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The Tax Compliance Costs of Large Corporations: An Empirical Inquiry and Comparative Analysis

Chris Evans, Philip Lignier, and Binh Tran-Nam*

PRÉCIS

Le présent article porte sur les coûts liés à l'observation fiscale assumés par le secteur des grandes sociétés. À l'aide d'un sondage mené auprès de grandes et très grandes sociétés, ainsi que de groupes internationaux en Australie, et en se fondant sur les résultats d'autres études, les auteurs comparent et mettent en opposition le fardeau actuel et le fardeau des dernières années de ces entreprises en Australie et d'autres entreprises à l'étranger. Ils cernent des tendances clés dans le profil des coûts d'observation du secteur des grandes sociétés et proposent des explications possibles de ces tendances. Ils abordent également les facteurs qui, de l'avis des répondants au sondage, donnent lieu à des coûts d'observation élevés. Enfin, ils donnent un aperçu de la relation existant entre les positions prises par les entreprises australiennes du secteur des grandes sociétés en matière de risque fiscal et le profil des coûts d'observation de ces entreprises. Les résultats de leur étude sont à la fois confirmatifs et pertinents. Ils confirment les résultats clés trouvés dans la littérature selon lesquels les coûts d'observation fiscale sont élevés, régressifs et ne diminuent pas au fil du temps, mais ils offrent également une nouvelle perspective sur le profil des coûts d'observation du secteur des grandes sociétés — un domaine encore très peu étudié. L'étude laisse entendre que, mis à part la taille de l'entreprise, le montant

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des impôts que l'entité doit observer est une variable explicative du niveau des coûts d'observation fiscale. De plus, elle laisse entendre qu'après le contrôle de la taille, les entités placées par le fisc dans la catégorie des entités présentant un risque d'observation élevé ont des coûts d'observation plus élevés que les entreprises classées comme présentant un risque moins élevé. Outre ces déterminants statistiquement mesurables, l'étude donne à penser que les contribuables perçoivent trois grands moteurs aux coûts d'observation fiscale : la complexité et l'incertitude des règles fiscales, les exigences administratives en matière de conformité imposées par les administrations fiscales et la présence sur le marché international.

ABSTRACT

This article considers the tax compliance costs incurred by the large corporate sector. Using a survey of large and very large businesses and international groups in Australia, and drawing on the findings of other studies, the authors compare and contrast the current burden with the burden encountered by such businesses in Australia and elsewhere in recent years. They identify key trends in the compliance cost profile of the large corporate sector and possible explanations for those trends. They also discuss the factors that are perceived by survey respondents to give rise to high compliance costs. Finally, they provide insights into the relationship between the tax-risk positions taken by Australian firms in the large corporate sector and the compliance cost profiles of those firms.

The research outcomes are both confirmatory and insightful. They confirm key findings from the literature that tax compliance costs are significant, regressive, and not reducing over time, but also provide new insights into the compliance cost profile of the large corporate sector—an area of research that has previously been largely unexplored. The research suggests that, apart from business size, the number of taxes that the entity has to comply with is a significant predictor of the level of tax compliance costs. In addition, it suggests that, after controlling for size, entities that have been identified as a significant compliance risk by the tax authority have higher compliance costs than those with lower risk classifications. Besides these statistically measurable determinants, the study suggests that three broad drivers of tax compliance costs are perceived by taxpayers: the complexity and uncertainty of tax rules, the administrative compliance requirements imposed by tax authorities, and international exposure.

KEYWORDS: TAX ■ TAX ADMINISTRATION ■ OPERATING COSTS ■ LARGE CORPORATIONS TAX ■ RISK MANAGEMENT ■ COMPLIANCE

CONTENTS

INTRODUCTION

Studies into tax compliance costs—the costs incurred by taxpayers in complying (or sometimes not complying) with their tax obligations[1]—over the last 30 years or so have considered the implications of such costs in relation to many different types of tax and many different types of taxpayer.[2] The level of coverage has varied: some taxes and taxpayer types have received very comprehensive consideration, while others have been relatively underresearched. For example, the tax compliance costs of the small business sector have been relatively heavily researched,[3] primarily as a result of concerns about the well-established regressive nature of tax compliance costs.[4]

By way of contrast, in particular outside the United States, Canada, and Australasia, far less attention has been paid to the large corporate sector.[5] Bluntly, the

1 See below under the heading "Research Design and Execution" for a description of the main components taken into account in measuring tax compliance costs. That section also describes the broader context in which the present study was undertaken.

2 See, for example, Binh Tran-Nam, Chris Evans, Michael Walpole, and Katherine Ritchie, "Tax Compliance Costs: Research Methodology and Empirical Evidence from Australia" (2000) 53:2 *National Tax Journal* 229-52; and Chris Evans, "Taxation Compliance and Administrative Costs: An Overview," in Michael Lang, Christine Obermair, Josef Schuch, Claus Staringer, and Patrick Weninger, eds., *Tax Compliance Costs for Companies in an Enlarged European Community* (Vienna and London: Linde Verlag and Kluwer Law International, 2008), 447-68.

3 See Alfons J. Weichenrieder, *Survey on the Taxation of Small and Medium-Sized Enterprises: Draft Report on Responses to the Questionnaire* (Paris: Organisation for Economic Co-operation and Development, Centre for Tax Policy and Administration, September 2007).

4 These concerns are discussed, for example, in Cedric Sandford, Michael Godwin, and Peter Hardwick, *Administrative and Compliance Costs of Taxation* (Bath: Fiscal Publications, 1989).

5 See below under the heading "A Review of the Literature" for a discussion of prior research on the tax compliance costs of this sector.

attitude has often been that this sector is "big enough and ugly enough" to be able to cope with the costs of complying with tax obligations, and that therefore less attention needs to be given to its compliance cost profile. Moreover, early research into the compliance costs of the large business sector suggested that many such businesses, rather than incurring compliance costs, may derive substantial benefits from tax compliance.[6] For example, in Australia in the 1990s, many large corporations may have actually benefited from "negative" compliance costs as a result of two factors that offset those costs: the cash flow benefits that derived from their ability to use—in the short to medium term—amounts of tax withheld or deducted from employees, customers, and others pending payment to the revenue authority; and the tax deductibility of almost all of their expenses.[7] In addition, large corporations may have derived further unquantifiable "managerial" benefits from the financial and management disciplines imposed by the tax system. The advantages that these compliance benefits may have bestowed on large corporations have been somewhat mitigated in more recent years by the bringing forward of the point at which withheld taxes have to be remitted to government.

The measurement and quantification of tax compliance costs is directly relevant to research into the degree of taxpayer compliance with the tax laws and how this can be improved, which invariably includes consideration of the scope for simplification of the tax laws and tax system.[8]

As a general observation, however, it is becoming increasingly clear that the gap in the research and understanding of tax compliance costs for large business also must be addressed; robust information and analysis of such costs for the large business sector are needed to assist governments in making well-informed decisions on broader tax policy and reform in this sector, given the extremely significant and topical issues that are being encountered in relation to the tax profile of "big business" entities worldwide. Very high compliance costs for large businesses may suggest that concessions within existing income tax systems are difficult to justify, or that there may be the potential for compliance cost reduction through structural changes to the

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6 Cedric Sandford and John Hasseldine, *The Compliance Costs of Business Taxes in New Zealand* (Wellington: Victoria University of Wellington, Institute of Policy Studies, 1992).

7 Chris Evans, Katherine Ritchie, Binh Tran-Nam, and Michael Walpole, *A Report into Taxpayer Costs of Compliance* (Canberra: Australian Government Publishing Service, 1997), at 51.

8 See, recently, Sebastian Eichfelder and Chantal Kegels, "Compliance Costs Caused by Agency Action? Empirical Evidence and Implications for Tax Compliance" (2014) 40:1 *Journal of Economic Psychology* 200-19. Tax simplification has been described as a measure that would be "a good start" in improving compliance even if the tax system is viewed as an inherently "complex dynamical system": see J.T. Manhire, "Tax Compliance as a Wicked System" (2016) 18:6 *Florida Tax Review* 235-74, at 268 and 238. It has also been noted, however, that "hypercomplexity" in the tax system does not necessarily imply that interactions of individual participants in the system must become more costly: Frank H. Pedersen, "A Contemporary Approach to Tax Complexity: Polycentrism in an Increasingly International Tax Environment," in Chris Evans, Richard Krever, and Peter Mellor, eds., *Tax Simplification* (Alphen aan den Rijn: Kluwer Law International, 2015), 9-23, at 11-12.

income tax in its present form—for example, through a move to formula apportionment approaches to the allocation of profits between jurisdictions in place of the existing arm's-length pricing approach,[9] or even broader reforms, such as the introduction of cash flow based or "allowance for corporate equity" (ACE) systems.[10]

Further study in this field is also important in providing complementary information relevant to tax administration performance. This area of research is very much in its infancy, but it could be expected to benefit from any findings of substantial discrepancies in taxpayer compliance costs between jurisdictions.[11]

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9 For a discussion of the impact of recent base erosion and profit shifting (BEPS) concerns in relation to multinational enterprises, and the potentially adverse implications of these developments for the future of the current tax treaty network, see, for example, Yariv Brauner, "Treaties in the Aftermath of BEPS," *Brooklyn Journal of International Law* (forthcoming); Brauner also cites the extensive literature on the potential advantages of formula apportionment as a system for international tax allocation as currently used in the US states and Canadian provinces. Compliance costs and administration will be important factors to consider in assessing the alternative systems under available economic models: Thomas A. Gresik, "Assessing the Normative Differences Between Formula Apportionment and Separate Accounting," in Wolfgang Schön and Kai A. Konrad, eds., *Fundamentals of International Transfer Pricing in Law and Economics* (Heidelberg: Springer, 2012), 257-66, at 259, note 1, citing Jack Mintz, "Corporate Tax Harmonization in Europe: It's All About Compliance" (2004) 11:2 *International Tax and Public Finance* 221-34, and Walter Hellerstein and Charles E. McLure Jr., "The European Commission's Report on Company Income Taxation: What the EU Can Learn from the Experience of the US States" (2004) 11:2 *International Tax and Public Finance* 199-220. See also (among others) Johannes Becker and Clemens Fuest, "Tax Enforcement and Tax Havens Under Formula Apportionment" (2010) 17:3 *International Tax and Public Finance* 217-35.

10 The implementation of an ACE system was recently considered in Australia, but was set aside for the short to medium term in the context of concerns about design challenges and a broader wariness of transitional costs (even where reforms may produce greater efficiency in the longer term): Australia, *Business Tax Working Group: Final Report* (Canberra: The Treasury, November 1, 2012), at 12 and 17. While favouring a reduction in Australia's corporate tax rate, the working group was, however, also constrained by its terms of reference to ensure that reform proposals were revenue-neutral; as a result, it was unable to develop a specific reform package, owing to disagreement among business groups as to the particular exemptions in the tax base that could be eliminated to fund such a rate reduction.

11 See, for example, William Crandall, *Revenue Administration: Performance Measurement in Tax Administration* (Washington, DC: International Monetary Fund, June 2010); William Crandall, *Feasibility Study: Developing a Tool To Assess Tax Administration Performance* (Washington, DC: Public Expenditure and Financial Accountability Partnership, May 2011); Organisation for Economic Co-operation and Development, *Tax Administration 2013: Comparative Information on OECD and Other Advanced and Emerging Economies* (Paris: OECD, 2013); Satoru Araki and Iris Claus, *A Comparative Analysis of Tax Administration in Asia and the Pacific* (Mandaluyong City, the Philippines: Asian Development Bank, April 2014); and James Alm and Denvil Duncan, "Estimating Tax Agency Efficiency" (2014) 34:3 *Public Budgeting & Finance* 92-110. Tax administration surveys of their clients overall, or of the large business sector specifically, often report generally favourable levels of satisfaction, but such surveys are only one measure needed in this field: see, for example, Australian Taxation Office, "ATO Single Corporate

In this article, we consider the tax compliance costs that have been incurred in recent years by the large corporate sector in Australia—essentially those Australian domestic and multinational corporate groups with an annual turnover (gross revenues) in excess of AUD 250 million (approximately CAD 260 million or USD 190 million in 2012, when our study sample was selected). We compare and contrast the current burden with the burden encountered by such businesses in Australia, Canada, the United States, and elsewhere, in the mid- to late 1990s and more recently. We identify key trends in the compliance cost profile of the large corporate sector and possible explanations for those trends. We also provide insights into the relationship between the tax-risk positions taken by Australian firms in the large corporate sector and the compliance cost profiles of those firms.

