Tax Compliance as a Red Tape to Businesses: Conceptual Issues and Empirical Evidence from Australia

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Abstract

Businesses typically face a variety of regulations, including taxation, imposed externally by the government. While estimates of the costs and benefits of regulations are difficult to obtain, there have been ongoing concerns, both at the industry and government levels, that regulations are excessive and impede business productivity and growth. This paper examines taxation compliance as a red tape to businesses. It consists of three interrelated discussions. The first is a concise review of tax compliance, including main theoretical models of tax compliance behavior. Tax compliance costs are naturally discussed next. This discussion provides a critical assessment of the meaning, and conceptual and measurement issues relating to tax compliance costs. The third section presents empirical estimates of tax compliance costs of Australian businesses. The numerical estimates presented are drawn from a recent nationwide study undertaken by a team of multi-university researchers and funded by an Australian Research Council Linkage Grant.

Keywords: tax compliance, red tape, tax compliance costs, Australia

1. Introduction and Context

Businesses typically face a variety of regulations imposed by both domestic and overseas governments. The Organisation for Economic Co-operation and Development (OECD) (1997: 196) defined regulation as the diverse set of instruments that governments use to impose requirements on enterprises and citizens. These regulations aim to achieve a variety of market and non-market policy objectives directed at protecting the broad public interest. There are different ways to classify regulations although most classifications tend to be purpose based. The two main approaches in the literature are those by the United States Small Business Administration (USSBA) and the OECD. According to the USSBA, regulations are divided into four categories: economic,¹ environmental, tax compliance, and occupational safety, health and domestic safety (Crain and Crain 2010).

The OECD (1997: 196) identified only three categories of regulations: economic (those that directly intervene in the market and have effects on prices and competition), social (those that aim to protect interests of the general public such as health and safety), and administrative (those that refer to paperwork and other formalities through which governments collect information and intervene in individual economic decisions, e.g., procedures required to start a business).Regulations ultimately generate both costs and benefits to the community, but precise estimates of these costs and benefits are difficult to obtain. There are thus different views about the net costs of regulations, depending on perspectives, assumptions and methods of estimation. For example, the United States Office of Management and Budget (USOMB) (2012: 13) has produced estimates showing that the aggregate monetized benefits of major US federal regulations in the US have caused substantial reductions in growth rates of both output and total factor productivity. They argued that changes in regulations offer a straightforward explanation for the productivity slowdown of the 1970s in the US.

¹Economic regulations include a wide range of restrictions and incentives that impact business operations, such as mechanisms regulating access to markets, the use of production techniques, output choices and pricing decisions, often with the intention to promote fair competition.

There currently exits a variety of estimates of the costs of regulations, both in absolute or relative terms, around the world over the past 20 years. For example, Lattimore et al. (1998: 187) estimated the total regulatory burden of small businesses in Australia in 1994–95 to be A\$32 billion or about 7% of Australia's GDP, and in 2005 the Australian Chamber of Commerce and Industry (ACCI)(2005: 15) estimated that the regulation costs of the Australian economy to be A\$86 million a year or 10.2% of GDP. Similarly, a large-scale OECD study found that small and medium-sized enterprises (SMEs) in 11 OECD member countries spent an average of \$US27,500 in 1998-99 to comply with tax, employment and environmental regulations, which equated to an average cost of US\$4,000 per employee or about 4% of the business sector GDP (OECD 2001: 50-80). The OECD (2001: 53) also established that the majority of regulation costs incurred by surveyed businesses were spent on complying with tax (46%) and employment (43%) regulations, while the amount spent on complying with environmental regulations was much lower (19%).

Not surprisingly there have been ongoing concerns, both at the industry and government levels, that regulations are excessive and impede business productivity and growth (see, for example, European Commission (EC) 2007; DST Global Solution2012). This has in turn given impetus to the drive of continuing programs of regulation simplification around the world. Specific examples include the European Union's Action Programme for reducing administrative burdens stemming from European Union legislation (EC 2012: 2) and the establishment in the UK of the Office of Tax Simplification charged with responsibility of addressing existing complexity of the tax system (HM Treasury 2010: 1). The principal aim of this paper is to examine tax compliance as a red tape to businesses. More specifically, it has a two-fold purpose. First, it critically discusses the meaning of tax compliance and investigates the determination of business taxpayers' tax compliance decision. Second, it explores conceptual issues arising from the measurement of tax compliance burden and presents empirical estimates of tax compliance costs incurred by Australian business taxpayers in the 2011-12 financial year. The focus on tax compliance as a government regulation is motivated by the fact that taxation is not only the most costly government regulation (as shown above) but also by far the most complex.

The remainder of the paper is organized accordingly. Section 2 reviews tax compliance/noncompliance in the context of business taxpayers. This section encompasses meaning and determinants of tax compliance. Section 3 summarizes the conceptual issues associated with the measurement of tax compliance costs, especially those incurred by business taxpayers. Section 4 then presents estimates of Australian business taxpayer compliance costs in 2011-12, derived from recent large-scale surveys conducted as part of an Australian Research Council (ARC) Linkage project on tax complexity. Section 5 concludes.

