April 2015

Analyzing University and College Financial Statements

Howard Bunsis

*Eastern Michigan University*

Follow this and additional works at: [https://thekeep.eiu.edu/jcba](https://thekeep.eiu.edu/jcba)

Part of the Collective Bargaining Commons, and the Higher Education Commons

**Recommended Citation**


DOI: [https://doi.org/10.58188/1941-8043.1468](https://doi.org/10.58188/1941-8043.1468)

Available at: [https://thekeep.eiu.edu/jcba/vol0/iss10/7](https://thekeep.eiu.edu/jcba/vol0/iss10/7)

This Proceedings Material is brought to you for free and open access by the Journals at The Keep. It has been accepted for inclusion in Journal of Collective Bargaining in the Academy by an authorized editor of The Keep. For more information, please contact tabruns@eiu.edu.
Analyzing University and College Financial Statements

Howard Bunsis, Professor of Accounting,
Eastern Michigan University
Chair, AAUP Collective Bargaining Congress
National Center for the Study of Collective Bargaining in Higher Education and the Professions, Hunter College
April 2015
Two Main Goals

Does the University have money?

Ratio Analysis

Are they spending the money the right way?

Expense Analysis
What Financial Information Do You Need?

Audited Financials

Budgets

IPEDS: Integrated Postsecondary Education Data System:
Pressure on Tuition Revenue for Public and Private Universities per Moody’s

- Price pressure on private universities
- Public and political pressure on affordability
- Limitations on tuition increases in some states
- Declining pool of graduating high school students

Versus

Strong demand for higher education
State Appropriations: 6-Year % Change (2008 to 2014)

US Average is -4.4%
1-Year Change in State Appropriation: 2013-14 to 2014-15 per Grapevine (July 10, 2014)

US Average is Positive 3.6%
State Appropriation as a Percent of Total Revenues in Ohio, Michigan, and Wisconsin

Source: IPEDS
All Ohio Publics:
State Appropriation vs. Tuition Revenue

![Graph showing the comparison of State Appropriation vs. Tuition Revenue from 2002 to 2013.](image-url)
Higher Ed Funding in Michigan: Corrections vs. Higher Ed
Source: Executive Budget 2015-16; Amounts in Millions

Bunsys: Analyzing University and College Financial Statements
*Cal State University System Revenues*

<table>
<thead>
<tr>
<th>In billions</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Other</td>
<td>3.09</td>
<td>3.10</td>
<td>3.32</td>
<td>3.36</td>
<td>3.36</td>
<td>3.70</td>
<td>3.93</td>
</tr>
<tr>
<td>State Operating</td>
<td>2.97</td>
<td>2.15</td>
<td>2.44</td>
<td>2.58</td>
<td>2.00</td>
<td>2.07</td>
<td>2.35</td>
</tr>
<tr>
<td>Tuition</td>
<td>1.48</td>
<td>1.59</td>
<td>1.80</td>
<td>1.88</td>
<td>2.23</td>
<td>2.25</td>
<td>2.28</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>7.54</td>
<td>6.84</td>
<td>7.57</td>
<td>7.82</td>
<td>7.59</td>
<td>8.02</td>
<td>8.56</td>
</tr>
</tbody>
</table>
Boston University 2014 Revenue Distribution

- Tuition: 48%
- Auxiliaries: 14%
- Sponsored programs: 12%
- Recovery of costs: 14%
- Contributions: 4%
- Sales and Services: 6%
- Investment Income: 6%
- Other Revenues: 9%

Published by The Keep, 2015
2014 Expense Distribution: University of Guelph

- Salaries: 56%
- Benefits: 15%
- Operating: 15%
- Utilities: 5%
- Scholarships: 5%
- Other: 4%

Total Expenses: 100%
Expense Distribution:
Functional Classification for UCONN, 2014

- Instruction: 32%
- Research: 18%
- Public Service: 10%
- Academic Support: 9%
- Student Services: 7%
- Institutional Support: 4%
- Plant: 3%
- Depreciation: 3%
- Auxiliaries: 5%
- Other: 1%
## Financial Statements Names

