University of Maine at Presque Isle

Core Financial Ratios and Composite Financial Index
FY06 to FY09
The financial health of the University of Maine at Presque Isle (UMPI) can be evaluated through the use of industry benchmarks and ratios. The following ratios and related benchmarks are derived from *Strategic Financial Analysis for Higher Education*, Sixth Edition published by KPMG; Prager, Sealy & Co., LLC; and Bearing Point. This book is widely used in the higher education industry and the most recent edition includes guidance specifically for public institutions of higher education. Ratios presented for the University of Maine System (UMS) were obtained from the January 5, 2010 *Ratio Analysis* report prepared by KPMG.

The **Primary Reserve Ratio** provides a snapshot of financial strength and flexibility by indicating how long the institution could function using its expendable reserves (both unrestricted and restricted, excluding net assets restricted for capital investments) without relying on additional net assets generated by operations. This ratio is calculated as follows:

\[
\text{Primary Reserve Ratio} = \frac{\text{Expendable Net Assets}}{\text{Total Expenses}}
\]

The benchmark ratio of 0.40 provides about 5 months (40% of 12 months) of expenses. In FY09 UMPI’s reserves covered about 2.5 months of expenses which was down from the 3.5 months provided in the three preceding years.

Key items that can impact the primary reserve ratio include principal payments on debt, use of unrestricted net assets to fund capital construction projects, operating results (operating revenues – operating expenses + net nonoperating revenues + depreciation), endowment returns, and total operating expenses. In all years except FY07, UMPI funded capital construction with unrestricted net assets. Funded projects include the Gentile Hall fitness center (FY07), Folsom-Pullen renovations (FY09),
and the wind project (FY08 and FY09). Although the $2 million investment in the wind project has the short-term impact of reducing UMPI’s primary reserve ratio and its viability ratio, the investment was a strategic decision by management that should positively influence future operating results by reducing energy expenses.

As previously mentioned, UMPI did not invest unrestricted net assets in capital construction projects during FY07; therefore, positive operating results and high endowment returns caused the primary reserve ratio to increase. In FY08 and FY09, negative operating results, negative endowment returns, and investments in capital construction caused the primary reserve ratio to decrease.

The **Net Operating Revenues Ratio** is a measure of operating results and answers the question, “Do operating results indicate that the University is living within available resources?” Operating results either increase or decrease net assets and, thereby, impact the other three core ratios: Primary Reserve, Return on Net Assets, and Viability. This ratio is calculated as follows:

\[
\text{Net Operating Revenues Ratio} = \frac{\text{Operating Income (Loss)} + \text{Net Non-Operating Revenues}}{\text{Operating Revenues} + \text{Non-Operating Revenues}}
\]

<table>
<thead>
<tr>
<th>FY06</th>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
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<tbody>
<tr>
<td>Low Benchmark</td>
<td>2.00%</td>
<td>2.00%</td>
<td>2.00%</td>
</tr>
<tr>
<td>High Benchmark</td>
<td>4.00%</td>
<td>4.00%</td>
<td>4.00%</td>
</tr>
<tr>
<td>UMPI Actual</td>
<td>4.30%</td>
<td>2.30%</td>
<td>-2.00%</td>
</tr>
<tr>
<td>UMS Actual</td>
<td>1.40%</td>
<td>2.60%</td>
<td>0.40%</td>
</tr>
</tbody>
</table>

The graph illustrates the Net Operating Revenues Ratio for FY06 to FY09, showing the comparison with the low and high benchmark, and the actual values for UMPI and UMS.
A target of at least 2% to 4% is a goal over an extended time period, although fluctuations from year to year are likely. A key consideration for institutions establishing a benchmark for this ratio would be the anticipated growth in total expenses.

UMPI’s ratio surpassed the high industry benchmark in FY06 but dropped off significantly in FY07 as increases in expenses began to outpace increases in operation and nonoperating revenues. In FY08, operating expenses outpaced revenue increases at an even greater pace, resulting in a negative return for the year. In FY09, operating expenses decreased slightly; however, operating and nonoperating revenues decreased significantly, resulting in an even larger negative return. The FY09 decrease in revenues primarily occurred in net student fees and noncapital State of Maine appropriation (net of State Fiscal Stabilization Program funds).

The **Return on Net Assets Ratio** measures asset performance and management. It determines whether an institution is financially better off than in the previous year by measuring total economic return. It is based on the level and change in total net assets. This ratio is calculated as follows:

\[
\text{Return on Net Assets Ratio} = \frac{\text{Change in Net Assets}}{\text{Total Beginning of the Year Net Assets}}
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\]
The nominal rate of return is adjusted for inflation (Higher Education Price Index) to arrive at the real rate. Items that may impact this ratio include those that impact the net operating revenues ratio, along with endowment returns; capital appropriations, gifts and grants, and transfers; and endowment gifts.

