CAUT Webinar

Analyzing University and College Financial Statements

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NPO Accounting

- General approach
  - Cash is king
  - Where is it coming from?
  - Where is it going?
- Communicating with members

What to do with too much income?

1. Get rid of it – transfer the excess operating income, which is unrestricted, into another fund, especially Capital Assets
2. Hide it – invest the excess income and earmark it for specific purposes

Helpful Analyses

- Track:
  - Revenues, expenses, net revenues
  - Capital assets
  - Net assets: unrestricted and internally restricted
  - Long term debt
  - Transfers to capital and internal restrictions
- Horizontal analysis (as % of base year: see appendix)
- Vertical analysis (as % of total revenues: see appendix)

Inter-fund transfers

In this context, inter-fund transfers represent current operating funds that are transferred and used, or earmarked, for purposes other than current operations.

1. Capital assets: acquisition of, or renovations to, buildings, land, office equipment and furniture, heavy equipment, etc.
2. Specific provisions

Are transfers to Capital legitimate?

U of M says it cannot raise sufficient capital funds from outside sources so it must use unrestricted operating funds.

Some popular Capital uses of operating funds: library acquisitions, asbestos abatement

Some more questionable uses: $3.6 M in operating funds used to build new Welcome Centre.

Inter-fund transfers

Inter-fund transfers represent current operating funds that are transferred and used or earmarked for purposes other than current operations.

1. Capital assets ($35 million): acquisition of, or renovations to, buildings, land, office equipment and furniture, heavy equipment, etc.
2. Specific provisions ($15.7 million): internally restricted funds

Budget carryover

($ millions)	2006	2009
Provision Amount	$17	$45
“Real” Amount (calculated)	$56	$48
% funded (per vp admin)	**30%**	**93%**

Do we need money set aside for budget carryover?

U of M says this is a legitimate obligation of the university and it is prudent and responsible to set money aside for it.

In 2003, there was no provision for budget carryover. Last year's carryover was paid out of this year's budget, much of which was left over because there was carryover at the end of this year. There was never a problem.

What other information might be useful?

- Student enrolment figures: search “office of institutional analysis” or “insitutional statistics”
- Salaries of president and VP’s: financial statements, govt lists, or other reports usually under “governance”
- Supplementary schedules (Parking!)

What other information might be useful?

- Horizontal analyses with CAUBO data (note: self reported, not audited; see CAUBO.ca “Financial Information of Universities and Colleges”

- Schedule 2.4C:
  - general operating expenditures:
  - instruction and non sponsored research general operating expenditures:
  - library general operating expenditures: external relations
- Schedule 3.1
  - general operating income (revenues)
  - ancillary income

- Schedule 3.2, within “general operating expenditures”:
  - salaries, academic ranks
  - salaries, other instruction and research salaries,
  - other salaries and wages
- Schedule 3.4
  - other salaries and wages in "instruction"
  - other salaries and wages in "admin and academic support"
  - other salaries and wages in "external relations"

Vertical analysis: how to do it

	A	B	C	D
1	How to do vertical analysis			
2	Hypothetical data:			
3		2018	2019	2020
4	total revenues	488000	496000	520000
5	faculty salaries	96000	99000	102000
6	admin salaries	24000	28000	33000

Start with data: we are going to express each item in the year as a % of total revenues (the top line) of that year

Vertical analysis: step 1

	A	B	C	D
1	How to do vertical analysis			
2	Hypothetical data:			
3		2018	2019	2020
4	total revenues	488000	496000	520000
5	faculty salaries	96000	99000	102000
6	admin salaries	24000	28000	33000

	enter formula in topmost, earliest cell first			
	2018	2019	2020	
total revenues	=B4/B$4			
faculty salaries				
admin salaries				

Vertical analysis: step 1

	A	B	C	D
1	How to do vertical analysis			
2	Hypothetical data:			
3		2018	2019	2020
4	total revenues	488000	496000	520000
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To learn more about this, read about "absolute vs relative cell referencing in Excel"

	enter formula in topmost, earliest cell first		
	2018	2019	2020
total revenues	=B4/B$4		
faculty salaries			
admin salaries			

