 10(2).

Cresswell, J, 2003, *Research design: Qualitative quantitative and mixed approaches*, second edition.

J W Creswell, *Research Design : Qualitative, Quantitative and Mixed Approaches* (second ed, 2003)

Erard, B, 2001, 'The income tax burden on Canadian big business' in C Evans, J Pope and J Hasseldine (eds), *Tax compliance costs : A Festschrift for Cedric Sandford*. Prospect, Sydney.

Evans, C, 2003, *Taxing personal capital gains: Operating cost implications*, Australian Tax Research Foundation, Sydney.

Evans, C, 2008, 'Taxation compliance and administrative costs: an overview' in M Lang et al (ed), *Tax compliance costs for companies in an enlarged European Community*.

Evans, C, Ritchie, K, Tran-Nam, B and Walpole, M, 1996, *A Report into incremental costs of taxpayer compliance*, Australian Government Publishing Service, Canberra.

Evans, C, Ritchie, K, Tran-Nam, B and Walpole, M, 1997, A report into taxpayer costs of compliance, Australian Government Publishing Service, Canberra.

Hays Australia and New Zealand, 2013, 'The 2013 Hays Salary Guide: Salary & Recruiting Trends'.

Inland Revenue (NZ), 2010, 'SME tax compliance costs 2009: Evaluation report 1', Wellington.

KPMG, 2006, Administrative Burdens – HMRC Measurement Project, KPMG LLP, (March).

Lignier, P, 2006, 'A silver lining in the tax compliance cloud? A study of the managerial benefits of tax compliance in small business' in M McKerchar and M Walpole (eds), *Further global challenges in tax administration*.

Lignier, P and Evans, C, 2012, 'The rise and rise of small business tax compliance costs in Australia', *Australian Tax Forum*, 27(3).

McKerchar, M, Hodgson, H and Walpole, M, 2006, *Scoping study of small business compliance costs: Report to The Board of Taxation*, Atax, University of New South Wales.

M McKerchar, H Hodgson and M Walpole, 'Scoping study of small business compliance costs: Report to The Board of Taxation' (ATAX- The University of New South Wales, 2006)

Pope, J, 1995, 'The compliance costs of major taxes in Australia' in C Sandford (ed), *Tax compliance costs measurement and policy*, Fiscal Studies, Bath.

Sandford, C, 1973, *Hidden costs of taxation*, Institute for Fiscal Studies, London.

Sandford, C, (ed) 1995, *Tax compliance costs measurement and policy*, Fiscal Publications, Bath.

Sandford, C, Godwin, M, Hardwick, P and Butterworth, M, 1981, *Costs and benefits of VAT*, Heinemann, London.

Sandford, C, Godwin, M and Hardwick, P, 1989, Administrative and compliance costs of taxation, Fiscal Publications, Bath.

Sandford, C and Hasseldine, J, 1992, *The compliance costs of business taxes in New Zealand*, Institute of Policy Studies, Wellington.

Shaw, J, Slemrod, J and Whiting, J, 2008, 'Administration and compliance: Chapter prepared for the Report of a Commission on Reforming the Tax System for the 21st Century (Mirrlees Review)', Institute for Fiscal Studies.

Shih, T-H and Fan, X, 2008, 'Comparing response rates from web and mail surveys: a metaanalysis' (20) *Field Methods*. Slemrod, J, 2009, 'Complexity in the Australian tax and transfer system', Paper presented at Australia's Future Tax and Transfer Policy Conference, Melbourne Institute.

Slemrod, J and Blumenthal, M, 1996, 'The income tax compliance of big business', 24(4) *Public Finance Quarterly*.

Slemrod, J and Venkatesh, V, 2002, 'The income tax compliance cost of large and mid-size businesses', University of Michigan Business School.

Tran-Nam, B, Evans C, Ritchie, K and Walpole, M, 2000, 'Tax compliance costs: Research methodology and empirical evidence from Australia', *National Tax Journal* 53(2).

Tran-Nam, B, Glover, J and Wilkin, S, 2004, 'The GST recurrent compliance costs/ benefits of small business in Australia: A case study approach', Paper presented at the 16th Annual Australasian Tax Teachers Association Conference, Adelaide.