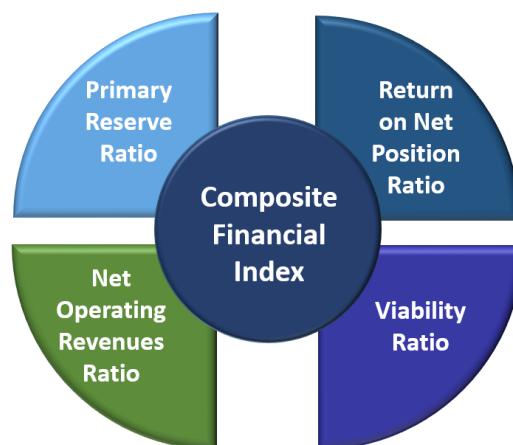


University of Maine System Governance and University Services

2018 Core Financial Ratios and Composite Financial Index



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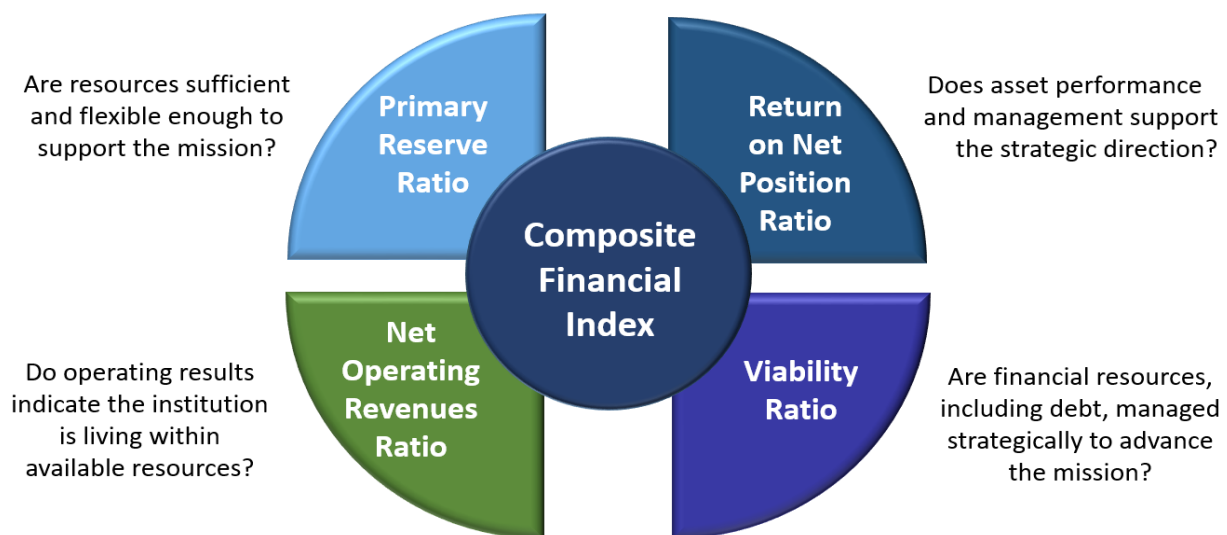
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Introduction

The financial health of the University of Maine System Governance and University Services (UMSGUS) 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.

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



When combined, these four ratios deliver a single measure of UMSGUS' overall financial health, hereafter referred to as the Composite Financial Index (CFI).

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, not just financial health, of the institution. As an example, if two institutions have identical CFI scores, but one requires substantial investments to meet its mission-critical issues and the other has already made those investments, the first institution is less healthy than the second. In fact, a high CFI is not necessarily indicative of a successful institution, although a low CFI generally is indicative of additional challenges. When put in the context of achievement of mission, a very high CFI with little achievement of mission may indicate a failing institution.

Strategic Financial Analysis for Higher Education

Reporting Entity

The reporting entity known as UMSGUS encompasses the following cost and income pools operated for the benefit of the entire University of Maine System:

- Benefit cost pool
- Risk management cost pool
- Investment income pool (FY10+)

UMSGUS' management does not consider the net position associated with the above operations to be readily available to fund UMSGUS' operations. **Therefore, in this report we have presented each ratio at two levels:**

- UMSGUS-Op – UMSGUS' activities and net position excluding the above noted cost and income pools and
- UMSGUS - All activities of, and net position held by, UMSGUS including the above noted cost and income pools.

Prior to FY10, the investment income pool was included as part of UMSGUS-Op as UMSGUS-Op was dependent on this income to balance its budget. Beginning in FY10, UMSGUS-Op reduced its reliance on investment income and UMSGUS management committed to placing a portion of investment earnings above budget in a 'budget stabilization' reserve to benefit all campuses in the event of a State appropriation curtailment or other economic crisis.

Restatement of FY17 Ratios

Adoption of New Accounting Standard

As required by generally accepted accounting principles, in FY18 the University of Maine System (UMS) adopted Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions* (GASB No. 75) related to its postemployment health plan. Pursuant to the provisions of GASB No. 75, the UMS and each of its campuses restated their FY17 financial statements to reflect the retroactive application of the accounting change. UMSGUS' FY17 financial statements were impacted as follows:

- Beginning of year expendable net position decreased by \$21.6 million as UMSGUS recognized its share of the funding obligation related to the \$102 million Unfunded Actuarial Accrued Liability recorded by the UMS as of July 1, 2016.
- Operating expenses were decreased by \$12 million as FY17 OPEB expense was lower under the new accounting standard.

Change in FY17 Commonfund Higher Education Price Index (HEPI)

In 2018 there is a new American Association of University Professors (AAUP) methodology related to faculty salaries that led the Commonfund to restate their 2017 HEPI number from 3.7% to 3.3%.

Restated Ratios

We have recalculated the FY17 ratios included in this report for the combined impact of adopting GASB No. 75 and the change in HEPI rate. A comparison of the originally stated and restated ratios is shown below.

FY17 Ratios and CFI						
	Primary Reserve Ratio	Net Operating Revenues Ratio	Return on Net Position Ratio (Nominal Rate)	Return on Net Position Ratio (Real Rate)	Viability Ratio	CFI
UMSGUS - Op as originally stated	2.06	36.77%	16.39%	12.69%	1.97	7.8
UMSGUS - Op as restated	1.5	56.13%	62.09%	58.79%	1.43	7.7
UMSGUS as originally stated	2.47	30.03%	11.89%	8.19%	3.29	8.5
UMSGUS as restated	4.13	65.02%	37.24%	33.94%	2.76	8.8
UMS as originally stated	0.41	0.53%	2.39%	-1.31%	1.65	2.8
UMS as restated	0.29	2.28%	4.29%	0.99%	1.12	2.5

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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:

$$\frac{\text{Expendable Net Position}^*}{\text{Total Expenses}}$$

* Excluding net position restricted for capital investments

Key items that can impact expendable net position

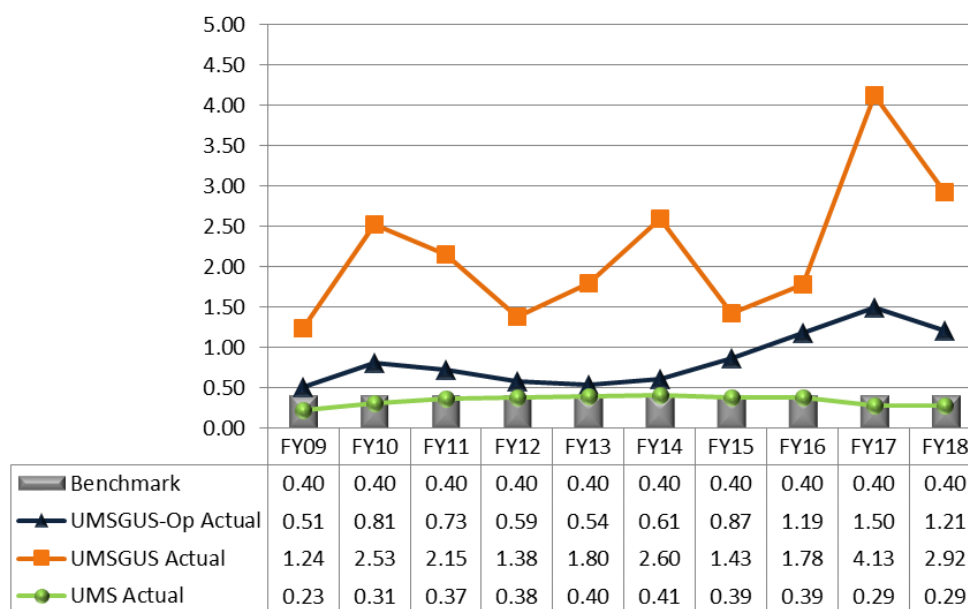
- principal payments on debt
- use of unrestricted net position to fund capital construction projects
- operating results (operating revenues – operating expenses + nonoperating revenues – nonoperating expenses + depreciation)
- endowment returns

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

UMSGUS-Op's reserves cover not only its expenses, but also serve as emergency funds for campuses without adequate reserves.

UMSGUS' ratio is significantly higher than that for UMSGUS-Op due to the net position associated with the cost and income pools, primarily the benefit pool and the investment income pool (FY10+).

Primary Reserve Ratio



	UMSGUS-Op Ratio Components \$ in thousands									
	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
Unrestricted expendable net position	\$ 11,189	\$ 14,428	\$ 14,953	\$ 13,377	\$ 11,224	\$ 10,172	\$ 16,059	\$ 17,300	\$ 17,186	\$ 15,189
Restricted expendable net position	\$ 2,147	\$ 2,459	\$ 3,334	\$ 3,177	\$ 4,528	\$ 6,529	\$ 7,341	\$ 7,653	\$ 8,670	\$ 9,495
Total expendable net position	\$ 13,336	\$ 16,887	\$ 18,287	\$ 16,554	\$ 15,752	\$ 16,701	\$ 23,400	\$ 24,953	\$ 25,856	\$ 24,684
Total expenses	\$ 26,275	\$ 20,907	\$ 25,073	\$ 27,987	\$ 28,947	\$ 27,279	\$ 26,916	\$ 20,945	\$ 17,277	\$ 20,339

	UMSGUS Ratio Components \$ in thousands									
	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
Unrestricted expendable net position	\$ 24,287	\$ 37,887	\$ 47,138	\$ 43,857	\$ 49,823	\$ 51,184	\$ 44,528	\$ 40,888	\$ 41,065	\$ 46,229
Restricted expendable net position	\$ 2,147	\$ 2,459	\$ 3,334	\$ 3,177	\$ 4,528	\$ 6,529	\$ 7,341	\$ 7,653	\$ 8,670	\$ 9,495
Total expendable net position	\$ 26,434	\$ 40,346	\$ 50,472	\$ 47,034	\$ 54,351	\$ 57,713	\$ 51,869	\$ 48,541	\$ 49,735	\$ 55,724
Total expenses	\$ 21,342	\$ 15,963	\$ 23,449	\$ 34,134	\$ 30,247	\$ 22,224	\$ 36,363	\$ 27,263	\$ 12,044	\$ 19,072

Note: The above totals have not been adjusted for rounding

Notable items in the \$2 million decrease in **UMSGUS-Op's** unrestricted expendable net position include:

- Use of \$4 million for various capital projects that benefit the entire UMS, including \$2 million for the regional optical network.
- Transfer of \$2 million of operating investment earnings in excess of budget, to the budget stabilization reserve.

The \$5.2 million increase in **UMSGUS'** unrestricted expendable net position is primarily related to the benefit pool that it operates. Due to volatility in benefit costs, the rate assessed to the campuses and UMSGUS-Op during FY18 was higher than actual experience. The resulting over recovery of \$5.8 million was transferred to the benefit pool reserve to continue to build the reserve to a level recommended by the UMS' actuary.

