

# Using University Financial Statements 2014

Cameron Morrill and Janet Morrill

University of Manitoba Faculty Association

[www.umfa.ca](http://www.umfa.ca)

January 2014

# Agenda

- Why look at the financial statements?
- Accounting 101
- Not-for-profit Accounting 101
- Financial analysis: What are we looking for?
- Bargaining money at the University of Manitoba
- Accounting for pensions at universities

# Why look at the financials?

- Audited record of university financial decisions
- Follows (a relatively) standardized set of accounting rules
- A history of the decisions made by administration (where they put their money)
- Problems in having to take administration word for financial situation

# Financial statements vs. budgets

Financial statements – standardized language (within certain limits), objective historical fact, meant to communicate to outsiders in a clear and concise way

Budgets – forward-looking, political, “wish list”, customized language, subject to change (e. g., U of Manitoba “Central Operating Reserve”)

# Administration incentives

“Having to take the administration’s word for it”

The administration has a strong incentive to make financial situation appear as bad as possible:

- Fundraising tool
- Negotiation tactic, especially in an atmosphere of strained labour relations

# How will a financial analysis help?

- Reduce information asymmetry – faster, better resolution to disputes; greater satisfaction with final outcome
- Mobilize students and (perhaps) public opinion
- Arguments in case of arbitration or mediation

# Accounting 101: Statement of Financial Position or Balance Sheet

Assets	=	Liabilities	+	Equity
▪ Cash		▪ amounts		▪ net worth
▪ Investments		owing to		of entity
▪ Capital		outsiders		

# Accounting 101: Statement of operations/Income statement

## **Revenues**

Government grants, tuition fees, ancillary fees

MINUS

## **Expenses**

Salaries, benefits, depreciation

EQUALS

**Net income (or Net revenue)**



# Accounting 101: Cash flow statement

## **Operating cash flows**

- Cash flows for salaries, operating grants, etc.

## **Investing cash flows**

- Acquisition of capital assets; purchase and sale of investments

## **Financing cash flows**

- Taking out and repaying loans

# Not-for-profit Accounting 101

## Characteristics of not-for-profit organizations

- Provide goods or services to society without expectation of profit
- Resources provided by contributors without expectation of gain or repayment
- **Contributions often have restrictions attached that govern the manner in which they can be spent**

# Fund accounting

Financial activities are organized according to restrictions within separate funds, each one with its own set of financial statements. Funds usually include:

General fund: unrestricted funds, usually used to pay operating expenses of university

Restricted funds: funds restricted to purchase of buildings and equipment; research funds

Endowment funds: can only be invested – income is available for specified uses

# Restricted fund reporting example: Balance sheet

	General Fund	Capital Fund	Total
Cash	\$80	\$20	\$100
Investments	50	---	50
Cap. Assets	<u>---</u>	<u>\$300</u>	<u>300</u>
Total	<u><u>\$130</u></u>	<u><u>\$320</u></u>	<u><u>\$450</u></u>
Net assets	<u><u>\$130</u></u>	<u><u>\$320</u></u>	<u><u>\$450</u></u>

# Deferral method reporting: Balance sheet

Cash	\$100
Investments	50
Capital Assets	<u>300</u>
Total	<u><u>\$450</u></u>
Net assets	
Invested in capital assets	\$320
Unrestricted	<u>130</u>
	<u><u>\$450</u></u>

# Analyzing University financials

Focus on general operating fund cash – this is what pays salaries, maintenance, etc.

Statement of financial position – how much cash is there?

Statement of operations and cash flow statement – where does it come from? Where is it going?

Pay careful attention to information in footnotes.

Get an accountant with relevant expertise.

# What are we looking for?

- Cash
  - Salaries and benefits require (unrestricted) cash
  - Cash is immune to accounting “tricks”
- A high level of cash
- A stable source of cash – low volatility over time

**UNIVERSITY OF MANITOBA**  
**STATEMENT OF FINANCIAL POSITION**  
**AS AT MARCH 31, 2013, MARCH 31, 2012 AND APRIL 1, 2011**  
(in thousands of dollars)

March 31, 2013

---

**Assets**

*Current Assets*

Cash and Cash Equivalents	\$ 117,603
Accounts Receivable (Note 4)	61,800
Inventories	3,421
Prepaid Expenses	1,329

---

**184,153**

*Long Term Assets*

Loan Receivable (Note 5)	170,538
Investments (Note 6)	636,874
Capital Assets, Net of Accumulated Amortization (Note 8)	960,754

