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# The Income Tax Compliance of Big Business

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LEADING IN THOUGHT AND ACTION

**The Income Tax Compliance Cost of Big Business**

**Joel Slemrod and Marsha Blumenthal**

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# **THE INCOME TAX COMPLIANCE COST OF BIG BUSINESS**

**Report to the Tax Foundation  
prepared by**

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## **1. Introduction**

One of the costs of operating a tax system is the compliance cost imposed on the taxpayers themselves. Previous research on the individual income tax suggests that the compliance cost is many times higher than the budget of the tax administration agency; recent estimates have put the annual compliance cost of the federal and subfederal individual income taxes as high as \$35 billion, compared to a total Internal Revenue Service (IRS) budget of about \$6 billion. (Slemrod and Sorum, 1984; Blumenthal and Slemrod, 1992).

Although compliance costs are large, reducing these costs through simplifying the tax process has seldom been an important objective of tax policy. One reason for its lack of prominence is that it has no natural constituency. Another possible reason is the scarcity of hard evidence about the compliance cost of alternative tax policies, or a sense of how large the total cost of complexity is.

An inevitable result of the low priority given to tax simplicity is a trend toward more complexity. A notable example of this are the business tax provisions of the Tax Reform Act of 1986. Whatever else its merits, there is near unanimity that the Act represented a substantial increase in the complexity in the tax system.

This report presents evidence from a survey of large corporations in the United States concerning their cost of complying with federal and subfederal income taxes. It attempts to measure both the overall size and composition of these costs, and also to investigate what about a firm and its tax situation determine what its compliance cost will be. It also reports on the attitudes and tax reform suggestions of corporate tax officers.

The goal of the project is to provide quantitative evidence about compliance costs that can form the basis for future tax policy initiatives that simplify the income tax system without compromising its other objectives.

## 2. Survey Design and Execution

### 2.1 Design

The first step in the process was to draft a pilot survey. In this process we drew on the expertise of an advisory panel consisting of corporate tax officers organized by the Tax Foundation and representatives of the IRS Coordinated Examination Program. We also profited from studying the survey instruments used by Sandford, Godwin, and Hardwick (1989) in their study of the United Kingdom, and that used by Pope, Fayle and Chen (1991) in their study of Australia. Several of the advisory panel members then gave the pilot instrument a trial run within their own firms. Comments and suggestions from the pilot survey experience were incorporated into the final version of the survey.

The final survey instrument was twelve pages long, and divided into five parts.<sup>1</sup> The first part asked about general characteristics of the company's tax affairs, sector, measures of firm size, and the extent of foreign operations. Parts Two and Three asked about the cost of complying with the income tax law. Costs were to be divided into several categories: whether due to federal or state and local income taxation, whether costs were incurred in-house or paid to those providing outside assistance, whether in-house costs were within or outside the tax department, whether they were personnel or non-personnel costs, and how they broke down by function (record keeping, planning, return filing, etc.). Part Four included several questions evaluating the firm's interactions with the Internal Revenue Service, including ratings of each member of the audit team and of overall satisfaction. The concluding section was primarily devoted to open-ended questions about the sources of complexity in the tax code, suggestions for simplifying the tax system, and corporate strategies for coping with increased complexity.

The survey was accompanied by a cover letter from the two authors, on University of Michigan letterhead, explaining the objectives of the project and identifying the sponsors. It also

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<sup>1</sup>The survey and cover letter are included as Appendix A of this report.

promised that all individual firm information would be kept confidential and only summary results would be reported.

The cover letter emphasized that the survey questions referred only to the compliance costs of U.S. federal, state and local income taxes and not to the costs of complying with payroll, property, excise, withholding and other taxes. The survey did, though, cover the expenditures incurred by foreign affiliates in complying with U.S. tax laws, though not with foreign tax laws. Finally, the letter stated that the survey was trying to measure "the annual incremental cost imposed by income tax compliance, i.e., what (you) could save over the long run if these taxes were eliminated."

## **2.2 Execution**

Between June 9 and 15, 1992 the survey was mailed to the chief corporate tax officer at the 1672 firms in the Coordinated Examination Program (CEP) of the Internal Revenue Service; these addresses had been supplied to us by the CEP.<sup>2</sup> Follow-up postcards were sent on July 20, 1992, and again on August 31, 1992. Finally, on September 25, 1992 a letter from the President of the Tax Executives Institute was sent to the tax officers, expressing support for the compliance cost project and urging that the questionnaires be filled out and returned.

By the end of the process 365 completed surveys were received. In order to calculate an accurate response rate, it is important to note that many firms are "in" the CEP because past years' tax filings have not been fully resolved, even though the firms were no longer active entities in 1992, having either been liquidated or acquired by or merged into another firm. Considering that, of the 1672 firms on their mailing list, 1329 were active entities in 1992, the 365 completed returns represent a response rate of 27.5%.

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<sup>2</sup>The rules for including firms in the Coordinated Examination Program are discussed in Section 3 of this report.



### 3. How Representative is the Sample?

How representative of big business are the 365 companies that responded to the survey? The answer to this question rests on two factors: (i) how representative of CEP companies are those that responded to the survey, and (ii) how representative of big business are companies in the CEP program. We next discuss each of these questions in turn.

To address how representative of the CEP population are the companies that responded to the survey, we compare the characteristics of the respondent population to the characteristics of the overall CEP population. The CEP population was described in an April 1992 publication of the General Accounting Office (GAO) entitled IRS' Efforts to Improve Corporate Compliance. This report analyzes the corporate tax returns of all the CEP companies to which the Statistics of Income Division of the IRS could match a 1988 tax return. Of the 1672 companies in the CEP program as of May 1991, there were 1329 matches. The predominant explanation for the 343 unmatched companies was that these companies had, due to takeover or bankruptcy, ceased to exist as independent entities, but had been retained in the CEP database because past tax years' cases had not yet been closed.

Tables 1 and 2 compare the distribution of the respondent population to the GAO results, by principal industry and size of U.S. assets, respectively. For both measures the distributions of survey respondents matches up very closely to the distribution of the firms in the GAO study; the principal exception is that only 10.3 percent of the survey respondents, compared to 14 percent in the GAO study, report U.S. assets over \$10 billion.<sup>3</sup> Note, however, that there are some reasons not to expect an exact correspondence. First of all, the GAO study refers to tax year 1988, while the survey was distributed in 1992. Second, the applicable corporate entity is not consistently measured. The survey responses probably, but not definitely, apply to the group

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<sup>3</sup>Another apparent discrepancy is that the survey contains a lower percentage of firms in the retail sector, 1.9% compared to 7% in the GAO study. However, this discrepancy is probably explained by the fact that, due to an oversight, the survey did not list "Retail" as one of the sectors to be checked. Those firms that did list their principal sector as Retail did so by writing it as a separate category. Note that the fraction of firms describing their primary business as retail or services, a likely alternative categorization for a retail business, was 10.4%, compared to 12% in the GAO study.

of companies—whether consolidated or not for tax purposes, and regardless of the number of corporate entities—for which the central tax department handles the tax affairs. In contrast, the GAO study was based on the key single corporation of the corporate group, and thus in general refers to a smaller unit than does the survey. In some cases the difference will be insignificant; in other cases where the corporate structure is divided among several separate significantly sized corporations, it will refer to a substantially smaller unit than the survey.

For these reasons it is impossible to be certain that the respondent firms are a representative sample of the CEP population. Nevertheless, the findings of Tables 1 and 2 make us reasonably confident that this is in fact the case. This leaves open the question of whether we can generalize about big business as a whole. The answer to that question depends on how typical of big business the CEP firms are. Companies are selected for the CEP based on a number of criteria. First, companies are assigned points based on the size of their worldwide assets, the size of their worldwide gross receipts, the number of different significant entities with tax consequences, and the number of different significant separate industries with tax consequences within the corporate entity. In addition, points are assigned based on the expected number of staff days of revenue agents and specialists required for the examination. All companies whose point total exceeds a certain cutoff are included in the program; a separate cutoff is assigned to financial corporations and utilities. A firm not meeting the point criteria may be included in the CEP if "it is of sufficient complexity to warrant inclusion and would benefit from examination using the team examination approach."<sup>4</sup>

Clearly the two dominating criteria for inclusion in the CEP are sheer size and the expected resource costs of examining the tax return. Thus, to the extent that these criteria and compliance costs are correlated, a reasonable expectation is that the active CEP companies have among the highest compliance costs of any companies operating in the United States. For that reason, it cannot be assumed that, for any size grouping, companies in the CEP are typical

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<sup>4</sup>Internal Revenue Manual (May 10, 1989), p. 4200-78.

companies; instead they probably have relatively more complex returns, and therefore relatively higher compliance costs. The one possible exception to this statement is the set of the very largest companies, which are nearly all in the CEP and are therefore not a subsample of the whole population.

To investigate the question of exactly what universe the respondent population represents, Table 3 presents a distribution of the respondent firms' rankings, by employment and by sales<sup>5</sup>, according to the Dun's Business Guide ranking of the top 5000 firms in the United States. Note that Dun's lists each corporate entity separately, so again there is not an exact correspondence between these rankings and the corporate group referred to in the surveys. In constructing Table 3, the parent company of the corporate group was chosen.

It is clear from Table 3 that the set of responding companies cannot be considered to be a representative sample of, say, the 1000 largest companies in the United States; more than two-thirds of the sample do not make the top 1000 ranked by either employees or sales. Although the great majority of responding firms are in the top 5000 in either employment or sales, the respondents are not representative of the top 5000, because they are not evenly distributed throughout the size categories, there being proportionately more in the larger categories.

The bottom line of our investigation into the generalizability of the survey population is as follows. We believe that the sample can be used to make statements about the CEP companies. However, although large firms dominate the sample, it does not represent the top 500, 1000, or 5000 companies in the U.S..

