

# Policy Memorandum

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**GEORGIA STATE UNIVERSITY  
ANDREW YOUNG SCHOOL OF POLICY STUDIES  
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**SUBJECT:** Debt Management Plan for Georgia

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We have reviewed the draft of the updated version of the Debt Management Plan. First, a very minor point, North Carolina is listed as having a Aaa rating. However, the past summer, Moody's downgraded North Carolina to Aa1.

As we understand it, the principal objective is for the State to maintain its Aaa rating. The Debt Management Plan concludes that to maintain the Aaa rating the target ceiling of the debt to income ratio should be 2.7%, which is the same as recommended in the 1994 report. Both reports arrive at that conclusion based on a comparison of the debt to income ratios of the other Aaa rated states and Moody's median. There is no discussion of how those comparisons led to the decision to select 2.7%.

We suggest a somewhat more analytical approach to the decision. The bond rating is obviously a function of many different factors, including the debt to income ratio. As can be seen in Table 1, a low ratio of debt to income does not guarantee a Aaa bond rating; there are many states with much lower debt to income ratios than Georgia that have a lower bond rating. While we do not know what goes on in the minds of the individuals who do the rating, we know that they are trying to assess the likelihood of default. There are many published studies that have attempted to determine the relative importance of various measurable factors that are thought to be associated with bond ratings for municipal government, but no studies that are particularly helpful for determining factors associated with state bond ratings. In addition, while some of the factors that may be important to the rating agency can be easily measured and compared across states, other factors are very subjective and cannot be quantified.

There are most likely tradeoffs between the factors that affect the rating. For example, a strong, stable, and growing economy may allow a state to have a higher debt to income ratio and still maintain a Aaa rating. Unfortunately, the State does not have much control over the factors associated with the state of the economy.

In an effort to determine the margin Georgia has with regards to the debt to income ratio, we compared all of the states with Aaa and Aa1 bond ratings across several factors. Table 1 contains the basic data. But for now we make simple comparisons across states along three dimensions, growth (population, income and employment), industry composition, and size of government. We paid particular attention to states with Aaa and Aa1 ratings that had the same debt to income ratio as Georgia, and to Delaware, which

**TABLE 1. CHARACTERISTICS OF STATES WITH AAA AND AA1 RATINGS**

State	Rating Mar-02	Debt/Pop per Capita	Debt/Income	-----Change 1995-2001-----			Unemployment Rate (2001)	Own Source Revenue (2000)
				Population	Income	Employment		
Delaware	Aaa	\$1,650	5.3%	11.0%	41.8%	14.4%	3.5%	\$4,472
Georgia	Aaa	\$804	2.9%	16.4%	50.7%	16.2%	4.0%	\$2,069
Maryland	Aaa	\$879	2.6%	6.6%	40.0%	13.1%	4.1%	\$2,604
Michigan	Aaa	\$438	1.5%	4.6%	28.5%	7.3%	5.3%	\$3,088
Minnesota	Aaa	\$576	1.8%	7.9%	45.4%	12.4%	3.7%	\$3,359
Missouri	Aaa	\$347	1.3%	5.7%	35.1%	8.4%	4.7%	\$2,007
North Carolina <sup>1</sup>	Aaa	\$375	1.4%	13.8%	42.9%	12.8%	5.5%	\$2,382
South Carolina	Aaa	\$615	2.5%	10.6%	40.3%	11.5%	5.4%	\$2,228
Utah	Aaa	\$708	3.0%	16.4%	47.2%	19.2%	4.4%	\$2,653
Virginia	Aaa	\$566	1.8%	8.6%	44.4%	14.9%	3.5%	\$2,620
Indiana	Aa1	\$296	1.1%	5.4%	34.3%	5.4%	4.4%	\$2,287
Iowa	Aa1	\$166	0.6%	2.9%	32.8%	8.2%	3.3%	\$2,484
Kansas	Aa1	\$824	3.0%	5.0%	35.9%	13.2%	4.3%	\$2,292
New Mexico	Aa1	\$879	4.0%	8.5%	33.5%	10.9%	4.8%	\$3,134
Ohio	Aa1	\$749	2.6%	2.0%	28.4%	6.6%	4.3%	\$2,341
Texas	Aa1	\$238	0.9%	13.9%	51.6%	18.6%	4.9%	\$1,830
Vermont	Aa1	\$813	3.0%	4.8%	40.8%	10.7%	3.6%	\$3,373
Washington	Aa1	\$1,383	4.4%	10.3%	47.9%	15.0%	6.4%	\$2,781
Means								
Delaware	Aaa	\$1,650	5.3%	11.0%	41.8%	14.4%	3.5%	\$4,472
Other Aaa rated	Aaa	\$752	2.8%	12.5%	41.6%	15.0%	4.5%	\$2,389
Aa1 rated	Aa1	\$795	2.9%	3.9%	38.1%	10.2%	4.5%	\$2,668

<sup>1</sup>North Carolina was downgraded in August.

has a Aaa rating but a much higher debt to income ratio than Georgia. We also calculated the averages for Aaa rated states excluding Delaware and Aa1 rated states.

