

April 2010

The Cost to Canadians of Complying with Personal Income Taxes

by François Vaillancourt





**Studies in
Tax Policy**

April 2010

The Cost to Canadians of Complying with Personal Income Taxes

by François Vaillancourt

Contents

| | | |
|--|---|----|
| Executive summary | / | 1 |
| Introduction | / | 4 |
| 1 The survey | / | 5 |
| 2 Tax completion choices | / | 10 |
| 3 The costs of complying | / | 14 |
| Conclusion | / | 40 |
| Appendix A Methodology used in survey | / | 42 |
| Appendix B: The questionnaire (English version) | / | 44 |
| Appendix C Regression used in calculation of market wage | / | 54 |
| References | / | 56 |
| About the author & Acknowledgments | / | 58 |
| Publishing information | / | 59 |
| Supporting the Fraser Institute | / | 60 |
| About the Fraser Institute | / | 61 |
| Editorial Advisory Board | / | 62 |

Executive Summary

Taxes impose numerous costs on Canadians both directly and indirectly. Direct costs are the taxes themselves. Indirect costs include the impact of taxes on behavior—the amount that Canadians work, consume, save, and invest¹—the resources that Canadians expend complying with the tax system, and the amount governments spend collecting taxes. This study examines the compliance costs of Canada’s personal income-tax system. That is, it examines all of the costs, time, and effort associated with preparing personal income-tax returns including buying tax software, hiring professionals such as accountants and lawyers, and completing and submitting personal income-tax returns. The study is part of a larger Fraser Institute research project that aims to calculate the compliance burden of all taxes in Canada.

The study is divided in three sections. Section one presents information on the detailed survey of Canadians filing personal income-tax returns carried out by Leger Marketing on behalf of the Fraser Institute. Section two presents the survey results. The final section estimates the costs, both in time and monetary resources, incurred by Canadians to complete and file personal income-tax returns.

Survey of Canadian tax payers

Governments rarely collect data on complying with tax regulations or study the costs of do so. Researchers must therefore collect their own data. To do this, we hired Leger Marketing to conduct a telephone survey of a representative sample of 2,000 Canadian tax filers from April 21 to May 11, 2008. The survey was developed by the author and was based on previous surveys of Canadian compliance costs and comments from several prominent tax experts. Those interviewed were asked 40 tax-related questions on the time and money they spent on various tax-filing activities. For example, they were asked whether they completed their tax returns themselves, purchased tax-filing software programs, paid someone else to complete their tax return, or had their return completed by a family member or friend or a non-profit organization. Additional questions included whether they incurred out-of-pocket expenses, how much time they spent

1 For a comprehensive review of the literature on the impact of taxes on economic behavior, see Palacios and Harischandra, 2008.

on tax planning and completing their tax return. Those interviewed were also asked about their income level, sources of income (e.g., wages, rental income, capital gains, self-employment income) and use of tax credits. We also asked numerous demographic questions such as sex, age, education, location, language skills, and marital status. The survey methodology is discussed in Appendix A (p. 42) and the English version of the questionnaire used can be found in Appendix B (p. 44).

Results of the survey

The survey found that 51% of Canadian tax filers use a paid tax preparer (e.g., accountant or lawyer) to prepare and submit their tax returns; 31% of Canadian tax filers prepare their returns themselves; and 18% rely on friends, family, or a non-profit organization. Interestingly, the use of paid preparers has increased significantly over the past 20 years: 39% of tax filers did so in 1986; 51% in 2007 (Vaillancourt, 1989: 105).

Among the many findings, it is to be noted that approximately 47% of those who prepare their own tax returns still file using paper forms; the other 53% use tax software. The survey also found that the use of tax software rather than filing a paper form was highest among those 25 to 34 years of age and substantially lower for those 55 and older. Men were found more likely than women to prepare their returns themselves (34% compared to 29%). The use of paid tax preparers is significantly higher when taxable income is above \$100,000 and among those with more complex sources of income such as self-employment or rental income. And, fluency in either of Canada's official languages did not affect the choice of whether tax filers used a paid tax preparer.

The survey also gathered information on the time and expense for Canadians preparing and filing their tax returns. This includes preparing the relevant supporting documents, maintaining proper records, undertaking tax planning, filing necessary reports, and meeting with tax preparers. According to the survey, Canadians spend an average of five hours gathering receipts and forms, preparing, meeting with paid preparers, and/or completing their tax returns. When time spent on tax planning and appealing decisions of the Canada Revenue Agency or Revenue Québec is included, Canadians spend an average of seven hours complying with personal income taxes. The survey also found that Canadians spend an average of \$61 on payments to tax preparers and purchasing software.

Cost of compliance

Using information on the time and resources Canadians spend completing and filing their personal income-tax returns, we calculate it costs Canadians approximately \$215 to comply with personal income taxes. Compliance costs are highest (above \$300) for those receiving self-employment income, rental income, capital gains, or foreign investment income. In addition, married tax filers were found to have higher compliance costs (\$253) than single tax filers (\$168). Compliance costs were also found to be substantially higher for those Canadians making use of tax credits like the Children's Fitness Tax Credit, Public Transit Tax Credit, Education Tax Credit, and natural-resource tax credits (e.g., Mineral Exploration Tax Credit).

Finally, personal income tax compliance costs were aggregated to estimate the total compliance costs of Canada's personal income-tax system. Using the survey data, we find that total compliance costs of personal income taxes range from \$4 billion to \$5.8 billion. The range for total compliance costs is the result of using different assumptions about such things as the compliance costs for tax returns filed purely to collect social benefits and the value to be placed on the time of some tax filers. The estimates of compliance costs of personal income taxes represent between 2.2% and 3.2% of personal income-tax revenue collected by the federal and provincial governments in Canada.

Introduction

The costs of complying with the Canadian tax system for the year 2005 were recently estimated as ranging between \$16.2 billion (lower bound) and \$25 billion (upper bound) by Vaillancourt and Clemens (2008: 81, table 3.6). The cost for individuals of complying with the requirements of the Canadian personal income taxes (PIT) and associated payroll taxes levied by both the federal and provincial governments were estimated at between \$2.9 billion (lower bound) and \$5.5 billion (upper bound) for 2005. The lower-bound PIT estimate uses data from various sources and, in particular, data dating back to a survey carried out for the 1986 taxation year; the upper-bound estimate uses the compliance costs/GDP ratio found in 1986, applying it to 2005 GDP.

Using compliance-cost information dating back to 1986 is less than ideal. Between 1986 and 2005 or more recent years, numerous changes have occurred in the taxation of personal income in Canada. The two most important for our purpose are the introduction of various computing tools such as e-filing and personal-tax software to aid in those filing taxes and the changes in the taxation of income by provincial governments, who moved from a tax-on-tax to a tax-on-income approach in 2000. Of course, there have been annual changes in the complexity of the tax system since 1986 such as the introduction of pension-income splitting or the child fitness credit.

Because of the lack of recent evidence on the costs of tax compliance in Canada, the Fraser Institute undertook a major research project on the topic in 2008. In this publication, we report the results of a survey carried out in May 2008 of 2000 individuals who filed returns on their personal income tax for the year 2007.¹ This allows us to obtain estimates for *individuals* of the compliance costs associated with the personal income taxes levied by the federal and provincial governments in Canada as well as Employment Insurance (EI), Canada Pension Plan (CPP), Quebec Pension Plan (QPP), and Quebec parental-leave insurance for 2007.² The publication is divided in three parts: the first presents the survey; the second, the choices with respect to the completion of the 2007 tax return; and the third, the costs in time and money incurred by individuals. There are also three appendices that give the survey methodology, the questionnaire used (English version), and the methodology used to calculate the wage rate for non respondents to this question.

1 As part of this research project, we shall be publishing further studies on the compliance costs associated with other taxes. The results of these studies will be drawn together to estimate the cost of complying with all taxes in Canada and provide an update to Clemens and Vaillancourt, 2008.

2 We also collected information on property taxes; it is not analyzed in this paper.

1 The survey

The costs of complying with taxes are rarely studied by official agencies of the government, be they tax or statistical bodies. This is shown in the comprehensive review of literature done by Vaillancourt and Clemens (2008). Researchers, therefore, must collect their own data, selecting a sample of respondents, individuals in this case. We hired the firm Leger Marketing to conduct a survey by telephone between April 21 and May 11, 2008, of Canadians residing in the 10 provinces.³ A filter was used at the beginning of the interview to ensure that an income-tax form had been filed for the 2007 federal personal income tax. See Appendix A (p. 42) for the main characteristics of the survey and sample (tables A-1, A-2)⁴ and the characteristics of the tax-filers population for 2006 (table A-3). We will use these characteristics in the analysis of the aggregate results at the end of the paper.

Dates

The dates of the survey were selected taking into account that the last date for filing on time a federal income tax form was April 30. Table 1 shows when respondents filed their income-tax returns:⁵ assuming a mid-point date of May 1 for the interview, about 70% of filers answered the survey no more than 45 days after filing their personal income-tax return⁶; using mid points of the various intervals, we estimate the elapsed time to be 35 days on average.⁷

Table 1: Distribution of respondents (%) by date of filing their 2007 personal income tax return, Canada

| Filing interval | 01/01– 28/02 | 01/03– 31/03 | 01/04– 20/04 | 21/04– 30/04 | After May | No answer |
|-----------------|-----------------|-----------------|-----------------|-----------------|--------------|--------------|
| Unweighted % | 11.9 | 35.6 | 28.0 | 19.8 | 2.7 | 2.2 |

Source: Calculation by the author using survey data unweighted.

- 3 The three territories were excluded because of the cost and difficulty of including them; they accounted for 67,920 of income tax returns filed in 2006 or 0.3% of tax-filers (24,141,700) in 2006. Also, we did not include a sample of those filing returns from outside Canada (78,780 in 2006) (Canada Revenue Agency, 2008f: Income Statistics 2008, Basic Table 5, All Returns by Province and Territory. <<http://www.cra-arc.gc.ca/gncy/stts/gb06/pst/fnl/pdf/tbl5-eng.pdf>>).
- 4 The survey sampled a smaller proportion of men and a larger portion of women than is found in the Canadian population. The survey results are weighted to correct this imbalance and ensure the results are representative of the Canadian population.
- 5 In all tables of this study, numbers do not add to 100% due to rounding.
- 6 Assuming a linear distribution in the 01/01–31/03 group, we get $17.8 + 28 + 19.8 + 2.7 = 68.3$.
- 7 $90 \text{ days} \times 0.119 + 45 \times 0.356 + 20 \times 0.28 + 5 \times 0.198 = 33.3$.

Thus, it seems plausible that the information provided is not greatly affected by the passage of time. The ideal situation would be for a sample of tax filers to be selected in advance and to provide them with a logbook in which they would record their various tax filing activities as they occurred. We are not aware of any study where this was done. Of those filing a federal tax return, 20.4% filed a 2007 Québec income-tax return.⁸

Questions asked

The questions asked in the survey are found in the questionnaire reproduced in Appendix 2 (p. 44). The questions were selected taking into account:

- lessons learned from the previous survey on the compliance costs of the personal income tax in Canada;
- comments made by reviewers at the Fraser Institute and outside reviewers on a draft questionnaire;
- the complete lack of information on the cost of complying with the property tax on personal property;
- the need to administer a questionnaire of reasonable length and complexity;
- the need to meet a reasonable budget constraint in carrying out the survey.

There are 40 tax-related questions, grouped as follows.

- Three questions on filing or not, and if so when, a federal and a Québec income tax return (Q1, Q1a, Q2).
- 17 questions (Q3–Q5n) on time or money spent on various tax filing activities, most questions asked of one type of tax filer only since Q5 asked respondents to sort themselves out as follows:
 - Yourself using a paper form
 - Yourself using software you purchased and installed on your computer
 - Yourself using software on the Internet
 - A not for profit group that was not paid for its service
 - A friend or family member who was not paid for their service
 - A tax preparer that you paid.
- That done each subset was asked questions such as these:

8 Calculations by the author using answers to Q2. There were 5,893,000 Quebec personal income-tax returns filed in 2006 (Quebec, Ministère de Finances, 2006); this represents 24.4% of all federal returns filed in 2006.

- And how much did you pay for this software that you purchased and installed on your computer? Please stop me when I get to the purchase price category
 - How much time did you spend completing your 2007 tax return(s)?
- Four other questions (Q6–Q9) on tax filing and tax planning.
 - Two questions (Q10–Q11) on income sources (13 kinds such as self-employment income) and use of tax law provisions (10 provisions such as Education and tuition amount for self or transferred).
 - Five questions (Q12–Q14) on interactions with the Canada Revenue Agency and Revenu Québec particularly on tax appeals.
 - Two questions (Q15–Q16) on preparing income tax returns for others.
 - Seven questions (Q17–Q21) on the compliance costs of the property tax.

In addition, there were 10 demographic (D1–D8) and income questions.

Table 2 presents information on who prepared the 2007 federal tax returns for which compliance costs will be presented below. It is the only table where we present the relevant information in both unweighted and weighted form. This allows the reader to see that the impact of weighting is not substantial and, from here on, only weighted results are reported and discussed. There are three key findings shown in table 2.

- 1 51% of returns were prepared by a paid tax preparer. This means that we have a precise figure in dollars directly obtained from the respondents on part of the direct cost of preparing a tax return for half our sample.
- 2 31% of returns were prepared by the respondents themselves. This means that we obtain information on the amount of time required to do so directly from the individual putting in this time but that we must calculate a cost in dollars for these returns and for the time for some activities of users of paid and unpaid preparers. This requires us to put a value on the time used in compliance activities.

Table 2: Percent of tax filers by tax preparation mode, Canadian personal income-tax filers, 2007

| | Self using paper form | Self using software on own computer | Self using internet based software | Not-for-profit group (NFP) | Friend or family member | Paid tax preparer | No answer |
|--------------|-----------------------|-------------------------------------|------------------------------------|----------------------------|-------------------------|-------------------|-----------|
| % unweighted | 14.4 | 11.8 | 4.5 | 1.8 | 15.9 | 51.2 | 0.6 |
| % weighted | 14.5 | 12.0 | 4.6 | 1.6 | 15.9 | 50.8 | 0.5 |

Source: Calculation by the author using survey data, unweighted and weighted

- 3 18% of returns were prepared either by a friend or family member or by a not-for-profit (NFP) group or similar organization. Here we have indirect information on the time required to prepare a tax return and we must calculate a value for this time. This is clearly less precise than the use of an amount paid to a tax preparer.

One can compare the results in table 2 to the situation in 1986 (Vaillancourt, 1989: 105) only when aggregating the 2007 data. We find that between 1986 and 2007 the use of paid preparers has increased from 39% to 51% of filers while help from friends or family members has decreased from 28% to 16%; self preparation remains more or less the same, going from 33% to 31% of tax filers. This may indicate that tax matters have become more complex over time, that networks of family and friends have shrunk over time, or both. We can also compare partially these results with those reported in Vaillancourt and Clemens, 2008 (69, table 3.1), where we find that 45% of tax returns in 2005 were prepared and filed by tax preparers (including discounters).