---

1,768,166

---

**\$ 1,952,319**

---



# The “fun” in Fund Accounting

Total assets = \$1,952,319

- General funds (operating)
- Restricted funds
  - capital asset, research/special, staff benefits
- Endowment fund

# U of M Balance Sheet (\$ millions)

	General Funds	Restricted funds	Endowment Funds	Total
Cash				\$118
Other				236
Investments	?	?	?	637
Cap. assets				<u>961</u>
				\$1,952

# U of M Balance Sheet (\$ millions)

	General Funds	Restricted funds	Endowment Funds	Total
Cash				\$121
Other				65
Investments				390
Cap. assets				<u>711</u>
				<u><u>\$1,287</u></u>

# Standard university balance sheet



## Statements of Financial Position

As at April 30, 2013

	2013
<b>Assets</b>	
<hr/>	
<b>Current</b>	
Cash and cash equivalents (note 4)	\$ 21,469,115
Accounts receivable (note 5)	3,262,864
Prepaid expenses and inventory	1,225,501
	<hr/>
	25,957,480
	<hr/>
<b>Long term</b>	
Investments (note 6)	138,889,603
Capital assets, net of accumulated amortization (notes 3, 7 & 9)	82,539,003
	<hr/>
	221,428,606
	<hr/>
<b>Total Assets</b>	<b>\$ 247,386,086</b>
	<hr/> <hr/>

# A transparent balance sheet

## UNIVERSITY OF SASKATCHEWAN

Consolidated Statement of Financial Position

As at April 30, 2012 (\$ thousands)

	General	Restricted	Endowment	Total 2012
<b>Current Assets</b>				
Cash (Note 5)	\$ (91,230)	\$ 95,919	\$ (409)	\$ 4,280
Accounts receivable (Note 6)	31,131	143,832	-	174,963
Inventories (Note 7)	14,112	-	-	14,112
Prepaid expenses	4,084	110	-	4,194
	(41,903)	239,861	(409)	197,549
<b>Long-Term Assets</b>				
Long-term accounts receivable (Note 8)	70	29,170	-	29,240
Long-term investments (Note 5)	344,656	39,486	213,657	597,799
Other assets	9,668	1,600	702	11,970
Capital assets (Note 9)	-	1,356,016	-	1,356,016
	354,394	1,426,272	214,359	1,995,025

# How to find General Fund Cash?

Cash = Cash + Investments

Cash (total) = Cash (General fund) + Cash (Endowments) + Cash (Restricted funds)

Cash (total) – we know this.

Cash (endowments) = Net assets in Endowments

Cash (restricted funds) = Deferred contributions for capital projects and other

All of this is in Stmt of Financial Position.

Example: U of Lethbridge

University of  
Lethbridge  
Statement of  
Financial  
Position at  
March 31,  
2013  
(\$ thousands)

	<b>2013</b>
<b>Assets</b>	
Cash and cash equivalents (Note 5)	\$ 18,662
Accounts receivable (Note 8)	8,692
Inventories and prepaid expenses	2,580
Portfolio investments (Note 6)	160,198
Tangible capital assets (Note 9)	301,738
	<b>\$ 491,848</b>
<b>Liabilities</b>	
Accounts payable and accrued liabilities	\$ 13,708
Employee future benefit liabilities (Note 10)	42,120
Debt (Note 11)	10,052
Deferred revenue (Note 12)	241,109
	<b>306,989</b>
<b>Net Assets</b>	
Accumulated surplus * (Note 14)	
Accumulated remeasurement gains and losses	5,958
Accumulated operating surplus	133,306
Endowment (Note 13)	45,595
	<b>184,859</b>
	<b>\$ 491,848</b>



## Note 12. Deferred revenue

	<b>Restricted</b>		
	<b>Research and other restricted</b>	<b>Unspent capital contributions</b>	<b>Spent capital contributions</b>
Balance, beginning of year	\$ 24,210	\$ 30,694	\$ 191,123
Grants, tuition, donations received	18,353	2,053	-
Investment Income	971	210	-
Unearned capital acquisition transfer	(2,255)	(11,169)	13,424
Recognized as revenue	(18,596)	(1,116)	(12,414)
Other	-	-	-
Balance, end of year	<b>\$ 22,683</b>	<b>\$ 20,672</b>	<b>\$ 192,133</b>

# Lethbridge General Fund Cash (\$ million)

Total cash/investments (= 18.7 + 160.2)	\$178.9
Less: Endowment net assets	-45.6
Less: Restricted for research, etc.	-22.7
Less: Restricted for capital	<u>-20.7</u>
General Fund Cash/investments	<u><u>\$89.9</u></u>

