

# TAXPAYER COMPLIANCE COSTS FOR SMALL BUSINESSES: EVIDENCE FROM CORPORATIONS, PARTNERSHIPS, AND SOLE PROPRIETORSHIPS\*

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## INTRODUCTION

**T**HE TAXATION OF CORPORATE PROFITS IN THE United States has been one of the most widely discussed issues in the area of public finance. Corporate revenues are currently subject to double taxation. Profits are taxed first on the corporate level and then, when distributed as dividends or when capital gains are realized, taxed a second time on the individual level. An often overlooked expense borne by business taxpayers is the cost to respond to the requirements of the U.S. federal tax system. The income tax compliance burden is the time and money spent by taxpayers on pre-filing and filing activities. Both taxable and pass-through entities incur compliance burden and if their compliance burden is significantly different then it could be an additional cause for inefficiency.

To measure compliance burden for small businesses the Internal Revenue Service (IRS) has deployed since 2006 the Small Business Burden Model (SBBM). The model is driven by compliance burden estimates collected by a survey of business entities with end-of-year assets of less than \$10 million.<sup>1</sup> This model complements the IRS Individual Taxpayer Burden Model (ITBM) in use since 2003 and using new burden survey data collected in 2008-2009. These models cover pre-filing and filing activities, such as tax-related recordkeeping and planning, that would not have incurred without a federal tax system while excluding psychological costs and deadweight losses from economic behavior changes. Compliance costs incurred post-filing as a result of amended returns or IRS enforcement processes are also outside the scope of these models (Guyton et. al, 2003).

The paper discusses the current econometric specifications for the SBBM and the ITBM, with the emphasis on sole proprietor and schedule E income in the individual model. These models and

associated burden measurements are compared with previous findings for the large business population reported by Slemrod and Venkatesh (2002). After addressing this broader context, the paper focuses on the compliance burden aspects of flow-through entities in comparison with other entity forms including C-corporations appearing to operate as implicit pass-through entities.

## BUSINESS TAXPAYER BURDEN MODELING APPROACH

As discussed earlier, the primary objective of the SBBM is to explain small business compliance burden. We developed a model reflecting the recent public and corporate finance literature and use current statistical techniques. In addition, we wanted a model that could easily be adapted to changes to the tax system and the economy overall. Finally, we wanted to develop a model that had the potential to be adapted and generalized to model compliance burden for other taxpayer populations, such as large and medium-size businesses, individual taxpayers, and tax exempt entities.

### Economic Model

To model compliance burden for small businesses we assume that business entities select the combination of capital and labor that allows them to respond fully to the requirements of the U.S. federal tax system while minimizing compliance costs.<sup>2</sup> This assumption may not hold true for all firms all the time but we believe that for-profit entities tend to adopt a compliance process that reduces costs. For example, small and young entities have limited budget so they tend to handle more pre-filing and filing activities in-house. The owners often maintain the financial books and other business records, and substantially perform tax preparation activities such as reviewing the tax rules, preparing tax records, completing, and submitting all tax forms. As firms grow they have more business transactions to account for and the business owners face higher opportunity costs on

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\*The views expressed are those of the authors and not the official positions of the U.S. Treasury Department or the Internal Revenue Service.

the time spent dealing with payroll, recordkeeping, and other paperwork. Consequently they are more likely to invest in recordkeeping software and hire full time recordkeeping staff or employ paid professionals for business activities, such as payroll. The improved infrastructure leads to less time needed for the tax-related activities. In addition, the firms' management becomes more familiar with the federal tax system and its requirements or hires paid tax preparers leading to further reduced compliance costs. Given this assumption, to model compliance burden for small businesses we examined the hypothesis that as business entities grow their compliance costs increase at a decreasing rate. A number of authors (e.g., Slemrod and Blumenthal, 1996; Eichfelder and Schorn, 2009) have found evidence that the compliance costs rise less than proportionately to size when studying different groups of taxpayers in a number of countries.

