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# BTC Brief

▶ NC BUDGET & TAX CENTER

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## HOW WE GOT HERE: North Carolina's Broken Revenue System Partly To Blame for Severity of State Revenue Shortfall

*Timely, accessible,  
and credible  
analysis of  
state and local  
budget and tax  
issues*

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### KEY FINDINGS:

- **North Carolina's \$3.7 billion budget shortfall for fiscal year 2011-12 is due in part to the state's narrow, outdated revenue system, which overreacts to economic ups and downs and has failed to adequately grow with the state's population and economy.**
- **Tax collections for fiscal year 2011-12 are projected to be about one-sixth (16 percent) lower, as a share of state personal income, than the average of the last two decades. If state tax collections were instead average relative to state personal income, the state's revenue shortfall would shrink from \$3.7 billion to less than \$400 million.**
- **Revenue-neutral tax modernization should account for historical state tax collections as a share of state personal income and/or gross state product. Using only next year's projected revenues as a baseline for revenue-neutral reform would "lock in" today's temporarily depressed state tax revenues, at great cost to North Carolina's ability to make public investments in the future. Instead, revenue neutrality should account for revenue collections through several business cycles to ensure that revenues are adequate to sustain public investments.**

### An Adequate, Stable Revenue System Supports Public Structures, Economic Opportunity

Both public and private investments are needed to strengthen North Carolina's economic recovery. In difficult times, public investments are critical to jumpstarting private-sector recovery and for sustaining the public structures that deliver expanded economic opportunity over the long term.

The purpose of a revenue system is to provide consistent funding for the institutions, programs and services that support economic opportunity and growth. To do so effectively, a state's revenue system must deliver **adequate** resources to meet demand for services and align with growth in the economy. It must also be **stable**, not vulnerable to the ups and downs of the business cycle. The Great Recession demonstrated that the volatility in North Carolina's revenue system is challenging the state's ability to adequately invest in critical programs and services, thus potentially undermining short-term economic recovery and long-term prosperity.<sup>1</sup>

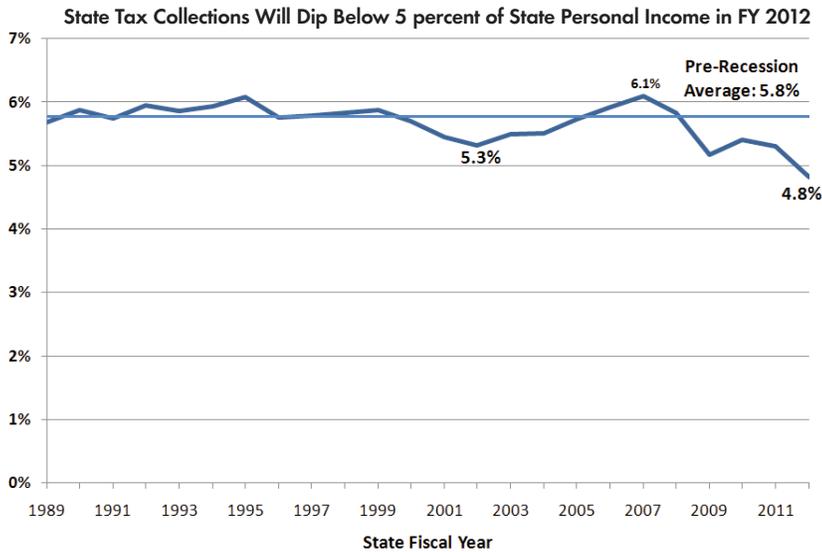
North Carolina has already experienced two years of state revenue shortfalls resulting in successive rounds of budget cuts. This year policymakers will need to address a \$3.7 billion shortfall, caused in part by North Carolina's outdated revenue system. Improving the stability of incoming revenues is an important step in modernizing the state's revenue system. Greater stability can minimize the extent to which ups and downs in the economy can compromise adequate support for key public structures like schools, hospitals, colleges and universities.