The remainder of the article proceeds as follows. We begin with a review of the literature relating to the compliance costs of large corporations encountered in Australia, the United States, Canada, and other developed countries. We then describe the design and execution of our current research project, and outline the demographic features of the sample population in the study. We report the principal outcomes of our research and identify the compliance cost profile of the major corporations, taking into account the costs that they incurred for external tax advisers, their internal staff costs of compliance, and other costs incurred. We use these data to undertake appropriate evaluations, including considerations relating to the breakdown of costs by reference to industry sectors, types of tax, tax functions, and the global spread of activities. We identify and analyze trends, and discuss the extent and nature of the regressivity encountered in this sector. We also undertake some broad and tentative comparative analysis.

We then explore the factors that may determine tax compliance costs of large business—both actual and perceived. We consider the drivers of tax compliance costs, as perceived by survey respondents, and undertake a factor analysis to establish clusters or patterns in the perceptions of respondents. We present a statistical analysis of the determinants of large-business compliance costs, including a consideration of the relationship between the aggressiveness of the corporate group on tax matters (as self-identified by reference to the group's position in the Australian Taxation Office's [ATO's] risk differentiation framework [RDF]) and its tax compliance costs profile—essentially testing out the thesis that the more aggressive the stance taken by a major corporation on tax matters, the higher its tax compliance cost profile is likely to be.

The article ends with our concluding comments.

Perceptions Survey: 2014-15" (www.ato.gov.au/About-ATO/Research-and-statistics/In-detail/Annual-research/ATO-Single-Corporate-Perceptions-Survey---2014/15/); and IFF Research, "Large Business Panel Survey 2013," prepared for HM Revenue & Customs, May 2014 (www.gov.uk/government/uploads/system/uploads/attachment_data/file/318936/report312.pdf); and United States Government Accountability Office, *Corporate Tax Compliance: IRS Should Determine Whether Its Streamlined Corporate Audit Process Is Meeting Its Goals*, GAO-13-662 (Washington, DC: GAO, August 2013), at 15 (www.gao.gov/assets/660/657092.pdf).

A REVIEW OF THE LITERATURE

There is now a significant literature relating to tax compliance costs, with studies conducted in most developed and many developing countries.[12] Tran-Nam and Evans have noted that the early quantitative studies of tax compliance costs in the 1930s to 1960s took place in North America.[13] Those early studies were undertaken by researchers from diverse academic backgrounds, including management science, business studies, accounting, and economics. After something of a hiatus, there have been a number of further major studies in more recent years in both the United States[14]

12 Evans, supra note 2, at 454; Jacqueline Coolidge, "Findings of Tax Compliance Cost Surveys in Developing Countries" (2012) 10:2 *eJournal of Tax Research* 250-87; and Sebastian Eichfelder and François Vaillancourt, "Tax Compliance Costs: A Review of Cost Burdens and Cost Structures" (2014) 210:3 *Hacienda Pública Española/Review of Public Economics* 111-48.

13 Binh Tran-Nam and Chris Evans, "The Impact of Cedric Sandford on the Discipline of Tax Compliance Costs" (2002) 17:4 *Australian Tax Forum* 389-406, at 393, citing, for example, Robert Murray Haig, "The Cost to Business Concerns of Compliance with Tax Laws" (1935) 24:11 *Management Review* 323-33, and John H. Wicks, "Taxpayer Compliance Costs from the Montana Personal Income Tax" [Fall 1965] *Montana Business Quarterly* 36-42.

14 See, for example, Joel B. Slemrod and Marsha Blumenthal, "The Income Tax Compliance Cost of Big Business" (1996) 24:4 *Public Finance Review* 411-38; Joel Slemrod, *Measuring Taxpayer Burden and Attitudes for Large Corporations: 1996 and 1992 Survey Results*, Office of Tax Policy Research Working Papers WP 97-1 (Ann Arbor, MI: University of Michigan, Ross School of Business, 1997); Joel Slemrod and Varsha Venkatesh, *The Income Tax Compliance Costs of Large and Mid-Size Businesses*, report to the IRS LMSB Division submitted by the Office of Tax Policy Research (Ann Arbor, MI: University of Michigan, Ross School of Business, September 5, 2002); and John L. Guyton, John F. O'Hare, Michael P. Stavrianos, and Eric J. Toder, "Estimating the Compliance Cost of the U.S. Individual Income Tax" (2003) 56:3 *National Tax Journal* 673-88. The Internal Revenue Service (IRS) maintains an active program of taxpayer surveys across different economic sectors and, in cooperation with the US Treasury's Office of Tax Analysis, also publishes much important research in this field: see, for example, George Contos, John Guyton, Patrick Langetieg, and Susan Nelson, "Taxpayer Compliance Costs for Small Businesses: Evidence from Corporations, Partnerships and Sole Proprietorships," in *Proceedings of the 102nd Annual Conference on Taxation* (Washington, DC: National Tax Association, 2010), 50-59; George Contos, John Guyton, Patrick Langetieg, and Melissa Vigil, "Individual Taxpayer Compliance Burden: The Role of Assisted Methods in Taxpayer Response to Increasing Complexity," in Martha Eller Gangi and Alan Plumley, eds., *Recent Research on Tax Administration and Compliance: Selected Papers Given at the 2010 IRS Research Conference* (Washington, DC: Internal Revenue Service, 2010), 191-220; George Contos, John Guyton, Patrick Langetieg, Allen H. Lerman, and Susan Nelson, "Taxpayer Compliance Costs for Corporations and Partnerships: A New Look," in Alan Plumley, ed., *New Research on Tax Administration: An IRS-TPC Conference* (Washington, DC: Internal Revenue Service, 2012), 3-18; Rosemary Marcuss, George Contos, John Guyton, Patrick Langetieg, Allen Lerman, Susan Nelson, Brenda Schafer, and Melissa Vigil, "Income Taxes and Compliance Costs: How Are They Related?" (2013) 66:4 *National Tax Journal* 833-54; and John Guyton and Ronald Hodge II, "The Compliance Costs of IRS Post-Filing Processes," in Alan Plumley, ed., *An IRS-TPC Research Conference: Advancing Tax Administration* (Washington, DC: Internal Revenue Service, 2014), 39-60.

and Canada,[15] suggesting that interest is being reignited. Much of that research in North America has related to the compliance costs of the large business sector. The use of survey instruments is also well established in the large business sector for other tax-related empirical research.[16]

The extant literature has suggested three broad conclusions with respect to tax compliance costs as they apply to all business sectors: these costs are large and significant in both absolute and relative terms (for example, in relation to administrative costs[17] or tax yield or national product); they are regressive (smaller businesses face a relatively higher proportionate compliance burden than larger businesses); and they are not reducing over time.[18]

There are several studies that illustrate the first of these conclusions in the context of the large business sector. For example, Slemrod and Blumenthal conducted a survey in 1992 of 1,329 of the largest corporations in the United States, which elicited 365 responses (a response rate of 27.5 percent) with approximately 10 percent of those respondents having assets of more than USD 10 billion.[19] Slemrod and Blumenthal found that the average corporate tax compliance costs for the respondents were USD 1.57 million, equating to total tax compliance costs of just over USD 2 billion for the large business sector in aggregate.[20] This survey related to US federal and subfederal corporate income taxes, and approximately 70 percent of the costs were attributable to the federal tax (an attribution recognized as "undoubtedly highly arbitrary for many firms").[21] When related to tax yield, tax compliance costs represented 3.2 percent of total tax revenue. A later US study by Slemrod and Venkatesh of

15 François Vaillancourt, *The Administrative and Compliance Costs of the Personal Income Tax and Payroll Tax System in Canada, 1986*, Canadian Tax Paper no. 86 (Toronto: Canadian Tax Foundation, 1989); Brian Erard, *The Income Tax Compliance Burden on Canadian Big Business*, Department of Economics Working Paper 97-2 (Ottawa: Carleton University, 1997); Robert E. Plamondon and David Zussman, "The Compliance Costs of Canada's Major Tax Systems and the Impact of Single Administration" (1998) 46:4 *Canadian Tax Journal* 761-85; and François Vaillancourt, Édison Roy-César, and Maria Silvia Barros, *The Compliance and Administrative Costs of Taxation in Canada* (Vancouver: Fraser Institute, April 2013).

16 See, for example, John R. Graham, Michelle Hanlon, Terry Shevlin, and Nemit Shroff, "Incentives for Tax Planning and Avoidance: Evidence from the Field" (2014) 89:3 *Accounting Review* 991-1023; and Kenneth Klassen, Petro Lisowsky, and Devan Mescall, "Corporate Tax Compliance: The Role of Internal and External Preparers," April 5, 2012 (https://fisher.osu.edu/supplements/10/11702/paper_Petro_4-6-12.pdf).

17 In this context, "administrative costs" are the costs incurred by the revenue authority in administering taxes and the tax system. Typically, *compliance costs* plus *administrative costs* constitute the *operating costs* of the tax system.

18 Evans, supra note 2, at 457.

19 Slemrod and Blumenthal, supra note 14.

20 Ibid., at 418. The 1992 study was repeated with an updated survey instrument for 1996, yielding a somewhat lower response rate but qualitatively similar findings: Slemrod, supra note 14.

21 Slemrod and Blumenthal, supra note 14, at 418.

the 1999 income tax compliance costs of corporations with an asset size in excess of USD 1 billion found compliance costs of the same order of magnitude—more than USD 1.33 million on average.[22] In Canada, in a 1995 survey, Erard estimated that average income tax compliance costs for large corporate entities were in the region of just under CAD 1 million.[23]

A more recent Canadian study using survey data for 2009 estimated the average cost of compliance with all taxes for large firms to be around CAD 2.4 million.[24] Similar outcomes in relation to the size and significance of tax compliance costs for Australia's large business sector were established in separate large-scale surveys undertaken in 1991[25] and 1997.[26]

In contrast to these significant sums expended in the large corporate sector, in a 1997 case study of the Hewlett-Packard (HP) corporation, Seltzer (who was then HP's tax counsel) indicated that "[f]or a company of its size and complexity, HP's outlay on federal tax compliance is quite modest."[27] He estimated that a large US multinational company such as HP could "complete an accurate corporate tax return with the functional equivalent of three full-time tax professionals."[28] Taken at face value, this comment may seem to imply that the outcomes of some of the other studies were excessive in suggesting average income tax compliance costs in excess of USD 1 million for large companies. However, as Seltzer noted, the HP case study was "anecdotal," unlike the more comprehensive, rigorous, and scientific approaches undertaken by others, and in any case it did not purport to embrace all compliance costs, but merely those related to the submission of one annual return.[29] Accordingly, his study does not detract from the conclusion suggested by the literature that compliance costs for the large corporate sector are significant in terms of absolute and relative size.

The results of other surveys of the large business sector in developed economies generally highlight the substantial tax compliance costs and the scale of the burden in terms of labour and other resources. A PricewaterhouseCoopers (PwC) survey in Australia in 2006, conducted on behalf of the Business Council of Australia and using the established "total tax contribution" framework, received 92 responses from

22 Slemrod and Venkatesh, supra note 14, at 15.

23 Erard, supra note 15, at 5.

24 Vaillancourt et al., supra note 15. This study, however, was based on a limited data set of only 23 firms, so caution is needed in extrapolating its findings to large businesses in Canada generally.

25 Jeff Pope, Richard Fayle, and Dongling Chen, *The Compliance Costs of Public Companies' Income Taxation in Australia 1986/87*, Research Study no. 13 (Sydney: Australian Tax Research Foundation, 1991).

26 Evans et al., supra note 7.

27 David R. Seltzer, "Federal Income Tax Compliance Costs: A Case Study of Hewlett-Packard Company" (1997) 50:3 *National Tax Journal* 487-93, at 488.