Vertical analysis: step 2

	A	B	C	D
1	How to do vertical analysis			
2	Hypothetical data:			
3		2018	2019	2020
4	total revenues	488000	496000	520000
5	faculty salaries	96000	99000	102000
6	admin salaries	24000	28000	33000

Original data

Steps for vertical analysis:			
	2018	2019	2020
total revenues	1.00		
faculty salaries			
admin salaries			

You should now have this

	copy that topmost, earliest cell and paste to adjacent columns				
	2018	2019	2020		
total revenues	=B4/B$4	=C4/C$4	=D4/D$4		
faculty salaries					
admin salaries					

Vertical analysis: step 3

	A	B	C	D
1	How to do vertical analysis			
2	Hypothetical data:			
3		2018	2019	2020
4	total revenues	488000	496000	520000
5	faculty salaries	96000	99000	102000
6	admin salaries	24000	28000	33000

Original data

	2018	2019	2020
total revenues	1.00	1.00	1.00
faculty salaries			
admin salaries			

You should now have this

	copy top row and paste to rows below		
	2018	2019	2020
total revenues	=B4/B$4	=C4/C$4	=D4/D$4
faculty salaries	=B5/B$4	=C5/C$4	=D5/D$4
admin salaries	=B6/B$4	=C6/C$4	=D6/D$4

Vertical analysis: voila

	A	B	C	D
1	How to do vertical analysis			
2	Hypothetical data:			
3		2018	2019	2020
4	total revenues	488000	496000	520000
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Original data

	2018	2019	2020
total revenues	1.00	1.00	1.00
faculty salaries	0.20	0.20	0.20
admin salaries	0.05	0.06	0.06

You should now have this

Uses of vertical analysis

- In many universities, can demonstrate that increased tuition revenues have offset decreases in provincial grants: eg. UM

VERTICAL ANALYSIS	2011	2012	2013	2014	2015	2016
Tuition and related fees	23%	23%	24%	24%	25%	25%
Net investment income	1%	1%	1%	1%	1%	1%
Provincial Educ and advanced learning	56%	56%	57%	56%	56%	55%
Other MB government	3%	3%	3%	3%	3%	4%
Govt of Canada	2%	2%	2%	1%	2%	2%
Sales of goods and services	6%	6%	6%	6%	5%	5%
Ancillary Services	6%	7%	7%	6%	6%	6%
Other	2%	4%	1%	3%	2%	2%
Total operating revenue	100%	100%	100%	100%	100%	100%

Horizontal analysis: how to do it

	A	B	C	D
1	How to do vertical analysis			
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3		2018	2019	2020
4	total revenues	488000	496000	520000
5	faculty salaries	96000	99000	102000
6	admin salaries	24000	28000	33000

Start with data: we are going to express each item in the year as a % of itself in the base year

Horizontal analysis: step 1

	A	B	C	D
1	How to do vertical analysis			
2	Hypothetical data:			
3		2018	2019	2020
4	total revenues	488000	496000	520000
5	faculty salaries	96000	99000	102000
6	admin salaries	24000	28000	33000

2018	2019	2020				
=B4/$B4			enter formula in topmost, earliest cell first			

Horizontal analysis: step 2

	A	B	C	D
1	How to do vertical analysis			
2	Hypothetical data:			
3		2018	2019	2020
4	total revenues	488000	496000	520000
5	faculty salaries	96000	99000	102000
6	admin salaries	24000	28000	33000

Original data

	2018	2019	2020
total revenues	1.00		
faculty salaries			
admin salaries			

You should now have this

2018	2019	2020			
=B4/$B4			copy cell and paste to adjacent cells		

Horizontal analysis: step 3

	A	B	C	D
1	How to do vertical analysis			
2	Hypothetical data:			
3		2018	2019	2020
4	total revenues	488000	496000	520000
5	faculty salaries	96000	99000	102000
6	admin salaries	24000	28000	33000

