The Role of Taxes in Organizational Choice:
S Conversions After the Tax Reform Act of 1986

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Abstract

One of the most fundamental decisions all businesses must make is the organizational form they will use to conduct their operations. Organizational choice will depend on both tax and non-tax factors, but the greater the tax savings from a particular choice, the more attractive that choice will be when compared to competing choices. This paper examines organizational choices based solely on tax considerations: the use of C versus S corporations among US businesses.

Using tax return information, this paper presents estimates of the role taxes played in firms' decisions to convert from taxable corporations to a pass-through corporate form, using data surrounding the Tax Reform Act of 1986. This is a departure, and advance, over previous work on organizational choice, which has only examined the influence of taxes after the organizational choice had been made. The results demonstrate that organizational decisions are influenced by the tax code, with firms changing organizational form in a manner consistent with tax minimization. One important result is the demonstration that tax factors are more complicated than the amount of tax savings to a firm in a given year, and are interrelated with a number of other tax and non-tax characteristics.

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While corporate financial decisions have been the focus of considerable research for many years, the study of organizational choices has received little attention. Much of this research developed in the 1970s and 1980s, as tax rules (especially changes under the Reagan administration in 1981) allowed for substantial tax savings if undertaken in certain forms.[1] Organizational choices are now recognized as being strongly influenced by the tax system, and for playing a role in the efficiency of the corporate tax.[2] Changes brought about by the Tax Reform Act of 1986 (TRA86) changed many of the tax rules which contributed the use of certain types of organizational forms to minimize tax liabilities, in many cases completely reversing the incentives. As a result, TRA86 provided a important change in the structure of the tax system from which data can be drawn to examine the particular role of taxes in organizational choice.[3]

The empirical literature in this area has generally been limited by its use of data for entities which have already made their organizational choices, and looked only at the relationship between the chosen forms and differences in various characteristics. Guenther (1992) and Gentry (1994) have examined the role of taxes in the use of publicly traded partnerships and corporations, testing the extent to which organizational form creates differences in the way they operate. Terando and Omer (1993) looked at conversions to publicly traded partnerships and found that leverage and the tax costs affected the decision. Plesko (1994) used differences in financial characteristics to predict what form the business had chosen to operate while Cloyd, Limberg, and Robinson (1995) tested for differences in financial structure by organizational choice. Ayers, Boyd, and Robinson (1996) examined the operating characteristics of closely-held C corporations, S corporations, and sole proprietorships, paying particular attention to the role of business risk in the decision.

With the exception of Terando and Omer, all of the previous research relied upon data after the organizational decisions had been made. In this paper, data is obtained for firms during an important change

in the tax code, and prior to an organizational decision, in order to examine how firms' operations under one tax regime influenced their response to tax changes. In addition, the organizations chosen for study, S corporations, are nearly identical in their non-tax characteristics, allowing for a purer test of the role of taxes in the organizational decision-making process than performed before.

Consequences of Organizational Choice for Corporations

The corporate sector is granted a number of non-tax benefits over other types of business forms, namely sole proprietorships and partnerships. Perhaps the most significant advantage of the corporate form is that owners are shielded from unlimited liability. Generally, corporate shareholders are only at risk for losses of a business to the extent of their investment. In the case of claims on the business in excess of the business' value, a shareholder's personal assets will not be subject to any claims by the corporation's creditors. Second, corporate ownership is freely transferable between individuals. This is not unique to the corporation, however, as sole-proprietors and limited partners are generally free to transfer their interests in a business as well.[4] But corporate ownership is much more easily divisible: a corporation can potentially have as many owners as there are outstanding shares of stock. Finally, unlike other types of organizations, a corporation can have an unlimited life span. The life of a sole proprietorship will be directly linked to the life span of its owner while the life of a partnership will be governed by the partnership agreement.

However, operating as a corporation entails a tax cost. Regardless of whether an entity is formally incorporated, the Internal Revenue Code (IRC) requires it to be taxed as a corporation if it "more nearly resembles a corporation than a partnership or trust."[5] The IRC treats corporations as separate entities from their shareholders and liable for a separate tax under subchapter C. Income earned by a corporation will be taxed first at the corporate level, and again at the individual level as earnings are distributed. This "double tax" structure has its own extensive literature and will not be discussed here.[6]

Subchapter S of the IRC was enacted in 1958 to allow "small" businesses to operate as corporations without the corporate tax consequences. These rules were substantially revised in 1982, making S elections even more attractive.[7] The key element to note is that Subchapter S corporations possess the same non-tax characteristics as any other corporation but for tax purposes are treated like partnerships.[8] Therefore income will generally be subject to only one tax, at the individual level.[9] By design, S corporations provide a low cost, easily achievable mechanism to opt out of the corporate tax.

To be eligible for federal tax treatment under subchapter S a corporation must meet all of the conditions of IRC §1361:[10]

- be a U.S. corporation with no more than thirty-five shareholders, with married couples counting as a single shareholder,[11]
- only individuals may be shareholders, with the exception of some estates and trusts,
- may not have a nonresident alien as a shareholder,
- may have only one class of stock.[12]
- may not be certain types of corporations, for example, members of affiliated groups, certain financial institutions, subchapter L insurance companies, possessions corporations, and Domestic International Sales Corporations (DISCs) or former DISCs.

An S election requires the unanimous consent of its shareholders. S corporations must generally use a calendar year tax year, but are granted the benefit or their choice of either the cash or accrual method of accounting. Unlike C corporation shareholders, an S corporation employee who owns more than two percent of the corporation's stock will face partnership treatment of fringe benefits.

Losses passed-through to shareholders are deductible at the individual level up to the individual's basis in the corporation's stock and debt. Losses in excess of basis can be carried forward at the individual level to offset

future subchapter S income. S corporation income is taxable to the individual shareholder as it is received or accrued regardless of whether the income is actually distributed (as in a partnership). As income is recognized by each shareholder, his or her basis in the corporation will be increased. Such basis affects the amount of distributions that can be received tax-free. Unlike a partnership, all gains and losses must be allocated *pro rata* to each share.

The extent of potential tax benefits of an S election depend on the relative tax rates on corporate and individual income. As an example, consider a new corporation under the tax structure prior to the passage of TRA86. The tax rate schedules for corporate income and the maximum tax rate on individual income are presented in Table 1. Under these circumstances, the use of an S corporation for a new company would yield a number of tax advantages to its shareholders. First, given an expectation of losses in early years (because of the combination of low sales, start-up costs, and depreciation deductions on early investment), these losses could be passed through directly to the shareholders to offset other income in the current year. Without an S election, all losses would stay in the corporation and be carried forward to offset future corporate income. This immediate use of losses yields a higher present value of tax savings.