# Where is the cash?

University of Manitoba Balance Sheet  
General Fund Assets  
as at March 31, 2013  
(thousands of dollars)

Cash	\$26,896
Other current assets	66,550
Long-term Investments	<u>130,000</u>
Total assets	<u><u>\$223,446</u></u>

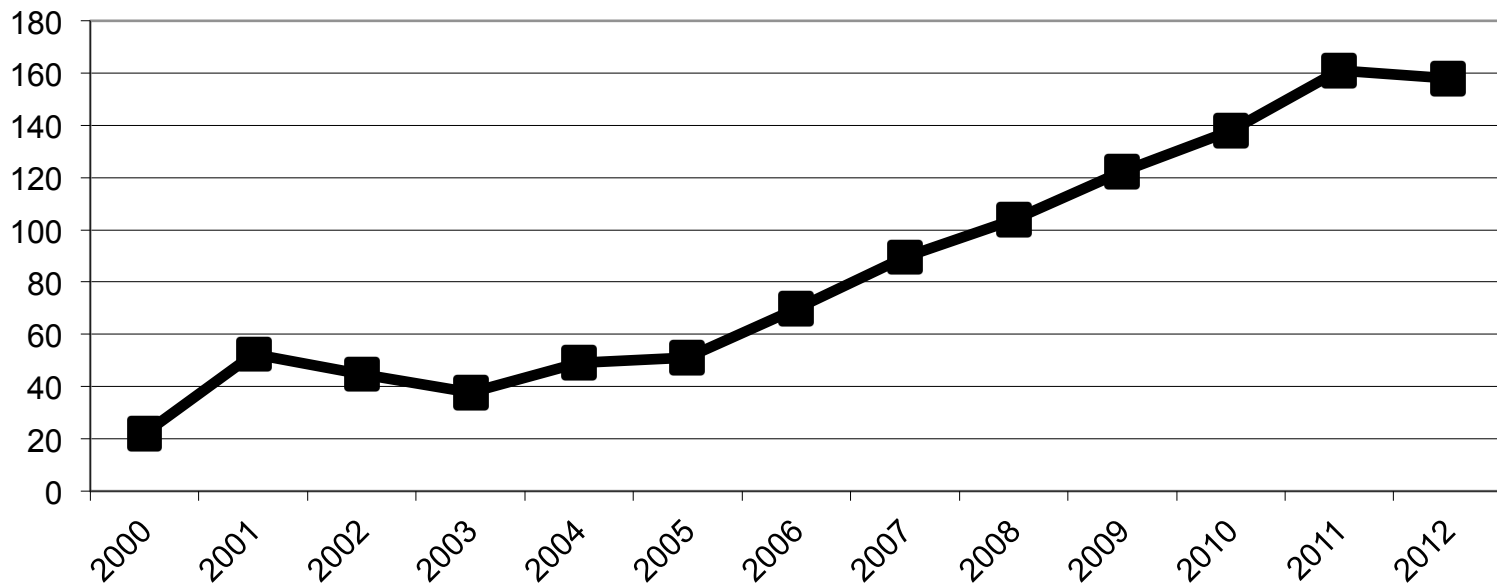
# What does it mean?

## Finding benchmarks

1. Compare your university's results with those of other universities – comparability?
2. Compare your university's results with benchmarks or rules of thumb – expertise?
3. Compare your university with itself – look for trends over time

# General Fund liquid assets

## U of M Cash and Long Term Investments (General fund, in millions of \$)



# General Fund Cash and Investments: Bottom Line

- Balance in cash (and other liquid investments) was in the \$40 - \$60 million range over the period 2001 – 2005
- Between 2005 and 2011, total cash and liquid investments has increased by \$110 million, or about \$18 million per year