To create a sample of firms that is representative of some important segment of big business, in what follows we analyze both the respondent sample and also a subset of the respondent firms that are in the 1992 Fortune 500, the largest industrial firms in the United States. There are 98 firms from the Fortune 500 in our sample. Because these 98 firms in the top 500 are clustered toward the top of the Fortune 500 list, we reweight the sample so that it is

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<sup>5</sup>The distribution by sales is for nonfinancial firms only.

representative of all 500. The reweighting procedure divides the Fortune 500 into groups of 50, and computes a weighting factor for each of these groups so that in the reweighted sample each group has equal representation.<sup>6</sup> Note that this procedure does not ensure that each sector is represented in the reweighted sample in the same proportion as in the Fortune 500.

#### 4. The Magnitude and Nature of Tax Compliance Costs

##### 4.1 The Magnitude of Tax Compliance Costs

Table 4 presents the survey results concerning the average cost of compliance.<sup>7</sup> The total cost averages \$1.57 million for the survey respondents as a whole, and \$2.11 million for the Fortune 500 subsample. Based on 1329 active firms in the CEP program, these averages correspond to a total compliance cost of \$2.080 billion for CEP firms and \$1.055 billion for the Fortune 500.<sup>8</sup>

Table 5 shows how the total costs break down into several categories. About 55% of the cost goes for within-firm personnel, about 30% to within-firm non-personnel costs, and approximately 15% for outside assistance. About 70% of the cost is due to the federal tax system, with the remainder for state and local. Of the within-firm costs, about 70% are incurred within the tax department, and 30% in non-tax departments. These percentages vary slightly, but not significantly, depending on which sample is used.

One way to put these costs into perspective is to consider them as a ratio of tax revenue. In the most recent year for which the data are available, 1989, the CEP firms reported a total

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<sup>6</sup> The weights are as follows:	<u>Rank</u>	<u>Weight</u>	<u>Rank</u>	<u>Weight</u>
	1-50	0.576	201-350	0.817
	51-100	1.089	351-400	1.960
	101-150	0.980	401-450	4.900
	151-200	0.754	451-500	1.633

<sup>7</sup>Data preparation issues are discussed in Appendix B to this report. The most problematic issue is the treatment of missing values in the survey. The appendix discusses how an extreme alternative treatment could lower the estimate of cost by as much as 16%.

<sup>8</sup>Note that, because not all Fortune 500 firms are in the CEP, the \$1.055 billion is not a component of the \$2.080 billion figure.

federal tax liability of \$54.4 billion. The total compliance costs, for federal tax purposes only, for this group is estimated in this study as \$1.440 billion (\$1.085 million per firm for 1329 firms). Thus, the cost to revenue ratio is 2.6%. To get an estimate of this ratio for all levels of government, we apply the ratio of total corporate tax revenues to federal corporate tax revenues for 1989, 1.21, to the \$54.4 billion figure, yielding \$65.8 billion. The ratio of the estimated total compliance cost of \$2.085 billion to \$65.8 billion of tax revenue is 3.2%. The ratio for state costs by themselves is 5.6%; the higher ratio reflects the nonuniformity of state rules, an issue discussed later in this report.

Table 6 breaks down the total personnel costs by function. For the tax department filing returns is the largest category of expense, but it comprises only slightly above 30% of the personnel costs. Audits, planning, and research<sup>9</sup> each make up over 10% of the total within-tax-department personnel cost, with record keeping just under 10%. However, record keeping is the predominant role of other departments in the tax process, making up nearly 50% of these personnel costs for all firms, and nearly 40% for Fortune 500 firms. The second most important role taken on by the non-tax departments is preparing information for financial statements, comprising about 15% of the total.

Table 7 presents more information about the outside assistance purchased by firms. Five functions—planning, litigation, research, appeals, and audits—account for over eighty percent of the costs, with planning being the largest category.

Table 8 makes clear that, on average, there is a clear division of labor between the internal and external tax-related activities. More than half of litigation and appeals work is done externally; a large percentage, but less than half, of research, planning, and audit work is done externally. As is apparent in Table 6, within the firm there is also a division of labor, with departments outside tax playing a major role only for record keeping and preparing information

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<sup>9</sup>Research comprises 9.0% of personnel costs within the tax department for Fortune 500 firms.

for financial statements. Table 9 shows how the functional breakdown of compliance costs varies by sector.

## **4.2 Size Effects**

On average, large firms experience higher compliance costs. Table 10 breaks firms into six categories based on their total U.S. employment, and shows a generally positive relationship of all categories of compliance cost to firm size. Tables 11 and 12 present a similar breakdown by U.S. assets and U.S. sales, respectively; these tables do not include firms in the financial or life insurance sectors, due to the difficulty of making meaningful comparisons with nonfinancial firms. Tables 13, 14, and 15 do the same using worldwide concepts of employment, assets, and sales.

Tables 10 through 15 suggest that in general compliance costs rise less than proportionately with firm size, so that average costs per unit of size, however measured, are lower for larger firms. Statistical analysis suggests that, on average, a 10% increase in size is associated with an increase in compliance costs of between 4.0% and 6.1%, depending on which of the six measures of size is used.<sup>10</sup> The finding of economies of scale in tax compliance costs is common in studies across countries and across types of tax.

## **4.3 Sector Effects**

Some sectors experience higher compliance costs than others. This is true even holding constant the effects of the size of the firm.

One must be careful about quantifying the relationship between compliance cost and sector, because of the confounding effect of size. Simply presenting average costs by sector is potentially misleading, because of the differences in average size by sector. Table 16 shows that, even within size categories, firms in retail or wholesale trade have significantly lower than

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<sup>10</sup>These estimates are based on regression analyses of the logarithm of compliance cost, excluding non-personnel costs, as a function of the logarithm of each of the six size measures.

average compliance costs, and firms in oil and gas or the mining sector have significantly higher than average compliance costs.

#### **4.4 Multinationality Effects**

One survey question asked what fraction of the compliance cost of federal taxes was due to the presence of foreign-source income. Based on these responses, we can estimate the contribution of foreign-source income to total compliance cost. For all responding firms, the mean cost due to foreign-source income was \$424,000, or 39.1% of the total mean cost due to federal taxes. The fraction was significantly higher for the Fortune 500 firms, 45.5%, or \$667,000 out of an overall mean cost of federal taxes of \$1,465,700.

### **5. The Determinants of Compliance Cost**

In Section 6 of this report we discuss what the responding tax officers identified to be the largest sources of complexity in the current tax code. In this section we discuss the preliminary results of a statistical analysis designed to identify what aspects of a company and tax situation are associated with higher compliance cost.

The methodology we employ is multiple regression analysis in which the dependent variable is the logarithm of total compliance costs.<sup>11</sup> The estimated equations represent the linear relationship which best forecasts a firm's costs; the estimated coefficient on any explanatory variable represents a statistically unbiased estimate of the percentage change in compliance costs resulting from a unit change in that variable, holding all other explanatory variables constant.

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<sup>11</sup>Forecasting the logarithm of costs, rather than the level of costs, presumes that a change in any explanatory variable is associated with a certain percentage change in compliance costs regardless of the initial level of these costs.

The regression analysis reveals several variables which are associated with higher compliance cost. For example, each additional active entity adds 0.5% to cost, and each additional substate income tax return adds 0.08% to cost. Being subject to the alternative minimum tax (AMT) adds 16.9%; this is true even though all but three of the firms report that they must calculate the alternative minimum tax liability. This result implies that those firms that suspect that they will actually have AMT liability devote more resources to its calculation and planning implications. Being subject to California income tax is associated with a compliance cost 32.5% higher than otherwise. Finally, having an ongoing tax appeal adds 18.8% to cost, and having ongoing tax litigation adds 28.4% to cost.

## **6. Respondents' Attitudes and Suggestions for Reform**

Part Five of the survey featured open-ended questions about the causes of complexity, how the Tax Reform Act of 1986 affected complexity, how corporations have coped with increased complexity, and suggestions for reform of the tax law and process. The responses to these questions are tabulated in Tables 17 through 22.

### **6.1 Causes of Complexity of Federal Income Taxes**

The tax officers were asked what aspect of the current federal tax code was most responsible for the cost of complying with the tax system. These answers are detailed in Table 17.

Of the 365 respondents, 315 gave some response to this question. More than seventy-five different aspects were mentioned on at least one survey. The two aspects most often cited were depreciation (118 mentions) and the alternative minimum tax (115 mentions).<sup>12</sup> Many of those surveyed tied the two issues together, citing the cost of having to simultaneously maintain as many as five separate depreciation accounts for fixed assets. Many of those that singled out

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<sup>12</sup>Many respondents listed more than one aspect of the tax code, so that the total number of aspects mentioned exceeds the number of surveys for which an answer to this question was given. This comment applies to Tables 14 through 18, as well.



the alternative minimum tax (AMT) pointed in particular to the adjusted current earnings portion of the definition of alternative minimum taxable income. It is interesting to compare the 115 mentions of the AMT to the number of firms that claimed to be currently subject to the AMT, 167. However, of the companies not currently subject to AMT, all but 14 of them said they calculated the AMT base anyway, presumably either to determine their potential AMT liability or to calculate their Superfund liability. The third most cited source of complexity was the set of uniform capitalization rules (Section 263A) introduced by the Tax Reform Act of 1986; it was listed on 85 surveys.

International tax issues were also widely cited. It is somewhat problematic to evaluate the breadth of the concern, because many respondents (44 to be exact) merely mentioned "international" or "foreign" as the aspect causing complexity, without citing a specific section code. Many others did cite particular code sections, specifically the foreign tax credit (37), controlled foreign corporations reporting on Form 5471 (21), transfer pricing (16), and expense allocation rules (12); in all, 93 respondents mentioned at least one foreign-related area. These numbers should be evaluated in light of the fact that of the 365 respondents, only 253 had some foreign operations, defined as having either a majority or a minority interest in a foreign affiliate or having a foreign branch, and only 174 had foreign employment or assets.

The other specific aspect of the tax code mentioned by at least 10 respondents was the economic performance test for the deductibility of accrued expenses, mentioned on 30 surveys.

A significant number of respondents replied to this question not by citing specific code sections, but instead by reporting generic problems with the tax code. The two such problems most often mentioned were the frequency of changes in the tax law (22 mentions), and the lack of conformity between book and taxable income (21 mentions).