28 Ibid., at 493.

29 Ibid., at 487.

"a very significant representation of large business in Australia."[30] Sixty-four of those responses addressed tax compliance costs, reporting average costs of approximately AUD 1.6 million; for "some of the larger organisations," compliance costs ranged as high as AUD 2 million to AUD 6 million and involved up to 50 employees.[31] A subsequent PwC survey in 2010 reported increased average compliance costs of AUD 2.1 million from 39 respondents.[32]

A similar PwC survey of 40 business round table members in the United States (firms with an average market capitalization of USD 50 billion) conducted in 2007 found average compliance costs of USD 11 million involving an average of 44 full-time employees.[33] Just over 40 percent of those costs were attributable to state and local taxes across 51 state-level jurisdictions (states and the District of Columbia) and more than 89,000 local-level jurisdictions.[34] In Canada, a 2012 PwC survey with 63 respondents also found extremely high costs, averaging CAD 4.5 million.[35] In contrast, average compliance costs in Japan were found to be somewhat lower, at JPY 62.2 million (approximately USD 560,000), for 41 group respondents to a PwC survey in 2011.[36] Surveys conducted to date in the United Kingdom do not seem to have reported tax compliance costs of large corporations, perhaps reflecting the difficulty of disaggregating tax compliance activities of multinational enterprises based in London across international jurisdictions.

Research undertaken in the early 2000s has confirmed the significance of compliance costs in the corporate sector in the broader context of Europe, and has also highlighted the regressivity of those costs. Responses to an EU survey from 700 companies across 14 member states showed that compliance costs for the largest companies (those employing 250 or more employees) averaged EUR 1.5 million, representing 2 percent of taxes paid and 0.02 percent of sales.[37] By way of contrast, small and medium-sized enterprises (SMEs—those with fewer than 250 employees)

30 PricewaterhouseCoopers, "What Is Your Company's Total Tax Contribution?" in Business Council of Australia, *Tax Nation: Business Taxes and the Federal-State Divide* (Melbourne: PwC, April 2007), at 5.

31 Ibid., at 28-30.

32 PricewaterhouseCoopers, *2010 Total Tax Contribution: Understanding the Economic Contribution of Business* (Melbourne: PwC, 2011), at 26.

33 PricewaterhouseCoopers LLP, *Total Tax Contribution: How Much Do Large U.S. Companies Pay in Taxes?* (PwC, 2009), at 37. The 40 respondents represented 34 percent (USD 2.05 trillion) of the total market capitalization of publicly held members of the round table (USD 6.03 trillion): ibid., at 13.

34 Ibid., at 47.

35 PricewaterhouseCoopers LLP, *Total Tax Contribution: Surveying the Canadian Council of Chief Executives* (Toronto: PwC, April 2014), at 17.

36 Zeirishi-Hojin PricewaterhouseCoopers, *Total Tax Contribution 2011* (Tokyo: PwC Japan Tax, May 2012), at 47.

37 European Commission, *European Tax Survey*, SEC(2004) 1128/2 (Brussels: European Commission, July 10, 2004), at 4 and 23.

incurred average compliance costs of EUR 200,000, representing 31 percent of taxes paid and 2.6 percent of sales.[38] The same survey indicated that cross-border activity (for example, establishing a subsidiary in another member state) was likely to lead to higher absolute and relative compliance costs, as were transfer-pricing issues, and repayments and refunds in the value-added tax (VAT) area.[39]

The regressivity of compliance costs was one of the key outcomes of research carried out in Australia in the mid-1990s. Evans et al. established that the average gross compliance costs per AUD 1,000 of annual turnover were only AUD 1.84 for large businesses and AUD 1.74 for medium-sized businesses, but AUD 34.13 for small businesses.[40] Such regressive profiles are an obvious outcome caused by two significant factors: the economies of scale enjoyed by larger enterprises; and the learning curve effect, which requires smaller businesses to invest a greater proportion of their resources in learning about and coping with tax complexity and tax change than is the case for larger businesses.

Research on tax compliance costs over time is underrepresented in the literature relating to the large corporate sector. The lack of longitudinal data is not entirely surprising, given the high costs of undertaking large-scale surveys (the primary methodology employed in tax compliance cost research) and given that tax systems are not constant—the frequent changes to tax structures and tax rules make it difficult to perform comparisons over time in any meaningful fashion.[41] Nevertheless, there is both empirical and anecdotal support for the conclusion that the tax compliance costs of the large business sector have not reduced over time,[42] despite a number of initiatives undertaken by governments and their revenue authorities to alleviate the burden.

As well as identifying and evaluating the major trends in tax compliance costs for the large business sector, research in this field has considered the likely determinants of these costs. The literature suggests that the compliance costs of large corporations are likely to be determined by a number of factors, including business size, the industry within which each corporation conducts its major activities, the number of entities in the corporate group, and the tax profile of the entity (including the number and nature of taxes that may apply).[43] Various studies in the United States and

38 Ibid., at 23.

39 Ibid., at 37.

40 Evans et al., supra note 7, at 8. The definition of small, medium, and large businesses adopted in that study used the then relevant ATO classification based on annual turnover: small business, annual turnover of less than AUD 100,000; medium business, annual turnover of AUD 100,000-9.99 million; large business, annual turnover of AUD 10 million or more.

41 In the United States, for example, between 2001 and 2010 there were 4,428 changes to the Internal Revenue Code, including 579 changes in 2010 alone. See National Taxpayer Advocate, *Annual Report to Congress 2010* (Washington, DC: Internal Revenue Service, 2011), at 4; and Internal Revenue Code of 1986, as amended.

42 See, for example, Pope et al., supra note 25, and Evans et al., supra note 7.

43 Slemrod and Blumenthal, supra note 14, at 428.

Canada have investigated the incidence of these factors with respect to total compliance costs of large entities, as well as their incidence with respect to particular components of compliance costs.[44] In addition, research in Australia has indicated that tax system complexity (in terms of both legislative rules and administrative processes) and the frequency of tax change are also heavily implicated in the search for the determinants of tax compliance costs.[45]

In summary, although there are gaps in the literature relating to the tax compliance costs of the large business sector, the research still suggests that

1. the impact of these costs is less severe for the largest corporations than for the SME sector;
2. these costs are nonetheless significant in both absolute and relative terms; and
3. so far as can be established, they do not appear to be reducing over time.

A number of factors appear to be responsible for both the size and the particular incidence of large-business tax compliance costs, including variables such as business size, the number of entities involved, the number and the nature of taxes involved, and the frequency with which tax rules and processes are changed. Further insights into the existing literature and how the current study contributes to that literature are developed in the discussion that follows.

RESEARCH DESIGN AND EXECUTION

Rationale for a Separate Large Business Survey

The current survey of large corporate groups was conducted as part of a broader study of the tax compliance costs of Australian taxpayers, including all forms of business taxpayers.[46] Initially, it had been decided to conduct only two large-scale surveys of Australian taxpayers: one, using a sample population of roughly 10,000

44 See Slemrod and Blumenthal, ibid.; Erard, supra note 15; Slemrod and Venkatesh, supra note 14; Marcuss et al., supra note 14; and Vaillancourt et al., supra note 15.

45 Evans, supra note 2.

46 The broader study examines not only tax compliance costs in Australia but also related issues such as legal complexity, the role of tax practitioners, and the possible development of a tax system complexity index. The tax compliance cost component of the study includes individual non-business taxpayers (see Binh Tran-Nam, Chris Evans, and Phil Lignier, "Personal Taxpayer Compliance Costs: Recent Evidence from Australia" (2014) 29:1 *Australian Tax Forum* 137-71), SMEs (see Phil Lignier, Chris Evans, and Binh Tran-Nam, "Tangled Up in Tape: The Continuing Tax Compliance Plight of the Small and Medium Enterprise Business Sector" (2014) 29:2 *Australian Tax Forum* 217-47), and large corporations. An overview of the outcomes of these specific studies is contained in Philip Lignier, Chris Evans, and Binh Tran-Nam, "Measuring Tax Compliance Costs: Evidence from Australia," in Evans et al., *Tax Simplification*, supra note 8, 121-40.

business entities of all sizes, to measure and evaluate business taxpayer compliance costs for all taxes imposed on such businesses by federal and state governments; and a second, using a sample population of 4,000 individuals, to measure and identify the costs for the non-business sector of complying with the federal and state tax systems. However, it soon became clear that a third and separate survey was needed for the large corporate sector.

The decision to carry out a separate and highly customized survey for large business entities emerged because experience has indicated that targeting the large business sector with "one-size" survey instruments and employing traditional survey methodologies (such as paper-based or electronic surveying) results in poor response rates. Moreover, the ATO, which has dedicated market segments within the organization that deal specifically with large business taxpayers, had offered to assist our research team in approaching the large corporate sector. The feedback from the pilot and cognitive testing of the questionnaire to be used for surveying tax compliance costs in the general business population confirmed that large entities were confronted with specific issues that justified the use of a separate survey instrument.

Measuring Tax Compliance Costs

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:[47]

1. external costs represented by monetary payments to external parties, such as tax agents and tax advisers;
2. internal labour costs represented by the time spent by internal staff, taxpayers, and unpaid helpers; and
3. non-labour costs corresponding to business overhead outgoings (expenditures) on items such as equipment, computers, stationery, travel, etc., related to tax compliance.

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 labour costs and non-labour costs relating to tax compliance may not be as problematic for large corporations as for smaller businesses, where accounting and tax record-keeping tasks are often entangled. Also, previous research has indicated that, unlike the practice in smaller businesses, where the owners and unpaid helpers often contribute a large proportion of internal time,

47 Tran-Nam et al., supra note 2, at 236.

tax activities in larger entities are almost exclusively undertaken by paid personnel.[48] This means that internal staff time can be easily valued on the basis of salary and on-costs.

Hence, for internal labour costs, respondents were asked to report dollar values rather than a number of hours. This approach was justified on the basis of an assumption that the costs would be readily available from the internal information systems, while the number of hours may not always be quantified for all categories of personnel.

In addition to those measurable costs, taxpayers may experience psychological costs in the form of stress, anxiety, and frustration imposed on them in complying with their obligations and dealing with tax authorities.[49] Psychological costs, although not insignificant, are typically subjective and difficult to measure, and are considered to be more relevant for individual taxpayers than for corporations. For these reasons, such costs were excluded from the scope of this study.

The resulting combination of external costs, internal staff costs, and non-labour costs constituted the *gross* compliance costs of the corporation. Some previous research into business taxpayers' tax compliance costs has also gone on to determine the *net* compliance costs—the amount remaining after tax compliance benefits have been offset against gross compliance costs.[50] Benefits from tax compliance include managerial benefits, tax deductibility benefits, and cash flow benefits.[51]

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, may directly or indirectly derive from tax compliance. Although such benefits are real, they are notoriously difficult to evaluate and in any case have been found to be relatively insignificant in large organizations.[52] They have therefore not been taken into account in this study.

Cash flow benefits and tax deductibility benefits have been estimated on an aggregate basis in previous research;[53] however, estimating such benefits when a large

48 Chris Evans, Katherine Ritchie, Binh Tran-Nam, and Michael Walpole, *A Report into the Incremental Costs of Taxpayer Compliance* (Canberra: Australian Government Publishing Service, 1996), at 125.

49 Tran-Nam et al., supra note 2, at 234.

50 Evans et al., supra note 7, at 4.

51 Sandford et al., supra note 4, at 13. While managerial benefits represent genuine benefits to society, tax deductibility and cash flow benefits are benefits only from the perspective of taxpayers (and costs from the tax authority's viewpoint).

52 Cedric Sandford, Michael Godwin, Peter Hardwick, and Michael Butterworth, *Costs and Benefits of VAT* (London: Heinemann, 1981); Binh Tran-Nam, "Tax Compliance Costs Methodology: A Research Agenda for the Future," in Chris Evans, Jeff Pope, and John Hasseldine, eds., *Tax Compliance Costs: A Festschrift for Cedric Sandford* (Sydney: Prospect, 2001), 51-68; and Philip Lignier, "Measuring the Managerial Benefits of Tax Compliance: A Fresh Approach" (2009) 24:2 *Australian Tax Forum* 117-50.

53 Evans et al., supra note 7.

number of taxes are taken into consideration is problematic and would require macro-statistical data that were not available to the researchers. For these reasons, and (as was the case with managerial benefits) in order to ensure comparability with previous North American research (which typically has reported gross compliance costs), only gross tax compliance costs are reported in this article.

Sample Selection

The possibility of generalizing the findings from the survey to the broader population of large corporations is dependent upon a rigorous sampling process that leads to the selection of a representative sample. A major hurdle for tax compliance cost surveys of large corporations is the difficulty of selecting a truly representative sample.[54] For this reason, the collaboration of the ATO in this project was considered essential, since that organization was able to provide us with access to a sample of large corporate taxpayers through its specialized units that deal with this market segment.