Amongst those using software on their computer, 78% use a Quicktax™ product; the only other product with a significant number of respondents is Ufile™ with 11% of the users. In the case of internet software, the product shares are 40% for Quicktax™ and 28% for Ufile™.⁹

To calculate the total cost of complying with the personal income tax in 2007, we thus need to calculate the value of the time spent on compliance activities. We do this using the market wage reported by respondents when available. However, both the use of a value of time set by assumption and the calculation of a imputed wage was necessary as some individuals did not report their wage rate; they answered “*I don’t know*” or refused to answer the question. The sample was divided among those who did not report a wage rate (514 individuals), those who reported a wage (1,071 individuals), and those who answered “*I don’t know*” or refused to answer (415 individuals). For those who did not report a wage, an examination of the data showed that the vast majority of them were the individuals who reported being “*retired*.” Although those individuals do not have a wage, the time spent on income tax matters is not valueless: an imputed *value of time* of \$10 per hour was attributed to them.¹⁰ For individuals who answered “*I don’t know*” or refused to

9 These percentages come respectively from answers to questions Q5B and Q5E. Commentators agree that Quicktax™ is the most popular product in Canada but do not provide specific shares (see, for example, Kapica, 2007, February 21).

10 The minimum hourly wage was highest in British Columbia and Ontario in 2007 at \$8.00 while in Quebec it was \$7.75, with the lowest set at \$7.00 (CBC News, 2007, February 1). So the Canadian average was about \$7.75. The average hourly wage for hourly paid employees in 2007 was \$18.95 (Statscan, 2009b: CANSIM Table 281-0030: Average hourly earnings for employees paid by the hour) and thus the estimated net (after income

answer, we estimated the market wage by ordinary least square, based on the individual characteristics. The dependent variable was the natural logarithm of the wage rate while the independent variables used were sex, schooling, age, marital status, and region. Data from individuals who reported a market wage and provided information on the five independent variables were used to estimate a market wage equation (1,053 observations). The regression is found in Appendix C (p. 54). The relevant coefficients of the regression were then multiplied by the individual characteristics of the individuals who answered “*I don’t know*” or refused to answer, to calculate an imputed wage rate for each of them. Thus, reported wages, imputed wages, or imputed value of time are used to calculate the value of the time spent by individuals on compliance activities.

For the time provided by NFP groups, we use the value of \$10; this is based on the fact that these are often tax clinics run by student volunteers. For the time provided by a friend or family member, we use the value of time associated with the tax filer; we thus assume that the wages, reported by, or imputed to, (or \$10) the tax filer are those of the friend or family member. This probably biases downward the value of this time as parents are more likely to prepare the income tax returns of their young children than the other way around (as can be inferred from table 3a).

tax) wage was \$13.25. Hence, \$10 was seen as a reasonable estimation of the value of the time of individuals not in the active workforce. We examine in the discussion of the overall compliance costs the sensitivity of our results to this choice.

2 Tax completion choices

We present in tables 3a, 3b, and 3c the breakdown of those filing personal income-tax returns, between four types of tax preparers: [1] self using paper form; [2] self using software; [3] friend, family, or not-for-profit group; [4] a paid tax preparer. Table 3a sorts filers by sociodemographic characteristics; table 3b, by income; and table 3c, by income tax characteristics. Since there was only a small number of users of internet-based software reported in table 2, we grouped these with filers who used software on their computers; similarly, those who had help from a not-for-profit group were grouped with those who had unpaid help from friends or family. This information on tax filing mode is important in the analysis of compliance costs since we show in table 4 (in section 3) that there are important cost differences among the various modes of tax filing.

Results of table 3a

- Men are more likely than women to prepare their own tax return.
- The self-preparing mode increases in frequency with age from 18–24 to 45–64 and then drops off. The use of software among those preparing tax returns themselves is highest in the 25–34 group and lowest among those 65 and older, as shown by the ratio in the right-most column. The use of software also increases with education as does the importance of self preparation.
- The use of paid preparers is highest among those 65 and older and by married individuals. Regionally, use of paid tax preparers is highest in Quebec and British Columbia.¹¹
- Language skills have no impact on the choice of a tax preparation mode.

Table 3b shows that the use of paid preparers is significantly higher when taxable income is above \$100,000.¹² Paid preparers are more often used by individuals with more complex sources of income such as self-employment or rents than by those with income from wages and salary.

11 The Atlantic region encompasses the provinces of Newfoundland & Labrador, Prince Edward Island, Nova Scotia, and New Brunswick; the Prairies encompasses the provinces of Manitoba, Saskatchewan, and Alberta.

12 Income was collected by income ranges and is defined in Question D6 as *the taxable income reported on your 2007 federal income-tax return*.

Table 3a: Percentage of tax filers using a preparation mode, by sociodemographic characteristics of tax filers, personal income tax, Canada, 2007

| | Self using paper form (%) | Self using software (%) | Friend, family, or not-for-profit (NFP) group (%) | Paid tax preparer (%) | Self using software/self using paper (ratio) |
|--------------------------------------|---------------------------------|-------------------------------|--|-----------------------------|---|
| Sex | | | | | |
| Men | 15.3 | 18.4 | 17.2 | 49.1 | 1.2 |
| Women | 13.9 | 15.0 | 18.1 | 53.0 | 1.1 |
| All tax filers | 14.4 | 16.3 | 17.7 | 51.5 | 1.1 |
| Age | | | | | |
| 18–24 | 9.0 | 13.4 | 26.9 | 50.7 | 1.5 |
| 25–34 | 9.1 | 21.3 | 19.7 | 50.0 | 2.3 |
| 35–44 | 13.3 | 17.9 | 17.3 | 51.5 | 1.3 |
| 45–54 | 13.9 | 22.2 | 13.2 | 50.7 | 1.6 |
| 55–64 | 18.8 | 15.9 | 18.5 | 46.9 | 0.8 |
| 65+ | 14.1 | 7.6 | 19.4 | 59.0 | 0.5 |
| Education | | | | | |
| Less than high school | 8.5 | 3.9 | 29.7 | 57.9 | 0.5 |
| High school completed | 11.4 | 11.8 | 22.2 | 54.6 | 1.0 |
| Some post secondary schooling | 15.8 | 15.8 | 12.0 | 56.5 | 1.0 |
| Some university schooling | 15.3 | 18.8 | 18.3 | 47.6 | 1.2 |
| Completed college degree | 12.6 | 15.8 | 15.8 | 55.8 | 1.3 |
| Completed undergraduate degree | 18.3 | 24.0 | 10.4 | 47.3 | 1.3 |
| Post-graduate degree | 21.0 | 25.7 | 15.0 | 38.3 | 1.2 |
| Marital status | | | | | |
| Married | 13.0 | 17.8 | 15.4 | 53.8 | 1.4 |
| Single | 17.5 | 16.6 | 19.6 | 46.3 | 0.9 |
| Other | 15.8 | 10.6 | 24.8 | 48.8 | 0.7 |
| Language skills | | | | | |
| Poor knowledge of English or French | 14.3 | 16.8 | 17.6 | 51.3 | 1.2 |
| Good+ knowledge of English or French | 14.8 | 16.4 | 17.8 | 51.0 | 1.1 |
| Region | | | | | |
| Atlantic | 17.4 | 8.3 | 30.3 | 43.9 | 0.5 |
| Québec | 14.8 | 12.0 | 19.9 | 53.2 | 0.8 |
| Ontario | 12.7 | 19.3 | 17.3 | 50.7 | 1.5 |
| Prairies | 14.2 | 22.1 | 12.4 | 51.2 | 1.6 |
| British Columbia | 18.7 | 11.6 | 14.1 | 55.6 | 0.6 |

Note: percentages in first four columns sum across rows.

Source: calculations by the author using survey data.

Table 3b: Percentage of tax filers using a preparation mode, by level and type of income of tax filers, personal income tax, Canada, 2007

| | Self using paper form (%) | Self using software (%) | Friend, family, or not-for-profit (NFP) group (%) | Paid tax preparer (%) | Self using software/self using paper (ratio) |
|-----------------------------------|---------------------------|-------------------------|---|-----------------------|--|
| Income | | | | | |
| Less than \$10,000 | 14.4 | 9.9 | 28.4 | 47.3 | 0.7 |
| \$10,000–\$29,999 | 15.4 | 11.7 | 21.1 | 51.8 | 0.8 |
| \$30,000–\$49,999 | 13.7 | 18.9 | 18.3 | 49.1 | 1.4 |
| \$50,000–\$69,999 | 16.4 | 22.3 | 9.7 | 51.7 | 1.4 |
| \$70,000–\$99,999 | 12.0 | 30.3 | 12.0 | 45.8 | 2.5 |
| \$100,000–\$149,999 | 14.9 | 21.3 | 4.3 | 59.6 | 1.4 |
| \$150,000 and greater | 14.3 | 17.9 | 10.7 | 57.1 | 1.3 |
| Type of income | | | | | |
| Wages and salary | 14.8 | 20.7 | 15.5 | 49.1 | 1.4 |
| Self-employment income | 8.5 | 16.4 | 6.6 | 68.5 | 1.9 |
| Child tax benefit | 9.3 | 19.0 | 18.1 | 53.6 | 2.0 |
| Government transfer payment | 14.4 | 10.7 | 24.3 | 50.7 | 0.7 |
| Private pension | 19.0 | 13.3 | 13.3 | 54.5 | 0.7 |
| Interest income | 16.6 | 19.9 | 11.6 | 51.9 | 1.2 |
| Dividend income | 12.5 | 21.3 | 10.8 | 55.5 | 1.7 |
| Rental income | 6.9 | 14.5 | 15.9 | 62.8 | 2.1 |
| Capital gains | 15.1 | 21.6 | 8.2 | 55.2 | 1.4 |
| Other investment income, Canadian | 12.7 | 16.0 | 12.3 | 59.0 | 1.3 |
| Investment income, non-Canadian | 13.6 | 23.9 | 11.4 | 51.1 | 1.8 |
| Labour income, non-Canadian | 11.1 | 33.3 | 11.1 | 44.4 | 3.0 |
| Pension Income, non-Canadian | 15.8 | 5.3 | 18.4 | 60.5 | 0.3 |

Note: percentages in first four columns sum across rows.

Source: calculations by the author using survey data.

Table 3c shows that paid preparers are used more often by those using the provisions of the Income Tax act associated with less common types of investment in natural resources, the investment credit, or stock options. Late filers are the least likely to use a paid preparer, perhaps because the supply has dried up by then.

Results not reported here show that from 1986 to 2007 there has been a growth in the use of accountants (and, to a lesser extent, lawyers) by tax filers using paid tax preparers. These now account for 64% as opposed to 51%

Table 3c: Percentage of tax filers using a preparation mode, by tax-related choices, tax filers, personal income tax, Canada, 2007

| | Self using paper form (%) | Self using software (%) | Friend, family, or not-for-profit (NFP) group (%) | Paid tax preparer (%) | Self using software/self using paper (ratio) |
|-----------------------------------|---------------------------------|-------------------------------|--|-----------------------------|---|
| Experience with tax system | | | | | |
| 4 years or less | 11.6 | 11.6 | 25.3 | 51.6 | 1.0 |
| 5–9 years | 7.6 | 20.2 | 16.8 | 55.5 | 2.7 |
| 10 years or more | 15.2 | 16.3 | 17.4 | 51.1 | 1.1 |
| Date return filed | | | | | |
| January 1–February 28 | 15.7 | 13.6 | 23.3 | 47.5 | 0.9 |
| March | 16.9 | 15.8 | 18.8 | 48.5 | 0.9 |
| April 1–20 | 10.3 | 15.6 | 17.3 | 56.8 | 1.5 |
| April 21–30 | 16.1 | 20.4 | 12.0 | 51.5 | 1.3 |
| May 1 and later | 13.2 | 26.4 | 17.0 | 43.4 | 2.0 |
| Tax law provisions used | | | | | |
| Natural resources | 12.5 | 7.5 | 15.0 | 65.0 | 0.6 |
| Education and tuition | 9.0 | 22.8 | 14.8 | 53.4 | 2.5 |
| Stock options | 8.5 | 14.1 | 16.9 | 60.6 | 1.7 |
| LSVCC | 14.3 | 21.4 | 14.3 | 50.0 | 1.5 |
| Medical expenses | 11.9 | 15.3 | 15.3 | 57.6 | 1.3 |
| Child fitness | 13.0 | 28.0 | 12.4 | 46.6 | 2.2 |
| Urban transit | 13.8 | 30.4 | 21.0 | 34.8 | 2.2 |
| Pension income splitting | 13.9 | 14.4 | 13.9 | 57.9 | 1.0 |
| Foreign tax credit | 19.7 | 31.1 | 8.2 | 41.0 | 1.6 |
| Investment credit | 13.0 | 13.0 | 6.9 | 67.2 | 1.0 |

Note: LSVCC = Labour Sponsored Venture Capital Corporation; percentages in first four columns sum across rows.

Source: calculations by the author using survey data.

of paid tax preparers; the share of private individuals has slipped from 13% to 10% while the share of firms specializing in tax preparation has gone from 36% to 24% (Vaillancourt, 1989: 105). Overall, the patterns observed in 2007 in terms of the use of a paid preparer also hold for the use of an accountant: individuals with more complex types of income such as self-employment or rental or who use more complex aspects of the tax law such as natural resources provisions are more likely to use an accountant than other types of paid tax preparers.

3 The costs of complying

In the following discussion of the costs of complying with personal income taxes in Canada, we exclude outliers; these are responses that were more than twice the standard error above the mean for any answer to a compliance-cost question. We did this after examining the data file and finding abnormalities in terms of jumps in values or clustering. This strengthens our analysis by ensuring that the values of compliance costs reported in this study for a specific characteristic are a minimum and not driven up by a few wayward responses.

There are two main reasons to file an income tax return in Canada. One is to be in compliance with the tax laws and to pay the required amount, which may mean an additional payment at the time of filing or the receipt of a refund. The second is to gain access to social programs delivered through the tax system, such as the child tax benefit, or those that require a proof of income, a notice of assessment supplying one such proof. The costs of filing a return for the second reason can be interpreted as social-policy costs rather than tax-compliance costs but they are linked to the tax system and, for many individuals, are not easily separated out as the tax return may have been filed for both reasons. We return to this issue in the discussion of overall compliance costs.

The findings reported in the tables 4a to 7c and discussed are mean findings. Values for characteristics with less than 20 respondents are not reported¹³ as they could be unduly influenced by one or two answers. These results do not allow us to see how one characteristic or another has an impact as such on the resources allocated to various tax compliance activities. Why? Because there may be interactions between various characteristics. For example, income first increases then decreases with age; hence if one finds that compliance costs increase with both, is it because of income or of age? We will thus present some multivariate results in table 8.

