CORPORATE TAX REVENUE BUOYANCY

Introduction

Although the tax on corporations is not the largest generator of state tax revenues, its share is too important to ignore. Georgia’s tax on corporations actually consists of two taxes, the corporate income tax and the net worth tax. In combination, these two taxes accounted for 5.7 percent of total state net tax collections in FY2007. But this share has declined over time and also become more volatile. This brief explores this trend and discusses some of the possible explanations behind it.

The Georgia corporate income tax is a 6 percent tax on a base of net corporate income, which closely mirrors federal corporate taxable income. From 1995 to FY2006, firms with multistate income used a 3-factor formula with a 50 percent weight on sales and separate 25 percent weights on property and payroll. Prior to 1995, firms with multistate income used an equally weighted three-factor apportionment formula. In 2006 the state began a two-year transition from the 3-factor apportionment formula to a single-factor apportionment formula based entirely on sales.

The net worth (NW) tax is computed on the same return as the state corporate income tax. The base of the net worth tax is the sum of a firm’s issued capital stock, paid-in surplus, and retained earnings. The NW tax liability ranges in discreet increments from $10 for firms with net worth up to $10,000 to $5,000 for firms with net worth in excess of $22,000,000.

Corporate Tax and Net Worth Revenues

Over the FY1977-2008 time period, Georgia gross state product (GSP) increased steadily, as shown in Figure 1, with the steeper trend line representing the nominal value of GSP and the flatter line representing the value of GSP for Georgia adjusted for inflation. Over this same time period state corporate and net worth taxes have also increased in both real and nominal terms, as shown in Figure 2. But it is also clear that this revenue source has been more volatile than GSP. Furthermore, corporate and net worth taxes have failed to keep up with the growth in GSP. As shown in Figure 3 corporate tax revenues inclusive of net worth taxes have declined as a percent of GSP over the FY1977-2008 time span. Corporate tax revenues per $1,000 of GSP were $4.6 in FY1977 and had declined to $2.4 by FY2008.

Figure 4 illustrates the buoyancy of the tax over this time period. The buoyancy of a tax in a given year is measured by the percent change in the tax revenues divided by the percent change in economic activity, which in the case of the corporate income tax is best captured by gross state product. The buoyancy of a
**Figure 1. Georgia GSP**

Source: Bureau of Economic Analysis and author's calculations.

**Figure 2. Corporate and NW Income Tax Receipts, FY 1977-2008**

Source: Georgia Department of Revenue annual statistical reports and Georgia Department of Audit budget reports - various years, and author's calculations.
**FIGURE 3. CORPORATE INCOME & NEW WORTH TAX PER $1000 OF GSP, FY 1977-2008**

Source: Author's calculations.

**FIGURE 4. BUOYANCY OF GEORGIA CORPORATE AND NET WORTH TAX, FY 1977-2008**

Source: Author's calculations.
tax gives an indication of the degree to which the tax is able to respond to changes in the economy. A buoyancy value of 1 indicates that a percentage increase (or decrease) in gross state product corresponds to an equal percentage increase (or decrease) in revenues from the corporate income tax. A buoyancy value of less than zero indicates that a percentage increase (or decrease) in gross state product corresponds to a percentage decrease (or increase) in corporate income tax revenues.

As seen in Figure 4, on average the buoyancy of the corporate income tax declined over the FY1977-2008 period, indicating less correspondence between changes in the GSP and corporate tax revenues. The trend line in Figure 4 implies that on average the buoyancy of the corporate income tax fell about 0.4 percentage points every ten years. Buoyancy for FY1977 was equal to 1.5 and equaled -2.6 for FY2008 and values ranged from -5.4 in FY2002 to 7.8 in FY2005 with an average value over whole time period of 0.5. This means that over the FY1977-2008 time period, on average a one percent increase in gross state product in Georgia has generated about a 0.5 percent increase in corporate tax revenues. Furthermore, Figure 4 shows the increased volatility of the corporate income tax revenue in relation to the gross state product. A flat line equal to some value (such as 1 or 0.75) indicates a consistent level of sensitivity to the change in the state economy. As Figure 4 reveals, the buoyancy of the corporate income tax has not been consistent over time and in fact is diminishing in consistency over time as shown by the wide swings occurring since 2002.