The sampling frame used for this survey included all large and very large business entities[55] that fall within the administrative responsibilities of two units within the ATO, the Client Relationship Management unit (CRM) and the Key Clients Management unit (KCM).[56] The sample for the survey was selected by the ATO by applying disproportionate stratified random sampling to the total population of 1,850 large business and international groups administered by these two units. A gross sample of 187 corporate groups was selected as a result of this process. Two criteria were utilized for sample selection: an entity's annual turnover, with oversampling of the highest strata (AUD 50 billion per year or more), and its tax compliance risk profile based on the RDF developed by the ATO.[57]

Questionnaire Development

In order to develop a questionnaire that was useful and adequate, it was decided to obtain input from various stakeholders who were familiar with large-business tax compliance issues. The development of the questionnaire was an iterative process that involved four major steps:

54 Slemrod and Blumenthal, supra note 14, at 414.

55 According to the current ATO business size classification, "large" entities are entities with an annual turnover of AUD 100 million or more but less than AUD 250 million, and "very large" entities are entities with an annual turnover of AUD 250 million or more; see Australian Taxation Office, *Taxation Statistics 2010-11* (Canberra: ATO, 2013), at 3.

56 The CRM program provides services related to goods and services tax (GST), while the KCM program provides a range of specialized services to large businesses: see Australian Taxation Office, *Large Business and Tax Compliance* (Canberra: ATO, 2011), at 13.

57 The RDF is described in detail below under the heading "Characteristics of Entities in the Survey Sample."

1. The research team leader (Chris Evans) made a presentation to the Large Business Advisory Group (LBAG).[58] This presentation had two main objectives. First, it aimed to raise awareness among LBAG members about the large business entity survey and to explain its objectives. Second, it sought general and more specific input in the development of the survey instrument.
2. A steering committee was set up with the specific purpose of providing input into the development of the survey instrument. The steering committee included representatives of the large business sector (drawn from the LBAG), the ATO, the Statistical Clearing House (SCH) of the Australian Bureau of Statistics (ABS), the Institute of Chartered Accountants in Australia (ICAA), and the three members of the research team (the authors of this article). The committee met several times by teleconference in November and December 2012.
3. The research team drafted a survey instrument, which was then submitted to the steering committee and to other representatives of the large corporate sector for pilot and cognitive testing. After feedback had been received from the testing process, amendments were made to the structure of the instrument and the wording of some questions, resulting in a more coherent and more user-friendly questionnaire.
4. The final draft of the questionnaire was circulated among the members of the steering committee, and a formal submission was made to the SCH for approval. Clearance was obtained from the SCH in early January 2013.

The version of the questionnaire prepared for electronic distribution contained 38 questions[59] structured into six sections:

1. background information;
2. external tax compliance costs;
3. internal time spent on tax compliance;
4. non-labour costs of tax compliance;
5. drivers of tax compliance costs; and
6. managerial and other benefits.

In addition, a designated space at the end of the questionnaire gave respondents the opportunity to make additional comments, provide suggestions as to how tax compliance costs might be mitigated or reduced, and self-identify if they chose to do so.

58 The LBAG is an ongoing peak forum with a focus on improving operational and administrative processes for the largest corporate taxpayers. It was established by the ATO and includes senior tax representatives of large corporate entities and senior ATO officers.

59 The original paper questionnaire included 34 questions. The electronic and paper versions were the same as to content, but in the paper version some subsidiary questions were not numbered. Both versions of the survey questionnaire are available from Chris Evans on request (see the asterisk note on the first page of the article).

Survey Implementation and Response Rate

The questionnaire was administered by way of an electronic survey in February 2013. The estimation of compliance costs was based on survey data relating to the 2012 fiscal year (July 1, 2011 to June 30, 2012). Potential respondents were contacted by e-mail and invited to participate in the survey by clicking on an embedded URL (uniform resource locator) linked to the survey web server. Attached to the e-mail was an endorsement letter signed by the deputy commissioner of taxation as a well as participant information statement, which explained the purpose of the survey and confirmed its clearance by the Ethics Research Committee of the University of New South Wales and by the SCH.

One week prior to the e-mail broadcast, key employees of potential participants (usually group tax managers or persons of equivalent status) were 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 e-mail broadcast list. The first e-mail broadcast was followed by a reminder e-mail sent 10 days later.

A total of 88 responses were ultimately received. The distribution of position descriptions of respondents indicated that in almost all cases the respondent to the survey was a qualified professional officer of the corporate group, who presumably would have excellent knowledge of the group's tax affairs. However, it was necessary to delete a number of incomplete or unusable responses, resulting in a net sample of 79 usable responses, and a net response rate of 42 percent. This was considered to be a very satisfactory response rate, comparable to the rate obtained by Evans et al. for their survey of business tax compliance costs in the mid-1990s,[60] and higher than the rates for similar surveys of large-business tax compliance costs undertaken in the United States[61] and Canada.[62] Moreover, once the incomplete or unusable responses were removed, there did not appear to be any of the issues of ambiguity or inconsistency reported in some of the earlier North American research,[63] or any need to

60 Evans et al., supra note 7, at 35.

61 Slemrod and Venkatesh, supra note 14, at 11.

62 Erard, supra note 15, at 3.

63 Slemrod and Venkatesh, supra note 14, at 64-67. In the present study, internal consistency of data was tested by calculating the Cronbach's alpha value for five variables identified in question 29 of the survey: the complexity of the law; poor legislative drafting; the uncertainty of the wording of the tax rules; the uncertainty in tax administration rules; and the uncertainty in the judicial interpretation of tax laws. A Cronbach alpha score of 0.93 was obtained from this analysis. This value is far greater than the commonly used threshold of 0.70 for acceptable internal consistency (see Darren George and Paul Mallery, *SPSS for Windows Step by Step: A Simple Guide and Reference*, 4th ed. (Boston: Allyn and Bacon, 2003)). It can therefore be concluded that there is no evidence of inconsistent responses by respondents in the present study.

reweight observations to make the sample more representative of the relevant population, as had been done in some North American studies.[64]

In light of the relatively high response rate achieved in the current survey, it may be useful to offer some insights into the factors that may have contributed to this outcome. Clearly, there are best practices that will always be worth adopting in the conduct of surveys (a number of which were evident in this study). Typically, these will include the following:

- development of the survey instrument through a carefully calibrated and iterative process involving input from both a specific advisory group and a broader focus group, together with the incorporation of results from pilot testing;
- recognition of the need to balance an obvious desire for detailed information on the part of the researchers with the understanding that respondents value their time and are often suffering from survey fatigue;
- assistance with the development of the survey frame from the tax department or relevant professional body in order to ensure that the survey instrument is appropriately targeted to the correct respondent;
- advance communication with respondents, ideally through the tax department or relevant professional body, about the pending survey in order to prepare the ground, manage expectations, and ensure buy-in;
- followup communication with non-respondents reiterating the significance and importance of the research;
- endorsement from a high-ranking tax official or from a senior executive of a professional body; and
- appropriate postsurvey followup with all respondents to ensure that they know that their views were counted and may have contributed to the development of government policy or to meaningful tax or other reform.

These factors alone, however, cannot guarantee a satisfactory response rate. Other forces may have contributed to the positive outcome in the current study. In the first place, it may have been the case that the particular topic of the survey was conducive to a more favourable reception by respondents. The in-house tax departments of large corporate taxpayers have been under attack in recent years as a result of their perceived corporate tax aggressiveness. This particular survey may have given them the opportunity to relate their side of the story from the perspective of the burden that they typically face in managing the tax affairs of large corporations. Thus, the salience and/or relevance of the survey topic may have been a positive factor.

Another key factor in the relative success of the survey may have been its modes of delivery and collection. Comparable past surveys have been paper-based and typically

64 Slemrod and Blumenthal, supra note 14, at 417; Slemrod and Venkatesh, supra note 14, at 68; and Erard, supra note 15, at 4.

returned by way of mail or fax. A degree of innovative personalization was evident in the current survey, including the involvement of the CRM and KCM, with the survey being distributed (through these intermediaries) electronically and completed and captured by means of a link to a survey web server.

Characteristics of Entities in the Survey Sample

In view of the fact that the net sample (79 units) covered about 4.2 percent of the population of large corporate groups in Australia, it was considered important to benchmark the demographic characteristics of entities in the sample against the characteristics of the broader large-business population and ensure that entities in the sample were a good representation of that population. The demographic data collected by the survey included legal form, business size, and industry sector. In addition, the survey questionnaire collected data regarding the tax compliance profile of the entity.

Legal Form

In all instances, the head entity was a corporate structure. Of the 79 corporate groups that responded, just under half were listed on the Australian Securities Exchange (ASX), while the remainder were almost evenly split between non-Australian listed public companies (that is, the Australian subsidiary of a multinational group, where the Australian subsidiary was itself the parent of an Australian group) and large private companies (table 1). The distribution between public and private companies in the sample approximated the distribution in the general population.

The sample distribution by the number of operating entities within the Australian group indicates great variety as to the complexity of the structure. For example, 37 percent of respondents had fewer than 10 operating entities in the corporate group, while at the other end of the spectrum 18 percent had more than 100 (table 2). In the large majority of instances (87 percent), the holding company (public or private) had responsibility for managing the group's tax affairs. Only 5 percent of respondents reported that this responsibility was devolved to a service entity.

Although the distribution by number of operating entities was not available for the general population of large businesses, the average number of entities for each group in the reference population was about 17.[65] The average number of operating entities for groups in the sample was calculated to be 38; thus, entities in the sample tended to include more operating entities compared to the general population.

Business Size

Business size can be measured by many criteria; among these, annual turnover (gross revenues) and number of full-time equivalent employees (FTEs) are the most commonly used. In view of the fact that the sample of respondents was drawn from the

65 Statistics provided by the Revenue Analysis Branch of the ATO.

TABLE 1 Legal Form of the Head Entity of the Australian Group

Legal form	Number in sample	Percentage of sample	Percentage of population
Listed public company (on the Australian Securities Exchange)	35	45	70
Non-listed public company	22	28	
Private company	21	27	30
Total	78	100	100

Source: Australian Taxation Office, "Large Business" (www.ato.gov.au/Business/Large-business).

TABLE 2 Distribution by Number of Operating Entities in the Australian Group

Number of entities in group	Number in sample	Percentage of sample
Fewer than 10	29	37
10 to 19	15	19
20 to 49	16	20
50 to 99	5	6
100 or more	14	18
Total	79	100

list of entities managed by the ATO large business units, it was anticipated that most respondents would meet the definition criteria for very large businesses (turnover of AUD 250 million or more).

The distribution by annual turnover (figure 1) reveals a bell-shaped distribution, centred on the AUD 1 billion-4.99 billion category (36 percent of the sample). Another 40 percent of entities in the sample were distributed roughly equally between the AUD 250 million-999 million category and the AUD 5 billion-19.999 billion category.

The sample distribution of entities by number of FTEs indicates that two-thirds of respondents were in the fewer than 1,000 FTEs and 1,000-4,999 FTEs categories (figure 2).

Unfortunately, no statistics about annual turnover and number of employees for the sample frame were available from the ATO. However, we were able to access data about the top Australian listed companies from Osiris.[66] Annual turnover for 2012 of the 176 top listed Australian companies included in the database was distributed as follows: 8.5 percent in the USD 100-500 million category, 81.8 percent in the USD 500 million-10 billion category, and 9.6 percent in the USD 10 billion+

66 Osiris, a database owned by Bureau Van Dijk, stores financial information on 53,000 listed companies worldwide. Financial information in this database is given in US dollars.