Original data

	2018	2019	2020
total revenues	1.00	1.02	1.07
faculty salaries			
admin salaries			

You should now have this

2018	2019	2020			
=B4/$B4	=C4/$B4	=D4/$B4	copy row and paste to rows below		

Horizontal analysis: voila

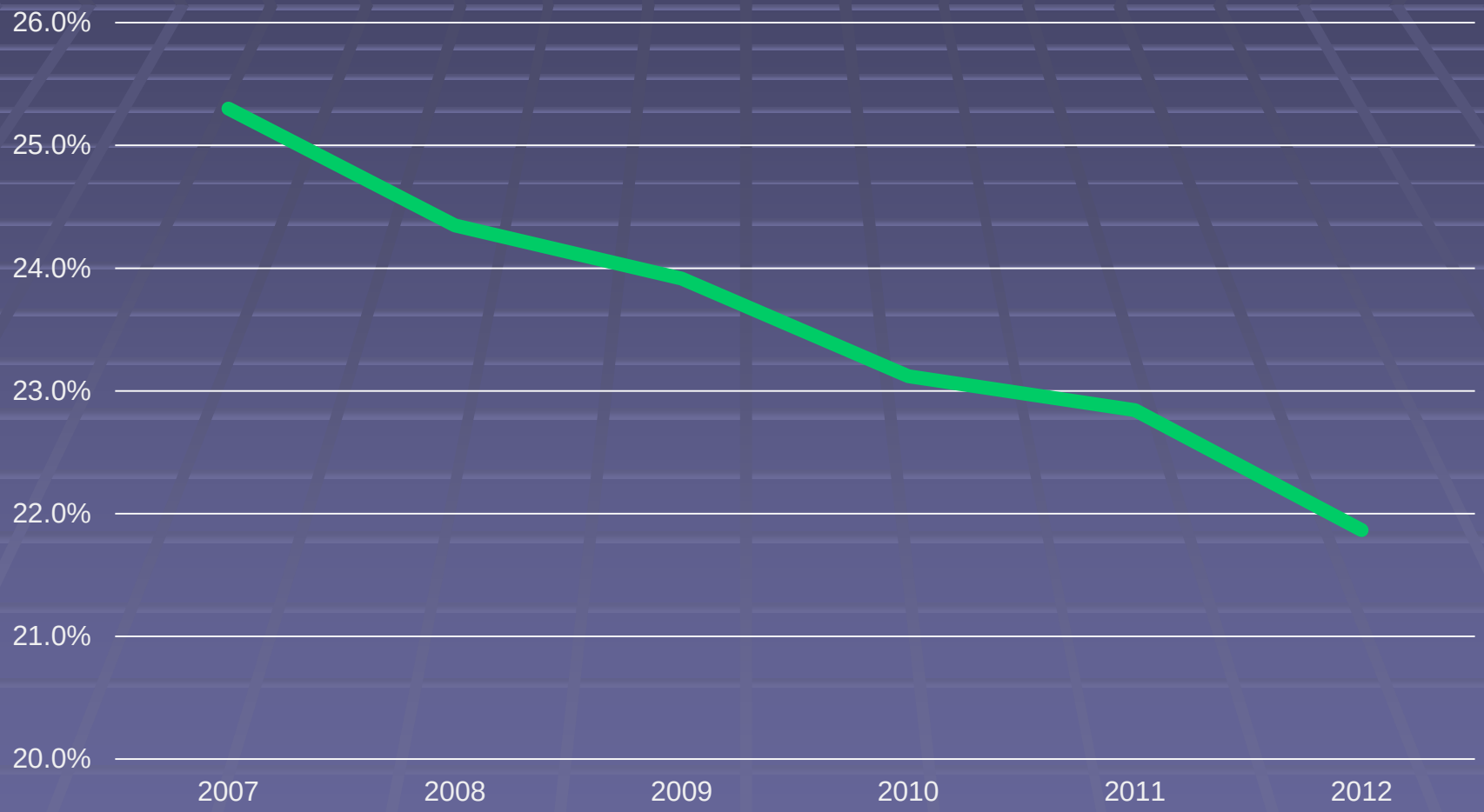
	A	B	C	D
1	How to do vertical analysis			
2	Hypothetical data:			
3		2018	2019	2020
4	total revenues	488000	496000	520000
5	faculty salaries	96000	99000	102000
6	admin salaries	24000	28000	33000

Original data

	2018	2019	2020
total revenues	1.00	1.02	1.07
faculty salaries	1.00	1.03	1.06
admin salaries	1.00	1.17	1.38

You should now have this

Total UMFA base salaries as percentage of UM operating revenue



UM example: VP (external) budget as % of operating revenues