

# The SBTCI is a Poor Measure of Growth Potential

While some researchers have attempted it, there really is no point in trying to assess whether the State Business Tax Climate Index (SBTCI) successfully predicts which states will do better in attracting business investment, creating jobs, or the like, since it fails to measure the effect of a state's tax system on a company's cost of doing business—the thing that even the Tax Foundation implies matters most (to the extent that taxes matter at all). Still, it is worth considering what researchers have found.

The results of studies assessing the SBTCI's ability to predict economic growth have been inconclusive and contradictory. For example, economist Jed Kolko and others<sup>1</sup> used statistical analysis to see if a state's score on the SBTCI (and on several other indexes) had a measurable effect on state growth in jobs, wages, or gross state product (GSP). When controlling for other factors affecting growth, they found that the SBTCI was a statistically significant predictor of one measure of job growth but not of another, and of marginal significance at best for a third measure of job growth. It was not a significant predictor of wage growth in two equations, and only of marginal significance in three others, and did not appear to have any influence on GSP growth in any of the five measures used in the study.

Since the SBTCI is a mishmash of over 100 measures, Kolko's analysis of SBTCI's five components (corporate and individual income taxes, sales taxes, property taxes, and unemployment insurance taxes) is also instructive. Overall, the component indexes failed to have a statistically significant effect on 107 out of 125 statistical tests (five predictive models, each applied to five measures of growth in jobs, wages, and GSP, times the five components).<sup>2</sup> While some of the component indexes (notably the sales and property taxes) are more closely related to the actual levels of those taxes, those components generally failed to predict any measure of growth too.

The only component index that approached statistical significance in how it affected wages and GSP was the corporate income tax index. But that component is precisely the one that is most indefensible as a meaningful measure of business taxes; it leaves out two major determinants of corporate income tax liabilities – federal deductibility and apportionment – while including numerous minor features. As a result, it is a meaningless index number from which no policy conclusion can be drawn. Furthermore, the corporate income tax is a much smaller share of taxes than the property tax, for most businesses.

Adding further to the confusion, the overall SBTCI predicts one measure of job growth, but none of its component indexes has any significant relation to any of the three measures of jobs. So what are we to make of the overall index? What is it, exactly, that the Kolko analysis is picking up as a predictor of job growth, if it is not any of the components of that index? It seems likely that the result occurs purely by happenstance.

A more recent published version of this research, with fewer different model specifications presented, reiterates the conclusions of the earlier paper.<sup>3</sup> When controls for other determinants of growth are included, the overall SBTCI was a statistically significant predictor of overall employment growth, but not of growth due to firm births. It was not a significant predictor of GSP growth, or of wage growth, except when manufacturing was examined alone.<sup>4</sup> The components were insignificant in 16 of 20 cases.

Furthermore, the Kolko research must be viewed in light of a large body of research on [the effects of business taxes on state growth](#), which generally concludes that the effects are quite small and hold only if we assume corporate tax cuts wouldn't result in lower state spending. The Kolko research adds nothing to the research that would change that basic conclusion.

Interestingly, the 2015 edition of the SBTCI cites on page 15 the more recent research by Kolko and others, claiming that the authors "concluded that the State Business Tax Climate Index yields 'positive, sizable, and statistically significant estimates for every specification' they measured." The Tax Foundation fails to point out that this quote refers only to the overall employment results; they do not mention the results dealing with wages, GSP, or the component indexes.

1. Jed Kolko, David Neumark, and Marisol Cuellar Mejia. "Public Policy, State Business Climates, and Economic Growth." Working Paper 16968, National Bureau of Economic Research, Cambridge, MA, April 2011.  
<http://www.nber.org/papers/w16968>

2. The coefficients were not statistically significant even at the 10 percent level.

3. Jed Kolko, David Neumark, and Marisol Cuellar Mejia. "What Do Business Climate Indexes Teach Us about State Policy and Economic Growth?" *Journal Of Regional Science*, Vol. 53, No. 2, 2013, Pp. 220-255

4. In one specification, the wage growth equation was significant at the 10% level. When the author looked at sectors instead of the economy as a whole, wage growth was not significant even at the 10% level when examining total private sectors wages, or all footloose industries.