FIGURE 1 Distribution of Respondents According to Group Annual Turnover, 2011-12

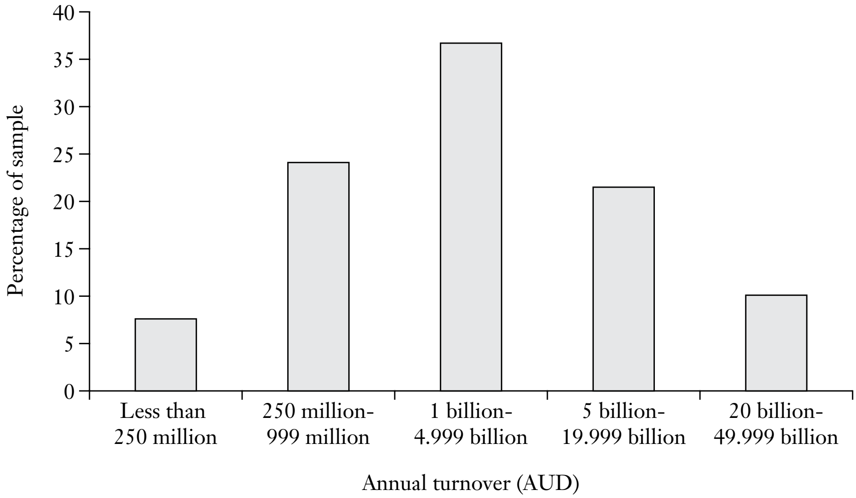
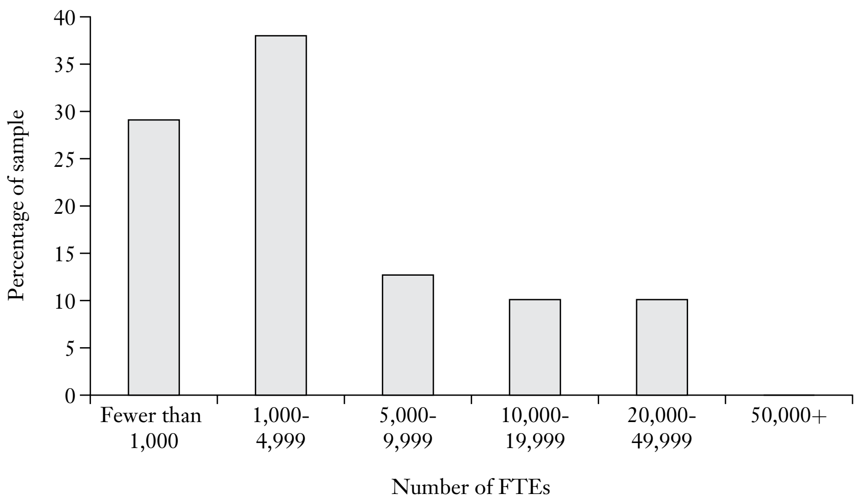


FIGURE 2 Distribution of Respondents According to Number of Full-Time Equivalent Employees (FTEs) as at June 30, 2012



category. Among the same companies, 14.8 percent had fewer than 1,000 employees, 54.7 percent had 1,000-10,000 employees, and 27.8 percent had more than 10,000 employees.[67]

The distribution of annual turnover in the sample reflects the cluster in the USD 500 million-10 billion category for the top quartile of Australian listed companies. Similarly, the distribution by number of FTEs in the sample is broadly consistent with the population distribution, although caution must be exercised in interpreting this comparison because of the large proportion of listed companies that did not report any data about the number of employees in their financial reports.

Industry Sector

The operations of large business groups often span different industry sectors. For this reason, the questionnaire invited respondents to self-describe the three main activities of their group, rather than self-classify the group's activities into a set list of industry sectors. The analysis of responses indicates that a majority of respondents nominated one industry sector, and that turnover derived from the main industry sector represented on average 80 percent of total turnover.

The breakdown by industry sector for the population of large businesses as defined by the ABS (based on a definition of more than 200 employees)[68] was used as a benchmark (table 3) since there were no comparable statistics available from the ATO.

The comparison suggests that financial services and mining are overrepresented in the sample compared to the reference population, while general manufacturing and other services are underrepresented. This bias could be explained by the fact that mining and the financial sector are dominated by very large operators, and was not considered to have caused any significant distortion in the representativeness of the sample.

Tax Compliance Profile of Entities in the Sample

The tax compliance profile of an entity is predicted to be an important determinant of that entity's tax compliance costs. The tax compliance profile can be established by reference to a number of criteria, such as the number of different tax obligations that the entity is subjected to, its risk profile classification as attributed by the ATO, and the level of tax review and litigation to which the entity is exposed.

The survey form identified 10 federal taxes (goods and services tax [GST], income tax, capital gains tax [CGT], fringe benefits tax [FBT], employee withholding tax ["pay as you go" or PAYG] and superannuation, fuel excise and rebate, petroleum

67 Only 54 companies among the 176 listed companies reported number of employees in their financial report.

68 See "Explanatory Notes" accompanying Australian Bureau of Statistics, "Counts of Australian Businesses, Including Entries and Exits, Jun 2008 to Jun 2012," catalogue no. 8165.0 (Canberra: ABS, 2013).

TABLE 3 Distribution of Respondents by Industry Sector (Main Activity)

Industry sector	Number in sample	Percentage of sample	Percentage with 200+ employees, 2012[a]
Construction	6	7.7	5.9
Mining	16	20.5	0.1
Oil and gas production	1	1.3	0.5
Utility	3	3.8	1.0
Food and beverages	3	3.8	7.7
General manufacturing and engineering	5	6.4	13.9
Wholesaling and retailing	10	12.8	15.8
Transport and logistics	5	6.4	11.9
Property services	2	2.6	0.8
IT and telecommunication	3	3.8	0.5
Financial services and insurance	15	19.2	7.1
Entertainment and gaming	3	3.8	2.1
Other services	6	7.7	28.8
Agriculture and related	0	0.0	3.9
Total	78	100.0[b]	100.0[b]

a Data from "Survival of Businesses by Employment Size Ranges," in Australian Bureau of Statistics, "Counts of Australian Businesses, Including Entries and Exits, June 2008 to June 2012," catalogue no. 8165.0 (Canberra: ABS, 2013).

b Column does not add because of rounding.

resource rent tax [PRRT], minerals resource rent tax [MRRT], carbon tax, and "other federal taxes, levies, and duties") and 4 state/territory taxes (payroll tax, land tax, stamp duties, and "other state/territory taxes, levies, and duties"). For each of these taxes, respondents were invited to report whether they incurred external and/or internal costs. On this basis, we drew a profile of the number of taxes (federal, state/territory, and total) with which each entity had to comply.

Entities in the sample had to comply with, on average, 5 different federal taxes and 1.5 state/territory taxes, implying exposure to 6.5 different taxes in total.[69] The distribution of entities in the sample according to the number of taxes that they had to comply with (table 4) shows that about 90 percent of entities had to comply with between 3 and 7 federal taxes during the 2011-12 tax year, and about 78 percent had to comply with at least 1 state/territory tax (which is most likely to be payroll tax).

The ATO has developed the RDF (risk differentiation framework) to assist it in identifying large businesses that may not meet their tax obligations and to assess the potential consequences of non-compliance.[70] The RDF is based on two criteria: likelihood of non-compliance and consequences of non-compliance. Using this

69 Many respondents identified the "other federal taxes" and "other state/territory taxes" categories; therefore, the actual number of taxes that they had to comply with may be slightly higher.

70 ATO, *Large Business and Tax Compliance*, supra note 56, at 6.

TABLE 4 Distribution by Number of Taxes Reported by Entities in the Sample for the 2011-12 Tax year

Number of taxes	Federal taxes: percentage of entities	State/territory taxes: percentage of entities	All taxes: percentage of entities
0	0.0	22.4	0.0
1	1.3	27.6	1.3
2	0.0	27.6	6.5
3	18.2	18.4	13.0
4	24.7	3.9	13.0
5	23.4		23.4
6	11.7		14.3
7	15.6		9.1
8	3.9		7.8
9	1.3		6.5
10	0.0		3.9
11			0.0
12			1.3
Total[a]	100.0	100.0	100.0

a Columns do not add because of rounding.

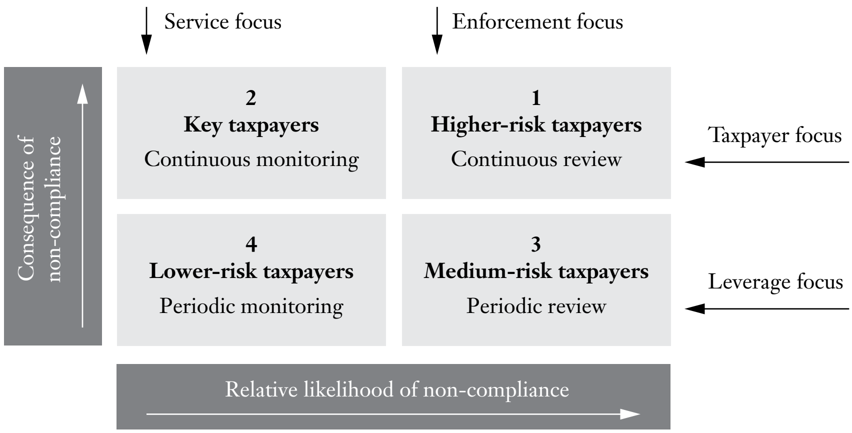
framework, large business taxpayers are assigned to one of four broad categories (quadrants): (1) higher-risk taxpayers, (2) key taxpayers, (3) medium-risk taxpayers, and (4) low-risk taxpayers (see figure 3).[71] This framework is applied by the ATO to determine a review stance appropriate to the level of the risk of non-compliance. Thus, higher-risk taxpayers are subject to continuous review, and key taxpayers to continuous monitoring. At the other end of the risk spectrum, low-risk taxpayers attract a periodic monitoring stance, and medium-risk taxpayers a periodic review stance.[72] Two separate risk-profiling exercises are conducted by the ATO—one for income tax compliance and a second for GST compliance.

The distribution of tax-risk profiles for income tax purposes in the sample of usable responses indicates that 52 percent of respondents were in quadrant 2 while 30 percent were in quadrant 4 and 16 percent in quadrant 3. Only one respondent was in quadrant 1. Compared to the ATO expected distribution, quadrant 2 was overrepresented while quadrant 4 was underrepresented. This distribution, however, reflects the structure of the sample frame provided by the ATO and is therefore not the result of a response bias. The distribution of tax-risk profiles for GST purposes in the sample was very similar to that for income tax. The two variables were highly correlated (Pearson $R = 0.771$, $p < 0.01$); consequently, the risk classification for income tax purposes is used a reference for analysis in the remainder of this article.

71 Ibid., at 23.

72 Ibid., at 24.

FIGURE 3 ATO Risk Differentiation Framework Matrix



Source: Australian Taxation Office, *Large Business and Tax Compliance* (Canberra: ATO, 2011), at figure 7.2.

One of the key objectives of the ATO approach to large-business tax compliance is to foster a cooperative relationship guided by the key principles of the Taxpayer's Charter.[73] This environment of self-assessment and cooperative compliance is expected to lead to greater certainty for businesses, resulting in a decrease in the number of objections and less litigation.

The overwhelming majority (77 percent) of respondents did not lodge any objection to an ATO assessment during the 2011-12 tax year, and for those that did, the number of objections raised was relatively limited.

Similarly, the number of requests for private rulings was relatively low, with over half (57 percent) of all respondents having made no request at all during the 2011-12 tax year. This result appears to be consistent with the fact that the number of private ruling requests from the total population of large businesses has varied between 220 and 300 requests per year in recent years, indicating that the majority of entities did not lodge any such request.[74]

Only 10 respondents out of 79 (12.7 percent) reported having been involved in any litigation with either the ATO or a state/territory revenue office. One respondent had been involved in litigation in the High Court of Australia (Australia's highest court), six in the Federal Court, and three in the Administrative Appeals Tribunal.

73 Ibid., at 6.

74 Australia, Inspector-General of Taxation, *Review of Aspects of the Australian Taxation Office's Administration of Private Binding Rulings: A Report to the Assistant Treasurer* (Canberra: Inspector General of Taxation, May 2010), at 31.

In summary, therefore, the demographic characteristics and the tax compliance profiles of the entities in the sample did not differ fundamentally from the characteristics and profiles of the population of Australian large corporations. The overrepresentation of some industry sectors, such as mining and the financial sector, is taken into account in the interpretation of the results. It was believed that in view of the high response rate and the representativeness of the sample data, neither reweighting nor testing for non-response bias would be necessary.

THE COMPLIANCE COST PROFILE OF AUSTRALIAN LARGE CORPORATIONS

After initially identifying each of the major components (external costs, internal staff costs, and non-labour expenses), in this section we report the estimated gross compliance costs of Australian large corporations for the 2011-12 fiscal year. Subsequently, we compare these results to those obtained in previous studies in North America and Australia.

