University of Maine at Fort Kent

Core Financial Ratios and Composite Financial Index

FY06 to FY13

University of Maine System
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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in Terminology from Prior Reports</td>
<td>1</td>
</tr>
<tr>
<td>Overview</td>
<td>1</td>
</tr>
<tr>
<td>Primary Reserve Ratio</td>
<td>2</td>
</tr>
<tr>
<td>Net Operating Revenues Ratio</td>
<td>4</td>
</tr>
<tr>
<td>Return on Net Position Ratio</td>
<td>6</td>
</tr>
<tr>
<td>Viability Ratio</td>
<td>8</td>
</tr>
<tr>
<td>Composite Financial Index</td>
<td>10</td>
</tr>
<tr>
<td>Graphic Financial Profile</td>
<td></td>
</tr>
<tr>
<td>Illustrated</td>
<td>13</td>
</tr>
<tr>
<td>UMFK Profiles</td>
<td>14</td>
</tr>
</tbody>
</table>
Change in Terminology from Prior Reports

In FY13, the University of Maine System adopted Governmental Accounting Standards Board Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*. Pursuant to the provisions of Statement No. 63, all University of Maine System campuses including the University of Maine at Fort Kent updated their financial statements to reflect the residual measure in the statement of net position as net position, rather than net assets. For consistency with the financial statements, we have updated this ratio report to reference net position rather than net assets. This change in terminology has no impact on the calculation of each core ratio or the core financial index.

Overview of Ratios

The financial health of the University of Maine at Fort Kent (UMFK) 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*, Seventh Edition published by KPMG; Prager, Sealy & Co., LLC; and ATTAIN. This book is widely used in the higher education industry and includes guidance for both private and public institutions. Ratios presented for the University of Maine System (UMS) were obtained from the separately prepared “Core Financial Ratios and Composite Financial Index” report prepared for the UMS.

According to the above publication, there are four fundamental financial questions that need to be addressed. Analysis of four core ratios can help us answer these questions.

- Are resources sufficient and flexible enough to support the mission? - **Primary Reserve Ratio**
- Do operating results indicate the institution is living within available resources? - **Net Operating Revenues Ratio**
- Does asset performance and management support the strategic direction? - **Return on Net Position**
- Are financial resources, including debt, managed strategically to advance the mission? - **Viability Ratio**

When combined, these four ratios deliver a single measure of UMFK’s overall financial health, hereafter referred to as the **Composite Financial Index**.
The **Primary Reserve Ratio** provides a snapshot of financial strength and flexibility by indicating how long the institution could function using its expendable net position (both unrestricted and restricted, excluding net position restricted for capital investments) without relying on additional net position generated by operations. This ratio is calculated as follows:

\[
\text{Expendable Net Position}^* \div \text{Total Expenses}
\]

* Excluding net position restricted for capital investments

Key items that can impact the primary reserve ratio include principal payments on debt, use of unrestricted net position to fund capital construction projects, operating results (operating revenues – operating expenses + nonoperating revenues – nonoperating expenses + depreciation), endowment returns, and total operating expenses.

A ratio of .40x (provides about 5 months) or better is advisable to give institutions the flexibility to manage the enterprise.

**UMFK's FY13 ratio** was unchanged from the prior year at .01x, and expendable net position covered only three days of expenses.
Although the primary ratio is calculated using the total of restricted and unrestricted expendable net position, the breakdown between the two categories is important in analyzing UMFK’s ratio as restricted expendable net position must be spent in accordance with restrictions imposed by third parties and is not available to pay all operating expenses. As shown below, UMFK’s unrestricted expendable net position has had a deficit balance for the past five years and the deficit grew by $132 thousand from FY12 to FY13.

<table>
<thead>
<tr>
<th>Expendable Net Position</th>
<th>$ in thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY06</td>
<td>FY07</td>
</tr>
<tr>
<td>Unrestricted</td>
<td>$(172)</td>
</tr>
<tr>
<td>Restricted</td>
<td>$959</td>
</tr>
<tr>
<td>Total</td>
<td>$787</td>
</tr>
</tbody>
</table>

**Highlights:**

**FY07:** Expendable net position increased 53% due to a combination of factors, including positive operating results, high endowment returns, and a large capital transfer from the System Office to partially fund interest paid on UMFK’s bonds payable.

**FY08:** The ratio fell in FY08 as operating expenses increased 6.8% and operating results and endowment returns were negative.

**FY09:** The primary reserve ratio decreased considerably as endowment returns were negative and operations generated a loss almost twice as large as the FY08 loss.

