Fiscal Analysis Including the Composite Financial Index: A Tale of Two Universities

Presented By:
Mary H. Loomis, CPA, MPA
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Why use ratios?

- Ratios are important for those who do not know how to interpret and analyze higher education financial statements (i.e., boards, foundations, faculty, students, administrators, etc.)
- Interested parties can use ratios to gain an understanding of the institution’s financial health, particularly if developed over time.
Why use ratios? (continued)

- Reduces the complexity of GAAP-basis financial statements.
- Facilitates peer assessment.
- Shifts focus to a global level.
- Enables strategic decision making.
- Supports a long-term institutional goal.
- Assists with the assessment of:
  - Creditworthiness.
  - Relative liquidity, financial viability, and leverage of resources.
  - Financial assets performance.
Principles of Ratio Analysis

- Focus on summary information to address key questions.
- Present in simple terms (such as $1 of cash and marketable to securities to every XX$ of current liabilities).
- Focus on trends in ratios.
- Use internal assessment with financial analysis. Never rely just on the ratios – look at the underlying information that is causing the ratios.
- When looking at the CFI (Composite Financial Index), consider each variable separately and never make decisions based on comparison of institutional CFIs. Conduct further analysis.
Composite Financial Index

• Calculation found in the seventh edition of *Strategic Financial Analysis for Higher Education* released in 2010 combines four primary ratios:
  – Primary Reserve Ratio
  – Viability Ratio
  – Return on Net Assets Ratio
  – Net Operating Revenues Ratio
Primary Reserve Ratio-35%

• Indicates the sufficiency of resources and their flexibility:
  » Expendable Net Assets/Position
  » Total Expenses (Operating & Nonoperating)

Note: Expendable net assets/position does not include those restricted for plant purposes nor does it include the pension obligation or compensated absences. (See URNA calculated for purposes of SACS.)
Viability Ratio-35%

• Indicates the capacity to repay total debt through reserves:
  » Expendable Net Assets/Position
  » Long-Term Debt
Return on Net Assets - 20%

• Indicates whether the institution is better off financially this year than last year:
  » Change in Net Assets/Position
  » Beginning Net Assets/Position
Net Operating/Unrestricted Revenues - 10%

• Indicates whether the institution is living within available resources:
  » Operating Surplus or Deficit (#)
  » Operating Revenues(#)

#NOTE: As a public institution and keeping in mind you are trying to get to what was once the net income ratio, non-operating revenues and expense are a significant part of the University’s business and bottom-line. Therefore, these type entities should use the following calculation:

Net Unrestricted Revenues:

Income (Loss) Before Other Operating and Nonoperating Revenues
Why these four ratios?

- The CFI measure is established by first answering the four key specific questions concerning financial health of an institution that address whether an institution is financially healthy:

  1. *Are resources sufficient and flexible enough to support the mission?*  
     Primary Reserve Ratio
  2. *Are debt resources managed strategically to advance the mission?*  
     Viability Ratio
  3. *Does asset performance and management support the strategic direction?*  
     Return on Net Assets Ratio
  4. *Do results indicate the institution is living within available resources?*  
     Net Unrestricted Revenues Ratio
• Indicates the sufficiency of resources and their flexibility: \textit{Expendable Net Position/Total Expenses} – Goal of .10 (10%) or 1.2 months of reserves is desirable for State Universities.

- SSU: 8%  
  0.08  
  7,410,147  
  91,864,146

- FVSU: 1.3%  
  0.013  
  1,008,339  
  77,070,347

• \textit{Are resources sufficient and flexible enough to support the mission?}
Viability Ratio-2015

• Indicates the capacity to repay total debt through reserves: Expendable Net Position/Long-Term Debt (includes current portion but not comp. abs. or pension obl.) – Goal of .08 (8%) is desirable for State Universities.

• SSU: 7% 0.07

  7,410,147
  106,047,893

• FVSU: 1.2% 0.012

  1,008,339
  80,828,481

• Are debt resources managed strategically to advance the mission?
Return on Net Assets - 2015

Indicates whether the institution is better off financially this year than last year: Change in Net Position/Beginning Net Position - annual return target of 3-4% is desirable for State Universities but a major issue is negative returns which affect cash & reserves.