Second, corporate owners in the highest individual tax bracket may have faced a tax rate higher than the maximum corporate rate. As a result, losses passed through to the owners could offset a greater amount of tax liability at the individual level than the corporate level, even absent present value considerations. If the taxpayer was in the highest individual marginal tax bracket these losses would have offset income at a rate four percentage points higher than the corporate rate (50 versus 46 percent). The greater the differential between the corporate and individual tax rates, the greater the advantage to passing the losses through to the individual.[13]

As the corporation became profitable, income would flow through to shareholders largely untaxed at the corporate level. However, the advantage that differential tax rates between corporate and individual income provided in the case of losses is reversed in the case of income. Higher individual tax rates imply that income which flows through to shareholders will face a heavier tax burden than income which is taxed only at the corporate level. Given the potential to have the income taxed at a lower rate in a corporation, the owners could elect to terminate their S status and become a taxable (C) corporation. As a C corporation only income distributed to shareholders in the form of dividends would be subject to a double tax; retained earnings would be taxed only once, at the corporate level.[14] Thus, the after-tax amount of income could be greater by electing to be taxed at the corporate level.[15] As the corporation grew, the value of outstanding stock would also rise as the corporation's assets increased. If a shareholder wanted income, it could be obtained through a sale of stock, which has the additional benefits of basis recovery and a lower tax rate if it qualified as a long-term capital gain. The net effect of these transactions would be to reduce the impact of the double tax on corporate income.[16]

There are a number of additional ways to remove income from the corporation without being subject to a double tax. Wages, salaries, and compensation paid to officers are all deductible expenses of a corporation, as are employee benefits. Were a corporation to pay out all of its earnings as employee expenses, only the individual tax would apply, assuming the expenses were included in the gross income of the employees.[17] Deductible expenses not included in an employee/shareholder's income would not be taxed at either level (such as health insurance and contributions to a retirement account).

Finally, while distributions, which are considered to be a return on equity, are not deductible by the corporation, payments of interest are. If a corporation finances its growth through the use of debt, the return to creditors would be taxed only once. If the corporation's creditors were also its shareholders, interest

payments could serve as a substitute for dividends, and would only be taxed once (at the individual level).

Effects of Recent Tax Changes on Organizational Form

Legal Changes Under the Tax Reform Act of 1986

TRA86 dramatically changed the incentives for using a corporation to defer the recognition of taxable income. The centerpiece of the 1986 law was to shift $120 billion of tax payments from individuals to corporations for the period 1987 - 1991. While both individuals and corporations saw their marginal tax rates fall, the maximum corporate rate was made higher than the maximum individual rate (34 versus 28 percent), as shown in Table 1. As a result, the incentive to leave income inside a corporation to avoid paying personal taxes was greatly reduced. In addition, the elimination of preferential treatment for long-term capital gains ensured that income will be taxed at the same rate regardless of when it is recognized.[18] Although under a number of circumstances an S election is either not permissible or otherwise not advantageous, for a new or existing eligible business the incentive to operate as an S corporation was greatly increased.

TRA86 also repealed the *General Utilities doctrine*. Under *General Utilities* a C corporation which sold its assets to another corporation was able to distribute the proceeds of the sale to shareholders (as part of a planned liquidation) without having to pay a corporate level tax. The repeal of *General Utilities* meant this income would now be subject to the corporate level tax. As a pass-through entity, S corporations are not subject to a separate corporate level tax on the proceeds of a corporate sale.

One exception to the pure pass-through treatment occurs in the case of a C corporation converting to an S corporation. Such a corporation was made subject to a new "built-in gains" (BIG) tax on the value of capital gains carried over from the C to the S corporation if they are recognized within a ten year period. TRA86 subjected all S elections made after January 1, 1987 to the BIG tax. Elections made before 1987 remain

subject to an earlier form of the tax which contained a three-year recognition period.

The imposition of a new corporate Alternative Minimum Tax (AMT) also made the taxable corporate form potentially more expensive. Even firms with relatively low corporate taxable income prior to 1986 might have become subject to the corporate AMT as the AMT targeted firms with large differences between their financial and taxable income, and those with large depreciation deductions. The AMT does contain an exemption level of $40,000 to mitigate its effects on smaller businesses.

Post-Tax Reform Trends in Business Organization[19]

The effects of TRA86 on organizational choices should be viewed in the context of broader trends over the past 30 years during which subchapter S corporations have been a small part of the corporate sector, at least as measured by size.[20] From 1959 to 1990 the number of S corporation returns grew at an annual rate of 10.2 percent, compared with 2.5 percent for non-S corporate returns. This growth is more striking if it is broken down into two periods: 1959-1986 versus 1986-1990. The annual growth in the number of S returns was 9.5 percent from 1959-1986, increasing to 17.5 percent per year from 1986-1990. Most dramatic was the change immediately following the enactment of TRA86, from 1986 to 1987, when the number of S corporations grew by more than 36.5 percent. S corporations now account for more than 42 percent of all active corporate returns. Of the total number of S corporations the largest share are in services (31.8 percent of all S corporations) and trade (26.7 percent). The smallest number of S corporations are in mining (1 percent of the total), agriculture (3.5 percent), and transportation and utilities (4.1 percent).[21]

While the number of S corporation returns has grown rapidly over the past three decades, the typical S corporation remains small compared to other corporations. S corporations accounted for less than 2 percent of corporate assets in 1986. Even with the sharp increase in the number of S corporations since 1986 S

corporations accounted for only slightly more than 4 percent of corporate assets in 1990. In 1990 the average S corporation had $472,550 in assets, compared to a non-S corporation average of approximately $8.1 million.[22]

S corporations have been responsible for a growing share of corporate income, and losses. The overall contribution of S corporations to the profitability of the corporate sector can best be seen by examining the trend in their share of net income less deficit (NILD).[23] In 1986, S corporations contributed 3.1 percent of the total amount of NILD. In 1987 this amount more than doubled to 7.1 percent of the total, and in 1990 reached 8.7 percent. These percentages mask the significance of the growth in corporate income attributable to S corporations. In 1986, the 3.1 percent of NILD of S corporations represented $8.3 billion. The increase in the S corporation share to 8.7 percent in 1990 represented $32.25 billion in NILD - an increase of about $24 billion, or nearly 290 percent over a four year period!

More than 90 percent of S corporations have four or fewer shareholders and less than one percent have more than ten. The distribution of assets is also skewed toward corporations with a small number of shareholders, though not as severely as the number of returns. Slightly more than half (53.4 percent) of the value of assets are held by S corporations with only one or two shareholders.[24]

As with measures of corporate income, S corporations' contribution to individual taxable income has also been a small share of the total, though it has increased in recent years. Between 1986 and 1990 S corporation income reported on individual tax returns rose from 0.8 percent of adjusted gross income (AGI) to 1.9 percent. Of those individual returns with subchapter S income, 72 percent had AGI below $100,000. However, positive income from S corporations tends to be concentrated among high income individuals. In 1990, 71 percent of such income went to individuals with more than $200,000 in AGI, up from 56 percent in

1986.[25] Thus, the shift in the use of S corporations after TRA86 appears to have led to more income flowing through to high-income individual tax payers.