#### The Data Set

The compliance burden data used by the SBBM are 7,049 surveys collected on behalf of the IRS, as discussed in DeLuca et al. (2008). The sample frame was small business taxpayers who filed a return during Processing Year 2003, that is all returns that were processed between January 1, 2003 and December 31, 2003. The population of SB taxpayers was defined as businesses (filers of Forms 1065, 1065-B, 1120, 1120-A, 1120-S, 1120-REIT, 1120-RIC, 1120-L, 1120-PC, 1120-F, 1120-FSC, 1120-ND, 1120-SF, 1120-POL, and 1120-H) with end-of-year assets of less than \$10 million. The sample is a stratified random sample which, when weighted, represents the small business population.

The survey collected information on both the time and money that businesses spend on pre-filing and filing activities. Each survey was then linked to the matching administrative record to create the estimation data set. The administrative record includes selected items from the primary tax forms and various secondary forms and schedules. Both the survey and administrative records were extensively reviewed and cleaned for memory recall, administrative, or processing errors. The data received further cleaning through the application of robust regression methods. Data missing as a result of incomplete responses or robust regression were imputed using multiple imputation techniques as discussed in Contos et al. (2009).

#### Econometric Model

To model the conditional distribution of taxpayer compliance burden, we employ a log-linear regression specification in which the natural log of burden is linearly related to a set of explanatory variables. This type of a model is supported by the results of the small business survey as well as findings of a Large and Mid-Size Business (LMSB) taxpayer survey conducted by Slemrod and Blumenthal (1996) and Slemrod and Venkatesh (2002).

Given that one of the objectives of this modeling effort is to estimate burden in future years using IRS administrative data, the choice of independent variables was limited to IRS data. Running through the SBBM administrative files from subsequent tax years allows us to produce burden estimates for those years. The dependent variable, *log (Burden)*, is of course based on survey data. As discussed earlier, the survey collected information on both the time and money that businesses spend on pre-filing and filing activities. In order to control for substitution of time and money and to aggregate across burden activities we created a single measure of compliance burden. The key choice was whether to monetize the value of time and add it to the out-of-pocket costs or rather to chronotize the out-of-pocket costs and add it to time. We opted for the former for both technical and program management reasons.<sup>3</sup> Total monetized burden is equal to the sum of monetized time spent on pre-filing and filing activities and out-of-pocket costs.

Following the corporate finance literature, the model controls for two key firm characteristics: size of the entity and industrial classification. As a proxy of size we use the *log of total receipts* in the current period.<sup>4</sup> Following the work of Slemrod and Venkatesh (2002) we also include a dummy for zero total receipts. The dummy is set to one for firms with zero reported total receipts and zero for entities with reported total receipts greater than zero. The firm's industrial classification is defined at the two digit North America Industry Classification System (NAICS) level. To better support "what-if" type analysis and reporting for various small business subgroups, a number of dummies and interaction terms were included in the model. The dummies were based on the preparation method (equal to one for self preparers) and on the type of tax form each entity filed.

The most unique aspect of modeling compliance burden is the need to account and control for the type and volume of activities performed by each

individual taxpayer in response to their federal tax obligations. To do so we developed a proxy for the type of activities performed. Each tax item from the primary forms and schedules was organized into one of three complexity categories; *low*, *medium*, and *high*. The complexity categories are based on the notion that burden increases as a function of both the number and the type of tax related activities. More specifically, if a business has to complete an additional tax item this year, keeping everything else the same, compliance burden will increase since the business will need to adjust its recordkeeping, familiarize itself with the relevant taxpayer instructions or pay higher preparation fees, etc. The increase in burden will also be a function of the extent to which the activity differs from the non-tax activities involved in managing a business (e.g., the business-related recordkeeping and planning activities).

To develop the complexity categories we initially placed the various tax items into categories based on the recordkeeping intensity, tax planning activities, and overall complexity of extracting that information from the entity’s financial books. More specifically, the low category includes items that are recorded and reported at an aggregate level. The medium category includes items that require additional recordkeeping and are reported to the IRS separately. Many of the items included in the medium category require attaching worksheets documenting how the totals were determined. Finally, the high category includes items that may require a separate recordkeeping system or a process with potentially separate rules for each item. Tracking records across years is an additional component for most items in this category.