<table>
<thead>
<tr>
<th></th>
<th>For-Profit Sector</th>
<th>Public Universities</th>
<th>Private Universities/Colleges</th>
<th>Fund Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance Sheet</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statement of Net</td>
<td></td>
<td>Statement of Net</td>
<td>Statement of Financial</td>
<td>Fund Balance</td>
</tr>
<tr>
<td>Assets</td>
<td></td>
<td>Assets</td>
<td>Position</td>
<td>Sheet</td>
</tr>
<tr>
<td><strong>Income Statement</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statement of Revenue,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenses, and Changes</td>
<td>Statement of</td>
<td>Statement of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in Net Assets</td>
<td>Revenue, Expenses,</td>
<td>Activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and Changes in Net</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Statement of Cash</strong></td>
<td></td>
<td>Statement of Cash</td>
<td>Statement of Cash</td>
<td></td>
</tr>
<tr>
<td>Flows</td>
<td></td>
<td>Flows</td>
<td>Flows</td>
<td>Only for</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Proprietary</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Funds</td>
</tr>
<tr>
<td>**Statement of</td>
<td></td>
<td></td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>Shareholder's Equity</td>
<td></td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Statement of Net Assets or
The Balance Sheet

Assets
- Cash & cash equivalents
- Accounts Receivable
- Property, Plant & Equipment

Liabilities & Net Assets
- Accounts Payable
- Long-Term Debt
- Net Assets
Revenues, Expenses & Changes in Net Assets

Total Revenues

Total Expenses

Change in Net Assets
Cash Flow

Cash Flows from Operating Activities

Cash Flows from Non-Capital and Cash Flow from Capital Financing Activities

Cash Flows from Investment Activities

Net Increase (Decrease) in Cash
Reserves in the Public Sector

Total Net Assets = Invested in Capital Assets + Restricted Net Assets + Unrestricted Net Assets

Expendable = Restricted Expendable + Unrestricted Net Assets

Non-expendable
Reserves in the Private Sector

Total Net Assets = Permanently Restricted + Temporarily Restricted Net Assets + Unrestricted Net Assets

Non-expendable = Expendable + Independent of Property and equipment

Reserves or Expendable Net Assets = Temporarily Restricted Expendable + Unrestricted independent of property and equipment
### Net Assets: Reserves - Redlands

<table>
<thead>
<tr>
<th>In Millions</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrestricted</td>
<td>103.0</td>
<td>52.3</td>
<td>60.4</td>
<td>60.2</td>
<td>55.2</td>
<td>60.4</td>
<td>67.0</td>
</tr>
<tr>
<td>Temporarily Restricted</td>
<td>19.2</td>
<td>31.0</td>
<td>25.0</td>
<td>32.2</td>
<td>30.5</td>
<td>32.1</td>
<td>42.8</td>
</tr>
<tr>
<td>Permanently Restricted</td>
<td>86.7</td>
<td>87.6</td>
<td>89.4</td>
<td>95.0</td>
<td>96.7</td>
<td>99.5</td>
<td>106.3</td>
</tr>
<tr>
<td>Total Net Assets</td>
<td>208.9</td>
<td>170.9</td>
<td>174.9</td>
<td>187.4</td>
<td>182.4</td>
<td>192.1</td>
<td>216.2</td>
</tr>
</tbody>
</table>

Not all of the unrestricted are true reserves – we have to take out the part devoted to the buildings. How much of the $216 million are true reserves? See the next slide.

Source: Audited financial statements
Further Analysis of Reserves - Redlands

<table>
<thead>
<tr>
<th>In Millions</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrestricted</td>
<td>103.0</td>
<td>52.3</td>
<td>60.4</td>
<td>60.2</td>
<td>55.2</td>
<td>60.4</td>
<td>67.0</td>
</tr>
<tr>
<td>Take Out Invested in Plant</td>
<td>58.3</td>
<td>53.6</td>
<td>60.4</td>
<td>55.3</td>
<td>51.3</td>
<td>51.8</td>
<td>48.6</td>
</tr>
<tr>
<td>True Unrestricted Reserves</td>
<td>44.7</td>
<td>(1.3)</td>
<td>0.0</td>
<td>4.9</td>
<td>3.9</td>
<td>8.6</td>
<td>18.4</td>
</tr>
<tr>
<td>Temporarily Restricted</td>
<td>19.2</td>
<td>31.0</td>
<td>25.0</td>
<td>32.2</td>
<td>30.5</td>
<td>32.1</td>
<td>42.8</td>
</tr>
<tr>
<td>Total Reserves</td>
<td>63.9</td>
<td>29.7</td>
<td>25.1</td>
<td>37.1</td>
<td>34.4</td>
<td>40.7</td>
<td>61.3</td>
</tr>
</tbody>
</table>