2. Tax Compliance/Noncompliance of Business Taxpayers

2.1 Definition of tax compliance

It is conceivable to interpret tax compliance from different perspectives (see, for example, McKerchar 2003; Devos 2014). A precise and severe definition of tax compliance is "the willingness of individuals and other taxable entities to act in accordance within the spirit as well as the letter of tax law and administration without the application of enforcement activity" (James and Alley 1999: 32). This is a typical example of the legal approach in defining tax compliance. Note an interesting feature of the above definition. The tax law is defined to encompass both how it is drafted (its letter) and the underlying policy intention (i.e., its spirit). This implies that tax avoidance (violating the spirit of the tax law) is tax noncompliance. From a legal perspective many tax lawyers insist to interpret a tax law in terms of its letter only. Along this line, Weber et al. (2014) explicitly argued that tax avoidance should be regarded as part of tax compliance.

An alternative to the above is the operational approach in defining tax compliance. This is the method has been adopted by tax administrators or tax authorities (OECD 2004; Inland Revenue Service (IRS) 2009). According to the operational approach, tax compliance is decomposed sequentially into various tasks: "(i) registration in the system; (ii) timely filing or lodgment of requisite taxation information; (iii) reporting of complete and accurate information (incorporating good record keeping); and (iv) payment of taxation obligations on time" (OECD 2004: 7). Note that the operational approach highlights the administrative or procedural aspects of tax compliance. Some elaborations deserve mention. First, taxpayer's attitudes toward the tax system are not a binary outcome (compliance versus noncompliance) but form a continuous spectrum. Second, tax law is complex so that taxpayers or their tax agents may not be able to correctly determine taxpayers' 'true' tax liabilities.

Thus, for honest taxpayers, there may be a gap between their intention and their actual behavior. This gives rise to unintentional noncompliance (which may be over compliance or under compliance). Third, because of tax complexity, the interaction between taxpayers and their agents can also give rise to tax noncompliance resulting from aggressive tax planning. Fourth, the presence of corrupt tax administrators (more likely in developing economies) raises the probability of intentional noncompliance and reduces the amount of tax revenue collected.

2.2 Brief review of models of tax compliance behavior

Understanding why businesses are tax compliant is obviously of great interest not only to tax academics but also to administrators and authorities. This is particularly true for tax jurisdictions that rely on self-assessment such as those of Australia, Canada, Ireland, New Zealand, the US and the United Kingdom (UK). Economists, psychologists, sociologists and political scientists have all contributed to constructing models of tax compliance/noncompliance behavior. Since these models have been extensively reviewed in the literature (Roth and Scholz, 1989; Andreoni, Erard and Fienstein, 1989; James and Alley, 1999; Pope and McKerchar, 2011; Devos, 2014), it suffices to make two remarks. First, there are basically three main groups of taxpayer compliance models, namely, the deterrence models (see, for example, Allingham and Sandmo 1972; Yitzhaki 1974); fiscal psychology models (for example, Schmölders1959; Strümpe11969) and behavioral economic models (see Hashimzade, Myles and Tran-Nam 2013 for a review of this strand of literature). Second, none of them is by itself capable of offering a complete and consistent explanation of the full range of tax compliance behaviors observed in practice.

The deterrence models emphasize the benefits and costs of income tax evasion and are consistent with an adversarial tax culture in which individuals are perceived by tax administrators as being responsive primarily to economic incentives and punishment. These models thus provide tax administrators with a theoretical justification for the use of such deterrence measures as tax auditing, penalties and prosecution for improving compliance. Moving away from the rationality approach, fiscal psychologists, especially later ones, view individual taxpayers as by and large responsible citizens and taxpaying as a complex social process, and only one aspect of a multitude of interrelated decisions made by individuals. The fiscal psychology models are consistent with a cooperative tax culture in which tax administrators can promote taxpayers' positive attitudes toward the tax system in order to improve tax compliance. In the behavioral economic models, by applying non-expected utility theory to the compliance decision and by addressing social interaction (such as loss of social prestige following detection of tax evasion, etc), it is possible to better match the observed extent of tax compliance in reality.

Deterrence model can be viewed as an application of the economic theory of crime championed by the Nobel Prize Laureate Gary Becker (1968). Similarly the fiscal psychology models are also consistent with Becker's approach to altruism in his paper on social interaction (Becker 1974). According to this way of thinking, taxpayers are not only economic but also social agents, who are capable of feeling altruistic when paying taxes. Note that most literature in the field of tax compliance focuses on the individual taxpayer. Clearly, not all business taxpayers can be or should be treated like individuals.

3. Tax Compliance Costs: Conceptual and Measurement Issues

Almost all models of tax compliance implicitly assume that taxpayers can comply with tax law requirements costlessly. In reality, tax compliance typically requires taxpayers or third parties to incur recurrent and one-off costs, often not negligible, to full fill their tax obligations. While the definition and measurement of taxpayer compliance costs are now firmly established in the literature, it is nevertheless helpful to briefly consider a number of conceptual and measurement issues and the estimating methodology.

3.1 Conceptual issues

Sandford, Godwin and Hardwick (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 ..."While this definition is widely accepted, several conceptual issues, especially with respect to business taxpayers, remain. The two main conceptual issues are avoidable and unavoidable costs, and tax compliance offsets. First, there has been a debate about what legitimately constitute tax compliance activities. A distinction has been drawn between avoidable (voluntary) and unavoidable (involuntary) tax compliance activities, where tax computation is regarded as unavoidable and tax planning as avoidable. This distinction, first introduced by Johnston (1963: 67), gave rise to an ongoing, unresolved debate. This issue is relevant to business taxpayers, particularly large businesses which often distinguish between tax compliance and tax planning.