To test the assignment criteria the model was then run with each item as a separate right-hand-side variable. The magnitude of the estimated coefficients was compared with the rest of the items in that complexity category. Items that had coefficients significantly different than their peers were moved to a more suitable category.<sup>5</sup>

As a proxy for the volume of activities, we used the money amounts reported by each entity for that item. This is based on the notion that the larger the amount reported on a tax item the more transactions should typically be associated with the activities related to that line. The value of each complexity category is equal to the sum of the logs of one plus the amount reported for each item. By utilizing the properties of logarithms in the com-

plexity categories, the equation acquires a desirable property. Each tax item included in the buckets acts as a separate regressor but with the coefficients of all items in the same category restricted to be the same. The equation estimated is:

$$(1) \quad \text{Log of (Burden)}_{it} = b_0 + b_1 \text{Log of (Total Receipts)}_{it} + b_2 \text{No Receipts}_{it} + b_3 \text{Low}_i + b_4 \text{Medium}_i + b_5 \text{High}_i + b_6 \sum \text{Industry dummies}_{it} + b_7 \text{Nopaid}_{it} + b_8 \text{Partnership}_{it} + b_9 \text{Ccorp}_{it} + b_{10} D_{it} + \varepsilon_{it}$$

The letter *i* indexes the business entity; *Log(Burden)* is the log of total monetized compliance burden; *Log(Total Receipts)* is the measure of size; *No Receipts* is a dummy set to one for entities that had total receipts equal to zero; *Low*, *Medium*, and *High* are the three complexity categories; the *Industry dummies* includes the industry dummies; *Nopaid* is a dummy set to one for entities that prepared their tax returns in-house and zero for firms that used a paid preparer; the *Partnership* dummy is set to one for entities that filed on Form 1065 (partnerships and most limited liability companies); the *Ccorp* dummy is set to one for entities that are organized as subchapter C corporations (filed on Form 1120); and *D* includes additional control variables and interaction terms based on the preparation method, organizational form type, and industry code.

**Simulation Issues**

The SB population is very diverse and covers businesses in a large range of asset classes; however, the majority of the entities is concentrated in the lower asset classes. Our log-linear regression specification addresses the inherent skewness in the compliance burden data. (Manning and Mullaby, 2001). In addition, since the model’s objective is to support tax policymaking through “what-if” type analysis, the SBBM needs to perform satisfactorily in estimating compliance burden for subgroups of the business population and across the overall population. All these issues led us to use a number of statistical techniques that improved the representativeness of the model across the entire population. The technical aspects of these techniques are discussed in detail in Contos et al. (2009).

**Simulated Burden Estimates**

Column 2 of Table 1 shows the distribution of the reported burden and column 3 shows the

Table 1  
**Reported and Predicted Small Business Income Tax Compliance Burden**

<i>Quantile</i>	<i>Reported Burden</i>	<i>Predicted without Transformation Adjustment</i>	<i>Predicted with Transformation Adjustment</i>	<i>Predicted with Simulated Draw of Error Term</i>
1	2	3	4	5
99%	63,938	19,673	28,388	58,122
95%	29,244	12,053	18,497	29,072
90%	19,217	9,380	14,838	19,409
75% Q3	9,303	6,192	10,271	9,555
Median	3,762	3,685	6,813	4,051
25% Q1	1,522	2,386	4,458	1,612
10%	655	1,381	2,691	646
5%	350	894	1,767	354
1%	103	236	493	92
Mean	8,055	4,817	8,071	8,071

distribution of the predicted burden before any additional adjustments to account for the average contribution of the error term to the level of burden. Such an approach effectively produces estimates of the median burden for each observation in the sample rather than the mean (expected) burden. Not surprisingly, the median of the predictions in column 3 is rather similar to the median of the reported burden distribution in column 2. On the other hand, the mean of the predictions in column 3 is well below the mean reported burden, which reflects the fact that the median of a highly right-skewed distribution falls well below the mean of the distribution. Column 4 shows the distribution of the predicted burden after the parametric approach is used to account for the average contribution of the error term to the level of taxpayer burden. The estimated mean (8,071) is much closer to the reported mean (8,055) than that reported in column 3 (4,817). Although our non-stochastic micro-simulation approach based on an econometric estimate of the expected level of taxpayer burden for each observation in the sample does a rather good job of estimating the mean burden, observe that it fails to adequately represent the percentiles of the reported burden distribution. Column 5 presents the results based on our stochastic micro-simulation methodology under which we randomly draw values from the distribution of the error term in our regression model and employ

these random draws in our prediction formula for the taxpayer burden distribution, as discussed in Contos et al. (2009). As the results indicate, our stochastic micro-simulation approach does a much better job of representing the overall distribution of reported burden than the non-stochastic micro-simulation methodology represented by column 4.