External Costs of Tax Compliance

All but two entities in the sample incurred external costs in relation to tax matters. As was the case with SME taxpayers,[75] accountants were the main providers of external tax services to large corporations. But in contrast to smaller entities, large businesses also relied heavily on lawyers (68 percent) and tax consultants (69 percent) for external tax advice. The propensity of larger firms to rely more heavily on lawyers (and relatively less on accountants) for external tax services than is the case for smaller firms has also been noted in previous tax compliance cost research in the United States.[76]

Owing to the streamlined services typically offered to the large business sector by the ATO (as well as state/territory revenue authorities), a larger proportion of large business taxpayers (24 percent) sought advice directly from the ATO (or from state/territory revenue office) compared to SME taxpayers (4 percent). Other tax service providers reported by respondents included shared service centres, tax software providers, and outsourced data production and analysis.

The mean annual expenditure for external tax services reported by respondents in the sample was AUD 1,029,000. Fifty percent of respondents had external costs of AUD 500,000 or less, 75 percent had costs of AUD 1,300,000 or less, and two entities had an annual expenditure on external tax services of more than AUD 5 million. On average, 92 percent of this total expenditure related to Australian tax matters (as opposed to foreign tax matters), and 65 percent concerned routine or recurrent tax matters (rather than extraordinary or ad hoc tax matters).

75 P. Lignier, C. Evans, and B. Tran-Nam, "Tangled Up in Tape: The Continuing Plight of the Small and Medium Enterprise Sector," paper presented at the 2014 Australasian Tax Teachers Association Conference, Brisbane, at 19.

76 Slemrod and Venkatesh, supra note 14, at 23.

As in the case of SME taxpayers, among all tax categories, income tax led to the largest expenditure on external compliance costs (66 percent of total external costs) for the large corporate sector (table 5).

Somewhat surprisingly, GST represented only 9 percent of the total external costs, a finding that is in stark contrast to SME taxpayers, who relied heavily on external advice and external services for GST.[77] The overrepresentation of the mining and resources sector in the sample probably explains the relatively high proportion of costs related to the MRRT (nearly 4 percent). It is worth noting that for respondents with activities in the mining and resources sector, the MRRT represented, on average, 15 percent of total external tax service costs.

An analysis of external costs by type of tax services indicates that record keeping and preparation and lodgement relating to taxes, etc., was the largest item of expenditure, accounting for more than 37 percent of the total. Another 27 percent of total external costs were spent on tax-planning services while 23 percent were attributed to professional advice relating to tax review, audit, or litigation (table 6).

These results suggest that the nature of tax services provided to large entities was fundamentally different from tax services provided to SMEs. For the latter, record keeping, preparation, and lodgement represented more than 80 percent of all external costs, and expenditure on tax-planning services and tax advice was significant only for the largest SMEs.[78]

Internal Staff Costs of Tax Compliance

Time spent by internal staff on tax compliance activities was valued by respondents in the sample at an average of AUD 1,374,000, with estimates per entity varying from AUD 30,000 to more than AUD 11 million. Half of the surveyed entities valued internal staff costs at under AUD 575,000, and 75 percent at under AUD 1,525,000. Over 90 percent of internal staff compliance costs related to Australian matters (as opposed to foreign tax matters) and 75 percent related to routine or recurrent tax matters (rather than extraordinary or ad hoc tax matters). Tax compliance work was undertaken by a variety of personnel, but qualified personnel dominated, with only 4.3 percent of internal staff costs attributed to administrative staff. About 40 percent of total internal staff compliance costs were attributed to accountants, while a roughly similar proportion was attributed to managers and 14 percent to senior personnel.

As in the case of external costs, income tax was the largest generator of internal staff compliance costs for large businesses (53 percent of total internal staff costs). Employment-related taxes (FBT, payroll tax, PAYG withholding, and superannuation) were the next most important internal cost item, representing more than 18 percent of the total, while GST came third with nearly 16 percent (table 7). It is again worth noting the relatively significant share attributed to the MRRT (2.7 percent). When

77 Lignier et al., supra note 75.

78 Lignier et al., "Tangled Up in Tape," supra note 46, at 236.

TABLE 5 Breakdown of External Costs by Tax Category

Tax category	Proportion of total external costs (%)
Goods and services tax	9.0
Income tax	66.4
Capital gains tax	2.1
Fringe benefits tax	5.3
Pay as you go and superannuation	1.0
Fuel excise and rebate	1.4
Petroleum resource rent tax	1.1
Minerals resource rent tax	3.7
Carbon pricing mechanism	1.5
Other federal taxes, levies, and duties	2.7
Payroll tax (state/territory)	1.5
Land tax (state/territory)	0.8
Stamp duties (state/territory)	2.2
Other state/territory taxes, levies, and duties	1.5
Total[a]	100.0

a Column does not add because of rounding.

only entities with activities in the mining and resources sector were considered, this proportion was almost 12 percent of total internal staff compliance costs.

The analysis by tax compliance activities (table 8) shows that 56 percent of total internal staff compliance costs were attributable to record keeping and preparation and lodgement of documents relating to taxes, etc. This result reflects the findings for SMEs, which reported that 60 percent of internal staff compliance costs were spent on the same activities.[79] However, in contrast to SME taxpayers, a significant proportion of internal tax costs in large entities was related to providing professional advice: 19 percent for advice relating to tax planning and 14 percent for advice relating to tax review, audit, and litigation.

Non-Labour Costs

In addition to internal staff costs, the surveyed entities reportedly spent an average of AUD 603,000 on non-labour costs. Estimates of these non-labour costs of tax compliance varied from AUD 5,000 per year to AUD 850,000 per year. Half of the respondents estimated non-labour costs at under AUD 150,000, and 75 percent at under AUD 600,000.

A breakdown by type of cost indicates that office space represented nearly a quarter of total non-labour costs while other significant cost items included tax hardware and software (18 percent), tax conferences and training (16 percent), and staff travel costs (15 percent).

79 Ibid.

TABLE 6 Breakdown of External Costs by Type of Tax Service

Type of tax service	Proportion of total external costs (%)
Record keeping and preparation and lodgement of documents relating to all taxes, levies, duties, or excises (including tax compliance assurance)	37.1
Professional advice relating to tax planning and related functions or activities	27.4
Professional advice relating to tax review, audit, or litigation and related functions or activities	22.9
Tax training (including trainers, conferences, seminars, workshops, etc.)	1.6
Financial and business advice related to tax matters	6.1
IT systems advice and input relating to tax matters	2.5
Other tax services	2.4
Total	100.0

TABLE 7 Breakdown of Internal Staff Costs by Tax Category

Tax category	Proportion of total internal staff costs (%)
Goods and services tax	15.9
Income tax	52.9
Capital gains tax	2.6
Fringe benefits tax	11.7
Pay as you go and superannuation	3.0
Fuel excise and rebate	1.9
Petroleum resource rent tax	1.1
Minerals resource rent tax	2.7
Carbon pricing mechanism	1.2
Other federal taxes, levies, and duties	1.2
Payroll tax (state/territory)	3.4
Land tax (state/territory)	0.3
Stamp duties (state/territory)	1.1
Other state/territory taxes, levies, and duties	1.0
Total	100.0

Estimated Gross Compliance Costs

The average estimated gross compliance cost per firm was found to be in excess of AUD 3 million, with internal labour costs on tax compliance making up just under half of this total. Median gross compliance cost per firm was AUD 1,450,000. Compliance costs expressed in relation to annual turnover were AUD 0.40 per AUD 1,000 of annual turnover. As might be expected, given the large body of literature confirming the regressive nature of tax compliance costs, these costs were small compared to the average costs per AUD 1,000 of annual turnover for SME taxpayers (table 9), which

TABLE 8 Breakdown of Internal Staff Costs by Activities

Tax compliance activities	Proportion of total internal staff costs (%)
Record keeping and preparation and lodgement of documents relating to all taxes, levies, duties, or excises (including tax compliance assurance)	56.3
Professional advice relating to tax planning and related functions or activities	18.7
Professional advice relating to tax review, audit, or litigation and related functions or activities	14.1
Tax training (including trainers, conferences, seminars, workshops, etc.)	2.6
Financial and business advice related to tax matters	4.5
IT systems advice and input relating to tax matters	2.4
Other tax services	1.4
Total	100.0

varied from AUD 75.84 for micro-businesses (turnover of less than AUD 75,000), AUD 14.09 for small businesses (turnover of AUD 75,000-2 million), and AUD 3.34 for medium-sized businesses (turnover of AUD 2 million-100 million).[80]

Comparison with Previous Research

Although extreme caution should be exercised when making international comparisons,[81] research into tax compliance costs undertaken in the United States[82] and in Canada[83] offers useful insights and points of reference. The findings from these studies can be compared with those obtained from the current study in relation to

1. gross compliance costs;
2. the structure or composition of those costs;
3. amounts spent, respectively, on domestic (federal and state/provincial) and foreign tax matters; and
4. the various types of activities (record keeping, tax planning, etc.) for which internal and external costs were incurred.

Comparisons of Gross Compliance Costs

In a study of US income tax compliance costs, Slemrod and Venkatesh established that average gross compliance costs in 1999 were USD 1,835,000 (in 2012, AUD 1,720,000)

80 Ibid., at 242.

81 Cedric T. Sandford, "International Comparisons of Administrative and Compliance Costs of Taxation" (1994) 11:3 *Australian Tax Forum* 291-309.

82 Slemrod and Blumenthal, supra note 14; and Slemrod and Venkatesh, supra note 14.

83 Erard, supra note 15; and Vaillancourt et al., supra note 15.

TABLE 9 Comparison of Tax Compliance Costs Across Business Size Categories

	Business type, by size[a]			
	Micro (<75,000)	Small (75,000- <2 million)	Medium (2 million- <100 million)	Large (100 million+)
Median cost per firm	1,916	5,869	30,000	1,450,000
Average cost per firm	3,392	12,169	54,605	3,008,000
Average compliance cost per AUD of turnover	75.84	14.09	3.34	0.40

a Annual turnover, in Australian dollars. Data for micro, small, and medium-sized businesses from Phil Lignier, Chris Evans, and Binh Tran-Nam, "Tangled Up in Tape: The Continuing Tax Compliance Plight of the Small and Medium Enterprise Business Sector" (2014) 29:2 *Australian Tax Forum* 217-47.

for corporations with asset size over USD 1 billion (AUD 938 million).[84] By comparison, in a 1995 survey of large Canadian corporations by Erard, average gross compliance costs for federal and provincial corporate income tax were found to be CAD 1,302,000 (in 2012, AUD 1,215,000),[85] while Vaillancourt et al. estimated the costs of compliance for large Canadian firms in 2008 at CAD 2,552,000 (in 2012, AUD 2,383,000) including CAD 1,366,000 (AUD 1,342,000) for income tax.[86]

Because most previous research (with the exception of the study by Vaillancourt et al.) only considered the compliance costs relating to income tax, the findings should be compared with Australian compliance costs that relate solely to that tax category (in the current study, 68.5 percent of external costs[87] and 55.5 percent of the combination of internal staff costs and non-labour costs).[88] Using this method of calculation, the amount of average compliance costs relating to income tax for Australian large corporations in the current study amounted to AUD 1,802,785.

Differences in the temporal and geographical contexts make it difficult to interpret the numbers shown above with any degree of confidence. However, similarities in the tax systems of the three jurisdictions (for example, the existence of separate

84 Slemrod and Venkatesh, supra note 14, at 42. The reported cost for 1999 was USD 1,331,643. For our purposes, this amount was adjusted to 2012 US dollars using the consumer price index (CPI) published by the US Bureau of Labor Statistics and then converted to Australian dollars using the average conversion rate for the 2012 calendar year.

85 Erard, supra note 15, at 5. The reported costs for all respondents were CAD 925,112. This amount was adjusted to 2012 Canadian dollars using the CPI published by Statistics Canada and then converted to Australian dollars using the average conversion rate for the 2012 calendar year.

86 Vaillancourt et al., supra note 15, at 65.

87 This number includes the costs attributed to CGT, which is not a separate tax in Australia.

88 Also see our caveat in note 24, supra, regarding extrapolation of the findings of the study by Vaillancourt et al. to the general population of large Canadian firms.

federal and state/provincial income tax regimes) make the international comparison at least pertinent. The comparison suggests that the level of the tax compliance burden faced by large corporations in Australia is broadly comparable to the burden for large US companies and slightly larger than the burden for large Canadian companies as expressed in 2012 Australian dollars—that is, if the differences in time are ignored. If nothing else, the broad similarities serve as a robust defence of the estimates derived from the current study (and confirmation of the likely feasibility of the estimates derived in the earlier studies).[89]

Comparisons of Tax Compliance Cost Structures

A comparison of the breakdown of tax compliance costs into their various components can also be undertaken, again subject to strong caveats. Such a comparison (table 10) indicates that the proportion represented by non-labour costs in all three countries is roughly comparable, representing about 20 percent of the total. However, while the proportion of internal staff time costs and external costs was roughly the same for the Canadian and the US surveys, Australian corporations apparently spent relatively more on external costs (34 percent of total compliance costs compared to 20 percent for the United States and 25 percent for Canada) and relatively less on internal costs (46 percent compared to 61 percent and 55 percent, respectively).