The survey also asked about what features of the Tax Reform Act of 1986 (TRA86) most contributed to increasing the complexity of the tax system; Table 18 presents the results. Again for this question there was a great variety of answers (over 50). However, for this question a clear-cut favorite (villain?) emerged—the alternative minimum tax. Of the 311 firms

responding to this question, 189 mentioned it. The uniform capitalization rules were cited by 138, and depreciation by 59 (many mentioning the mid-quarter convention of the modified accelerated cost recovery system).

Many (29) remarked generally about changes in the foreign area, with 60 more respondents singling out the foreign tax credit and 11 mentioning the change in the Section 861 allocation rules; in all, 98 companies mentioned one or more foreign-related areas. Also mentioned on at least ten surveys were the Section 469 changes in the definition of active versus passive income and the Section 382 and 383 changes in the treatment of net operating losses.

There was also a question about what features of TRA86 reduced complexity. As Table 19 shows, in most surveys this question was handled with dispatch. Of the 210 who entered any response, 112 wrote "none." Adding to this figure the nine who wrote "?", the five who wrote "N/A", and the eight who wrote either "hah!" or "you must be kidding" brings the total to 134 respondents, or 64% of those who wrote anything at all for this answer, who believe that there were no significant areas of corporate tax simplification embodied in the 1986 Act. This figure of 134 does not include the indeterminable number of respondents whose lack of answer was meant to indicate that there were not any complexity-reducing aspects to TRA86. Some respondents did, though, point to simplification. 39 cited the elimination of the investment tax credit, and 10 mentioned the elimination of the preferential tax treatment of capital gains.

## **6.2 Causes of Complexity in State and Local Income Taxes**

The survey also inquired about the primary causes of complexity with state and local income taxes; these results are reported in Table 20. Recall that, on average, the costs of complying with state and local taxes comprise 30% of total compliance cost.

The most commonly cited source of complexity was the lack of uniformity among the states, mentioned by 76 of the 269 respondents who gave some answer to this question. There

were 28 mentions of a particular kind of nonuniformity, that of apportionment formulas, and 34 mentions of the lack of uniformity of depreciation rules.

On 47 surveys there was a reference to the lack of consistency between the federal government on the one hand and the states on the other. Clearly the inter-state inconsistency and the federal-states inconsistency are two dimensions of having to deal with different tax jurisdictions, requiring separate procedures to determine tax liability.

After uniformity issues, the next most cited aspect of complexity was the apportionment formula used to calculate state taxable income. In addition to the 28 surveys mentioning nonuniform apportionment formulas, 42 surveys cited this area as a source of complexity. Close behind was the unitary/water's edge issue, also cited by 42 respondents.

Other issues mentioned by at least 10 respondents were depreciation (19), business versus non-business (16), consolidated/combined reporting (16), and nexus (13).

### **6.3 Suggestions for Reform**

One survey question solicited suggestions for simplifying compliance at either the federal or state/local level; the responses are tabulated in Table 21. When interpreting these answers, note that it is arguable that respondents took into consideration the political prospects for effecting particular changes, and the implications (other than simplification) of the tax provisions.

The reform most often suggested was to require more uniformity between the state corporate income tax systems and the federal system, and among the state systems. Of the 256 surveys that included an answer to the question, 75 mentioned this type of reform. 19 respondents went further to recommend an extreme version of federal-state uniformity—a piggyback system where the federal government defines taxable income, the states specify a tax rate, and the federal government collects and enforces the law, and remits the revenues collected

to the states according to some formula. 27 more responses specified requiring uniformity of the states' apportionment formula.

Aside from uniformity, the most popular general suggestion was to move toward more conformity between taxable income and the measure of income used for financial accounting purposes. 42 surveys suggested this change. Several tax officers recommended that the tax calculation begin with book income and then proceed by making a small number of modifications, a reconciliation similar to the one now required on Form M-1.

The current tax provision drawing most criticism was the alternative minimum tax. 38 recommended that it be completely eliminated; 11 recommended only that it be simplified, while 13 more surveys advocated a particular change—eliminating the adjusted current earnings provision. 17 respondents recommended eliminating the uniform capitalization rules, with 2 more suggesting that they be simplified; 13 surveys advised that the foreign tax credit provisions be simplified, and various other international provisions were singled out for simplification.

Twenty-one respondents suggested that, because the underlying problem with the tax code was its instability, the required solution was some kind of moratorium on tax changes, perhaps limiting major tax bills to once every three or four years.

#### **6.4 Coping with Complexity**

It is clear that there is near unanimity among corporate tax officers that in recent years the tax system has grown more complex. One question in the survey asked how the corporation has coped with the increased complexity. 324 out of 365 gave some reply to this question, tabulated in Table 22.

One answer to this question dominated all others—computerization. 203 respondents said that the tax departments had either expanded their computer hardware or made more use of tax planning and filing software, or some combination of the two. Another significant, but much lower, fraction responded to increased complexity by making more extensive or intensive use of

their personnel. 59 had hired more personnel, 28 had worked the existing level of personnel longer hours or harder, and 43 had upgraded the personnel or expanded their training programs.

Some companies responded by reallocating their resources, though there was not a uniform response. 35 firms said they engaged more outside consulting; however, 21 said they had brought more of the tax work in-house, including a few that began in-house tax departments where none had existed previously. 11 firms said they had shifted resources away from planning and/or research to compliance activities.

A significant number of companies suggested that one consequence of increased complexity is the deterioration of the quality of the information they provide to the IRS. This suggestion came through in a number of different ways. 14 companies said they now had a lower level of compliance, or did a less competent job of complying with the tax law. Two said they now "lived with more risk." Seven said they had elected "simplified" methods, while 5 said they now applied a more stringent standard of "materiality," presumably meaning that they devoted less effort to issues not involving a lot of dollars. All in all, there were 28 companies who intimated that one victim in the process of increased complexity was the accuracy of the information conveyed to the IRS.

## **7. Putting Compliance Costs in Perspective**

Any tax system is costly to operate, and will entail both administrative and compliance costs. Different systems place different relative burdens on the taxpayer and the tax enforcement agency. They also score differently on the other important criteria by which we evaluate taxation -- the fairness of the tax burden, and how supportive it is of economic growth. There is often, but not always, a tradeoff that must be made between these other goals and simplicity. The simplest tax system is not necessarily the best, but neither is all of the complexity in the current system necessarily serving a useful purpose.

It is difficult to dismiss a one billion dollar annual compliance cost for the Fortune 500 alone. These costs represent resources which, under other circumstances, could have been used

to add to the productive capacity of the country. But are these costs cause for alarm, and do they lead directly to policy conclusions? To answer these questions, one needs to put these cost estimates into some kind of perspective. This section provides some useful perspectives.

## **7.1 Other Countries**

Although there have been excellent studies of the tax compliance cost of business done in other countries, none of these studies has focused on the largest companies, making a meaningful cross-country comparison impossible. For example, the business sample in the United Kingdom used by Sandford, Godwin, and Hardwick (1989) contained only two companies with more than 500 employees, and only six with more than 100 employees. In their study of Australia, Pope, Fayle, and Chen (1991) report having 67 firms with over 1,000 employees, and 77 with annual turnover exceeding \$100 million. For the latter group of companies they estimate annual mean compliance costs to be A\$56,896, compared to mean tax payable of A\$1,760,000; this amounts to 3.2% of tax revenue. Any comparison of these numbers to the U.S. case should note the much smaller average size of the Australian sample.

## **7.2 Other Taxes**

How do the compliance costs per dollar raised through the corporate income tax compare to other taxes? Earlier work in Slemrod and Sorum (1984) and Blumenthal and Slemrod (1992) suggests that the compliance cost of individual income taxes is between five and seven percent of revenue raised. This figure is about double what we have tentatively estimated for income taxes on big business. Note, though, that corporations also incur some costs in administering the individual income tax, via withholding; these costs have not been included in any of the studies. Note also that, because of the clear economics of scale in tax compliance, the cost-to-revenue ratio for the corporate income tax is undoubtedly higher for corporations that are smaller than the group studied in this project. Thus the cost-to-revenue ratio for the corporate sector as a

whole, or the business sector as a whole, is undoubtedly higher than what is calculated in this study.

### **7.3 Previous Years' Compliance Costs**

Arlinghaus and Anderson (1986) report on the results of two mail surveys on compliance costs sent to all Fortune 500 firms, one conducted in 1983 and the other in late 1985 and early 1986. Their response rates were 46.2% and 46.4%, respectively.

Table 23 presents their results, in comparison with those of this work. For several reasons, however, these studies are not strictly comparable. First, Arlinghaus and Anderson define tax personnel as "managers, supervisors, and technical specialists employed to do tax work for the corporation...at corporate headquarters." Secretarial and data processing employees are explicitly excluded. In contrast, the current study includes not only clerks and data processors, but employees who do tax work outside the corporate headquarters. Second, Arlinghaus and Anderson lump franchise, property, sales and use tax compliance with income tax work at the state and local levels. The current study is devoted to compliance with the taxation of income only. Third, the categories of non-personnel compliance expenditures differ, notably in the exclusion of computers and data processing and record storage and retrieval by Arlinghaus and Anderson. Finally, Arlinghaus and Anderson did not reweight their data to correct for any potential systematic bias in which firms responded to the survey.

Even with these caveats in mind, a comparison of the Arlinghaus-Anderson 1986 figures with the 1992 numbers from this study is instructive. First note that the comparison should be made in inflation-adjusted dollars, and that the Consumer Price Index rose by 28.0% between 1986 and 1992. Using this adjustment factor, the average within-firm cost rose slightly, although the personnel component of the cost actually declined. Most striking is the 86% increase in the real expenditure on outside tax advisors. This apparent surge in the use of outside assistance is somewhat surprising in view of the fact that, as documented in Table 22, only 11%

of responding firms mentioned that since 1986 they made use of more outside consulting to cope with the increased complexity of the tax process.

The Arthur D. Little, Inc. (1988) study of business compliance costs, commissioned by the IRS, estimated a total annual burden in 1985 of 3.614 billion hours, but did not convert that into a dollar figure. However, their sample of 1090 corporations included only one with assets in excess of \$250 million, and only nine with assets over \$10 million; for that reason it does not provide a reliable measure of the tax compliance costs of big business.