See discussion of the Net Operating Revenues Ratio for an explanation of the change in operating expenses.

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:

$$\frac{\text{Operating Income (Loss) plus Net Non-Operating Revenues (Expenses)}}{\text{Operating Revenues plus Non-Operating Revenues}}$$

Operating Revenues plus Non-Operating Revenues

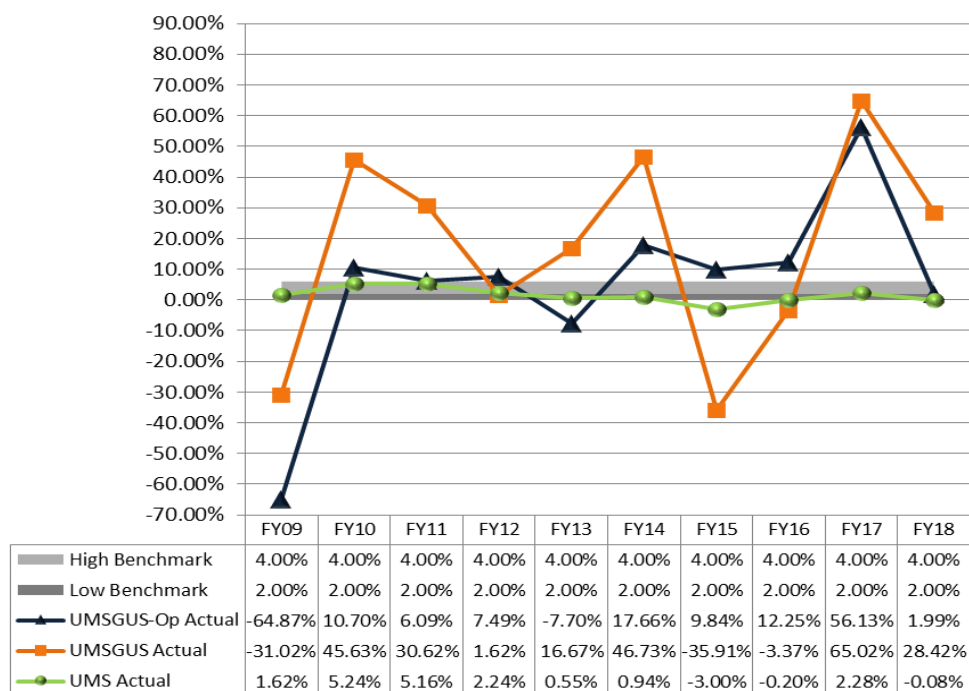
A target of at least 2% to 4% is a goal over an extended time period, although fluctuations from year to year are likely. A key consideration for institutions establishing a benchmark for this ratio would be the anticipated growth in total expenses.

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.

Strategic Financial Analysis for Higher Education

Operating investments are UMSGUS’ primary asset and UMSGUS operates a benefit pool for the entire UMS. Consequently, UMSGUS’ operating returns have been quite volatile as investment markets and benefit costs have fluctuated over the years. Prior to moving investments out of UMSGUS-Op in FY10, UMSGUS-Op’s operating returns were also volatile.

Net Operating Revenues Ratio



UMSGUS-Op Ratio Components \$ in thousands										
	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
Operating revenues	\$ 3,911	\$ 5,276	\$ 7,028	\$ 10,062	\$ 10,069	\$ 10,384	\$ 6,669	\$ 6,898	\$ 10,574	\$ 10,861
Operating expenses	\$ (21,168)	\$ (20,672)	\$ (24,926)	\$ (26,776)	\$ (27,316)	\$ (27,070)	\$ (26,727)	\$ (19,892)	\$ (17,129)	\$ (19,729)
Operating loss	\$ (17,257)	\$ (15,396)	\$ (17,898)	\$ (16,714)	\$ (17,246)	\$ (16,686)	\$ (20,058)	\$ (12,995)	\$ (6,555)	\$ (8,868)
Net nonoperating revenues	\$ 6,919	\$ 17,902	\$ 19,523	\$ 18,980	\$ 15,177	\$ 22,536	\$ 22,997	\$ 15,919	\$ 28,656	\$ 9,281
Operating income (loss) plus net non-operating revenues (expenses)	\$ (10,338)	\$ 2,506	\$ 1,625	\$ 2,266	\$ (2,069)	\$ 5,850	\$ 2,939	\$ 2,925	\$ 22,102	\$ 414
Operating revenues plus non-operating revenues	\$ 15,937	\$ 23,413	\$ 26,698	\$ 30,253	\$ 26,877	\$ 33,129	\$ 29,855	\$ 23,870	\$ 39,378	\$ 20,752

UMSGUS Ratio Components \$ in thousands										
	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
Operating revenues	\$ 3,922	\$ 5,292	\$ 7,124	\$ 10,142	\$ 10,077	\$ 10,386	\$ 6,994	\$ 6,923	\$ 10,605	\$ 10,894
Operating expenses	\$ (15,994)	\$ (15,233)	\$ (21,311)	\$ (28,469)	\$ (24,093)	\$ (17,837)	\$ (23,605)	\$ (19,548)	\$ (4,975)	\$ (13,145)
Operating loss	\$ (12,072)	\$ (9,941)	\$ (14,187)	\$ (18,327)	\$ (14,015)	\$ (7,451)	\$ (16,611)	\$ (12,626)	\$ 5,630	\$ (2,251)
Net nonoperating revenues	\$ 7,019	\$ 23,340	\$ 24,538	\$ 18,888	\$ 20,065	\$ 26,948	\$ 7,004	\$ 11,737	\$ 16,762	\$ 9,825
Operating income (loss) plus net non-operating revenues (expenses)	\$ (5,053)	\$ 13,399	\$ 10,351	\$ 561	\$ 6,050	\$ 19,497	\$ (9,607)	\$ (888)	\$ 22,392	\$ 7,574
Operating revenues plus non-operating revenues	\$ 16,289	\$ 29,362	\$ 33,800	\$ 34,695	\$ 36,296	\$ 41,721	\$ 26,756	\$ 26,375	\$ 34,436	\$ 26,646

Note: The above totals have not been adjusted for rounding.

UMSGUS-Op: Total operating and non-operating revenues decreased from FY17 to FY18 and operating expenses increased \$2.6 million. Notable items in the revenue decrease include:

- Loss of FY17 one-time revenue of \$12 million as the savings from restating OPEB expense were transferred from the benefit pool operated by UMSGUS, to a new GASB 75 (OPEB) Implementation reserve held by UMSGUS-Op.
- A \$4.8 million decrease in noncapital State of Maine appropriation revenues as a greater portion of the total State appropriation received by the UMS was allocated to the campuses.

UMSGUS: The \$7.8 million decrease in total operating plus non-operating revenues from FY17 to FY18 is primarily comprised of the same \$4.8 million decrease in noncapital State of Maine appropriation revenue that impacted UMSGUS-Op, and a \$3.3 million decrease in investment income as investment markets declined. A \$7 million increase in OPEB expense accounts for 85% of the \$8.2 million increase in **UMSGUS'** operating expenses from FY17 to FY18.

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:

$$\frac{\text{Change in Net Position}}{\text{Total Beginning of the Year Net Position}}$$

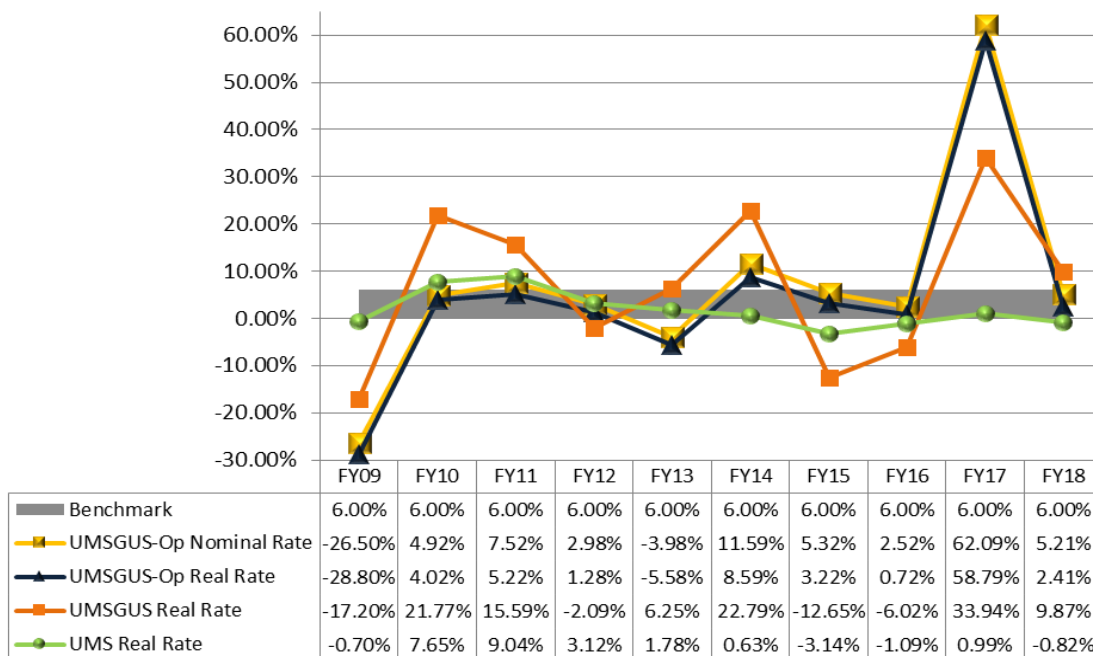
Key items that can impact expendable net position

- Items that impact the Net Operating Revenues Ratio
- endowment returns
- capital appropriations, grants, gifts, and transfers
- 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.

The trend of UMSGUS-Op's and UMSGUS' return on net position is quite similar to the trend of their return on operations as neither entity receives significant revenues for capital purposes.

Return on Net Position Ratio



	UMSGUS-Op Ratio Components \$ in thousands									
	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
Operating income (loss) plus net non- operating revenues (expenses)	\$ (10,338)	\$ 2,506	\$ 1,625	\$ 2,266	\$ (2,069)	\$ 5,850	\$ 2,939	\$ 2,925	\$ 22,102	\$ 414
Other changes in net position	\$ (4,527)	\$ (456)	\$ 1,661	\$ (866)	\$ 143	\$ (474)	\$ (183)	\$ (1,549)	\$ (887)	\$ 2,471
Change in total net position	\$ (14,865)	\$ 2,050	\$ 3,286	\$ 1,400	\$ (1,926)	\$ 5,376	\$ 2,756	\$ 1,376	\$ 21,215	\$ 2,884
Total net position (beginning of year)	\$ 56,096	\$ 41,637	\$ 43,688	\$ 46,974	\$ 48,374	\$ 46,390	\$ 51,762	\$ 54,520	\$ 34,166	\$ 55,381

	UMSGUS Ratio Components \$ in thousands									
	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
Operating income (loss) plus net non- operating revenues (expenses)	\$ (5,053)	\$ 13,399	\$ 10,351	\$ 561	\$ 6,050	\$ 19,497	\$ (9,607)	\$ (888)	\$ 22,392	\$ 7,574
Other changes in net position	\$ (4,527)	\$ (988)	\$ 1,661	\$ (866)	\$ 143	\$ (474)	\$ (183)	\$ (2,617)	\$ (887)	\$ 2,469
Change in total net position	\$ (9,580)	\$ 12,411	\$ 12,012	\$ (305)	\$ 6,193	\$ 19,023	\$ (9,790)	\$ (3,505)	\$ 21,506	\$ 10,045
Total net position (beginning of year)	\$ 64,315	\$ 54,735	\$ 67,147	\$ 79,159	\$ 78,854	\$ 73,756	\$ 92,778	\$ 82,989	\$ 57,754	\$ 79,260

Note: The above totals have not been adjusted for rounding.

