

## **INCOME TAXES AND COMPLIANCE COSTS: HOW ARE THEY RELATED?**

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*This paper examines the relationship between tax complexity and income tax compliance costs through the development and use of econometric models based on a mix of survey and tax administration data. The models are used to analyze compliance cost differences in taxpayer characteristics and return complexity.*

*Keywords: compliance burden, compliance cost, complexity*

*JEL Codes: H24, H25*

### **I. INTRODUCTION**

The three pillars of tax policy, commonly juxtaposed in discussions of tax reform, are equity, efficiency, and simplicity. This paper focuses on the third pillar, simplicity, by offering insights into its antithesis, complexity, and the ways that complexity affects taxpayer compliance costs.

The U.S. tax system is complex and imposes compliance costs on taxpayers. We estimate that the annual income tax-related compliance costs exceed \$150 billion, at least \$50 billion for individuals and \$100 billion for businesses, or a little over 10 percent of

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federal income tax revenue.<sup>1,2</sup> A better understanding of the relationship between federal income taxes and taxpayer compliance burden can inform tax law simplification efforts and reveal other opportunities for mitigating compliance costs. To that end, we discuss how tax complexity and other factors affect the compliance burden, the measurement of taxpayer burden via surveys, the development of the Internal Revenue Service (IRS) individual and business burden models, and how those models are used to estimate and analyze compliance burden.

## II. COMPLEXITY AND COMPLIANCE BURDEN

### A. Increasing Tax Code Complexity

According to the National Taxpayer Advocate's Annual Report to Congress (2012), complexity is the main issue faced by taxpayers and the IRS. That report also states that there have been about 4,680 changes to the tax code since 2001.

Even provisions intended as tax simplification may actually expand the tax code and result in tangential complexity due to exceptions to the new rules, phased-in implementation, and interactions with other provisions. Using the number of Internal Revenue Code (IRC) subdivisions (subtitles, parts, sub-parts, etc.) and cross references as a proxy for tax complexity, Figure 1 below indicates how tax complexity has increased for tax years 1991 through 2012.<sup>3</sup>

### B. Complexity and Increasing Use of Assisted Tax Preparation Methods

Citing complexity as the reason, the Taxpayer Advocate states that "... few taxpayers complete their returns without assistance" (National Taxpayer Advocate, 2012, p. v). As the tax code becomes more complex, it would follow that more taxpayers would opt for an assisted tax preparation method. Figure 2 shows that the use of assisted tax preparation methods, including self-preparation with tax software, has indeed increased over the years.

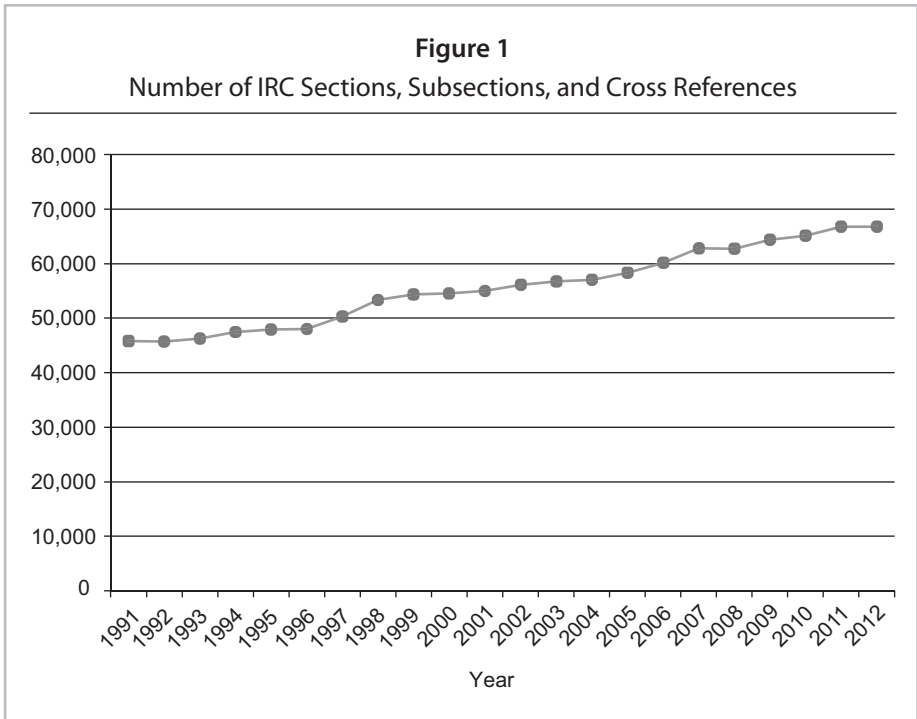
Our research indicates that tax complexity does play a role in the decision to use an assisted method. However, we suggest that other factors may actually be greater contributors to the migration from pen and paper tax self-preparation. For example, many taxpayers with basic income reporting requirements (income solely from wages, interest, or unemployment benefits) tend to use an assisted method if they are getting

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<sup>1</sup> This percentage is similar to an earlier estimate by Slemrod (1996). These estimates are lower bounds because they exclude taxpayer burden related to information reporting and income tax withholding.

<sup>2</sup> Because compliance costs of flow-through entities are included as business compliance costs whereas much of the tax on flow-through income is paid at the individual level, it is difficult to compute an appropriate ratio of compliance costs to tax revenues separately for individuals and businesses.

<sup>3</sup> All figures are preliminary and subject to revision.