#### **7.4 The Compliance Cost of Feasible Tax Alternatives**

The most meaningful perspective on compliance costs is how they stack up against what they would be under feasible alternative tax regimes. That, alas, is the most difficult kind of question to answer quantitatively. For example, while this survey can help to estimate the incremental compliance cost burden of foreign operations, it cannot reliably estimate the cost saving from an incremental simplification of, say, the foreign tax credit system. Nor can it estimate the cost saving of altering the alternative minimum tax to eliminate the adjusted current earnings provision.

This, however, is the kind of information that would be most helpful to add to the policy debates about tax changes. In theory, a survey that was focused on the potential cost savings of a set of concrete policy proposals could provide reasonable estimates of this figure. At a minimum, any evaluation of a tax policy alternative should include an estimate of whether it would increase, reduce, or leave unchanged the cost of compliance and administration.

### **8. Conclusions**

This study has established that the cost to big business of complying with the income tax system is, in an absolute sense, large -- over \$1 billion for the Fortune 500 companies and over \$2 billion for a group of 1329 large companies that warrant special examination by the IRS.



These compliance costs, which are ultimately borne by the customers, workers, and shareholders of the corporation, dwarf the budget cost of administering the income tax systems.

As a fraction of revenues raised, these compliance costs are lower than estimates that have been made for the individual income tax. This is not very surprising, as it is well established, and demonstrated by this survey, that there are significant economies of scale in tax collection, so that collecting revenue from large enterprises is relatively efficient. Because of these economies of scale it is not appropriate to conclude that similar cost-to-revenue ratios would apply to the corporate tax system as a whole, and not just the largest corporations; such ratios would certainly be much higher. The cost-to-revenue ratio is higher for state corporate tax systems than it is for the federal tax system, presumably reflecting the nonuniformity of state tax systems.

There is near unanimity among senior corporate tax officers that the Tax Reform Act of 1986 added complexity to the tax system, resulting in a combination of higher compliance costs and less accurate information transmission. They point to, in particular, the alternative minimum tax, inventory capitalization rules, and foreign income rules as growing sources of complexity; the California state corporate tax system is apparently a large source of compliance cost in itself. One striking finding is that the corporate officers point to greater uniformity among the states' income tax systems, and greater conformity of state to federal rules, as the most promising simplification that could be made; reforming or eliminating the alternative minimum tax was also high on many lists of recommended simplifications. Although complexity has increased, tax department budgets have not kept pace. Corporations have responded by computerizing their operations. There has also apparently been a large increase since 1986 in expenditures on outside tax assistance. Many respondents, though, are concerned that increased complexity in the face of limited budgets leads to a lower quality of information being transmitted to the IRS.

What this survey has not, and could not, establish is whether any particular tax simplification is a good idea. That is because simplicity is but one criterion of many against

which the tax system ought to be evaluated. But simplicity has been an oft-overlooked criterion, and quantitative estimates of the cost of overlooking it are a first step toward keeping it in the forefront of policy debates.

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**APPENDIX A**

**COVER LETTER AND SURVEY INSTRUMENT**



# THE UNIVERSITY OF MICHIGAN

SCHOOL OF BUSINESS ADMINISTRATION

ANN ARBOR, MICHIGAN 48109-1234

Joel B. Slemrod  
Director  
Office of Tax Policy Research  
(313) 936-3914  
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June 5, 1992

Dear Corporate Tax Officer:

There is substantial agreement in the business community that the corporate income tax system has become extraordinarily complex. In spite of that view, there is little knowledge about the compliance costs borne by businesses as they deal with the requirements of the tax law.


The enclosed survey, which is being sent to the 1672 largest companies in the United States, is designed to learn more about the nature of these costs. In particular, we intend to estimate the magnitude and determinants of compliance costs, and ultimately to suggest policy changes which could improve the tax code's efficiency, equity and simplicity. The survey and a report of its findings are sponsored jointly by the Tax Foundation and the Office of Tax Policy Research of the Michigan Business School. Using only summary information, an additional report will be prepared for the Large Case Division of the Internal Revenue Service, for the purposes of monitoring and improving their interactions with taxpaying companies.

We would very much like to have your participation in this important work. Although we request some sensitive information, you can be assured that the survey results will be reviewed only by ourselves and our research assistants. The questionnaire has an identification number solely to reduce duplication of follow-up mailings: the name of your company will never be placed on the questionnaire. In reporting our findings, no individual corporation will be identified; the results will be reported only in a summary form.

In this survey you are asked to estimate expenditures on personnel both within and outside of the tax department who deal with the tax law, on overhead and supplies to support those personnel, and on outside expert advice. While we acknowledge that you also devote resources to complying with payroll, property, excise, withholding and other taxes, this survey is limited to the costs of complying with U.S. federal, state and local income taxes. These costs should include expenditures of foreign affiliates to comply with U.S. tax law, but not expenditures to comply with the tax rules of foreign governments. Our interest is in the annual incremental costs imposed by income tax compliance, i.e., what you could save over the long run if these taxes were eliminated.

If, as you complete the survey, you have any questions, please feel free to contact either of the authors (Joel Slemrod at the above address and number, or Marsha Blumenthal at the University of St. Thomas in St. Paul, MN, 612-647-5891). We appreciate your time and effort. Thank you.

  
Joel Slemrod

  
Marsha Blumenthal

JS/MB/mm  
Enclosure

**SURVEY OF THE COMPLIANCE COSTS  
OF CORPORATE INCOME TAX**

**June 1992**

**Sponsored by  
The Office of Tax Policy Research, Michigan Business School  
and the  
Tax Foundation**

**PART ONE: Characteristics of the Corporation**

**For questions 1 through 6, refer to tax year 1990 returns or, if already completed, 1991 returns.**

1. Did you file a consolidated Federal income tax return?

Yes ☐ No ☐

If **Yes**, please record the number of entities included in the consolidated return(s)\_\_\_\_\_

Of this number, how many entities were active?\_\_\_\_\_

If you also filed unconsolidated federal returns, please record the number of unconsolidated returns filed\_\_\_\_\_

2. How many pages or inches of documents were submitted as part of your Federal income tax return?

\_\_\_\_\_pages or \_\_\_\_\_inches

3. In how many states did you file a corporate income tax return? (Include states which levy a franchise tax based on income or other business tax)\_\_\_\_\_

How many state income tax returns were filed?\_\_\_\_\_

Please indicate if California and/or New York were among your state income tax returns.

California ☐ New York ☐

4. In how many other substate jurisdictions (e.g., municipalities, counties, etc.) did you file corporate income tax returns?\_\_\_\_\_

5. Over the past year, how many of the following income tax filings did you make:

	<b>Federal</b>	<b>State and Local</b>
Estimated tax	_____	_____
Request for extension	_____	_____
Amended or corrected return (for any period)	_____	_____

6. Were you subject to the Alternative Minimum Tax?

Yes ☐ No ☐

If **No**, did you calculate the AMT Liability?

Yes ☐ No ☐

7. Please indicate which one of the following industry categories best describes the activities of your primary business:

Agriculture, Forestry and Fishing	<input type="checkbox"/>	Wholesale Trade	<input type="checkbox"/>
Mining	<input type="checkbox"/>	Financial	<input type="checkbox"/>
Construction	<input type="checkbox"/>	Insurance and Real Estate	<input type="checkbox"/>
Manufacturing	<input type="checkbox"/>	Services	<input type="checkbox"/>
Transportation and Public Utilities	<input type="checkbox"/>		

8. Indices of firm size (as of close of 1991, or \_\_\_\_\_)

- a. What was the total number of employees (full-time equivalents)?

U.S. \_\_\_\_\_ Foreign \_\_\_\_\_ Total \_\_\_\_\_

- b. What were your total assets?

U.S. \_\_\_\_\_ Foreign \_\_\_\_\_ Total \_\_\_\_\_

- c. What were your net receipts or sales? (Refer to the most convenient recent 12-month period)

U.S. \_\_\_\_\_ Foreign \_\_\_\_\_ Total \_\_\_\_\_

9. Indices of multinationality

- a. Does your corporation have a majority interest, direct or indirect, in any foreign subsidiaries?

Yes ☐ No ☐

If **Yes**, how many? \_\_\_\_\_ In how many different foreign countries? \_\_\_\_\_

Does your corporation have a minority interest in any foreign entities?

Yes ☐ No ☐

If **Yes**, how many? \_\_\_\_\_ In how many different foreign countries? \_\_\_\_\_

- b. Does your corporation operate any branches in foreign countries?

Yes ☐ No ☐

If **Yes**, how many? \_\_\_\_\_ In how many different foreign countries? \_\_\_\_\_

- c. Do you have a foreign sales corporation?

Yes ☐ No ☐



- d. Does your corporation own any Section 936 Corporations?  
Yes ☐ No ☐
- e. Does a foreign parent own a majority of your corporation?  
Yes ☐ No ☐
- f. Does your corporation participate in any joint ventures?  
Yes ☐ No ☐  
If Yes, how many of these are inside the U.S.? \_\_\_\_\_ Outside the U.S.? \_\_\_\_\_

**PART TWO: Compliance Costs Within the Firm**

This section refers to the cost of tax compliance incurred within the firm, both inside and outside the tax department. (Part Three deals with the cost of tax-related services purchased from sources external to the firm.) Please estimate the annual cost that could be saved over the long run if corporate income tax was eliminated.

1. How many person-years are devoted to federal corporate income tax?

Within Tax Department

Within Firm,  
Outside of Tax Department

To state and local corporate income tax?

Within Tax Department

Within Firm,  
Outside of Tax Department

2. Within the tax department, about what percentage of employee-years have the following educational attainments?:

Less than high school

High School graduate

College graduate

Advanced degree

**TOTAL**

Within Tax Department

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**100%**

3. What is the total annual budget for salaries (including fringe benefits) for federal corporate income tax-related work?

Within Tax Department

Within Firm

Outside of Tax Department

For state and local income tax-related work?