Six categories of costs in time or money

- 1 *Time on direct compliance* is the sum of time spent readying and sorting tax-related information, time gathering documents, time preparing return, time meeting preparers (paid and unpaid), and time of unpaid preparers.

13 The choice of a cut-off number in statistical analysis is always a trade-off between more precision with a higher number and more results with a lower cut-off or none. One number often used is 30 as it is associated with a normal law distribution. We chose 20 since it is equal to 1% of our sample. Such cases are marked in the tables with “nc,” i.e., not calculated.

The first two activities are undertaken by all tax filers while the last three are undertaken according to the tax-filing mode selected. We present information on the time allocated to each activity in table 5.

- 2 *Time on appeals and planning* is the sum of time spent on these two items. These are activities engaged in only by a subset of individuals, one that is fairly small in the case of tax appeals. Hence, in table 6 we examine the time allocated to these activities in conjunction with the frequency of these activities.
- 3 *Total time* is the sum of the previous two categories. This sum is calculated using individual observations and not the means in the tables. We then apply the outlier rule to this sum; hence, it can differ from the sum of the means.
- 4 *Spending on direct compliance* is the sum of payments to tax preparers (the main expense), costs of purchasing software, and out-of-pocket expenses (such as postage and photocopies). These costs are presented in table 7.
- 5 *Total cost of direct compliance* is the sum of the value in dollars of time spent on direct compliance, calculated as the amount of time of each individual multiplied by his/her wage rate (as reported in the survey or as calculated as discussed above or an assumed rate of \$10), plus the total spending on direct compliance.
- 6 *Total cost of tax activities* is the value of time and dollars spent on direct compliance activities and on appeals and planning.

Overall compliance activities

The main findings on compliance costs are summarized in tables 4a to 4c. Table 4a shows that:

- Men incur higher compliance costs than women for all six items.
- Direct and total compliance costs (\$) first increase, then decrease with age, peaking in the 35–54 age range, while the three time items show a slight downward trend with age.
- Compliance costs of individuals with a post-graduate degree are twice those of individuals with less than high-school education. There is an upward trend for all three time items but none for direct spending.
- Married tax filers have higher compliance costs than others for all six items. Their use of various child-related provisions of the income-tax law such as child-care expenses, RESP, and so on may explain this in part.

- Total compliance costs increase from east to west, in part due to higher wages. The total time spent in Atlantic Canada is actually higher than in the Prairies (8.30 versus 8.03 hours) but the direct compliance is \$69 higher in the Prairies with only \$26 due to higher spending on direct compliance.
- The degree of knowledge of English or French has no impact on these six categories.

Table 4b shows that:

- All six compliance categories increase in absolute value with income but the values of the last three items decrease as a share of income; this is illustrated for all compliance activities in figure 1. The ratio goes from 3.3% for the lowest income group to 0.9% for the second to 0.5% for the third and then tapers off at 0.3%.
- Compliance costs are highest (above \$300) for those receiving self-employment income, rental income, or income from capital gains or foreign investment.

Table 4c shows that:

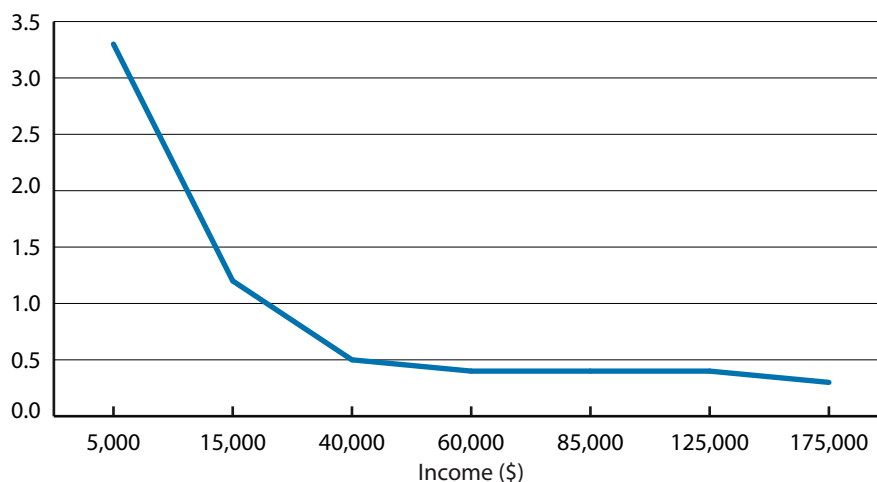
- Direct compliance costs are highest for filers using a paid preparer followed by self filers using software and lowest for those having it prepared by an not-for-profit (NFP) group or friend or family member without payment.
- Time costs decrease with years of experience with the tax system but dollar costs increase with years of experience; it appears there is some learning by doing.
- Four of the six items increase with later dates of filing.
- All compliance activities costs are highest (above \$340) and very similar for those making use of tax provisions related to natural-resources stock options, and LSVCC.¹⁴ Those making use of the foreign tax credit and the fitness credit have the next highest costs.

14 LSVCC stands for Labour Sponsored Venture Capital Corporation, a type of savings that attracts a favorable tax treatment. See Cumming and MacIntosh, 2007 for more details.

Table 4a: Total costs (time or \$), by sociodemographic characteristics of tax filers, personal income tax, Canada, 2007

| | Time spent on direct compliance | Time spent on appeals and planning | Total time | Spending on direct compliance (\$) | Total value of direct compliance (\$) | Total value of all compliance activities (\$) |
|--------------------------------------|---------------------------------------|--|------------|---|--|--|
| Sex | | | | | | |
| Men | 5.65 | 2.46 | 8.41 | 61.90 | 203.51 | 253.79 |
| Women | 4.87 | 1.80 | 6.76 | 60.90 | 154.15 | 193.43 |
| All tax filers | 4.99 | 1.97 | 7.16 | 61.39 | 173.25 | 216.53 |
| Age | | | | | | |
| 18–24 | 5.67 | 2.44 | 7.64 | 48.77 | 122.56 | 148.59 |
| 25–34 | 4.73 | 1.89 | 6.83 | 57.27 | 158.87 | 205.75 |
| 35–44 | 5.77 | 2.49 | 8.90 | 58.69 | 204.91 | 281.36 |
| 45–54 | 5.07 | 2.01 | 7.56 | 61.12 | 200.00 | 249.45 |
| 55–64 | 5.47 | 2.18 | 7.30 | 62.95 | 177.61 | 207.91 |
| 65+ | 5.09 | 1.93 | 7.30 | 67.05 | 162.68 | 194.66 |
| Education | | | | | | |
| Less than high school | 4.24 | 1.06 | 5.22 | 56.42 | 134.14 | 159.50 |
| High school completed | 4.85 | 1.64 | 6.76 | 60.25 | 161.83 | 189.12 |
| Some post secondary schooling | 5.09 | 2.09 | 7.46 | 69.24 | 188.50 | 237.15 |
| Some university schooling | 5.43 | 2.20 | 7.91 | 58.78 | 156.19 | 195.13 |
| Completed college degree | 4.93 | 1.89 | 6.90 | 69.13 | 185.37 | 232.76 |
| Completed undergraduate degree | 5.83 | 2.49 | 8.46 | 59.42 | 205.14 | 259.87 |
| Post-graduate degree | 6.48 | 3.82 | 10.50 | 59.38 | 224.78 | 303.25 |
| Marital status | | | | | | |
| Married | 5.58 | 2.38 | 8.18 | 68.66 | 200.23 | 253.19 |
| Single | 4.77 | 1.61 | 6.43 | 44.81 | 135.89 | 167.89 |
| Other | 4.45 | 1.68 | 6.39 | 51.83 | 142.49 | 168.50 |
| Language skills | | | | | | |
| Poor knowledge of English or French | 5.26 | 2.31 | 7.72 | 61.73 | 182.16 | 231.61 |
| Good+ knowledge of English or French | 5.30 | 2.14 | 7.65 | 61.31 | 179.60 | 225.17 |
| Region | | | | | | |
| Atlantic | 5.23 | 2.42 | 8.30 | 47.32 | 139.87 | 186.34 |
| Québec | 5.07 | 1.31 | 6.78 | 57.97 | 157.48 | 182.31 |
| Ontario | 5.15 | 2.41 | 7.57 | 58.53 | 178.82 | 225.78 |
| Prairies | 5.47 | 2.47 | 8.03 | 73.32 | 209.53 | 273.64 |
| British Columbia | 5.87 | 2.45 | 8.59 | 71.55 | 206.38 | 259.86 |

Source: calculations by the author using survey data.

Figure 1: Ratio (%) of all compliance costs to income, seven income categories

Source: calculation by author; we use the mid-point of income classes and \$175,000 for the \$150,000+ class as the denominator and the costs reported in the sixth column of table 4b as the numerator.

Table 4b: Total costs (time or \$), by level and type of income of tax filers, personal income tax, Canada, 2007

| | Time spent on direct compliance | Time spent on appeals and planning | Total time | Spending on direct compliance (\$) | Total value of direct compliance (\$) | Total value of all compliance activities (\$) |
|-----------------------------------|---------------------------------------|--|---------------|--|---|---|
| Income | | | | | | |
| Less than \$10,000 | 4.58 | 1.70 | 6.66 | 50.12 | 129.42 | 166.39 |
| \$10,000–\$29,999 | 5.20 | 1.90 | 7.29 | 52.49 | 144.30 | 179.63 |
| \$30,000–\$49,999 | 5.07 | 1.92 | 7.00 | 59.29 | 176.07 | 214.48 |
| \$50,000–\$69,999 | 5.66 | 2.11 | 7.98 | 66.85 | 196.10 | 261.30 |
| \$70,000–\$99,999 | 5.85 | 3.75 | 10.81 | 74.03 | 245.39 | 339.55 |
| \$100,000–\$149,999 | 5.99 | 3.40 | 9.40 | 95.71 | 359.01 | 471.09 |
| \$150,000 and greater | 8.07 | 5.09 | 13.16 | 77.72 | 385.09 | 481.11 |
| Type of income | | | | | | |
| Wages and salary | 5.21 | 2.32 | 7.74 | 60.16 | 191.64 | 239.95 |
| Self-employment income | 7.40 | 3.55 | 10.74 | 103.25 | 292.03 | 389.32 |
| Child tax benefit | 5.82 | 2.49 | 8.60 | 64.00 | 201.10 | 253.83 |
| Government transfer payment | 5.32 | 2.00 | 7.31 | 56.80 | 155.34 | 188.26 |
| Private pension | 5.48 | 2.32 | 7.59 | 68.90 | 188.82 | 229.35 |
| Interest income | 5.94 | 2.76 | 8.97 | 68.05 | 214.78 | 270.72 |
| Dividend income | 6.05 | 3.10 | 9.55 | 75.40 | 233.00 | 294.71 |
| Rental income | 6.52 | 2.93 | 10.45 | 84.76 | 271.45 | 332.35 |
| Capital gains | 6.23 | 3.29 | 9.94 | 75.28 | 248.92 | 316.76 |
| Other investment income, Canadian | 5.89 | 2.79 | 8.63 | 68.97 | 228.72 | 297.67 |
| Investment income, non-Canadian | 6.95 | 3.37 | 11.11 | 72.08 | 252.12 | 320.37 |
| Labour income, non-Canadian | nc | nc | nc | nc | nc | nc |
| Pension Income, non-Canadian | 5.22 | 1.40 | 6.62 | 70.08 | 136.12 | 154.57 |

Source: calculations by the author using survey data; "nc" = not calculated.

Table 4c: Total costs (time or \$), by tax-related choices of tax filers, personal income tax, Canada, 2007

| | Time spent on direct compliance | Time spent on appeals and planning | Total time | Spending on direct compliance (\$) | Total value of direct compliance (\$) | Total value of all compliance activities (\$) |
|---------------------------------------|---------------------------------------|--|------------|---|--|--|
| Return completion mode | | | | | | |
| Self, paper | 5.79 | 2.68 | 9.08 | 5.20 | 129.37 | 167.33 |
| Self, software | 6.07 | 2.93 | 9.02 | 33.27 | 182.75 | 251.29 |
| Family / friend / NFP without payment | 5.66 | 1.26 | 6.86 | 9.79 | 109.80 | 135.26 |
| Paid tax preparer | 4.72 | 2.02 | 6.97 | 107.92 | 217.23 | 262.37 |
| Experience with tax system | | | | | | |
| 4 years or less | 6.25 | 2.56 | 8.48 | 46.44 | 142.83 | 174.55 |
| 5–9 years | 5.05 | 2.09 | 6.67 | 58.74 | 167.17 | 192.25 |
| 10 years or more | 5.21 | 2.12 | 7.58 | 62.37 | 181.19 | 227.89 |
| Date return filed | | | | | | |
| January 1–February 28 | 4.34 | 1.55 | 5.78 | 52.06 | 154.37 | 187.05 |
| March | 5.20 | 1.83 | 7.25 | 52.35 | 162.16 | 201.36 |
| April 1–20 | 4.94 | 2.06 | 7.30 | 70.97 | 183.60 | 225.19 |
| April 21–30 | 6.28 | 3.09 | 9.68 | 68.81 | 208.99 | 269.22 |
| May 1 and later | 6.13 | 3.82 | 9.69 | 57.15 | 251.45 | 355.96 |
| Tax law provisions used | | | | | | |
| Natural resources | 7.80 | 1.40 | 15.01 | 80.09 | 234.35 | 340.32 |
| Education and tuition | 6.50 | 2.59 | 9.38 | 62.04 | 222.46 | 291.18 |
| Stock options | 6.73 | 3.11 | 9.93 | 78.10 | 276.53 | 344.68 |
| LSVCC | 6.32 | 2.48 | 8.80 | 80.12 | 273.13 | 343.76 |
| Medical expenses | 5.75 | 2.35 | 8.39 | 70.73 | 204.37 | 256.96 |
| Child fitness | 6.69 | 3.34 | 10.19 | 63.19 | 245.89 | 332.76 |
| Urban transit | 5.36 | 2.51 | 8.49 | 45.93 | 216.33 | 263.13 |
| Pension income splitting | 6.11 | 2.45 | 8.55 | 72.49 | 196.74 | 233.12 |
| Foreign tax credit | 8.22 | 5.11 | 14.51 | 66.95 | 249.31 | 311.36 |
| Investment credit | 5.99 | 2.78 | 9.51 | 85.15 | 248.73 | 298.24 |

Source: calculations by the author using survey data.

Time spent on specific tax-filing activities

Tables 5a to 5c report the time spent on five tax-filing activities associated with various characteristics of our respondents and provide details of the activities grouped together in column 1 of table 4. In each case, it is the mean value for individuals that engaged in the specific activity noted in the column heading that is reported in the relevant column, with the exception of the line marked all tax filers. Why? Because some questions were asked of all tax filers (e.g., Q4: *How much time did you spend gathering information?*), while other questions were asked only of those who engaged in the relevant behavior. For example, only those using a tax preparer are asked how much time they spent meeting with a tax preparer. But, to measure the burden for all tax filers and thus the compliance costs as a whole for society, one must use the mean time for all tax filers. Of course, the mean time for all will be lower; for example, if 25% of tax filers report spending four hours on a tax-filing activity and 75% zero time, the average over all filers will be one hour.