**FY10:** The ratio improved slightly in FY10 as UMFK reduced operating expenses and slightly increased total operating and nonoperating revenues.

**FY11:** In FY11, the primary reserve ratio fell as UMFK experienced a greater loss from operations in FY11 than it did in FY10.

**FY12:** UMFK reduced expenses from FY11 to FY12; however, the primary reserve ratio fell to a seven year low as UMFK’s expendable net position dropped $138 thousand. Key contributors to this drop include negative endowment returns and the utilization of expendable net position to fund various construction projects, including renovation of the student service center, acquisition and maintenance of the armory, and installation of the sports center boiler.

**FY13:** A $206 thousand increase in endowment returns helped to offset the loss from operations and allow UMFK’s primary reserve ratio to remain at .01x.
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 position and, thereby, impact the other three core ratios: Primary Reserve, Return on Net Position, and Viability. This ratio is calculated as follows:

\[
\text{Operating Income (Loss) plus Net Non-Operating Revenues (Expenses)} \\
\text{Operating Revenues plus Non-Operating Revenues}
\]

The authors of *Strategic Financial Analysis for Higher Education* note the following:

The primary reason institutions need to generate some level of surplus over long periods of time is because operations are one of the sources of liquidity and resources for reinvestment in institutional initiatives.

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.

**UMFK's ratio** has been negative for the past eight years.

![Net Operating Revenues Ratio Chart](image-url)
Highlights:

Noncapital transfers from the System Office are included in UMFK’s nonoperating revenues. UMFK received such transfers in each of the eight years presented and the transfers have been as small as $61 thousand (FY09) and as large as $1.09 million (FY12).

**FY07:** The ratio improved significantly in FY07 as operating revenues increased 14.5% and nonoperating revenues increased 12.5% compared with an 8.3% increase in operating expenses.

**FY08:** Revenues increased again in FY08 but at a much lower percentage than FY07. The increase did not, however, keep pace with the increase in expenses.

**FY09:** Operating revenues fell 5.5% and nonoperating revenues only increased 1.5%. Without the State Fiscal Stabilization Program revenue, FY09 nonoperating revenues would have decreased 3% from the FY08 level.

**FY10:** Although still negative, the FY10 ratio improved significantly over that for FY09 as UMFK reduced operating expenses by $433 thousand. Revenues increased slightly.

**FY11:** Revenues increased in FY11; however, they were outpaced by an increase in operating expenses. Where appropriate, management spent down restricted net position balances to pay operating costs that otherwise would have been paid from educational and general funds. Although total expendable net position decreased, the decision to utilize restricted net position allowed UMFK to reduce the deficit in its unrestricted net position.

**FY12:** Noncapital transfers of $1.09 million from the System Office from both strategic investment funds and other sources were the primary contributor to the increase in UMFK’s total operating and nonoperating revenues and therefore the net operating revenues ratio.

**FY13:** An increase in enrollment contributed to the $512 thousand increase over FY12 tuition and fees revenue. This increase was not, however, enough to offset the impact of other significant factors in FY13: increases in financial aid costs and other operating expenses and a $444 thousand decrease in noncapital transfers from the System Office.
The **Return on Net Position 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 position. An improving trend in this ratio indicates that the institution is increasing its net position and is likely to be able to set aside financial resources to strengthen its future financial flexibility. This ratio is calculated as follows:

\[
\text{Change in Net Position} / \text{Total Beginning of the Year Net Position}
\]

Items that may impact this ratio include those that impact the net operating revenues ratio, along with endowment returns, capital appropriations, capital grants and gifts, capital transfers, and endowment gifts.

The nominal rate of return on net position is the actual return unadjusted for inflation or other factors. The real rate of return adjusts the nominal rate for the effects of inflation using the Higher Education Price Index.