- SSU: -9%
  - (0.09)
  - (5,350,682)
  - 60,946,799

- FVSU: -2%
  - (0.02)
  - (1,584,976)
  - 74,182,336

Does asset performance and management support the strategic direction?
Net Unrestricted Revenues - 2015

- Indicates whether the institution is living within available resources: Income (Loss) Before Other/Operating & Non-Operating Revenues explains how the surplus generated from activities affects the behavior of other ratios as the net surplus or deficit directly affects the amount added to or deducted from net position – **Positive or surplus target (deficits should not have to be covered by cash and reserves).**

- **SSU:** -6.216%
  - (5,701,503)
  - 91,721,560

- **FVSU:** -8.681%
  - (6,156,651)
  - 70,917,560

- Do results indicate the institution is living within available resources?
## CFI SCORING SHEET

**FISCAL YEAR 6/30/15**

<table>
<thead>
<tr>
<th>RATIO</th>
<th>VALUE</th>
<th>STRENGTH: Divide Value by These Factors</th>
<th>WEIGHT: Multiply Strength by These Factors</th>
<th>CFI SCORE (Note 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Reserve</td>
<td>0.081</td>
<td>0.133</td>
<td>0.35</td>
<td>0.21</td>
</tr>
<tr>
<td>Viability</td>
<td>0.070</td>
<td>0.417</td>
<td>0.35</td>
<td>0.06</td>
</tr>
<tr>
<td>Return on Net Assets</td>
<td>(0.088)</td>
<td>2.00%</td>
<td>0.20</td>
<td>(0.88)</td>
</tr>
<tr>
<td>Net Operating Revenues (or Net Unrestricted Revenues)*</td>
<td>(0.062)</td>
<td>1.30%</td>
<td>0.10</td>
<td>(0.48)</td>
</tr>
</tbody>
</table>

CFI SCORE - sum last column

(1.09)

**Note 1:** Maximum score for the ratios is 3.5 for primary reserve and viability, 2 for return on net assets, and 1 for net operating revenues/net unrestricted revenues. If score exceeds these amounts, enter the maximum value in appropriate cell.

**Note 2:** If no long-term debt is reported, the weights change as follows: viability ratio is ignored, primary reserve weight becomes .55, return on net assets weight becomes .30, net operating revenues/net unrestricted revenues weight becomes .15. Maximum scores become 5.5 for primary reserve, 3 for return on net assets, and 1.5 for net operating revenues/net unrestricted revenues.

**Note 3:** Assumes use of operating measure; if change in unrestricted net assets is used, the strength factor is 1.3% versus 0.7%.
SSU Composite Financial Index FY2011-2015
### CFI SCORING SHEET

**FISCAL YEAR 6/30/15**

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<th>WEIGHT: Multiply Strength by These Factors</th>
<th>CFI SCORE (Note 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Reserve</td>
<td>0.013</td>
<td>0.133</td>
<td>0.35</td>
<td>0.034</td>
</tr>
<tr>
<td>Viability</td>
<td>0.012</td>
<td>0.417</td>
<td>0.35</td>
<td>0.010</td>
</tr>
<tr>
<td>Return on Net Assets</td>
<td>(0.021)</td>
<td>2.00%</td>
<td>0.20</td>
<td>(0.214)</td>
</tr>
<tr>
<td>Net Operating Revenues (or Net Unrestricted Revenues)*</td>
<td>(0.087)</td>
<td>1.30%</td>
<td>0.10</td>
<td>(0.668)</td>
</tr>
</tbody>
</table>

CFI SCORE - sum last column

(0.837)

**Note 1:** Maximum score for the ratios is 3.5 for primary reserve and viability, 2 for return on net assets, and 1 for net operating revenues/net unrestricted revenues. If score exceeds these amounts, enter the maximum value in appropriate cell.

**Note 2:** If no long-term debt is reported, the weights change as follows: viability ratio is ignored, primary reserve weight becomes .55, return on net assets weight becomes .30, net operating revenues/net unrestricted revenues weight becomes .15. Maximum scores become 5.5 for primary reserve, 3 for return on net assets, and 1.5 for net operating revenues/net unrestricted revenues.

**Note 3:** Assumes use of operating measure; if change in unrestricted net assets is used, the strength factor is 1.3% versus 0.7%.
FVSU Graphic Financial Profile FY2015

- Primary Reserve Ratio: 0.034
- Viability Ratio: 0.010
- Return on Net Assets Ratio: (0.214)
- Net Revenues Ratio: (0.668)
FVSU – CFI GRAPH

FVSU
Composite Financial Index FY2012-2016

Primary Reserve Ratio

Net Revenues Ratio

Viability Ratio

Return on Net Assets Ratio

2012
2013
2014
2015
2016
Conclusions

- Like all other ratio analysis, the CFI should be considered in light of the underlying financial data. Complete linear and other ratio analysis first.
- Understand your institution’s initiatives and strategies and how they align with your prior and future fiscal objectives.
- Maintain consistency in reporting ratios.
- Five-year periods are good, ten are better.
- Evaluate within your context and based on your peers.
Conclusions

- Understand the impact of changes and explain them to readers.
- Communicate openly and often with your Chief Academic Officer and others to understand your story and plan for the future.
- Communicate, interpret, assess, and do it again!
  - Communicate with:
    - President and Senior Leaders, Directors, internal.
    - USG System Office/Board of Regents.
    - Rating, State, Grant agencies when required.
Finally . . .

With limited resources:

• Look at strategic resource initiatives.
• Tie financial initiatives to student success; involve senior leadership.
• Transparency and trustworthiness.
• Communicate, communicate, communicate.

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