Recent Research on Small Business Compliance Burden*

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Abstract

The IRS Office of Research is currently developing improved methods to measure and model U.S. small business federal taxpayer compliance burden. Characteristics of this population include having "burden without liability" and suffering "diseconomies of lack of scale". In addition, much of their burden is associated with activities "behind the forms" not easily linked to details of their tax return data. Recent research initiatives focusing on small business income and employment tax burden present a number of challenges, particularly identifying activities incremental to the federal tax system beyond those foundational to the ordinary course of business, and uncovering the determinants and structure of fees paid to outside tax preparers and other paid professionals. In this paper, we focus on the implications of our qualitative research on small business compliance burden for burden measurement and model design, and discuss some of the challenges of estimating and simulating money burden for this population.

Introduction

As discussed in Stavrianos and Greenland (2002), Arena *et al* (2003), Guyton *et al* (2003), Lerman and Lee (2004), and Holtzblatt (2004), the Internal Revenue Service (IRS) is developing microsimulation models of taxpayer compliance burden, starting with the Individual Taxpayer Burden Model (ITBM). For this research, taxpayer compliance burden consists of the time and money spent by taxpayers to comply with the federal tax system, above and beyond the tax liability remitted to the federal government.[1] This paper provides a discussion of some of the recent research at IRS on designing and developing an analogous microsimulation burden model of small businesses as discussed in DeLuca *et al* (2003) and Kindlon (2004). As defined by IRS, small businesses are corporations or partnerships with under $10 million in assets.[2] The research at IRS builds on an extensive body of international research measuring compliance burden surveyed in Evans (2003).[3]

Each of the IRS compliance burden studies has four major phases. In the research design phase, IRS seeks to identify key research goals, establish functional objectives for the burden model, and develop a research plan. In the data collection phase, IRS (via its contractor) administers a mixed-mode (telephone

and mail) survey to a large sample of taxpayers. Survey responses are merged with IRS administrative data, yielding an analysis data file. In the model design and development phase, relationships are specified that form the underpinning of the burden model. Included in this step are the development of a tax calculator, the mapping of tax system complexity to taxpayer characteristics, and the econometric estimation of compliance burden relationships. Finally, in the model implementation phase, a software tool is developed allowing users to run "what if" simulations and generate summary reports.

Developing a Small Business Microsimulation Model presents several new challenges beyond those encountered in developing the ITBM. The first is the predominance of "burden without liability". Small businesses typically pass through income/liability to their owners, but most of the burden stays with the entity.[4] Second is the ability of many businesses to choose how they will be treated for federal income tax purposes (e.g., using the check-the-box rules).

Other challenges are more differences of degree from our previous work. Small businesses are more likely to incur burden associated with multiple types of taxes. Small businesses are more likely to use a variety of paid professionals (e.g. payroll vendors, accountants, lawyers). Small business time burden predominantly consists of activities other than form completion, primarily record keeping and tax planning. We also expect greater variation in burden across industry groups for small businesses than determined for self-employed taxpayers. Widespread use of paid preparers results in much more of the compliance burden to be experienced as an out-of-pocket cost to the taxpayer.

Another difficult problem is determining which activities are "foundational". Foundational activities (such as tracking revenue) are done primarily to successfully manage the business and would be completed even in the absence of the Federal tax system. Incremental activities are done specifically to comply with the federal tax system. For small businesses, it is difficult to identify which activities are foundational and which are incremental – many foundational activities also facilitate tax compliance. State tax burden is assumed to have little marginal impact beyond federal tax burden. After summarizing the findings from our qualitative research, we will return to the subject of challenges with an in-depth

focus on our plan of estimating out-of-pocket money burden in general and paid professional fees in particular.

Qualitative Research on Small Business Compliance Burden

The implementation phase of this project began by conducting in-depth case studies with small business taxpayers.[5] The case studies were designed to support four major research objectives: 1) guide questionnaire development by identifying activities that are tax-related and burdensome, 2) assign priorities to different topics, identifying difficult topics that require probes, 3) reveal new issues, and 4) guide development of imputations from administrative data. Combining survey data, administrative data, and case study information will provide a robust set of data inputs. The case studies also were used to guide the modeling effort by supporting simulation of taxpayer behavior and guiding selection of inputs to the burden estimation equations.

Income Tax Qualitative Research Findings: Record Keeping

The majority of small business taxpayers with whom we spoke use a software system such as QuickBooks, Peachtree, or some industry specific package to maintain records. The decision to use software is driven primarily by foundational business reasons. Often this software has to be modified to accommodate tax information. Small business taxpayers exhibit many common tax-related record keeping activities, including obtaining and organizing tax-related records and receipts, entering tax-related information into a software based accounting system, using data from their record keeping system to produce reports needed for tax compliance, and checking inputs into the accounting system for accuracy, identifying and correcting errors.