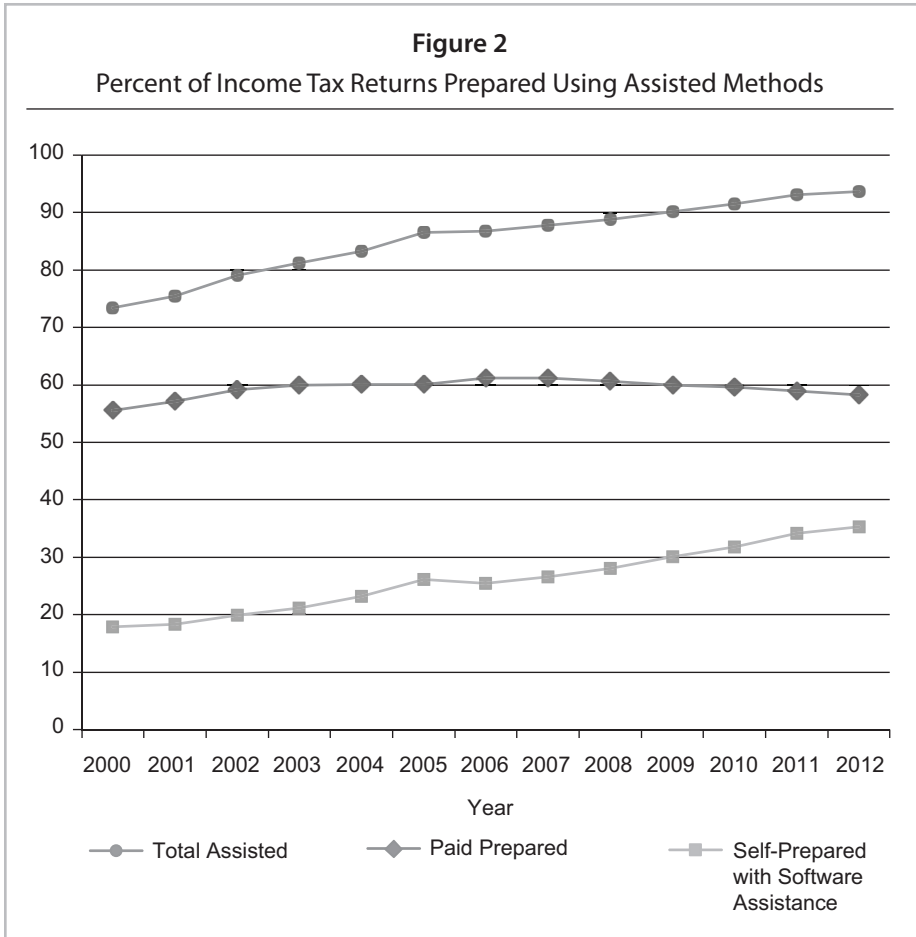


a refund (Figure 3). This finding is plausible since software-prepared returns (whether prepared by the taxpayer or a paid professional) are generally filed electronically, which speeds up the refund process.

In addition, several other factors are likely to contribute to the choice to use an assisted method, including increasing technology adoption, increased availability of free online tax preparation services, and the assurance that all required forms and schedules are filed with the return and the math is correct. These influences can be seen in the fact that even taxpayers filing a simple return with no refund are increasingly using an assisted method as well (Figure 4).

Tables 3 and 4 suggest that many taxpayers are substituting out-of-pocket costs for their time. To determine the extent to which this trade-off may be affecting compliance costs, we reviewed average tax preparation fees from 1995–2010.<sup>4</sup> Figure 5 shows that tax preparation fees have remained roughly constant over the past decade in real dollar terms.

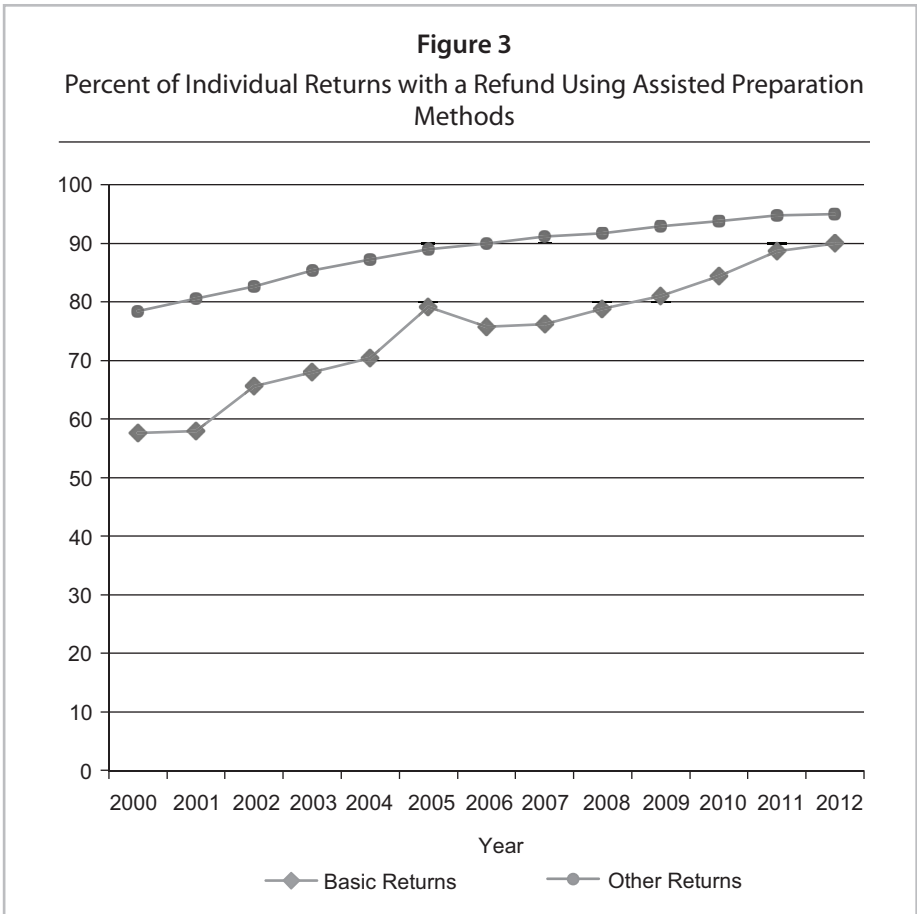
<sup>4</sup> The tax preparation fee deduction is claimed on Schedule A before the 2 percent of AGI limitation. Source: SOI Statistical Tables, Table 3, “Returns with Itemized Deductions: Itemized Deductions by Type and by Size of Adjusted Gross Income,” <http://www.irs.gov/uac/SOI-Tax-Stats-Individual-Tax-Statistics>.