The amount of the FY18 return on net position for both UMSGUS-Op and UMSGUS is slightly higher than the amount of the return from operations, primarily due to \$2.9 million in State of Maine capital appropriation revenue that is funding debt service and project costs associated with the UMS' 2017 Revenue Bonds.

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:

$$\frac{\text{Expendable Net Position}^*}{\text{Long-Term Debt}}$$

* Excluding net position restricted for capital investments

Key items that can impact expendable net position

- 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

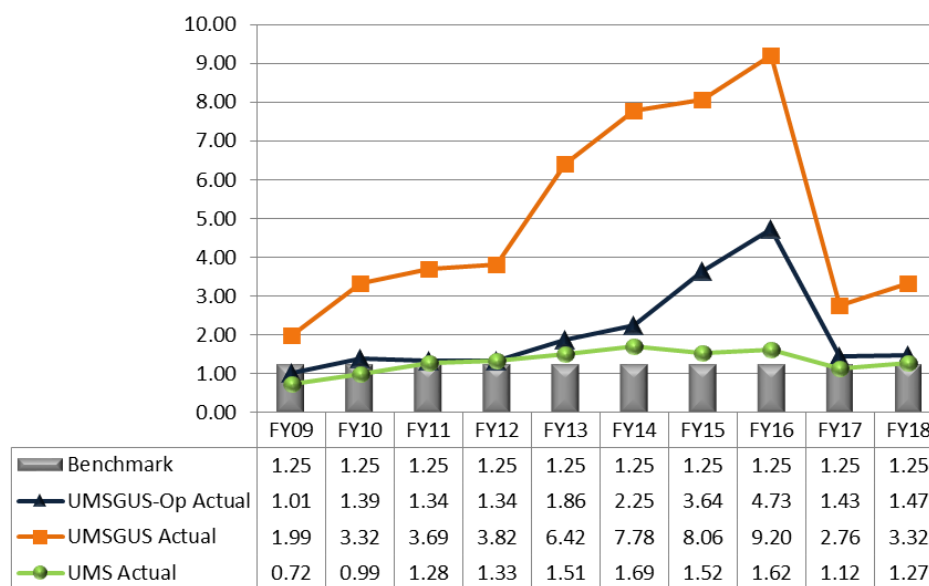
A ratio of 1.25 or greater indicates that there are sufficient resources to satisfy debt obligations.

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.

Strategic Financial Analysis for Higher Education

Reserves related to the benefit and risk management pools and the budget stabilization fund cause UMSGUS' ratio to be higher than that of UMSGUS-Op.

Viability Ratio



	UMSGUS-Op Ratio Components \$ in thousands									
	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
<i>Unrestricted expendable net position</i>	\$ 11,189	\$ 14,428	\$ 14,953	\$ 13,377	\$ 11,224	\$ 10,172	\$ 16,059	\$ 17,300	\$ 17,186	\$ 15,189
<i>Restricted expendable net position</i>	\$ 2,147	\$ 2,459	\$ 3,334	\$ 3,177	\$ 4,528	\$ 6,529	\$ 7,341	\$ 7,653	\$ 8,670	\$ 9,495
Total expendable net position	\$ 13,336	\$ 16,887	\$ 18,287	\$ 16,554	\$ 15,752	\$ 16,701	\$ 23,400	\$ 24,953	\$ 25,856	\$ 24,684
Long-term debt	\$ 13,262	\$ 12,155	\$ 13,668	\$ 12,324	\$ 8,462	\$ 7,414	\$ 6,433	\$ 5,277	\$ 18,045	\$ 16,806

	UMSGUS Ratio Components \$ in thousands									
	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>	<u>FY18</u>
<i>Unrestricted expendable net position</i>	\$ 24,287	\$ 37,887	\$ 47,138	\$ 43,857	\$ 49,823	\$ 51,184	\$ 44,528	\$ 40,888	\$ 41,065	\$ 46,229
<i>Restricted expendable net position</i>	\$ 2,147	\$ 2,459	\$ 3,334	\$ 3,177	\$ 4,528	\$ 6,529	\$ 7,341	\$ 7,653	\$ 8,670	\$ 9,495
Total expendable net position	\$ 26,434	\$ 40,346	\$ 50,472	\$ 47,034	\$ 54,351	\$ 57,713	\$ 51,869	\$ 48,541	\$ 49,735	\$ 55,724
Long-term debt	\$ 13,262	\$ 12,155	\$ 13,668	\$ 12,324	\$ 8,462	\$ 7,414	\$ 6,433	\$ 5,277	\$ 18,045	\$ 16,806

Note: The above totals have not been adjusted for rounding.

Throughout the ten years presented in this report, UMSGUS-Op has had outstanding debt for two system-wide projects: the 1998 digital library project and the PeopleSoft implementation project. Prior to FY13, it also had \$2.8 million of debt related to a required debt service reserve fund securing a portion of the 2000A UMS Revenue Bonds. During FY13, UMS liquidated the debt service reserve fund and retired the related debt. In FY17, UMSGUS-Op acquired \$11.4 million in new debt to finance WiFi upgrades throughout the UMS. The State of Maine is providing appropriation dollars restricted to pay the debt service on these new UMS Revenue Bonds.

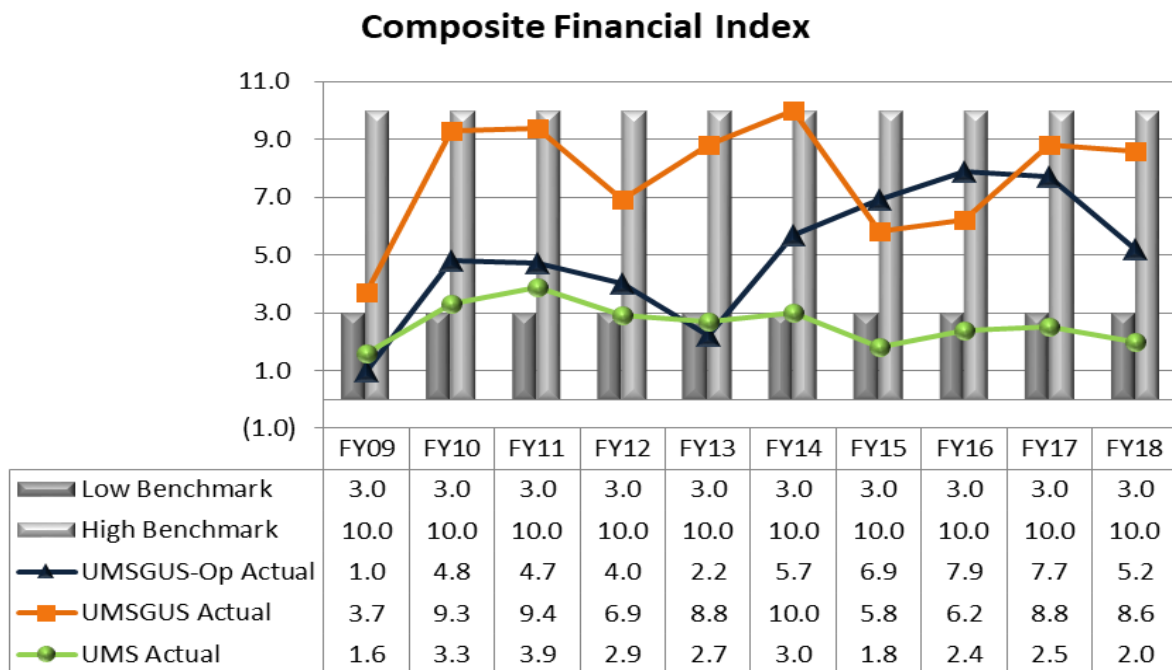
The **Composite Financial Index (CFI)** creates one overall financial measurement of the institution's health based on the four core ratios: primary reserve ratio, net operating revenues ratio, return on net position ratio, and viability ratio. By blending these four key measures of financial health 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.

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.

In comparing the CFI scores for UMSGUS and UMSGUS-Op, we see the impact of the benefit, risk management, and investment income (FY10+) pools on the financial health of UMSGUS.



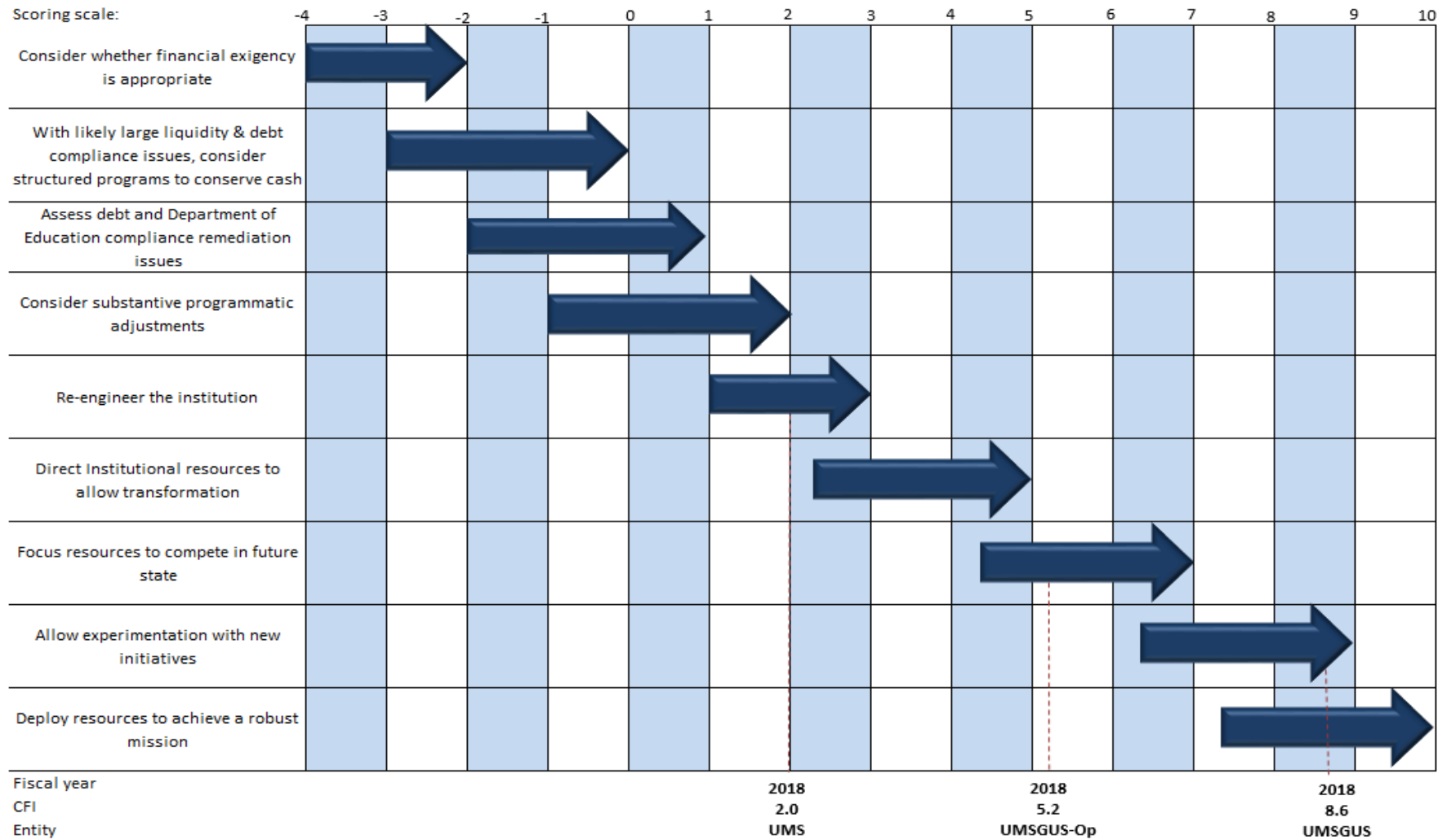
To improve the significantly lower CFI score for the UMS, UMSGUS resources are being invested in projects to aid the campuses in making a transformation while at the same time ensuring that resources are

available to address the following:

- The UMS' health insurance plan for active employees is self-insured. Consequently, the UMS needs to ensure that it has reasonable reserves available to address a catastrophic event. Management has been working with its actuary in defining a reasonable level of reserves.
- Maintaining reserves and ratios sufficient to satisfy bond rating agencies and maintain or improve the UMS' current ratings. Currently, the UMS has \$158.6 million in outstanding bonds and notes payable and lease purchase agreements.