Nearly all the small business taxpayers included in our study expend time obtaining and organizing tax-related records and receipts, and entering this information into their accounting system. These record keeping activities are cited as among the most time consuming activities by a high number of taxpayers. The types of receipts and records taxpayers mentioned frequently include: meal and entertainment expenses, mileage logs, receipts related to capital purchases, and records of charitable contributions.[6] The number of receipts or transactions is reported to be a key driver of record keeping burden.

Employment Tax Qualitative Research Findings: Record Keeping

The most frequently mentioned record keeping activities for employment tax are: collecting W-4 information from employees, determining whether workers are properly classified as employees or contractors, determining the tax treatment of certain types of compensation (e.g., benefits), entering information into an employment tax system and checking entries for accuracy. Key drivers of employment tax record keeping burden include: number of employees, whether or not a payroll vendor is used, industry of the business, and presence of certain types of compensation (e.g. tip income, in-kind benefits, supplemental wages, sick pay, reimbursed business expenses).

The majority of taxpayers with whom we spoke use a payroll vendor to complete both payroll and employment tax compliance activities. The key reasons given for using a payroll vendor are:

Cost Savings – Many of the small business taxpayers interviewed explain that it is extremely cost effective for their business to use a payroll vendor. The amount that they pay for payroll, employment tax form preparation, tax deposits, and preparation of information returns is far less than it would cost if they decided to handle these activities in-house. Still, small business bearing these compliance costs suffer from the "diseconomies of lack of scale" described in the literature.[7]

Accuracy of Payroll/Employment Tax Information – Taxpayers also explain that they use a payroll vendor to ensure the accuracy of their payroll, tax withholdings, and employment tax forms, and the timeliness and accuracy of employment tax payments. Using a payroll vendor to handle these tasks increases the accuracy of these activities and reduces the chance that the business will face scrutiny or penalties from the IRS.

Privacy – Some small business owners feel more comfortable having financial information maintained by a vendor outside the company. They believe that this information is kept more securely and accurately than it would be in-house.

Qualitative Research Findings: Tax Planning

Many taxpayers work with a paid professional for tax planning. Preparing for these meetings is cited by many as being time consuming. The most common tax planning activities center on business

structure, capital expenditures, and shifting income between entities or across tax years. Most tax planning occurs near the end of the fiscal year when businesses focus on trying to reduce taxable income. A common characteristic of this population is that they have a taxable income of exactly $0, thus exhibiting "burden without liability". For C-Corporations this is typically the result of deliberate end-of-year planning.[8]

Businesses that handle depreciation internally experience significant burden. Key drivers of depreciation burden include types of assets, number of assets, and industry specific depreciation methods. Avoiding the burden of tracking depreciation was cited as one of the factors driving use of external paid professionals.

Small business taxpayers with certain characteristics are more likely to engage in tax planning:

Small businesses that are profitable – Profitable businesses engage in tax planning to reduce their taxable income.

Small businesses with owners sophisticated in finance or accounting – Owners with backgrounds in accounting or finance have a better understanding of tax planning strategies and are more likely to engage in this activity.

Small businesses who use paid professionals that encourage tax planning – Paid professionals have a major influence on the level and types of tax planning that take place.

Small Business Burden Estimation and Simulation

There are a number of major challenges to estimating and simulating small business compliance burden. While guided by theory, separating foundational business costs from costs incremental to the federal tax system can be difficult to operationalize. Another challenge is identifying burden drivers not easily observed from IRS administrative data. Much of small business compliance burden is tied to activities (*e.g.*, record keeping, planning, detailed calculations) "behind the forms".[9]

Also, jointly estimating time and out-of-pocket money burden within a conceptual framework in which software costs and paid professional fees are seen as substitutes for time burden represents an important challenge to undertake in support of realistic microsimulation functionality. Estimating tax

planning time (and fees for tax planning services) as substitutes for tax liability (or other after-tax costs passed through to the owners) requires the model to consider the interaction between compliance burden and liability burden.

It is also difficult to develop methods both for allocating existing burden across the tax system and for simulating marginal changes in burden given tax system changes. This problem underscores the need for further theoretical development. It is all too easy to find and use proxy drivers of burden that have strong explanatory power but yield poor simulation performance. This problem is particularly challenging for taxpayers using paid professionals (i.e., most of our population of interest). For example, lumpy pricing and competitive pressure among providers makes it very difficult to disentangle the drivers of paid professional fees.

Estimating Out-of-Pocket Costs for Small Business Taxpayers Using Paid Professionals

A key component in building our simulation model is to determine paid professional fees that are incremental to federal tax compliance. This requires uncovering how much small business taxpayers are willing to pay for professionals to comply with the federal tax system.