Second, there are benefits associated with tax compliance and these should be deducted from tax compliance costs to arrive at net tax compliance costs (e.g., Sandford, Godwin and Hardwick 1989: 13-14; Tran Nam et al. 2000: 233). The complication is that some benefits exist at the societal level, e.g., managerial benefits (more stringent record-keeping requirements help businesses to make better and more informed decisions), whereas other benefits accrue only to taxpayers, e.g., cash flow benefits (the mismatch in timing that allows businesses to hold on to tax revenue for a period before remitting it to the tax office), tax deductibility benefits (many tax compliance activities are tax deductible) or one-off/recurrent cash subsidies. The cash flow and tax deductibility benefits and cash subsidy represent transfers from the government to the private sector so that they vanish at the societal level. For business taxpayers, their net tax compliance costs can be interpreted as an additional production cost.

3.2Measurement issues

At the practical level, there are issues associated with accounting/tax overlap, psychological costs, implicit costs, joint costs and transitional/recurrent costs. There is clearly an overlap between accounting and taxation costs in most business situations. This overlap is particularly pronounced for SMEs as, for these businesses, tax and accounting functions cannot be easily separated and internal staff members (e.g., an account clerk) are often employed to do both accounting and taxation activities. Similarly, accounting services are often provided by the same third party and the costs are not easily disentangled. In the presence of multiple outputs (taxation and accounting), it is difficult to accurately attribute the joint costs to tax compliance alone. For example, it is not always clear in the mind of the taxpayers whether a particular activity (e.g., record-keeping) should be classified as 'accounting' or as 'tax-related'. Without reasonably precise attribution, it is conceivable that tax compliance costs can be overestimated. Psychological costs refer to the stress and anxieties experienced by taxpayers, especially small business owners and managers, in having to satisfactorily deal with taxation. They are problematic because there are no objective and consistent way to monetize these costs across taxpayers or over time. One plausible approach is to capture the changes in psychological costs (as a result of a tax reform) by the use of a suitable Likert scale (see Tran-Nam and Glover 2002: 533). Empirical studies typically ignore psychological costs of tax compliance.

Many important components of tax compliance activities involve implicit costs, e.g., time spent by a sole trader or an unpaid helper in dealing with business tax affairs. The accounting approach only recognizes explicit costs and will underestimate true tax compliance costs. While the opportunity cost provides an appropriate approach, it is problematic to implement it in practice. In the absence of market information, estimating the labor cost component of tax compliance can be difficult. As a result, quantitative estimates of tax compliance costs can be sensitive to the valuation of non-market time spent on tax compliance. A key issue related to implicit costs is how to value internal time. This is a contentious issue which has been abundantly discussed in the literature (see, for example, Pope 1995). For tax compliance activities undertaken by employees of the business, the labor costs can be satisfactorily valued at the prevailing before-tax market rates for different categories of personnel.

Valuing time spent on tax activities by personal taxpayers, business proprietors and unpaid helpers is more problematic. One approach is to ask respondents to value their time and the time of unpaid helpers. However, as time valuations made by respondents are typically widely dispersed with some excessive values, it is important to benchmark them against the prevailing market rates for corresponding functions (Inland Revenue, 2010). There is a distinction between transitional and recurrent compliance costs where transitional costs refer to the start-up and learning costs that tend to vanish over time, whereas recurrent costs refer to the positive costs incurred by taxpayers on a regular basis. Ideally it is useful to observe transitional and recurrent costs separately although this is unlikely in practice. In relation to transitional costs, capital costs are problematic to deal with, especially if the capital investment can be used for a variety of purposes.

3.3Estimating methodology

It is useful to summarize the above discussion by two definitional equations:

- (1) Gross tax compliance costs= Cost of resources Managerial benefits
- (2) Net tax compliance costs = Gross tax compliance costs Tax compliance benefits

where Tax compliance benefits to taxpayers = Cash flow benefits +Tax deductibility benefits +Cash subsidies.In terms of empirical studies, tax compliance costs are typically estimated using the following definition:

(3) Tax compliance costs = Internal labor costs + External labor costs +Non-labor costs

Where internallabor costs include implicit or explicit costs of time spent by owners, employees, contractors or unpaid spouses/friends on tax affairs, and external labor costs include payments to tax intermediaries and for other tax services. Non-labor costs are often omitted in many empirical studies due to difficulties in obtaining accurate data. Traditionally data collection methods have included surveys (invariably using questionnaires) conducted through commercial polling organizations, or by post, email and telephone, other interview-based methodologies, case study approaches, and documentary analysis (EC 2013).

4. Tax Compliance Costs: Empirical Findings

4.1 Overview of empirical findings on tax compliance costs

Research into tax compliance costs has progressed a long way since the first known empirical study undertaken by Haig (1935) 80 years ago. 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 'foundation' 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 (Coolidge 2012).

Despite different research methodologies and data collection strategies, international empirical studies of tax compliance costs have come up with a number of consistent results (see Evans 2008: 457).First, tax compliance costs around the world are large, whether in absolute monetary terms or relative to relevant tax revenue collected or GDP (ranging from 2% to 10% of tax revenue and up to 2.5% of GDP).Second, internal labor costs dominate the composition of tax compliance costs (about two-thirds). Third, tax compliance costs are regressive in the sense that, as the size of taxpayer (by taxable income for individuals or annual turnover for business taxpayers) increases, tax compliance costs become a smaller fraction of taxpayer income or turnover. Fourth, tax compliance costs show no sign of decreasing over time despite governments' commitments to tax simplification.