Note that the sum one can calculate for the five types of time of “All tax filers” (row 3, table 5a), which is 4.38 hours, is not equal to the figure, 4.99, shown for “All tax filers” (column 1, row 3, table 4a) because, in table 5, we removed outliers for each column while for the first column of tables 4a, 4b, and 4c we did this for the total rather than for each of the five elements; hence it would only be by chance that these numbers would be equal, since the individuals remaining are not the same. Each table is valid for its own purpose, which for table 5 is an analysis of five activities spent complying with taxes and for table 4 is an analysis of the total time spent complying with taxes.

The main findings of table 5a are that:

- Whatever the tax-preparing mode chosen, tax filers spend 2.8 hours (sum of the first two columns) preparing themselves to complete their tax return or to have it completed.
- Tax filers preparing their own tax returns devote almost two hours to doing this; this is very close to the time reported by tax filers for unpaid preparers for completing a tax return. Tax filers using paid or unpaid preparers spent one hour meeting with them, thus saving one hour but, of course, in some cases paying for the service when it is provided by a paid preparer.
- Men spend more time than women on all five tax filing activities.
- Individuals aged 65 or older spend more time than others preparing their tax return while those aged 18 to 24 spend less time readying and sorting, perhaps because they have less diversified source of income, deductions, and credits.

- Individuals with post-graduate degrees spend more time on preparation activities than others.
- Married tax filers devote more of their time than others to tax activities.
- Better knowledge of English or French has no impact on resources used and there is no obvious pattern to the regional differences in time allocated to tax-filing activities.

Table 5b shows that:

- Time spent on preparing activities increases with the level of income.
- Greatest time spent on readying and sorting is linked to the receipt of non-Canadian investment income followed by three types of income with similar amounts of time—self-employment income, interest income, and income from capital gains.
- Greatest time on gathering information is linked to self-employment and rental incomes; this is perhaps linked to documenting expenses.
- Greatest time in completing the tax return is linked to two types of investment income—other Canadian and non-Canadian. This is probably due to the need to use more complex aspects of tax laws and regulations.

Table 5c shows that:

- Tax filers who prepare their own returns spend more time readying and sorting information than those who do not prepare their own tax returns. This is also true of those with little experience with the tax system (less than 4 years).
- The later you file before the deadline, the more time you spend on the various activities.
- The use of the tax credit for foreign income is associated with the greatest time spent on readying and sorting documents and completing returns and second greatest time spent gathering information (income from natural resources has the greatest gathering time associated with it).
- Using tax provisions for stock options, child fitness, and pension income splitting is linked to more time spent gathering information; the latter two are associated with more time spent completing returns.

One set of results not shown here indicates that individuals e-filing (65% of our respondents) spent about one-half hour less on direct compliance activities than those filing using a paper form.

Table 5a: Time for five activities by sociodemographic characteristics of tax filers, personal income tax, Canada, 2007.

| | Readying and sorting | Gathering information | Time of self preparers | Time of other unpaid preparers (friend, family, NFP group) | Time meeting with preparers (paid or unpaid) |
|--------------------------------------|-------------------------|--------------------------|---------------------------|--|--|
| Sex | | | | | |
| Men | 1.15 | 2.08 | 2.13 | 1.90 | 1.05 |
| Women | 0.98 | 1.68 | 1.82 | 1.99 | 0.97 |
| All tax filers | 1.03 | 1.77 | 0.57 | 0.33 | 0.68 |
| Tax filers concerned | 1.03 | 1.77 | 1.96 | 1.94 | 1.01 |
| Age | | | | | |
| 18–24 | 0.71 | 1.96 | nc | nc | 1.10 |
| 25–34 | 0.95 | 1.67 | 1.58 | 1.77 | 1.15 |
| 35–44 | 1.18 | 2.01 | 2.09 | 1.98 | 1.11 |
| 45–54 | 1.07 | 1.78 | 1.87 | 1.77 | 1.05 |
| 55–64 | 1.06 | 1.98 | 1.85 | 1.75 | 0.95 |
| 65+ | 1.08 | 1.89 | 2.47 | 2.22 | 0.89 |
| Education | | | | | |
| Less than high school | 0.95 | 1.37 | 1.75 | 1.97 | 0.93 |
| High school completed | 0.92 | 1.80 | 1.85 | 1.92 | 0.94 |
| Some post secondary schooling | 1.11 | 1.89 | 2.26 | 1.51 | 1.11 |
| Some university schooling | 0.98 | 1.88 | 2.02 | 1.93 | 1.05 |
| Completed college degree | 0.89 | 1.86 | 1.77 | 2.09 | 1.00 |
| Completed undergraduate degree | 1.26 | 1.83 | 1.87 | 2.32 | 1.09 |
| Post-graduate degree | 1.40 | 2.64 | 2.28 | 1.72 | 1.07 |
| Marital status | | | | | |
| Married | 1.13 | 2.03 | 2.03 | 1.95 | 1.07 |
| Single | 0.93 | 1.66 | 1.78 | 2.14 | 0.95 |
| Other | 0.96 | 1.50 | 1.96 | 1.76 | 0.86 |
| Language skills | | | | | |
| Poor knowledge of English or French | 1.07 | 1.96 | 1.95 | 1.96 | 1.03 |
| Good+ knowledge of English or French | 1.07 | 1.89 | 1.99 | 1.93 | 1.00 |
| Region | | | | | |
| Atlantic | 0.93 | 1.67 | 2.56 | 1.88 | 0.97 |
| Québec | 1.04 | 1.50 | 2.13 | 2.00 | 0.88 |
| Ontario | 1.05 | 1.99 | 1.87 | 1.83 | 1.03 |
| Prairies | 1.18 | 2.07 | 1.78 | 2.05 | 1.24 |
| British Columbia | 1.08 | 2.26 | 2.21 | 2.26 | 0.95 |

Source: calculations by the author using survey data.

Table 5b: Time for five activities by level and type of income of tax filers, personal income tax, Canada, 2007.

| | Readying and sorting | Gathering information | Time of self preparers | Time of other unpaid preparers (friend, family, NFP group) | Time meeting with preparers (paid or unpaid) |
|-----------------------------------|-------------------------|--------------------------|---------------------------|--|--|
| Income | | | | | |
| Less than \$10,000 | 0.93 | 1.53 | 1.88 | 1.76 | 0.89 |
| \$10,000–\$29,999 | 0.93 | 1.73 | 2.09 | 1.78 | 1.04 |
| \$30,000–\$49,999 | 1.02 | 1.70 | 2.06 | 1.77 | 1.05 |
| \$50,000–\$69,999 | 1.24 | 1.79 | 1.78 | 1.52 | 1.09 |
| \$70,000–\$99,999 | 1.19 | 2.23 | 1.65 | nc | 1.19 |
| \$100,000–\$149,999 | 1.33 | 2.64 | nc | nc | 0.96 |
| \$150,000 and greater | 1.96 | 3.53 | nc | nc | nc |
| Type of income | | | | | |
| Wages and salary | 1.09 | 1.89 | 1.91 | 1.86 | 1.08 |
| Self-employment income | 1.24 | 3.12 | 2.40 | 2.29 | 1.29 |
| Child tax benefit | 1.13 | 1.99 | 2.13 | 1.91 | 1.14 |
| Government transfer payment | 1.07 | 1.85 | 2.04 | 1.84 | 0.94 |
| Private pension | 1.06 | 2.09 | 2.64 | 2.06 | 1.05 |
| Interest income | 1.22 | 2.19 | 2.37 | 2.11 | 1.10 |
| Dividend income | 1.02 | 1.75 | 1.81 | 1.96 | 1.03 |
| Rental income | 1.17 | 3.00 | 1.95 | 1.76 | 1.08 |
| Capital gains | 1.29 | 2.31 | 2.81 | nc | 1.11 |
| Other investment income, Canadian | 1.12 | 2.42 | 3.15 | 1.82 | 0.97 |
| Investment income, non-Canadian | 1.53 | 2.65 | 3.07 | nc | 1.01 |
| Labour income, non-Canadian | nc | nc | nc | nc | nc |
| Pension Income, non-Canadian | 0.95 | 1.47 | nc | nc | 1.00 |

Source: calculations by the author using survey data; "nc" = not calculated.

Table 5c: Time for five activities, by tax-related choices of tax filers, personal income tax, Canada, 2007.

| | Readying and sorting | Gathering information | Time of self preparers | Time of other unpaid preparers (friend, family, NFP group) | Time meeting with preparers (paid or unpaid) |
|---------------------------------------|-------------------------|--------------------------|---------------------------|--|--|
| Return completion mode | | | | | |
| Self, paper | 1.43 | 1.81 | 2.26 | — | — |
| Self, software | 1.39 | 2.10 | 1.75 | — | — |
| Family / friend / NFP without payment | 0.82 | 1.47 | — | 1.94 | 0.88 |
| Paid tax preparer | 0.95 | 1.97 | — | nc | 1.05 |
| Experience with tax system | | | | | |
| 4 years or less | 1.15 | 1.92 | 2.20 | 2.23 | 1.15 |
| 5–9 years | 0.93 | 2.03 | 1.67 | nc | 1.24 |
| 10 years or more | 1.07 | 1.86 | 1.99 | 1.92 | 0.99 |
| Date return filed | | | | | |
| January 1–February 28 | 0.77 | 1.48 | 1.66 | 1.67 | 1.00 |
| March | 1.13 | 1.75 | 1.82 | 1.86 | 0.96 |
| April 1–20 | 1.03 | 1.74 | 1.99 | 2.00 | 0.99 |
| April 21–30 | 1.17 | 2.35 | 2.28 | 2.20 | 1.13 |
| May 1 and later | 1.08 | 3.48 | nc | nc | 1.22 |
| Tax law provision used | | | | | |
| Natural resources | 1.28 | 3.56 | nc | nc | 1.14 |
| Education and tuition | 1.26 | 2.26 | 2.09 | 1.94 | 1.10 |
| Stock options | 0.86 | 2.67 | nc | nc | 1.18 |
| LSVCC | 1.45 | 2.21 | nc | nc | nc |
| Medical expenses | 1.13 | 2.15 | 2.20 | 2.13 | 1.03 |
| Child fitness | 1.28 | 2.57 | 2.46 | 2.32 | 1.30 |
| Urban transit | 1.26 | 1.92 | 1.90 | 1.76 | 1.30 |
| Pension income splitting | 1.28 | 2.48 | 2.46 | 2.00 | 0.98 |
| Foreign tax credit | 2.08 | 2.94 | 3.16 | nc | 1.36 |
| Investment credit | 0.98 | 2.42 | 2.71 | nc | 1.29 |

Source: calculations by the author using survey data; "nc" = not calculated.

Time spent on tax planning and appeals

To further our understanding of time spent on appeals and planning (column 2, tables 4a, 4b, 4c), one needs to examine the behavior of individuals with respect to tax planning and tax appeals. Table 6 examines who does tax planning and who files tax appeals and how much time is devoted to these activities.

Tax planning

Table 6a shows that:

- Only 45% of individuals allocate some time (one hour or more) to this activity; men devote more time than women.
- Tax planning activities reach a peak in both the share of tax filers engaged in it (%) and time allocated to it (time) for individuals aged between 35 and 44.
- Better educated tax filers or those who are married engage in tax planning more (%) and devote more time to it than others, while language skills have little impact on this.
- Tax-filers in Quebec are substantially less likely to engage in tax planning and devote fewer hours than those residing in the other four regions of Canada. We do not know why;¹⁵ perhaps they are more accepting of publicly financed activities, perhaps the supply of tax-planning activities in French is lower than in English, perhaps it is more difficult to plan successfully when having to satisfy both the Canada Revenue Agency (CRA) and Revenu Québec (RQ), or perhaps they prefer to use the underground economy more extensively than tax filers in the rest of Canada.

Table 6b indicates that having a higher income is associated with more tax planning (% and time spent). Recipients of non-Canadian investment income are those who engage the most in tax planning. Those with self-employment and rental income also devote more time to this activity than others.

Table 6c shows that tax filers who prepare their own returns are more likely (%) to engage in tax planning and spend more time on it. Perhaps users of paid providers receive such services as part of the tax-return completion services they purchase and thus do not identify it as such. The later one files, the more likely one is to engage in tax planning or to devote more time to it. Finally, the use of the foreign tax credit is linked to more tax planning activity (% and time). One should note that the answers on tax planning are subject to both over- and under-estimation since respondents may report as

¹⁵ We rechecked the questions in French and English and they are identical, so results have not been skewed by the questionnaire.

Table 6a: Tax planning and tax appeals decisions and time by sociodemographic characteristics of tax filers, personal income tax, Canada, 2007

| | Percent spending time on tax planning | Time spent on tax planning (hours) | Percent appealing a decision of revenue authorities | Time spent on appeal (hours) |
|--------------------------------------|---|---------------------------------------|---|---------------------------------|
| Sex | | | | |
| Men | 51.2 | 2.06 | 3.6 | 6.57 |
| Women | 41.3 | 1.61 | 1.6 | 2.53 |
| All tax filers | 45.2 | 0.95 | 2.4 | 0.11 |
| Tax filers concerned | — | 1.84 | — | 5.27 |
| Age | | | | |
| 18–24 | 40.3 | 1.74 | 6.0 | nc |
| 25–34 | 45.5 | 1.60 | 1.6 | nc |
| 35–44 | 50.0 | 2.13 | 3.0 | nc |
| 45–54 | 46.1 | 1.74 | 2.8 | nc |
| 55–64 | 46.3 | 1.91 | 1.4 | nc |
| 65+ | 41.4 | 1.77 | 2.3 | 9.11 |
| Education | | | | |
| Less than high school | 27.9 | 0.97 | nc | nc |
| High school completed | 36.4 | 1.53 | 1.9 | nc |
| Some post secondary schooling | 48.4 | 1.96 | 2.7 | nc |
| Some university schooling | 46.3 | 1.85 | 2.6 | nc |
| Completed college degree | 43.2 | 1.50 | 1.3 | nc |
| Completed undergraduate degree | 53.5 | 2.16 | 2.6 | nc |
| Post-graduate degree | 68.4 | 3.05 | 4.2 | nc |
| Marital status | | | | |
| Married | 49.1 | 2.04 | 2.1 | 6.66 |
| Single | 40.4 | 1.43 | 2.9 | nc |
| Other | 36.2 | 1.47 | 2.4 | nc |
| Language skills | | | | |
| Poor knowledge of English or French | 49.7 | 2.01 | 2.8 | 4.77 |
| Good+ knowledge of English or French | 45.4 | 1.85 | 2.4 | 5.33 |
| Region | | | | |
| Atlantic | 50.4 | 1.94 | 3.8 | nc |
| Québec | 26.5 | 1.12 | 1.2 | nc |
| Ontario | 51.2 | 2.02 | 3.3 | nc |
| Prairies | 52.5 | 2.27 | 1.5 | nc |
| British Columbia | 55.0 | 2.18 | 4.0 | nc |

Source: calculations by the author using survey data; "nc" = not calculated.