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 scale with the FY18 CFI scores for the UMS, UMSGUS-Op, and UMSGUS.



UMSGUS-Op CFI Calculation										
Fiscal Year	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
+ Primary Reserve Ratio	0.51	0.81	0.73	0.59	0.54	0.61	0.87	1.19	1.50	1.21
/ Common Scale Value *	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133
= Strength Factor **	3.83	6.09	5.49	4.44	4.06	4.59	6.54	8.95	10.00	9.10
X Weighting Factor ***	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
Ratio Score	1.34	2.13	1.92	1.55	1.42	1.61	2.29	3.13	3.50	3.19
+ Net Operating Revenues Ratio	-64.87%	10.70%	6.09%	7.49%	-7.70%	17.66%	9.84%	12.25%	56.13%	1.99%
/ Common Scale Value *	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
= Strength Factor **	-4.00	10.00	8.70	10.00	-4.00	10.00	10.00	10.00	10.00	2.84
X Weighting Factor ***	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Ratio Score	-0.40	1.00	0.87	1.00	-0.40	1.00	1.00	1.00	1.00	0.28
+ Return on Net Position Ratio	-26.50%	4.92%	7.52%	2.98%	-3.98%	11.59%	5.32%	2.52%	62.09%	5.21%
/ Common Scale Value *	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
= Strength Factor **	-4.00	2.46	3.76	1.49	-1.99	5.80	2.66	1.26	10.00	2.61
X Weighting Factor ***	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Ratio Score	-0.80	0.49	0.75	0.30	-0.40	1.16	0.53	0.25	2.00	0.52
+ Viability Ratio	1.01	1.39	1.34	1.34	1.86	2.25	3.64	4.73	1.43	1.47
/ Common Scale Value *	0.417	0.417	0.417	0.417	0.417	0.417	0.417	0.417	0.417	0.417
= Strength Factor **	2.42	3.33	3.21	3.21	4.46	5.40	8.73	10.00	3.43	3.53
X Weighting Factor ***	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
Ratio Score	0.85	1.17	1.12	1.12	1.56	1.89	3.06	3.50	1.20	1.24
Composite Financial Index	1.0	4.8	4.7	4.0	2.2	5.7	6.9	7.9	7.7	5.2

* = The common scale value is derived from the scoring scale defined by the authors of *Strategic Financial Analysis for Higher Education*, Seventh Edition for public institutions with an endowment spending rate.

** = The strength factor is the result of dividing the ratio value by the common scale value to determine a comparable value (strength) for each ratio that can be analyzed on a common scale of -4 to 10.

*** = The weighting factor is derived from the weighting schema defined by the authors of *Strategic Financial Analysis for Higher Education*, Seventh Edition for institutions with long-term debt.

UMSGUS CFI Calculation										
Fiscal Year	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18
+ Primary Reserve Ratio	1.24	2.53	2.15	1.38	1.80	2.60	1.43	1.78	4.13	2.92
/ Common Scale Value *	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0.133
= Strength Factor **	9.32	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
X Weighting Factor ***	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
Ratio Score	3.26	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
+ Net Operating Revenues Ratio	-31.02%	45.63%	30.62%	1.62%	16.67%	46.73%	-35.91%	-3.37%	65.02%	28.42%
/ Common Scale Value *	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
= Strength Factor **	-4.00	10.00	10.00	2.31	10.00	10.00	-4.00	-4.00	10.00	10.00
X Weighting Factor ***	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Ratio Score	-0.40	1.00	1.00	0.23	1.00	1.00	-0.40	-0.40	1.00	1.00
+ Return on Net Position Ratio	-14.90%	22.67%	17.89%	-0.39%	7.85%	25.79%	-10.55%	-4.22%	37.24%	12.67%
/ Common Scale Value *	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
= Strength Factor **	-4.00	10.00	8.95	-0.20	3.93	10.00	-4.00	-2.11	10.00	6.34
X Weighting Factor ***	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Ratio Score	-0.80	2.00	1.79	-0.04	0.79	2.00	-0.80	-0.42	2.00	1.27
+ Viability Ratio	1.99	3.32	3.69	3.82	6.42	7.78	8.06	9.20	2.76	3.32
/ Common Scale Value *	0.417	0.417	0.417	0.417	0.417	0.417	0.417	0.417	0.417	0.417
= Strength Factor **	4.77	7.96	8.85	9.16	10.00	10.00	10.00	10.00	6.62	7.96
X Weighting Factor ***	35%	35%	35%	35%	35%	35%	35%	35%	35%	35%
Ratio Score	1.67	2.79	3.10	3.21	3.50	3.50	3.50	3.50	2.32	2.79
Composite Financial Index	3.7	9.3	9.4	6.9	8.8	10.0	5.8	6.2	8.8	8.6

* = The common scale value is derived from the scoring scale defined by the authors of *Strategic Financial Analysis for Higher Education*, Seventh Edition for public institutions with an endowment spending rate.

** = The strength factor is the result of dividing the ratio value by the common scale value to determine a comparable value (strength) for each ratio that can be analyzed on a common scale of -4 to 10.

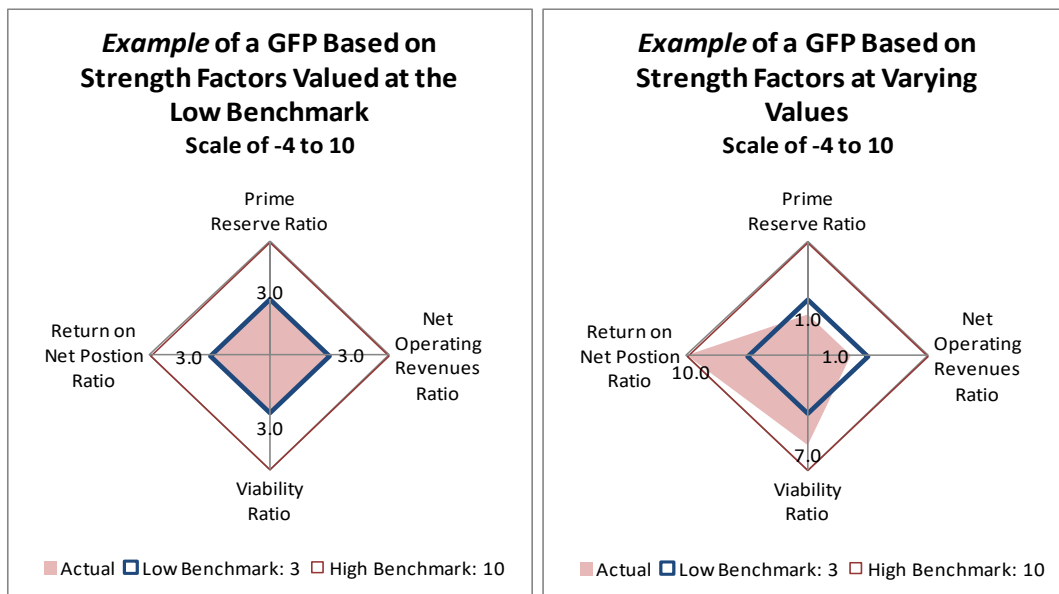
*** = The weighting factor is derived from the weighting schema defined by the authors of *Strategic Financial Analysis for Higher Education*, Seventh Edition for institutions with long-term debt.

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.

The UMSGUS's Graphic Financial Profiles begin on the next page.

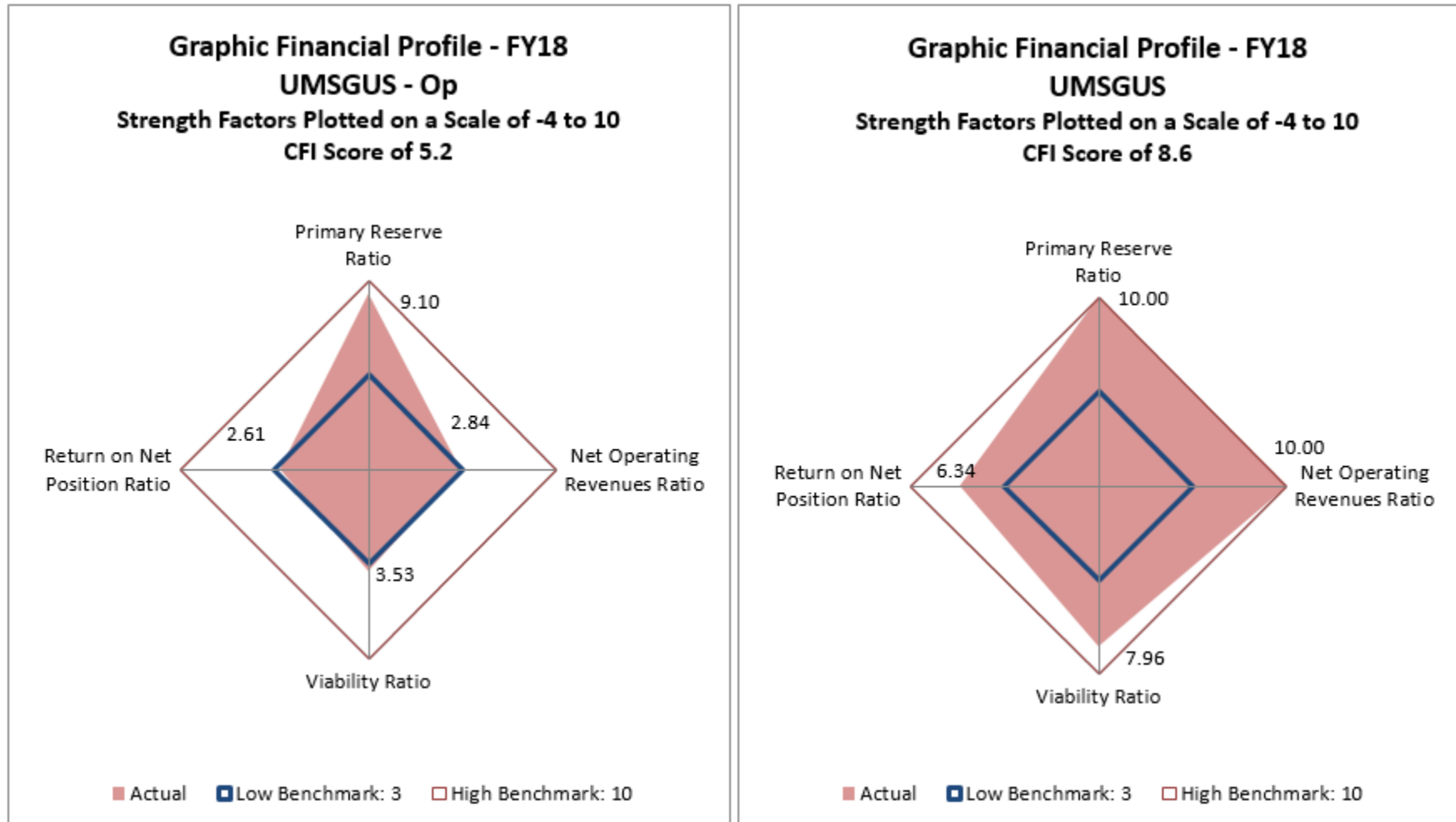
Illustration

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:



