


THE POWER OF BEING UNDERSTOOD

AUDIT | TAX | CONSULTING



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KEY PERFORMANCE MEASURES

CACUBO Higher Education Accounting Workshop  
Presented by RSM US LLP



May 17, 2016



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Agenda

- Purpose of ratios and benchmarking
- Important key performance measures – definitions and calculations
- Walkthrough examples of computing and graphing Composite Financial Index
- Analyzing the results and taking action
- Conclusion

Source material: In this presentation, RSM US LLP is summarizing information on ratios for higher education institutions made popular by the publication, "Strategic Financial Analysis for Higher Education (Seventh Edition)", developed by KPMG LLP, Prager, McCarthy & Sealy, LLC and Attain LLC.



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## Your Instructor



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## Experience the Power of Being Understood

- On October 26, 2015 McGladrey LLP changed its name to RSM US LLP and united with fellow firms in its global network under the common brand – RSM
- We remain an independent member of the RSM International network globally, which encompasses:
  - 120 countries
  - 760 offices
  - 38,300 people internationally
- This is accelerating our vision to be the first-choice advisor to middle market leaders globally

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## About RSM

RSM US LLP is the leading provider of audit, tax and consulting services focused on the middle market, with more than 8,000 people in 80 offices nationwide. RSM uses its deep understanding of the needs and aspirations of clients to help them succeed.



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## Objectives

- Hands-on experience regarding key performance measures
- Explain financial measures that provide meaning to financial data and help determine an institution's level of success
- Discuss how to use those benchmarks to create strategic plans

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## Purpose of ratios and benchmarking

- Measurement of the use of financial resources to achieve the institution's mission
- A way to focus planning activities on those steps necessary to improve financial performance.



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## Your Institution's mission

- What is the institution's mission?
- All decisions should be made knowing you and others in your organization are stewards of the resources available to accomplish the Institution's mission.
- A mission is best accomplished through a strategic plan.

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## Financial health

- Current - Capacity to carry out current programs
- Future - Continuing expected capacity to carry out future programs
  
- Also trend analysis (improving vs deteriorating)

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## Financial health questions

- Are resources sufficient and flexible enough to support the mission?
- Do operating results indicate the institution is living with available resources?
- Does financial asset performance support the strategic direction?
- Is debt managed strategically to advance the mission?

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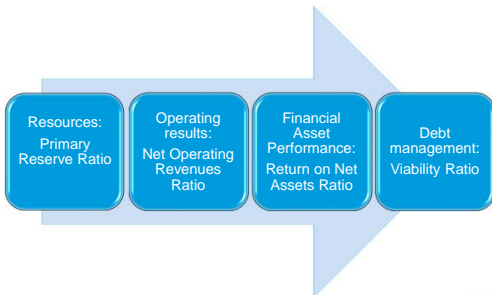
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## Overall Financial Health → CFI



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## CFI

- Composite Financial Index – combination of four core ratios to produce a single measurement of financial performance
- Remember this only measures financial performance. CFI can be too high if resources are not being utilized to fulfill the Institution's mission

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## Resources sufficient and flexible

- Primary Reserve Ratio – measures financial strength, higher ratio is better
  - Higher ratio indicates more expendable net assets available should they be needed to cover expenses
  - Lower ratio indicates insufficient resources and less operating flexibility
- Recommended that this be ratio be at least 0.40X (cover at least five months of expenses)

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## Resources sufficient and flexible

Primary Reserve Ratio –

$$\frac{\text{Expendable net assets}}{\text{Total expenses}}$$

### Private:

- Expendable net assets = Total net assets – Permanently restricted net assets – Property, Plant & Equipment, net + Long-term Debt

### Public:

- Expendable net assets = institution unrestricted net assets + institution expendable restricted + CU unrestricted net assets + CU temporarily restricted net assets – CU net investment in plant.
- Total expenses = institution operating and non-operating expenses + CU total expenses

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## Operating results

- Net Operating Revenues Ratio – measures operating performance (living within available resources)
  - Positive ratio indicates an operating surplus and generally stronger financial performance
    - However if too high could indicate underspending on mission-critical areas
  - Negative ratio indicates a deficit
    - Occasional small deficits that are part of a long-term plan are acceptable but large unplanned deficits indicate a problem
- Recommended that goal be 2 – 4% return over the long-term (can vary somewhat year to year)

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## Operating results – Net Operating Revenues Ratio

### Net Operating Revenues Ratio –

#### Private:

$$\frac{\text{Excess (deficiency) of unrestricted operating revenue over unrestricted operating expense}}{\text{Total unrestricted operating income}}$$

#### Public:

$$\frac{\text{Operating income (loss) plus net non-operating revenues (expenses) plus FASB CU change in unrestricted net assets}}{\text{Operating revenues plus non-operating revenues plus FASB CU unrestricted revenue}}$$

NOTE: Non-operating are included here because several non-operating support operations.