#### Estimated Coefficients

Table 2 shows the results of the robust OLS regression of the complete small business econometric model. The estimated coefficient for *log(total receipts)* is as expected positive, 0.219, and significant at the 1 percent level. The same is true for the *No Receipts* coefficient, 2.615. Both coefficients are qualitatively similar to the coefficients estimated by Slemrod and Venkatesh (2002), 0.4639 and 8.6283 respectively. Although Slemrod and Venkatesh (2002) presented results using total assets, they reported in private conversations finding similar results using receipts as a size measure for the LMSB population. Not surprisingly, the introduction of the complexity measures including some components of total receipts lowers the coefficient of total receipts.

All three coefficients for the complexity categories are statistically significant at the 1% level and equal to 0.003 for Low, 0.005 for Medium, and 0.008 for High. Since the coefficients are positive,

Table 2  
**SBBM Regression Results (select coefficients)**

Variable	Variance Coefficients		Burden Coefficients	
	Estimate	T-stat	Estimate	T-stat
Intercept	1.601	7.710	5.063	35.32
Log Total Receipts	-0.014	-0.780	0.219	18.74
No Receipts Indicator	0.501	2.220	2.615	17.67
Low Complexity	-0.003	-1.920	0.003	3.79
Medium Complexity	-0.002	-0.810	0.005	3.79
High Complexity	-0.004	-2.020	0.008	5.28

additional increases in the volume of an activity will increase total burden. In addition, the magnitudes of these coefficients confirm the make-up of the complexity categories. An additional dollar increase in a medium complexity item, given everything else is the same, will increase burden more than a dollar increase in a low complexity item. The coefficients for the remaining variables are not discussed in this paper but are generally in line with our expectations.

#### INDIVIDUAL TAXPAYER BURDEN MODELING APPROACH

The overall design of the ITBM model is very similar to the SBBM supporting the hypothesis that as individual returns become more complex, their compliance costs increase at a decreasing rate. We initially extended the SBBM econometric to the sole proprietor population. Preliminary results were promising enough to encourage us to attempt to generalize and adapt the model to cover all individual taxpayers. Similar data cleaning and missing data imputation techniques were used with further refinements in the nonresponse bias adjustment as discussed in Brick et al. (2009). We again employ a log-linear regression specification in which the natural log of burden is linearly related to a set of explanatory variables. The dependent variable,  $\log(\text{Burden})$ , is based on survey data collected in 2008-2009 for tax year 2007 returns processed by the IRS in 2008. To account and control for the type and volume of activities performed by each individual taxpayer, tax items from the primary forms and schedules were organized into one of four complexity categories; *low*, *low-medium*, *medium*,

and *high*. We found that for individual taxpayers the model supported further differentiation of the low complexity category. The low category includes items that are reported on information returns or require very little recordkeeping. As a proxy of size we use the *log of modified total positive income* in the current period.<sup>6</sup> Table 3 presents the distribution of reported and predicted burden corresponding to Table 1 above for small businesses. Again we see the skewness of the distribution with a mean monetized burden of \$582 but a median of only \$270.<sup>7</sup>

#### Estimated Coefficients

Table 4 shows the results of the robust OLS regression of the individual model. The estimated coefficient for  $\log(\text{modified total positive income})$  is as expected positive, 0.201, and significant at the 1 percent level. The coefficient is very similar to the  $\log(\text{total receipts})$  coefficient, 0.236, estimated by the SBBM and qualitatively similar to the Slemrod and Venkatesh (2002) size coefficient, 0.4639. As we discussed earlier in this paper, the introduction of the complexity measures lowers the coefficient of total receipts. All four coefficients for the complexity categories are statistically significant at the 1percent level and equal to 0.005 for *Low*, 0.008 for *Low-Medium*, 0.014 for *Medium*, and 0.017 for *High*. Again much like for the SBBM, the magnitudes of these coefficients confirm the make up of the complexity categories. An additional dollar increase in a medium complexity item, given everything else is the same, will increase burden more than a dollar increase in a low complexity item. Again, the coefficients for the remaining variables are not discussed in this paper but are generally in line with our expectations.