In all four years UMPI experienced a positive nominal rate of return on net assets. In FY06 and FY07, operating results (see prior discussion of the net operating revenues ratio) were the primary factor in the positive return on net assets. Although operating results were negative in FY08, State of Maine capital appropriation revenue enabled UMPI to realize a positive return on net assets. FY09’s positive return on net assets was attributable to State of Maine capital appropriation revenue and a capital transfer from the System Office to partially match the capital appropriation dollars.

The **Viability Ratio** measures UMPI’s expendable resources that are available to cover debt obligations (e.g., capital leases, notes payable, and bonds payable). This ratio is calculated as follows:

\[
\frac{\text{Expendable Net Assets}^*}{\text{Long-Term Debt}}
\]

* Excluding net assets restricted for capital investments

A ratio of 1.00 or greater indicates that there are sufficient resources to satisfy debt obligations. Like the primary reserve ratio, the viability ratio is impacted by such items as principal payments on debt, use of unrestricted net assets to fund capital construction projects, operating results (operating revenues – operating expenses + net nonoperating revenues + depreciation) and endowment returns. Issuance of
new debt would also impact the ratio; however, UMPI has not acquired new debt since FY04 when University Revenue Bonds were issued to construct the health and fitness education center. UMPI has strived to keep their debt balance low and has had the lowest level of debt in the UMS each of the past four years.

Positive operating results and high endowment returns accounted for the significant jump in the viability ratio in FY07. Despite a decrease in expendable net assets in FY08, the viability ratio increased as the percentage reduction in outstanding debt was greater than the percentage decrease in expendable net assets. In FY09, the viability ratio dropped as $2.2 million of restricted expendable net assets were used to fund the wind project and the Folsom-Pullen renovation project. Despite the large decline in FY09, UMPI’s viability ratio still far surpassed the industry benchmark.

The Composite Financial Index (CFI) creates one overall financial measurement of the institution’s health based on the four core ratios: primary reserve ratio, net operating revenues ratio, return on net assets ratio, and viability ratio. The CFI is calculated by:

- Determining the value of each ratio;
- Converting the value of each ratio to strength factors along a common scale;
- Strength factors are then multiplied by specific weighting factors; and
- The resulting four numbers are totaled to reach the single CFI score.

These scores do not have absolute precision. They are indicators of ranges of financial health that can be indicators of overall institutional well-being, when combined with nonfinancial indicators. This would be consistent with the fact that there are a large number of variables that can impact an institution and influence the results of these ratios. However, the ranges do have enough precision to be indicators of the institutional financial health, and the CFI as well as its trend line, over a period of time, can be the single most important measure of the financial health for the institution.
A score of 1.0 indicates very little financial health; 3, the low benchmark, represents a relatively stronger financial position; and 10, the top range of the scale. During FY06 thru FY08, UMPI’s CFI scores actually surpassed the low industry benchmark, indicating a strong financial position for those years. However, UMPI’s financial position in FY09 was much weaker as UMPI experienced significant decreases in all four core ratios. As previously noted, the FY09 decline in the primary reserve ratio and the viability ratio was partly attributable to management’s strategic decision to invest expendable net assets in the wind project in order to reduce future energy costs.

Each ratio’s strength factor and the total CFI score can be evaluated on the following parameters (based on a floating scale):

<table>
<thead>
<tr>
<th>Score</th>
<th>Performance Indication</th>
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<tbody>
<tr>
<td>-1 to 1</td>
<td>Assess institutional viability to survive</td>
</tr>
<tr>
<td>0 to 3</td>
<td>Re-engineer the institution</td>
</tr>
<tr>
<td>2 to 5</td>
<td>Direct institutional resources to allow transformation</td>
</tr>
<tr>
<td>4 to 7</td>
<td>Focus resources to compete in future state</td>
</tr>
<tr>
<td>6 to 9</td>
<td>Allow experimentation with new initiatives</td>
</tr>
<tr>
<td>8 to 10</td>
<td>Deploy resources to achieve a robust mission</td>
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</tbody>
</table>

The strength factor for the four core ratios can be mapped on a diamond to show a Graphic Financial Profile of UMPI’s financial health compared to the industry benchmarks. The charts on the following pages graphically display how each of the core ratios relates to one another as part of the CFI. Two institutions could have the same CFI score, yet have very different looking charts depending on the individual ratio results.
The center point of the graphic financial profile is zero. Any value that actually falls below zero defaults to the center of the graph. The maximum value in the graph is 10; thus, any actual values greater than 10 are not plotted beyond the outer diamond. The smaller, heavily lined diamond represents the low industry benchmark of 3. The institution’s ratio values are plotted and shaded to show how the institution’s health compares with the low and high benchmarks. Unless there is an unusual circumstance, an institution would want the plotting of its ratios to at least shade the entire smaller diamond.

As shown in the charts on the following page, UMPI had a CFI score of 4.0 in both FY06 and FY07; however, the shape of their diamond was quite different as their strongest ratio changed from the net operating revenues ratio in FY06 to the viability ratio in FY07. The shape changed significantly again in FY08 and FY09 as losses were incurred and the return on net assets and net operating revenues ratios declined significantly.