## State Revenues Crashed During Recession, Will Recover Slowly

Tax collections inevitably fall during a severe economic downturn. However, the defective structure of North Carolina's tax system made the collapse in state revenue much steeper and longer-lasting than the decline in the state's economy and residents' personal incomes during and after the Great Recession.

FIGURE 1

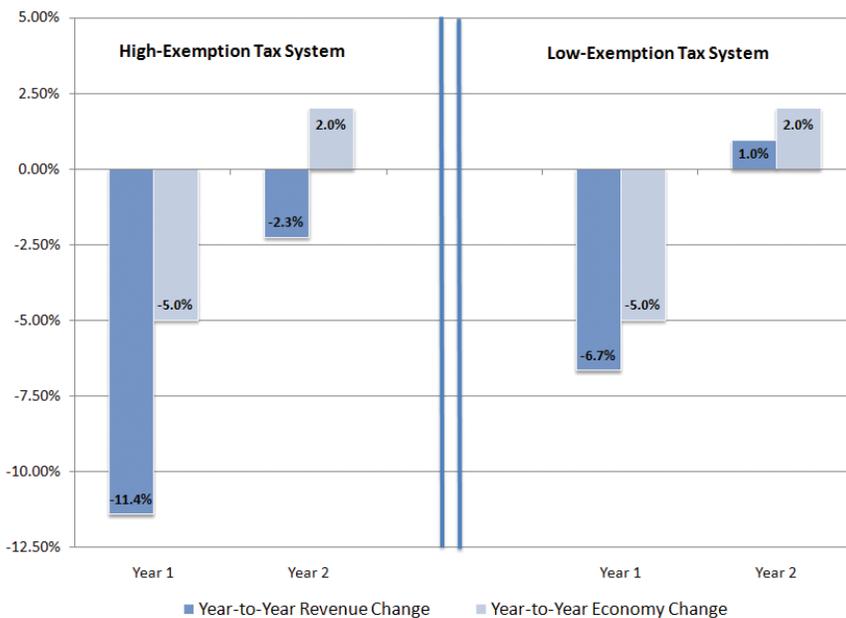
### NORTH CAROLINA TAX REVENUES PROJECTED TO REACH HISTORIC LOWS



SOURCE: State Personal Income Data – Bureau of Economic Analysis; State Tax Collections Data – NC Department of Revenue; FY2011 & FY 2012 State Personal Income calculated based on national-level projections from the Congressional Budget Office (CBO); FY2011 State Tax Collections from Consensus Revenue Estimates by NC OSBM and NC Fiscal Research; FY2012 State Tax Collections calculated using CBO forecast for national-level growth in tax base (salary & wages, domestic profits.)

FIGURE 2

### HIGH EXEMPTIONS, HIGH RATES CAUSE REVENUE VOLATILITY



SOURCE: Tax volatility simulation based on author's calculations. Both systems are simulated using an economy that equals \$1,000 in Year 0, declines by 5 percent in Year 1, and recovers by 2 percent in Year 2. In the High Exemption scenario, 30 percent of the economy is exempt from taxation in Year 0. These exemptions grow by 10 percent in each subsequent year. In the Low Exemption scenario, 10 percent of the economy is exempt from taxation in Year 0, and the exemptions grow by 10 percent in each subsequent year. Both tax systems raise the same amount of revenue in Year 0 but using different rates. The resulting revenue shortfall for the high-exemption system after Year 2 (13.4%) is more than twice the size of the resulting shortfall for the low-exemption system (5.8%).

During the twenty years preceding the Great Recession, state tax revenues averaged 5.8 percent of all North Carolina residents' incomes put together. Once the 2009 tax package expires at the end of June, state tax collections will likely amount to only 4.8 percent of residents' incomes next year—almost one-sixth less than the average of the past two decades (see Figure 1). If next year were instead an "average" year for tax collections as a share of residents' incomes, the \$3.7 billion shortfall would drop to less than \$400 million.

