Economic Growth, Productivity, and Public Education Funding: Is South Carolina a Death Spiral State?

Lisa G. Driscoll  
*University of North Carolina*

Robert C. Knoeppel  
*Clemson University*

Matthew R. Della Sala  
*Purdue University*

Jim R. Watson  
*University of North Carolina*

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Lisa G. Driscoll, Robert C. Knoeppel, Matthew R. Della Sala, and Jim R. Watson

Introduction
As a result of the Great Recession of 2007-2009, most states experienced declines in employment, consumer spending, and economic productivity (Alm, Buschman, and Sjoquist 2011). In turn, these events led to historic declines in state tax revenues (Mikesell and Mullins 2010; Boyd and Dadayan 2009), resulting in major cuts in public spending. Local governments, including school districts, have been severely impacted as well (Alm, Buschman, and Sjoquist 2011; Dadayan 2012), forcing them to decrease services, shed employees, or raise taxes.

Recovery from the recession has been slow. For policymakers who seek not only to restore but also to improve their states' fiscal health, there exist differing schools of thought as to how best to achieve this goal. This article focuses on South Carolina and the application of two competing views of how to achieve greater economic growth and productivity, one that is more commonly referred to fiscal conservatism, or, in extreme cases, fiscal austerity, and a second that is grounded in maintaining a robust public K-12 public education system.

State Competitiveness and Productivity
In 2012, Baldwin (2012a), a staff writer for Forbes, introduced the concept of "death spiral" states, defined as those states representing the highest risks for investors. His underlying assumption was that shrinking the public sector would attract new business investment to a state and encourage existing businesses to expand. He operationalized this concept through calculation of the ratio of "takers" to "makers;" that is, in a death spiral state, a greater number of individuals ("takers") drew funds from the government as state or local employees, pensioners, or welfare recipients than the number of people who contributed to the productive value of the state as private sector employees ("makers"). Based upon this ratio, Baldwin (2012b) identified the top eleven death spiral states in the country, with ratios ranging from 1.00 in Ohio to...
but, rather, a fair tax system increased business productivity. Tax policies did not necessarily enhance state productivity, improve the public education system, the essential Porter (2011b, 8) asserted that states needed to “...relentlessly growth, state governments must use tax revenues. To improve productivity in the business environment, Porter (2012, 2) would agree with Baldwin (2012a, 2012b) that state competitiveness is “determined by the productivity with which a state uses its human, capital, and natural resources to create value,” he noted that both the private sector and public sector, the latter defined as levels of government, work in different, but complementary, ways to enhance state competitiveness. Further, he asserted that in order to leverage the state’s infrastructure (e.g., education, transportation, and communication), to support productivity growth, state governments must use tax revenues. To improve productivity in the business environment, Porter (2011b, 8) asserted that states needed to “...relentlessly improve the public education system, the essential foundation, and ...not just the best schools, [but rather] ...to provide a good education for all.” Further, he stated that low-tax policies did not necessarily enhance state productivity, but, rather, a fair tax system increased business productivity. Thus, critical assets such as public education, needed to be protected through adequate taxation. In a study examining South Carolina’s competitiveness standing, Porter (2011a, 2) concluded that the state was weak on four of five relative indicators. The state performed well on “cluster strength,” defined as: ...relative employment rank in the top 20% across all states. A state’s “cluster strength” is in turn the state’s total share of traded employment in these strong cluster. A positive trend in cluster strength is indicated by a state’s increasing national cluster share across these strong clusters (Porter 2011a, 36). However, the state was weak with regard to productivity, mobilization of labor, and innovation. When compared with other states, South Carolina consistently ranked among the lowest five states and appeared to be declining. According to Porter (2013, 3) a state is competitive “…if the companies operating there can compete successfully in the global economy, while simultaneously raising living standards...”. Competitiveness is not about creating jobs as much is it about having an infrastructure in place that creates and sustains the business environment (Porter 2013). Elements of this structure include three factors. First, the business environment must support productivity. The necessary factors associated with productivity include educational quality at the K-12 and postsecondary levels, a simplified tax code and efficient legal environment, predictable regulation and incentives, accessible capital, high expectations for quality, and an effective political system. Porter (2013, 4) cited ineffectiveness of the U.S. political system as the single greatest weakness affecting competitiveness. Second, a critical mass of expertise and suppliers in the same location is essential for the support and growth of firms. Finally, policy coordination among multiple geographic levels, including other rival states, is necessary. Porter (2011b) argued that all states have the same macroeconomic conditions, such as national fiscal, monetary, and trade policy. Where they differ is in how each state leverages the previously cited elements. Background on South Carolina Act 388 In 2006, South Carolina enacted Act 388 (Property Tax Relief Act 2006) that advanced several tax changes intended to reduce the property tax burden on homeowners across the state. The Act changed the fundamental revenue sources for public education and the method by which localities were able to raise funds to offer educational services. Whereas local property tax revenues had previously been the major source of local funds for public school district operations, Act 388 exempted owner-occupied property and replaced the lost revenue with a one percent increase to the state’s retail sales tax, but eliminated the sales tax on unprepared food. Furthermore, the law required that the additional revenue generated from the sales tax increase be reserved for a homestead exemption fund. In turn, this fund, external to the state general fund, would be used to reimburse school districts for their estimated property tax revenue loss (entitled reimbursement tier III). In South Carolina, this change is