Modelling the Conversion Decision

For eligible corporations, the choice between operating as an S corporation or a C corporation entails little or no non-tax cost, and will therefore turn on the extent to which firm managers can use one form or the other to minimize the combined corporate and individual levels of tax. Among the factors which much be considered in evaluating conversion include the legal requirements and financial characteristics of the firm. It is also likely that demographic characteristics of the firm, such as its industry group, could enter the decision. Thus, the net benefits of conversion can be modelled in reduced form as:

$$S_i^* = \alpha + \beta_L' L_i + \beta_F' F_i + \beta_D' D_i + u_i \tag{1}$$

Where each β_i contains the coefficients for the variables measuring the legal, financial, and demographic characteristics. S* is unobservable; we observe only whether the firm converted or not, that is:

$$S = 1 \quad \text{if } S_i^* > 0$$
$$S = 0 \quad \text{otherwise}$$

Assuming u_i is normally distributed, the estimation of equation (1) becomes a standard Probit model.[26]

Data

The data was drawn from a matched sample of the 1986 and 1988 Statistics of Income corporation files, each consisting of approximately 90,000 corporate tax returns.[27] From the 1988 file, the filing status of corporations reporting 35 or fewer shareholders was extracted and matched to the records of C corporations

for 1986.[28] Each record was then screened to see if it appeared eligible to elect S corporation status. Returns were excluded, for example, if they showed the corporation to be a part of a controlled group, operated in an ineligible line of business, or if they had a foreign owner. To directly examine the effects of TRA86, only firms which filed their first S return during tax year 1987 were categorized as having converted. The 1986 data is assumed to be exogenous to the conversion decision, and characterizes the operations of the firm as a C corporation. The final sample contained 11,723 firms, of which 3,370 converted from C to S. The sample was further split into two subsamples: corporations with positive taxable income (gain corporations) and those with negative taxable income (loss corporations).[29,30]

Variables

Accounting, economic, and legal considerations identify a common set of personal and financial characteristics which should influence the choice of organizational form.[31] This section provides a description of the various factors affecting the choice between S and C corporations. The variables are broken down into three groups to represent either legal or tax aspects of each firm's operations in 1986, along with an explanation of the expected effect of the variable on the decision to become an S corporation. These variable definitions are summarized in Table 2, with descriptive statistics for the sample provided in Table 3. Again, it is important to note that for an eligible corporation, given a set of financial circumstances, there were essentially no non-tax effects of an S conversion. Thus, the model estimated here provides as pure a test as possible of the role of various tax factors in organizational decisionmaking.[32]

Number of shareholders. Since an S election must be unanimous, the larger the number of shareholders the less likely it is an election will take place. In addition, as the number of shareholders increases, it is likely that the structure of the firm will become more complex. Since subchapter S places some restrictions on a firm's operations, firms with more shareholders will be less likely to be eligible.

Short form. This is a dummy variable for whether the firm filed an 1120S in 1986, and is expected to be positively related to S conversion. To be eligible to file an 1120S a firm must meet nearly two dozen requirements covering asset size, receipts, and income (all must be less than $500,000) as well as a number of operational restrictions. Many of these requirements overlap with those of subchapter S, and firms meeting them are likely to be least constrained by the rules governing S corporations.

Passive income. Passive income consists of earnings from rents, royalties, interest, dividends, and capital gains. Subchapter S imposes an entity level tax on former C corporations with earnings and profits if more than 25 percent of earnings are derived from passive sources. To avoid this tax, a converting C corporation with positive income needs to distribute all of its earnings and profits prior to the conversion (which would entail an immediate tax cost on shareholders). Thus, firms which generate a greater share of their income from passive sources should be less likely to convert. However, passive income represents corporate earnings from assets which could just as easily be held by an individual. If deferral of the individual tax was the motivation for their being held by the corporation then passive income would be associated with a desire to convert to S.

LIFO inventories. A converting corporation which uses LIFO inventory accounting must pay a corporate level recapture tax on the extent to which a FIFO valuation of inventory exceeds the LIFO value. A larger LIFO inventory implies a greater cost of converting.

State tax treatment. Not all states recognize subchapter S for state tax purposes. Operating in a non-conforming state (or states) will require additional recordkeeping[33] and provide a smaller combined tax benefit to converting than in a state which conforms to the federal tax rules on subchapter S.

Compensation of employees. In the case of closely-held firms, the shareholders of the firm are likely to be the firm's managers and will have discretion over how to compensate themselves for their services. In the case of a C corporation, for example, the payment of dividends subjects the earnings to two levels of tax (corporate and individual). However, if the same payment is made in the form of wages, only one level of tax will be paid as wages are a deductible expense to the corporation. The greater the share of deductions devoted to compensating officers or other employees the smaller the impact of the corporate tax, thus reducing the expected benefit of conversion.

Benefits. Benefits represent another form of compensation to workers which may escape both the corporate and individual tax. Employer contributions toward health insurance and pensions, for example, are deductible at the corporate level and generally not included in an individual's income. As with compensation, this provides a mechanism to reduce the impact of the corporate tax. In addition, S status restricts the ability of an employee/shareholder to receive non-taxable fringe benefits as they are subject to the rules governing partnerships rather than corporations.

Built-in gains. Built-in gains are proxied by the sum of accumulated depreciation, depreciation, and amortization. As explained earlier, the greater the amount of unrecognized capital gains in the corporation, the more attractive subchapter S status could be to the firm. The benefits of a subchapter S conversion were greatest for firms which had larger built-in gains and the shortest time horizons during which they anticipated selling the assets but at the cost of eliminating the deferral of additional income.

Book income. The larger the book, or financial, income of a firm relative to its taxable income the more likely it would be subject to the new corporate AMT. In addition to the other preferences and adjustments, one-half of the difference between book and taxable income was included in the definition of AMT income,

less a $40,000 exemption amount. To measure the potential effect of this aspect of the AMT a variable equal to one-half of the difference between book income reported on the firm's tax balance sheet and its taxable income was constructed.

Gross corporate tax payments. The larger the amount of tax paid by an eligible corporation, the greater the amount of tax saving S status would yield. Important to note is that the amount of tax savings is the gross, not net (after special deductions and tax credits), amount of the corporate income tax since those provisions which reduce gross taxes paid could also be passed through to individual shareholders.

Undistributed income. The amount of income being shielded from the individual income tax through deferral is represented by the retained earnings of the corporation. It is these retained earnings that, prior to TRA86, would have been eligible for capital gains tax treatment upon the sale of stock in the corporation.

Interest paid. Interest payments provide another mechanism to distribute corporate earnings without subjecting them to the corporate level tax since interest payments are a deductible expense to the corporation. As with the compensation variables, the greater the amount of income distributed without being subject to the corporate tax, the lesser the incentive to convert.

