# Issue Brief – Bond Rating Methodology

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## SUMMARY

Utah is one of only seven states that maintain the highest bond rating by the three major bond rating agencies (Moody's, Standard and Poor's, and Fitch). Recently Moody's released a document entitled Moody's State Rating Methodology which outlines the factors they—and presumably other rating agencies—use to analyze states' ability and willingness to service their debt.

## OBJECTIVE

Utah currently has over $1.5 billion in net general obligation debt. Small changes in interest rates can cost the state millions of dollars in interest payments in future bond issues. The objective of this Issue Brief is to help decision makers understand the factors that weigh into Utah's bond rating and therefore make financial and budgetary decisions accordingly.

**Broad Standards for Average State Rating**

**Economy (Proportionately Underweighted)**

* Trend of long-term growth in private sector employment, personal income, and income-per-capita, similar to the trends for the US economy as a whole

* Diverse industrial base, including participation in emerging growth industries and limited exposure to declining industries

* Low-to-moderate downside sensitivity of employment and income indicators in periods of economic recession

* Growing working-age population, and growth in the elderly and/or poverty segments that is not significantly higher than overall national trends

* Per-capita income at or steadily moving toward at least 80% of the national average

**Debt (Proportionately Underweighted)**

* A low-to-moderate burden of long-term tax-supported state debt, generally not exceeding 6% of personal income, and annual debt service not exceeding 8% of the general budget (each of these percentages being roughly twice the national average)

* Reasonably conservtive debt structure, low-to-moderate exposure to variable interest rates; and low exposure to innovative or potentially volatile financial products

* Very limited, if any, use of short-term debt for current operations that is not seasonal in nature and/or expected to be repaid within the fiscal year from reliable sources of revenue

* Pension system that is well-funded, with actuarial funding ratio at or moving steadily toward 80% or higher (adjusting, if appropriate, for temporary large swings in asset market values), and effective policies regarding annual contributions that work to limit the growth of new unfunded liabilities

**Finances (Proportionately Overweighted)**

* Operating budget that is at or close to structural balance based on current and future projections for key revenue and expenditure categories

* Tax structure that effectively captures the benefit of state economic growth, but is not subject to significant downside volatility during periods of recession

* Consistent trend of balance sheet health, as evidenced by maintenance of positive GAAP fund balances in the General Fund and other key operating funds (on a fund accounting basis, which emphasizes current assets and liabilities)

* Consistent trend of strong liquidity, as evidenced by year-end available cash and budgetary balances (net of any s/term debt outstanding at year-end for non-capital funding purposes) that provide a healthy cushion given potential budget volatility

* Rating history that is free of recurring instances of serious liquidity strain and associated downgrades

**Management (Proportionately Overweighted)**

* Institutional governance framework, including related constitutional provisions, that is conducive to effective financial management and financial flexibility

* Budget formulation and monitoring processes which promote enactment and maintenance of balanced budgets, including consideration of structural balance and out-year effects, together with reasonable executive powers to control mid-year spending

* Track record of political compromise as necessary to implement actions that maintain budgetary balance and avoid serious financial imbalance

* Capital and debt planning process that identifies long-term capital needs consistent with projected economic growth, and effectively balances the necessary funding between affordable debt and pay-go sources