Table 3  
**Reported and Predicted Individual Taxpayer Income Tax Compliance Burden**

<i>Quantile</i>	<i>Reported Burden</i>	<i>Predicted without Transformation Adjustment</i>	<i>Predicted with Transformation Adjustment</i>	<i>Predicted with Simulated Draw of Error Term</i>
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>8</i>
99%	4,463	3,189	4,423	5,021
95%	1,911	1,231	1,673	1,869
90%	1,222	808	1,094	1,171
75% Q3	557	443	594	577
Median	262	250	333	270
25% Q1	116	143	199	126
10%	54	85	126	59
5%	31	60	90	36
1%	13	26	43	12
Mean	552	430	582	582

Table 4  
**ITBM Regression Results**

<i>Variable</i>	<i>Variance Coefficients</i>		<i>Burden Coefficients</i>	
	<i>Estimate</i>	<i>T-Stat</i>	<i>Estimate</i>	<i>T-Stat</i>
Intercept	1.486	5.760	0.132	0.65
Log Total Positive Income	-0.050	-2.750	0.337	20.51
Low Complexity	-0.000	-0.430	0.006	6.44
Low-Medium Complexity	-0.001	-0.970	0.009	13.26
Medium Complexity	-0.001	-0.530	0.011	10.83
High Complexity	0.005	3.050	0.014	9.65

## FINDINGS

### Total Income Tax Compliance Burden

Table 5 shows the total income tax compliance burden for individual and small business taxpayers.

Total monetized burden for individual taxpayers is \$83.2 billion and was produced by the ITBM model using tax year 2007 data.<sup>8</sup> The total monetized burden estimate for business taxpayers was produced by the SBBM using Tax Year 2004 data. Total monetized burden for C corporations was \$18.3 billion, for S corporations was \$26.7 billion, and for Partnerships \$14.7 billion.

### Average Income Tax Compliance Burden

Table 6 shows the total average monetized compliance burden for small business as estimated by the SBBM and ITBM. The first row of Table 6 shows the compliance burden attributed to the filing of the associated tax form. For C corporations, the average burden for filing Form 1120 is \$8,858. The average burden for filing Form 1120S is \$8,498 for S corporations and for filing Form 1065 is \$6,717 for partnerships. When we looked at burden as a percentage of total receipts, partnerships have higher average burden than the corporate forms, 1.50 percent of receipts compared to 0.77 and 0.87 percent for C and S corporations. However,

*Table 5*  
**Total Monetized Burden for Individuals and Small Businesses\***

	<i>Corporate and Partnership Taxpayers**</i>			<i>Individual Taxpayers***</i>	
	<i>C corporations</i>	<i>S corporations</i>	<i>Partnerships</i>	<i>All</i>	<i>Non-Farm</i>
				<i>Individuals</i>	<i>Sole Proprietorship Activity</i>
Total Compliance Burden	\$18.3 Billion	\$26.7 Billion	\$14.7 Billion	\$83.2 Billion	\$23.9 Billion
Total Receipts	\$2,381 Billion	\$3,085 Billion	\$1,009 Billion	\$13,084 Bill.	\$1,375 Bill.
Total Compliance Burden as a Percent of Total Receipts	0.77%	0.87%	1.46%	0.64%	1.73%

Notes:

\* Businesses with less than \$10 million in assets.

\*\*The total monetized burden estimates for businesses was produced by the SBBM and are for Tax Year 2004.

\*\*\* The total monetized burden estimate was produced by the ITBM model and was for Tax Year 2007. For the individuals, we are reporting modified total positive income here in place of total receipts, as discussed above. For the sole proprietors we are reporting the portions of modified total positive income associated with sole proprietorship activity.