Table 6b: Tax planning and tax appeals decisions and time, by level and type of income of tax filers, personal income tax, Canada, 2007.

| | Percent spending time on tax planning | Time spent on tax planning (hours) | Percent appealing a decision of revenue authorities | Time spent on appeal (hours) |
|-----------------------------------|---|---------------------------------------|---|---------------------------------|
| Income level | | | | |
| Less than \$10,000 | 38.8 | 1.51 | 2.4 | nc |
| \$10,000–\$29,999 | 43.4 | 1.57 | 1.4 | nc |
| \$30,000–\$49,999 | 49.0 | 1.70 | 1.7 | nc |
| \$50,000–\$69,999 | 44.5 | 1.92 | 4.2 | nc |
| \$70,000–\$99,999 | 64.8 | 3.22 | 4.2 | nc |
| \$100,000–\$149,999 | 72.3 | 2.71 | 8.5 | nc |
| \$150,000 and greater | 75.0 | 3.08 | 7.1 | nc |
| Type of income | | | | |
| Wages and salary | 49.1 | 1.94 | 3.9 | 4.93 |
| Self-employment income | 56.2 | 2.84 | 1.9 | nc |
| Child tax benefit | 48.2 | 2.01 | 2.4 | nc |
| Government transfer payment | 42.7 | 1.79 | 2.7 | 2.97 |
| Private pension | 50.6 | 2.08 | 3.2 | 5.53 |
| Interest income | 56.7 | 2.42 | 3.3 | 4.50 |
| Dividend income | 60.1 | 2.58 | 4.2 | 4.60 |
| Rental income | 55.2 | 2.80 | 4.8 | 4.48 |
| Capital gains | 61.5 | 2.71 | 5.6 | 4.47 |
| Other investment income, Canadian | 59.6 | 2.33 | 6.1 | 4.63 |
| Investment income, non-Canadian | 67.0 | 2.96 | 6.8 | nc |
| Labour income, non-Canadian | 61.1 | 1.92 | 5.6 | nc |
| Pension Income, non-Canadian | 30.8 | 1.57 | 6.6 | nc |

Source: calculations by the author using survey data; "nc" = not calculated.

Table 6c: Tax planning and tax appeals decisions and time by tax related choices of tax filers, personal income tax, Canada, 2007.

| | Percent spending time on tax planning | Time spent on tax planning (hours) | Percent appealing a decision of revenue authorities | Time spent on appeal (hours) |
|------------------------------------|---------------------------------------|------------------------------------|---|------------------------------|
| Return completion mode | | | | |
| Self, paper | 62.7 | 2.24 | 3.1 | nc |
| Self, software | 64.04 | 2.56 | 1.53 | nc |
| Family/friend /NFP without payment | 30.90 | 1.08 | 2.27 | nc |
| Paid tax preparer | 39.2 | 1.74 | nc | nc |
| Experience with tax system | | | | |
| 4 years or less | 41.1 | 2.06 | 5.3 | nc |
| 5–9 years | 46.7 | 1.43 | 2.5 | nc |
| 10 years or more | 45.7 | 1.86 | 2.2 | 6.07 |
| Date return filed | | | | |
| January 1–February 28 | 37.1 | 1.30 | 1.7 | nc |
| March | 42.8 | 1.62 | 2.2 | 3.01 |
| April 1–20 | 45.4 | 1.79 | 3.3 | 4.04 |
| April 21–30 | 54.4 | 2.56 | 3.8 | 9.61 |
| May 1 and later | 64.2 | 3.11 | nc | nc |
| Tax law provision used | | | | |
| Natural resources | 65.0 | 3.32 | 7.5 | nc |
| Education and tuition | 54.8 | 2.17 | 3.1 | nc |
| Stock options | 59.2 | 2.10 | 7.6 | 5.27 |
| LSVCC | 42.9 | 1.73 | 3.6 | nc |
| Medical expenses | 48.8 | 2.02 | 2.9 | 7.6 |
| Child fitness | 60.6 | 2.71 | 4.7 | nc |
| Urban transit | 52.9 | 1.99 | 2.1 | nc |
| Pension Income splitting | 55.4 | 2.42 | 1.5 | nc |
| Foreign tax credit | 77.0 | 3.94 | 6.6 | nc |
| Investment credit | 59.1 | 2.23 | 2.3 | nc |

Source: calculations by the author using survey data; "nc" = not calculated.

tax planning activities linked to financial planning and may not report the implicit tax-planning component of financial planning activities. Since good quality advice on financial planning will take into account basic tenets of tax planning (such as holding interest-bearing investments inside RRSPs and not outside), the value of tax-planning activities is most likely underestimated in this study.

Tax appeals

The small number of individuals (2.4% of tax filers) appealing tax decisions yields a large number of empty cells (“nc”) in column 4, Time spent on appeal (hours), in tables 6a–6c.¹⁶ Men, younger or better educated tax filers, those with higher income, those with fewer years of tax filing experience, and those with more complex types of income such as that from capital gains or foreign sources; or using more complex provisions of the tax law such as those for natural resource or foreign tax credits are more likely to be appealing a decision.

We do not know for sure how respondents interpreted this question: narrowly, as in a legal appeal, or broadly, as in interacting directly with the two revenue authorities (CRA and RQ). Canada Revenue Agency reports that the average time to resolve an income-tax dispute was 107 days (Canada Revenue Agency, 2007), so most disputes are resolved within one year. CRA resolved 85,000 disputes in 2006 for all taxes, a figure that is less than 1% of personal income-tax filers in 2007 (see table A-3). So, it seems plausible that our respondents answered using the broader definition of appeals.

One aspect of the relationship between the CRA and Revenu Québec (RQ) on one hand and tax filers on the other is the request for documentation by either agency. We find that 7% of our respondents indicate having been asked for a document by either of these agencies in 2007. This percentage varies from 5% for recipients of government transfer income to 15% for recipients of rental income; it is 7% for those with an income less than \$10,000 and 21% for those with an income above \$150,000. It is 5% for those who completed their own return using paper and 10% for those who did so with a computer.

Amounts spent to hire others to prepare tax returns

Tables 7a to 7c present the amounts spent on tax preparers by those who use them, amounts spent on software by those who use it, and on small out-of-pocket expenses. This is a disaggregation of column 4 of tables 4a, 4b, and 4c. We focus our analysis on spending on tax preparers. Why? First, as shown in the last column of table 7, out-of-pocket expenses are not very large, about \$4 on average; they do not exceed \$7 except for recipients of foreign pension income, who spend an average of \$12 of out-of-pocket expenses. This may

16 Because there were fewer than 20 respondents.

indicate a need to acquire information from abroad. Second, spending on software also varies little across types of tax filers.

- Tax filers using paid preparers spent \$103. Spending peaks in the 55–64 age group, for those with post-graduate degrees, and for married filers but, in general, older individuals and better educated ones spend more than other tax filers on tax preparers.
- Language skills have no impact while spending is higher in the Prairies and British Columbia, perhaps reflecting the presence of self-employed farmers, fishermen, and forestry operators.¹⁷
- Spending on tax preparers increases with income and is highest for those with self employment or rental income.
- Spending is highest for those with more experience with the tax system and increases as people file later. The use of the foreign tax credit is associated with the highest amount spent on tax preparers. There is also higher spending by individuals claiming the child fitness credit (this may reflect family size) and the pension-splitting credit.

Spending on tax planning and appeals

We do not provide a detailed look at spending on tax planning and tax appeals given that there would be a large number of empty cells in such a table if it were included in this paper. Only 13% of respondents spent at least \$1 on tax planning for an average spending of \$18 per spender. Spending on tax planning appears to be associated with new tax filers, that is, those aged 18–24 years, or those who have filed returns for less than five years. It is also associated with less common forms of income such as that from foreign sources or with the use of the foreign tax credit. Spending on tax appeals by those appealing was \$36.

Multivariate analysis

Until now, we have presented evidence on mean costs in time or money for individuals with a specific sociodemographic characteristic or a given type of income, and so on. But the results associated with a given characteristic may be influenced by others: for example, income increases with schooling. Hence, to disentangle the impacts of various factors, we carry out multivariate analysis using the technique of ordinary least squares. We do this for total time, spending, and total resources. This requires us to identify a reference category to which the other characteristics in a group can be compared:

17 Of returns classified by the Canada Revenue Agency as having farming as its main source of income, 50% were filed in the Prairies in 2006 (Canada Revenue Agency, 2008a: *Final Basic Table 3: All returns by major source of inc., Alberta* <<http://www.cra-arc.gc.ca/gncy/stts/gb06/pst/fnl/html/t03ab-eng.html>>).

Table 7a Specific amounts (\$) spent, by socio-demographic characteristics of tax filers, personal income tax, Canada, 2007

| | Tax preparer (\$, users) | Cost software (\$, users) | Small out-of-pocket expenses (\$, all) |
|--------------------------------------|-----------------------------|------------------------------|---|
| Sex | | | |
| Men | 107.89 | 16.72 | 4.39 |
| Women | 99.18 | 14.25 | 4.37 |
| All tax filers | 49.26 | 1.25 | 4.38 |
| Tax filers concerned | 103.27 | 15.61 | 4.38 |
| Age | | | |
| 18–24 | 77.52 | nc | 5.62 |
| 25–34 | 92.08 | 12.36 | 5.00 |
| 35–44 | 97.22 | 15.10 | 5.00 |
| 45–54 | 101.26 | 17.75 | 3.52 |
| 55–64 | 115.48 | 13.96 | 4.57 |
| 65+ | 107.44 | nc | 3.69 |
| Education | | | |
| Less than high school | 86.86 | nc | 4.86 |
| High school completed | 98.03 | 14.20 | 3.75 |
| Some post secondary schooling | 107.98 | nc | 3.88 |
| Some university schooling | 106.63 | 11.91 | 5.02 |
| Completed college degree | 107.56 | nc | 5.28 |
| Completed undergraduate degree | 106.30 | 16.97 | 3.72 |
| Post-graduate degree | 125.41 | 14.95 | 4.70 |
| Marital status | | | |
| Married | 111.45 | 16.76 | 4.79 |
| Single | 80.84 | 11.22 | 3.68 |
| Other | 93.16 | 17.73 | 3.53 |
| Language skills | | | |
| Poor knowledge of English or French | 105.93 | 14.91 | 4.18 |
| Good+ knowledge of English or French | 104.38 | 15.57 | 4.32 |
| Regions | | | |
| Atlantic | 94.15 | nc | 3.48 |
| Québec | 89.01 | 18.43 | 5.54 |
| Ontario | 100.82 | 15.66 | 3.89 |
| Prairies | 124.75 | 16.49 | 4.59 |
| British Columbia | 121.63 | nc | 3.56 |

Source: Calculations by the author using survey data ; "nc" = not calculated.

Table 7b: Specific amounts (\$) spent, by level and type of income of tax filers, personal income tax, Canada, 2007

| | Tax preparer (\$, users) | Cost software (\$, users) | Small out-of-pocket expenses (\$, all) |
|-----------------------------------|-----------------------------|------------------------------|---|
| Income level | | | |
| Less than \$10,000 | 85.86 | nc | 5.95 |
| \$10,000–\$29,999 | 89.31 | 10.55 | 4.11 |
| \$30,000–\$49,999 | 99.59 | 16.98 | 4.83 |
| \$50,000–\$69,999 | 111.23 | 15.08 | 3.64 |
| \$70,000–\$99,999 | 134.18 | 17.46 | 5.46 |
| \$100,000–\$149,999 | 172.73 | nc | 3.77 |
| \$150,000 and greater | nc | nc | 2.64 |
| Type of income | | | |
| Wages and salary | 102.46 | 15.98 | 4.73 |
| Self-employment income | 140.39 | 17.12 | 5.67 |
| Child tax benefit | 98.09 | 16.49 | 5.66 |
| Government transfer payment | 100.68 | 12.94 | 4.20 |
| Private pension | 115.29 | 17.91 | 4.21 |
| Interest income | 116.28 | 16.45 | 4.29 |
| Dividend income | 124.29 | 18.45 | 4.17 |
| Rental income | 130.56 | nc | 6.27 |
| Capital gains | 125.71 | 16.92 | 4.53 |
| Other investment income, Canadian | 104.73 | nc | 5.25 |
| Investment income, non-Canadian | 128.28 | nc | 4.15 |
| Labour income, non-Canadian | nc | nc | nc |
| Pension Income, non-Canadian | 90.77 | nc | 12.59 |

Source: Calculations by the author using survey data; "nc" = not calculated.

Table 7c: Specific amounts (\$) spent, by tax related choices of tax filers, personal income tax, Canada, 2007

| | Tax preparer (\$, users) | Cost software (\$, users) | Small out-of-pocket expenses (\$, all) |
|-----------------------------------|-----------------------------|------------------------------|---|
| Experience with tax system | | | |
| 4 years or less | 69.19 | nc | 6.11 |
| 5-9 years | 89.71 | nc | 5.06 |
| 10+years | 106.22 | 15.53 | 4.25 |
| Date return filed | | | |
| January 1–February 28 | 97.03 | nc | 3.86 |
| March | 91.12 | 15.24 | 4.32 |
| April 1–20 | 108.96 | 15.17 | 5.00 |
| April 21–30 | 114.78 | 16.45 | 3.72 |
| May 1 and later | nc | nc | 5.17 |
| Tax law provision used | | | |
| Natural resources | 102.66 | nc | 5.31 |
| Education and tuition | 96.14 | 16.42 | 4.42 |
| Stock options | 111.90 | nc | 7.27 |
| LSVCC | nc | nc | 5.77 |
| Medical expenses | 108.62 | 16.16 | 4.75 |
| Child fitness | 113.22 | 18.61 | 5.11 |
| Urban transit | 103.52 | 13.46 | 5.07 |
| Pension Income splitting | 114.72 | nc | 5.64 |
| Foreign tax credit | 123.48 | nc | 3.38 |
| Investment credit | 117.58 | nc | 3.96 |

Source: Calculations by the author using survey data; "nc" = not calculated.

for example, we use the Atlantic region as the reference for regions and our results indicate how other regions differ from the Atlantic region.

We must also decide what credibility to attach to our results. We use a system of none, one, two, or three asterisks (*). Results with no asterisk are not significant in a statistical sense; the characteristic studied does not have a different impact on the compliance activity studied than the reference category. Results with one asterisk could be seen as having some impact while those with two or three asterisks are very likely to differ in their impact from that of the reference category.

