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POTENTIAL EFFECT OF ELIMINATING THE STATE CORPORATE INCOME TAX ON STATE ECONOMIC ACTIVITY

At first glance, the elimination of the corporate tax on business seems an obvious method of attracting new firms to the state and promoting the expansion of existing firms. And in fact, states and localities have been offering tax incentives, usually in the form of reduced property taxes or corporate income tax credits, to firms for many years. Under current law, Georgia imposes a 6 percent tax on corporate income. In fiscal year 1999, state corporate tax revenues were \$800 million (Morton and Hawkins 2004). Over the years though, the corporate tax has become less important in providing revenues to the state. By fiscal year 2003 state revenues from this source were \$470 million (Morton and Hawkins 2004). Thus, a simple estimate of the outright repeal of the corporate income tax would result in a revenue loss to the state of at least \$564 million in FY 2006 which represents the forecasted revenues from this tax.¹ But in fact, the potential revenue loss could be somewhat greater than that. Repealing the tax on corporate income creates some incentive to move income currently taxed under the state personal income tax code, such as sole proprietorships or LLCs, and reorganize it as corporate income in order to reduce taxes.² This tax avoidance behavior could increase the revenue loss to the state.

Literature Review

In an attempt to determine the degree of responsiveness of employment and investment to changes in taxes, we turned to the existing literature on this subject. The literature on the effect of taxation on employment and business location is quite large and dates back over 30 years. The studies measure the effect of fiscal factors on various economic variables such as employment, investment, new firm birth, and changes in state personal income. On the whole, the studies tend to find small and inconsistent results. Some studies find that higher taxes have a small but statistically significant negative influence on employment or new firm creation. Others find little or no effect at all.

An extensive review of the existing literature finds no overriding consensus regarding the effect of fiscal variables on economic conditions. Based on the studies reviewed, the corporate income tax rate is only occasionally found to affect employment levels. Of the seven studies considered, four find significant effects. In two of these cases, though, the results provided only weak support and were based on data prior to 1977. Only one study employing data from the early 80s finds a strong significant

relationship between corporate tax rates and employment. This study is unique in that it ties state revenues to state expenditures. In the study, a one percent decrease in the corporate tax rate would increase employment by about 6 percent if the decrease in taxes was associated with an offsetting decrease in transfer payment expenditures. Such a result indicates that patterns of expenditures are also of importance to firm location. The same research finds that increases in nontransfer type public expenditures (education, highways) paid for with a reduction in transfer payments (income support programs) and keeping all other taxes constant would have roughly the same effect on employment as a decrease in the corporate tax rate.

We see more consistency of results when we consider the effect of the state corporate income tax rates on investment. There have been fewer studies, though, focusing on investment because the necessary data at the state level is hard to come by. In addition, only one of the studies focusing on domestic investment tests specifically for the influence of the corporate income tax rate. The other studies employ some aggregate measure of tax burden. Two studies did find that in general investment levels decline as tax rates increase. The one study that specifically tested this relationship found that a one percent decrease in corporate tax revenues as a percent of personal income associated with an equal offset of transfer type public expenditures, would result in a 9 percent increase in investment at the state level. As explained earlier, an important component of this research is the effect of public expenditures on the level of investment. For example, this work also finds that increases in public education expenditures paid for with an equal reduction in transfer type public expenditures and holding all other taxes constant would have roughly the same effect on investment as a decrease in the corporate income tax rate.

The surprising case is that of foreign direct investment (FDI). In all three studies considered here, state corporate income tax rates were a statistically significant determinate of the amount of foreign direct investment in the state. Findings from one study found that a 1 percent decrease in the state corporate income tax rate would result in a 10 percent increase in manufacturing investment by foreign investors from countries that exempt foreign earnings as compared to foreign investors from countries that offer tax credits for foreign taxes paid. Findings from another study indicate that a one percent decline in state corporate tax revenues as a percent of state personal income would lead to an increase of 0.57

percent to 0.76 percent in the probability of a state begin chosen as a location for FDI.

Two of the studies reviewed considered the effect on the number of firms in an area due to the existence of lower taxes. One found that property taxes but not corporate taxes have a statistically significant influence on firm location. The other study used a combined effective tax rate composed of all state and local taxes a firm would face in a given location. This study found that such a variable was influential on 2 out of 5 industry sectors considered.

In general, the results of the academic literature summarized in Table EX-1 on this topic reveal mixed findings. There is little support for the effect of the corporate income tax on employment or firm location. The results are more supportive for investment and foreign direct investment. Furthermore, the review of the literature indicates one particular empirical model is responsible for almost all of the studies with positive findings. In this model, tax revenues are linked to expenditure patterns. The majority of the studies using this empirical model find a negative relationship between taxes and employment, investment, or foreign direct investment. It should be noted that while this empirical model seems to consistently find a relationship between taxes and employment and investment, it cannot be used as support of a repeal of the corporate income tax. In fact, results from this empirical model reveal the interdependence of taxes and expenditures and supports the idea that nontransfer payment expenditures, such as education and highways, are of importance to the firms even when these expenditures are funded with higher taxes.