Within Tax Department

Within Firm

Outside of Tax Department

4. Are you currently under examination by the Internal Revenue Service?

Yes ☐

No ☐

If Yes, how many years are currently under examination? \_\_\_\_\_

What is the earliest year under audit? \_\_\_\_\_

Which IRS representatives are part of the audit team?

☐ Case Manager

☐ Economist Specialist

☐ Team Coordinator

☐ International Specialist

☐ Team Member

☐ Computer Audit Specialist

☐ Employment Specialist

☐ Excise Tax Specialist

☐ EPEO Specialist

☐ Other, Please Specify \_\_\_\_\_

Do you currently have tax years before appeals?

Yes ☐

No ☐

If Yes, how many? \_\_\_\_\_

Do you currently have tax years under litigation?

Yes ☐

No ☐

If Yes, how many? \_\_\_\_\_

5. Roughly speaking, the tasks involved in complying with Federal and State/local corporate income tax laws fall into the following categories:
- Keeping records: e.g., saving, creating, and filing necessary receipts and records, setting up and maintaining tax accounting systems.
  - Researching the tax laws and filing requirements: e.g., reading IRS or commercially-prepared materials, attending classes or seminars.
  - Planning: e.g., choosing accounting and inventory valuation methods, the nature of the tax year, the types of forms to file, evaluating the tax consequences of certain expenditures, various hiring and fringe benefit decisions, mergers and acquisitions, liquidations, dividends, raising capital, entering or exiting a market.
  - Dealing with other personnel about tax matters, either internally or externally.
  - Filing the returns: e.g., collecting forms and materials, reconciling book and tax accounts, preparing special schedules, attachments and worksheets, filling out the forms, assembling and copying, signatures and mailing.
  - Audits.
  - Appeals.
  - Litigation.
  - Preparing information for financial statements.
  - Monitoring and participating in the tax legislative and administrative process.

Please estimate the percentage of personnel expenditure devoted to each of these tasks, separately for within the tax department and outside the tax department (but within the firm):

	Within Tax Department	Within Firm, Outside Tax Department
a. Keeping records	_____	_____
b. Researching the tax laws and filing requirements	_____	_____
c. Planning	_____	_____
d. Dealing with other personnel, internal and external	_____	_____
e. Filing the returns	_____	_____
f. Audits	_____	_____
g. Appeals	_____	_____
h. Litigation	_____	_____
i. Preparing information for financial statements	_____	_____
j. Monitoring and participating in tax process	_____	_____
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>

6. Please estimate your annual non-personnel costs for complying with Federal and State/Local corporate income tax requirements:

	Within Tax Department	Within Firm, Outside Tax Department
Computer/Data processing	_____	_____
Record storage and retrieval	_____	_____
Office space	_____	_____
General supplies	_____	_____
Copying, faxes, etc.	_____	_____
Travel	_____	_____
Other (please specify _____)	_____	_____

Of the total non-personnel costs, what fraction was devoted to Federal and what fraction to State and Local income taxation?

Federal	_____
State/Local	_____
<b>TOTAL</b>	<b>100%</b>

### **PART THREE: Compliance Costs Outside the Firm**

1. Over the past fiscal year, what was your expenditure for outside tax assistance?

\_\_\_\_\_

Of this, what fraction was devoted to Federal income taxation and what fraction to State and Local income taxation?

Federal	_____
State/Local	_____
<b>TOTAL</b>	<b>100%</b>

2. Please estimate what percentage of your expenditures on outside tax assistance go to:

Accounting firms	_____
Legal firms (tax attorney)	_____
Consulting firms	_____
Financial Institutions	_____
Other (specify _____)	_____
<b>TOTAL</b>	<b>100%</b>

3. Please estimate the percentage of your expenditures on outside tax assistance accounted for by the following functions:

a.	Keeping records	_____
b.	Researching the tax laws and filing requirements	_____
c.	Planning	_____
d.	Filing the returns	_____
e.	Communicating with internal tax personnel	_____
f.	Audits	_____
g.	Appeals	_____
h.	Litigation	_____
i.	Preparing information for financial statements	_____
j.	Monitoring and participating in tax process	_____
k.	Other (specify _____)	_____
<b>TOTAL</b>		<b>100%</b>

#### **PART FOUR: Satisfaction Regarding Interactions with the IRS**

1. On a scale of 1 to 5, where 1=very ineffective and 5=very effective, please rate your opinion of the competency of the following members of the examination team: (If you are dealing with more than one team concurrently, evaluate the average competency of the teams' members.)

	Very Ineffective	Somewhat Ineffective	Neutral	Somewhat Effective	Very Effective	Not Member of Team
a. Case Manager	1	2	3	4	5	<input type="checkbox"/>
b. Team Coordinator	1	2	3	4	5	<input type="checkbox"/>
c. Domestic Team Member	1	2	3	4	5	<input type="checkbox"/>
d. International Agent	1	2	3	4	5	<input type="checkbox"/>
e. Engineer Specialist	1	2	3	4	5	<input type="checkbox"/>
f. Economist Specialist	1	2	3	4	5	<input type="checkbox"/>
g. Employment/Excise	1	2	3	4	5	<input type="checkbox"/>
h. Specialist Manager						
Engineering	1	2	3	4	5	<input type="checkbox"/>
International	1	2	3	4	5	<input type="checkbox"/>

2. On a scale of 1 to 5, where 1=very dissatisfied and 5=very satisfied, how satisfied are you with the currency of your current examination?

<b>Very Dissatisfied</b>	<b>Somewhat Dissatisfied</b>	<b>Neutral</b>	<b>Somewhat Satisfied</b>	<b>Very Satisfied</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

3. Information Document Requests:  
Regarding the audit team's requests for information, please use the criteria listed below to rate the following areas:

	not specific enough	appro- priately specific	too many	appro- priate number	not clear	clear
Domestic Issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
International/Economist Issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Engineering Issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. How satisfied are you with current efforts by case managers, specialist managers and/or branch chiefs to resolve issues at the lowest level possible?

<b>Very Dissatisfied</b>	<b>Somewhat Dissatisfied</b>	<b>Neutral</b>	<b>Somewhat Satisfied</b>	<b>Very Satisfied</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

5. Overall, how satisfied are you with your interactions with the IRS?

<b>Very Dissatisfied</b>	<b>Somewhat Dissatisfied</b>	<b>Neutral</b>	<b>Somewhat Satisfied</b>	<b>Very Satisfied</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Please rate your overall satisfaction level for the following separate functions of the IRS:

	<b>Very Dissatisfied</b>	<b>Somewhat Dissatisfied</b>	<b>Neutral</b>	<b>Somewhat Satisfied</b>	<b>Very Satisfied</b>
Exams	1	2	3	4	5
Appeals	1	2	3	4	5
Counsel	1	2	3	4	5

## **PART FIVE: Attitudes and Suggestions for Reform**

1. What aspect(s) of the current tax code is/are most responsible for the cost of complying with the Federal corporate income tax?

With state/local income taxes?

2. What features of the Tax Reform Act of 1986 (provisions or code sections) most increased the complexity of the tax system?

Which features reduced complexity the most?

3. Currency of Examination:

- a. Within how many months of the filing of your corporate returns do you think the examination should be started?

12 months ☐

18 months ☐

24 months ☐

Other: \_\_\_\_\_

- b. How many years do you think should be included in the audit cycle?

1 year ☐

2 years ☐

3 years ☐

- c. Within what time span do you think the audit should be completed?

6 mos.    12 mos.    18 mos.    24 mos.

If the audit cycle includes 1 year ☐ ☐ ☐ ☐

If the audit cycle includes 2 years ☐ ☐ ☐ ☐

If the audit cycle includes 3 years ☐ ☐ ☐ ☐

4. What suggestions would you make to simplify compliance with the tax at either the federal or state/local levels?

5. What is your best estimate of the percentage growth between 1986 and 1992 in the funds your corporation allocates for corporate income tax compliance?

\_\_\_\_\_ %



6. Of the total cost of complying with the federal tax system, what is your best estimate of the percentage of these costs that is due to foreign-source income operations?  
\_\_\_\_\_ %
7. In the past six years what has your corporation done to cope with increased complexity, given your limited budget?
8. What problems have you encountered with the tax system which have not been addressed by this questionnaire?

Contact Person (Optional): Name: \_\_\_\_\_

Title: \_\_\_\_\_

Phone No.: \_\_\_\_\_

00001668

## APPENDIX B

### Preparation of Data

The information from the returned questionnaires was initially recorded into a database file (using the Borland program, "Reflex") by University of St. Thomas students. The completed database was then printed and compared by a University of Michigan student, observation by observation, with the same questionnaires. All of the discrepancies were investigated and were resolved by recoding them at St. Thomas. The data were next read into a statistical package (TSP) where further adjustments and consistency checks were made, as discussed below.

One significant problem was the "lumping" together of responses to several questions. For example, question 6 of part II asks respondents to indicate the amounts spent, both within the tax department and in other corporate departments, on a list of non-personnel items (e.g., computers, copying, storage, travel). Many respondents "lumped" several items together and wrote one number as the total for those items. To break these totals into their component parts, we took all of the other surveys for which there were separate entries for each of the lumped-together categories and calculated (a) the total dollars spent on each category alone, (b) the total dollars spent on all the categories together, and (c) the ratio of (a) to (b). If, for example, 50 other respondents together allocated to travel 30% of the dollars they spent on 4 lumped-together categories, then we imputed 30% of the expenditure reported by the lumping respondent to travel; we repeated this process for the other 3 lumped categories. Similar lumping problems (questions 5 in part II and 3 in part III) were resolved in the same way.

Another problem was that the words million and billion have different meanings in American and British parlance; this was vexing, since both nationalities were represented in our sample. Furthermore, there are different ways of abbreviating those words, "m" denoting thousands when used by some and millions when used by others. The answers to the questions regarding assets and sales were especially difficult to evaluate because of this, although the problem cropped up everywhere dollar responses (or large numbers) were reported. Our

approach was to examine these questions very carefully, identifying the corporation and using external sources to verify the order of magnitude of the responses, as necessary.

Regarding the distribution of our sample by industry or sector, a small number of respondents indicated that their main business activity lay in more than one sector. In order not to lose the information contained in these responses, we coded, for example, a corporation checking both agriculture and services as a half-agriculture and half-services observation.