UMFK’s real rate of return was negative for six of the past eight fiscal years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Benchmark</th>
<th>UMFK Nominal Rate</th>
<th>UMFK Real Rate</th>
<th>UMS Real Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY06</td>
<td>6.00%</td>
<td>-5.26%</td>
<td>-10.36%</td>
<td>1.01%</td>
</tr>
<tr>
<td>FY07</td>
<td>6.00%</td>
<td>2.39%</td>
<td>-0.41%</td>
<td>4.56%</td>
</tr>
<tr>
<td>FY08</td>
<td>6.00%</td>
<td>-4.02%</td>
<td>-9.02%</td>
<td>-3.51%</td>
</tr>
<tr>
<td>FY09</td>
<td>6.00%</td>
<td>-8.09%</td>
<td>-10.39%</td>
<td>-0.70%</td>
</tr>
<tr>
<td>FY10</td>
<td>6.00%</td>
<td>9.58%</td>
<td>8.68%</td>
<td>7.65%</td>
</tr>
<tr>
<td>FY11</td>
<td>6.00%</td>
<td>0.62%</td>
<td>-1.68%</td>
<td>9.04%</td>
</tr>
<tr>
<td>FY12</td>
<td>6.00%</td>
<td>4.45%</td>
<td>2.75%</td>
<td>3.12%</td>
</tr>
<tr>
<td>FY13</td>
<td>6.00%</td>
<td>-1.37%</td>
<td>-2.97%</td>
<td>1.78%</td>
</tr>
</tbody>
</table>
Highlights:

**FY07**: The positive nominal rate of return in FY07 is attributable to high market returns on the endowment and a large capital transfer from the System Office.

**FY08/FY09**: The net operating revenues ratio fell significantly as previously discussed, endowment returns were negative, and there were no significant capital transfers from the System Office.

**FY10**: The positive return for FY10 is primarily attributable to $1.2 million of State of Maine capital appropriation revenue from the 2007 bond referendum. Although the return from operations was negative, reduced operating expenses also contributed to the level of the FY10 return on net position.

**FY11**: UMFK’s return on net position fell in FY11 as UMFK incurred a loss from operations and as available State of Maine capital appropriation revenue decreased significantly from the FY10 amount.

**FY12**: Despite a decrease in State of Maine capital appropriation revenue and negative endowments returns, UMFK’s rate of return on net position increased significantly in FY12 due to a $500 thousand grant from the State of Maine and $168 thousand in match monies from the System Office for a biomass boiler at the Sports Center and capital transfers of $216 thousand from the System Office for various other capital activities.

**FY13**: UMFK’s loss from operations along with decreases in State of Maine capital appropriation revenue, capital grants and gifts revenues, and capital transfers from the System Office were the primary contributors to the negative return on net position.
The **Viability Ratio** measures expendable resources that are available to cover debt obligations (e.g., capital leases, notes payable, and bonds payable) and generally is regarded as governing an institution’s ability to assume new debt. This ratio is calculated as follows:

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

* Excluding net position restricted for capital investments

Like the primary reserve ratio, the viability ratio is impacted by such items as principal payments on debt, use of unrestricted net position to fund capital construction projects, operating results (operating revenues – operating expenses + nonoperating revenues – nonoperating expenses + depreciation) and endowment returns. Issuance of new debt would also impact the ratio.

The authors of *Strategic Financial Analysis for Higher Education* note the following:

There is no absolute threshold that will indicate whether the institution is no longer financially viable. However, the Viability Ratio, along with the Primary Reserve Ratio discussed earlier, can help define an institution’s “margin for error”. As the Viability Ratio’s value falls below 1:1, an 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.

A ratio of 1.00 or greater indicates sufficient resources to satisfy debt obligations.

UMFK basically has had no viability over the past eight years with ratios close to zero.
Highlights:

FY07: As previously discussed, expendable net position increased 53% in FY07 because of positive operating results once depreciation is added back, high endowment returns, and a large capital transfer from the System Office.

FY08/FY09: The viability ratio decreased in FY08 and FY09 as negative operating results and negative endowment returns caused expendable net position to decrease at a faster rate than debt was reduced. Another contributing factor to the FY09 decline was the acquisition of an internal loan to acquire the Cyr House property.

FY10: Expendable net position increased in FY10 because of positive operating results once depreciation is added back, and high endowment returns.

FY11: The decrease in debt in FY11 due to scheduled payments was enough to offset the decrease in expendable net position and keep the viability ratio flat at .05.

FY12: The viability ratio decreased in FY12 as UMFK’s expendable net position decreased and UMFK borrowed an additional $475 thousand from the System Office to fund the Sports Center boiler, Crocker Hall, and Student Success and Learning Center capital projects.

FY13: UMFK’s viability ratio decreased to an eight-year low as expendable net position decreased for the reasons noted in the discussion of the primary reserve ratio.
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 position ratio, and viability ratio. By blending these four key measures of financial health into a single number, a more balanced view of the state of the institution’s finances is possible because a weakness in one measure may be offset by the strength of another measure.

The CFI is calculated by completing the following steps:

1. Compute the values of the four core ratios;
2. Convert the ratio values to strength factors along a common scale;
3. Multiply the strength factors by specific weighting factors; and
4. Total the resulting four numbers (ratio scores) to reach the single CFI score.