**A Comparison of Key Factors Among the Seven Most Highly-Rated States**

| | UT | DE | GA | MD | MO | SC | VA |
|---|---|---|---|---|---|---|---|
| Personal Income Growth 1990-2000 | **107.0%** | 69.0% | 101.0% | 66.0% | 69.0% | 77.0% | 74.0% |
| Personal Income Growth 2000-2003 | **10.8%** | 12.2% | 10.3% | 13.3% | 8.7% | 10.3% | 12.5% |
| PI Per Capita as % of US 2003 | **80.0%** | 106.0% | 93.0% | 119.0% | 92.0% | 83.0% | 107.0% |
| Employment Growth 1990-2000 | **49.0%** | 21.0% | 32.0% | 13.0% | 17.0% | 20.0% | 21.0% |
| Employment Growth 2000-2003 | **-0.1%** | -1.5% | -2.2% | 1.3% | -2.6% | -2.6% | -0.5% |
| Unemployment 2003 | **5.6%** | 4.4% | 4.7% | 4.5% | 5.6% | 6.8% | 4.1% |
| Poverty Rate 2003 | **9.1%** | 7.3% | 11.9% | 8.6% | 10.7% | 12.7% | 10.0% |
| Dependency Ratio 2003* | **67.0%** | 60.0% | 56.0% | 57.0% | 61.0% | 59.0% | 55.0% |
| Available Fund Bal as % of Revenue 2003 | **0.6%** | 25.3% | NA | 3.8% | 12.7% | -2.9% | 0.2% |
| Available FB as % Revenue 1999-2002 Avg | **3.0%** | 20.2% | 11.6% | 11.3% | 18.8% | 0.0% | 7.2% |
| Net Tax Supported Debt Growth 1990-2000 | **381.0%** | 46.0% | 170.0% | 30.0% | 53.0% | 73.0% | 163.0% |
| Net Tax Supported Debt Growth 2000-2003 | **41.0%** | 16.0% | 29.0% | 37.0% | 63.0% | 56.0% | 6.0% |
| Net Tax Supported Debt as % of PI 2003 | **2.8%** | 5.7% | 2.9% | 2.7% | 1.6% | 2.4% | 1.7% |
| State Pension Funding Ratio | **78.0%** | 64.0% | 98.0% | 76.0% | 79.0% | 83.0% | 84.0% |
| Debt Service as % of GF Expend 2004 | **3.0%** | | | | | | |

*Dependency Ratio = Sum of persons age 17 and under and persons age 65 and over, divided by persons age 18 to 64.

## DISCUSSION AND ANALYSIS

The highest ratings are assigned to states that show the strongest measures of financial strength with the greatest consistency and flexibility. However, policy and management track records also have a profound influence. In fact, there is a relatively weak correlation between most of the individual quantitative measures and state rating levels, suggesting that it may be more important to have well institutionalized fiscal management and governance practices.

Though efforts are made to base ratings on quantifiable models, there are always trade-offs among factors considered in the rating process, and determining the extent of these trade-offs tends to be qualitative or judgmental in nature.

The following four major factors are analyzed:
1. Economic
2. Financial
3. Debt
4. Management

### Economic Factors

The state's economic base ultimately generates the resources that repay state debt. Demographic factors drive expenditure demands. Thus, economic analysis is the fundamental underpinning of the rating process. Agencies look at personal and business income, industrial diversity, and volatility. Along with demographic factors, they focus principally on the aspects that drive expenditures, the most important of which is the age distribution, since states provide extensive public services for the young and old.

Wealth has long been a key economic metric, but the recent recession showed how volatile the income of the wealthy has become, which can exert downward rating pressure. Moreover, states with high per capita wealth levels may still have high concentrations of poverty and associated expenditure demands.

Agencies pay especially close attention to employment data. Jobs generate the income to pay taxes. Agencies track the composition of job growth across industries and regions within a state and look at wage data to assess whether job growth is concentrated in high-paying or low-paying sectors.

One of the most important variables in an analysis of a state economy is diversity. Agencies expect a diverse economy to perform better than an economically concentrated one over long periods of time, and to suffer less during economic recessions that are concentrated in particular industries.

Demographic factors affect both the expenditure and revenue side of a budget. The very old, the poor, and school-age children are the key expenditure drivers, while wage earners for the most part contribute the revenue. Trends are important in this kind of analysis. For example, whereas Utah has a larger percentage of school-age children creating budget stress, the long-term prospects may be favorable as those children age into the wage-earning group.

Generally speaking, growth is a sign of economic health, as population growth and income growth tend to go hand in hand. However, extremely rapid growth can produce strains on capital budgets with demand for schools, jails, infrastructure and transportation creating fiscal pressure while the state waits for tax revenue to catch up with front-loaded debt growth. Also population growth due to immigration from poor or underdeveloped countries can pressure school funding in the short term.

Financial Factors

Unlike economic factors, which are largely beyond the state's control, financial results are the product of many decisions and practices determined by state policy makers. The financial choices they make at any given point in the economic situation they face are critical to the rating.

*Structural budget balance* is a central concept in evaluating state financial strength. A structurally balanced budget is one for which the forecast over the next three to five years shows that recurring revenues under reasonable state economic growth assumptions can support recurring baseline expenditure commitments given expected demographic trends and current policies.