The greater exposure of Australian corporations to external costs in 2012 may be part of a broader (and international) shift toward outsourcing for many larger corporations. If that is the case, it might be expected that a similar shift toward external costs might be evident in the United States and Canada if those studies were undertaken today.

Another interesting comparison is the breakdown of tax compliance costs by reference to federal, state, and foreign taxes. Unfortunately, this comparison can only be made in relation to the United States, and then only on a limited basis, since US figures are not available for the breakdown for external costs between domestic and foreign tax matters.[90]

The comparison indicates that federal taxes represented a much greater proportion of both external and internal costs for Australian corporations (around 85 percent of total costs) compared to their US counterparts (around 72 percent). This clearly reflects the dominance of federal taxes in the Australian tax system: the Australian Commonwealth raised more than 80 percent of taxation revenue collected in 2010-11.[91] In addition, the much higher proportion of internal costs in Australia in 2012 expended on foreign tax matters (10 percent in Australia compared to 4 percent in the United States) supports the obvious conclusion that much more attention needs to be paid to foreign taxes in 2012 compared to 1999, rather than suggesting that

89 Erard, supra note 15; Slemrod and Venkatesh, supra note 14; and Vaillancourt et al., supra note 15.

90 Slemrod and Venkatesh, supra note 14, at 52.

91 Australian Bureau of Statistics, *Taxation Revenue, Australia, 2010-11*, catalogue no. 5506.0 (Canberra: ABS, 2012).

TABLE 10 Estimated Tax Compliance Costs as a Percentage of Total Costs, by Major Component: International Comparison

Cost category	Australia, 2012	United States, 2001[a]	Canada, 1996[b]
External costs	34.2	19.8	24.6
Internal staff time costs	45.7	60.7	55.1
Non-labour costs	20.1	19.5	20.3
Gross compliance costs	100.0	100.0	100.0

a Data from Joel Slemrod and Varsha Venkatesh, *The Income Tax Compliance Costs of Large and Mid-Size Businesses*, report to the IRS LMSB Division submitted by the Office of Tax Policy Research (Ann Arbor, MI: University of Michigan, Ross School of Business, September 5, 2002), at 45, table 4 (asset size > USD 1 billion).

b Data from Brian Erard, *The Income Tax Compliance Burden on Canadian Big Business*, Department of Economics Working Paper 97-2 (Ottawa: Carleton University, 1997), at 13, table 3, all respondents.

Australian large corporations have a greater exposure to international tax matters than do US large corporations.

A final comparison can be made between the compliance cost profiles evident in Australia, the United States, and Canada with respect to the various activities relating to expenditure on internal compliance costs, and a partial analysis can be performed on the same basis for external costs by reference to tax activities.

The comparative analysis by reference to tax compliance activities for internal costs shows a relative similarity in the structure of internal costs among the three jurisdictions: "record keeping and filing" represented around one-half of total internal costs; "tax planning and research" represented between a quarter and a third of such expenditure; and around 15 to 20 percent of total internal time was spent on "audit and litigation" and related matters. This represents a relatively stable comparison over time.

The breakdown of external costs was available only for the Canadian study. This comparison indicates that Australian large corporations may be spending significantly more on external record keeping and filing than did their Canadian counterparts some years earlier; but relatively less on external tax-planning services. Once again, this may point to the conclusion that certain activities (such as record keeping and filing) are being outsourced to external providers. It may also suggest that expenditure on tax planning no longer takes such a predominant role in the activities of large corporations—although an equally plausible explanation for the apparent reduction in expenditure on tax planning may be that respondents were loath to allocate expenditure to the tax-planning category in an environment where some public and revenue authority hostility is likely to attach to any such categorization.

In summary, although undertaken a few years prior to the current study, research on the tax compliance costs of large businesses in the United States and Canada constitutes a useful point of comparison. Overall, the tax compliance costs relating to income tax incurred by large corporations in Australia were comparable to those incurred by large US corporations but somewhat larger than those incurred by Canadian companies. External costs represented a greater proportion of total costs in Australia compared to both the United States and Canada, and a greater percentage of these external costs was incurred for filing and record-keeping services in contrast to tax-planning services. Finally, Australian corporations spent relatively more on federal tax compliance and foreign tax matters than did their US counterparts.

The survey results are also somewhat higher than those found in the business sector surveys in Australia (for example, the PwC 2010 survey finding of average costs of AUD 2.1 million)[92] and higher than findings in similar surveys of the comparable figure for Japan,[93] but lower than those in the United States[94] and Canada.[95]

It is tempting to suggest that some of these variations are accounted for by differences in tax structure, and differences in the detail of tax design (including technical and legislative provisions) in each of the countries concerned. Although Australia, Canada, and the United States are all constitutional federations, and although they share many similarities in terms of their tax systems, they also diverge quite considerably in many respects. For example, the Australian tax consolidation regime, whereby all domestic entities in the corporate group file and pay taxes on the basis of a single "consolidated" tax return, contrasts with the lack of any official loss-transfer or group consolidation system in Canada, while the US system of tax consolidation for tax reporting lies somewhere in between. This factor alone would make any attempt to seek to explain the different compliance cost profiles in the three countries tentative at the very best. Myriad other differences, whether in tax accounting law and practice or administrative process, compound the difficulties of explaining different compliance cost outcomes by reference to institutional or legislative settings. Hence, although an exploration of the differences in the tax systems in the three countries, and the impact on their respective compliance costs, might be enlightening, it is, unfortunately, too large a task to undertake in the current article.

Rather, in the following section, we attempt to identify and examine the factors that may drive compliance costs in the large corporate sector in Australia, and we suggest possible extrapolation to countries such as Canada and the United States only in the most general and tentative fashion.

92 See supra note 32, at 6-32.

93 Ibid.

94 Ibid.

95 Ibid.

DETERMINANTS OF TAX COMPLIANCE COSTS: PERCEIVED AND ACTUAL

Perceived Factors

The final section of the questionnaire gave respondents the opportunity to give their views about tax compliance costs, including their perception of the possible factors that may drive costs in their business.[96]

There was a very large consensus of opinion regarding the complexity of tax laws: 95 percent of respondents agreed or strongly agreed that tax laws in Australia had become more complex since 2007, an opinion that seemed to be stronger among large corporations than among SME taxpayers, where only 68 percent of respondents held that view.[97]

In addition to this attitudinal question, data about the perception of tax compliance cost drivers were collected by asking respondents to score 18 potential factors on a 10-point scale (where 0 implies "no impact," 5 implies a "moderate impact," and 10 implies an "enormous impact"). The results (figure 4) show that 17 of 18 listed factors received a score higher than 5; only "parent jurisdiction requirements" received a moderate score, of 4.05. Reflecting the general perception on tax complexity discussed previously, the "complexity of the law" factor received the highest score (8.06 out of 10); this was closely followed by "compliance and regulatory requirements imposed by the ATO" (7.72), "number of different tax laws the group has to comply with" (7.45), "uncertainty in the wording of tax rules" (7.42), "frequent changes in tax rules" (7.38), and "frequency of changes in tax practices" (7.36).

Comparisons with the SME business taxpayer survey, where a similar question on tax compliance cost drivers was included, reveal some similarity in the findings: complexity of tax law and ATO administrative requirements also received the highest scores among factors, although the scores were somewhat lower (6.22 and 6.20, respectively).[98]

Research in the United States and Canada also identified the perceived importance of complexity of tax rules and frequent changes in legislation as sources of tax compliance costs.[99] In the case of Canada, the different tax rules and tax bases across provinces and audit by multiple jurisdictions were also seen by taxpayers as sources of high compliance costs.[100]

96 Respondents were also invited to provide any suggestions as to how compliance costs might be reduced or mitigated for their group or for the large business sector as a whole. Outcomes of this aspect of the survey will be separately reported.

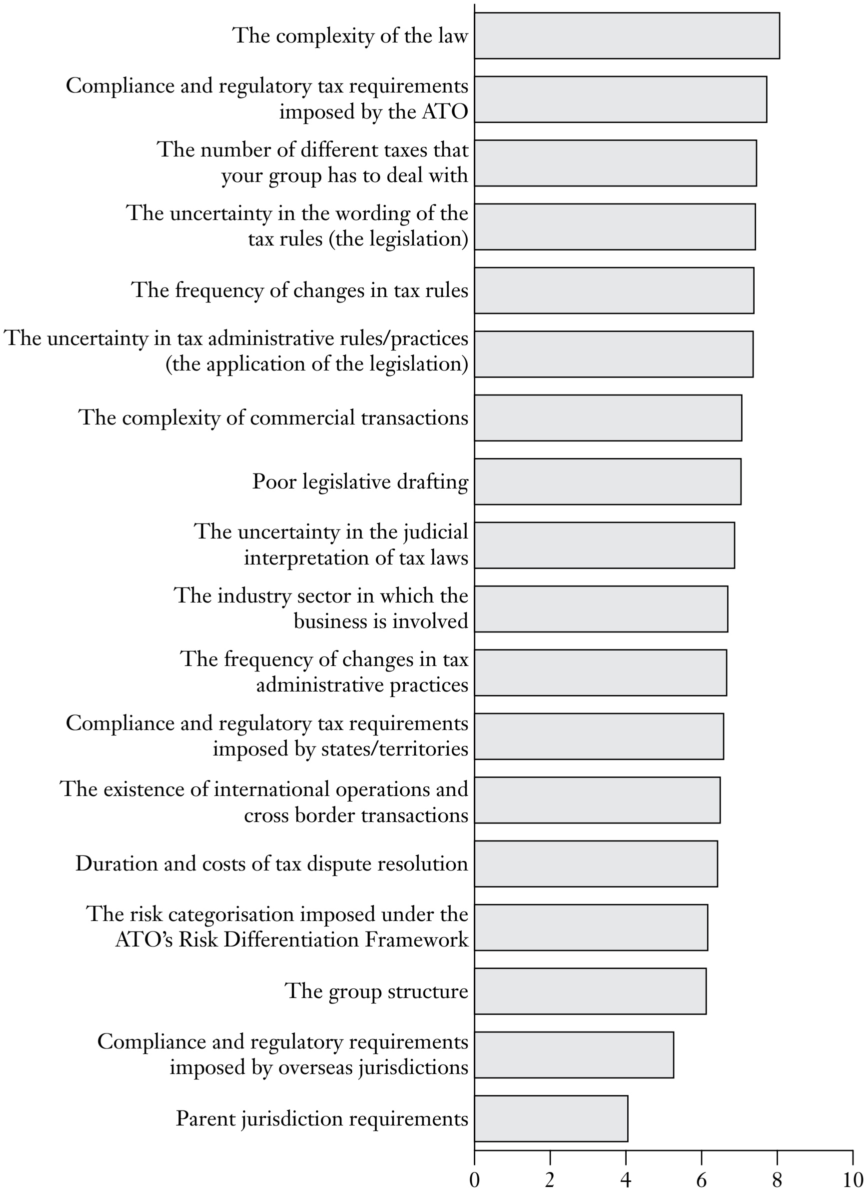
97 Lignier et al., supra note 75, at 32.

98 Lignier et al., "Tangled Up in Tape," supra note 46, at 246.

99 Slemrod and Blumenthal, supra note 14, at 428; and Erard, supra note 15, at 8.

100 Erard, supra note 15, at 16.

FIGURE 4 Perception About Tax Compliance Cost Drivers (Mean Scores out of 10)



Note: 0 indicates no impact; 5 indicates a moderate impact; 10 indicates an enormous impact.

Other factors that may drive compliance costs, which were volunteered by respondents (that is, they were not listed in the 18 factors above) included the excessive information requirements from the ATO and the extent and duration of tax reviews.

A factor reduction procedure using principal component analysis was performed on these factors to investigate whether a general pattern of correlation between different factors would emerge. The pattern matrix of coefficients of correlation between the rotated factors and the principal components is presented in table 11.[101] The analysis identified four principal components (or clusters), with most factors correlating strongly with one of the four components. However, three of the 18 factors correlated across two different components.