In light of technology diffusion and the role that electronic filing plays in expediting refunds, we find only limited support for the premise that increasing tax code complexity is a primary driver of the expanding use of assisted preparation methods. Technology likely plays a large role in mitigating the impact of increasing tax law complexity by determining which provisions apply to the taxpayer via the tax interview, providing new or updated tax forms, performing calculations, and facilitating planning.

**C. Complexity Does Not Affect Taxpayers Equally**

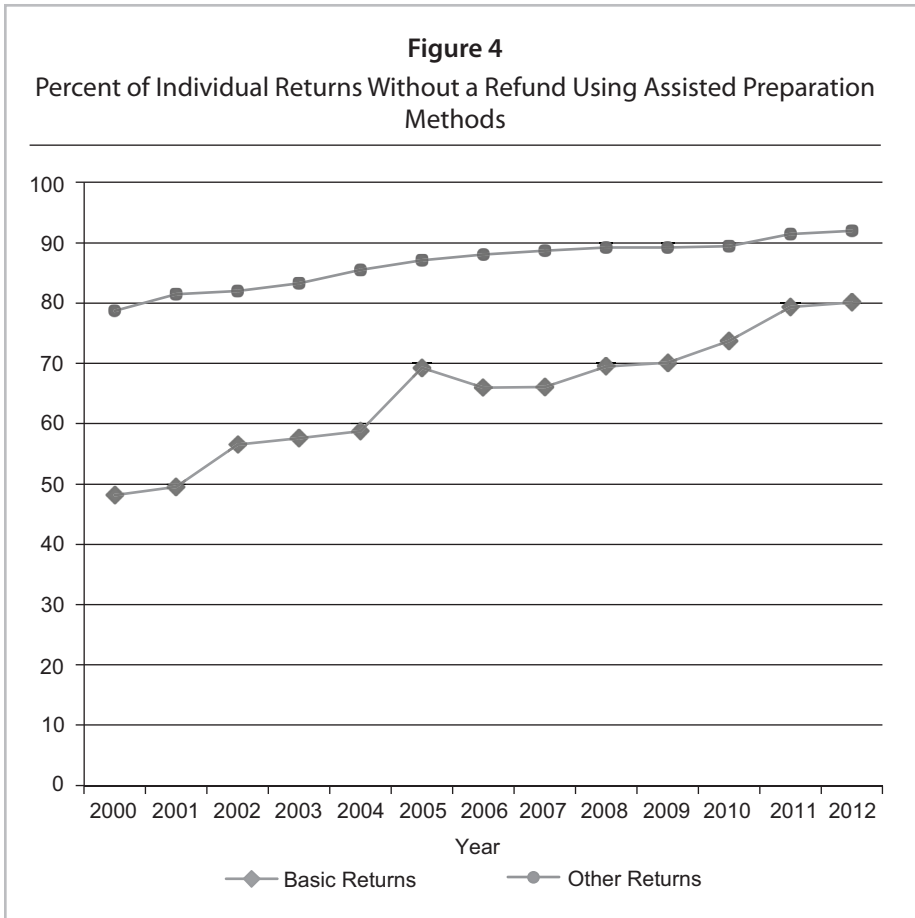
The bulk of the impact of an increase in complexity falls on the taxpayers who are affected by the change. For example, a change in the foreign earned income exclusion rules likely has little or no impact on a taxpayer that never earns income in a foreign



country, but can have a significant impact on a taxpayer who does. Although the former taxpayer may have an information-gathering cost to figure out what “foreign earned income” is and if the new rules apply to him, actually claiming a foreign earned income exclusion is far more burdensome. Further, the use of tax software or a tax preparer may decrease the time spent by the taxpayer on this type of information gathering and therefore reduce the effect of this increased complexity.

### III. MEASURING COMPLIANCE COSTS

As a key step in estimating taxpayer compliance costs, the IRS conducts taxpayer burden surveys that gather statistically representative data regarding the time and out-of-pocket costs incurred by taxpayers in response to their tax obligations. Individual Taxpayer Burden (ITB) surveys have been conducted for tax years 1984, 1999, 2000,