Because the CFI only measures the financial component of an institution’s well-being, it must be analyzed in context with other associated activities and plans to achieve an assessment of the overall health of the institution. A high CFI is not necessarily indicative of a successful institution, although a low CFI generally is indicative of additional challenges. When considered in the context of achievement of mission, a very high CFI with little achievement of mission may indicate a failing institution.

A score of 1.0 indicates very little financial health; 3, the low benchmark, represents a relatively stronger financial position; and 10 is the top of the scale.

UMFK’s FY13 CFI of -0.5 is not much different than its -0.7 score from FY06.
Performance of the CFI score can be evaluated on a scale of -4 to 10 as shown on the following page. 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.
The overlapping arrows represent the ranges of measurement that an institution may find useful in assessing itself.

We have overlaid the scoring scale with UMFK’s earliest (FY06) and most recent (FY13) CFI scores to assist in evaluating UMFK’s performance.
The strength factors that were used in calculating the CFI can be mapped on a diamond to show the shape of an institution’s financial health compared to the industry benchmarks. This **Graphic Financial Profile** can assist management in determining whether a weakness in one ratio is offset by strength in another ratio.

*Illustrated below are two examples* of a Graphic Financial Profile (GFP): one plots actual strength factors that equal the low industry benchmark of 3 and one that plots actual strength factors that fall above and below the low benchmark:

- **Example of a GFP Based on Strength Factors Valued at the Low Benchmark**
  - Scale of -4 to 10

  ![Diagram 1](image1.png)

  *Actual □ Low Benchmark: 3 □ High Benchmark: 10*

- **Example of a GFP Based on Strength Factors at Varying Values**
  - Scale of -4 to 10

  ![Diagram 2](image2.png)

  *Actual □ Low Benchmark: 3 □ High Benchmark: 10*

- The center point of the graphic financial profiles is -4, the lowest possible score on the scale.
- The smaller, heavily lined diamond in the graphs represents the low industry benchmark of 3.
- The outer, lightly lined diamond represents the high industry benchmark of 10 and the highest possible score on the scale for each ratio.
- The actual values of the institution’s ratio strength factors are plotted and shaded to show how the institution’s health compares with the low (3) and high (10) industry benchmarks. In the left graph, the plotted actual values fill the smaller diamond as each of the actual values is at the low benchmark of 3. In the right graph, the smaller diamond is not filled as the actual values of two ratios fall below the low industry benchmark of 3. Also, in the right graph, part of the outer diamond is filled as values for two of the ratios surpass the low benchmark of 3.
The following graphs contain UMFK’s Graphic Financial Profiles for FY06 thru FY13. From these profiles we can see that UMFK has been and remains financially weak. Returns on operations have been consistently negative; thus, UMFK remains undercapitalized and has little flexibility to make organizational changes, address deferred maintenance, etc.

**FY06**: UMFK’s negative operating return defaulted to the lowest score on the scale.

**FY07**: UMFK remained financially weak despite a positive return on net position that helped provide a small increase in reserves.
**FY08:** UMKF’s negative return from operations again defaulted to the lowest score on the scale.

**FY09:** UMKF’s financial profile is difficult to see graphically, as the return on net position and the return on operations default to the center of the graph and the capitalization strength factors are at a four year low.

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**Graphic Financial Profile - FY08**
Strength Factors Plotted on a Scale of -4 to 10
CFI Score of -.5

**Graphic Financial Profile - FY09**
Strength Factors Plotted on a Scale of -4 to 10
CFI Score of -1.1
FY10: As previously noted in this report, State of Maine capital appropriation revenues enabled UMFK to experience a positive return on net position in FY10. These capital appropriation revenues had no impact, however, on the strength factor for the primary reserve ratio as capital appropriations are used to fund capital construction and thereby increase net position invested in plant.

FY11: UMFK’s financial profile remains in the left portion of the diamond; however, the plotted area has shrunk. In four of the last six years, UMFK’s negative operating return has defaulted to the lowest score of -4 on the scale.
**FY12 and FY13:** What strength UMFK has continues to reside in the left portion of the diamond as non-operating revenues are the drivers for the return on net position ratio.

**Graphic Financial Profile - FY12**
Strength Factors Plotted on a Scale of -4 to 10
CFI Score of 0.1

**Graphic Financial Profile - FY13**
Strength Factors Plotted on a Scale of -4 to 10
CFI Score of -0.5