Component 1 can be broadly described as "rule complexity and uncertainty," given that most of the components relate to the promulgation, application, and interpretation of formal rules, although it is notable that two of the components also include elements of administrative practice. But essentially the seven factors that were strongly correlated with this component revolved around legal complexity and uncertainty.[102]

Component 2 relates principally to "international exposure" and regroups four factors relating to tax compliance requirements imposed as a result of the international status of the group, including requirements imposed by overseas jurisdictions and parent jurisdictions.

Component 3 includes six factors mostly concerned with the administrative requirements imposed on the group by the ATO and state/territory revenue authorities, and therefore can be broadly identified as "administrative compliance requirements." The industry sector in which the group operates is strongly correlated with this component since it is a significant determinant of the number of taxes that the group has to comply with. The ATO RDF classification factor, which naturally fits in this group, is also correlated with component 2 ("international exposure"). A possible explanation for this dual correlation is that the presence of international factors may be associated with higher compliance risk and therefore would trigger a higher RDF classification. The frequency of changes in tax rules, which contributes to component 1 ("rule complexity and uncertainty"), is also correlated with this component, presumably because changes in the law will also trigger additional administrative requirements.

Finally, component 4, which could be loosely described as "commercial factors," had three significantly contributing factors: "group structure," "complexity of commercial transactions," and "parent jurisdiction requirements." However, all of these factors had a negative correlation with the component, making its interpretation difficult.

101 The rotation method used for this analysis was Direct Oblimin rotation with Kaiser normalization.

102 A strong correlation is expressed by a coefficient greater than 0.3.

TABLE 11 Pattern Matrix of Coefficients Between Tax Compliance Factors and Principal Components

	Components			
	1	2	3	4
The uncertainty in tax administrative rules/practices (the application of the legislation)	1.001			
The uncertainty in the judicial interpretation of tax laws	0.903			
Poor legislative drafting	0.895			
The uncertainty in the wording of the tax rules (the legislation)	0.870			
The frequency of changes in tax administrative practices	0.647			
The complexity of the law	0.537			
Duration and costs of tax dispute resolution	0.434			
Compliance and regulatory requirements imposed by overseas jurisdictions		0.937		
The existence of international operations and cross border transactions		0.828		
Parent jurisdiction requirements		0.703		−0.480
The risk categorisation imposed under the ATO's Risk Differentiation Framework		0.509	0.335	
The number of different taxes that your group has to deal with			0.813	
Compliance and regulatory tax requirements imposed by the ATO			0.771	
Compliance and regulatory tax requirements imposed by states/territories			0.706	
The industry sector in which the business is involved			0.595	
The frequency of changes in tax rules	0.532		0.557	
The group structure				−0.853
The complexity of commercial transactions				−0.634

Note: Components are broadly described as follows: component 1, rule complexity and uncertainty; component 2, international exposure; component 3, administrative compliance requirements; component 4, commercial factors.

Statistical Analysis

As noted above under the heading "A Review of the Literature," earlier research into the compliance costs of large corporations, particularly in the United States and Canada, suggested that business size, industry sector, and tax profile (number and nature of taxes) have been identified as potentially contributing to the tax compliance costs encountered by the sector. The current study investigated these, and related variables, to test (by way of statistical analysis) whether this was also the case in relation to the Australian large business sector.

In addition, the current study also focused on the impact on tax compliance costs of further variables indicative of the entity's tax compliance profile. As discussed above under the heading "Research Design and Execution," the survey collected data on a number of variables descriptive of the corporation tax compliance profile, including the group's RDF (risk) classification as allocated by the ATO, and the number of taxes (federal and subfederal) with which the entity had to comply. Other indicators of the tax compliance profile collected by the survey, such as the number of objections that the group lodged and the number of litigation cases in which it was involved,[103] were considered to be potential determinants of tax compliance costs, but were not investigated further because there were insufficient data with which to undertake meaningful analysis.[104]

A multiple regression analysis was performed on the data collected for the 79 usable responses in the sample. In the first three equations, the dependent variables were the natural logarithm of gross compliance costs, external costs, and internal staff costs, respectively. In order to control for the effect of size and number of entities in the group, the logarithm of annual turnover and number of entities in the group were included in the model as independent variables with the RDF classification, the number of federal taxes, and the number of state taxes. In view of the fact that more than 20 percent of survey entities had activities in the mining sector and that this sector had specific tax compliance requirements, the introduction of a dummy variable for those entities was initially considered. However, the idea was later abandoned because no significant relationship between that dummy variable and compliance costs was found.[105]

The results of the three regressions are presented in table 12. In all three equations, turnover and number of entities were found to be strong predictors of tax compliance costs; however, the fact that the coefficients for these factors were less than 1 confirms earlier findings that although tax compliance costs rise when the firm size increases, the increase is less than proportional.[106]

The RDF risk classification profile and the number of federal taxes were found to be significant predictors of both gross compliance costs and one of its principal components, external costs.[107] On the other hand, none of these variables were found to be determinant of internal staff costs expended on tax compliance. We were also unable to establish a significant relationship between foreign tax exposure and tax compliance costs.

103 These indicators are discussed in Slemrod and Blumenthal, supra note 14, at 425-27.

104 Some of the values for number of the private rulings and number of objections had too few observations to allow us to conduct a meaningful regression analysis.

105 The influence of activity sector on tax compliance costs is not clear. Although Slemrod and Blumenthal, supra note 14, at 426 and Slemrod and Venkatesh, supra note 14, at 29 could not confirm this relationship, Erard, supra note 15, at 12 did find some significantly higher tax compliance costs for entities in the mining, oil, and gas industry sector.

106 In view of the cross-sectional nature of the data, it was considered important to test for heteroscedasticity. A scatterplot of residuals showed no indication of heteroscedasticity.

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

TABLE 12 Determinants of Tax Compliance Costs

Dependent variable (Log)	Gross compliance costs		External costs		Internal staff costs	
Adjusted R^2	0.635		0.529		0.454	
	Coeff.	*t*-statistic	Coeff.	*t*-statistic	Coeff.	*t*-statistic
Independent variables						
Constant	9.649	19.17***	9.039	15.80***	8.399	10.79***
No. of entities	0.344	4.98***	0.350	4.47***	0.368	3.45***
Turnover (log)	0.347	5.12***	0.266	3.45***	0.462	4.41***
Risk classification	0.149	2.00**	0.168	1.99*	0.033	0.19
No. of federal taxes	0.122	1.94*	0.164	2.31**	0.046	0.47
No. of state taxes	−0.024	−0.29	−0.079	−0.74	−0.034	−0.26

* Significant at 10 percent.
** Significant at 5 percent.
*** Significant at 1 percent.

In order to obtain further insights into the influence of risk classification on tax compliance costs, two additional regressions were performed between this particular variable and the components of tax compliance costs that were most likely to be affected by risk classification: costs related to tax planning (external and internal) and costs related to review, audit, and litigation (external and internal). In both cases, the effects of size and number of entities in the group were controlled by including these variables in the regression model. The results (table 13) indicate a statistically significant relationship[108] between risk classification and tax compliance costs associated with review, audit, and litigation, but no significant relationship with the cost of tax planning.

It 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 (coefficient = 0.951). However, it is not clear whether the risk classification in itself was the driving factor—that is, whether 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. An alternative interpretation of the relationship is that the tax aggressiveness of the group on tax matters was the underlying cause of tax compliance costs, and the RDF classification was just a proxy for this underlying cause. However, the fact that costs of planning were not significantly related to risk classification provides some support for the first explanation.

Overall, therefore, significant relationships were established between tax compliance costs and business size (measured by reference to turnover and number of

108 The level of significance was 5 percent.

TABLE 13 Determinants of Specific Costs

Dependent variable (log)	Cost of tax planning (external and internal)		Cost of review, audit, and litigation (external and internal)	
Adjusted R^2	0.108		0.102	
	Coeff.	t-statistic	Coeff.	t-statistic
Independent variables				
Constant	6.176	3.28**	5.614	2.13**
No. of entities	0.866	2.24**	0.452	1.15
Turnover (log)	0.153	0.418	0.138	0.37
Risk classification	0.453	1.08	0.951	2.23**

** Significant at 5 percent.

operating entities). The study was unable to confirm whether industry sector or foreign tax exposure may have a significant impact on tax compliance costs, but we did note that the income tax risk classification attributed to the group, and the number of federal taxes that the group had to deal with, were significant positive predictors of the level of gross tax compliance costs. Ultimately, however, it was not possible to establish the direction of the causal relationship between risk classification and tax compliance costs.

CONCLUSIONS

This research is the first tax compliance cost study in Australia that has focused exclusively on large corporations. As noted in the introduction, the field of tax compliance research has generally paid more attention to the SME sector than to the large corporate sector, and thus the relevance of this study goes beyond the Australian context. However, one of the difficulties faced by any such research is the lack of useful benchmarks that can allow appropriate comparison of the findings to take place. Fortunately, similar studies have been undertaken in the United States and Canada, although in both cases the studies took place more than 10 years prior to our research, and this time lag is a limiting factor.

Notwithstanding this limitation, the methodology used for this research and the assistance provided by the ATO helped us to obtain a very satisfactory response rate from a representative sample. We believe that this permits generalization of the results to the broader large corporate sector in Australia, though subject to the caveats identified below.

The research outcomes are both confirmatory and innovative. They confirm key findings from the literature that tax compliance costs are significant and regressive, and are not reducing over time, but they also provide new insights into the compliance cost profile of the large corporate sector. We elaborate on these points in these final paragraphs of the article.

The first broad outcome of this research is that the costs of compliance with all taxes (both federal and state/territory) are significant for large corporations, comprising, on average, AUD 3 million per firm per year. The specific costs of complying with income tax are an average of AUD 1.8 million, a figure that is broadly comparable to the cost (expressed in 2012 Australian dollars) reported for large US corporations in 2002.

Although absolute tax compliance costs are significant for the large business sector, the relative burden of tax compliance expressed in relation to annual turnover (AUD 0.40 per AUD 1,000 of annual turnover) is not as heavy as for smaller businesses that were the object of a contemporaneous survey. The regressive nature of tax compliance costs identified in previous research is therefore also confirmed.

The absence of previous comparable research on tax compliance costs of the large business sector in Australia makes it difficult to evaluate the evolution of those costs over time. However, comparison with the results from previous research in both the United States and Canada tends to support the hypothesis that these costs are not diminishing over time.

Other findings from the research develop our understanding of issues related to the compliance cost profile of the large corporate sector. For example, the research outcomes suggest that, apart from business size, the number of taxes that the entity has to comply with is a significant predictor of the level of tax compliance costs. The results also indicate that, after controlling for size, entities that have been identified as a significant compliance risk by the ATO have higher compliance costs than those with a lower risk classification.

Besides these statistically measurable determinants, three broad drivers of tax compliance costs are perceived by taxpayers: the complexity and uncertainty of tax rules, the administrative compliance requirements imposed by tax authorities, and international exposure.

Respondents to the survey were invited to make suggestions as to how tax compliance costs might be mitigated or reduced for their group or for the large business sector as a whole. Unsurprisingly, suggestions reported in the survey mainly addressed the broad drivers of tax compliance costs identified above—namely, reduction in the number of taxes (including harmonization of rules between states/territories); simplification of tax rules; and streamlining of ATO processes, particularly the audit and review process. Some specific taxes, such as the FBT, were widely perceived as costly and unnecessary, as were some of the taxes imposed at the state/territory level, such as stamp duty and payroll tax. These sentiments very much echo the recommendations of the Henry review of the tax system in Australia in 2009.[109] That review noted that more than 90 percent of tax revenue was generated from less than 10 percent of the 119 federal and state/territory taxes then extant in Australia,

109 Australia, *Australia's Future Tax System: Report to the Treasurer* (Canberra: Department of the Treasury, May 2010) (submitted December 2009).

and called for the removal of some of the more inefficient taxes.[110] The ongoing relevance of the Henry review recommendations, most of which are still on the table, is certainly confirmed by this current study, while the results and some of the very large compliance cost estimates in other countries also provide a glimpse into the compliance costs of the corporate income tax. Those costs could potentially be translated, even in part, into revenue gains under reformed corporate income tax structures, a subject that also warrants further investigation in the future.

110 Ibid., at 11.