Estimated Effects

It is not appropriate to extrapolate the results from the literature review to the effect of a complete corporate income tax elimination.³ As an alternative to the estimates found in the academic literature two other estimates are produced and shown in Table EX-2.

In the first alternative we consider the corporate income tax as one component of the cost structure of the firm. Eliminating the corporate tax would reduce the cost of goods sold by about 4 percent.⁴ This is believed to be an overstatement of the effect for several reasons. First, this figure incorporates all state and local business taxes and an elimination of only the corporate tax would naturally have a smaller effect. Second, this figure is based on data from all

TABLE EX-1. SUMMARY OF RESEARCH RESULTS

Dependant Variable	Research Results
Employment	4 out of 7 studies find small effect on employment; 1 finds 6% increase in employment when 1% tax decreases are offset by transfer payment expenditures. 2 find effects only in limited cases using data prior to 1975.
Domestic Investment	One study finds that a 1% decline in the ratio of taxes to personal income that is financed by an equal reduction in transfer payments would lead to a 9% increase in investment.
Foreign Direct Investment	All three papers reviewed find an effect on the level of foreign investment in manufacturing. The size of the effect may be dependant on the tax treatment of foreign earnings by the home country.
Firm Births	A 1% decrease in the effective tax rate leads to a 9.5% increase in the number of firm births in the Communications Industry and a 2.7% increase in the Furniture industry.

TABLE EX-2. ESTIMATED EFFECT OF ELIMINATION OF THE STATE CORPORATE TAX

Effect on:	Bartik method	User Cost method
Employment	86,000 new jobs	17,000 new jobs
Investment	\$8.7 billion in new investment	\$1.8 billion in new investment

states and does not incorporate the relatively low corporate rate of Georgia or the new method of apportioning income. Therefore, the estimated effect of elimination of the state corporate income tax on employment and investment based on this method are expected to overstate the actual effect.

Based on this method, we estimate of the affect of eliminating the tax would be an increase in employment of 2.7 percent or 86,000 new jobs and \$8.7 billion in new investment. As stated above, this is believed to be upper limit on the effect since corporate taxes are hypothesized to be less than 4 percent of the cost of production. Furthermore, only employment in corporations would be affected by the elimination of the tax, but due to data limitations we use total state private sector employment. Both the additional employment and investment would be one-time increases to the state and not annual increases. The length of the adjustment period would depend on the mobility of both capital and labor. It is expected that the state would experience the full increase in investment first as it is believed that capital is more mobile than labor and thus responds to changes in price faster.

In a second approach we use estimates of the responsiveness of the capital stock to its user cost to determine an alternative estimate of the potential effect on investment and employment from eliminating the corporate income tax. From this method we estimate the elimination of the state corporate income tax would result in an increase in employment of 17,000 new jobs and \$1.8 billion in new investment.⁵ As explained for the method above, this increase does not represent an annual increase but a permanent, one time increase in investment and employment for the state. It should also be noted that this estimate, like those in the first approach, is expected to overstate the true effects. This estimate is based on total state private investment and employment. It is expected that the effects of the corporate tax elimination will be confined mainly to the corporate sector.

While these estimates for employment and investment are not estimated directly, they are preferred to those based on the estimated effects found in the literature for several reasons. First, the estimates found in the literature are only applicable to small changes in the tax rate. Therefore, they cannot be applied to a 100 percent reduction in the tax on corporation income. Second, the estimates in Table EX-2 are directly dependent on the size of the effective tax rate. The estimates found in the literature only consider the relative differences in the tax rate (usually across states) and not the absolute value. Given the already relatively low effective tax rate in Georgia,

we should not expect a large response from the elimination of the tax.

The two estimates provided in Table EX-2, for employment and investment, differ from each other. The estimates based on the User Cost method are the preferred estimates since they incorporate more information specific to Georgia, though both sets of estimates are likely to overstate the effects on employment and investment due to a lack of specific corporate data.

Other Factors to Consider

It is important to note that the elimination of the tax would not be done in a vacuum. It is expected that the revenue lost from the elimination of the tax would be raised by increasing other taxes, or reducing expenditures. As illustrated in the literature review, most studies find that government expenditures have a positive effect on firm location. This is interpreted to mean that increased government funded amenities such as good schools and public infrastructure are valued by firms and are a factor in their relocation decisions.⁶ Therefore, the revenue loss described above from the elimination of the corporate tax would need to be offset by revenue from other sources if the amount of public expenditures is not diminished. To the extent that these funds are raised through additional taxes on business such as a gross receipts tax, increased property taxes, or licensing fees, the potential positive economic development effects of the corporate income tax elimination would be dampened.