Most small businesses use a paid professional to prepare their federal income and employment tax returns. These paid professionals include certified financial planners, accountants, tax advisors, and tax lawyers. They provide federal-tax-related services including a variety of activities such as record keeping, tax planning, preparation and submission of tax returns. In addition to the federal-tax-related services, typically, the paid professionals also provide other general accounting services and state and local tax-related services that are foundational to operating a small business.

Although small businesses pay professionals for a variety of services, it's difficult to obtain accurate data on how much they pay for each service separately. It was during our qualitative research that we learned that taxpayers typically pay a lump-sum fee and they either don't know or don't remember precisely the detailed breakdowns. Recognizing this, we focused in our survey on, among other things, the lump-sum amount a small business spent on paid professionals. We also focused on what kind of

services they received, as we believe information on what kind of services that they purchased are more reliable than how much they spent on each one of these services.

In addition to uncovering what portion of the total fee is paid for services related to federal tax compliance, we also need to develop a mathematical relationship between the willingness to pay and some measures of tax law complexity that we can use to run "what-if" simulations with our model. One available and appropriate tool for these two tasks is the hedonic price theory (Rosen, 1974)[10]. We plan to investigate application of this theory in building our simulation model. While the focus of this discussion is on paid professional fees, a similar approach will also be considered for other out-of-pocket costs such as for business accounting software[11].

Using the hedonic approach, we treat paid professionals as providing a highly differentiated service with numerous characteristics. These characteristics include both general accounting activities foundational to run a small business (such as general accounting, book-keeping, and state and local tax preparation) and activities that are related only to federal tax compliance (such as preparing different federal tax forms, tax planning, federal-tax-related record keeping). In addition to these observable activities, the characteristics also include things that differentiate one paid professional from another, such as type of professionals (*e.g.*, accountant, lawyer, financial advisor, payroll vendor), reputation, accessibility, experience, fee structure, and flexibility in client participation.

According to the hedonic model, the lump-sum amount spent by small business on the paid professional service is a function of these characteristics. Generally, it is defined as a hedonic price function: $P(x) = f(x_1, x_2,\ldots, x_k)$, where $P(x)$ is the observed lump-sum amount paid, and $x_1, x_2,\ldots, x_k$ are the amounts of the characteristics obtained in the paid professional service. The hedonic price theory shows that the partial derivative of $P(x)$ with respect to x_i is the shadow (or implicit) price of the characteristics of x_i. It measures the small business taxpayers' willingness to pay for an additional unit of x_i.

We are conducting two independent surveys of small businesses, one for federal income tax and the other for federal employment tax. Based on our research it is not common for one preparer to provide both

services to the same business. Therefore, it is acceptable to treat federal income tax and employment tax separately and consider constructing two similar hedonic price functions. We illustrate the potential approach in discussing federal income tax.

Hedonic Price Function for Federal Income Tax Compliance Services

In this case, P(x) would be the annual spending on paid professional services collected from our small business federal income tax survey. Also collected from the survey are the types of services they purchased for the survey year. These services constitute the characteristics of a particular paid professional service a small business purchased. They are represented as x_1, x_2… x_k in the hedonic price function. Specifically, they are the following activities:

1. Federal business income return preparation
2. Federal individual income return preparation
3. Employment tax services
4. Payroll services
5. Submission of business federal income tax return
6. Excise tax services
7. State and local tax services including sales and use tax
8. Bookkeeping services
9. Income tax estimated tax payment services
10. Legal services
11. General non-tax business advisory services
12. Assets depreciation calculation and bookkeeping
13. Other accounting services
14. Tax planning.

The variable x_i takes the form of a dummy variable, with a value of 1 if the ith activity is purchased, and 0 if not. Here the goal is to estimate the marginal value of activities that are incremental to the federal business income tax compliance, while controlling other activities (not directly related to the

federal business income tax) that also affect the price. We will also consider replacing the first activity, federal business income tax return, with three variables, each representing which IRS primary income tax form is filed (Form 1120, 1120S, or 1065). These data are available from IRS administrative files.

The hedonic price function could include additional independent variables that describe the characteristics of small business taxpayers and that may also affect their willingness to pay. Additional variables under consideration (available either from our survey or from IRS administrative data):

15. Type of firm legal entity
16. Number of vehicles owned
17. Value of assets with useful lives each in excess of one year
18. Number of assets with a useful life in excess of one year
19. Number of hours spent on business federal income tax
20. Number of employees
21. Number of independent contractors
22. Age of the business
23. Gross revenue
24. Business federal income tax liability
25 Type of industry
26. Real property owner
27. Dividend payer
28. Subsidiary

Remaining econometric issues

In estimating the hedonic price function, we must specify a functional form with an error term. The common choices suggested in the economic literature are linear, exponential (semi log), power (double log), logarithmic, translog, and Box-Cox.[12] Since economic theory does not indicate which functional form is better than another, the common practice in empirical research is to estimate a number of

functional forms and choose the one that fits the data better, or in our case, results in better simulation results.