Carryover tax attributes. Tax attributes which can be carried forward by C corporations (such as unused tax credits and net operating losses) cannot be used by an S corporation. As a result, the future tax savings from the use of these attributes is lost if a corporation converts from C to S. The greater the amount of these attributes the more expensive it is for the firm to convert.[34]

Size. For an eligible corporation, the benefits of an S election should increase with the amount of assets.

At the same time, the size of a corporation is likely to be related to a more complicated financial and ownership structure, which may make it less likely that the firm will be able to meet the eligibility requirements of subchapter S. Plans for future operations and/or expansion might also conflict with subchapter S's eligibility requirements.

Age. The age of the corporation will likely affect the decision to utilize new tax strategies. Older corporations may find it more difficult to make necessary administrative changes, or may have reached a period in their growth where non-tax factors dominate their decision. Older firms have also had more time to consider an S conversion prior to 1986, and therefore age may be a proxy for institutional inertia. Firms which incorporated in 1986 and initially chose to be taxable should have had the greatest ease in converting, and are proxied separately with a dummy variable equal to 1 if they incorporated in 1986.

Results

The two sets of estimates are presented side-by-side in Table 4. In examining the set of variables which measure legal restrictions to a conversion, the number of shareholders and the share of income from passive sources are significant, and of the expected sign, only for gain corporations. Each additional shareholder is estimated to reduce the probability a firm would convert by 0.3%. Firms which filed an 1120A in 1986, whether loss or gain, were more likely to convert, as hypothesized. A loss firm which filed an 1120A was 15.5 percent more likely to convert, 28.5 percent for a gain corporation. For gain firms, a one percentage point increase in the share of income derived from passive sources decreases the probability of conversion by .065 percent. The passive income coefficients imply that although these investments are tax disadvantaged at the corporate level, shareholders appear to prefer not to have them in their own portfolios.

The extent of LIFO inventories, and hence the amount of tax that would need to be paid at the time of

conversion, is not estimated to affect the decision. The lack of any statistical relationship between the state variable and the conversion decision is in contrast to the earlier results which found systematic relationships between the use of S corporations and their location (Carrol and Joulfain (1993) and Plesko (1994)). A likely explanation is that while the costs of operating as an S corporation in a state which does not recognize S may be higher, they were not large compared to the federal benefits of an S election after TRA86.

Of the compensation variables, officer's compensation is statistically significant for both sets of firms, but of opposite signs. In the case of loss firms, compensation reduces the probability the firm would convert, as expected, with a one percentage point in deductions devoted to officer's compensation decreasing the probability of conversion .11 percent. For gain firms a one percentage point increase in compensation is estimated to increase the probability of conversion .18 percent. Wages are not estimated to play a significant role. Benefits are estimated to be significant only for loss corporations, but opposite the expected sign.

Much of the interest in the use of S corporations concerned the effects of the repeal of *General Utilities,* and the desire to remove these gains from potential double taxation. In neither set of estimates is the value of these gains estimated to be significantly related to their decision.

The variable for the book income adjustment is positive and significant for loss corporations, consistent with these firms being more likely to be subject to taxes after 1986. For these firms, the alternative minimum tax may have subjected them to federal tax liability even though they had negative taxable income. The significance of this variable for loss firms rather than gains firms may be explained by the characteristics of the firms: for loss firms the mean value of the book income variable is $135,300, well above the $40,00 exemption amount, while for gain firms the mean is only $44,300. The estimated effect is small, however, with a one percent increase in the value increasing the probability of conversion less than .01 percent

Gross tax is significant in both equations, though of opposite sign. For loss corporations the coefficient is positive, as expected, though the magnitude of the effect is small. For gain corporations, the effect is the opposite - larger tax payments *decrease* the probability the firm would convert. One reason this result could occur is that for loss corporations the firm is subject to a corporate tax, yet unable to use the losses to offset other income. For gain corporations, the amount of corporate tax paid could be a proxy for the tax benefit of deferring the individual tax.

Undistributed income represents current earning (or losses) not distributed to shareholders. In both sets of estimates the coefficients are positive and statistically significant, however the underlying means of the two variables are of opposite signs. Thus, while the estimated probabilities are of opposite signs, they provide a consistent set of estimates: greater negative income decreases the probability of conversion while greater positive income increases the probability. What is most intriguing in this result, however, is that based on the ability to pass losses through to shareholders in an S corporation, subchapter S should be the preferred choice both before, and after, TRA86, for any loss firm.

The coefficients on interest paid, negative and statistically significant in both equations, is also consistent with the use of a C corporation to shelter income and avoid the double tax. In both cases, the marginal probabilities of a percentage point increase in the share of deductions devoted to interest are relatively large: -.166 for loss corporations, -.192 for gain.

The next two variables represent tax attributes that would lose their value if a firm was to convert. As hypothesized, the greater the amount of credits a firm has, the lower the probability they would choose to convert. For loss firms, the amount of net operating losses they have does not appear to be a significant factor in the decision. That credits are estimated to be significant and losses not may be due to the greater

value of credits to a firm. A loss carryforward offsets income, and the tax savings rom that offset depends on the marginal tax rate of the firm. The value of a tax credit is the same, regardless of the tax rates.

Firm size, as measured by the log of assets, is significant in both equations, implying larger firms were more likely to convert. This result is complementary to the estimate for 1120A filers, which identified a portion of the smaller firms as more likely to convert. The age variables are significant only for loss firms, with older loss firms less likely to convert and loss firms incorporated in 1986 more likely to convert than other firms.

Additional Implications of the Results

Income Tax Revenues

A central element of the TRA86 was the shifting of an estimated $120 billion in tax payments from individuals to corporations during fiscal years 1987 to 1991. Actual corporate receipts, however, did not appear to increase as much as expected and individual receipts fell by less than expected. Concern over these revenues was great enough to cause the Senate Finance Committee to hold hearings to investigate the potential reasons for the shortfall where the growth of S corporations was highlighted as a potential factor by a number of witnesses.[35]

The revenue consequence of S conversions requires information on both the corporation, to determine the amount of corporate revenue lost as well as the amount of additional income passed-through to individuals, and the shareholders, to determine the tax on additional individual income. Table 5 provides information on both the unweighted and weighted sample. For the sample, the amount of revenue estimated to be lost from the corporate sector because of conversions was $840 million. Offsetting this, however, was $1.04 billion in undistributed income which would have been taxed at the individual level after conversion, along with the $840 million in corporate tax which, rather than being paid, would also be taxed at the individual level. Were

this income taxed at the 34 percent rate, individual income tax liability would rise by $640 million, implying a net loss of $200 million. This loss does not include the effects of partnership treatment of benefits or taxes paid at the time of conversion, both of which would reduce the loss of revenue. Applying the sample weights, the net loss is estimated to be approximately $500 million.