4.20verview of the research project

The research project involved three separate surveys of more than 15,000 taxpayers selected from a national database of taxpayers provided by the ATO, targeted at three broad categories of taxpayers: personal (nonbusiness) taxpayers; small and medium business enterprises (SMEs) (annual turnover less than or equal to A\$250 million); and large businesses (annual turnover exceeding A\$250 million).²The surveys focused on the taxation compliance burden imposed by Australian federal and State taxes during the year ended 30 June 2012, and were conducted in Australia between November 2012 and February 2013. The surveys were the first independent large-scale surveys of tax compliance costs conducted in Australia since 1996 and since the introduction of the Goods and Services Tax (GST, Australia's value added tax) in 2000.

The key features of the SME taxpayer survey methodology are (i) collection of primary data via a large-scale survey based on a random sample of taxpayers in each category; (ii) availability of both paper and electronic questionnaires to survey participants; (iii) estimation of both sample averages and population averages (by combining sample means and macro-distributions); and (iv) estimation of both absolute and relative costs of tax compliance. The survey of the large business taxpayers followed a different approach. The rationale behind this differentiated strategy was based on the particular nature of large taxpayers and the internal organization of the ATO. Experience has indicated that targeting the large business sector with traditional survey methodologies (such as paper-based or electronic surveying) results in poor response rates. In addition, the ATO has dedicated market segments within the organization that deal specifically with the large corporate sector.³ Hence the questionnaire for the large corporate taxpayers group was only administered by way of an electronic survey.

 $^{^{2}}$ At the time of the surveys, one Australian dollar (A\$) was roughly equivalent to one US dollar (US\$).

³The two units within the ATO that deal with the large corporate sector are the Client Relationship Management (CRM) and Key Client Management (KCM) branches. KCM provides a range of specialized services to large businesses, while CRM provides services related to GST (see ATO 2011, page 13).

One week prior to the email broadcast, key employees (usually Group Tax Managers or persons of equivalent status) of potential participants had been contacted in person (usually by phone) by their ATO CRM/KCM counterparts and given a briefing (from a prepared script) about the research project. Roughly one-sixth of those contacted (32 out of 187) indicated that they did not wish to participate in the survey and were therefore removed from the email broadcast list. The response rates for the SME and large business taxpayer surveys are summarized in Table 1. The response rate varied from 7.5% for the SME survey to 42% for the large business survey. A number of checks were carried out to test for non-response bias and for representativeness of the observed samples compared to the general population. No non-response bias was detected in any of the observed samples. Given that the research combines macro-distributions with sample averages, population representativeness is not essential to the study. Further, analysis of the sample data suggests a reasonable degree of spread in the various demographic and economic variables considered relevant for the purpose of this study: business size, activity sector and legal form.

	SME taxpayers	Large business taxpayers	
Sample frame*	2,177,108	1,850	
Gross sample	9,953	187	
Out of frame	879	0	
Effective sample	682	79	
Response rate†	7.5%	42.2%	

Table 1: Populations, samples and response rates, 2011–12

Source: Lignier, Evans and Tran-Nam (2014: 231) and Evans, Lignier and Tran-Nam (2014).

*Some taxpayers were deliberately excluded from the sample frame by the ATO.[†] The response rate is calculated as the ratio of the effective sample over the gross sample less out of frame responses.

4.3 Tax compliance cost estimates of small and medium-sized enterprises

In view of the fact that the definition of an SME can be a contentious issue, and that many studies have used different criteria to classify businesses, it was decided to break down the sample of respondents into three subcategories based on annual turnover: (i) micro-businesses: those businesses with annual turnover under the A\$75,000 turnover threshold for GST registration; (ii) small businesses: those businesses with annual turnover in the A\$75,000–1,999,999 range; and (iii) medium-sized businesses: those businesses with annual turnover in the A\$2 million–100 million range. For the purpose of this survey, only gross tax compliance costs were analyzed, including internal staff time spent on tax compliance and external adviser costs, but excluding non-labor and psychological costs. Based upon the responses from nearly 700 SMEs, the average gross compliance costs per year for all firms (based on population weightings) were found to be A\$ 11,004 (Table 2). The calculations for each size category resulted in mean gross compliance costs of A\$3,392 for micro businesses, A\$12,169 for small businesses and A\$54,605 for medium-sized enterprises. In all three categories, internal costs were about twice as large as external costs, reflecting a pattern observed in previous research in Australia and overseas (see Vaillancourt, Édisonand Barros 2013: 47).Aggregate gross compliance costs for the SME sector were estimated at a little over A\$18 billion, representing 1.2% of GDP and 14% of SMEtax revenue.

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	All*	Micro	Small	Medium
External costs (adjusted)	3,425	1,049	3,871	16,300
Value of internal time	7,579	2,343	8,298	38,305
Total	11,004	3,392	12,169	54,605

Table 2: Annual gross tax compliance costs per SME (A\$), 2011–12

Source: Lignier, Evans and Tran-Nam (2014: 241).

*Average calculated on the basis of population weightings for different size categories.

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: average gross compliance cost per A\$1,000 of turnover were A\$90.45 for micro businesses, but decreased to A\$11.72 for small firms and A\$2.10 for medium-sized entities. Once again this confirmed the regressive nature of compliance costs predicted by theory and already observed for personal taxpayers. The major component of SME tax compliance costs – the internal time spent on tax compliance – was analyzed in terms of different compliance activities (Table 3) and in terms of different tax categories (Table 4).