Another econometric issue is the choice of estimation method. The goal is to have unbiased and efficient estimates. A particular challenge is that some characteristic variables are unobservable or with no data (such as paid professionals' reputation). As a result, we have to either use a proxy or omit them from the hedonic price function. If these omitted variables are correlated with any of the included characteristic variables, the estimates for the included variables will be biased. Such bias must be considered in selecting a suitable estimation method.

Conclusions and Future Research

As discussed above, understanding and modeling the drivers of small business compliance burden is a complex task. We are approaching the task by breaking time and money compliance burden into separately measurable components with distinct drivers. Based on our qualitative research, the most important sources of compliance burden are record keeping time, tax planning time, and out-of-pocket costs for paid professional tax services.

The next steps in completing development of the Small Business Burden Model are to finish data collection, perform burden estimation (with consideration to the econometric issues discussed above), and implement a microsimulation model. We expect completion of this work will be of significant interest to economists and policy analysts. Overall compliance burden for this population is expected to be much larger as a percentage of overall income tax liability than for individuals or large corporations, given that a large percentage of small businesses have no income tax liability at the entity level.

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Endnotes

[1] In addition to completing and submitting tax forms, federal tax compliance burden can include record keeping, tax planning, gathering tax materials, using IRS services, and working with a tax professional. This intuitive definition of compliance burden has the further advantage of eliminating redundancies and potential inconsistencies across burden components (e.g. it avoids double counting tax liability burden that is picked up elsewhere in revenue estimates). Many activities and costs commonly associated with tax compliance are necessary not only to comply with the federal income tax system, but also for other purposes such as state taxes or loan applications. In cases where a single activity is motivated both by federal tax requirements and by other requirements or interests, the joint costs of the activity must be allocated. A reasonable approach is to designate one set of activities as foundational, and assign all joint costs to the foundational activity set. The definition used in this study treats federal tax requirements as foundational to state tax requirements, and other requirements (e.g., financial planning and reporting) as foundational to both federal and state tax requirements.

[2] Businesses operating as sole proprietorships were previously studies in developing the ITBM.

[3] The authors would particularly like to thank Professor Joel Slemrod of the University of Michigan and Professor Binh Tran-Nam of the University of New South Wales for helpful discussion during the design phase of the study.

[4] This suggests reconsidering how we think about compliance costs as a percentage of revenue yield. The result is not very meaningful when the denominator is zero (or close to zero). For the U.S. small business population we might consider adding the associated compliance burden to that of individuals (and likewise adding the small associated tax to the total individual tax collected) and recomputing a combined compliance-to-yield ratio for the two populations. Such a combined ratio would presumably be higher than the standard compliance-to-yield ratio for individual taxpayers.

[5] See Kindlon (2004) referenced above.

[6] Interestingly, we were told by preparers that many of their small business corporate clients keep records only needed for the Alternative Minimum Tax (AMT) even though very few actually pay AMT. Preparers told us their clients do this to be prepared should they be subject to AMT in the future. This information led us to add a question on our income tax survey focusing on record keeping for AMT.

[7] Evans (2003, p. 72) tells us "most of the studies tell us that smaller businesses carry disproportionately higher compliance costs."

[8] This finding was confirmed in our in-depth interviews with tax professionals and in our discussions with small business trade associations.

[9] The authors would like to thank Susan Nelson of the U.S. Treasury Office of Tax Analysis for this insight.

[10] This theory treats consumers' demand for a good as an implicit demand for the characteristics that embody the good. The theoretical foundation was formalized by Rosen (1974). For example, the demand for personal computers is a demand for RAM capacity, hard drive size, display resolution, CPU speed, etc. Hedonic techniques have attracted the interest of economists as a means of measuring values, also called shadow price or implicit price, of these characteristics through the market price of the good that is embodied by these characteristics. Examples are applications to the personal computer market (Berndt, etc. 2001), wine industry (Combris etc. 1997), and housing market (Palmquist *et al* 1984). Moulton (2001) surveys the role of hedonic methods in improving official price indices in the United States.

[11] Some business accounting software are used for both general business accounting and tax related purposes. Therefore, the issue here is the same: We need to uncover the portion of the total software cost that is used for federal tax compliance. Hedonic price approach could be a tool for this task.

[12] See Blackley *et al* (1984).