Compliance

Research within the IRS has identified a decline in business tax compliance from 1980 and 1987. Given the use of closely-held C corporations as a means of avoiding the individual tax, it may also be the case that the corporate form encourages non-compliance by some firms as well. If the corporations which converted from C to S were relatively more compliant, then the decrease in compliance observed in 1987 could be due to the higher percentage of non-compliant firms which remained. Support for this is found in the characteristics of the non-compliant reported by Morton (1992). Older firms, which were estimated to be less likely to convert, are also less compliant. In addition, firms in the mining industry, which were also estimated as less likely to convert, are the least compliant of all industry groups. Thus, the decrease in compliance may have been due to a creaming effect - with more compliant firms being more likely to convert, leaving the less compliant behind.[36]

One test of this hypothesis can be performed by assigning ranks to the industry groups based upon their estimated marginal probabilities of conversion (regardless of whether the coefficients are significant) and also by their estimated degree of compliance as reported by Morton. For gain corporations the null hypothesis that the rank correlation is 0 cannot be accepted against the alternative hypothesis of there being a positive correlation, that is, less compliant industries were less likely to convert (significant at 1 percent) . For loss corporations the null cannot be accepted at the 5 percent level.

Welfare Costs of the Corporate Tax System

Gravelle and Kotlikoff (1989) have estimated significant welfare losses of the corporate income tax. In their framework, the distinction between corporate and noncorporate sectors is based tax status, rather than profitability. Their estimate of the deadweight loss of the corporate tax (approximately 120 percent of liabilities) is due to within sector substitution between corporate and noncorporate capital. However, the results of Gordon and Mackie-Mason (1994) suggest the presence of sizable non-tax costs to operating as a noncorporate entity, reducing the cost of the corporate tax. They estimate the deadweight loss of the corporate tax to be only 9 percent of liability. In both of these studies S corporations were classified as noncorporate entities, while closely-held C corporations were viewed as corporate. This assumption will overstate the significant of the noncorporate sector, and lead to an overstatement of the deadweight loss of corporate taxation

It is clear from the analysis presented here that these businesses can be viewed as the same in all matters except their choice of tax status, and that those which chose to remain taxable did so as a result of tax-minimizing behavior, or because of perceived non-tax factors. Second, the mere changing from one tax status to the other would seem to hardly entail a shift in the underlying technologies of production, or management, which is implicit in Gravelle and Kotlikoff's characterization of the noncorporate sector. Finally, to the extent that eligible firms chose not to convert implies the non-tax benefits of operating in the *taxable* corporate form may be relatively high, supporting the lower estimates of the deadweight loss from the corporate tax found by Gordon and Mackie-Mason.

Recent Changes in Federal Tax Laws

Since 1986 there have been a number of changes in tax law and administration affecting subchapter S corporations.[37] The most significant changes, however, may have been contained in the Omnibus Budget

Reconciliation Act of 1993 (OBRA93). Changes in the tax rates under OBRA93 have reintroduced a maximum individual tax rate higher than the maximum corporate rate. The effect of such a change is to make the use of subchapter S corporations less attractive from a tax minimizing standpoint for companies which do not distribute the earnings.[38]

Under OBRA93 the maximum individual tax rate was increased to 36 percent for taxable income in excess of certain amounts ($140,000 for married filing jointly, $115,000 for single individuals). OBRA93 also included a ten percent surtax on income in excess of $250,000 (married filing jointly), leading to a new maximum marginal tax rate of 39.6 percent (.36 + (.36*.10)). In addition to these individual changes, a new corporate tax rate of 35 percent was imposed on corporate taxable income in excess of $10 million, and a new phase out of 34 percent tax rate imposed a 3 percent surcharge (implying a marginal rate of 38 percent) of corporate income between $15,000,001 and $18,333,333. The OBRA93 also introduced an exclusion of 50 percent of the gain on "qualified small business stock" held for more than five years up to $10 million. This stock is defined as any stock in a C corporation issued after August 10, 1993.

As a result, it is no longer clear an S corporation will continue to be a beneficial form of organization for new corporations. However, Congress has also considered modifications to subchapter S to make it more attractive. In 1994 and 1995 , legislation was introduced which would have expanded the number of permitted shareholders and change the way in which family members are counted. S corporations would also have been permitted to have subsidiaries and issue preferred stock. Further, in 1995, the Treasury Department proposed changing the classification rules to allow unincorporated businesses to choose whether or not they wanted to be subject to the federal corporate tax regardless of their other organizational characteristics.[39] Regardless of the individual outcomes of these various proposals, the tax treatment of closely-held corporations is likely to continue as an active area of potential change.

Conclusions

The organization of business operations can be a difficult and complex task, requiring a manager to understand not only their product(s) and market(s), but also numerous aspects of business law. The tax code adds another level of complexity to these decisions. Were the tax system neutral, decisions made on the basis of business judgment would be unaffected by the presence of an income tax system. The U.S. tax code, however, is known to affect firms' decisions in employment, financing, and investment. In this paper an additional influence of the tax code has been described and explored: its effects on organizational form. Not only does the tax code affect organizational choice, but these organizational decisions also appear to have their own effects on firm financing, investment, and operations.

The dramatic increase in the use of S corporations after TRA86 represents a set of purely tax-motivated transactions. Given the opportunity to minimize the combined effects of the corporate and individual taxes, many firms traded benefits of subchapter C, including deferral and beneficial tax treatment of payments to shareholders, in order to eliminate their exposure to a second level of tax. The results also highlight the underlying advantages remaining in subchapter C for shareholders willing to defer the recognition of income in order to minimize the effects of the individual tax.

1. Watson (1988) analyzed the way in which partnership investment could be influenced by the level and progressivity of the tax system, and the interaction of taxes with the preferences of the partners. Scholes and Wolfson (1988, 1992 chapter 19), provide a description of the use of partnerships for tax-sheltered investments.

2. See Gravelle and Kotlikoff (1989) and Gordon and Mackie-Mason (1994) for extensions of the Harberger model which allow for differences in the form of business.

3. For an explanation of these provisions see U.S. Congress (1987), pp. 1063 - 1079.

4. In closely-held corporations, the free transferability of ownership may be limited by agreement of the shareholders, or by a lack of markets for the shares.

5. See IRC §7701 and its regulations, §301.7701-2.

6. See, for example, McLure (1979) or U.S. Treasury (1992).

7. For an overview of the 1982 Act, see Kenoe (1982).

8. The exceptions are outlined in IRC §1363(b).

9. S-corporations may be liable for investment credit recapture, tax on excess net passive investment income, capital gains, and built-in gains.

10. Individual states set their own rules for the state income tax treatment of S corporations, which range from full conformance to the federal rules to the nonrecognition of S corporations, which subjects all income of the entity to the state corporate income tax.