States with the broadest and most *diverse revenue streams* generally hold up better against downward economic pressures. Moody's expects that states that impose the three largest broad-based taxes (corporate income tax, personal income tax, and sales tax) and a broad array of more narrowly based taxes to have the best defense should revenues weaken. A broader tax base also generally does a better job of generating tax revenue growth that keeps pace with the state's economic growth.

*Revenue volatility* is an important rating consideration. The sales and income taxes are generally less volatile than many of the narrower targeted taxes such as the cigarette and gasoline tax. Generally, Moody's expects that states with both a broad sales tax and income tax would have a less volatile revenue stream than those with only one.

The 2001 recession debunked the conventional wisdom that the personal income tax represented a more steady revenue stream than the sales tax. Sales taxes remained fairly steady as low interest rates and cash-out mortgage refinancing propelled retail sales. Personal income taxes fluctuated widely beginning in the late 1990s as they became more linked to the stock market. Revenue forecasters are now paying closer attention to the breakdown in source of income tax revenue between wages on the one hand, and investment income on the other.

Moody's monitors current and forecasted *revenue growth* to determine whether the revenues can accommodate the growing expenditure base. As political constraints have led states to avoid increases to the broad-based taxes, many have looked toward smaller revenue sources, which are considered less valuable to ratings. Even sales tax can vary in how well it captures economic growth, depending on how broad the base is.

Another important aspect is *whether revenue growth is recurring or is a one-time fix* intended to bolster the budget temporarily. One-shot fixes are a common feature of state budgets in difficult times. States that depended heavily on these types of solutions during the recent recession were more likely to see downward rating actions than those states that addressed the widespread budget stress with recurring solutions.

Regarding *expenditures*, agencies look not only at expenditure growth, but where the growth drivers are, how much of the costs are within the discretion of the state, and how much spending flexibility exists. *Medicaid* is the single most difficult spending item for states to manage and a major source of structural budget pressure. Medicaid's constituents are well-funded and organized in their advocacy and lobbying. *Education* is the largest item in most state budgets. During the latest recession most states avoided retrenching in education, but eventually ran out of cutting options outside of education.

Moody's looks at a number of balance sheet measures, but *cash position* and *fund balances* as presented in Comprehensive Annual Financial Reports (CAFR) provide a critical point of comparison as to how states are doing. The fund balance as a percent of revenues provides a measure of the financial reserves potentially available to fund unforeseen contingencies. A Rainy Day Fund provides a way for states to cushion themselves from severe downturns, but other methods are also used. Utah, for example, historically self-funded significant portions of our capital program from current tax revenues. By shifting capital spending to bonds during the downturn, the cash previously spent on capital served as a reserve to draw from.

Agencies also look at the state's *liquidity*, since debt service, bills and payroll are paid with cash. States that maintain narrow cash margins have little recourse to confront a shortfall.

Debt Factors

Moody's analyzes net tax supported debt, gross debt, debt per capita, debt as a percent or personal income, and trends in debt service as a percentage of total revenues.

Management Factors

This category of rating factors captures willingness to pay, in contrast to ability to pay. The most effective state systems involve enacting a balanced budget at the beginning of the year based on realistic forecasts, closely monitoring the budget as the year progresses, and then quickly making adjustments if it begins to veer off course. This requires governors and legislators to have accurate and objective information, which is aided by good management information systems and professional legislative and executive branch fiscal staff.

States that attempt to increase expenditures for popular programs and simultaneously pledge not to raise taxes or cut other programs generally see their balance sheets and bond ratings deteriorate.

The following fiscal management practices tend to produce strong results. Utah has a strong rating because most of these practices are well entrenched.

1. Consensus revenue forecasting, advised by nonpartisan and objective economic analysis, and a track record of forecast accuracy or conservatism
2. Close revenue monitoring against the forecast
3. Timely budget enactment
4. Multi-year financial planning, including out-year analysis of spending and revenue proposals
5. Swift mid-course spending adjustments when revenues fail to meet forecasts
6. Strong executive branch intra-year budget monitoring and spending allotment control to keep spending within budgets with revenues fail to meet projections
7. Debt affordability analysis to inform capital budgets and debt authorization decisions

State constitutions in some states include provisions that limit financial flexibility. The initiative and referendum process often layers on increasing limits to flexibility over time. Colorado, for example, is struggling with voters having enacted both tax limitations and spending mandates.