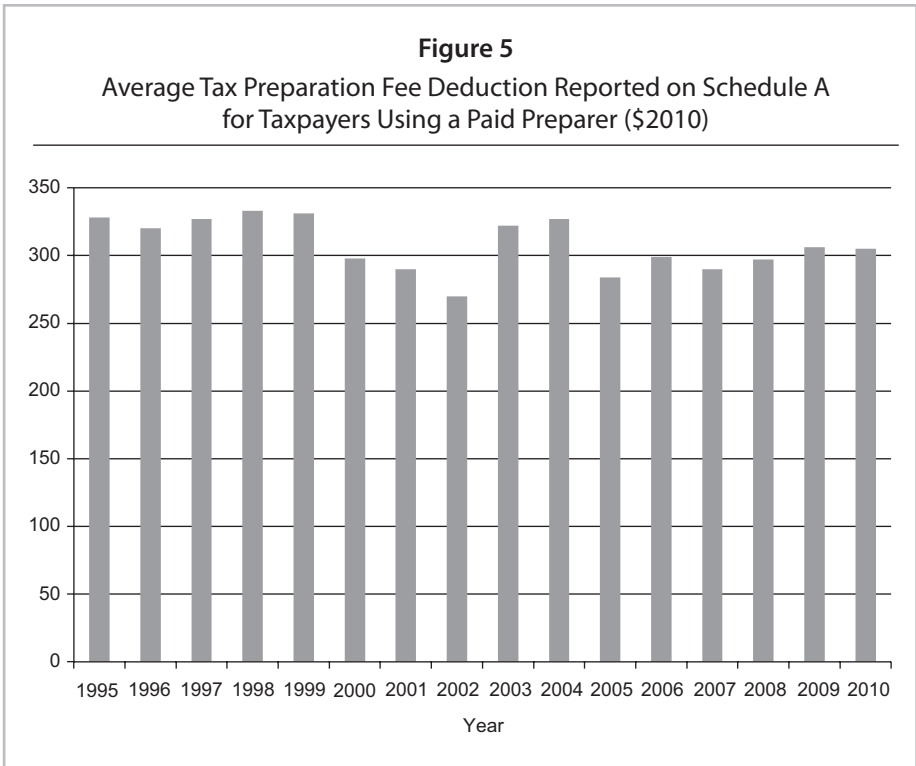


2007, and 2010. Similar Business Taxpayer Burden (BTB) surveys for corporations and partnerships were conducted for tax years 2004 and 2009. This paper focuses on the results from the 2010 ITB and 2009 BTB surveys and related research.

The sampling methodology for the ITB 2010 survey involved a stratified random sample with 15 categories. Returns were first distinguished by preparation method (third-party prepared, self-prepared using tax preparation software, and self-prepared by hand). Returns were further stratified within the three preparation categories based on five complexity categories: low, low-medium, medium, high-medium, and high.<sup>5</sup>

The 2010 ITB survey consisted of several framing questions, such as asking the taxpayer to think about resources they may have used when preparing their return, as well

<sup>5</sup> Appendix A provides more information on the five complexity categories.



as the key time and out-of-pocket cost questions. These topics were broken down into two separate response items: (1) time, including recordkeeping, tax planning, gathering materials, and completing and submitting the tax return; and (2) out-of-pocket costs, including paid preparer services, tax preparation website or software, fees for early or immediate refund, tax books, classes, or seminars, and postage or filing fees.

Data collection for 2010 ITB occurred between September 9, 2011, and May 31, 2012. To reduce recall bias, the surveys were conducted close to when the taxpayers filed their tax returns. The IRS contracted with an outside vendor to administer the surveys. The overall response rate was 42 percent after adjusting for unreachable taxpayers.

The 2009 BTB updated the small business taxpayer burden survey of 2004 and added large businesses. Previous studies of compliance burden for large businesses were conducted in 1993 by Slemrod and Blumenthal (1996) and in 2002 by Slemrod and Venkatesh (2002). In addition, the 1986 Arthur D. Little study for Tax Year 1984 also covered business taxpayers, as discussed in Contos, et al. (2012).

As with the 2010 ITB, stratified random sampling was used. Business entities were grouped by entity type based on the tax return they filed (corporation, S corporation, or partnership). Each entity type was distinguished by preparation method: self-prepared

(no paid preparer signature) and third-party prepared. Self-prepared returns were divided into four income categories and third-party prepared returns were divided into nine income categories (see Appendix B for the sampling stratification).

For the 2009 BTB, respondents were asked to consider the time and out-of-pocket costs incurred for filing all federal and state business tax returns (income, payroll, excise, information returns, state and local, etc.). Entities with an in-house tax department were asked additional questions regarding the budget and staffing for that department. One of the main concerns in creating the business survey instrument was whether respondents would be able to separate the compliance costs associated with tax planning and tax filing, given that many tax service providers bundle these services.

To take into account likely pay rate differences, respondents were asked to prorate time spent by type of staff doing the work (for example, full-time versus part-time or executive versus clerical). Respondents were asked to allocate their time burden across (1) tax compliance activities (such as recordkeeping, tax planning, calculating payroll taxes, and completing and submitting the federal income tax return) and (2) the type of employee (owners, executives, clerical, and other) performing those activities.

Cost-related questions included fees paid to external service providers for tax and tax-related services, the cost of tax-related software, and the amount spent on other tax-related activities (copies of tax returns, postage, etc.). Respondents were asked to provide total amounts for each of these items, as well as indicating how much of those costs were spent specifically for federal income tax compliance.

The 2009 BTB was conducted in five waves from July 27, 2010, to April 25, 2011. A total of 19,187 surveys were mailed and 5,256 responses were received.

#### **IV. COMPLIANCE COST MODELS**

The survey data makes it possible to begin developing a model that can be used for forecasting and simulation of changes in the underlying tax law, IRS administrative procedures, and taxpayer behavior.

##### **A. First Step — A Cost-Minimization Model**

To guide development of compliance cost models for a “what-if” analysis, a simple economic model was developed based on the premise that a rational taxpayer will choose between preparing his return himself or seeking the services of a third party preparer depending on which choice minimizes tax burden, holding constant all other influencing factors. This economic model of compliance costs was developed following the work of Slemrod (2001) and Eichfelder and Schorn (2009).

Compliance cost consists of the individual’s or firm’s compliance burden, which is a function of resources spent plus the cost of hiring an outside tax specialist. Filing activities are the first part of the constraint in the minimization mode — the activities



needed to file a tax return. The amount of activities needed depends on the entity's earnings, tax planning, and the need to meet recordkeeping and tax reporting compliance requirements.

Resource production, the output produced by the resources used, is the other part of the constraint. In this model, a rational taxpayer will choose the allocation of personal and third party resources to minimize total compliance cost while conducting only those activities needed for tax compliance. The gross marginal cost of in-house resources may not be greater than the market price of outsourced tax compliance activities. Key implications of this modeling framework are as follows:<sup>6</sup>

1. As personal productivity increases, holding all else constant, the taxpayer uses more personal resources and fewer third party resources;
2. As the price of third party tax assistance increases, holding all else constant, the taxpayer uses more personal resources and fewer third party resources;
3. As a taxpayer's earnings increase, holding all else constant, the taxpayer solely relies on additional third party resources; and
4. As earnings increase, compliance costs increase.