11. A June 17, 1994 IRS Revenue Ruling (1994-27) revoking a 1977 ruling makes it easier to structure an operation to include more than 35 shareholders yet maintain flow-through treatment. In 1977, when there was a ten shareholder limit for S corporations, thirty unrelated individuals formed three ten-shareholder S corporations. The three corporations then organized a partnership to operate their business. In Revenue Ruling 77-220 the IRS ruled that this should be treated as one thirty shareholder corporation, ineligible for S status. The revocation of Revenue Ruling 77-220 will make it much easier to circumvent the thirty-five shareholder limitation.

12. IRC §1361(c)(5) provides a safe-harbor such that straight debt shall not be treated as a second class of stock. In October 1990 the IRS issued proposed regulations (PS-4-73) dealing with the one class of stock rule. Hearings on the proposed regulations were held in February of 1991. See IRS (1990), and Evans (1991).

13. As recently as 1980, the maximum individual marginal tax rate was 70 percent, implying a maximum differential of 24 percentage points (70 - 46).

14. Two "penalty taxes," the personal holding company tax and the accumulated earnings tax, exist to thwart unreasonable retention at the corporate level of individual and corporate earnings. However, tax planning strategies exist to eliminate or greatly reduce their threat. See Lind., et. al. (1987) p. 53, and 384 - 385.

15. This strategy works only if the shareholders are willing to forgo dividend income. If all earning are to be distributed each year then S would work better than C since it eliminates the corporate level tax. As explained below, it is possible to remove earnings from a C corporation without subjecting them to both levels of tax.

16. The preferential tax rate on capital gains was eliminated in 1986 when it was set equal to the individual tax rate. A small differential was reintroduced in 1990 when the maximum individual tax rate was increased to 31 percent and the maximum capital gains rate left at 28 percent. If the stock were held until death, the double tax would be completely avoided through the step-up of basis allowed to property acquired from a decedent. See IRC §1014.

17. Excessive payments may be challenged by the IRS, particularly when there is substantial overlap in the corporation's officers and shareholders, though the ability of the IRS to enforce such a determination has been questioned. See Raby (1994).

18. Capital gains continued to provide the benefit of deferral.

19. To fully understand the trends in the use of various business organization requires an understanding of the tax code, and its changes in each of those years. While each of the numerous tax law changes since Subchapter S was enacted in 1958 will have had effects on its desirability over the years, it is beyond the scope of this paper to review and discuss each one. Petska and Wilson (1994) provide a summary of the tax changes during the 1980 - 1990 period, and discuss their impact on business income.

20. Nelson (1988) presents a description of the historical significance of various non-corporate businesses, including subchapter S corporations.

21. Historical data on S corporations and their growth since 1986 can be found in Nelson (1993), Petska and Wilson (1994), and Plesko (1995).

22. Nelson (1992, 1993) provides data on the characteristics of new S corporations after the TRA86.

23. IRS defines NILD is the difference between gross receipts and necessary business deductions as allowed for by the IRC, and before special deductions such as the net operating loss carryforwards. As a result, it will exceed measures of income subject to the corporate tax (which is generally equal to zero for an S corporation). A complete description is provided in the "Explanation of Terms" section IRS *Corporation Income Tax Returns* publications.

24. Plesko (1994) reporting data from 1984. This distribution appears to have remained stable even after TRA86 (Nelson (1993)).

25. Data from Nelson (1993).

26. For the results presented in Table 4, the null hypothesis of homoskedastic errors could not be rejected.

27. For a general description of the sample see U.S. Internal Revenue Service (1988).

28. The 1986 and 1987 files did not contain information on the number of shareholders.

29. The hypothesis that the two samples can be pooled cannot be accepted at any reasonable level of significance.

30. That a smaller percentage of eligible loss corporations converted is consistent with the results of Samwick (1995) who concluded that the passive loss rules of TRA86 were redundant in discouraging all but the most "abusive" tax shelters. As a result, the flow-through of losses, in and of themselves, may not have been as attractive after TRA86.

31. The variables chosen were those identified in the literature, particularly the tax-practice literature, as being either important in making the conversion decision or as characteristics associated with the use of taxable corporations to shelter income from the individual tax. See, for example, Solomon, Lurie, and Boutwell (1986), McNulty (1992), Plesko (1994).

32. While there are little, if any, non-tax differences between S corporations and C corporations eligible to convert, this should not imply that tax factors are viewed as significant, or even considered by the firm. In a survey of Silicon valley start-up firms Bankman (1994) found executives, despite their high level of sophistication, to have little knowledge or interest in the tax consequences of their organizational choices. This may explain why only a minority of the firms in this study actually converted from C to S despite the potentially large tax benefits.

33. From Reynolds and Kessel (1988), states which did not recognize S corporations for state tax purposes in 1986 were: Connecticut, Louisiana, Michigan, New Jersey, North Carolina, and Tennessee.

34. These carryovers can be used to offset any entity level taxable income generated by the C to S conversion.

35. U.S. Congress (1990).

36. Plesko, Shelley and Omer (1996) examine conversions within the natural resource industry and find a number of industry-specific factors that influence the decision.

37. See Looney (1993) for an overview.

38. See Looney (1994) for a complete description of the changes brought about by OBRA93 and their potential impact on S corporations.

39. See Shefter (1995) and Plesko (1995) for a discussion of these proposals.

References

Ayres, B. , B. Cloyd, and J. Robinson, 1996, "Organizational form and taxes," forthcoming, *Journal of the American Taxation Association*.

Bankman, J., 1994, "The structure of Silicon Valley start-ups," *UCLA Law Review,* 41: 1737-1768.

Carroll, R., and D. Joulfaian, 1993, "Do taxes affect corporate organizational decisions? The choice of organizational form," working paper, U.S. Treasury.

Cloyd, B., S. Limberg, and J. Robinson, 1995, "The impact of federal taxes on the debt-equity structure of closely-held corporations," working paper, University of Texas-Austin.

Evans, M., 1991, "IRS bashed from all sides over one-class-of-stock regs covering S corporations," *Tax Notes*, 50: 704 - 708.

Gentry, W., 1994, "Taxes, financial decisions and organizational form: Evidence from Publicly Traded Partnerships, *Journal of Public Economics*, 53: 223 - 244.

Gordon, R.H., and J.K. Mackie-Mason, 1994, "Tax distortions to the choice of organizational form," *Journal of Public Economics*, 55: 279 - 306.

Gravelle, J.G., and L.J. Kotlikoff, 1989, "The incidence and efficiency costs of corporate taxation when corporate and noncorporate firms produce the same good," *Journal of Political Economy*, 97: 749 - 780.

Guenther, D.A., 1992, "Taxes and organizational form: a comparison of corporations and master limited partnerships," *The Accounting Review*, 67: 17 - 45.