*Table 6*  
**Average Monetized Compliance Burden for Small Businesses and Sole Proprietorships, by Organizational Form**

	<i>C corporations</i>	<i>S corporations</i>	<i>Partnerships</i>	<i>Sole Proprietorship</i>
Corporate or Partnership-Level Tax Compliance Burden	\$8,858	\$8,498	\$6,717	\$0
Individual Tax Compliance Burden	\$0*	\$491**	\$491**	\$1,075
Total	\$8,858	\$8,989***	\$7,699***	\$1,075

\* Corporate revenues are taxed on the individual level when distributed as dividends or when capital gains are realized. We estimate compliance burden on the shareholders of C corporations as a very small share of their personal income tax return so for the purpose of this work we consider it as zero.

\*\* Per shareholder or partner.

\*\*\* Assumes one shareholder for S corporations and two partners for partnerships.

partnerships have on average lower total receipts than C and S corporations so we believe that this is an indication that our hypothesis is correct that as business entities grow their compliance costs increase at a decreasing rate.

The second row of Table 6 shows the compliance burden associated with the business on each shareholder or partner.<sup>9</sup> The compliance burden for an S corporation with one owner therefore increases to \$8,989. In tax year 2006, the latest year that SOI

has published data, S corporations had on average 1.7 shareholders so the compliance burden would be \$9,333. The compliance burden for a partnership with two partners increases to \$7,699. In tax year 2007 SOI reports that partnerships had on average 6 partners, so the compliance burden would be \$9,663. As discussed earlier, non-farm profits and losses are reported on the sole proprietor's annual personal income tax return in Schedule C. Using the ITBM we estimated the additional compliance burden for submitting each Schedule C to be \$1,075.

To test our finding for robustness we next estimated average burden for businesses in the Finance, Insurance, and Real Estate (FIRE) industries, Services industries, and other industries. We chose these groups because there is a heavy concentration of partnerships in the FIRE group and of S corporations in the Services group, 56 and 43 percent of partnerships and S corporations, respectively. Panel A of Table 7 shows the average

burden by the three industry groups and organizational form. The average burden estimated by the SBBM is significantly different for different kinds of business entities. For example, partnerships in the FIRE industry group has average burden equal to \$5,710 when S corporations in the Other Industries group have average burden equal to \$10,249. But when looking at Panels B and C of Table 7 it becomes clear that the differences in average burdens are primarily the results of differences in the size of the entities included in each group.

For example, when looking at the two groups we identified earlier, partnerships in the FIRE industry group and S corporations in the Other Industries group, have the highest and second lowest ratios of average burden to total receipts. That is even when the average total receipts of S corporations in Other Industries is significantly higher than the average total receipts of partnerships in FIRE. So Table 7 supports our hypothesis that as business

*Table 7*  
**Average Monetized Small Business Income Tax Compliance Burden,  
by Industry and Organizational Form**

*Panel A: Average Monetized Small Business Income Tax Compliance Burden*

	<i>C corporations</i>	<i>S corporations</i>	<i>Partnerships</i>	<i>All</i>
Service Industries	\$8,372	\$7,550	\$8,124	\$7,877
FIRE Industries	\$6,197	\$5,819	\$5,710	\$5,819
Other Industries	\$10,127	\$10,249	\$7,942	\$9,763
All	\$8,858	\$8,498	\$6,717	\$8,071

*Panel B: Average Monetized Small Business Income Tax Compliance Burden as a Percentage of Total Receipts*

	<i>C corporations</i>	<i>S corporations</i>	<i>Partnerships</i>	<i>All</i>
Service Industries	1.00%	1.20%	1.20%	1.10%
FIRE Industries	1.60%	2.60%	2.60%	2.30%
Other Industries	0.62%	0.66%	0.96%	0.68%
All	0.77%	0.87%	1.50%	0.92%

*Panel C: Average Small Business Total Receipts (in dollars)*

	<i>C corporations</i>	<i>S corporations</i>	<i>Partnerships</i>	<i>All</i>
Service Industries	823,252	641,219	692,834	701,502
FIRE Industries	390,902	220,689	216,600	248,342
Other Industries	1,645,158	1,550,658	830,446	1,444,532
All	1,151,595	981,983	460,259	874,871



Table 8

**Average Reported Small Business Income Tax Compliance Burden, by Organizational Form**

	<i>C corporations</i>	<i>S corporations</i>	<i>Partnerships</i>	<i>All</i>
Service Industries	\$8,353	\$7,859	\$8,004	\$8,023
FIRE Industries	\$6,204	\$5,510	\$5,841	\$5,837
Other Industries	\$9,993	\$10,374	\$7,711	\$9,731
All	\$8,787	\$8,644	\$6,710	\$8,111

Note: Burden data reported on this table were collected in the small business burden survey and were weighted using the sample weights to reflect the small business population. Missing data were imputed as discussed in Contos et al. (2009).

entities grow their compliance costs increase at a decreasing rate.