### Table 1 | Baldwin’s “Takers” vs. “Makers” Ratio

<table>
<thead>
<tr>
<th>State</th>
<th>Ratio (High to Low)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Mexico</td>
<td>1.53</td>
</tr>
<tr>
<td>Mississippi</td>
<td>1.49</td>
</tr>
<tr>
<td>California</td>
<td>1.39</td>
</tr>
<tr>
<td>Alabama</td>
<td>1.10</td>
</tr>
<tr>
<td>Maine</td>
<td>1.07</td>
</tr>
<tr>
<td>New York</td>
<td>1.07</td>
</tr>
<tr>
<td>South Carolina</td>
<td>1.06</td>
</tr>
<tr>
<td>Kentucky</td>
<td>1.05</td>
</tr>
<tr>
<td>Illinois</td>
<td>1.03</td>
</tr>
<tr>
<td>Hawaii</td>
<td>1.02</td>
</tr>
<tr>
<td>Ohio</td>
<td>1.00</td>
</tr>
</tbody>
</table>


1.53 in New Mexico. (See Table 1.) South Carolina was ranked seventh at 1.06, i.e., there were 1.06 “takers” for every “maker.”

Given these ratios, Baldwin (2012a) asserted that the capacity of states like South Carolina to leverage human resources, capital, and natural resources to productive ends was reduced. Death spiral states would also experience declining credit worthiness as they became trapped in a spiral of “large debts, an uncompetitive business climate, weak home prices, and bad trends in employment” (Baldwin 2012a, para 11). In these states, Baldwin warned, taxes were too high, and, as a result, innovative and creative individuals and businesses would exit the state, and the state would be unable to generate sufficient revenue to support promises made to citizens. Hence, a downward fiscal and economic spiral would ensue and escalate.

Although Porter (2012, 2) would agree with Baldwin (2012a, 2012b) that state competitiveness is “determined by the productivity with which a state uses its human, capital, and natural resources to create value,” he noted that both the private sector and public sector, the latter defined as levels of government, work in different, but complementary, ways to enhance state competitiveness. Further, he asserted that in order to leverage the state’s infrastructure (e.g., education, transportation, and communication), to support productivity growth, state governments must use tax revenues.

Table 1 | Baldwin’s “Takers” vs. “Makers” Ratio
commonly referred to as the “tax swap.” The legislature devised a formula for implementation over time, holding the districts harmless in FY2008, but in succeeding years moving ahead with full implementation of the new law.

In addition, Act 388 imposed a millage cap for all local governing bodies whereby the cap allows local governments to raise millage rates by a “…percentage less than or equal to the percentage increase in local population plus the rate of inflation of the Southeastern Consumer Price Index (CPI)” (Schunk 2007, 7). Act 388 also sought to slow local education revenue growth through a cap applied to the assessed value of all real property in a county to a maximum of 15% over a five-year period, which could be exceeded by a local referendum. The law did allow for a stepped-up basis for real property assessment in the event that the property was transferred (sold) to a new owner. This “assessable transfer of interest” would subject the transferred property to a contemporaneous appraisal as opposed to an appraisal on the five year cycle.

Methodology
Following upon Porter’s recommendation that a robust public education system is essential to increase a state’s economic competitiveness and productivity, this study sought the perceptions of a sample of South Carolina school district superintendents with regard to state fiscal support for public K-12 education. This encompassed the administration of a written questionnaire followed by the conduct of semi-structured interviews during the 2012-2013 and 2013-2014 school years. Purposive sampling was used to select superintendents from eight South Carolina school districts based upon district locale, student enrollment, per-pupil property wealth ranking, and changes in state and local operating revenue per pupil in the initial period of Act 388 implementation. (See Table 2.)