Table 8 examines the determinants of time spent (column 3, table 4), total spending (column 5, table 4) and total resources (column 6, table 4), that is time expressed in dollars and spending added up, on compliance activities. Overall, as shown by the R-square between one tenth (.11) and one quarter (.24) of the compliance activity examined in one equation is explained by the variables used; these are reasonable results for survey based analysis. We find that:

- Sex has little impact on total resources on tax compliance activities.
- Age has little impact on our three measures while holders of an undergraduate or graduate degree spend more time and total resources than others. Hence individuals with more human capital apply it to tax matters.
- Unmarried tax filers spend less and allocate fewer total resources to tax compliance work than those who are married.
- Region of residence has no impact. One would have expected to see a positive impact for Quebec but this is not the case; Vaillancourt (1989) reports a similar result.
- Higher income (\$50,000+) increases resources allocated to total direct compliance costs and has some impact (\$50,000–\$100,000) on total spending.
- Poor language skills in English or French or years of experience have no impact.
- Receipt of self-employment income increases time, direct spending, and total resources allocated; this is the strongest multivariate result. Rental income increases total resources allocated.
- Filers using foreign tax credits spend more time; those claiming the medical expense credit spend more and use more total resources on compliance activities. We also find a negative impact of using the urban transit credit on spending on tax compliance activities; no obvious reason could be ascertained.

Table 8: Multivariate analysis of total time, total spending, and total resources, personal income tax, Canada, 2007

| Dependent variable/ independent variables | Total time | Total spending | Total direct compliance cost (time and expenses) |
|---|------------|----------------|---|
| Sex (Men as reference) | | | |
| Women | -0.7243* | 4.8821 | -21.5276* |
| Age (18–24 as reference) | | | |
| 25–34 | -2.6151* | -17.3836 | -57.1600 |
| 35–44 | -0.4582 | -17.9889 | 2.6244 |
| 45–54 | -1.7441 | -17.2924 | -35.3956 |
| 55–64 | -1.2578 | -18.4706 | -55.4418 |
| 65+ | -1.5836 | -3.9910 | -58.0186 |
| Education (Less than high school as reference) | | | |
| High school completed | 0.6295 | -0.9165 | 21.5001 |
| Some post secondary schooling | 1.2346* | 5.1715 | 40.4670* |
| Some university schooling | 1.4907* | -3.5187 | 15.4566 |
| Completed college degree | 1.0018 | 8.7345 | 43.4504** |
| Completed undergraduate degree | 2.0374*** | -9.1133 | 53.3311*** |
| Post-graduate degree | 3.4533*** | -13.2681 | 49.3242** |
| Marital status (Married as reference) | | | |
| Single | -0.6924 | -21.2314*** | -56.5836*** |
| Other | -0.0864 | -16.4376*** | -28.2692* |
| Region (Atlantic as reference) | | | |
| Québec | -1.0422 | -0.3780 | -32.2934 |
| Ontario | -1.5779* | 9.2074 | -13.2199 |
| Prairies | -1.2629 | 18.9294 | 4.7874 |
| British Columbia | -1.5960 | 15.4500 | 16.2966 |
| Income level (less than \$10,000 as reference) | | | |
| \$10,000–\$29,999 | 0.6066 | -3.4145 | 0.4130 |
| \$30,000–\$49,999 | 0.3772 | 8.9357 | 15.9717 |
| \$50,000–\$69,999 | 0.8809 | 20.0135** | 46.6981** |
| \$70,000–\$99,999 | 1.5887* | 23.8728** | 120.0769*** |
| \$100,000–\$149,999 | 0.9908 | 40.5511 | 182.8530*** |
| \$150,000 and greater | 3.0131 | 12.566 | 120.9833** |
| Language skills (Good as reference) | | | |
| Poor knowledge of English or French | 1.5094* | -7.2651 | 13.3224 |

continued ...

Table 8, continued: Multivariate analysis of total time, total spending, and total resources, personal income tax, Canada, 2007

| Dependent variable/ independent variables | Total time | Total spending | Total direct compliance cost (time and expenses) |
|--|------------------|-------------------|---|
| Experience with tax system (0–4 years as reference) | | | |
| 5–9 years | –0.1332 | 5.4292 | 23.8125 |
| 10 years or more | –1.3288 | –2.0202 | 1.3849 |
| Type of income (Absence is reference for each category) | | | |
| Wages and salary | –0.2366 | –9.4529* | –8.1477 |
| Self-employment income | 2.4163*** | 44.3371*** | 130.2143*** |
| Child tax benefit | –0.0723 | –0.87112 | –20.7098 |
| Government transfer payment | 0.5498 | –10.1435** | –2.4166 |
| Private pension | 0.0762 | 6.8486 | 8.5089 |
| Interest income | 0.6179 | –3.7109 | 2.4963 |
| Dividend income | 0.1375 | 1.9551 | 16.2569 |
| Rental income | 0.9487 | –1.0616 | 16.1755** |
| Capital gains | –0.5449 | 3.1018 | 3.1018 |
| Other investment income, Canadian | –0.4425 | 4.5378 | 26.3222 |
| Investment income, non-Canadian | –0.6066 | –1.0615 | –38.9705 |
| Labour income, non-Canadian | 2.5169 | 7.4881 | 67.3143 |
| Pension Income, non-Canadian | –0.0462 | 10.2359 | –28.9151 |
| Use of tax break (Absence is reference for each category) | | | |
| Natural resources | 4.2407** | 7.1437 | 71.2485 |
| Education and tuition | 1.0781* | 4.8049 | 35.8232* |
| Stock options | 0.8585 | 6.7077 | 49.3010 |
| LSVCC | –0.3383 | –8.1956 | –11.1708 |
| Medical expenses | 0.2561 | 9.4744** | 41.2363*** |
| Child fitness | 1.3482* | –3.0722 | 29.5217 |
| Urban transit | –0.4985 | –22.3422*** | –1.9701 |
| Pension Income splitting | 0.3544 | 1.8987 | –38.9633* |
| Foreign tax credit | 4.1154** | –3.9779 | 65.2044 |
| Investment credit | –0.3293 | 13.1118 | 31.5997 |
| Constant | 7.3781*** | 68.8606*** | 183.3288*** |
| R² | 0.1170 | 0.1528 | 0.2422 |
| F | 2.3900 | 0.0000 | 7.5400 |
| N | 1402 | 1399 | 1409 |

Note: *, **, *** indicate statistical significance at the 0.10, 0.05, and 0.01 levels respectively

Source: Calculations by the author using survey data.

Aggregate compliance costs

We now turn to the issue of the aggregate compliance costs of the personal income tax for Canada as a whole. Using the methodology described by Vaillancourt and Clemens (2008), we estimate the number of tax filers at 24,676,412 for 2007; we round this number to 24,675,000. We present five possible results obtained respectively by:

- 1 applying the methodology used by Vaillancourt and Clemens (2008) to the results of table 4;
- 2 correcting these results for a possible over-estimation associated with the use of the income-tax system for social policy;
- 3 using a value of time higher than \$10 for those without a reported wage;
- 4 correcting for the differences in the age distribution for the population as a whole and for tax filers;
- 5 correcting for the various forces that bias downwards our results.

The straightforward methodology

Multiplying 24,675,000 returns by the relevant mean costs—also rounded¹⁸ to account for measurement error (173.25 to 175 and 216.53 to 215)—yields a total direct compliance cost of \$4,318,125,000 and a total compliance cost of \$5,305,125,000.

The impact of social policy programs

In 2006, 24,141,700 income-tax returns were filed, of which 7,769,980 or 32% were nontaxable.¹⁹ The share of nontaxable returns was 18% in 1968, the first year for which we have data in web-accessible form, and at its highest in recent years at 38% in 1978, up from 30% in 1977.²⁰ This high level can be associated with the introduction of the refundable child tax credit in 1978.²¹ The largest number of non-taxable returns in 2006 is found in the \$1–\$10,000 bracket with 4,230,150 returns of which 3,926,010 or 93% were non-taxable, accounting for 51% of all non-taxable returns. Only 10% of the returns in that

18 These numbers come from table 4a, row “All tax filers”, fifth and sixth column, respectively.

19 Canada Revenue Agency, 2008e: *Income statistics 2008, 2006 tax year, Basic table 2: All returns by total income class*. <<http://www.cra-arc.gc.ca/gncy/stts/gb06/pst/fnl/pdf/tbl2-eng.pdf>>.

20 Canada Revenue Agency, 2008d: *Historical Table 1: Tax years—1968-2006: Yearly Record of Returns Filed*. <<http://www.cra-arc.gc.ca/gncy/stts/gb06/pst/fnl/pdf/htbl1-eng.pdf>>.

21 The increase from 23% in 1974 to 29% in 1975 is associated with the change in the tax status, from non-taxable to taxable, of the family allowance that was paid into the hands of the mother.

income bracket report receiving the universal child-tax benefit; they account for one third of the 1,332,450 that reported such income for 2006. In our opinion, it seems plausible that 10% of returns filed are thus filed only to collect social benefits. This amounted to 2,467,500 returns in 2007: What are the compliance costs associated with them? We would argue that they are those of the lowest income group, \$129.42 (rounded to \$130) and \$166.39 (rounded to \$170) and that one should reduce the aggregate total direct compliance cost obtained using the straightforward method by \$320,775,000 ($\$130 \times 2,467,500$) and the total compliance cost by \$419,475,000 ($\$170 \times 2,467,500$). This yields revised totals of \$3,999,735,000 and \$4,885,650,000.

Using a higher assumed value for the time of some tax-filers

It could be argued that \$10 is too low a value to place on the time of retirees. They numbered 514 respondents or 25.7% of our sample; we round to 25%. What happens if we increase the amount by \$1 to \$11? For 75% of the respondents nothing changes and for 25% there is a 10% change, or a 2.5% change in the total. The average value of direct compliance time is \$111.86 (that is \$173.25 – \$61.39 in table 4a). Hence, moving from \$10 to \$12, a 20% increase, would increase time costs by 5% to \$117.45 and total direct costs to \$178.84. Rounding to \$180, one obtains a total direct cost of \$4,441,500,000. Hence, our results are not very sensitive to the changes proposed in this hypothesis.

Using tax-filer weights

The sample was weighted for population and not tax filers when weighted results were produced. This is a reasonable choice given how the survey was carried out but the information in Appendix 1 (p. 42) shows that there are differences in the age distribution of the population and of tax filers. For example, the 18–24 year-old age group accounts for 3.3% of the weighted sample, for 7% of tax filers, and 12.1% of the population aged 18 years and older. We thus recalculated the mean costs by multiplying the age-specific results of table 4 by the CRA's 2006 age distribution (see table A-3). We then obtain a mean direct cost of \$179.34 rather than \$173.25 and a total cost of \$226.79 rather than \$216.53. Rounding the first number to \$180\$, we obtain the same result as above while, rounding the second number to \$230, we obtain a total of \$5,675,250,000.

Correcting for the downward biases

Throughout the calculations leading to the tables reported in this study, we have used assumptions (value of time of friends or family) and methods (outlier exclusions) that were aimed at biasing our results downwards. Thus, our last set of calculations increases by 10% the costs to \$4,749,937,500 for direct compliance and \$5,835,637,500 for total compliance; these are reasonable upper-bound estimates.

Summary

The lowest costs of complying with the 2007 personal income tax are \$3,997,525,000 and \$4,885,650,000 and the highest are \$4,749,937,000 and \$5,835,637,500. This ranges from 0.26% to 0.37% of GDP²² in 2007. This is at about the same level as in 1986. It is also of the same order as the upper bound estimate of \$5,474,904,000 calculated for 2005 by Vaillancourt and Clemens (2008: 76). The estimate of direct compliance costs is substantially higher than their lower-bound estimate of \$2,922,006,000, which is the strictly comparable one to the straightforward number.

Contribution to social security plans (EI, CPP, QPP and so on) are \$34,280,000,000 and personal income taxes are \$179,869,000,000²³ in 2007 for a total of \$214,149,000,000. Thus, the lowest direct compliance costs are equal to 1.87% of revenue collected (2.22% of personal income taxes) and the highest total compliance costs equal 2.73% (3.24%).

22 GDP \$1,532,944,000,000 (nominal) (Statscan, 2009d: *Gross domestic product, expenditure-based*. <<http://www40.statcan.ca/l01/cst01/econ04.htm>>.

23 Statscan, 2009c: *CANSIM Table 385-0001: Consolidated federal, provincial, territorial and local government revenue and expenditures, annual*.

Conclusion

This study surveyed a sample of 2000 tax filers. We summarize the main findings by going back to the multivariate results and focusing on the significant results. Thus, in preparing table 9, we extract from table 8, rows with at least two asterisks (*) in them, either two coefficients with one asterisk or at least one with two; we remove the other rows and replace in the remaining rows the coefficients without asterisks with 0. What clearly comes out from table 9 is that:

- better educated individuals and those who are married do more tax compliance activities while women do less;
- individuals with higher incomes and those receiving income such as that from self-employment that requires more reporting to tax authorities must allocate more resources to tax compliance activities.

These results for 2007 are similar to those for 1986.

In terms of overall compliance costs, the results obtained show that the compliance costs are not unreasonably high and compare favorably with those found in the United States, where they can be as high as 11% of personal income tax revenue (Vaillancourt and Clemens, 2008:84–85, table 3.1).

Table 9: Key multivariate analysis results, direct compliance costs, personal income tax, Canada, 2007

| Independent variables | Total time | Total spending | Total \$ value |
|-------------------------------|------------|----------------|----------------|
| Women | -0.7243* | 0 | -21.5276* |
| Some post secondary schooling | 1.2346* | 0 | 40.4670* |
| Completed college degree | 0 | 0 | 43.4504** |
| Completed undergraduate | 2.0374*** | 0 | 53.3311*** |
| Post-graduate degree | 3.4533*** | 0 | 49.3242** |
| Single | 0 | -21.2314*** | -56.5836*** |
| Other | 0 | -16.4376*** | -28.2692* |
| \$50,000-\$69 999 | 0 | 20.0135** | 46.6981** |
| \$70,000-\$99 999 | 1.5887* | 23.8728** | 120.0769*** |
| \$100,000-\$149,999 | 0 | 0 | 182.8530*** |
| \$150 000+ | 0 | 0 | 120.9833** |
| Self-employment income | 2.4163*** | 44.3371*** | 130.2143*** |
| Government transfers | 0 | -10.1435** | 0 |
| Rental income | 0 | 0 | 16.1755** |
| Natural resources | 4.2407** | 0 | 0 |
| Education and tuition | 1.0781* | 0 | 35.8232* |
| Medical expenses | | 9.4744** | 41.2363*** |
| Urban Transit | | -22.3422*** | |
| Foreign tax credit | 4.1154** | 0 | 0 |

Source table 8, lines with at least 2 asterisks.