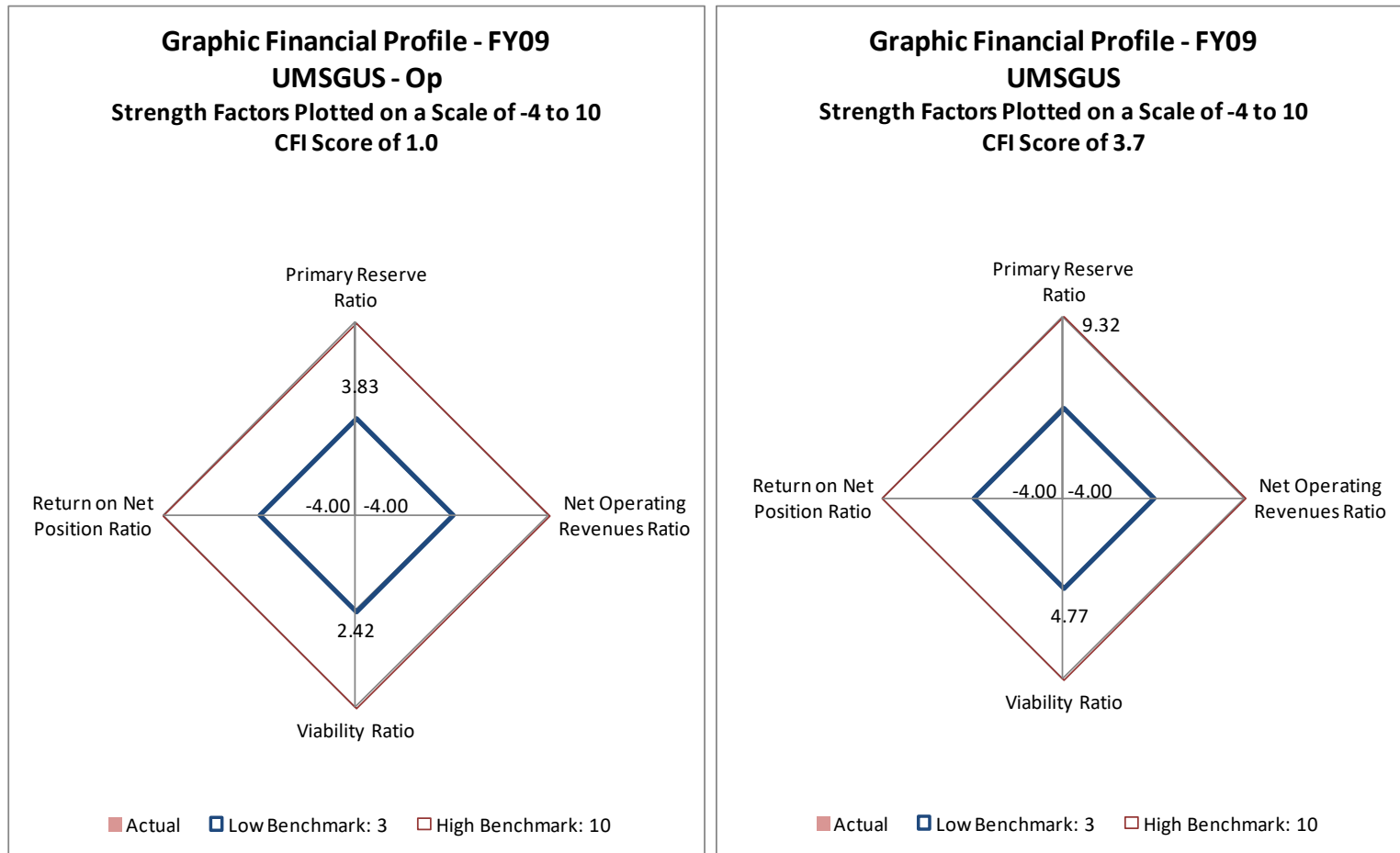
- The center point of the graphic financial profiles is -4, the lowest possible score on the scale.
- The smaller, heavily lined diamond in the graphs represents the low industry benchmark of 3.
- The outer, lightly lined diamond represents the high industry benchmark of 10 and the highest possible score 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.

**UMSGUS-Op and UMSGUS
Graphic Financial Profiles
FY18**

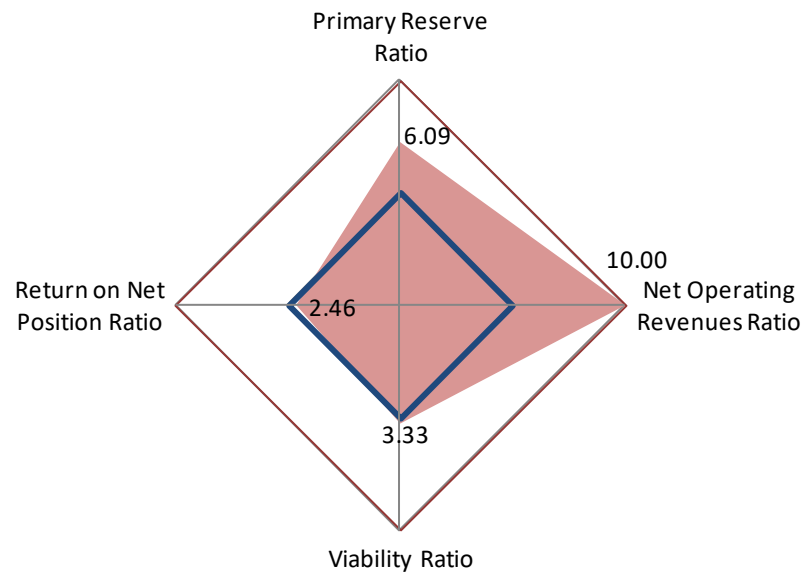


UMSGUS-Op and UMSGUS
Graphic Financial Profiles
FY09 to FY17

Changes in the shape of the graphic financial profile for UMSGUS-Op and UMSGUS for FY09 thru FY17 can be seen below and on the subsequent pages.

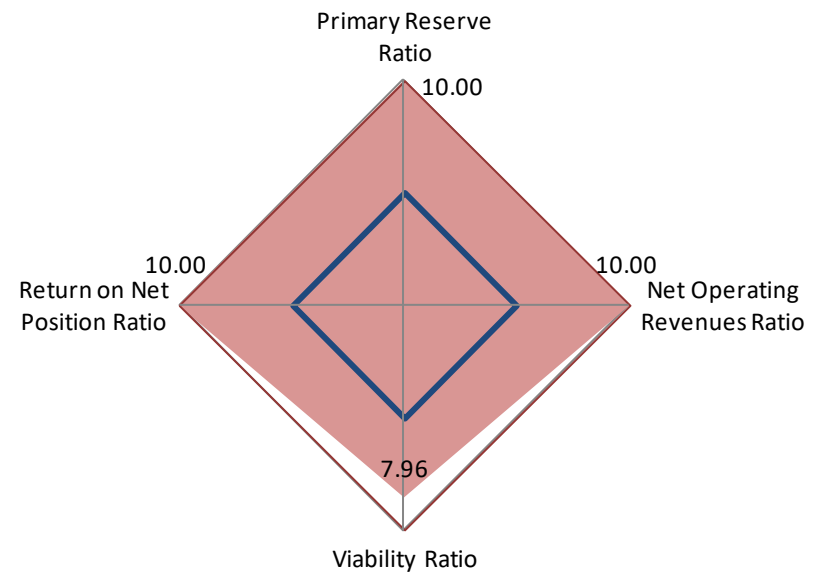


Graphic Financial Profile - FY10
UMSGUS - Op
 Strength Factors Plotted on a Scale of -4 to 10
 CFI Score of 4.8



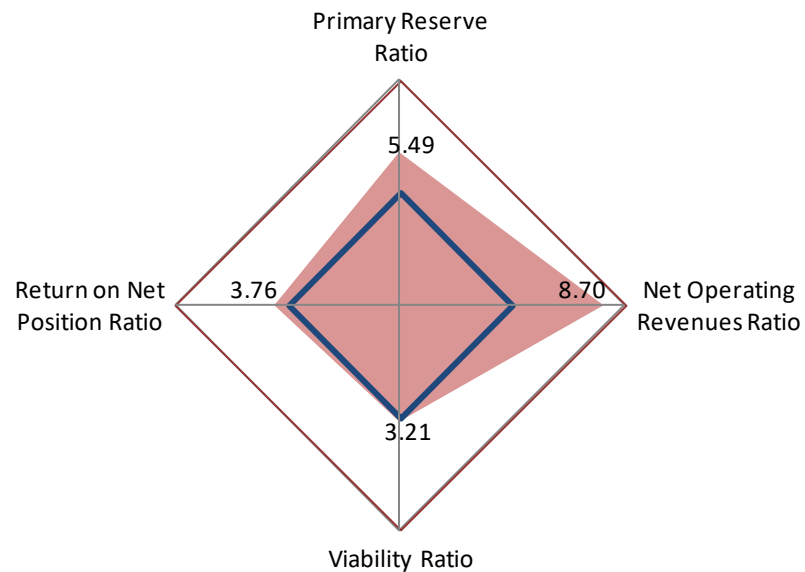
Actual Low Benchmark: 3 High Benchmark: 10

Graphic Financial Profile - FY10
UMSGUS
 Strength Factors Plotted on a Scale of -4 to 10
 CFI Score of 9.3



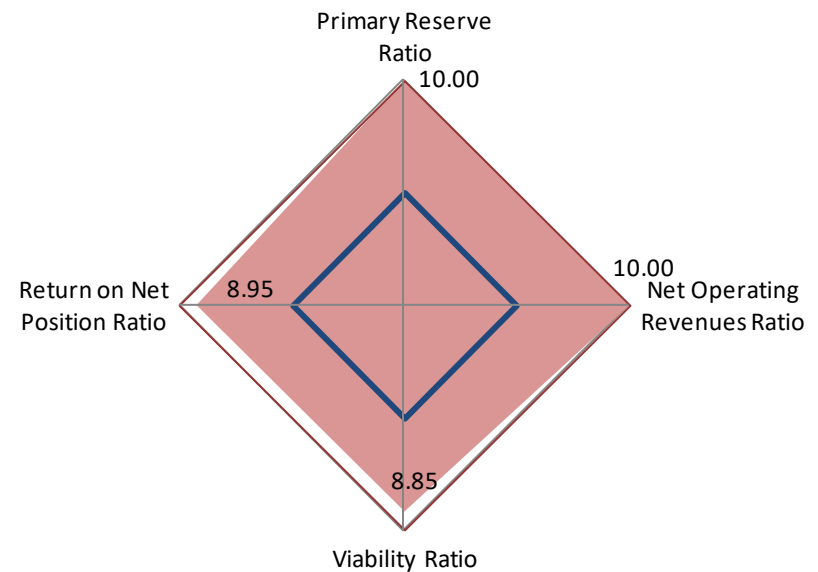
Actual Low Benchmark: 3 High Benchmark: 10