The general observations we make are:

- high growth states (particular population and employment) have higher bond ratings. Aaa rated states had population growth rates that were on average 3 times higher than Aa1 states. There was no difference in the average growth of total income between Aaa and Aa1 rated states.
- states with Aaa rated bonds had lower unemployment rates than the states with Aa1 bonds. However, Delaware had a high (relative to the other Aaa rated states) unemployment rate.
- There is not much difference in the industrial structure, as we have measured it, i.e., by major sectors. (This factor is not included in Table 1.) However, states that have more cyclical economies (i.e., vary more widely over the business cycle) or that are dependent more on agricultural and natural resources appear to have lower bond ratings, despite have very low debt to income ratios.
- Aaa rated states have lower revenue effort (as measured by own source revenue per capita) than Aa1 states. But again, Delaware is an outlier.

We also focused on those states with debt to income ratios that are close to Georgia's. For Aaa rated states these include Utah (3.0%), Georgia (2.9%), Maryland (2.6%) , and South Carolina (2.5%). Georgia was tied with Utah for the highest population growth between 1995 and 2001, had the lowest unemployment rate in 2001, had the largest growth in total income, and had the second highest growth in employment. Georgia also does better than Delaware on these measures, which has a debt to income ratio of 5.4%. However, Georgia does not match up quite as well on some of these indicators for more recent (one year) changes.

We also compared Georgia to those Aa1 rated states with debt to income ratios that are about the same value as Georgia. These states are Kansas (3.0%), Vermont (3.0%), and Ohio (2.6%). Georgia's population growth rate is at least three times as great as these other states. The growth in income and employment is also higher. Georgia's unemployment is lower than two of the states, as is its revenue per capita.

### **Conclusion**

If Georgia is able to maintain its above average population, income, and employment growth and if the current unemployment rate does not increase much more, then we think that if Georgia maintained its current debt to income ratio of 2.9 percent, there would be a very small probability that the state would suffer a downgrade in its bond rating. In fact, our analysis suggests that even increasing the ratio to 3.0 percent would not likely result in a rating downgrade. However, the Georgia economy performed worse during the most recent recession compared to previous recessions. And, if the current economic weakness in the state were to continue or deepen, the state would be at risk of a downgrade similar to North Carolina's downgrade this past summer.

In Table 2 we present the reasons for recent downgrades in state bond ratings by Moody's. There are a variety of reasons for the downgrades, including budget issues associated with reduced revenue due to the state of the economy and to recurring expenses.

**TABLE 2. STATE BOND DOWNGRADES SINCE MARCH 2001**

<b>State</b>	<b>Downgrade/Watch</b>	<b>Noted issues</b>	<b>Reference</b>
North Carolina	Moody's downgrade from Aaa to Aa1 August 2002	Budget pressure (including sluggish economy and drains from tax reductions), reliance on non-recurring revenues, weakened balance sheet, rising debt levels	Moody's Investor Service via <a href="http://www.ncgop.org/news/Moodys_Downgrades_NC_Bonds-081902.html">www.ncgop.org/news/Moodys_Downgrades_NC_Bonds-081902.html</a>
Tennessee	Moody's downgrade from Aa1 to Aa2, August 2001	Covering recurring expenses with one-time revenues (tobacco), increased cost of TennCare, state's reliance on sales tax revenues. Tennessee was Aaa in 1999, downgraded in 2000 and 2001	Memphis Business Journal, via <a href="http://dallas.bizjournals.com/memphis/stories/2001/08/27/story2.html">http://dallas.bizjournals.com/memphis/stories/2001/08/27/story2.html</a>
New Jersey	Moody's downgrade from Aa1 to Aa2, March 2001	Budget deficit, lack of strategic planning for budget	Courier Post Online via <a href="http://www.southjerseynews.com/issues/april/b042602a.htm">http://www.southjerseynews.com/issues/april/b042602a.htm</a>
California	Moody's downgrade from Aa2 to Aa3 (May 2001) and from Aa3 to A1 (November 2001)	Reduced revenues, associated difficulties in the energy and technology sectors. California had been upgraded in 2000	State Treasurer's office, via <a href="http://www.treasurer.ca.gov/ratings/history.htm">www.treasurer.ca.gov/ratings/history.htm</a>