Tax compliance activity	Hours
Learning about tax	17.2
Attending tax seminars	2.9
Recording information	129.9
Completing tax returns and paying tax	55.9
Dealing with ATO etc	6.4
Dealing with external tax advisers	33.8
Other tax compliance activities	11.6
Total	256.5†

Table 3: Mean annual compliance time (hours) by activities: SMEs, 2011–12

Source: Lignier, Evans and Tran-Nam (2014: 235).

† Individual times do not sum to totals as some respondents only provided total hours.

Business taxpayers in the SME survey sample in 2012 spent an average of 256 hours per year on their tax compliance activities. The most time consuming activities were recording tax information (130 hours), completing tax returns and paying taxes (56 hours) and dealing with external tax advisers (34 hours). In addition, SME taxpayers spent an average of 20 hours per year learning about tax and attending tax seminars. Respondents were also invited to report time spent on different taxes by way of a separate question in the survey instrument.⁴ The results (Table 3) indicate that GST (69 hours) was the most time consuming tax in 2012, representing almost 38% of total internal costs. Employment related taxation (including withholding tax and superannuation) was the second largest item (54 hours) while income tax was third with 33 hours. Remarkably, payroll tax (a State tax only paid by large employers) consumed almost 11 hours of annual SME compliance time.

Table 4: Mean annual compliance time (hours) on specific taxes: SMEs, 2011–12

Taxes	Hours
GST	68.8
Income tax (excluding capital Gains Tax)	33.4
Capital Gains Tax	4.1
Employee withholding taxes	35.8
Employee superannuation	18.6
Fringe Benefits Tax	4.2
Other federal taxes	3.2
Payroll tax	10.8
Other State/Territory taxes	1.7
Total	185.4†

Source: Lignier, Evans and Tran-Nam (2014: 238).

† Individual times do not sum to totals as some respondents only provided total hours.

The 2012 study sought to examine possible relationships between tax compliance costs and various factors that, based on previous empirical research, were believed to be predictors of tax compliance costs. A multiple regression analysis was performed on the data collected for the 682 usable responses in the sample. The analysis used three separate equations, where the dependent variable was total compliance costs, external compliance costs and internal time costs respectively (as natural logarithm in each case). The independent variables in each equation were annual turnover, legal form and the number of taxes with which the business had to comply (also natural logarithms in each case). Each separate legal form was included in the model as a 'dummy' variable. Industry sector, a potential determinant of tax compliance costs, could not be retained as an independent variable because many respondents chose not to identify their activity sectors.

As expected, business size measured by annual turnover was a strong predictor of the level of tax compliance costs. The value of the coefficients (< 1) showed that the increase in compliance costs was less than proportional, confirming regressively. The number of taxes with which the business had to comply was also a strong predictor of the level of total compliance costs and of internal time costs (though not of external costs). None of the variables representing legal form (dummy variables) were found to be significantly correlated when the model was controlled for business size.

⁴Asking respondents to report compliance time in two different questions inevitably led to discrepancy in the totals. However it is generally considered that time reported in relation to specific tax activities is more reliable than time in relation to specific taxes.

Overall, the results for this study confirm the findings of Slemrod and Venkatesh(2002) that the size of the business is a significant predictor of the amount of compliance costs and that the relationship with legal form is not significant. In addition, the 2012 study found that the number of taxes that the entities had to report was a significant predictor of both total compliance costs and internal time costs. The SME survey also attempted to gauge respondents' perceptions about compliance costs and to seek their views about which factors were driving these costs for their businesses. Respondents were invited to score a number of factors which, on the basis of existing literature, were likely to be drivers of high compliance costs for 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 0 to 10, with 0 meaning no impact and 10 implying an enormous impact. For the overall sample, only two factors, complexity of tax laws and compliance requirements imposed by the ATO, rated above 6 out of 10. Two further factors: frequency of tax changes and the number of taxes the business had to deal with, rated above 5 (Table 5).

Drivers of tax compliance costs	Mean score(out of 10)
Industry sector in which your business is involved	4.68
Complexity of commercial transactions	3.82
Complexity of tax laws	6.22
Frequency of changes in tax rules	5.43
Number of different taxes that your business has to deal with	5.03
Frequency of changes in tax administrative practices	4.57
Compliance and regulatory tax requirements imposed by the ATO	6.20
Compliance and regulatory tax requirements imposed by States/Territories	4.27
Other factors	3.55

Source: Lignier, Evans and Tran-Nam (2014: 246).

Overall, the results of the 2012 SME survey confirm the findings of previous research in Australia and elsewhere: tax compliance costs are large, regressive and not declining over time. A further important outcome of this research is the confirmation that business size (measured by annual turnover) is the single most significant determinant of the magnitude of compliance costs at firm level. In addition, the number of taxes the entity has to comply with is also a significant predictor of the magnitude of these costs, even when controlling for size. In contrast, legal form is not found to be significantly correlated with a firm's compliance costs. The results of the study strongly suggest that taxation compliance costs continue to be a significant issue for SMEs, and that policy-shapers and policy-makers need to be very cognisant of the potential impact on that burden whenever changes to legislative and administrative requirements affecting the tax system are contemplated.

4.4Tax compliance cost estimates of large businesses

Although tax compliance costs of large businesses in Australia had been surveyed in previous studies (see Evans et al. 1997), the 2012 Australian research was the first study that specifically surveyed large corporate groups. The 187 entities included in the gross sample were selected by the ATO, with the characteristics of respondents in the net sample being benchmarked against the population of large businesses in Australia. Business size was broadly consistent with the characteristics of the population; however entities in the sample tended to have a more complex structure with a greater number of operating entities. Also, financial services and mining businesses were over-represented in the sample compared to the reference population, while general manufacturing and other services were under-represented. Notwithstanding these limitations, the data derived from the survey were considered to be sufficiently robust for the purposes of extrapolation to the broader community of large business taxpayers.