Graphic Financial Profile - FY11
UMSGUS - Op
 Strength Factors Plotted on a Scale of -4 to 10
 CFI Score of 4.7



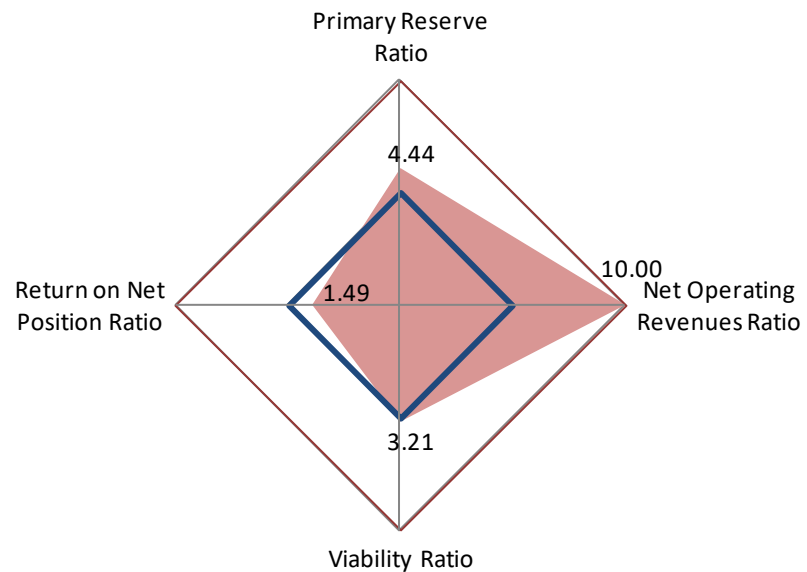
Actual Low Benchmark: 3 High Benchmark: 10

Graphic Financial Profile - FY11
UMSGUS
 Strength Factors Plotted on a Scale of -4 to 10
 CFI Score of 9.4



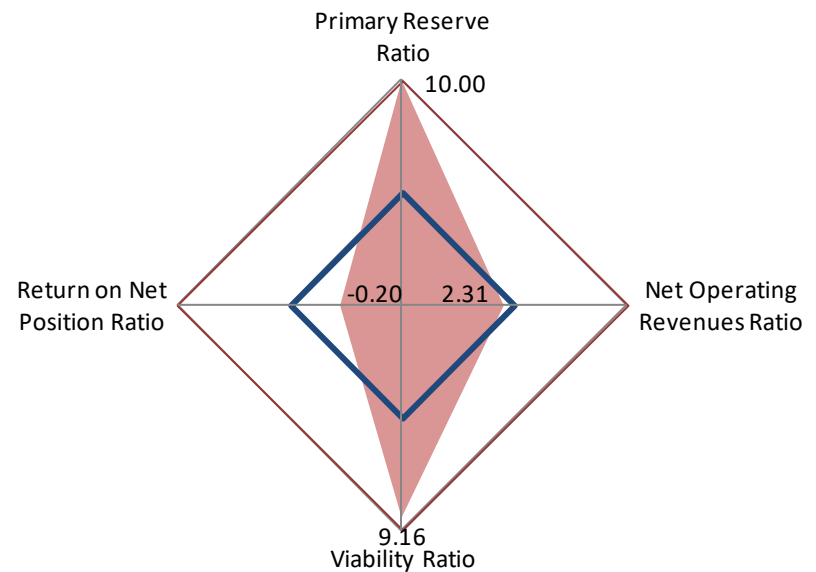
Actual Low Benchmark: 3 High Benchmark: 10

Graphic Financial Profile - FY12
UMSGUS - Op
 Strength Factors Plotted on a Scale of -4 to 10
 CFI Score of 4.0



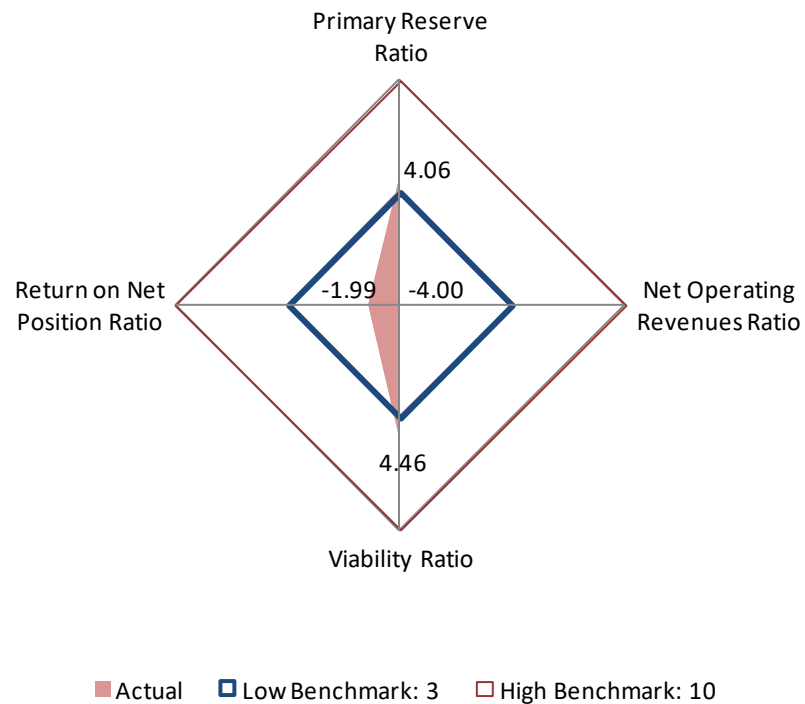
Actual Low Benchmark: 3 High Benchmark: 10

Graphic Financial Profile - FY12
UMSGUS
 Strength Factors Plotted on a Scale of -4 to 10
 CFI Score of 6.9

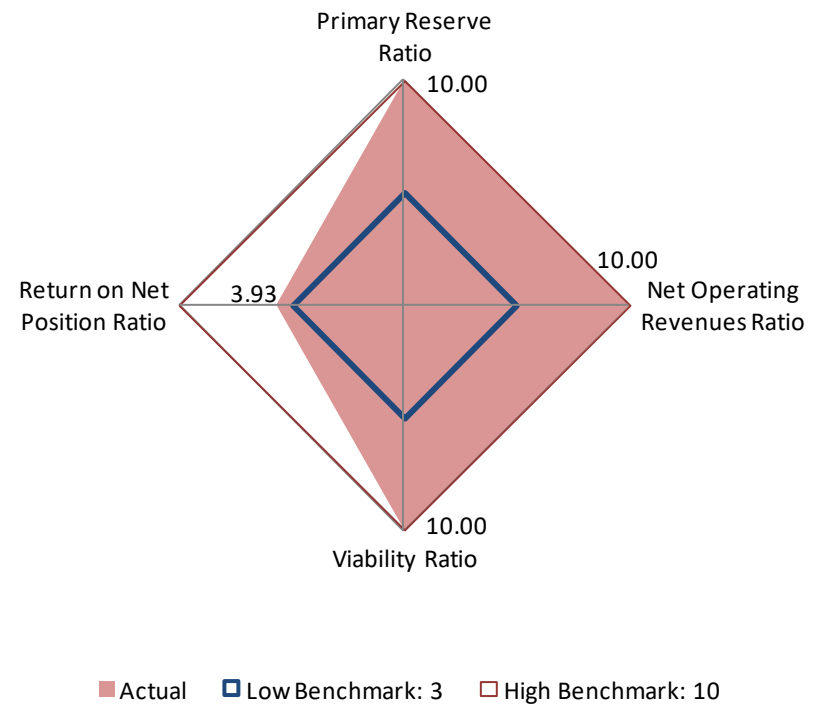


Actual Low Benchmark: 3 High Benchmark: 10

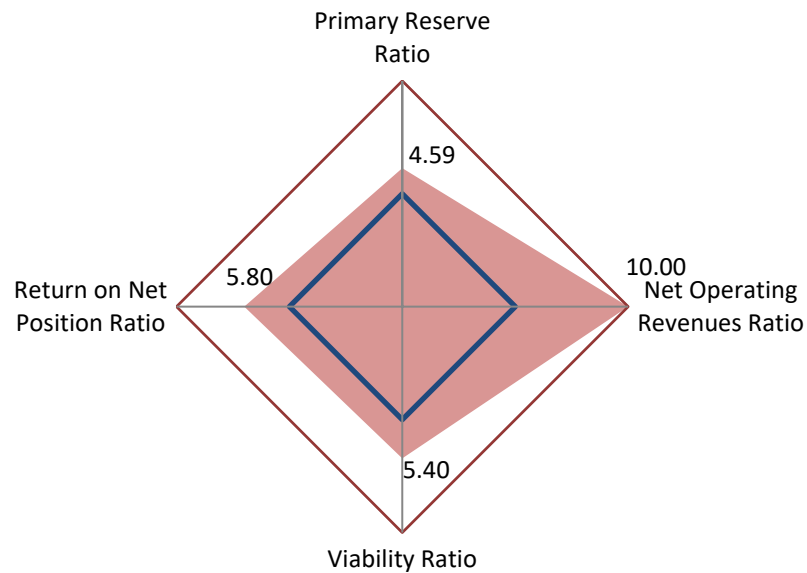
Graphic Financial Profile - FY13
UMSGUS - Op
 Strength Factors Plotted on a Scale of -4 to 10
 CFI Score of 2.2



Graphic Financial Profile - FY13
UMSGUS
 Strength Factors Plotted on a Scale of -4 to 10
 CFI Score of 8.8

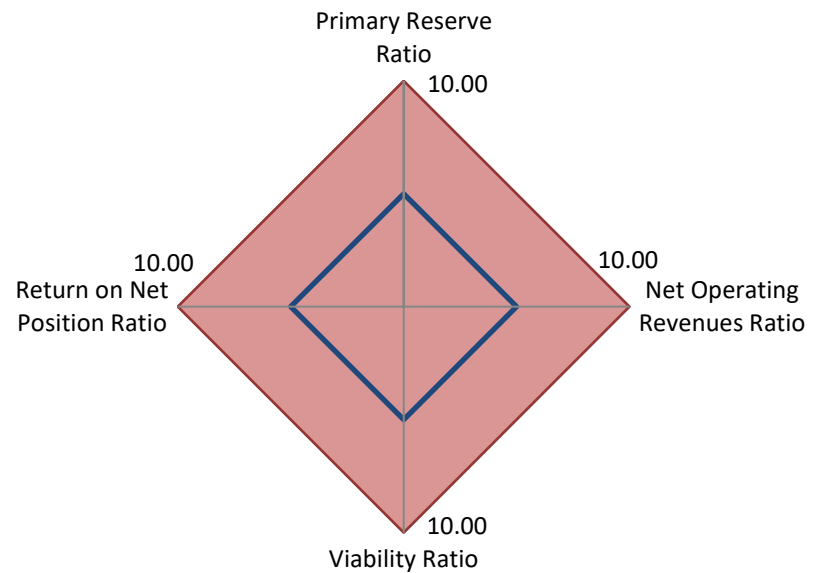


Graphic Financial Profile - FY14
UMSGUS - Op
 Strength Factors Plotted on a Scale of -4 to 10
 CFI Score of 5.7



