Measuring compliance costs –
methodological challenges

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Abstract
The Transformation of New Zealand’s tax administration aims to reduce the effort and costs for customers of the New Zealand tax system. Better Public Services also frames the move by government agencies to engage with customers digitally. Inland Revenue is a key agency for two of the better public service initiatives aimed at making interaction with government less costly and requiring less effort.

Measurement of compliance costs provides a basis for evaluating if initiatives to reduce the cost of dealing with government have been successful. Compliance costs components of interest include time, money and stress, which is also described as psychic cost or effort.

Following Sandford and Hasseldine’s seminal study in 1999 Inland Revenue has measured the compliance costs of small businesses in 2004, 2009 and 2013. From 2016 onwards we propose a two year cycle of compliance cost measurement not just of small businesses, but also large businesses, not for profit organisations and for people who are not in business.

This paper will highlight challenges to robust measurement of compliance costs of small businesses. Not only is designing an appropriate methodology and analysis process difficult, but respondents have become more resistant to participating in surveys. Over the years of conducting compliance cost surveys response rates have fallen substantially.
1. A Desired State

A fundamental goal of many government initiatives throughout the world is the reduction of effort for citizens in dealing with government. The OECD Tax Forum states: *Our key aim is to improve taxpayer services and tax compliance by helping tax administrations increase the efficiency, effectiveness and fairness of tax administration and reduce the costs of compliance*.1

In New Zealand “Better for Business is a partnership of government agencies working to make it easier and more efficient for business customers to deal with government. For business people, this means less effort on administration and more time to focus on growing their business*.2

To drive change the government set the public sector two challenging targets:

1. Business costs (effort) from dealing with government will reduce by 25% by 2017, through a year-on-year reduction in effort required to work with agencies.

2. Government services to business will have similar key performance ratings as leading private sector firms by July 2017.

The Inland Revenue Department is undergoing a modernization process, “Business transformation will make it simpler and faster for New Zealanders to pay their taxes and receive their entitlements, resulting in significant benefits for New Zealanders and New Zealand’s economy*.3

The business case* for Business Transformation states these changes will deliver cumulative compliance cost savings of $1.2 to $2 billion through to 2023 derived from saving in time of 18-26 hours per small to medium enterprise. In addition the aim is to make it easier for customers to meet their obligations and receive their entitlements. A key indicator of this is that the proportion of customers who find it easy to interact with Inland Revenue will lift from 82% to 90-95%.

New Zealand is not alone in the stated aims to make it simpler for tax payers – The United Kingdom has an office dedicated solely to this aim, the Office of Tax Simplification*5 and the ATO is also working towards this goal. *We want to improve the client experience by providing interactions which are easy to access and reduce compliance costs*.6

1 https://www.oecd.org/tax/forum-on-tax-administration/
5 https://www.gov.uk/government/organisations/office-of-tax-simplification
2. Measurement

To establish the success or otherwise of compliance cost reduction activities it is necessary to measure compliance costs. This is a challenging task both from the design and collection perspective.

The compliance costs of meeting tax obligations is a significant part of the total costs of compliance – the NZIER estimated that in New Zealand tax compliance accounts for around 40% of total compliance. Inland Revenue is the most frequent government department interacted with as shown by the Result 9 Better for Business survey.

To track progress the Better for Business partnership uses a rolling monthly monitor surveying 1,200 business owners every six months. The survey asks about the effort for businesses to interact with government both at the agency and whole of government level.

When estimating the economic cost of compliance a monetised measure is required. New Zealand tax system measures follow the classic model of compliance costs of three components: internal costs, external costs and psychological costs. When applied to the tax system only those things that are done to meet tax obligations are in scope, not activities that would be done to manage the business regardless of tax obligations nor the value of the taxes themselves. The level that it is possible to disentangle business processes from tax processes is debatable. It can be argued that tax advice and planning while discretionary are indicators of the complexity and ambiguity of a tax system. While less prevalent for small and medium enterprises and for people earning wages and salary, advice and planning are an important part of meeting tax obligations for large businesses.

The New Zealand surveys of compliance costs, which build on the work of Sandford and Hasseldine (The Compliance Costs of Business Taxes in New Zealand) have measured these items by surveying samples of small businesses via a self reported questions on the time taken, and application of a dollar cost per hour based on who carries out the activity. External costs are sought from those receiving services as well as those providing them (with the permission of the business). Questions also address the level of anxiety of those carrying tax obligations.