## **B. The Econometric Models**

The IRS burden model methodology, developed in partnership with the U.S. Department of the Treasury Office of Tax Analysis, establishes econometric relationships between tax return characteristics from IRS administrative data and the time and out-of-pocket costs reported by those taxpayers via an IRS taxpayer burden survey. The current methodology is based on the activities performed by the taxpayer rather than the actual forms and schedules used. The methodology also differentiates compliance cost based on tax characteristics and the amount of reported economic activity. The results control for the substitution of time and money by monetizing time and reporting total compliance costs in dollars.

### *1. Individual Taxpayer Burden Model (ITBM)*

Following the methodology in Contos et al. (2009a) and Contos et al. (2009b), which modeled the compliance burden of small businesses, we employ a log-linear specification in which the logarithm of the burden is linearly related to a set of explanatory variables, described in further detail in Contos, et al. (2010). The dependent variable is based on survey responses, and is defined as the logarithm of total pre-filing and filing compliance costs — that is, the monetized time and money taxpayers spend to comply with federal tax laws.

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<sup>6</sup> The modeling framework is adapted from Eichfelder and Schorn (2009), see Appendix C, <http://www.irs.gov/pub/irs-soi/13incometaxescompcostappc.pdf>.

Table 1 shows the estimated coefficients used in the ITBM based on updated information from the 2010 ITB survey. Note that the coefficient for the logarithm of modified positive income (MPI) is positive and less than one, so compliance costs increase with MPI, but at a decreasing rate.<sup>7</sup>

The most unique aspect of modeling compliance burden is the need to control for the type and volume of activities performed by taxpayers to meet their federal tax obligations. Therefore, we developed a proxy for the type of activities performed. Each tax item from the primary forms and schedules is rated as “Low,” “Medium,” or “High,” based on the notion that burden increases as a function of both the type of tax-related activities completed by the taxpayer as well as the volume completed. For example, if an individual completes an additional tax item one year, holding all else constant, compliance burden should increase because the taxpayer will have adjusted his record-keeping, familiarized himself with the relevant taxpayer instructions, or perhaps paid higher preparation fees.

**Table 1**  
Individual Taxpayer Regression Results

| Variable  | Burden Coefficients |             |
|---|---------------------|-------------|
|   | Estimate            | T-statistic |
| Intercept   | <b>-0.769</b>       | -3.700      |
| Ln(Modified Positive Income)                          | <b>0.289</b>        | 16.250      |
| Ln(Modified Positive Income) and Paid Prepared Return | <b>0.168</b>        | 10.580      |
| Low Complexity  | 0.006               | 10.140      |
| Medium Complexity                                     | <b>0.009</b>        | 21.860      |
| High Complexity                                       | <b>0.035</b>        | 10.340      |
| Ln(Line Count of Self Prepared Return)                | <b>0.399</b>        | 10.010      |
| Ln(Line Count of Software Prepared Return)            | <b>0.192</b>        | 7.930       |
| Ln(Line Count of Paid Prepared Return)                | <b>0.235</b>        | 8.750       |
| Paid Prepared Return                                  | <b>2.708</b>        | 10.900      |
| Software Prepared return                              | <b>1.180</b>        | 6.420       |

Note: Coefficients in bold are statistically significant at the 1 percent level.

<sup>7</sup> Modified total positive income (MPI) is defined as the sum of wages and salaries, taxable and nontaxable interest, dividends, state income tax refunds, alimony received, capital gains, gross retirement income, gross profit from Schedules C and F, gross profits from active participation in a partnership or S corporation, and certain other miscellaneous income reported on the tax return. Where the only source of income is from business, MPI reduces to total receipts.

As a proxy for the volume of activities, we use the money amounts reported by each taxpayer for that item. This is based on the notion that a larger dollar amount reported for a tax item is associated with more activity related to that item. The Low, Medium, and High coefficients (0.006, 0.010, and 0.039, respectively) apply to the logarithms of the sums of all the values on lines categorized as having the corresponding complexity. Based on these coefficients, an additional dollar of activity in the high category will increase burden more than an additional dollar in medium and low.

We include dummy variables to measure the effect of preparation method on compliance burden when self-preparation is the reference category. The remaining preparation categories represent paid and software preparation. The coefficients for the preparation dummies are positive because fixed costs are associated with using assisted methods.

As discussed earlier, the trade-off for additional tax preparation costs is a reduction in the amount of time it would have taken a taxpayer to research and complete the tax return unassisted. In addition to preparation of their tax returns, taxpayers may also receive tax-planning advice and can be reasonably assured that they receive all of the tax benefits to which they are entitled. Taxpayers may also benefit from representation in the event they are contacted by the IRS about their tax return.

To control for the efficiency gains associated with hiring a paid professional, we include in the specification an interaction term between the dummy variable for paid preparation and the logarithm of MPI. This interaction term takes into account the lower marginal compliance costs associated with using a paid preparer. To control for additional efficiency gains associated with hiring a paid professional or using software, we include three line count variables that reflect the difference in salience of inapplicable tax rules conditional on the taxpayer's preparation method.

## 2. *Business Taxpayer Burden Model (BTBM)*

For business entities, we use a model based on Slemrod and Venkatesh (2002) and Contos et al. (2009b). The dependent variable is the logarithm of total monetized compliance costs. Independent variables include the logarithms of total assets, total receipts, and the sum of dollars reported for line items requiring either very little or conversely significant tax-specific recordkeeping, and dummy variables for organizational form, industry, and use of a paid tax return preparer. Controlling for both assets and total receipts provides a better fit across a range of types and sizes of businesses. Dummy variables are used for cases where either assets or receipts are not reported.

Table 2 shows the results of the robust ordinary least squares (OLS) regression of the complete business econometric model. The estimated coefficient for the natural logarithm of Total Assets is (as expected) positive and significant at the one percent level. The same is true for the coefficient on the No Assets variable.