The questionnaire items were developed by the researchers and were guided by the fiscal concepts of revenue stability, tax burden, tax equity, and tax yield, defined as follows:

- Stable revenues are not subject to large variations from year to year.
- Tax burden is the proportion of taxpayer income that is paid for income, property, or sales taxes; it has also been defined as incidence.
- Tax equity refers to the distribution of tax burden on individuals, households, and businesses.
- Tax yield is the amount of revenue generated from a tax.

The items on the questionnaire were, as follows:

1. In what ways has the stability of revenue (volatility) from local sources changed since the initiation of Act 388?
2. In what ways has the stability of revenue (volatility) from state sources changed since the initiation of Act 388?
3. In what ways has the tax burden (who pays) changed, if any, in your school district?
4. In what ways has the tax equity (fairness of revenue) changed, if any, in your school district?

Table 2 | Characteristics of Sample School Districts

<table>
<thead>
<tr>
<th>District</th>
<th>Locale Type</th>
<th>Student Enrollment Range</th>
<th>Per-Pupil Property Wealth State Ranking **</th>
<th>Per-Pupil State/Local Revenue FY 2007 ($)</th>
<th>Per-Pupil State/Local Revenue FY 2010 ($)</th>
<th>Difference FY 2007-2010 ($)</th>
<th>Per-Pupil State/Local Revenue FY 2012 ($)</th>
<th>Difference FY 2007-2012 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A *</td>
<td>Rural, Fringe</td>
<td>5,000–10,000</td>
<td>Lower Third</td>
<td>9,154</td>
<td>8,663</td>
<td>(491)</td>
<td>9,531</td>
<td>377</td>
</tr>
<tr>
<td>B</td>
<td>Rural, Fringe</td>
<td>5,000–10,000</td>
<td>Upper Third</td>
<td>11,322</td>
<td>12,288</td>
<td>965</td>
<td>13,189</td>
<td>1,867</td>
</tr>
<tr>
<td>C</td>
<td>Rural, Fringe</td>
<td>10,000–15,000</td>
<td>Middle Third</td>
<td>8,662</td>
<td>8,732</td>
<td>70</td>
<td>8,909</td>
<td>247</td>
</tr>
<tr>
<td>D</td>
<td>Rural, Distant</td>
<td>5,000–10,000</td>
<td>Lower Third</td>
<td>7,899</td>
<td>8,093</td>
<td>194</td>
<td>8,168</td>
<td>269</td>
</tr>
<tr>
<td>E *</td>
<td>Rural, Distant</td>
<td>10,000–15,000</td>
<td>Upper Third</td>
<td>8,193</td>
<td>8,128</td>
<td>(65)</td>
<td>8,645</td>
<td>452</td>
</tr>
<tr>
<td>F</td>
<td>Town, Distant</td>
<td>&lt;5,000</td>
<td>Lower Third</td>
<td>7,969</td>
<td>7,736</td>
<td>(233)</td>
<td>7,959</td>
<td>(10)</td>
</tr>
<tr>
<td>G</td>
<td>Suburb, Midsize</td>
<td>&lt;5,000</td>
<td>Middle Third</td>
<td>9,995</td>
<td>9,706</td>
<td>(289)</td>
<td>10,262</td>
<td>267</td>
</tr>
<tr>
<td>H</td>
<td>City, Small</td>
<td>15,000–20,000</td>
<td>Upper Third</td>
<td>9,018</td>
<td>8,952</td>
<td>(66)</td>
<td>9,220</td>
<td>323</td>
</tr>
<tr>
<td>Sample Median</td>
<td></td>
<td>Middle Third</td>
<td></td>
<td>8,840</td>
<td>8,698</td>
<td>(66)</td>
<td>9,220</td>
<td>323</td>
</tr>
<tr>
<td>State Median</td>
<td></td>
<td>4,370</td>
<td></td>
<td>8,952</td>
<td>8,950</td>
<td>(2)</td>
<td>9,153</td>
<td>201</td>
</tr>
</tbody>
</table>

N=8

Note: Data source for enrollment ranges, and state and local revenue per pupil was the South Carolina State Department of Education Historical School District Information, http://ed.sc.gov/agency/cfo/finance/HistoricalFinanceData.cfm. Revenues from bonds, leases, and charter schools were excluded.