Unlike smaller entities, large corporations generally have sophisticated accounting systems in place. Hence it was anticipated that the internal reporting data would allow respondents (essentially accountants and lawyers) to track and identify external costs related to tax compliance without too much difficulty. For the same reasons, the measurement of internal labor costs and incidental costs relating to tax compliance may not be as problematic as in smaller businesses where accounting and tax record-keeping tasks are often entangled. Furthermore, previous research has indicated that, unlike SMEs where business owners and unpaid helpers often contribute a large proportion of internal time, tax activities in larger entities are almost exclusively undertaken by paid personnel (Evans et al 1997: 125).

This means that internal staff time can be easily valued on the basis of salary and on-costs. Hence, for internal labor costs respondents were asked to report dollar values rather than a number of hours. As was the case with SMEs, only gross compliance costs were estimated for this cohort of taxpayers. Managerial benefits, such as the improved quality of the accounting and financial management system and better financial decision-making, or savings on financial reporting costs or reduced likelihood of tax audit, are notoriously difficult to evaluate and in any case have been found to be relatively insignificant in large organizations (see Lignier 2009). They were therefore not taken into account in this study. Cash flow and tax deductibility benefits are difficult to measure when a large number of taxes are taken into consideration, and calculation is problematic and would have required macro-statistics data that were not available to the researchers. The survey results indicated that the average estimated gross annual compliance costs per firm were highly significant in absolute terms: in excess of A\$3 million, with internal labor costs on tax compliance comprising just under half of this total (Table 6). Relative compliance costs expressed in relation to annual turnover were A\$0.40 per \$1,000 of annual turnover, confirming the regressive nature of compliance costs already identified.

Cost category	Average cost per firm ('000)	Average cost per \$1,000 of annual turnover	
External costs	1,030	0.14	
Internal staff time costs	1,374	0.18	
Incidental costs	603	0.08	
Gross compliance costs	3,008	0.40	

Source: Evans, Lignier and Tran-Nam (2014).

The absence of previous comparable research into the tax compliance costs of the large business sector in Australia makes it difficult to evaluate the evolution of those costs over time. However, the comparison with the results from previous research in both the US and Canada tends to support the view that these costs have not diminished over time: a relatively recent study of tax compliance costs of Canadian large businesses estimated the cost of compliance at C\$2,552,000 (A\$ 2,383,000) including C\$1,366,000 (A\$1,342,000) for the costs of complying with income tax obligations (Vaillancourt, Édison and Barros 2013: 62). As was the case with SME taxpayers, a multiple regression analysis was performed for the large corporate sector in order to identify the determinants of tax compliance costs. Previous research in the US and Canada has suggested that business size, industry sector and tax profile (number and nature of taxes) potentially contribute to the tax compliance costs encountered by the sector (see, for example, Slemrod and Blumenthal 1996; Slemrod and Venkatesh 2002, Erard 1997). In addition, the current study also investigated the impact on tax compliance costs of the corporate group's Risk Differentiation Framework (RDF) classification by the ATO: essentially the view taken by the ATO (and shared with the corporate group) as to its exposure to, and appetite for, risk in terms of its tax affairs.

Group turnover and number of entities in the group were found to be strong predictors of gross compliance costs in the 2012 Australian study. The RDF risk classification profile and the number of federal taxes were also found to be significant predictors of both gross compliance costs and one of its principal components – external costs.⁵On the other hand, none of these variables were found to be determinants of internal staff costs expended upon tax compliance. Further analysis of the results indicated a statistically significant relationship between risk classification and tax compliance costs associated with review, audit and litigation, but no significant relationship with the cost of tax planning.⁶It appears that when controlling for size and number of entities in the group, the risk classification of the group had a significant effect on the group's tax compliance costs, and its external costs in particular. It also appears that the influence on the costs related to review, audit and litigation was particularly strong. However, it was not clear whether the risk classification in itself was the driving factor: that is, it may alternatively have been the case that a higher risk classification generated more intense review activity from the ATO and as a result the tax compliance costs incurred by the group increased. Apart from these statistically measurable determinants, three broad drivers of tax compliance costs were perceived by large business taxpayers: the complexity and uncertainty of tax rules; the administrative compliance requirements imposed by tax authorities; and international exposure.

⁵Level of significance was 5% for the relationship between risk classification and gross compliance costs, number of federal taxes and external costs, and 10% in the other cases.

⁶The level of significance was 5%.

5. Summary Conclusion

This paper has sought to examine the burden of tax compliance as a red tape to businesses. This is accomplished by providing an overview of regulations, discussing tax compliance and then examining the taxpayer costs of tax compliance. Tax can be thought of as one of the many regulations imposed on businesses by both domestic and overseas governments. Apart from the revenue collected, tax regulation in itself generates very little direct benefits to businesses. At the same time, it is well-known that taxation represents the most costly regulation to businesses. These justify the need to single out taxation among the many regulations with which businesses need to comply. In reviewing the tax compliance literature, one of the important conceptual issues that need to be settled is that whether tax avoidance should be treated as tax compliance or noncompliance. The paper has provided a concise summary of the three major models of tax compliance, namely, the deterrence, fiscal psychology and behavioural economic models. From a policy perspective, the deterrence and fiscal psychology models provide tax administrators with theoretical justification for a range of measures to promote tax compliance. While the traditional deterrence approach emphasises involuntary compliance through detection and punitive enforcement measures such as auditing, penalties and prosecution, the modern fiscal psychology model stresses voluntary compliance through preventive and education measures, including real and perceived procedural fairness.

