

March 21, 2018

MEMORANDUM

TO: State Board of Regents  
FROM: David L. Buhler  
SUBJECT: USHE – Debt Ratio Analysis

Issue

As part of the Board's commitment to financial oversight for USHE institutions, the Board has asked for an annual debt ratio analysis report to monitor and track institution financial health as it relates to management of debt.

Background

To address the Board's request, three common debt ratios were chosen (viability, leverage, debt burden) that historically have proven good basic measures, from the publication "Ratio Analysis in Higher Education: New Insights for Leaders of Public Higher Education" 5<sup>th</sup> Edition. Each ratio is defined and presented by institution for the last five years using industry standards and formulas. When ratios are viewed together they can provide the general health of debt practices within USHE.

**Viability Ratio:** measures how many times an institution can cover their entire long-term debt obligation using their total expendable net assets. A ratio of 1:1 or greater indicates that an institution has sufficient expendable net assets to satisfy debt obligations. As the ratio falls below 1:1, the institution's ability to respond to adverse conditions from internal resources diminishes, as does its ability to attract capital from external sources and its flexibility to fund new objectives.

**Leverage Ratio:** measures the number of times that an institution's long-term debt can be covered using available net assets. A ratio of 2:1 or greater is recommended. Were this ratio to fall below 2:1, the concern would be that the institution might have difficulty maintaining its loan repayments should long-term economic conditions impacting the institution deteriorate.

**Debt Burden Ratio:** measures an institution's dependence on borrowed funds to finance its operation, by measuring the relative cost of borrowing to overall expenditures. Industry standards recommend 7% as the upper threshold for a healthy institution. The higher the ratio, the fewer resources are available for other operational needs. A level trend or a decreasing trend indicates that debt service has sufficient coverage, whereas a rising trend signifies an increasing demand on financial resources to pay back debt.

Institutional Controllers submitted all financial information from their audited annual financial statements, and have reviewed the results along with Chief Financial Officers, Budget Officers, and OCHE staff.

Explanation of those below the standards:

Snow College's Viability Ratio is below the standard of 1:1 and has been for the last four years. The cause of being below the standard for the last three years is due to a new GASB requirement starting in fiscal year 2015 to record a pension liability for any unfunded portion in the Utah Retirement System (URS). The college is not required to pay the pension liability; however, they are required to book the entry on its financial statements. The amount fluctuates each year based on URS actuarial reports. The pension liability amounts have increased from \$3,412,748 in 2015 to \$4,750,002 in 2017. The college does have long term debt, and has not added any debt over the past three years. They have also paid off \$1.4 million (or 8%) of its long term debt over the last three years. Removing the pension liability would have resulted in Viability Ratios of 1.06, 1.12, and 1.15 for the 2015, 2016, and 2017 fiscal years, respectively. This shows that the College's efforts are improving the Viability Ratio for the things that are within its control.

Dixie State University's rapid student growth combined with the limitation of unrestricted fund balance that can be carried forward will always produce a low Viability Ratio when significant debt is incurred. While the Viability Ratio is low, this ratio when used in conjunction with the Leverage Ratio (6.90:1 against 2:1 ratio standard) and Debt Burden Ratio (2.2% against <7 standard) show that DSU is healthy and its debt burden is relatively low. The Viability Ratio is likely to continue to decline in FY18 as additional debt comes on-line and then improve over time as the debt is repaid.

Salt Lake Community College had no debt at Fiscal Year End, June 30, 2016. There were no calculable ratios for Salt Lake Community College for FY 2016. During FY 2017, their only debt is a DFCM Energy Loan, which is an interest free vehicle. This has caused both the Viability and Leverage Ratios to calculate numbers that are not meaningful within the context of the Ratios. The Debt Burden Ratio is still at zero because there was no debt service during FY 2017.

#### Commissioner's Recommendation

This is an informational item only; no action is required.

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David L. Buhler  
Commissioner of Higher Education

DLB/KLH/BLS/MWM  
Attachments

Viability Ratio	FY13	FY14	FY15	FY16	FY17
University of Utah	2.79	2.22	2.10	2.14	2.11
Utah State University	2.94	2.58	2.66	1.79	1.91
Weber State University	2.27	2.50	2.36	2.64	2.77
Southern Utah University	2.51	3.97	3.82	2.15	2.06
Snow College	1.01	0.94	0.72	0.73	0.70
Dixie State University	2.32	3.16	0.67	0.48	0.76
Utah Valley University	1.25	1.18	1.27	1.61	1.53
Salt Lake Community College	11.54	13.73	17.91	No Debt	186.83

Viability Ratio measures how many times an Institution can cover their entire long-term debt obligation using their total Expendable Net Assets. A ratio of 1:1 or greater indicates that an Institution has sufficient expendable net assets to satisfy debt obligations. This ratio should be considered along with the Leverage Ratio.