Inland Revenue will survey small and medium businesses in 2016 to continue the series of measures of the cost for businesses to comply with tax obligations. A series of studies is planned which will seek information from large enterprises and salary. In 2017 studies of taxation compliance costs for wage and salary individuals and not for profit organisations will be undertaken. Each of these customer groups have very different interactions with the tax system and the methodology to capture their experiences vary according to their nature.
The Standard Cost Model (SCM) replaces the compliance cost to businesses within a framework of the total costs of as follows\(^7\).

**Figure 1: Standard Cost Model**

- Costs caused by legal regulation
  - Direct financial costs
  - Compliance costs
  - Indirect financial costs
  - Administrative burden

The following adaptation\(^8\) of the SCM adaption, places compliance cost for businesses along the other components of cost, that is government and community cost.

**Figure 2: Standard Cost Model adapted**

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\(^7\) [Methodology for determining the amount and source of administrative burden on businesses](http://www.mvcr.cz/.../methodology-for-determining-the-amount-and-source---)

\(^8\) NZIER 2015 unpublished
In previous studies of the compliance costs for small and medium businesses in New Zealand the elements of compliance cost that have been measured are:

- External costs in $ such as use of accountants to complete income tax returns and payroll providers to pay and file employees tax, PAYE
- Psychic costs – stress and anxiety associated with carrying out the activity.

Effort is now an accepted way to consider the efficiency of an administrative system from the customers perspective and is closely allied to psychic costs. The Better for Business (Result 9) survey asks for businesses to rate the effort of dealing with government.

![Customer Effort Score (CES)](http://www.researchfirst.co.nz/uploads/RF_CX.pdf)

3. Ensuring accuracy

*Representativeness*

Completing a complex survey, such as the compliance cost survey, asks a lot of business owners – who are pushed for time to run their own businesses. Over time the response rates for business surveys have decreased, from 31% to 39% for the various subgroups in 1999 for the Sandford and Hasseldine study, ranging down to 17% for the most recent study. Response rates of 3% are not uncommon leading to concerns about the validity of conclusions drawn from that group. This trend is reported not just in New Zealand but throughout the world. Possible causes include ‘burn out’ with an increasing number of online and telephone surveys pushed to potential respondents, distrust in what engaging in such a process may result in, increased demands on time in general and a decrease in willingness to do something with no obvious direct benefits.

New Zealand is a country of very small businesses. Of the 410,000 businesses covered by the compliance cost survey it is estimated that 95% have fewer than 5 employees. Sole traders and very small businesses show lower response rates than for businesses with 5 or more employees. It can be argued that those businesses with high compliance costs, which for very small businesses equates to owner’s time, will be less able to take part, hence biasing the results.
Weighting of responses to control for differential response rates can mitigate variation between observed variables, but cannot compensate for those variables that affect response rate but which are not yet known.

As is usual in compliance cost measurement we have found that proportionately the smallest of businesses expend the highest amount on meeting compliance cost obligations. For very small businesses with a turnover of less than $40,000 combined compliance costs is 6% of turnover, while for larger businesses it drops to well under 1%. This finding in combination with the policy emphasis on reducing compliance burden for developing businesses makes the inclusion of such businesses in compliance cost studies essential.

Combined compliance costs as a proportion of turnover in 2013

Reducing respondent burden

Somewhat ironically the measurement of compliance costs could place a substantial burden on survey respondents. A number of techniques will be used in the forthcoming New Zealand Compliance Cost survey: it will have 30 strata to control for the wide range of entities and their characteristics to ensure that the widest possible coverage of the business population is achieved while minimizing the sample size for each group. Respondents will be offered a choice of ways to answer—paper based and online in the same way most tax returns can be completed in the way the suits the taxpayer best. Administrative information will be combined with survey responses, thus reducing the number of questions and amount of information requested from the respondents.
Internal costs are derived from recording the time taken to complete tasks required to meet tax obligations – such as filing monthly GST returns. The question then becomes for what period should this be done. Tax is a seasonal activity – in the New Zealand system May to July is ‘peak season’ for income tax returns. In addition many businesses are seasonal in nature, eg ski resorts, retail trade over the Christmas period, for instance for gift shops. The number of workers peaks in December and is lower in mid-winter hence payroll activities reduce. Under the New Zealand system very small businesses need only file and pay GST six monthly, the majority in September and March, while larger enterprises have a monthly obligation.

This variability raises the question how and when should time data be captured. Medical research is rich in information relating to recall of severe medical events such as heart attacks and cancer, and also more frequently occurring activities such as compliance with medication and exercise regimes. From the literature it is clear that people do not always accurately recall the time taken for events or when they happened. Unpleasant activities are recalled as taking longer, significant events may suffer from ‘telescoping’ and be recalled as happening more recently.