Kenoe, A.S., 1982, "An overview of the Subchapter S Revision Act of 1982, *Tax Notes*, 17: No. 12, (December 20).

Lind, S.A., S. Schwarz, D.J. Lathrope, and J.D. Rosenberg, 1987, *Fundamentals of Corporate Taxation*, 2nd ed., (Foundation Press, Mineola, N.Y.).

Looney, S.R., 1993, "Important developments affecting S corporations since the Tax Reform Act of 1986," *Journal of S corporation taxation 4* (Spring): 312 - 344.

-----, 1994, "Choice of entity after RRA'93: Back to the future for S corporations?" *Journal of S Corporation Taxation 5* (Spring): 299 - 338.

McLure, C.E., Jr., 1979, *Must corporate income be taxed twice?*, (Brookings, Washington, D.C.).

McNulty, J.K., 1992, *Federal Income Taxation of S Corporations.* (Westbury N.Y.: Foundation Press).

Morton, C.M., 1992, "Trends in the compliance of small corporations," *IRS Research Bulletin*, (Publication 1500), (Washington D.C., US GPO): 29-37.

Nelson, S.C., 1988, "Noncorporate business taxation: before and after the Tax Reform Act of 1986," U.S. Treasury, Office of Tax Analysis Working Paper No. 59.

-----, 1992, "S Corporations since the Tax Reform Act of 1986." *Proceedings of the Eighty-Fourth Annual Conference, 1991.* (Columbus OH: NTA-TIA): 18 - 24.

-----, 1993, "S Corporations: The record of growth after Tax Reform." *Journal of S corporation taxation 5* (Fall): 138 - 161.

Petska, T.B., and R.A. Wilson, 1994, "Trends in business structure and activity, 1980-1990." *SOI Bulletin 13* (Spring): 27 - 72.

Plesko, G.A., 1994, "Corporate taxation and the financial characteristics of firms." *Public Finance Quarterly* (July): 311 - 334.

-----, 1995, "'Gimme Shelter: Closely-held corporations since the Tax Reform Act of 1986," *National Tax Journal*, 48 (September), 409 - 416.

-----, M. Shelley, and T. Omer, 1996, "The influence of tax costs on organizational choice in the natural resource industry," working paper, MIT..

Raby, W.L., 1994, "No ceiling on deductible compensation in closely held corporations," *Tax Notes*, 64: 97 - 100.

Reynolds, R., and J. Kessel, 1988, "A practical guide to the state tax impact of a subchapter S election," *Journal of State Taxation*, 6: 291 - 326.

Samwick, A.A., 1996, "Tax shelters and the Tax Reform Act of 1986," forthcoming in M.S. Feldstein and J.M. Poterba, eds., Empirical Foundations of Household Taxation. (University of Chicago Press, Chicago).

Scholes, M.S., and M.A. Wolfson, 1989, "Issues in the theory of optimal capital structure," in S. Bhattacharya and G.M. Constantinides, eds, *Financial Markets and Incomplete Information: Frontiers of Modern Financial Theory*, v. 2, (Rowman & Littlefield, Totowa), pp. 49 - 74.

-----, 1992, *Taxes and Business Strategy: A Planning Approach*, (Prentice-Hall, Englewood Cliffs).

Shefter, Daniel 1995. "Check the Box Partnership Classification: A Legitimate Exercise in Tax Simplification," *Tax Notes 67* (April 10): 279 - 284.

Shelley, M.K., T.C. Omer, and T.J. Atwood, "Capital restructuring: The case of publicly traded partnerships," working paper, Northeastern University.

Solomon, L.D., B.K. Lurie, and C.D. Boutwell, 1986, *Choice of Entity*, 456 TM (Bureau of National Affairs, Washington, D.C.).

Terando, W., and T.C. Omer, 1993, "Corporate characteristics associated with master limited partnership

formation," *Journal of the American Taxation Association* 15: 23-45.

U.S. Internal Revenue Service, *Statistics of Income: Corporation Income Tax Returns*, Publication 16, various years.

-----, 1990, "One class of stock requirement," Proposed Rules (PS-4-73).

U.S. Internal Revenue Service, 1995. Notice 95-14, *Internal Revenue Bulletin* (March 29).

U.S. Congress, Committee on the Budget, House of Representatives,1987, *Omnibus Budget Reconciliation Act of 1987*. Report 100-391, Part 2, (October 26).

-----, 1990, Committee on Finance, U.S. Senate, *Decline of Corporate Tax Revenues*, S. Hrg. 101-1065, (Washington, D.C.: U.S. GPO), (May 3).

U.S. Treasury, 1992, *Taxing Business Income Once*, (Washington, D.C.: U.S. GPO).

Watson, H., 1988, "The effects of taxation on partnership investment," *Journal of Public Economics* 36, 111 - 126.

TABLE 1
Statutory Corporate Tax Rates[1]
(in percent)

Taxable Income	1986	1988
$0 - $25,000	15	15
$25,001 - $50,000	18	
$50,001 - $75,000 25	39	
$75,001 - $100,000	40	34[2]
over $100,000	46[2]	
maximum individual rate:	50	28[3]

[1]Transition rates for 1987 are omitted, as are the corporate and individual minimum tax.

[2]An additional 5 percent corporate tax is applied to a certain range of taxable income in order to recapture the benefits of the graduated rate structure from large corporations. In effect, corporations above this income range pay a flat tax equal to the highest marginal rate. For 1986 and 1988 the ranges and maximum additional tax are:

Taxable Income	$1,000,000 - $1,405,000	$100,000 - $335,000
maximum additional tax	$20,250	$11,750.

[3]Some high-income individuals may face a 33% marginal rate on certain income as the benefits of the graduated rate structure are phased-out. This "bubble" was repealed in 1990 and replaced with a 31 percent bracket.

TABLE 2

Variable Definitions and Predicted Signs

Variable	Definition	Predicted effect
Number of shareholders	number of shareholders of record -	
Short form	equal to 1 if the firms filed an 1120A in 1986	+
Passive income	share of net income from passive sources (rents + royalties + interest + dividends + capital gains)	-/+
LIFO inventories	dollar value of LIFO inventories	-
State	equal to 1 if state of corporation did not conform to federal tax treatment of S corporations, 0 otherwise	-
Officer's compensation	compensation of officers as a share of total deductions	-
Wages	wages as a share of total deductions	-
Benefits	benefits paid as a share of total deductions	-
Built-in gains	accumulated depreciation, depletion, and amortization	+
Book income adjustment	if positive, before-tax net income (book) less net income (tax), otherwise 0	+
Gross tax	tax liability before credits	+
Undistributed income	net income before taxes less taxes paid less distributions to shareholders	+
Interest paid	interest payments as a share of total deductions	-
Carryover GBCs	GBCs available at the end of the year	-
Carryover NOLs	NOLs available at the end of the year	-
Assets	total assets from the tax balance sheet	+/-
Age	number of years since incorporation	-
Incorporated in 1986	equal to 1 if date of incorporation was 1986 0 otherwise	+