There are several places in the questionnaire where respondents were asked either to add two or more numbers, supply a total or to break down a total into its component parts. As a check on internal consistency, all such total and breakdowns were reviewed:

1. Corporate employment, assets and sales. Obvious arithmetic errors in calculating totals were corrected by adjusting the total. Often a respondent would report the same number for U.S. sales and for total sales, leaving foreign sales blank (this also happened with employment and assets). In such cases, we imputed a zero for foreign sales. Another variant of such problems was where U.S. sales were reported, but neither foreign sales nor total sales were present. Here our strategy was to impute a zero for foreign sales if, from the rest of the questionnaire, we were certain that the corporation did not engage in international business. Then, total sales was set equal to U.S. sales. In still other cases, foreign and total sales were reported while U.S. sales were omitted. In this case we set U.S. sales to the difference between total sales and foreign sales.

2. Percentage breakdown of educational attainment of employees. In some cases a respondent would supply percentages for some categories and not for others. If the percentages in the reported categories summed to 100, then zeroes were imputed for the omitted categories. Occasionally a respondent would report the absolute number of employees in each category rather than the percentages. These were converted to percentages. Finally, where the respondent's percentages did not sum to 100, the questionnaires were closely examined and the percentages adjusted; the percentages were either proportionally adjusted to sum to 100, or else coded as missing.

3. Current audit status. We used the oldest audit year as a consistency check on the number of years reported to be under audit. There were several cases in which the number of years reported exceeded the elapsed time between the oldest audit year and 1991. For these observations, number of years was recoded to equal that elapsed time.

4. Personnel expenditures within the corporation (within and outside the tax department). Zeroes were imputed for a category left blank by a respondent when the sum of the percentages reported for other categories was 100. Those cases in which the sum of percentages was not 100 were closely examined and adjusted; the percentages were either proportionally adjusted to sum to 100, or else coded as missing. On occasion, this required converting dollar responses to percentages.

5. Allocation of personnel costs between federal and state/local taxation. Zeroes were imputed where one category was left blank, and the other category was 100. Dollar responses were converted to percentages. In the few cases where the sum of federal and state/local percentages fell between 80 and 120, the percentages were adjusted to sum to 100; when the sum fell outside this range, the responses were coded as missing.

6. Allocation of outside assistance expenditures between federal and state/local taxation. Zeroes were imputed where the state/local responses was blank and the federal response was 100. Some respondents indicated that international tax matters were responsible for a portion of their expenditures; these were folded into the federal category. Dollar responses were converted to percentages.

7. Source of outside assistance and outside assistance by function. Dollar responses were converted to percentages. Zeroes were imputed, and necessary adjustments were made, as above.

Finally, a special procedure was used to test the consistency of the responses to questions regarding the number of person-years devoted to income tax matters (within the corporation) with responses to questions about the amounts budgeted for the salaries of those employees. The first step was to impute zeroes to any blank person-years categories (e.g., number of person-

years within the tax department devoted to complying with the federal income tax). Next, an estimate of per-employee compensation was constructed for each observation using a weighted average compensation estimate computed from the 1988 Current Population Report data on earnings by educational attainment.<sup>1</sup> This number was then multiplied by the number of person-years and the resulting product compared with the number reported for the salaries of these employees. We identified as problems those cases for which the reported salary budget was either greater than 300% of the constructed estimate or less than 40% of that estimate. Those 9 cases were carefully scrutinized and, where it seemed reasonable, were recoded (5 cases). In the remaining cases, the number of person-year responses were deemed unreliable and were treated as missing.

#### Missing Data

In a questionnaire of this length (12 pages), it is inevitable that not all questions will be answered by all respondents. One approach to treating the missing data would be to eliminate from the analysis all observations for which any of the responses are blank. This would, however, result in a sample so small as to be potentially unrepresentative of the large corporation population. The alternative selected was to include in the analysis all observations for which at least one question was answered. While this provides a much larger sample, boosting the validity and predictive power of the results, it also raises the problem of how to interpret blank answers. For example, if the question regarding the budget for salaries in the tax department is left blank, it may be because this corporation does not have a tax department (extremely unlikely in this sample), or because the respondent did not wish to reveal this information, or because it was too difficult to obtain this information, or because the question was simply overlooked.

---

<sup>1</sup>1988 average earnings, adjusted for inflation to 1991, for each educational attainment category were weighted by the proportion of a corporation's tax department employees with that education. The resulting estimate of per-employee earnings was multiplied by 1.25 to reflect fringe benefits.

In general, it would be incorrect to assume that the budgeted amount is zero. Under some circumstances and for some observations, it may be possible, either on the basis of responses to other questions or externally-provided information (e.g., a phone call to the corporation) to impute an answer. As described in the section on data preparation, we did impute answers to blank responses in a few, highly selective situations. But for the majority of cases, a special "missing values" code was inserted for all blank answers. Any statistical analysis of the answers to a question ignores those observations with missing values codes, considering only those observations for which the information was present. In this way we were able to use all of the information available in each observation. This was particularly valuable for those questions with multiple categories, where one or more categories were "missing" for many observations (e.g., the functional breakdown of personnel expenditures). Dollar measures of average compliance costs (e.g., the entries in Table 4) were constructed by first calculating mean expenditure for each category, and then adding across the categories.

Having wrung as much information as possible from the questionnaires, one next wonders whether the existence of missing values systematically biases the results. If the true values for observations with missing values were above the average of the other observations, then our result would be downwardly biased. On the other hand, if the true values for observations with missing values were below the average of the other observations, then our result would be upwardly biased. Since we have no reason to believe that all or even most of the missing values were either "high" or "low," it seems reasonable that those which were "high" were likely canceled by those where were "low," so that there was no systematic bias overall. For example, complete responses to questions concerning within-firm expenditures outside of the tax department were strikingly less frequent than to questions about such expenditures within the tax department. One could argue that our estimates of these costs were downwardly biased since so many respondents did not provide answers. However, one could alternatively argue that our estimates were biased upward since those who did respond tended to be the largest firms in the sample. Any systematic bias is arguably small, due to these offsetting factors.

In order to put an upper bound on the possible overestimate due to our treatment of missing values, in Table A below we have re-estimated the upper panel of Table 4 under the extreme alternative assumption that missing answers correspond to zero costs, even though an answer of zero was not provided. Table A recomputes the average compliance costs using the following procedure: for any firm supplying a number for at least one of the four personnel categories, zeros were assigned to any other personnel category for which no answer was provided. The same procedure was followed separately for within-firm non-personnel costs and outside assistance. As Table A shows, this lowers the overall average compliance cost, compared to Table 4, by 16%. There is a 11% drop in within-firm personnel costs, a 37% drop in within-firm non-personnel costs, and no drop in outside assistance costs. The drop in costs in departments outside tax is also much larger than for costs within the tax department.

Because of the reasons discussed above, the figures in Table A are likely to underestimate the true numbers, and are offered here as a guide to the maximum possible discrepancy introduced by our preferred method of dealing with missing values.

**TABLE A**  
**Average Compliance Cost Using a Different Treatment of Missing Values**  
**(\$thousands)**

All Responding Firms					
Function	Federal		State and Local		Total
	Tax Dept.	Other Depts.	Tax Dept.	Other Depts.	
Within firm Personnel	457.6	92.2	203.6	47.5	800.9
Within firm Non-personnel	131.4	51.6	60.4	24.6	268.0
Outside firm	190.1		57.3		247.4
Total	922.9		393.4		1316.3

**TABLE 1**  
**Comparison of Industry Distributions**  
**of Survey Respondents and CEP Population per GAO Report**  
**(percent)**

Industry	Survey Respondents	GAO Report
Wholesale Trade	7.1	7
Retail Trade	1.9	7
Services	8.5	5
Mining	2.5	3
Construction	1.8	2
Manufacturing	41.7	45
Financial and Insurance	20.0	19
Transportation	15.0	12
Agriculture	1.5	n.a.



**TABLE 2****Comparison of U.S. Assets Distributions  
of Survey Respondents and CEP Population per GAO Report**

<b>Asset Category (\$millions)</b>	<b>Survey Respondents</b>	<b>GAO Report</b>
Less than 250	10.9	12
250-500	14.1	13
500-1000	20.0	17
1000-2000	16.2	15
2000-3000	8.2	8
3000-4000	5.3	6
4000-5000	2.6	4
5000-6000	2.9	4.5
6000-7000	2.9	3
7000-8000	2.1	2
8000-9000	1.5	1
9000-10000	2.9	2
More than 10000	10.3	14

**TABLE 3****Distribution of Survey Respondents' Dun's Ranking, by Employment and Sales**

Dun's Rank of Parent Company	Employees		Sales	
	Employee Range	Number of Survey Respondents	Sales Range (\$millions)	Number of Survey Respondents
1-500	21920-761400	65	2977-124705	69
501-1000	12000-21800	46	1518-2971	51
1001-1500	8068-12000	39	1000-1512	38
1501-2000	6001-8053	17	738-1000	22
2001-2500	5000-6000	26	571-736	24
2501-3000	4100-5000	21	471-570	14
3001-3500	3500-4100	13	400-471	10
3501-4000	3022-3500	8	349-400	6
4001-4500	2800-3017	11	300-349	8
4501-5000	2500-2800	12	268-300	5
>5000	<2500	64	<268	24
Total ranked		322		271
Not ranked		43*		94**

\*Includes firms too small to make the top 5000, and three firms for which the lack of an identification number precluded matching.

\*\*Also includes nonfinancial firms, which were not ranked on the basis of sales by Dun's.

Source: Dun's Business Guide, 1992.