The estimated coefficient for the logarithm of Total Receipts is also positive and significant at the 1 percent level. The same is true for the No Receipts coefficient. The coefficient for High Complexity, 0.100, is positive and statistically significant at the

**Table 2**  
Business Survey Regression Results

| Variable                | Burden Coefficients |             |
|-------------------------|---------------------|-------------|
|                         | Estimate            | T-statistic |
| Intercept               | <b>4.057</b>        | 6.91        |
| Ln(Total Assets)        | <b>0.188</b>        | 17.22       |
| No Assets Indicator     | <b>1.649</b>        | 12.24       |
| Ln(Total Receipts)      | 0.139               | 8.17        |
| No Receipts Indicator   | <b>1.564</b>        | 7.16        |
| Low Complexity          | 0.005               | 0.64        |
| High Complexity         | <b>0.100</b>        | 5.94        |
| No Complexity           | <b>0.787</b>        | 3.06        |
| Partnership Indicator   | 0.067               | 0.96        |
| S Corporation Indicator | -0.013              | -0.21       |
| Self-Prepared Indicator | <b>-0.276</b>       | -3.3        |
| Positive Tax Liability  | 0.08                | 0.89        |
| Industry Controls       | YES                 |             |

Note: Coefficients in bold are statistically significant at the one percent level.

1 percent level. The fact that this coefficient is positive suggests that increases in the volume of high complexity activity increases total burden, controlling for other drivers of burden. The coefficient for Low Complexity (0.005), while insignificant, is expectedly lower than the coefficient for High Complexity. The coefficients for the remaining variables are also generally in line with our expectations. Using the model, we estimated that the annual compliance burden for business entities exceeds \$100 billion.

## V. HOW COMPLIANCE COSTS VARY AMONG TAXPAYERS

As discussed above, survey results are used as inputs for our estimates of individual taxpayer burden. These data also help us understand how compliance burden varies among taxpayers. This section shows just a few of the ways compliance burden can be analyzed.

### A. Individual Compliance Costs by Adjusted Gross Income

Table 3 presents individual compliance burden by adjusted gross income (AGI) expressed in terms of time, out-of-pocket costs, and total monetized costs. To monetize time for individual taxpayers, we assign an after-tax hourly wage rate based on the tax-

**Table 3**  
Individual Compliance Burden (\$) by AGI Strata

|                          | Population<br>(Thousands) | Time<br>(Hours) | Average<br>Out Pocket<br>Costs (\$) | Average<br>Monetized<br>Burden (\$) | Burden/<br>AGI (%) |
|--------------------------|---------------------------|-----------------|-------------------------------------|-------------------------------------|--------------------|
| Entire Population        | 142,985                   | 12.54           | 198                                 | 373                                 | 6.8                |
| No adjusted gross income | 2,577                     | 26.09           | 243                                 | 441                                 | --                 |
| 1 to 5,000               | 9,961                     | 7.30            | 73                                  | 127                                 | 83.3               |
| 5,000 to 10,000          | 12,278                    | 8.95            | 97                                  | 164                                 | 2.2                |
| 10,000 to 15,000         | 12,812                    | 10.34           | 114                                 | 192                                 | 1.5                |
| 15,000 to 20,000         | 11,742                    | 11.24           | 124                                 | 210                                 | 1.2                |
| 20,000 to 25,000         | 10,173                    | 11.30           | 128                                 | 222                                 | 1.0                |
| 25,000 to 30,000         | 8,961                     | 11.46           | 136                                 | 240                                 | 0.9                |
| 30,000 to 40,000         | 14,620                    | 11.74           | 148                                 | 268                                 | 0.8                |
| 40,000 to 50,000         | 10,991                    | 12.69           | 164                                 | 315                                 | 0.7                |
| 50,000 to 75,000         | 18,769                    | 13.44           | 192                                 | 380                                 | 0.6                |
| 75,000 to 100,000        | 11,828                    | 14.09           | 237                                 | 480                                 | 0.6                |
| 100,000 to 200,000       | 13,945                    | 14.51           | 328                                 | 670                                 | 0.5                |
| 200,000 and more         | 4,328                     | 29.79           | 1,250                               | 2,331                               | 0.5                |

payer's marginal tax rate, FICA tax rate (if applicable to income at the marginal rate) and Medicare tax rate. For self-employed taxpayers, we control for changes in net income by using a three-year average for year one and the two prior years. All taxpayers are assigned a monetization rate no less than minimum wage. An upper bound limitation is applied to take into account the fact that above a certain wage rate taxpayers tend to use a paid preparer because the value of their time generally exceeds what they would pay a preparer to complete the return.

These results indicate that compliance costs rise less-than-proportionately with size, consistent with the results of Slemrod and Blumenthal (1996) and Eichfelder and Schorn (2009).

Table 4 uses the five ITB survey complexity categories to illustrate how compliance costs vary based on tax return characteristics. We extend the table to \$115,000 AGI for the sake of illustration. A complete chart shows that average compliance costs tend to level off as AGI increases.

## B. Individual Compliance Costs by Major Segments of the Tax Code

One might think that the myriad of tax deductions and credits available to individuals would contribute to the bulk of the complexity faced by these taxpayers. However, as shown in Table 5, the elements of the tax law that deal solely with reporting income