There are several factors that have been shown to decrease the buoyancy and increase the volatility of the corporate tax revenues. These explanations, as they apply to Georgia, are discussed in the remaining section of this policy brief.

**Factors Affecting State Corporate Tax Revenues.**

The value of tax revenue in any given year is the product of the tax rate and the tax base. The state corporate income tax rate has been 6 percent since 1969. Therefore, all changes in corporate tax revenues experienced since 1969 are attributable either directly or indirectly to changes in the tax base. These base changes come from several sources and are discussed below. The list of factors affecting the corporate income tax revenues is based on a list constructed by and discussed in greater detail in Fox and Luna (2002) and Cornia, et al. (2005). These factors include changes that have occurred in the federal tax base, the growth of non corporate entities, changes that have occurred at the state level, and the growth in tax planning activities. Based on a survey of state tax administrators, these items were listed as the more important issues affecting state corporate income tax revenues. While not all apply equally to Georgia, several have been shown to be important determinants of the level of corporate tax revenue and volatility (Cornia et al., 2005).

**Changes at the Federal Level.** Because the Georgia corporate income tax is heavily based on the federal corporate income tax, changes at the federal level have implications to Georgia’s corporate income tax base. Over the 1977-2008 time period, there have been significant changes to the federal corporate income tax base, including several more recent depreciation provisions which affect both the level and timing of tax liabilities. While Georgia conforms to the federal corporate tax base in general, there have been some exceptions to this conformity, such as the section 199 domestic production activities deduction and bonus depreciation provisions. Georgia is not alone in decoupling from the section 199 provision and the bonus depreciation provisions. By 2007, 18 states had decoupled from the section 199 provision, and only 12 states conformed to the 2002 and 2003 bonus depreciation provisions (Johnson, 2007 and CCH, 2003). For those states that had not decoupled, the total estimated revenue loss from the adoption of the section 199 provision was estimated to be between $1.2 and $1.9 billion for 2006. The Center on Budget and Policy Priorities estimated the revenue loss to Georgia if it conformed to the 2008 bonus depreciation provision to be $213 million (Johnson, 2008). Because the state does not conform to these provisions, revenues are suspected to be less volatile and higher than they would be otherwise. On the other hand, the existence of these provisions at the federal level may have had an indirect effect on state level corporate taxable income as firms adjusted their federal taxable income and profits to take advantage of these provisions at the federal level.

**Growth of Non-Corporate Businesses.** Another reason for the current trends in revenue stems from the increase in noncorporate entities. Over the 1980-2002 time frame, the number of business filers Nationally increased 103 percent (Figure 5), from 13 million to 26.4 million and the number of corporate filers increased 94 percent from 2.7 million to 5.3 million. But this increase in corporate filers is comprised of several different components. For instance, the number of national S corps and real estate investment trusts and regulated investments companies (REITS & RICS) grew 478 percent and 619 percent, respectively, over this time period, while the number of national C corporations declined by 3 percent. At the state level as at the federal level, S corporations and REITS/RICS are treated as pass-through entities so that the income earned by these entities is taxed at the individual shareholder level and not at the corporate
level. Thus, the growth in business activity nationally over this time period has come in the form of organizational structures that do not file a corporate return. While longer trend data is not available for Georgia, information in Table 1 from the Georgia Department of Revenue shows that Georgia is, in general, following the national trend in terms of a decline in the C corporate filings and an increase in pass-through filings. Cornia, et al. (2005) report that Georgia lost 9.5 percent of corporate tax revenues between 1991 and 2002 because of C corporations that switched to S corporations.

**State Tax Credits.** There are also several changes that have occurred at the state level which impact the size and volatility of corporate income tax receipts. The first of these is tax incentives offered in the form of tax credits against corporate income tax liabilities. In 2006, Georgia offered 18 different tax credits such as the Low-Income Housing Tax Credit, the Jobs Tax Credit, and the Film Tax Credit. This is a significant increase from 1990 when the only credit offered to corporations by the state was the Jobs Tax Credit. The total value of the credits applied against the state corporate income tax in 1991 was $180,000 used by 10 firms and $76.5 million in 2005 used by approximately 400 firms.\(^5\) The presence of corporate tax credits is likely to increase the volatility and reduce the revenues from corporate taxes. This is because in many cases the tax credits are given to a relatively small number of firms with high credit values per firm. This pattern creates greater year-to-year variation for a firm’s tax liability, though the number of such firms is small.