**TABLE 4**

**Average Compliance Cost  
(\$thousands)**

All Responding Firms					
Function	Federal		State and Local		Total
	Tax Dept.	Other Depts.	Tax Dept.	Other Depts.	
Within firm Personnel	476.8	130.6	217.8	70.3	895.5
Within firm Non-personnel	163.9	123.2	76.6	58.5	422.2
Outside firm	190.1		57.3		247.4
Total	1084.6		480.5		1565.1

Fortune 500 Only					
Function	Federal		State and Local		Total
	Tax Dept.	Other Depts.	Tax Dept.	Other Depts.	
Within firm Personnel	615.3	160.9	291.3	82.0	1149.5
Within firm Non-personnel	236.0	183.8	103.8	94.6	618.2
Outside firm	269.7		73.0		342.7
Total	1465.7		644.7		2110.4

**TABLE 5**

**Composition of Compliance Costs  
(% of total)**

All Responding Firms					
Function	Federal		State and Local		Total
	Tax Dept.	Other Depts.	Tax Dept.	Other Depts.	
Within firm Personnel	30.5	8.3	13.9	4.5	57.2
Within firm Non-personnel	10.5	7.9	4.9	3.7	26.9
Outside firm	12.1		3.7		15.9
Total	69.3		30.7		100.0

Fortune 500 Only					
Function	Federal		State and Local		Total
	Tax Dept.	Other Depts.	Tax Dept.	Other Depts.	
Within firm Personnel	29.2	7.6	13.8	3.9	54.5
Within firm Non-personnel	11.2	8.7	4.9	4.5	29.3
Outside firm	12.8		3.5		16.2
Total	69.5		30.5		100.0

Note: Categories may not sum to 100 due to rounding error.

**TABLE 6****Within-firm Personnel Costs by Function  
(% of total personnel costs)**

Function	All Survey Respondents		Fortune 500 Only	
	Within Tax Dept.	Other Depts.	Within Tax Dept.	Other Depts.
Record keeping	9.5	49.1	7.0	39.2
Research	10.7	3.8	9.0	2.6
Planning	12.4	5.5	14.7	6.3
Dealing with other personnel	7.6	6.2	7.2	10.0
Filing returns	30.3	8.7	31.8	11.6
Audit	12.9	7.4	13.1	10.4
Appeals	3.6	1.6	3.7	1.6
Litigation	2.1	0.6	2.7	0.3
Preparing info. for fin. stmts.	6.1	13.8	5.3	14.5
Monitoring tax process	5.0	3.3	5.6	3.7

Column totals may not be 100 because of rounding error.

**TABLE 7****Outside Assistance by Function and Type of Provider  
(% of total outside assistance costs)**

Function	All Responding Firms	Fortune 500 Only
Record keeping	1.7	0.4
Research	17.3	18.8
Planning	20.1	24.5
Communicating with firm personnel	3.4	3.1
Filing returns	7.2	5.0
Audit	12.1	9.2
Appeals	12.5	10.4
Litigation	19.4	20.2
Preparing info. for fin. stmts.	2.4	2.2
Monitoring tax process	2.4	3.5
Other	1.6	2.8
<b>Type of Provider</b>		
Accounting	42.2	41.3
Legal	52.6	55.1
Other	5.2	3.6

Columns may not add to 100 because of rounding error.

**TABLE 8****Average Functional Expenditures by Location of Activity****All Responding Firms**

Function	Within the Firm		Outside Assistance	Total	% of Total Costs
	Tax Dept.	Other Depts.			
Record keeping	69.5	115.7	4.2	189.4	15.9
Research	75.4	8.3	42.7	126.4	10.6
Planning	88.1	12.6	49.6	150.3	12.6
Dealing with other personnel	52.8	14.7	8.4	75.9	6.4
Filing returns	215.1	20.1	17.7	252.9	21.3
Audits	89.5	17.3	29.7	136.5	11.5
Appeals	25.4	3.7	30.8	59.9	5.0
Litigation	14.0	2.0	48.0	64.0	5.4
Preparing information for financial statements	41.2	32.8	6.0	80.0	6.7
Monitoring tax process	36.1	7.5	6.0	49.6	4.2
Other	0.0	0.0	3.8	3.8	0.3
Total	707.0	234.6	246.8	1188.7	100

Note: These figures do not include within-firm non-personnel costs. All figures, except for those in the last column, are in \$thousands.

**TABLE 8, continued**

**Average Functional Expenditures by Location of Activity**

Fortune 500 Only

	Within the Firm		Outside Assistance	Total	% of Total Costs
	Tax Dept.	Other Depts.			
Record keeping	78.8	136.1	1.4	216.3	13.7
Research	101.8	11.8	64.6	178.2	11.3
Planning	124.3	17.3	84.0	225.6	14.3
Dealing with other personnel	64.9	25.1	10.7	100.7	6.4
Filing returns	283.8	37.2	17.1	338.1	21.4
Audits	121.0	29.1	31.4	181.5	11.5
Appeals	32.0	4.5	35.7	72.2	4.6
Litigation	19.6	2.8	69.4	91.8	5.8
Preparing information for financial statements	48.8	38.6	7.5	94.9	6.0
Monitoring tax process	51.3	11.2	12.1	74.6	4.7
Other	0.0	0.0	3.0	3.0	0.2
Total	926.2	313.7	336.8	1576.7	100

Note: These figures do not include within-firm non-personnel costs. All figures, except for those in the last column, are in \$thousands.



TABLE 9

**Average Functional Expenditures by Sector**  
(% of total costs)

**All Responding Firms**

Expenditure Category	Agriculture	Manufacturing	Finance	Mining	Transportation	Insurance	Oil & Gas	Construction	Wholesale Trade	Services	Retail Trade	Media	Overall
Record keeping	17.6	13.6	27.4	15.1	14.8	7.8	10.5	17.5	14.3	17.5	43.1	8.4	15.9
Research	12.1	11.5	10.8	11.2	9.7	12.5	8.9	9.9	13.9	10.0	5.2	4.0	10.6
Planning	16.9	15.7	9.4	2.9	9.8	18.0	10.6	10.5	11.6	10.6	6.6	12.4	12.6
Communicating with firm personnel	3.4	6.3	5.0	9.8	7.5	7.6	6.3	4.8	6.2	6.4	5.3	16.5	6.4
Filing returns	21.7	22.6	21.1	13.9	21.0	21.2	20.1	25.1	22.1	25.1	13.6	11.9	21.3
Audit	13.3	12.4	12.0	12.2	9.8	9.7	7.1	13.0	13.5	13.8	12.7	12.0	11.5
Appeals	4.9	4.5	2.9	4.9	8.5	11.0	3.1	3.4	7.0	3.1	2.5	8.0	5.0
Litigation	2.2	3.0	3.2	2.6	5.0	1.4	23.6	7.0	1.6	0.8	2.9	4.0	5.4
Preparing info. for fin. stmts.	6.1	6.1	4.9	8.2	7.7	5.3	5.5	3.0	5.0	8.3	5.7	12.4	6.7
Monitoring tax process	1.8	4.2	3.3	7.7	4.8	5.6	4.2	5.4	4.3	2.4	2.4	10.4	4.2
Other	0.0	0.1	0.0	1.5	1.5	0.0	0.0	0.5	0.5	0.1	0.0	0.0	0.2
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Note: These figures do not include within-firm non-personnel costs.  
Column totals may not be 100 because of rounding error.

TABLE 9, continued

Average Functional Expenditures by Sector  
(% of total costs)

## Fortune 500 Only

Expenditure Category	Agriculture	Manufacturing	Finance	Mining	Oil & Gas	Services	Media	Overall
Record keeping	18.6	13.3	9.1	10.3	11.9	16.3	8.4	13.7
Research	12.3	11.6	12.3	11.3	7.6	18.0	4.0	11.3
Planning	22.3	15.8	17.7	5.0	10.4	7.8	12.4	14.3
Communicating with firm personnel	2.8	6.3	5.8	10.9	5.7	3.0	16.5	6.4
Filing returns	26.5	23.1	9.0	15.9	16.0	25.7	11.9	21.4
Audit	9.5	11.9	29.7	16.1	6.7	11.7	12.0	11.5
Appeals	0.6	4.7	0.0	6.0	3.1	5.8	8.0	4.6
Litigation	0.0	3.1	0.0	2.2	27.5	0.6	4.0	5.8
Preparing info. for fin. stmts.	5.6	5.4	13.4	10.4	7.1	10.2	12.4	6.0
Monitoring tax process	1.7	4.6	3.0	10.3	4.0	0.9	10.4	4.7
Other	0.0	0.1	0.0	1.5	0.0	0.0	0.0	0.2
Total	100	100	100	100	100	100	100	100

Note: These figures do not include within-firm non-personnel costs.  
Column totals may not be 100 because of rounding error.

TABLE 10

## Average Compliance Costs by Number of U.S. Employees

All Responding Firms								
Employee Size Category (thousands)	Personnel Expenditures		Non-Personnel Expenditures			Outside Assistance	Total Cost	Cost Per Employee
	Tax Dept.	Other Depts.	Tax Dept.	Other Depts.	Other Depts.			
<1.0	243.0	97.2	103.9	88.2		164.2	696.5	1203.4
1.0-2.75	278.3	88.1	85.7	52.1		111.4	615.5	326.0
2.75-6.0	424.7	105.4	155.9	65.8		142.3	894.1	210.7
6.0-15.0	609.6	161.9	183.5	129.3		223.1	1307.5	135.9
15.0-40.0	1455.1	330.8	545.9	212.6		526.5	3070.8	120.2
>40.0	1833.8	732.0	783.6	1217.9		613.8	5180.9	63.6
Overall Means	694.6	201.0	246.4	181.4		245.2	1568.5	125.0

Note: All dollar figures, except the last column, are in \$thousands.

TABLE 11

## Average Compliance Costs by U.S. Assets

All Responding Firms							
Asset Size Category (\$millions)	Personnel Expenditures		Non-Personnel Expenditures		Outside Assistance	Total Cost	Cost as % of Assets
	Tax Dept.	Other Depts.	Tax Dept.	Other Depts.			
<250	192.1	75.0	85.2	113.9	114.2	580.5	0.40
250-500	247.5	31.9	77.7	63.2	105.2	525.5	0.14
500-1000	334.5	143.6	118.3	57.6	143.3	797.3	0.10
1000-2000	572.7	148.3	248.4	99.8	217.2	1286.4	0.09
2000-3000	805.8	128.1	328.6	283.1	309.5	1855.0	0.08
3000-4000	1104.9	387.4	359.2	524.6	430.0	2806.2	0.08
4000-5000	1044.2	220.0	290.3	39.8	194.7	1788.9	0.04
5000-7500	1284.0	265.6	611.7	87.7	377.4	2626.3	0.04
7500-10000	2075.0	448.0	1120.7	393.7	931.4	4968.8	0.05
>10000	3508.8	531.5	1239.4	1459.0	1098.1	7836.8	0.03
Overall Means	750.2	171.1	277.6	216.8	261.6	1677.3	0.06

Notes: All dollar figures are in thousands, except for last column.  
Excludes financial and life insurance firms.