**Table 4**  
Average Compliance Cost by AGI and Complexity Category

| AGI                   | Complexity Category |                                |                                 |
|-----------------------|---------------------|--------------------------------|---------------------------------|
|                       | One<br>(Low)        | Two<br>(Low-Medium and Medium) | Three<br>(High-Medium and High) |
| All amounts are in \$ |                     |                                |                                 |
| 0                     | 28                  | 115                            | 452                             |
| 5,000                 | 63                  | 146                            | 335                             |
| 10,000                | 86                  | 179                            | 384                             |
| 15,000                | 95                  | 188                            | 414                             |
| 20,000                | 100                 | 190                            | 467                             |
| 25,000                | 106                 | 196                            | 475                             |
| 30,000                | 111                 | 206                            | 480                             |
| 35,000                | 114                 | 222                            | 512                             |
| 40,000                | 119                 | 231                            | 533                             |
| 45,000                | 123                 | 237                            | 528                             |
| 50,000                | 125                 | 249                            | 518                             |
| 55,000                | 129                 | 259                            | 555                             |
| 60,000                | 132                 | 269                            | 574                             |
| 65,000                | 140                 | 281                            | 572                             |
| 70,000                | 137                 | 290                            | 593                             |
| 75,000                | 144                 | 302                            | 625                             |
| 80,000                | 144                 | 316                            | 616                             |
| 85,000                | 140                 | 322                            | 644                             |
| 90,000                | 143                 | 336                            | 677                             |
| 95,000                | 147                 | 337                            | 649                             |
| 100,000               | 151                 | 337                            | 693                             |
| 105,000               | 165                 | 367                            | 680                             |
| 110,000               | 159                 | 371                            | 718                             |
| 115,000               | 170                 | 374                            | 748                             |
| 120,000               | 176                 | 389                            | 714                             |

(before claiming any deductions or credits) comprise more than half of individual taxpayer compliance burden. The proration was derived by stripping away consecutive categories of burden (other taxes, AMT, credits, deductions, etc.). At each step, tax liability was recalculated based on the remaining categories to identify the taxpayers who no longer had a reason to file based on the remaining items. These taxpayers were

**Table 5**  
Allocation of Individual Taxpayer Compliance Costs

| Category               | Cumulative<br>Population with<br>a Reason to File<br>(Thousands) | Cumulative<br>Share of<br>Burden<br>(\$Millions) | Share of<br>Burden<br>(\$Millions) | Share of Compliance Burden (%) |                  |                 |
|------------------------|--|--|------------------------------------|--------------------------------|------------------|-----------------|
|                        |  |  |                                    | All<br>Taxpayers               | W&I<br>Taxpayers | SE<br>Taxpayers |
| Wages                  | 124,011  | 9,721  | 9,721                              | 18.2                           | 12.7             | 5.5             |
| Self-employment Income | 132,977  | 19,667   | 9,946                              | 18.6                           | 0.5              | 18.1            |
| Other income           | 136,974  | 29,203   | 9,536                              | 17.9                           | 10.3             | 7.5             |
| Deductions             | 136,974  | 42,807   | 13,604                             | 24.5                           | 7.3              | 17.2            |
| Credits                | 139,277  | 50,230   | 7,423                              | 13.9                           | 5.5              | 8.4             |
| AMT                    | 139,277  | 51,062   | 832                                | 1.6                            | 0.4              | 1.2             |
| Other taxes            | 142,985  | 53,364   | 2,302                              | 5.3                            | 1.4              | 3.9             |

removed from the burden estimation calculation. The resulting change in the estimated burden was assigned to the category that was removed.<sup>8</sup>

For example, as a first step we removed all of the tax-related reporting items that did not fit into one of the other categories. After removing these items, about four million (143 million minus 139 million) taxpayers no longer had a reason to file. When we re-estimated burden for the remaining taxpayers, the result was about 4 percent lower than total estimated burden. Thus, the “Other taxes” category is estimated to contribute 4 percent to overall estimated taxpayer burden for all individual taxpayers. We then broke out the share of compliance burden between wage and investment (W&I) taxpayers and self-employed (SE) taxpayers.

We found that over half of the individual income tax compliance costs are associated with reporting and substantiating income, even for taxpayers with relatively simple sources of income. Taxpayers with simpler sources of income also tend to have fairly simple deductions and credits, or none at all. Note that this analysis only considers the cost to the taxpayer. If we were to consider the costs of issuing information returns such as Forms W-2 and 1099, the overall share of income tax compliance costs would be even more heavily weighted towards reporting and substantiating income.

One thing that must be considered is that the measurement methodology discussed above ignores the impact that complexity has on what taxpayers choose not to do because it is too burdensome, such as choosing not to keep records necessary to claim a tax benefit or even not to comply with certain reporting requirements. Also, we recognize that we may undervalue self-employed taxpayers’ time, given that net self-employment income may not properly reflect the opportunity cost of starting a new business or the complexity associated with deductions that offset the business’s income.

### C. Business Compliance Costs

For business entities, we break down compliance burden in terms of either total receipts or asset size. Table 6 shows the estimated total monetized business compliance burden by revenue strata and business entity type, including costs passed through to the individual level and using a variable monetization rate based on entity size.

As shown in Table 6, compliance burden varies greatly depending on the type of entity and the entity’s gross receipts. As with individual returns, compliance costs tend to increase as income increases, but at a decreasing rate.

### D. Compliance Costs versus Compliance Burden

Virtually all estimates of compliance costs constructed by government and academic economists, including our own, are estimates of the social costs imposed on the economy by tax compliance. The estimates represent the upper bound on the direct costs imposed

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<sup>8</sup> Taxpayers are considered to have a reason to file if they have a filing requirement or are eligible for a refund.



**Table 6**  
Income Tax Compliance Costs (Tax Year 2009) from BTBM  
by Size of Receipts, Using a Variable Monetization Rate

| Total Receipts<br>(\$Million)                     |     |      | C Corporations | S Corporations | Partnerships | All      |
|---|-----|------|----------------|----------------|--------------|----------|
| Panel A: Average Compliance Costs (\$)            |     |      |                |                |              |          |
| 0   | to  | 0.10 | 4,700          | 3,900          | 6,700        | 5,300    |
| 0.10  | to  | 1    | 13,000         | 9,800          | 18,100       | 12,500   |
| 1   | to  | 10   | 35,700         | 27,600         | 43,500       | 34,000   |
| 10  | to  | 500  | 157,800        | 89,800         | 134,600      | 128,200  |
| 500   | and | more |                | 504,000        | 645,800      | 925,400  |
| All Receipt Sizes                                 |     |      |                |                | 13,400       | \$11,600 |
| Panel B: Total Compliance Costs (\$Billion)       |     |      |                |                |              |          |
| 0   | to  | 0.10 | 3.7            | 7.9            | 14.2         | 25.9     |
| 0.10  | to  | 1    | 8.8            | 16.6           | 14.9         | 40.3     |
| 1   | to  | 10   | 6.9            | 9.6            | 8.7          | 25.1     |
| 10  | to  | 500  | 4.2            | 2.2            | 4.3          | 10.7     |
| 500   | and | more | 1.7            | 0.0*           | 0.4          | 2.1      |
| All Receipt Sizes                                 |     |      | 25.3           | 36.3           | 42.5         | 104.1    |
| *Total compliance cost is less than \$50 million. |     |      |                |                |              |          |

on the taxpaying entities. Because some tax compliance costs, such as fees for tax planning and tax preparation, are deductible, the actual taxpayer burden incurred is reduced.