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## Financial Asset Performance

- Return on Net Assets – measures total economic return, higher ratio is better
  - Decline may be appropriate if it is part of a strategy to fulfill the institution's mission
  - Improving trend indicates the institution is setting aside financial resources for future flexibility
- Recommended that goal be 3 – 4% return over the long-term

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## Financial Asset Performance

Return on Net Assets –

Private:

$$\frac{\text{Change in net assets}}{\text{Total beginning net assets}}$$

Public:

$$\frac{\text{Change in net assets plus FASB CU change in net assets}}{\text{Total beginning net assets plus FASB CU total beginning net assets}}$$

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## Debt management

- Viability Ratio – availability of expendable net assets to cover debt
  - Below 1.1X indicates diminished ability to respond to adverse conditions or to fund new objectives
- The “right” ratio depends on the institution’s debt policies.
  - Generally recommended that this be ratio be between 1.25X and 2.00X.

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## Debt management

- Viability Ratio –

$$\frac{\text{Expendable net assets}}{\text{Long-term debt}}$$

- Same numerator as Primary Reserve Ratio
- Public institutions – long-term debt includes both institution and CU plant-related debt

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### Conversion to strength factors

Ratio	Conversion factor
Primary Reserve Ratio	0.133X
Net Operating Revenue Ratio - Private	0.70%
Net Operating Revenue Ratio - Public	1.30%
Return on Net Assets	2.0%
Viability Ratio	0.417X

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### Weighting Pattern

Ratio	Institution with Long-term Debt	Institution with no Long-term Debt
Primary Reserve Ratio	35%	55%
Net Operating Revenue Ratio	10%	15%
Return on Net Assets	20%	30%
Viability Ratio	35%	-

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### CFI ranges

- 1 to 1 – Assess viability to survive
- 0 to 3 – Reengineer
- 3 to 5 – Direct resources to allow transformation
- 5 to 7 – Focus resources to compete in the future
- 7 to 9 – Opportunities to experiment with new initiatives
- 8 to 10 – Deploy resources to achieve a robust mission

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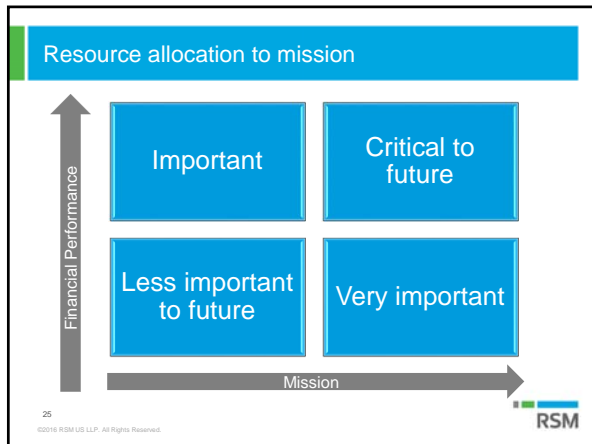
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### CFI Calculation – Example 1

Ratio	Value	Strength Factor	Weighting Factor	Score
Primary Reserve Ratio	1.839	10	35%	3.5
Net Operating Revenue Ratio	33.85%	10	10%	1.0
Return on Net Assets	17.20%	8.6	20%	1.7
Viability Ratio	1.927	4.6	35%	1.6
			Total CFI	7.8

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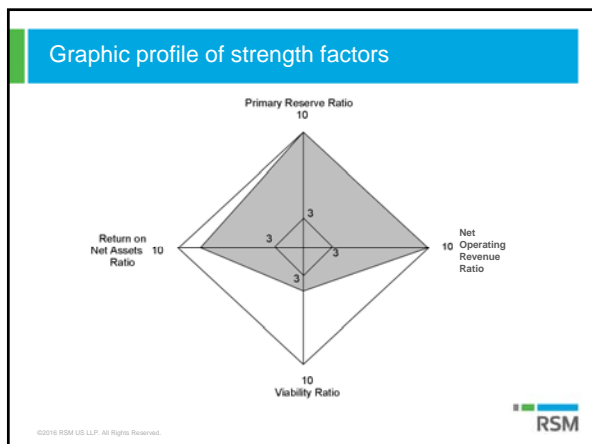
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## CFI Calculation – Example 2