Are Tax Reductions Worth the Revenue Loss?

A related question is whether these potential benefits represent a net gain to the state. In the process of winning businesses to the area, state and local governments typically offer reductions in tax liabilities. Therefore, the potential gains in tax revenue stemming from additional employment and investment should be weighed against the value of those reduced tax liabilities. The possible corporate income tax elimination also needs to be weighted against alternative methods of increasing employment and investment in the state. That is, would the elimination of the corporate income tax provide a larger economic stimulus per dollar of revenue than other potential stimuli, such as increases in the existing jobs tax credit?

Are New Jobs Created by the Elimination of the Tax?

It is important to discriminate between the creation of new employment in the state and employment shifted from some other locale. None of the studies reviewed above measure

the extent to which new jobs, as opposed to a relocation of existing jobs, are created by these types of economic development efforts. It is usually assumed that the presence of new plants in the state will result in a higher employment rate for state residents. But that may not be completely true. The presence of a new plant in the state may also encourage migration into the state from other states, especially if the plant is simply relocating its operations. In that case, few if any, new jobs are created nationwide and while the state may gain employment opportunities, not all those opportunities will be filled by native residents. Furthermore, there is little research to indicate the types of jobs created from this type of economic development effort. There is some evidence to suggest that manufacturing jobs are more sensitive to changes in fiscal policy than other industries but the manufacturing jobs of today are not always the high wage/high benefit jobs of previous decades.

Corporations Benefit from Public Expenditures

Lastly, businesses benefit from spending on public infrastructure and are better suited to attract skilled labor if government provided amenities are of a high quality. Therefore, it is reasonable to expect corporations to shoulder some of the burden of the provision of these public goods. Several of the studies reviewed in this report indicate that firms place considerable value on government provided services. In many cases, the impact of higher spending on public services, such as education and highways, had as much an effect on employment or investment levels in a state as did the corporate income tax rate. It is true that corporate income is a poor proxy for the value of these public services but corporate income is the tax base used at the federal level and its use at the state level relieves corporations of determining another base.

Conclusion

So will the elimination of the corporate income tax lead to increased employment and a higher level of investment in Georgia? Based on the research reviewed above, we can state that low state corporate income taxes have a positive effect on investment and employment in a state. It is also expected that the elimination of the corporate income tax would have a larger and faster effect on investment in the state as opposed to employment. This is because of the greater responsiveness of investment to changes in the tax rate as documented in the academic literature. The controversy concerning the elimination of the corporate income tax resides around the magnitude of the effect on investment and employment. Our

best estimate leads us to expect an increase in investment for the state of around 0.6 percent or \$1.8 billion and an increase in employment of 17,000 additional new jobs. In addition to these estimated employment and investment effects, the elimination of the corporate income tax may send a signal to businesses that the state is “business friendly” and willing to support business activities. The size of this “WOW” effect in terms of additional employment and investment cannot be estimated at this time since no state has yet eliminated its corporate income tax. But it is expected to have some small positive influence on employment and investment in the state.

The academic research also indicates that public expenditures are important to firms and those studies which include public expenditures in their empirical models find that corporate taxes do affect both investment and employment at the state level. But the correct interpretation of these results does not lead to an elimination of the corporate income tax but to an understanding that there is some optimal balance of taxes and nontransfer type public expenditures that are valued by firms. Therefore, these studies lead to the conclusion that an elimination of the corporate income tax should be accompanied by an increase in revenues from another tax or a decrease in public expenditures spent on income support programs so that the public services valued by firms are not diminished in any way.

Notes:

1. The official state forecast of corporate income tax revenues for fiscal year 2006 is \$564,173,000.
2. The incentive to reorganize into a corporate business form would not be overwhelming because reorganization at the state level also requires reorganization at the federal level. Since the federal corporate tax rate is 35 percent, there still exists an incentive to remain a noncorporate entity.
3. Elasticities are defined in terms of responses to a 1 percent change. These responses are not believed to be linear. Thus, a 100 percent change in the tax stemming from the complete elimination of the tax is not equivalent in magnitude to 100 1-percent changes.
4. Using 2001 data from Statistics of Income, all state and local taxes paid by corporations are about 4 percent of cost of goods sold.
5. This estimate assumes a base of employment in the state of 3.2 million workers.
6. See Mark, McGuire, and Papke (2000) and also Bradbury, Kodrzycki, and Tannenwald (1997).

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