Next, we wanted to confirm that the SBBM assigns the appropriate burden to the three organizational form types and the different industry groups. Table 8 shows average burden not as predicted by the model but as reported on the survey by the respondents and weighted up to the small business population. When comparing with the estimates produced by the SBBM, shown on Panel A of Table 7, we can see that the model predicts the average burden by organizational form fairly well. Even the industry group averages by organizational form are fairly close.

### CONCLUSIONS AND OUTLOOK

As discussed above, we find higher marginal compliance burden associated with partnerships, than with C and S corporations. Consideration of the compliance burden to partners and shareholders further emphasizes the higher marginal burden for partnerships. The declining marginal cost model reflecting differences in recordkeeping and planning activities provides controls allowing us to effectively make this comparison of compliance burden across entity types, despite the significant difference in average size of the respective entities. The similarity of the coefficients on the economic size variables across the small business and individual taxpayer compliance burden models suggests to us that it may be worth attempting to explicitly integrate the models in the future. We expect that splitting out the equations by preparation method and considering other factors influencing preparation method selection will be necessary parts of any such effort.

### Notes

- <sup>1</sup> Entities meeting this definition account for approximately 98 percent of all business entities and 30 percent of total revenues.
- <sup>2</sup> Labor in this scenario is the time spent on pre-filing and filing activities by firm owners and employees but also by paid professionals.
- <sup>3</sup> To monetize the value of time the average labor cost for each entity was estimated. The average labor cost includes the wages paid to employees and all other overhead costs incurred by the firm such as health insurance premiums, pension contributions, etc. If the estimated average labor cost was below the wage rate of a clerical employee with no benefits and overhead or above the average fee charged by paid professionals for each particular activity, these limit values were used to monetize time for that taxpayer. Separate maximum limits were set for each particular activity, for example, the maximum hourly cost for recordkeeping time was set equal to the fees charged by professional bookkeepers.
- <sup>4</sup> Total receipts are defined as the sum of gross receipts, rental real-estate income, interest income, dividend income, royalties income, and other income. Total receipts or total assets are two of the most commonly used size proxies in corporate finance literature. We selected total receipts as our proxy since certain small businesses (total assets or receipts of \$250,000 or less) are not required by the IRC to file balance sheets. We tested log of total assets as a proxy of size for firms with total assets greater than \$1 million yielding similar results as when using total receipts.
- <sup>5</sup> At this time, the complexity category assignments are still preliminary.
- <sup>6</sup> Modified total positive income is a generalization of the business size variable total receipts. It is defined as the sum of wages and salaries, nontaxable and excludable interest, dividends, state income tax refunds, alimony received, capital gains, total rather than taxable retirement income, gross business profits from

Schedule C, gross farm profits from Schedule 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 sources of income are from business income, this definition of modified total positive income reduces to total receipts.

- <sup>7</sup> To monetize the value of time in the ITBM< an average hourly earnings rate for each taxpayer was estimated. The average hourly earnings rate includes all wage, investment, retirement, and net business profits reported by the taxpayer. If the estimated average hourly earnings rate was below the minimum wage rate or above the average fee charged by paid professionals for each particular activity, these limit values were used to monetize time for that taxpayer. Separate maximum limits were set for each particular activity, for example, the maximum hourly cost for recordkeeping time was set equal to the fees charged by professional bookkeepers.
- <sup>8</sup> This estimate excludes the burden associated with the roughly 15 million taxpayers only filing for tax year 2007 as a result of the 2008 Economic Stimulus Program.
- <sup>9</sup> As discussed earlier, corporate revenues are taxed on the individual level when distributed as dividends or when capital gains are realized. We have estimated that the compliance burden on the shareholders of C corporations from dividend distribution is a very small share of their personal income tax return burden and that capital gains from the sale of shares from owners of small business happens infrequently, so for the purpose of this work we consider them as negligible.

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