Ideally time measurement relating to tax will be made close to the time the activity was done, will require little effort on the part of the tax payer to recall and record and will be representative of the time period of interest.

To meet these objectives as far as possible the next New Zealand cost of compliance survey will take place in the peak of income tax processing, relatively close to the major filing and paying for GST and will also capture the monthly PAYE activities. The time recorded will be multiplied up by the number of times it occurs in a year to give an annual value for time taken.

As previously mentioned the size of New Zealand businesses is highly right skewed by any of the measures of size. Similarly the values for time spent in meeting compliance obligations are clustered to the left.

There are however a relatively small number of businesses that record a high number of hours taken, as seen above, or that provide a high self-valuation for time. A technique to ‘trim’ such outliers was applied removing those with extreme values.

Regardless of this trimming the distributions remained highly skewed. Consequently medians were selected to represent the experience of Small/medium businesses.
4. Estimating the value of time

Once the time for an activity is determined a $ value is calculated by multiplying by the cost of that time. As we have seen New Zealand businesses are typically small. In this study a SME is one with under 20 employees or with a turnover of less than $80 million. In other jurisdictions this is a very small or micro business.

Our approach is to value the time according to who does the work. When it is the business owner or director, or an unpaid friend or family member of the owner, the owner is asked to value the time – an opportunity cost perspective. The average hourly rate for owners was 2013 $61 and $39 for friends and family members. Employees were costed at the Statistics NZ average for clerical workers of $28. In the 2013 compliance cost survey business owners accounted for 72% of time spent on compliance activities, paid employees for 24% and friends and family for 4%.

The resulting costs of compliance are largely driven by the value business owners give to their time due both to prevalence and high valuation. The time of owners accounted for 90% of internal compliance cost and 80% of overall cost in 2013.

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\(^9\) Statistics NZ Quarterly Employment Survey Sep 2013
survey of compliance costs. The survey respondents were most often (71%) the people who entered the payroll information in the software and were unlikely to be paid for this (61%).

In contrast the ‘Ease of doing business’ study by the World Bank, which ranks New Zealand as 22 in the 189 countries for ease of paying tax, Australia is 42, UK 15 and USA 53. Qatar and the United Arab Emirates are number 1. Bolivia and Venezuela are the most difficult and defines a medium business\(^\text{10}\) as having 5 owners and 60 employees. The measurement is done by seeking the opinion of 1300 expert’s world wide in business taxation regarding the scenario provided and excludes any ‘wasted time’. It assumes businesses are fully efficient regarding the tax requirements. This is a measure of what could be compared to what is.

This approach is very different to the approach of the New Zealand IRD which seeks estimates of time taken for tax activities from those carrying out the work, and represents the time it takes rather than what it ‘should’ take.

The resulting measures as expected are highly right skewed reflecting the large number of micro-businesses in the sample and in the New Zealand economy.

5. Comparability over time

An important element of the NZ compliance cost surveys is the comparison over time. Consequently it is important that comparability is maintained. This will be achieved by using essentially the same methodology for collection – while ensuring questions and approaches are relevant for today, particularly including the digital world. Time is not subject to inflation – however wage rates are. Consequently past $ values of compliance costs will be adjusted for inflation. Consistency of methods will assist in demonstrating the direction of travel if asked consistently even if the quantum is less exact.

<table>
<thead>
<tr>
<th>Median Total Cost</th>
<th>GST</th>
<th>Income tax</th>
<th>PAYE</th>
<th>KiwiSave</th>
<th>FBT</th>
<th>All</th>
<th>Total Hours (median)</th>
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<tbody>
<tr>
<td>2004</td>
<td>$1,542</td>
<td>$757</td>
<td>$699</td>
<td>n/a</td>
<td>$51</td>
<td>$1,739</td>
<td>55</td>
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<td>2009</td>
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<td>$661</td>
<td>$397</td>
<td>$159</td>
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<tr>
<td>2013</td>
<td>$1,223</td>
<td>$734</td>
<td>$505</td>
<td>$184</td>
<td>$178</td>
<td>$2,076</td>
<td>36</td>
</tr>
</tbody>
</table>

\(^{10}\) http://www.doingbusiness.org/methodology/paying-taxes
6. Conclusion

There are many challenges when measuring the cost of compliance. However the rewards are high in identifying where the incidence of compliance burden falls and in evaluating the impact of efforts to reduce the costs on citizens. With careful design and combining administrative data a robust and respondent friendly survey will inform the New Zealand tax simplification efforts under Business Transformation.