Leverage Ratio	FY13	FY14	FY15	FY16	FY17
University of Utah	4.55	4.05	3.77	3.87	3.95
Utah State University	8.27	6.35	6.84	5.22	4.94
Weber State University	5.72	6.14	6.32	7.82	8.54
Southern Utah University	8.18	9.42	8.79	5.88	5.19
Snow College	5.57	5.46	4.49	4.24	4.31
Dixie State University	14.82	21.99	6.18	6.78	6.90
Utah Valley University	4.84	4.80	5.70	6.47	6.89
Salt Lake Community College	36.62	49.22	66.00	No Debt	615.16

Leverage Ratio measures the number of times that an Institution's Long-Term Debt can be covered using available (unrestricted) Net Assets. Industry standard indicates the Institution should have a 2:1 ratio. Available Net Assets are defined as all Net Assets - Nonexpendable Net Assets. This ratio should be considered along with the Viability Ratio.

Debt Burden Ratio	FY13	FY14	FY15	FY16	FY17
University of Utah	2.6%	6.5%	6.0%	3.0%	2.9%
Utah State University	4.3%	3.6%	2.2%	5.0%	2.7%
Weber State University	1.6%	2.2%	2.0%	2.0%	1.9%
Southern Utah University	1.7%	1.6%	3.5%	1.0%	1.8%
Snow College	3.2%	3.4%	2.8%	3.0%	2.6%
Dixie State University	1.5%	1.4%	2.7%	2.0%	2.2%
Utah Valley University	1.9%	2.4%	1.7%	3.0%	2.0%
Salt Lake Community College	0.8%	0.6%	0.6%	No Debt	0.0%

Debt Burden Ratio measures an Institution's dependence on borrowed funds to finance it's operation, by measuring the relative cost of borrowing to overall expenditures. The industry has established 7.0% as the upper threshold for a healthy institution. Debt Service is defined as Interest Expense + Principal Payments. Total Expenditure is defined as Total Expenses - Depreciation Expense + Principal Payments.

Industry Standards & Formulas

$$1:1 \frac{\text{Expendable Net Assets}}{\text{Long-Term Debt}}$$

$$2:1 \frac{\text{Available Net Assets}}{\text{Long-Term Debt}}$$

$$< 7.0\% \frac{\text{Debt Service}}{\text{Total Expenditure}}$$

Source: Excerpts from "Ratio Analysis in Higher Education," 4th Edition (Prager & Co., LLC)

## **Debt Ratio Analysis - Industry Standard Rationale**

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Utah System of Higher Education

### Viability Ratio (1:1)

Although a ratio of 1:1 or greater indicates that, as of the balance sheet date, an institution has sufficient expendable net assets to satisfy debt obligations, this value should not serve as an objective since most institutions would find this relationship unacceptable. However, the level that is "right" is institution-specific. The institution should develop a target for this ratio and other ratios that balances its financial, operating, and programmatic objectives.

There is no absolute threshold that will indicate whether the institution is no longer financially viable. However, the Viability Ratio can help define an institution's "margin for error." As the Viability Ratio's value falls below 1:1, the institution's ability to respond to adverse conditions from internal resources diminishes, as does its ability to attract capital from external sources and its flexibility to fund new objectives.

### Leverage Ratio (2:1)\*

This ratio is similar to a debt-to-equity ratio. It is different from the Viability Ratio because net investment in plant is included as part of the numerator. The numerator includes all net assets less nonexpendable net assets, plus the FASB component unit unrestricted and temporarily restricted net assets. The denominator includes all long-term debt of the institution and its component units.

Indications are that the threshold for this ratio should be above 1:1 for most institutions. How much above 1:1 is an institution-specific question. The lower this ratio becomes, concern increases that the institution might have difficulty maintaining its loan repayments should long-term economic conditions impacting the institution deteriorate. In fact, many financially sound public institutions operate effectively with a ratio less than 1:1.

### Debt Burden Ratio (< 7%)

Investment bankers have identified an upper threshold for this ratio at 7 percent, meaning that current principal and interest expense should not be greater than 7 percent of total expenditures, a generally accepted threshold. Since debt service is a legal claim on resources, the higher the ratio the fewer the resources available for other operational needs. A level trend or a decreasing trend indicates that debt service has sufficient coverage without impinging further on financial resources required to support other functional areas. On the other hand, a rising trend in this ratio usually signifies an increasing demand on financial resources to pay back debt.