We now need to put these reserves in context; how large is $61.3 million? We will compare to expenses and debt.
## Size of Reserves Relative To: Operating Expenses and Debt at Whittier

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reserves</strong></td>
<td>52.9</td>
<td>19.3</td>
<td>26.9</td>
<td>42.8</td>
<td>41.1</td>
<td>62.8</td>
</tr>
<tr>
<td><strong>Operating Expenses</strong></td>
<td>57.7</td>
<td>61.0</td>
<td>61.2</td>
<td>64.2</td>
<td>67.4</td>
<td>70.2</td>
</tr>
<tr>
<td><strong>Primary Reserve Ratio</strong></td>
<td>92%</td>
<td>32%</td>
<td>44%</td>
<td>67%</td>
<td>61%</td>
<td>89%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reserves</strong></td>
<td>52.9</td>
<td>19.3</td>
<td>26.9</td>
<td>42.8</td>
<td>41.1</td>
<td>62.8</td>
</tr>
<tr>
<td><strong>Debt</strong></td>
<td>59.3</td>
<td>58.3</td>
<td>55.4</td>
<td>54.5</td>
<td>53.4</td>
<td>52.4</td>
</tr>
<tr>
<td><strong>Viability Ratio</strong></td>
<td>89%</td>
<td>33%</td>
<td>48%</td>
<td>79%</td>
<td>77%</td>
<td>120%</td>
</tr>
</tbody>
</table>
# Summary of Ratios

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Weight in Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Reserve</td>
<td>Total Reserves</td>
<td>Annual Expenses</td>
<td>40.0%</td>
</tr>
<tr>
<td>Viability</td>
<td>Total Reserves</td>
<td>Total Debt</td>
<td>22.5%</td>
</tr>
<tr>
<td>Net Asset</td>
<td>Change in Net Assets</td>
<td>Total Revenues</td>
<td>12.5%</td>
</tr>
<tr>
<td>Cash Flow</td>
<td>Operating Cash Flows</td>
<td>Total Revenues</td>
<td>25.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Ratio</th>
<th>Poor</th>
<th>Average</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Reserve</td>
<td>Less than 10%</td>
<td>15% to 25%</td>
<td>More than 50%</td>
</tr>
<tr>
<td>Viability</td>
<td>Less than 30%</td>
<td>50% to 100%</td>
<td>More than 250%</td>
</tr>
<tr>
<td>Net Asset</td>
<td>Anything Negative</td>
<td>1% to 3%</td>
<td>More than 5%</td>
</tr>
<tr>
<td>Cash Flow</td>
<td>Anything Negative</td>
<td>1% to 3%</td>
<td>More than 5%</td>
</tr>
</tbody>
</table>
Viability Ratio in Context

- Whittier
- Excellent
- Very Good
- Good
- Solid
- ok
- Questionable
- Trouble
Moody’s 2014 Bond Ratings of Public Universities
8 Universities with Aaa Moody’s Bond Ratings
Analysis of Tuition Revenue Changes

Sources: UCONN Office of Institutional Research and Effectiveness; Audited Financial Statements
2013 Subsidy Percentages for UCONN and Other Peers
Source: Data Per USA Today; Expenses in Millions
2007-2013 Graduation Rates and Pell Grants
Ohio Publics per IPEDS

- OSU
- Miami
- Ohio U
- Cincy
- BGSU
- Kent St
- Toledo
- WSU
- Akron
- Cleve St
- Central St

6-Year Grad Rate
% Pell

Bundis: Analyzing University and College Financial Statements
Published by The Keep, 2015