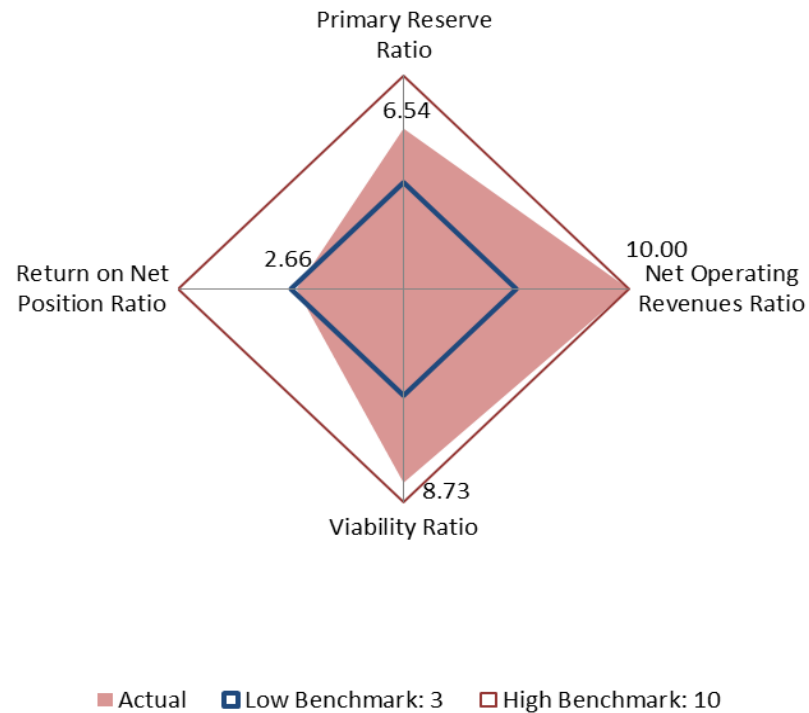
Actual Low Benchmark: 3 High Benchmark: 10

Graphic Financial Profile - FY14
UMSGUS
 Strength Factors Plotted on a Scale of -4 to 10
 CFI Score of 10.0

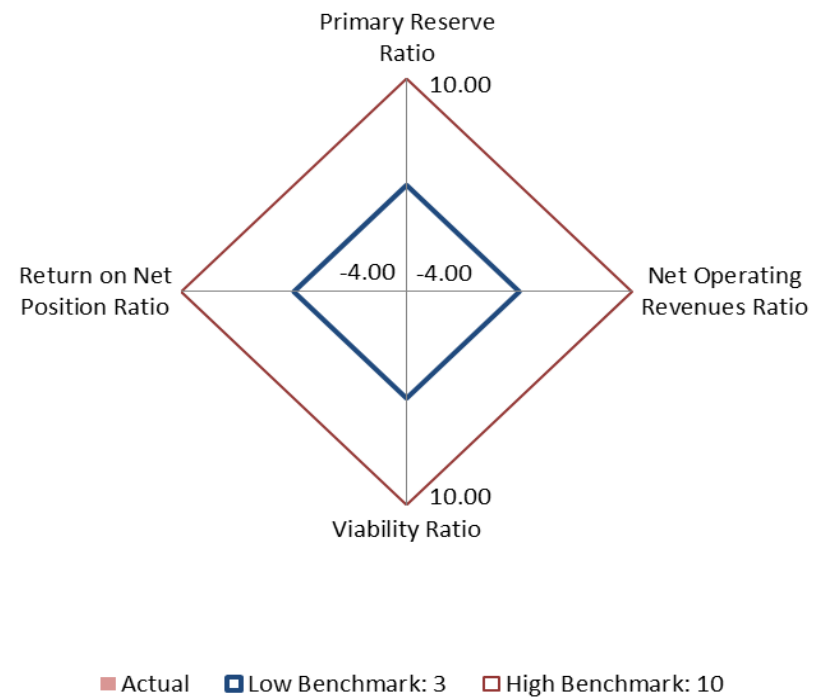


Actual Low Benchmark: 3 High Benchmark: 10

Graphic Financial Profile - FY15
UMSGUS - Op
 Strength Factors Plotted on a Scale of -4 to 10
 CFI Score of 6.9



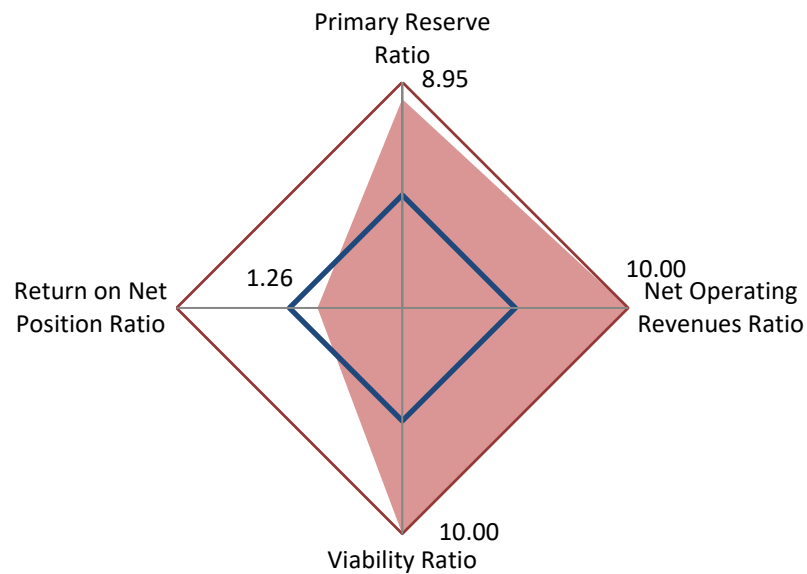
Graphic Financial Profile - FY15
UMSGUS
 Strength Factors Plotted on a Scale of -4 to 10
 CFI Score of 5.8



Graphic Financial Profile - FY16

UMSGUS - Op

Strength Factors Plotted on a Scale of -4 to 10
CFI Score of 7.9

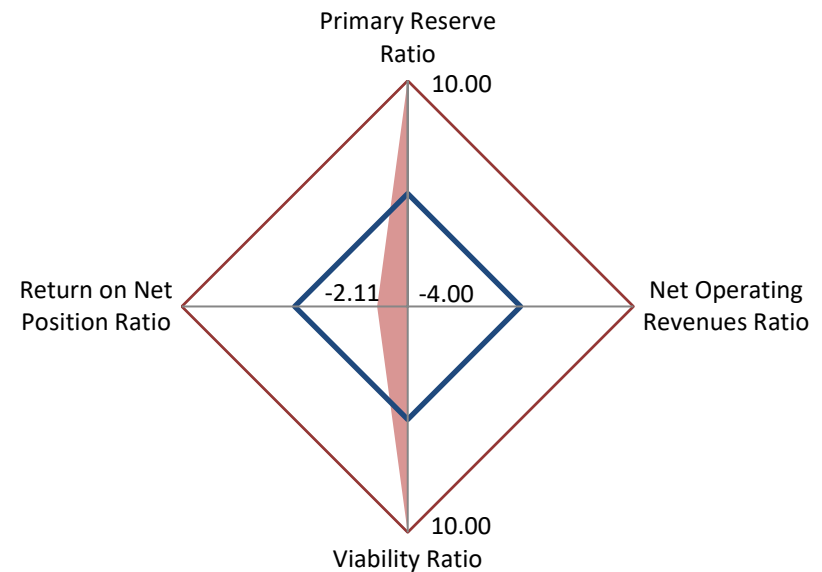


Actual Low Benchmark: 3 High Benchmark: 10

Graphic Financial Profile - FY16

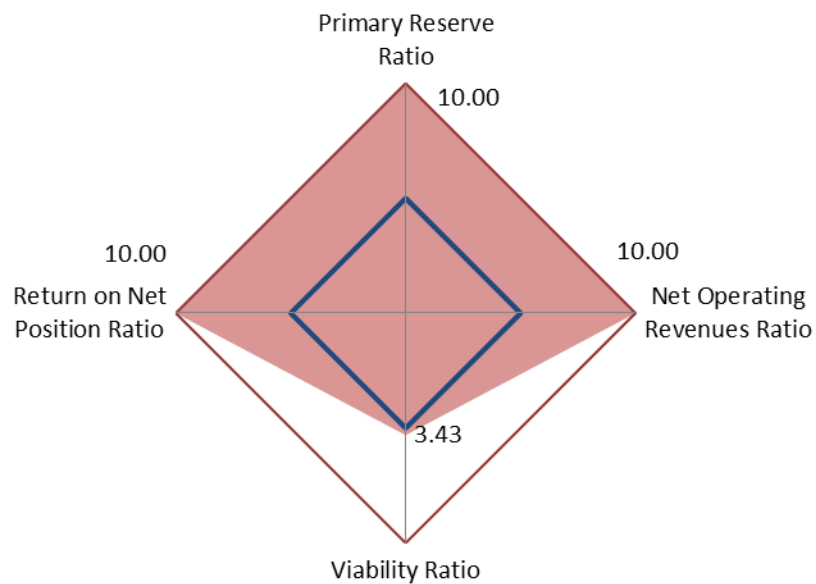
UMSGUS

Strength Factors Plotted on a Scale of -4 to 10
CFI Score of 6.2



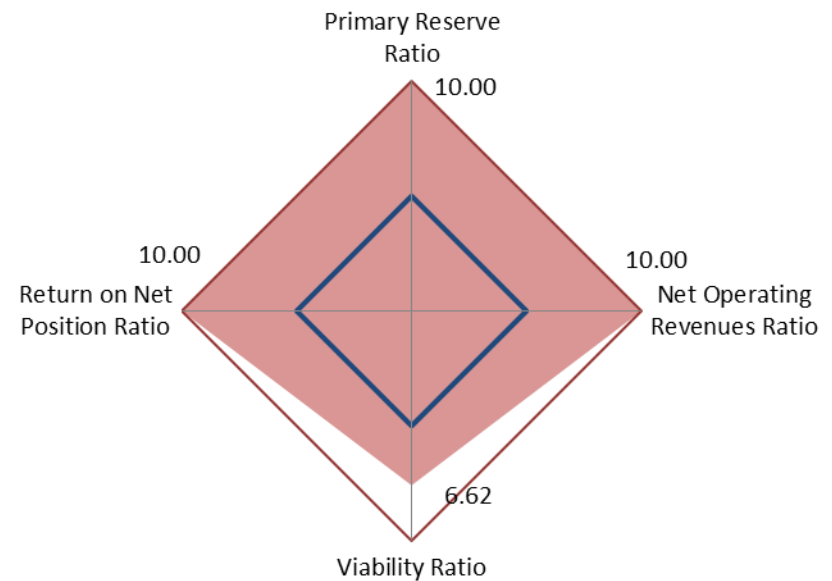
Actual Low Benchmark: 3 High Benchmark: 10

Graphic Financial Profile - FY17
UMSGUS - Op
 Strength Factors Plotted on a Scale of -4 to 10
 CFI Score of 7.7



Actual Low Benchmark: 3 High Benchmark: 10

Graphic Financial Profile - FY17
UMSGUS
 Strength Factors Plotted on a Scale of -4 to 10
 CFI Score of 8.8



Actual Low Benchmark: 3 High Benchmark: 10

UMSGUS Financial Highlights FY09 thru FY17

The following financial highlights are provided as a resource in understanding prior years' changes in the core ratios.

Primary Reserve Ratio

UMSGUS operates a benefit pool by assessing a benefit rate to the campuses based on projected costs for a given year and accumulating the actual costs in a benefit cost pool. Due to volatility in benefit costs, the rate assessed to the campuses and UMSGUS-Op may be higher or lower than actual experience. The resulting over or under recovery impacts UMSGUS' Primary Reserve Ratio. Benefit pool performance and how UMSGUS addressed the over or under recovery are as follows:

FY09: \$4.6 million cost over recovery was transferred to the benefit pool reserve in anticipation of a large increase in FY10 post-employment health costs.