### NC's High-Exemption, High-Rate Tax System Magnified Plummeting Revenues

A major reason why state revenues declined so rapidly relative to the economy is that the state's tax code was built for the economy of the 1930s, when manufacturing and agriculture dominated economic activity. The upshot of North Carolina's tax system failing to evolve with today's technology- and service-driven economy is that much of the state's economic activity is exempt from taxation.

As a result, North Carolina must levy higher tax rates on the portion of the economy that is subject to taxation in order to bring in adequate revenues. Figure 2 presents a simple simulation comparing how a high-exemption tax system might fare during a severe recession compared to a low-exemption tax system. High-exemption, high-rate tax systems tend to be substantially more susceptible to the ups and downs of the economy, largely because tax exemptions tend to grow or remain unchanged even as the taxed portion of the economy declines.<sup>2</sup> In this simulation, the high-exemption tax system lost nearly twice as much revenue as the low-exemption tax system in the first year of the simulated recession. In the second year of the simulated recession, the high-exemption system continued to lose revenue while the low-exemption system returned to modest growth.<sup>3</sup>

States also tend to exempt more stable economic activity from taxation: Economists

Richard Dye and Therese McGuire, for example, used a sophisticated tax system simulation to demonstrate that a broad-based sales tax system including a wide variety of services exhibited substantially less volatility than a traditional, goods-based sales tax system.<sup>4</sup> Just as it is advisable for an investor to have a broad investment portfolio to hedge against risk, a state should have a broad-based tax system to hedge against a recession.

### **“Revenue-Neutral” Tax Reform Must Take a Long View**

Legislatures and governors across the nation convene tax reform commissions to address the volatility of state tax systems. Most state tax reform commissions are tasked with planning for “revenue-neutral” reform, but few adequately define the concept. Often, the assumption is that a reformed tax system should bring in no more or less revenue than the prior revenue system would have brought in if it were still in place. Yet, since one of the primary reasons for tax reform is to address revenue volatility, revenue neutrality should account for the volatility of the existing revenue system as well as what is needed to adequately support public structures.

Furthermore, as population demographics and the cost of public services change, revenue levels may need to rise or fall relative to state personal income. Currently, the rising cost of health care services and the rapid aging of the population are likely to increase the demands on the state’s public structures and the revenue system that supports them.

Current revenue levels are at historically low levels as a share of the state’s economy due to the combination of the worst recession in 75 years and a broken tax system. Adopting a more stable revenue system at these historically low revenue levels would lock in this inadequate revenue flow, resulting in chronic under-funding of the vital public structures that are essential to sustain the state’s nascent economic recovery and long-term growth and competitiveness. Instead, revenue neutrality should account for historical revenue collections through several business cycles to ensure that revenues are adequate to sustain public investments. Thus, lawmakers would need to raise additional revenue in the next fiscal year to attain long-term revenue neutrality.

### **Conclusion**

Closing next year’s state revenue shortfall is among the biggest challenges North Carolina policymakers have faced in modern times. Comprehensive revenue reform that not only modernizes and stabilizes the state’s finances but also restores much of the revenues lost during the Great Recession is among the most important steps that state policymakers can make this year. Doing so will protect the public investments made by generations of North Carolinians and put the state back on a path to a future of shared prosperity.

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- 1 An additionally important criterion for an ideal revenue system is the degree to which it requires those with a greater ability to pay to contribute more than those with the least ability to pay. North Carolina’s state and local revenue system requires low-income families to pay a greater share of their income in taxes than high-income households.
  - 2 Katherine Barrett and Richard Greene, “Staying Stable: Volatile revenue streams and unpredictable taxes bring misery to everyone from state budgeters to businesses,” *Governing*, January 2008.  
[http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Economic\\_Competitiveness/Tax\\_Report.pdf](http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Economic_Competitiveness/Tax_Report.pdf)
  - 3 See figure source description for additional information on the simulation.
  - 4 Richard F. Dye and Therese J. McGuire, “Expanding the Sales Tax Base: Implications for Growth and Stability,” in William F. Fox, *Sales Taxation: Critical Issues in Policy and Administration*, Praeger Publishers, 1992, Table 12.2, p. 173.