*Superintendent was not interviewed.
**Estimated for Fiscal Year 2007.
5. Has the tax revenue (yield) changed in your district? Individual follow-up interviews by telephone were conducted with five superintendents. One superintendent was interviewed in person. The remaining two superintendents declined to be interviewed because of scheduling conflicts. Using the initial questionnaire, researchers probed for details based on the superintendent's responses. Interviews were not audiotaped; rather, notes were taken by the researcher. Statements were read back during the interview to the respondents for clarification and accuracy. Each interview lasted between 20 and 30 minutes.

Both questionnaire and interview responses were incorporated into a single transcript for each respondent by the researcher who conducted the interviews. These transcripts were open-coded in a holistic manner through multiple cycles that occurred several weeks apart (Saldaña 2012). Through this process, open codes were added, coalesced, or deleted. Often, it appeared that the respondents interpreted the five questions as interrelated. Thus, responses given to a single question frequently provided information that answered other questions as well. The coding scheme was adjusted through several iterations to address this issue. Inductive analysis was used to organize the codes to give rise to themes. To achieve trustworthiness of data, the interview responses were triangulated with existing data sources, such as school district financial statements and comprehensive annual financial reports. Triangulation was sought through a discussion of the final themes from the codes with a second researcher for cross-checking. Because these respondents were few in number, and the districts had experienced different outcomes after the implementation of Act 388, the findings can not be generalized to the state as whole.

**Thematic Analysis**

Three themes emerged from the analysis. First, superintendents perceived an adverse political environment not only for public education but also for business and low income renters. Second, they noted a lack of integration of the provisions of Act 388 with existing state statutes and policies. Third, they found the timing of the passage and enactment Act 388 with the economic recession problematic. The remainder of this section provides greater detail on superintendent responses related to each of the three themes.

**Theme 1: Adverse Political Environment**

Although neither the questionnaire nor the interviewer asked superintendents directly about their perceptions of the political environment, all offered comments to the effect that the environment was adverse, or “downright hostile” to public education with regard to school funding. Most of the respondents reasoned that the political climate was instrumental in the passage of Act 388 and its continued implementation. Supporting subthemes were the presence of a fatalistic outlook on the benefits of education, a zero-sum tax relief strategy, and a perplexing shift in the property tax burden.

The superintendents described the political climate as one of doubt that the entire population of the state's children should be educated to a high standard. They related anecdotes that characterized the state outlook as caste-like, void of educational opportunity as an equalizer of societal inequities. Citing the currently “insufficient” Tier I, Tier II, and Tier III reimbursements to replace “lost” or non-accessible tax revenue from owner-occupied property in the school district, the respondents indicated that there seemed to be little political will at the state level to rectify this problem.

With regard to the second subtheme, superintendents asserted that the state had as its priority the implementation of constituent-driven, zero-sum tax relief strategies. They described a legislative culture that viewed the pool of state resources as fixed and finite at a given point in time through which advancement of the state's objectives was to be achieved by reallocation. They pointed to Act 388 as an example of the reallocation of fixed resources to individual and certain sectors of taxpayers.

In the third subtheme, the superintendents stated they were perplexed by the state's action to shift the property tax burden from homeowners to owners of commercial and rental property. They viewed these changes as unfavorable to businesses and renters, particularly, low income renters.

**Theme 2: Lack of Statutory and Policy Integration**

A second major theme emerged with regard to the integration of Act 388 with existing statutes and policies. They asserted that reimbursement for Tier III appeared to be completed in some districts at the expense of state funding obligations for the Education Finance Act, the Education Incentive Fund, and unrecurring funding. They were vocal about the initial inclusion of the assessed property valuation in the Index of Taxpaying Ability, part of the formula used to calculate district fiscal capacity in the Education Finance Act. This lack of integration allowed the state to count the inaccessible property tax base for the school district as part of their wealth, and, thus, decreased state funding in this formula to particular districts, especially those with higher proportions of commercial property to owner-occupied property which was not considered in the fiscal capacity measure.