TABLE 12

## Average Compliance Costs by U.S. Sales

All Responding Firms							
Sales Size Category (\$millions)	Personnel Expenditures		Non-Personnel Expenditures			Total Cost	Cost as a % of Sales
	Tax Dept.	Other Depts.	Tax Depts.	Other Depts.	Outside Assistance		
<250	244.4	67.7	127.0	140.0	122.4	701.5	0.47
250-500	252.8	45.1	76.5	49.3	94.4	518.1	0.13
500-750	324.6	87.9	120.8	55.3	135.8	724.4	0.12
750-1250	339.5	97.1	99.8	53.8	130.0	720.2	0.07
1250-2000	574.9	154.5	212.5	63.8	182.1	1187.9	0.08
2000-3000	735.5	164.8	306.4	336.0	258.0	1800.6	0.07
3000-5000	1121.0	316.1	399.1	212.1	494.2	2542.4	0.07
5000-10000	1586.5	492.3	420.0	321.3	482.6	3302.7	0.05
>10000	3424.1	542.5	1962.9	2000.5	1096.0	9025.9	0.05
Overall Means	750.2	171.1	277.6	216.8	261.6	1677.3	0.06

Note: All dollar figures are in thousands, except for last column.  
Excludes financial and life insurance firms.

TABLE 13

## Average Compliance Costs by Number of Worldwide Employees

Employee Size Category (thousands)	Personnel Expenditures			Non-Personnel Expenditures			All Responding Firms		
	Tax Dept.	Other Depts.		Tax Dept.	Other Depts.		Outside Assistance	Total Cost	Cost Per Employee
<1.0	215.3	117.7		93.4	115.3		96.2	637.8	1027.2
1.0-2.75	284.9	86.0		89.0	48.7		115.2	623.8	318.0
2.75-6.0	390.0	105.1		147.9	58.5		154.0	855.5	197.5
6.0-15.0	550.6	164.6		177.5	75.0		187.7	1155.3	117.7
15.0-40.0	986.5	211.8		357.1	199.0		331.5	2085.9	83.3
>40.0	2242.4	648.4		969.8	864.6		862.5	5587.7	61.3
Overall Means	694.6	201.0		246.4	181.4		245.2	1568.5	95.0

Note: All dollar figures, except the last column, are in thousands.

TABLE 14

## Average Compliance Costs by Worldwide Assets

## All Responding Firms

Asset Size Category (\$millions)	Personnel Expenditures		Non-Personnel Expenditures			Outside Assistance	Total Cost	Cost as % of Assets
	Tax Dept.	Other Depts.	Tax Dept.	Other Depts.	Other Depts.			
<250	171.7	69.0	73.6	36.9		78.8	429.9	0.30
250-500	242.3	31.9	82.9	60.5		92.4	510.0	0.14
500-1000	278.7	127.5	89.3	93.2		146.4	735.0	0.10
1000-2000	504.2	152.0	188.7	59.9		226.7	1131.5	0.08
2000-3000	713.0	193.1	288.2	281.0		287.4	1762.6	0.07
3000-4000	792.3	360.7	306.8	536.6		325.8	2322.3	0.07
4000-5000	1047.3	97.6	376.7	43.8		197.1	1762.5	0.04
5000-7500	1123.7	182.4	373.6	45.7		350.5	2075.9	0.03
7500-10000	1773.3	356.3	918.1	399.0		692.9	4139.6	0.05
>10000	3168.8	644.6	1186.8	1274.7		1079.8	7354.7	0.03
Overall Means	750.2	171.1	277.6	216.8		261.6	1677.3	0.05

Note: All dollar figures are in thousands, except for last column.  
Excludes financial and life insurance firms.

TABLE 15

## Average Compliance Costs by Worldwide Sales

## All Responding Firms

Sales Size Category	Personnel Expenditures		Non-Personnel Expenditures		Outside Assistance	Total Cost	Cost as % of Sales
	Tax Dept.	Other Depts.	Tax Dept.	Other Depts.			
<250	273.6	86.2	170.3	197.2	88.1	815.3	0.55
250-500	234.7	37.6	70.5	65.0	90.9	498.7	0.13
500-750	336.2	98.9	108.7	46.5	91.9	682.2	0.11
750-1250	292.8	89.0	96.6	55.8	164.7	698.9	0.07
1250-2000	490.9	190.7	174.7	55.8	182.0	1093.8	0.07
2000-3000	767.7	153.7	254.9	278.8	294.2	1749.3	0.07
3000-5000	826.7	185.2	370.9	115.4	315.3	1813.5	0.05
5000-10000	1480.5	470.5	480.9	335.2	587.7	3354.7	0.05
>10000	3024.9	648.0	1443.9	1741.1	1031.8	7889.7	0.04
Overall Means	750.2	171.1	277.6	216.8	261.6	1677.3	0.05

Note: All dollar figures are in thousands, except for last column.  
Excludes financial and life insurance firms.



**TABLE 16****Predicted Compliance Cost by Sector (% Deviation from Average)**

<u>Sector</u>	<u>% Deviation from Average</u>
Manufacturing	-3
Wholesale Trade	-29
Retail Trade	-21
Services	+1
Mining	+52
Oil and Gas	+157
Construction	0
Transporation	-1
Agriculture	+1

**Note:** These figures are based on forecasts from a multiple regression analysis of compliance costs, not including non-personnel costs, as a function of the logarithm of six measures of firm size and principal sector. Because of the noncomparability of sales and assets figures, firms in the financial and life insurance sectors are not included.

**TABLE 17****Federal Tax Code Aspects Most Responsible for Cost of Complying  
(Number of Mentions)**

---

Depreciation	118
Alternative	115
Uniform Capitalization (Sec. 263A)	85
International	44
Foreign Tax Credit	37
Economic Performance Rules (Sec. 461)	30
Instability of Tax Code	22
Lack of Book/Tax Conformity	21
Controlled Foreign Corporation Reporting (Form 5471)	21
Transfer Pricing	16
Allocation Rules	12

---

**Note:** Of 365 respondents, 315 gave some answer to this question. Many respondents listed more than one aspect. Only those responses receiving at least ten mentions are listed.

**TABLE 18**  
**Complexity Increasing Features of TRA86**  
**(Number of Mentions)**

Alternative Minimum Tax/Adjusted Current Earnings	189
Uniform Capitalization (Sec. 263A)	138
Foreign Tax Credit	60
Depreciation	59
International	29
Active vs. Passive Income Definition	15
Net Operating Loss Treatment	13
Economic Performance Rules	12
Allocation	11

**Note:** Of 365 respondents, 311 gave some answer to this question. Many respondents listed more than one aspect. Only those responses receiving at least ten mentions are listed.

**TABLE 19****Complexity Reducing Features of TRA86  
(Number of Mentions)**

---

None	(112)	}	
?	(9)	{	134
Hah!/You're Kidding	(8)	{	
N/A	(5)	}	
Eliminating Investment Tax Credit			39
Eliminating Capital Gains Differential			10

---

Note: Of 365 respondents, 210 gave some answer to this question. Many respondents listed more than one aspect. Only those responses receiving at least ten mentions are listed.

**TABLE 20****State and Local Tax Code Aspect Most Responsible for Cost of Complying  
(Number of Mentions)**

---

Lack of Uniformity Among States - apportionment singled out (28)	76
State-Federal Inconsistency - depreciation singled out (34)	47
Apportionment	42
Unitary/Water's Edge	42
Depreciation	19
Non-Business vs. Business Income Definition	16
Consolidated/Combined vs. Separate Filing	16
Nexus	13

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**Note:** Of 365 respondents, 269 gave some answer to this question. Many respondents listed more than one aspect. Only those responses receiving at least ten mentions are listed.

**TABLE 21****Suggestions for Simplification  
(Number of Mentions)**

---

More Federal/State Uniformity			75
- go to piggyback system	(19)		
Eliminate Alternative Minimum Tax	(38)	}	
Simplify Alternative Minimum Tax	(11)	}	62
Eliminate Adjusted Current Earnings	(13)	}	
More Book/Tax Conformity			42
Uniform Apportionment Formula			31
Limit Changes in Tax Law			21
Eliminate Uniform Capitalization	(17)	}	19
Simplify Uniform Capitalization	(2)	}	
Simplify Foreign Tax Credit			13

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Note: Of 365 respondents, 256 gave some answer to this question. Many respondents listed more than one aspect. Only those responses receiving at least ten mentions are listed.

**TABLE 22****Strategies for Coping with Complexity  
(Number of Mentions)**

---

Computerization			203
Hiring More Personnel			59
More Training/Upgrade Personnel			43
More Outside Consulting			35
Work Harder/Longer Hours/More Overtime			28
Lower Level of Compliance/Less Competent Job	(14)	}	
Elect Simplified Methods	(7)	{	28
Use Materiality Rule	(5)	{	
Live With More Risk	(2)	}	
More Work Done In-House			21
Less Planning/Research			11

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**Note:** Of 365 respondents, 324 gave some answer to this question. Many respondents listed more than one aspect. Only those responses receiving at least ten mentions are listed.

**TABLE 23****Comparison of Arlinghaus-Anderson Mean Compliance Costs Results  
for 1983 and 1986 to the Results of This Report**

Fortune 500 Only			
	Arlinghaus-Anderson		Slemrod-Blumenthal 1992 Study
	1983 Study	1986 Study	
Personnel	758	999	1150
Total Within Firm	1004	1319	1768
Outside Tax Advisors	126	146	343
Total	1130	1465	2110

**Note:** All figures are in thousands of dollars.





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