TABLE 3
Summary Statistics of the Sample

Variable	Loss Corporations Mean	Loss Corporations Std. Dev.	Gain Corporations Mean	Gain Corporations Std. Dev.
Converting firms	0.1832		0.3213	
Number of Shareholders	3.1836	4.1262	3.3447	4.2566
Short form (dummy)	0.0209		0.0058	
Passive Income (share)	0.1438	0.3184	0.0988	0.2345
LIFO inventories	0.0338	0.4752	0.0426	0.5207
State (dummy)	0.0832		0.1001	
Officer's compensation (share)	0.1042	0.1327	0.1414	0.1428
Wages (share)	0.1748	0.1598	0.1990	0.1550
Benefits (share)	0.0226	0.0512	0.0360	0.0534
Built-in Gains	1.1375	7.2020	1.3341	5.7630
Book Income Adjustment	0.1353	0.9409	0.0443	0.6375
Gross Tax	0.0003	0.0025	0.3339	3.0690
Undistributed Income	-0.3189	1.7021	0.2711	5.1700
Interest Paid (share)	0.1069	0.1677	0.0674	0.1247
Carryover GBCs	0.0403	0.7632	0.0113	0.1490
Carryover NOLs	0.0231	0.5163		
Assets	6.4534	37.8730	7.4569	35.9740
Log (Assets)	-0.2206	2.1365	0.3921	1.7531
Age	14.5280	14.6170	18.556	15.8240
Incorporated in 1986 (dummy)	0.0867		0.0249	
Industry Groups				
Agriculture	0.0348		0.0299	
Mining	0.0254		0.0117	
Construction	0.1104		0.1198	
Manufacturing	0.1641		0.1952	
Transportation	0.0380		0.0289	
Utilities	0.0132		0.0093	
Wholesale Trade	0.1129		0.1765	
Retail Trade	0.1947		0.2029	
Finance, Insurance, Real Estate	0.1613		0.1143	
Services	0.1425		0.1113	
Other	0.0028		0.0002	
number of observations	2871		8852	

dollar values in millions

TABLE 4
Coefficient Estimates of Conversion Equation

Dependent variable = 1 if firm converted from C to S. Asymptotic standard errors in parentheses. For dollar denominated variables, the marginal probabilities represent the change in the probability a firm would convert if the variable was increased by one percent from its mean value, calculated at the mean of the explanatory variables with dummy variables equal to zero. Marginal probabilities for share variables were calculated by increasing the share by 1 percentage point. The marginal probability of a dummy variable was estimated as a change from 0 to 1. Significance levels: ***1 percent, **5 percent, *10 percent.

	Loss Corporations		Gain Corporations	
	coefficient	marginal probability	coefficient	marginal probability
Intercept	-0.810*** (0.108)	---	-0.512*** (0.052)	---
Number of Shareholders	0.005 (0.007)	0.091	-0.009** (0.004)	-0.315
Short form (dummy)	0.581*** (0.183)	15.486	0.707*** (0.186)	28.532
Passive income (share)	-0.117 (0.113)	-0.023	-0.182** (0.082)	-0.065
LIFO inventories	0.009 (0.074)	0.000	0.028 (0.025)	0.000
State (dummy)	0.053 (0.102)	1.089	-0.018 (0.047)	-0.633
Officer's compensation (share)	-0.565** (0.234)	-0.111	0.534*** (0.114)	0.188
Wages (share)	-0.186 (0.207)	-0.037	0.021 (0.114)	-0.007
Benefits (share)	0.954* (0.533)	0.189	0.104 (0.283)	0.036
Built-in gains	0.008 (0.008)	0.002	-0.006 (0.004)	-0.003
Book income adjustment	0.209** (0.089)	0.006	-0.059 (0.038)	-0.001
Gross tax	40.917*** (12.340)	0.002	-0.133*** (0.026)	-0.016
Undistributed income	0.402*** (0.092)	-0.025	0.056*** (0.012)	0.005
Interest paid (share)	-0.846*** (0.218)	-0.166	-0.544*** (0.143)	-0.192

Carryover GBCs	-1.016**	-0.008	-1.590***	-0.007
	(0.455)		(0.329)	
Carryover NOLs	0.026	0.000		
	(0.559)			
Log (assets)	0.077***	0.015	0.210***	0.074
	(0.018)		(0.011)	
Age	-0.005**	-0.105	-0.0004	-0.003
	(0.002)		(0.001)	
Incorporated in 1986 (dummy)	0.287***	6.658	0.145	5.271
	(0.098)		(0.093)	
Agriculture	-0.082	-1.542	-0.132	-4.507
	(0.187)		(0.094)	
Mining	-0.537**	-7.536	-0.354**	-11.235
	(0.257)		(0.149)	
Construction	-0.109	-2.021	-0.108*	-3.715
	(0.120)		(0.053)	
Transportation	-0.061	-1.160	-0.140	-4.761
	(0.170)		(0.094)	
Utilities	0.150	3.237	-0.178	-5.978
	(0.267)		(0.155)	
Wholesale	0.262**	5.982	-0.035	-1.223
	(0.110)		(0.048)	
Retail	0.241**	5.432	0.098**	3.540
	(0.100)		(0.048)	
Finance, insurance, real estate	0.372***	8.991	-0.090	-3.099
	(0.112)		(0.065)	
Services	0.225**	5.047	0.077	2.779
	(0.107)		(0.057)	
Other industries	0.932**	28.201	0.921	35.463
	(0.467)		(0.868)	
number of observations	2871		8852	
number of firms converting	526 (18.3 %)		2844 (32.1%)	
log likelihood	-1294.342		-5302.308	
predictions				
% correct converting firms	64.26%		66.74%	
% correct non-converting firms	57.27%		56.24%	
% correct overall	58.55%		59.61%	

TABLE 5
Revenue Effects of S Conversions
(dollar amounts in billions)

	Sample		Weighted Sample	
	Total	Converting	Total	Converting
Number of Firms	11,723	3,370	559,401	119,102
Assets	84.53	23.71	352.98	105.60
Income Subject to Tax	6.03	1.80	22.28	8.29
Gross Tax	2.96	0.84	8.20	3.18
Undistributed Income	3.18	1.04	15.85	4.70
gain corporations	4.08	1.11	15.85	5.47
loss corporations	-0.90	-0.07	-6.12	-0.77
Additional Income to be Taxed at the Individual Level				
gains		1.95		8.65
losses		-0.07		-0.77
net change		1.88		7.88
Change in Individual Liability at 34 percent rate				
gains		0.66		2.94
losses		-0.02		-0.26
net change		0.64		2.68
Change in Federal Tax Liability				
corporate		-0.84		-3.18
individual		0.64		2.68
net change		-0.20		-0.50