**Theme 3: Timing of Act 388 Implementation with the Economic Recession**

All superintendents indicated that implementation of Act 388 during the economic recession hampered implementation of the statute and led to decreased revenues for public education. They asserted that the decline in state sales tax revenues contributed to the lowering of the base student cost by the state. The base student cost, which is South Carolina's per-pupil guarantee through the foundation program, declined each school year from 2007 to 2011. The base student cost for 2007-2008 was $2,476 and decreased to as low as $1,630 for the 2010-2011 school year (South Carolina Department of Education, 2013). During this time period, the state Budget and Control Board proposed that the base student cost be increased from $2,476 to $2,720.
Discussion and Conclusions

The purpose of this article was to explore two competing views of how to achieve greater state economic growth and productivity in South Carolina, along with the implications of these views for funding of public K-12 education. The first approach, advanced by Baldwin (2012a, 2012b), identified "death spiral" states as those whose imbalance between private sector employment and recipients of taxpayer-funded services created an environment that would discourage business investment and economic growth. Baldwin's analysis ranked South Carolina in the top ten of such states. The solution, according to Baldwin, is fiscal austerity, i.e., deep tax cuts and reductions in public employees and benefits, as well as government-provided services like public education.

In direct contrast to Baldwin's crash diet of fiscal austerity is that of Porter (2011a, 2011b, 2012, 2013), whose careful study of economic growth and productivity across a number of states has led him to a more nuanced approach. Porter asserts that an adequate tax system and a robust public education system are required components of a state's infrastructure that will jumpstart a state's economic competitiveness in the United States and globally and enable it to maintain momentum over time. Admittedly, Porter's own analysis of South Carolina yielded weaknesses in the state's prospects for economic growth and productivity, but rather than advocate fiscal conservatism, much less fiscal austerity, he zeroed in on the need to address disappointing ten-year trends in wage growth, labor mobilization, and innovation.

However, neither approach expressly addresses the impact and aftermath of the 2007-2009 recession on states, which complicated the analysis presented in this article. Specifically, just before the beginning of the recession, South Carolina passed Act 38 that shifted the local property tax burden from residential to business property while increasing the state sales tax to replace school districts' lost revenues. The recession and its aftermath had a strong negative effect on sales tax revenues and adversely affected school districts' revenues.

In this article, the authors presented the results of a qualitative study where they surveyed and interviewed a purposive sample of South Carolina school superintendents with regard to the elements of an adequate tax system, specifically tax revenue stability, tax burden, tax equity and tax yield. In this sense, the study sought to explore Porter's concepts of an adequate tax structure and a strong public education system as necessary to a state's infrastructure to enhance economic growth, productivity, and competitiveness. Interestingly, superintendents responded instead with a description of what they perceived to be the underlying forces of a state tax system that provided insufficient education funding. First, they pointed to a political climate adverse to public education, largely, although not completely, embodied in Act 388. Second, they noted that the components of Act 388 were not integrated with existing state statutes and policies. Third, they lamented the passage and enactment of Act 388 at a time when many school districts were already struggling financially.

In closing, in order to avert the negative consequences associated with a death spiral, states must cultivate and grow their competitiveness and productivity, not through sweeping fiscal austerity measures to shrink the public sector, but through recognizing the interdependence of the private and public sectors, as Porter noted, including a robust public education system supported by an adequate state-local tax system. However, for South Carolina, the challenges to economic growth and productivity that must first be addressed are those that lie just beneath the surface—a political climate hostile to public education and the lack of cohesion in existing state policies and statutes related to taxation and school funding.

Endnotes
1 Note that local government employees included school district employees as well as employees of public higher education institutions. It should also be noted that, in many states, recipients of public sector pensions contribute some portion of their wages to state/local pension funds while employed. Third, Baldwin did not define “welfare.”
2 Porter (2011a, 36) defined productivity as “average private wage and 10-year trend.” Labor mobilization was defined as “total labor force as a share of civilian population and 10-year trend.” Innovation was defined as “utility patents per 10,000 workers and 10-year trend.”
4 Owners of second homes, commercial enterprises, businesses, and rental property were not included.
5 Under South Carolina law, beginning in FY2008, reimbursements to school districts from a homestead exemption fund occur in three tiers. Tier I is a fixed reimbursement and is set at the total reimbursement received in FY2007 for property tax relief: $100,000 of assessed value of all owner-occupied property. Tier II is a fixed reimbursement and is set at the total reimbursement received in FY2007 for property tax relief for citizens over 65, those legally blind, or disabled: the first $50,000 of assessed value of owner-occupied property. Tier III is dollar-for-dollar reimbursement districts would have received from property taxes on owner-occupied property that was eliminated as a result of Act 388. Districts receive all three tiers of reimbursements.
7 School districts in the largest urban areas of South Carolina were not included due to their potential identification. This represents a major limitation of the study.
References