FY10: \$5 million cost over recovery was transferred to the benefit pool reserve to help build the reserve to a level recommended by the UMS' actuary. The cost over recovery was primarily attributable to actual post retirement costs being less than budgeted costs due to efforts made by the Retiree Health Plan Task Force (RHPTF) III to reduce post-retirement health costs.

FY11: \$3.4 million cost over recovery was transferred to the benefit pool reserve.

FY12: \$2.0 million under recovery was funded by a transfer from the benefit pool reserve.

FY13: \$2.9 million cost over recovery was transferred to the benefit pool reserve.

FY14: \$4.4 million cost over recovery was transferred to the benefit pool reserve to continue to build the reserve to a level recommended by the UMS' actuary.

FY15: \$6.4 million under recovery was funded by a transfer from the benefit pool reserve. Special retirement incentives and severance packages were significant factors in the under recovery.

FY16: \$30 thousand under recovery was funded by a transfer from the benefit pool reserve.

FY17: \$670 thousand under recovery was funded by a transfer from the benefit pool reserve.

Significant factors that have impacted both UMSGUS-Op's and UMSGUS' Primary Reserve Ratio over the years include the following:

- During **FY09**, expendable net position had to be used to help offset the impact of heavy investment losses.
- Repayment of internal construction loans at the end of **FY09** by the University of Maine and the University of Southern Maine helped to offset the impact of negative results from operations. Repayment of such loans improves the Primary Reserve Ratio because it reclassifies UMSGUS' net position from "invested in capital assets" to "unrestricted net position".
- **FY09** expenses included a \$4.3 million one-time transfer of University College's net position to the University of Maine at Augusta effective July 1, 2008.
- Increased grant activity and increased strategic investment fund awards caused operating expenses to increase from FY11 to **FY12**. Expendable net position decreased as management utilized \$4.2 million of expendable net position for the data center remediation project and other projects.
- During **FY13**, management utilized \$1.4 million of expendable net position for various capital projects including data center remediation, the data warehouse, and the integrated workplace management system.
- The \$949 thousand increase in UMSGUS-Op's net position from FY13 to **FY14** is the net of positive operating activity, positive endowment investment returns, and reclassification of net position from expendable to net investment in capital assets pursuant to the issuance of \$5.3 million in new internal loans to the campuses to replace revenue bonds that UMSGUS-Op had early refunded from its reserves to obtain interest savings for the campuses.

The increase in UMSGUS' expendable net position is primarily the result of strong operating investment returns which were \$10.3 million above the amount budgeted. The decrease in

expenses is primarily the result of an over recovery of costs in the benefit pool.

- From FY14 to **FY15**, expendable net position for UMSGUS-Op increased \$7 million. \$6 million of the increase stems from \$3 million in administrative savings related to the Information Technology and Strategic Procurement operations and \$3 million from a reclassification of net position from invested in capital assets to unrestricted expendable as the campuses partially repaid internal loans UMSGUS-Op had made to them in prior years for construction projects.

The \$7 million decrease in expendable net position for UMSGUS is net of the increase for UMSGUS-Op. Significant items that offset the UMSGUS-Op increase were the previously mentioned \$6.4 million under recovery of benefit pool expenses, and the utilization of \$5.8 million from the Budget Stabilization reserve to address negative investment returns and campus operating losses.

- UMSGUS' expendable net position decreased again in **FY16** as the Budget Stabilization Reserve was again utilized to address campus operating results and a shortfall in budgeted investment income.
- Prior to the restatement of **FY17** financial results for the implementation of GASB 75, UMSGUS' unrestricted expendable net position increased \$9.9 million. Primary contributors to this increase include the following:
 - ✓ As part of the State of Maine's supplemental budget, the UMS received \$2 million in appropriation revenues for its Early College initiative. The UMS received these monies late in the fiscal year and they remained unspent as of June 30, 2017. UMSGUS management placed the monies in an Early College Reserve held by UMSGUS-Op for future expenditure throughout the UMS.
 - ✓ FY17 operating investment returns were \$6.07 million above budget, enabling UMSGUS to not only increase the Budget Stabilization Reserve by \$1.76 million, but to also make the following increases to reserves held by UMSGUS-Op for the benefit of all campuses: \$270 thousand for the Executive Transition Reserve and \$4.04 million for the Strategic Investment Fund Reserve.

- ✓ \$1 million of unrestricted net position came from a reclassification from net position invested in capital assets as the campuses partially repaid internal loans UMSGUS-Op had made to them in prior years for construction projects

With the adoption of GASB 75, and the restatement of FY17 financial data, the change in UMSGUS' unrestricted net position from FY16 to FY17 was reduced to \$200 thousand.

In FY10, we removed investment income revenues and related expenses and the new budget stabilization reserve from the definition of 'UMSGUS-Op' as it reduced its reliance on investment income to balance its budget. By the end of FY14, management had transferred \$21 million of unspent investment income to the budget stabilization reserve to benefit all campuses in the event of a State appropriation curtailment or other economic crisis. The reserve balance was reduced during FY15 thru FY17, as \$11.3 million was used to cover campus budget shortfalls. During FY17, UMSGUS again contributed to the reserve, transferring \$1.8 million of investment earnings to the reserve.

Over the course of FY14 thru FY17, the UMS underwent a reorganization to centralize under the University Services portion of UMSGUS-Op, many services (e.g., Procurement, Human Resources, Information Technology, Facilities, and Finance) that had previously existed at each of the campuses and UMSGUS-Op. The costs of University Services were then allocated back out to the campuses within the UMS along with an additional allocation of noncapital State of Maine appropriation revenues to help cover the costs of the centralized services. This reorganization occurred in a staggered approach with all University Services costs being allocated to the campuses by FY17. This reorganization helps to explain variances in total expenses for UMSGUS along with swings in pooled costs for risk management and benefits.

Net Operating Revenues Ratio

FY09: Investment losses drove UMSGUS-Op's ratio significantly lower in FY09; while an over recovery in the benefit pool tempered the ratio drop for UMSGUS as a whole.

FY10: Investment income was \$12.1 million higher than in FY09; thus, accounting for the jump in UMSGUS' ratio. The jump in UMSGUS-Op's ratio from FY09 to FY10 was attributable to the exclusion of investment income activity from the definition of UMSGUS-Op's operations. In FY09,

an investment loss had been included in UMSGUS-Op's ratio calculations.

Also impacting both UMSGUS-Op's and UMSGUS' FY10 ratio was \$1.6 million of grant revenue from the final close out of two fixed price contracts with the State of Maine.

FY11: Contributing to the decrease from FY10 to FY11 for both UMSGUS-Op and UMSGUS was a change in UMSGUS-Op's budget for operating the Maine State Library Network. In prior years UMSGUS-Op received only a portion of the MSLN's budget as a subrecipient. In FY11, UMSGUS-Op began receiving and managing the entire MSLN budget. Because such revenues are recognized only to the extent of expenses, the increased revenue stream increased the denominator of the ratio calculation but did not impact the numerator.

As previously noted in the discussion of the Primary Reserve Ratio, there was an over recovery of costs in the benefit pool in FY11. The over recovery, however, was significantly less than that in FY10; thus, causing the UMSGUS' operating revenues ratio to decrease in FY11.

FY12: The two primary contributors to the sharp decline in UMSGUS' ratio from FY11 to FY12 are a \$6.1 million decrease in investment income due to market conditions and a \$5.4 million increase in operating expenses as a result of the benefit pool experiencing an under recovery in FY12 compared with an over recovery of expenses in FY11. See discussion of the primary reserve ratio for more information about the benefit pool.

Increases in UMSGUS' operating grants revenue and noncapital State of Maine appropriations revenue helped to offset the decline in investment income and caused the denominator of UMSGUS' ratio calculation to increase. These revenue increases did not, however, have a corresponding impact on the ratio's numerator, as the increase in grants and contracts revenue was completely offset by increased expenses.

UMSGUS-Op's ratio increased slightly from FY11 to FY12 as the above mentioned increases in grant revenue and State of Maine appropriation revenue increased the denominator of the UMSGUS-Op's ratio calculation. The numerator also increased as UMSGUS-Op experienced a decline in operating expenses not associated with grant and contract activity.

FY13: UMSGUS-Op experienced a loss from operations as noncapital appropriation revenue declined \$3.4 million from FY12.

UMSGUS experienced a 16.67% return from operations as significantly increased investment returns and an over recovery on benefit pool costs more than offset the loss of appropriation revenue experienced by UMSGUS-Op.

FY14: UMSGUS-Op experienced a positive return from operations primarily due to the following changes from the prior fiscal year: noncapital State of Maine appropriation revenue increased \$1.1 million; transfers from the investment income pool for both operations and reserves increased \$1.3 million, transfers to the campuses decreased as no transfer was made in FY14 for tuition remediation (\$1 million in FY13) and no strategic investment fund awards were made (\$2.6 million in FY13).

The increase in noncapital State of Maine appropriation revenue also contributed to the positive operating return that UMSGUS experienced in FY14. Other items that impacted UMSGUS' FY14 return include a \$3.5 million increase in investment income from FY13 and a \$1.5 million increase in over recovered benefit costs.

FY15: UMSGUS' return from operations decreased \$29 million from the prior year and was negative as investment returns decreased \$13 million, net noncapital transfers from UMSGUS to the campuses increased \$8 million, grants and contracts revenue decreased \$4 million, noncapital State of Maine appropriation revenues increased \$2 million, and expenses increased \$6 million.

FY16: Although still negative, UMSGUS' return from operations was significantly improved from the prior year as investment returns were once again positive and \$3 million higher than the prior year, net noncapital transfers to the campuses decreased \$5 million, expenses decreased \$4 million, and noncapital State of Maine appropriation revenues decreased \$3 million.

FY17: The \$23 million increase in UMSGUS' return from operations from FY16 to FY17 is attributable to both an increase in revenues and a decrease in expenses. Notable variances include the following:

- \$4 million increase in grant revenue for UMSGUS-Op related to NetworkMaine's contract with the Public Utilities Commission
- \$3 million decrease in noncapital State of Maine appropriation revenues for UMSGUS-Op,
- \$7 million increase in investment income
- \$12 million reduction in previously reported operating expenses (OPEB expense) pursuant to the implementation of GASB 75
- \$3 million decrease in other operating expenses
- Implementation of GASB 75 resulted in a restatement and \$12 reduction of the originally reported FY17 operating expenses.

Return on Net Position Ratio

The Return on Net Position Ratio has been impacted over the years by the same items that impacted the Net Operating Revenues Ratio and the following items that are included in other changes in net position and directly impact capital and endowments assets:

- Undistributed endowment returns impact UMSGUS' Return on Net Position ratio every year; however, the impact has fluctuated significantly over the years with changes in investment market returns:

\$ in thousands

FY09	(\$1,758)	FY14	\$865
FY10	\$375	FY15	(\$387)
FY11	\$1,082	FY16	(\$488)
FY12	(\$434)	FY17	\$438
FY13	\$505		

- State of Maine capital appropriation revenue has not been a significant factor for UMSGUS over the years as they only received \$350 thousand in FY17.
- In FY16, \$1.1 million of investment income was used to cover forgiveness of the working capital loan advanced by UMSGUS to the University of Maine at Machias in FY08/FY09.
- Capital transfers from UMSGUS to the campuses has fluctuated over the years:

\$ in thousands

FY09	\$2,568	FY14	\$1,339
FY10	\$411	FY15	(\$213)
FY11	(\$579)	FY16	\$1,061
FY12	\$417	FY17	\$1,674
FY13	\$362		

Viability Ratio

The same totals for expendable net position are used for this ratio as the Primary Reserve Ratio; therefore, please see discussion of that ratio for items impacting expendable net position.