Ratio	Value	Strength Factor	Weighting Factor	Score
Primary Reserve Ratio	0.248	1.86	35%	.65
Net Operating Revenue Ratio	2.68%	3.48	10%	.35
Return on Net Assets	3.09%	1.55	20%	.31
Viability Ratio	0.442	1.06	35%	.37
			Total CFI	1.7

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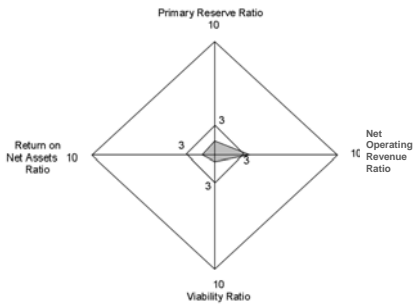
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## Graphic profile of strength factors



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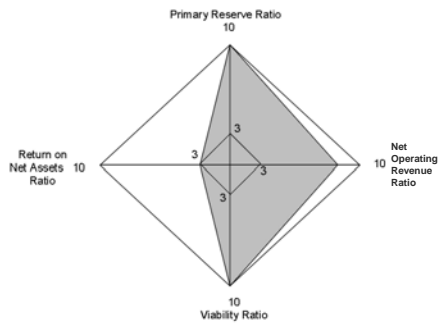
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## Graphic – higher investment in PPE



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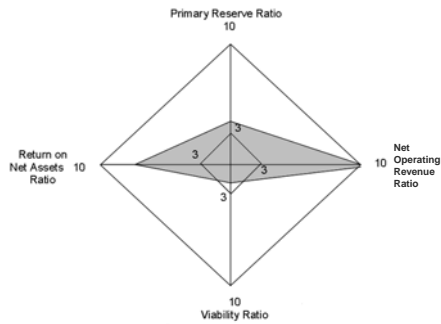
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Graphic – thinly capitalized, good returns



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Other Key performance measures

- Secondary Reserve ratio – assessment of significance of permanently restricted net assets

$$\frac{\text{Nonexpendable Net Assets (Permanently restricted net assets)}}{\text{Total Expenses}}$$

- No recommended level but higher is better

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Other Key performance measures

- Net Tuition by student FTE – This ratio measures average tuition and fees actually received per student.

$$\frac{\text{Net Tuition and Fees}}{\text{FTE students}}$$

- When compared to prior years and to published rates, this measure reflects the institution's success in retaining its annual tuition and fee increases.

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### Other Key performance measures

- Net Education by Student FTE – This ratio measures average educational expenses incurred per student.

$$\frac{\text{Education and General expense}}{\text{FTE students}}$$

- When compared to prior years and net tuition per FTE, this measure reflects the institution's success limiting cost increases and living within its means.
- Caution should be exercised in making institutional comparisons since entities serving different missions are likely to have substantially different educational cost bases.

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### Other Key performance measures

- Debt Coverage ratio – income available to service debt service payments

$$\frac{\text{Adjusted Change in Net Assets}}{\text{Debt Service}}$$

- Adjusted Change in Net Assets = Change in unrestricted net assets + depreciation expense + interest expense
- Debt service = Principal payments + interest expense
- No recommended level but higher is better

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### Other Key performance measures

- Tuition Discount Rate - This ratio measures the amount of tuition revenue funded by unrestricted institutional resources as well as external resources.

$$\frac{\text{Scholarships and Grants}}{\text{Gross tuition and fees}}$$

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### Other Key performance measures

- Fundraising expense to contribution ratio - This ratio measures the percentage of fundraising costs compared to contribution revenues – Institutions should remember that fundraising costs incurred in one period may result in contributions that will be received in future periods so consider a three year average.

$$\frac{\text{Fundraising expense}}{\text{Contribution revenue}}$$

- Recommended that not-for-profit organizations spend no more than 35% of related contributions on fund raising

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### Board presentations

- Consider how the people that make up your board best understand information
  - Numbers vs Graphs (more visual)
  - Detail vs Summary
- Timing of information
  - If too old, no longer relevant
- Which ratios are most relevant to your institution

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QUESTIONS  
AND ANSWERS?

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THANK YOU FOR  
YOUR TIME AND  
ATTENTION

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