The discussion on tax compliance leads naturally to the costs of tax compliance. Despite this obvious linkage it is interesting to note that virtually all models of taxpayer compliance behaviour conveniently assume away tax compliance costs. In discussing the meaning and scope of tax compliance costs, a distinction has been made between involuntary costs (tax computational costs) and voluntary costs (tax planning costs). It is still controversial whether or not tax compliance should include tax planning and whether or not tax compliance costs should include involunrary costs. It has also been recognized that in complying with tax law requirements, bsuiness taxpayers can enjoy a number of compliance offsets such as managerial, tax deductibitlity and cash flow benefits.As an illustration, the paper has reported and discussed quantitative estimates of tax compliance costs incurred by Australian business taxpayers in 2011-12. Theresearch outcomes, derived from recent business taxpayer surveys of tax compliance costs, are highly confirmatory. They confirm key findings from the literature that tax compliance costs are significant, regressive and not declining over time. Further, the large business survey is also innovative as it provides new insights into the compliance costs profile of the large corporate sector in Australia.

First, gross tax compliance costs at taxpayer level are significant and have substantially increased in the 17 years since the previous large-scale survey undertaken in 1995. The substantial increase in the tax compliance costs incurred by SME taxpayers may reasonably be attributed to the introduction of GST in 2000, a tax that substantially affects the compliance activities of business taxpayers. Much of the increase experienced by the SMEs is accounted for by the growth in the external costs of compliance, reflecting perhaps a trend towards the outsourcing of tax activities to professional intermediaries. Second, the regressive pattern of tax compliance costs has been confirmed for all business taxpayers. Size, measured by turnover, was a significant determinant of the gross compliance costs for SMEs and large business taxpayers. However, in the case of business taxpayers, the number of taxes the entity had to comply with was also a significant determinant.

Finally, there was a general consistency of views across all classes of taxpayers regarding the significance of their compliance costs and the increasing complexity of tax laws. However, larger businesses seem to hold more strongly negative views about issues such as the frequency of changes in tax laws and the uncertainty regarding tax administrative practices. Overall, the main outcome of this research is that tax compliance costs have continued to rise and have risen significantly in the past two decades in Australia despite various simplification initiatives such as the 'simplified tax system' legislation for SMEs. Whether this trend is an indication of rising tax complexity, as seems to be the perception of taxpayers, or the result of more tax planning behaviour, or a combination of both, is an important topic that needs to be investigated through further research. In summary, tax compliance will continue to be the main red tape to Australian businesses in decades to come.

References

- Allingham, M., and A. Sandmo (1972), "Income Tax Evasion: A Theoretical Analysis", Journal of Public Economics, Vol. 1Issue 3–4, 323–338.
- Andreoni, J., B. Erard, and J. Fienstein(1989), "Tax Compliance", Journal of Economic Literature, Vol. 36 Issue 2, 818–860.
- Australian Taxation Office (ATO)(2011), Large Business and Tax Compliance, ATO, Canberra.
- Australian Chamber of Commerce and Industry (ACCI) (2005), Holding Back the Red Tape Avalanche: A Regulatory Reform Agenda for Australia, ACCI, Canberra.
- Becker, G.(1968), "Crime and Punishment: An Economic Approach", Journal of Political Economy, Vol.76 Issue 2, 169–217.
- Becker, G.(1974), "A Theory of Social Interaction", Journal of Political Economy, Vol.82 Issue 6, 1063–1093.
- Coolidge, J.(2012), "Findings of Tax Compliance Cost Surveys in Developing Countries", *e Journal of Tax Research*, Vol. 10 Issue 2, 250–287.
- Crain, V.N., and W.M. Crain (2010), The Impact of Regulatory Costs on Small Firms, US Small Business Administration, Washington DC.
- Dawson, J.W., and J.J. Seater (2013), "Federal Regulation and Aggregate Economic Growth", Journal of Economic Growth, Vol. 18 Issue 2, 137–177.
- Devos, K.(2014), Factors Influencing Individual Taxpayer Compliance Behaviour, Springer, Dordrecht.
- DST Global Solutions (2012), FSC–DST Global Solutions CEO Report, DST Global Solutions, Sydney.
- Erard, B.(1997), "The Income Tax Compliance Burden on Canadian Big Business", Department of Economics Working Paper 97–2, Carleton University, Ottawa.
- European Commission (EC)(2007), Models to Reduce the Disproportionate Regulatory Burden on SMEs: Report of the Expert Group, Enterprise and Industry Directorate General, Brussels.
- European Commission (EC)(2012), Europe Can Do Better Best Practices for Reducing Administrative Burdens, EC, Brussels.
- European Commission (EC)(2013), A Review and Evaluation of Methodologies to Calculate Tax Compliance Costs, Taxation Papers: Working Paper No. 40-2013, EC, Brussels.
- Evans, C. (2008), "Taxation Compliance and Administrative Costs: An Overview", in M. Lang, C. Obermair, J. Schuch, C. Staringer and, P. Weninger (eds), Tax Compliance Costs for Companies in an Enlarged European Community, Wolters Kluwer Law International, Rijn, 447–468.
- Evans, C., K. Ritchie, B. Tran-Nam, and M. Walpole (1997), A Report into Taxpayer Costs of Compliance, Australian Government Publishing Service, Canberra.
- Evans, C., P. Lignier, and B. Tran-Nam (2014), The Tax Compliance Costs of Large Corporation: Recent Empirical Evidence, 106th National Tax Association Annual Conference, NTA, Tampa, 21–23 November.
- Haig, R.M.(1935), "The Cost to Business Concerns of Compliance with Tax Laws", Management Review, Vol. 24 Issue November, 323–333.
- Hashimzade, N., G. Myles, and B. Tran-Nam (2013), "Applications of Behavioural Economics to Tax Evasion", Journal of Economic Surveys, Vol. 27 Issue 5, 941–997.
- HM Treasury (2010), Office of Tax Simplification Framework Document, available from<<u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/193545/ots_framew_ork_document_jul10.pdf</u>?>.
- Inland Revenue Service (IRS)(2009), Update on Reducing the Federal Tax Gap and Improving Voluntary Compliance, IRS, Washington DC.
- Inland Revenue(2010), SME Tax Compliance Costs 2009: Evaluation Report 1, Inland Revenue, Wellington.
- James, S., andC. Alley(1999), "Tax Compliance, Self Assessment, and Tax Administration", Journal of Finance and Management in Public Services, Vol. 2 Issue 2, 27–42.
- Johnston, K.S.(1963), Corporations' Federal Income Tax Compliance Costs; A Study of Small, Medium-size, and Large Corporations, Bureau of Business Research Monograph No. 110, Ohio State University, Ohio.
- Lattimore, R., A. Madge, B. Martin, and J. Mills(1998), Design Principles for Small Business Programs and Regulations, Productivity Commission, Canberra.
- Lignier, P. (2009), "Measuring the Managerial Benefits of Tax Compliance: A Fresh Approach", Australian Tax Forum, Vol. 24 Issue 2, 117–150.