Appendix A: Methodology used in survey

- The survey was conducted via telephone from April 21 to May 11, 2008 in both English and French.
- A total of 2,000 respondents completed the survey.
- The overall margin of error for this study of this size is $\pm 2.2\%$, 19 times out of 20.
- The pretest, conducted in both English and French, was for 50 completes.
- Table A-1 presents information on the number of interviews completed per province and each province's associated margin of error, while tables A-2 and A-3 allow the reader to compare some characteristics of the sample to the overall Canadian population (A-2) or to Canadian tax filers (A-3).
- Weights applied were for gender: Males were weighted 1.3 and females at .8.
- Overall, a total of 53,218 calls were made to garner the 2,000 completed interviews for this study. Most of the telephone numbers were only called once but some (very few) were called 7 to 17 times.

Table A-1: Interviews by province/region

| Province | Interviews | Margin of Error (19 times out of 20) |
|----------------------|------------|---|
| British Columbia | 202 | $\pm 6.9\%$ |
| Prairies | 340 | na |
| Alberta | 169 | $\pm 7.5\%$ |
| Saskatchewan | 89 | $\pm 10.4\%$ |
| Manitoba | 82 | $\pm 10.8\%$ |
| Ontario | 806 | $\pm 3.5\%$ |
| Québec | 526 | $\pm 4.3\%$ |
| Atlantic region | 116 | na |
| New Brunswick | 43 | $\pm 14.9\%$ |
| Nova Scotia | 53 | $\pm 13.5\%$ |
| Newfoundland | 25 | $\pm 19.6\%$ |
| Prince Edward Island | 5 | $\pm 43.8\%$ |
| Total | 2000 | $\pm 2.2\%$ |

Source: Information provided by Léger Marketing.

Table A-2: Breakdown of the sample by sex and age

| | Unweighted N | Unweighted % | Weighted % | Comparable population |
|----------------|--------------|--------------|------------|-----------------------|
| Sex | | | | |
| Men | 779 | 39.0 | 50 | 49.5 |
| Women | 1221 | 61.0 | 50 | 50.5 |
| Age | | | | |
| 18–24 | 67 | 3.4 | 3.3 | 12.1 |
| 25–34 | 255 | 12.8 | 12.5 | 17.4 |
| 35–44 | 330 | 16.5 | 16.5 | 19.2 |
| 44–55 | 434 | 21.7 | 21.9 | 19.8 |
| 55–64 | 417 | 20.9 | 20.1 | 14.6 |
| 65+ | 437 | 21.9 | 22.0 | 17.0 |
| Refused | 60 | 3.0 | 2.9 | |

Source: First three columns: calculated using survey data. Comparable population column from Statscan, 2009a: *CANSIM Table 051-0001: Estimates of population, by age group and sex as for July 1, Canada, provinces and territories, annual (persons)*.

Table A-3: Breakdown of 2006 tax-filers by sex, age, and region

| | |
|------------------|-----|
| Sex | |
| Men | 54% |
| Women | 46% |
| Age | |
| 18–24 | 7% |
| 25–34 | 18% |
| 35–44 | 21% |
| 44–55 | 23% |
| 55–64 | 16% |
| 65+ | 14% |
| Region | |
| Atlantic | 7% |
| Québec | 25% |
| Ontario | 38% |
| Prairies | 17% |
| British Columbia | 13% |

Sources: Canada Revenue Agency, 2008b: *Final Basic Table 4A: Taxable returns by age and sex, All Canada*. <<http://www.cra-arc.gc.ca/gncy/stts/gb06/pst/fnl/html/tbl4a-eng.html>>; Canada Revenue Agency, 2008c: *Final Basic Table 5: All Returns by Province and Territory*. <<http://www.cra-arc.gc.ca/gncy/stts/gb06/pst/fnl/html/tbl5-eng.html>>.

Appendix B: The questionnaire (English version)

Introduction

Hello, my name is _____. I'm calling from Leger Marketing, a public opinion and market research firm. I am not trying to sell you anything. The Fraser Institute, an independent, non-partisan, research and educational organization, has commissioned us to conduct a survey. It wants to understand the perspectives of Canadians around filing a personal income-tax return in Canada for 2007. Your responses are confidential, and you will not be personally identified.

Screeners

S1 Do you have the time to complete this survey? It will take approximately 15 minutes.

Yes [CONTINUE]

No [SCHEDULE CALLBACK]

S2 Are you 18 years of age or older?

Yes [CONTINUE]

No, May I please speak with someone who is? [REPEAT INTRODUCTION]

No, not qualified / available [THANK AND TERMINATE]

Survey

Q1 So to begin, did you file a federal personal income tax return for yourself for the year 2007?

Yes

No [THANK AND TERMINATE]

DK/REF [THANK AND TERMINATE]

Q1A And when did you file a federal personal income tax return for yourself? Please stop me when I get to your date range.

[READ LIST – ACCEPT RESPONSE BEFORE FINISHING LIST]

January 1st to February 28th 2008

March 1st to 31st 2008

April 1st to 20th 2008

April 21st to 30th 2008

After April 30th 2008

[QUEBEC ONLY] Q2 *Did you file a Québec personal income tax return for yourself for the year 2007?*

Yes

No [THANK AND TERMINATE]

DK/REF [THANK AND TERMINATE]

Q3 *How much time did you spend in 2008 or earlier in 2007 learning about the various aspects of the 2007 personal income tax laws, say by reading documents, consulting websites, or by other means, to prepare your 2007 tax return?*

[RECORD IN HOURS]

Less than one hour

Q4 *And how much time did you spend in 2008 or earlier in 2007 preparing and sorting your personal income tax documents, such as receipts, tax statements such as T4s, T5s, necessary to prepare your income tax return or returns for 2007?*

[RECORD IN HOURS]

Less than one hour

Q5 *And who prepared your 2007 income tax return or returns? Was it ...*

Yourself using a paper form

Yourself using software you purchased and installed on your computer

Yourself using software on the Internet

A not for profit group that was not paid for its service

A friend or family member who was not paid for their service

A tax preparer that you paid

[IF "YOURSELF USING A PAPER FORM" AT Q5, ASK Q5A]

Q5A *How much time did you spend completing your 2007 tax return(s)?*

[RECORD IN HOURS]

Less than one hour

[IF "YOURSELF USING SOFTWARE YOU PURCHASED AND INSTALLED ON YOUR COMPUTER" AT Q5, ASK Q5B TO Q5D]

Q5B *And what software did you use? Was it ...*

Quicktax™

Taxtron™

GenuTax™

Cantax™

Ufile™

Other [specify]

Q5C *And how much did you pay for this software that you purchased and installed on your computer? Please stop me when I get to the purchase price category.*

Nothing

- Less than \$10
- \$11–\$20
- \$21–\$30
- \$31–\$40
- \$41–\$50
- \$51–\$60
- More than \$60

Q5D *How much time did you spend completing your 2007 tax return(s)?*

[RECORD IN HOURS]

Less than one hour

[IF "YOURSELF USING SOFTWARE ON THE INTERNET" AT Q5, ASK Q5E TO Q5G]

Q5E *And what software did you use on the Internet?*

[LIST]

Q5F *How much did you pay for this software you used on the Internet? Please stop me when I get to the purchase price category.*

Nothing

Less than \$10

\$11–\$20

\$21–\$30

\$31–\$40

\$41–\$50

\$51–\$60

More than \$60

Q5G *How much time did you spend completing your 2007 tax return(s)?*

[RECORD IN HOURS]

Less than one hour

[IF "A NOT FOR PROFIT GROUP THAT WAS NOT PAID FOR ITS SERVICE" AT Q5, ASK Q5H AND Q5I]

Q5H *And how much time did this not for profit group spend completing your 2007 personal income tax return(s)?*

[RECORD IN HOURS]

Less than one hour

[Q5I] *How much time did you spend with this person (traveling time, waiting time providing explanation, documents and so on)?*

[RECORD IN HOURS]

Less than one hour

[IF "A FRIEND OR FAMILY MEMBER WHO WAS NOT PAID FOR THEIR SERVICE" AT Q5, ASK Q5J TO Q5K]

- Q5J** *And how much time did this person or persons spend completing your 2007 personal income tax return(s)?*
[RECORD IN HOURS]
Less than one hour
- Q5K** *How much time did you spend with this person (traveling time, waiting time providing explanation, documents and so on)?*
[RECORD IN HOURS]
Less than one hour
[IF "A TAX PREPARER THAT YOU PAID" AT Q5, ASK Q5L TO Q5N]
- Q5L** *And what kind of tax preparer was it that you paid to help with your taxes? Was it ...*
A private individual
A tax preparing firm
A tax discounter
An accountant
A lawyer
Other (specify)
- Q5M** *How much did you pay this tax preparer for the 2007 personal income tax work?*
[RECORD DOLLAR AMOUNT]
- Q5N** *How much time did you spend with this tax preparer (traveling time, waiting time providing explanation, documents and so on)?*
[RECORD IN HOURS]
Less than one hour
- Q6** *Was your federal return filed electronically or in paper form?*
Electronically
Paper form
DK/REF
- Q7** *And how much did you yourself pay in small out of pocket expenses that may have been associated with preparing and filling your 2007 return? Small expenses here can be postage, photocopying, printing, and other expenses.*
I did not have any small out of pocket expenses
[RECORD IN HOURS]
Less than five (5) dollars
- Q8** *How much money did you spend in 2007 or 2008 acquiring documents, or interacting with experts, as in attending seminars, speaking with them on the phone, or meeting with them for personal income tax planning purposes?*

I did not spend any money acquiring documents or interacting with experts
[RECORD IN HOURS]
Less than five (5) dollars

Q9 *And how much time did you devote to personal income tax planning activities in 2007 or 2008?*

[RECORD IN HOURS]
Less than one hour

Q10 *And in 2007 did you receive any of the following*

[SELECT ALL THAT APPLY]

Canadian

Wage and salary income

Self employment income

Child tax benefit

Government transfer payments (At least one of Welfare, Workers compensation, Employment insurance, Old Age Security or OAS Canada Pension Plan or CPP/Québec Pension Plan or QPP of any kind)

Private Pension Income, including Registered Retirement Income Funds or RRIF

Interest income

Dividend income

Rental income

Capital gains income

Other Canadian investment income

Non Canadian

investment income

labour income(wages or self employment)

pension income

Q11 *Did you use any of the following provisions of the Canadian tax law in your 2007 personal income tax return(s)*

[SELECT ALL THAT APPLY]

Natural resources (various including flow through shares)

Education and tuition amount for self or transferred

Stock options

Labor Sponsored Venture Capital Corporation or LSVCCC

Medical expenses

Child fitness amount

Urban transit amount

Pension income splitting

Foreign tax credit

Investment credit

Q12 *In 2007 were you appealing a Canada Revenue Agency or Revenu Québec decision on a filing?*

A Canada Revenue Agency decision

A Revenu Québec decision

Both

No [SKIP TO Q 14]

[IF YES AT Q12, ASK Q 13]

Q13 *And for what year were you appealing a Canada Revenue Agency or Revenu Québec decision on a filing?*

[RECORD YEAR]

Q13A *How much did you spend in 2007 on this appeal?*

[RECORD DOLLAR AMOUNT]

I did not spend any money

Q13B *How much time did you spend on this appeal in 2007?*

[RECORD IN HOURS]

Less than one hour

Q14 *In 2007, did the Canada Revenue Agency or Revenu Quebec ask for explanations or documentation with respect to your 2006 return(s)*

Yes

No

DK/REF

Q15 *How many 2007 federal personal income tax returns did you prepare for free for your spouse, your children, your parents, other family members or friends?*

None

Number

DK/REF

Q16 *How much time overall did you spend preparing these returns?*

Q17 *How many personal property tax bills did you pay in 2007 for property in Canada?*

[INTERVIEWER NOTE: STATE THAT BILLS PAID IN TWO INSTALLMENTS COUNT AS TWO]

One

Two

Three

Four

Five

Six to ten
More than ten
None
DK/REF

Q17A *And how many personal property tax bills did you pay in 2007 for property abroad?*

[INTERVIEWER NOTE: IF ASKED, BILLS PAID IN TWO INSTALLMENTS COUNT AS TWO]

One
Two
Three to Five
Six to ten
More than ten
None
DK/REF

Q18 *And approximately how much time did you devote to paying personal property tax bills in 2007?*

[RECORD IN HOURS]

Less than one hour

Q18A *And approximately how much money did you spend in paying personal property tax bills in 2007? Spending money in this case refers to expenses like postage, photocopying, printing, and other out of pocket expenses.*

[RECORD DOLLAR AMOUNT]

None

Q19 *Did you challenge a personal property tax bill in the last five years, since 2003?*

[INTERVIEWER NOTE: IF ASKED WHAT A CHALLENGE WOULD BE, SAY "AN EVALUATION, A CLASSIFICATION OF PROPERTY, OR A RATE THAT MAY HAVE BEEN USED"]

No [SKIP TO DEMOS]

Yes

[IF YES AT Q20, ASK Q21]

Q20 *And approximately how much time did you spend on challenging a personal property tax bill in the last five years, since 2003?*

[RECORD IN HOURS]

Less than one hour

Q21 *And how much money did you spend on challenging a personal property tax bill in the last five years, since 2003?*

[RECORD DOLLAR AMOUNT]

I did not spend any money challenging a personal property tax bill in the last five years, since 2003

Demographics

We are almost finished, and I am now going to ask you some demographic questions that allow us to group responses and to sort the information we collect. Let me assure you that all of your responses will be held in strict confidence and will not be attributed to you.

Record gender [DO NOT ASK]

D1 In what year were you born?

[RECORD YEAR (RANGE 1900 TO 1989)]

D2 Including yourself, how many people currently live in your household?

[RECORD NUMBER (IF MORE THAN ONE IN D2, ASK D2A)]

D2A And how many of those people are under the age of 18?

[RECORD NUMBER]

D2B And what is your current marital status? Please stop me when I get to your category. Are you ...

[READ LIST; ACCEPT RESPONSE BEFORE FINISHING LIST]

Married

Single

Separated or Divorced

Widowed

Living common-law

D3 What is the highest level of schooling that you have obtained? Please stop me when I get to your category. Are you ...

[READ LIST; ACCEPT RESPONSE BEFORE FINISHING LIST]

Grade school or some high school

Completed high school

Post secondary technical school

Some university or college

Completed college diploma

Completed university degree

Post-grad degree (masters or PhD)

Refused/Not Stated

D4 Which category best describes your employment situation in 2007? Please stop me when I get to your category. Are you ...

[READ LIST; ACCEPT RESPONSE BEFORE FINISHING LIST; ALLOW MORE THAN ONE CHOICE]

Employed full-time

Employed part-time

Unemployed

Homemaker
Retired
Other
Refused

D5 *In 2007, what was your usual hourly wage before deductions when you worked? Please stop me when I get to your category.*

[READ LIST; ACCEPT RESPONSE BEFORE FINISHING LIST]

[INTERVIEWER NOTE: IF RESPONDENT SAYS THEY WERE SELF EMPLOYED, ASK RESPONDENT TO PLEASE USE BEST GUESS AT A REASONABLE ESTIMATE.]