**Apportionment Changes.** Another important change which affect state corporate revenues, but is not completely reflected in the data presented in this brief, is the change in the state corporate apportionment formula. For years prior to 2008, corporations operating in multiple states had to apportion their corporate income to Georgia based on a three-factor apportionment formula. Prior to 1995, the apportionment formula was based in equal parts on the fraction of the firm’s property, payroll, and

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### Table 1. Number of Pass-Through and Corporate Returns in Georgia

<table>
<thead>
<tr>
<th>Year</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partnership</td>
<td>71,738</td>
<td>72,093</td>
<td>85,180</td>
</tr>
<tr>
<td>S Corporate</td>
<td>141,560</td>
<td>149,533</td>
<td>155,014</td>
</tr>
<tr>
<td>C Corporate</td>
<td>92,015</td>
<td>89,451</td>
<td>84,296</td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on data provided by the Georgia Department of Revenue.
gross receipts associated with operations in Georgia. Between 1995 and 2006, the apportionment factors were equal to 50 percent of the fraction of the firm’s sales in Georgia, 25 percent of the fraction of payroll located in Georgia, and 25 percent of the fraction of the property value located in Georgia. In 2006 and 2007, the weights on payroll and property factors were reduced and the weight on the sales factor was increased, until for tax years after 2007, the state apportionment factor was based entirely on sales. At this time, data for tax years in which the new apportionment factors were in place are not available but the estimated effects of this change in the apportionment formula suggested a revenue loss of $135 million in 2008 (Edmiston, 2003). Furthermore, the switch from equally weighted factors to a double weight on sales, which occurred after 1995, is widely believed to have decreased corporate tax revenues below what would have been due for the post 1994 years.

Corporate Tax Planning. Yet another factor that is believed to contribute to the decline in state corporate tax revenues relative to GSP is corporate tax planning. Multistate corporations are increasingly employing the use of passive investment companies (PICs), also known as Delaware holding companies. In doing so, a corporation can transfer profits from a higher tax rate state to a lower tax rate state. In this way the corporation is able to avoid tax on some income earned in a given state. Furthermore, firms have become very sophisticated in their ability to time transactions and capital purchases so as to maximize tax benefits or minimize tax liabilities. Both of these activities will serve to increase the volatility and reduce the buoyancy of the corporate tax revenues at the state level. In an effort to reduce corporate gaming of the tax system, Georgia adopted limited consolidated filing. For tax years 2002 and forward, Georgia restricted multistate firms from filing a consolidated return without prior approval of the Department of Revenue. This restricted the ability of a multistate firm to use losses from one Georgia affiliate to offset gains from another Georgia affiliate, but it is less restrictive than the requirement for combined filing, which Georgia and most other states do not require. The state also restricted, via legislation in 2005, deductions for payments for use of intangibles, thereby reducing the ability to utilize PICs and has also restrained the use of captive REITs as a tax planning tool.

Conclusion
Although gross state product has consistently risen over time, corporate tax revenues have failed to keep up with the growth of the general economy. Instead, state corporate and net worth revenues have fallen with respect to GSP and have also become more volatile over time. This brief explores several explanations for these trends, including: changes in the federal tax base which has the potential to reduce the state corporate income tax base; the growth of non-corporate entities such as LLCs and S corporations; more aggressive tax planning behavior, particularly through the use of passive investment companies; and a growing use of tax credits at the state level. Each of these factors has contributed in some way to the general decline in corporate tax revenues as a share of GSP and to an increase in volatility. The increase in volatility reduces the accuracy with which revenues can be forecast in the future, making it more difficult to budget for future expenditures.

Notes
1. Georgia Department of Revenue Annual Statistical Report for 2007, Table H-2. The corporate income tax provides about 97 percent of the combined total from these two taxes.

2. For more information on the computation of the Georgia Corporate Income tax, see Grace (2002).

3. For more information on the computation of the Georgia Net Worth Tax, see Grace (2002).

4. Based on author’s calculation of Statistics of Income data.

5. Based on information provided by the Georgia Department of Revenue.

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