- Lignier, P., C. Evans, and B. Tran-Nam(2014), "Tangled Up in Tape: The Continuing Plight of the Small and Medium Enterprise Sector", Australian Tax Forum, Vol. 29 Issue 2, 217–247.
- McKerchar, M.(2003), The Impact of Complexity upon Tax Compliance: A Study of Australian Personal Taxpayers, Australian Tax Research Foundation Research Study No. 39, ATRF, Sydney.
- Organisation for Economic Co-operation and Development (OECD)(1997), The OECD Report on Regulatory Reform, OECD, Paris.
- Organisation for Economic Co-operation and Development (OECD) (2001), Businesses' Views on Red Tape: Administrative and Regulatory Burdens on Small- and Medium-Sized Enterprises, OECD, Paris.
- Organisation for Economic Co-operation and Development (OECD)(2004), Compliance Risk Management: Managing and Improving Tax Compliance, OECD, Paris.
- Pope, J.(1995), "The Compliance Costs of Major Taxes in Australia", in C.T. Sandford (ed.), *Tax Compliance Costs: Measurement and Policy*, Fiscal Publications, Bath,101–125.
- Pope, J., and M. McKerchar(2011), "Understanding Tax Morale and Its Effect on Individual Taxpayer Compliance", British Tax Review, Vol. 2011 Issue 5, 587–601.
- Roth, R., and J. Scholz (eds) (1989), Taxpayer Compliance: Social Science Perspectives, University of Pennsylvania Press, Philadelphia.
- Sandford, C.T, M. Godwin, and P. Hardwick(1989), Administrative and Compliance Costs of Taxation, Fiscal Publications, Bath.
- Schmölders, G.(1959), "Fiscal Psychology: A New Branch of Public Finance", National Tax Journal, Vol. 12 Issue 4, 340–345.
- Slemrod, J. (1989), "The Return to Tax Simplification: An Econometric Analysis", Public Finance Review, Vol. 17 Issue 1, 3–27.
- Slemrod, J., and Blumenthal, M. (1996), "The Income Tax Compliance Costs of Big Business", Public Finance Quarterly, Vol. 24 Issue 4, 411–438.
- Slemrod, J., and V. Venkatesh(2002), The Income Tax Compliance Cost of Large and Mid-Size Businesses, Report to the Internal Revenue Service LMSB Division, University of Michigan Business School, Ann Arbor.
- Strümpel, B.(1969), "The Contribution of Survey Research to Public Finance", in A. Peacock (ed.), Quantitative Analysis in Public Finance, Praeger, New York, 13–32.
- Tran-Nam, B., C. Evans, M. Walpole, and K. Ritchie (2000), "Tax Compliance Costs: Research Methodology and Empirical Evidence from Australia", National Tax Journal, Vol.53 Issue 2, 229–252.
- Tran-Nam, B., and J. Glover (2002), "Estimating the Transitional Compliance Costs of the GST in Australia: A Case Study Approach", Australian Tax Forum, Vol. 17 Issue 4, 499–536.
- United States Office of Management and Budget (USOMB)(2012), Draft 2012 Report to Congress on the Benefits and Costs Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities, USOMB, Washington DC.
- Vaillan court, F., R-C Édison, and M.S. Barros(2013), The Compliance and Administrative Costs of Taxation in Canada, Fraser Institute, Ottawa.
- Weber, T.O., J. Fooken, and B. Herrmann (2014), "Behavioural Economics and Taxation", Taxation Papers Working Paper No.41–2014, EC, Luxembourg.
- Yitzhaki, S. (1974), "A Note on Income Tax Evasion: A Theoretical Analysis", Journal of Public Economics, Vol. 3 Issue 2, 201–202.