\$10 or less
\$10 to less than \$15
More than \$15 to less than \$20
More than \$20 to less than \$25
More than \$25 to less than \$30
More than \$30 to less than \$35
More than \$35 to less than \$40
More than \$40 to less than \$45
More than \$45 to less than \$50
\$50 or more

D6 *And what was the taxable income reported on your 2007 federal income tax return?*

Less than \$10,000
\$10,000–\$29,999
\$30,000–\$49,999
\$50,000–\$69,999
\$70,000–\$99,999
\$100,000–\$150,000
\$150,000 or more

D7 *And how well do you know English? On a scale of 1 to 10, with 1 being “poor” and 10 being “excellent—it is my mother tongue,” where on that scale would you say your knowledge of English is?*

[QUEBEC ONLY] *And how well do you know French? On a scale of 1 to 10, with 1 being “poor” and 10 being “excellent—it is my mother tongue,” where on that scale would you say your knowledge of French is?*

D8 *And for how many years have you filled a Canadian federal income tax return?*

First year
2–4
5–9
10 and more

Finally, in order to know how to classify your responses, can you please provide me with your postal code?

[PROBE FOR FIRST THREE DIGITS IF DK/REF]

[RECORD SIX DIGIT POSTAL CODE]

[IF NECESSARY] *I assure you that this information will remain completely confidential. We only use it for classification purposes.)*

This completes the survey. On behalf of The Fraser Institute and Leger Marketing, thank you very much for taking the time to provide feedback. Your opinion is important. Have a nice night

Appendix C: Regression used in calculation of market wage

Table C.1 reports the results of the regression. The R^2 and the F statistics show that the equation used explains reasonably well the wage rate. The individual characteristics have the usual impact on wages:

- Women receive lower wages than men;
- Wages increases with schooling.
- Wages first increase with age until the age of 45-64 and then decrease;
- Wages are lower for single individuals than married ones;
- Wages are higher in Ontario and in the Western provinces than in Quebec and the Atlantic provinces.

The coefficients were used along with the individual characteristics to impute a wage. For example, a woman with a university undergraduate degree aged 35 to 44, married, and living in Atlantic Canada saw her wage calculated as: $3.0193999 = 2.493436 - 0.2771383 + 0.3785142 + 0.5910891 - 0.1665011$. This is the sum of the constant and of the relevant sex, age, education, marital status and region coefficients. Since the marital status in his case is the reference one (included in the constant) no coefficient is added. One then takes the exponential of this and obtains a wage rate of \$20.48.

Table C.1: Regression of wage rate on individual characteristics

| Variable | Coefficients | (t statistics) |
|---|--------------|----------------|
| Constant | 2.493436 | |
| Women | -0.2771383 | (9.44) |
| Schooling (primary omitted) | | |
| Secondary | 0.0620825 | (1.06) |
| Post-Secondary | 0.3037943 | (5.50) |
| University (undergraduate) | 0.5910891 | (9.97) |
| University (graduate) | 0.8083814 | (11.92) |
| Age (18–24 omitted) | | |
| 25–34 | 0.217045 | (3.02) |
| 35–44 | 0.3785142 | (5.24) |
| 45–54 | 0.4672618 | (6.51) |
| 55–64 | 0.4692987 | (6.26) |
| 65 and over | 0.4286355 | (4.06) |
| Marital Status (married omitted) | | |
| single | -0.1503967 | (-3.84) |
| others | -0.018697 | (-0.41) |
| Regions (Ontario omitted) | | |
| Atlantic | -0.1665011 | (-2.74) |
| Quebec | -0.01301 | (-0.36) |
| West | 0.0684622 | (1.93) |
| F | 36.19 | |
| R² | 0.3436 | |

References

Canada Revenue Agency (2007). *Annual Report to Parliament: 2006–2007*. <<http://www.cra-arc.gc.ca/gncy/nnnl/2006-2007/prfrmnc-e/rc4425-07eng.pdf>>.

Canada Revenue Agency (2008a). Final Basic Table 3: All returns by major source of inc., Alberta. *Final Statistics—Sample Data 2008 Edition (2006 tax year)*. Revised May 2009. <<http://www.cra-arc.gc.ca/gncy/stts/gb06/pst/fnl/html/t03ab-eng.html>>.

Canada Revenue Agency (2008b). Final Basic Table 4A: Taxable returns by age and sex, All Canada. *Final Statistics—Sample Data 2008 Edition (2006 tax year)*. Revised May 2009. <<http://www.cra-arc.gc.ca/gncy/stts/gb06/pst/fnl/html/tbl4a-eng.html>>.

Canada Revenue Agency (2008c). Final Basic Table 5: All Returns by Province and Territory. *Final Statistics—Sample Data 2008 Edition (2006 tax year)*. Revised May 2009. <<http://www.cra-arc.gc.ca/gncy/stts/gb06/pst/fnl/html/tbl5-eng.html>>.

Canada Revenue Agency (2008d). Historical Table 1: Tax years—1968-2006: Yearly Record of Returns Filed. *Final Statistics—Sample Data 2008 Edition (2006 tax year)*. Revised May 2009. <<http://www.cra-arc.gc.ca/gncy/stts/gb06/pst/fnl/pdf/htbl1-eng.pdf>>.

Canada Revenue Agency (2008e). Income statistics 2008, 2006 tax year, Basic table 2: All returns by total income class. *Final Statistics—Sample Data 2008 Edition (2006 tax year)*. Revised May 2009. <<http://www.cra-arc.gc.ca/gncy/stts/gb06/pst/fnl/pdf/tbl2-eng.pdf>>.

Canada Revenue Agency (2008f). Income Statistics 2008, Basic Table 5, All Returns by Province and Territory. *Final Statistics—Sample Data 2008 Edition (2006 tax year)*. Revised May 2009. <<http://www.cra-arc.gc.ca/gncy/stts/gb06/pst/fnl/pdf/tbl5-eng.pdf>>, consulted August 13, 2009.

CBC News (2007, February 1). *Ontario's Minimum Wage Hits \$8*. <<http://www.cbc.ca/canada/toronto/story/2007/02/01/minimumwage-ontario.html>>, consulted August 11th 2009)

Cumming, Douglas, and Jeffrey MacIntosh, with Keith Godin (2007). *Crowding Out Private Equity: Canadian Evidence*. Fraser Alert (September).

Kapica, Jack (2007, February 21). Take the Taxing Part Out of Filing. Updated March 31, 2009. *Globe and Mail*: <<http://www.theglobeandmail.com/news/technology/article743612.ece>>.

Palacios, Milagros, and Kumi Harischandra (2008). The Impact of Taxes on Economic Behavior. In Jason Clemens (ed.), *The Impact and Cost of Taxation in Canada: The Case for Flat Tax Reform* (Fraser Institute): 3–31.

Quebec, Ministère de Finances (2006). *Statistiques fiscales des particuliers: Année d'imposition 2006*. <http://www.finances.gouv.qc.ca/documents/statistiques/fr/STAFR_sfp_2006.pdf>.

Statscan (2009a). CANSIM Table 051-0001: Estimates of population, by age group and sex as for July 1, Canada, provinces and territories, annual (persons).

Statscan (2009b). CANSIM Table 281-0030: Average hourly earnings for employees paid by the hour.

Statscan (2009c). CANSIM Table 385-0001: Consolidated federal, provincial, territorial and local government revenue and expenditures, annual.

Statscan (2009d). *Summary Tables*. Gross domestic product, expenditure-based. <<http://www40.statcan.ca/l01/cst01/econ04.htm>>, consulted August 14, 2009.

Vaillancourt, François (1989). *The Administrative and Compliance Costs of Personal Income Taxes and Payroll Taxes, Canada 1986*. Canadian Tax Foundation, 1989.

Vaillancourt, François, and Jason Clemens (2008). Compliance and Administrative Costs of Taxation in Canada. In Jason Clemens, ed., *The Impact and Cost of Taxation in Canada* (Fraser Institute, 2008): 55–102.

About the author

François Vaillancourt is a Fellow of the Royal Society of Canada. He obtained his Ph.D. in economics from Queen's University at Kingston and is a Full Professor in the Département de sciences économiques, Université de Montréal, where he has taught since 1976. He is an associate of the Chaire d'études politiques et économiques américaines of that university and a Fellow, CIRANO. He has published extensively in the area of public policy, particularly on fiscal federalism, taxation, and language policy. Since 2000, he has been the Fulbright Canadian Research Scholar at Kennesaw State University (2007) and a Visiting professor at the Andrew Young School of Policy Studies in Atlanta (2007, 2009) at FUCaM (2006) and at the École Normale Supérieure de Cachan (2006, 2008). In the 1990s, he was visiting scholar at the Institut d'Études Européennes (1994), the Shastri Institute visiting lecturer (India, 1993), a visiting scholar at the Federalism Research Centre, Australian National University (1991), and the visiting Professor of Policy Modeling, Institute for Policy Analysis, University of Toronto (1991). He was also research coordinator, Income Distribution and Economic Security, Economic Research, Royal Commission on the Economic Union and Development Prospects for Canada (1983–1985) and associate editor, *Canadian Public Policy* (1985–1995).

He has acted as a consultant for various bodies, both Canadian—Advisory Panel on Fiscal Imbalance of the Council of the Federation; Auditor General of Canada; Canadian Tax Foundation; CIDA; Conseil de la langue française; Expert Panel on Equalization and Territorial Formula Financing; Finance Canada; Law Reform Commission of Canada; Software Human Resource Council; Standing Committee on Finance (House of Commons); Statistics Canada; Treasury Board (Québec)—and non Canadian—AFD; New Zealand Treasury; OECD; UNDP; World Bank.

Acknowledgments

This publication was prepared as part of a larger research project on the compliance costs of taxes in Canada initiated by the Fraser Institute. We would like to thank the Mitchell Family and the Lotte & John Hecht Memorial Foundation for their generous support of this project. We also thank Maria Barros for her able research assistance and Niels Veldhuis, David Guimond, and two anonymous referees for comments on earlier drafts.

Publishing information

Periodically, the Fraser Institute publishes timely and comprehensive studies of current issues in economics and public policy. This study is one such example belonging to a series of related publications.

Distribution

These publications are available from <http://www.fraserinstitute.org> and <http://www.fraseramerica.org> in Portable Document Format (PDF) and can be read with Adobe Acrobat® 7 or later or with Adobe Reader® 7 or later. Adobe Reader® 9, the most recent version, is available free of charge from Adobe Systems Inc. and may be down-loaded from: <http://get.adobe.com/reader/>. We encourage you to install the most recent version.

Ordering publications

For information about ordering the printed publications of the Fraser Institute, please contact the publications coordinator

- e-mail: sales@fraserinstitute.org
- telephone: 604.688.0221 ext. 580 or, toll free, 1.800.665.3558 ext. 580
- fax: 604.688.8539.

Media

For media inquiries, please contact our Communications Department

- 604.714.4582
- e-mail: communications@fraserinstitute.org.

Disclaimer

The author of this publication has worked independently and opinions expressed by him are, therefore, his own, and do not necessarily reflect the opinions of the supporters, trustees, or staff of the Fraser Institute. This publication in no way implies that the Fraser Institute, its trustees, or staff are in favor of, or oppose the passage of, any bill; or that they support or oppose any particular political party or candidate.

Copyright

Copyright© 2010 by the Fraser Institute. All rights reserved. No part of this publication may be reproduced in any manner whatsoever without written permission except in the case of brief passages quoted in critical articles and reviews.

Date of issue

April 2010

ISSNs

ISSN 1923-371X Studies in Tax Policy (Print)

ISSN 1923-3728 Studies in Tax Policy (Online)

Editing and design

Kristin McCahon and Lindsey Thomas Martin.

Cover design

Bill Ray

Images for cover

Fotolia, man with laptop © Elenathewise

Fotolia, Pressione fiscale © Comugnero Silvana

Fotolia, Economy cut © Giordano Aita

Fotolia, Filing Taxes Receipts © redrex

Fotolia, Stack of Folders © Lai Leng Yiap

Supporting the Fraser Institute

To learn how to support the Fraser Institute, please contact

- Development Department, Fraser Institute
Fourth Floor, 1770 Burrard Street
Vancouver, British Columbia, V6J 3G7 Canada
- telephone, toll-free: 1.800.665.3558 ext. 586
- e-mail: development@fraserinstitute.org.

About the Fraser Institute

Our vision is a free and prosperous world where individuals benefit from greater choice, competitive markets, and personal responsibility. Our mission is to measure, study, and communicate the impact of competitive markets and government interventions on the welfare of individuals.

Founded in 1974, we are an independent research and educational organization with locations throughout North America and international partners in over 70 countries. Our work is financed by tax-deductible contributions from thousands of individuals, organizations, and foundations. In order to protect its independence, the Institute does not accept grants from government or contracts for research.

菲沙研究所的願景乃一自由而昌盛的世界，當中每個人得以從更豐富的選擇、具競爭性的市場及自我承擔責任而獲益。我們的使命在於量度、研究並使人知悉競爭市場及政府干預對個人福祉的影響。

Nous envisageons un monde libre et prospère, où chaque personne bénéficie d'un plus grand choix, de marchés concurrentiels et de responsabilités individuelles. Notre mission consiste à mesurer, à étudier et à communiquer l'effet des marchés concurrentiels et des interventions gouvernementales sur le bien-être des individus.

تتمثل رؤيتنا في وجود عالم حر ومزدهر يستفيد فيه الأفراد من القدرة على الاختيار بشكل أكبر، والأسواق التنافسية، والمسؤولية الشخصية. أما رسالتنا فهي قياس، ودراسة، وتوصيل تأثير الأسواق التنافسية والتدخلات الحكومية

Nuestra visión es un mundo libre y próspero donde los individuos se benefician de una mayor oferta, la competencia en los mercados y la responsabilidad individual. Nuestra misión es medir, estudiar y comunicar el impacto de la competencia en los mercados y la intervención gubernamental en el bienestar de los individuos.

Editorial Advisory Board

Prof. Armen Alchian

Prof. James Gwartney

Prof. Terry Anderson

Prof. H.G. Johnson*

Prof. Robert Barro

Prof. Ronald W. Jones

Prof. Michael Bliss

Dr. Jerry Jordan

Prof. James M. Buchanan[†]

Prof. Ross McKittrick

Prof. Jean-Pierre Centi

Prof. Michael Parkin

Prof. John Chant

Prof. F.G. Pennance*

Prof. Bev Dahlby

Prof. Friedrich Schneider

Prof. Erwin Diewert

Prof. L.B. Smith

Prof. Stephen Easton

Prof. George Stigler*[†]

Prof. J.C. Herbert Emery

Mr. Vito Tanzi

Prof. Jack L. Granatstein

Sir Alan Walters

Prof. Herbert G. Grubel

Prof. Edwin G. West*

Prof. Friedrich A. Hayek*[†]

* deceased; [†] Nobel Laureate