The impact of tax deductibility varies by the legal form of the taxed entity and can range from a negligible impact for individual taxpayers to very large for taxable corporations with taxation at the corporate level as well as on distributed dividends at the individual level. The spread between compliance costs and compliance burden depends on the value of the tax deduction for the compliance costs. For individuals, nonbusiness and investment-related out-of-pocket compliance costs (e.g., tax preparation fees, cost of investment advice) are deductible only if the taxpayer itemizes deductions and then only to the extent that the total of these costs and certain other miscellaneous deductions exceed 2 percent of AGI. Thus the difference between a taxpayer's compliance costs and the associated burden is very modest for nonbusiness compliance costs. For partnerships and S corporations, compliance costs directly reduce the taxable income of partners and S corporation shareholders. For C corporations, deductible compliance costs reduce the amount of income subject to tax, and also reduce the taxable income on which dividends are paid.

For example, suppose Corporation A has an average marginal tax rate of 30 percent at the federal level. For this purpose, ignore the state tax and dividend paid deductions. Under these assumptions, \$1,000 of deductible tax compliance expenses reduces tax paid at the corporate level by \$300. Thus, the corporation's net compliance burden is \$700. The other \$300 in cost has been shifted to other parts of the economy.

## VI. CONCLUSION

Our results suggest that over half of individual income tax compliance costs are associated with reporting income. Consistent with the rest of the literature on this topic, we find marginal costs decrease with the scale of reporting. Additional complexity is mitigated by the application of technology and specialized expertise providing further decreasing marginal costs after an initial investment. Deductibility of compliance costs changes the economic incidence of compliance burden and associated taxpayer incentives.

The tax law already includes many examples of compliance cost mitigation efforts, such as safe harbors, information reporting, book/tax conformity, and allowing deductions for certain tax preparation expenses. Managing compliance costs benefits from obtaining information from whoever can provide it at the lowest marginal cost and evaluating that public cost against the benefit of the information for tax administration.

Understanding the relationship between income taxes and compliance costs can help focus compliance cost management efforts to areas of greatest impact. Examples of promising approaches are the minimization or elimination of reporting requirements when the information obtained is of little use to tax administration, consideration of whether the benefit of a policy outweighs its reporting costs for various taxpayer segments, and mitigating the main drivers of taxpayer compliance costs.

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## DISCLAIMERS

The views represented are those of the authors and do not necessarily represent the views of the Internal Revenue Service or the U.S. Department of the Treasury.

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## APPENDIX A: DEFINITION OF 2010 ITB COMPLEXITY STRATA

| <b>Table A1</b> |  |
|-----------------|--|
| Strata          | Definition   |
| Low             | Wage income<br>Interest income<br>Unemployment income<br>Withholding<br>Earning income tax credit (with no qualifying children) or advanced EIC<br>Does not meet any of the conditions for higher levels of differential burden  |
| Low-Medium      | Capital gain income (includes capital gains distributions and undistributed capital gains)<br>Dividend income<br>Earned income tax credit (with qualifying children)<br>Estimated tax payments<br>Retirement income (includes SS benefits, IRA distributions, or pensions and annuities)<br>Any non-refundable credit (includes child and dependent care expenses, education credits, child tax credit, elderly or disabled credit)<br>Household employees<br>Nonbusiness adjustments<br>Does not meet any of the conditions for higher levels of differential burden  |
| Medium          | Itemized deductions (includes mortgage interest, interest paid to financial institutions, charitable contributions, and medical expenses)<br>Foreign income, expense, tax, credit, or payment<br>Moving expenses<br>Simple Schedule C or C-EZ<br>General business credit<br>Does not meet any of the conditions for higher levels of differential burden   |
| Medium-High     | Farm income as reported on Schedule F<br>Owns rental property as reported on Schedule E, including farm rental and low income housing<br>Estate or trust income as reported on Schedule E<br>Employee business expense deductions<br>Files AMT without AMT preference items<br>Prior year alternative minimum tax credit<br>Investment interest expense deduction<br>Net loss as reported on Schedule C<br>Depreciation or amortization as reported on Schedule C<br>Expenses for business use of home as reported on Schedule C<br>Does not meet any of the conditions for higher levels of differential burden |
| High            | Cost of goods sold as reported on Schedule C<br>Partnership or S-Corp income as reported on Schedule E<br>Files AMT with AMT preference items  |

## APPENDIX B: 2010 BTB SAMPLING STRATA

**Table B1**

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**Preparation Method Strata**

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1. Self-Prepared
  2. Paid Prepared (defined as presence of a paid preparer)
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**Total Revenue Strata**

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**Self-Prepared**

1. Less than \$5,000
2. \$5,001–\$100,000
3. \$100,001–\$1,000,000
4. \$1,000,001 or more

**Paid Prepared**

1. Equal to zero
2. \$1–\$5,000
3. \$5,001–50,000
4. \$50,001–\$100,000
5. \$100,001–\$500,000
6. \$500,001–\$1,000,000
7. \$1,000,001–\$5,000,000
8. \$5,000,001–\$10,000,000
9. \$10,000,001 or more