# Where does the cash come from?

University of Manitoba

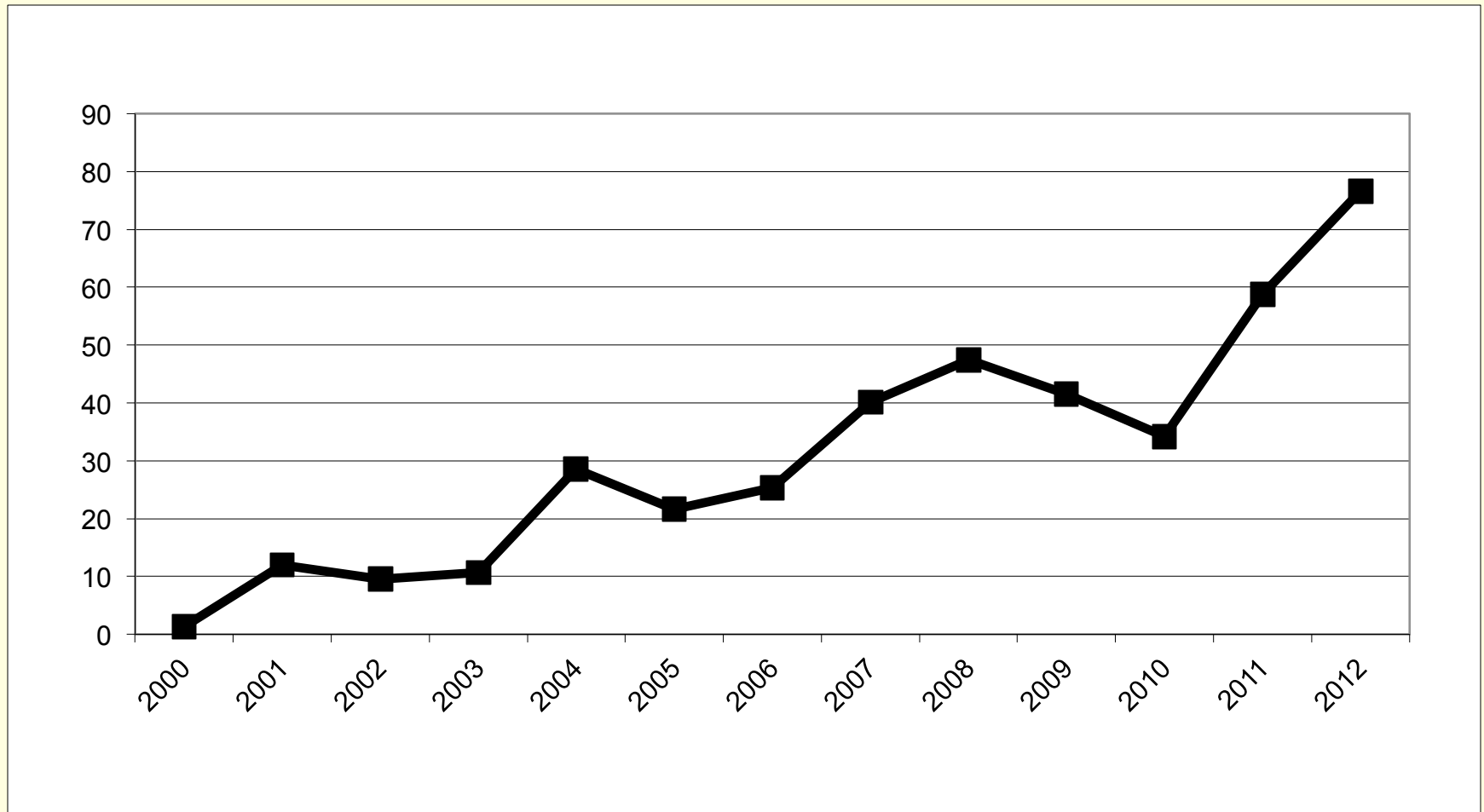
General Operating Fund

Statement of Operations for the year ending

March 31, 2012 (millions of dollars)

Operating revenues	\$547.1
Operating expenses	<u>470.5</u>
Net revenue	<u><u>\$76.6</u></u>

# General Operating Fund Net Revenue 2000 – 2012 (\$millions)





# Where does all the cash go?

University of Manitoba

General Operating Fund

Statement of Operations for the year ending

March 31, 2012 (millions of dollars)

Operating revenues	\$547.1
Operating expenses	<u>470.5</u>
Net revenue	76.6
Inter-fund transfers	<u>76.6</u>
Net increase in fund balance	<u>\$0.0</u>

# 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 income and earmark it for specific purposes

## *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 (\$77 million): acquisition of, or renovations to, buildings, land, office equipment and furniture, heavy equipment, etc.

2. Specific provisions (\$4.4 million)

*Inter-fund transfers from Operating to  
Capital Assets – 2012 (\$ millions)*

<b>Item</b>	<b>Amount</b>
Funding of capital asset additions	\$63
Long Term Debt Repayments	5
Student Contributions for Technology	4
Unit Capital Development Assessment	<u>4</u>
Total	<u>\$77</u>

# *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.

- library acquisitions, asbestos abatement
- cost overruns on construction projects

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.

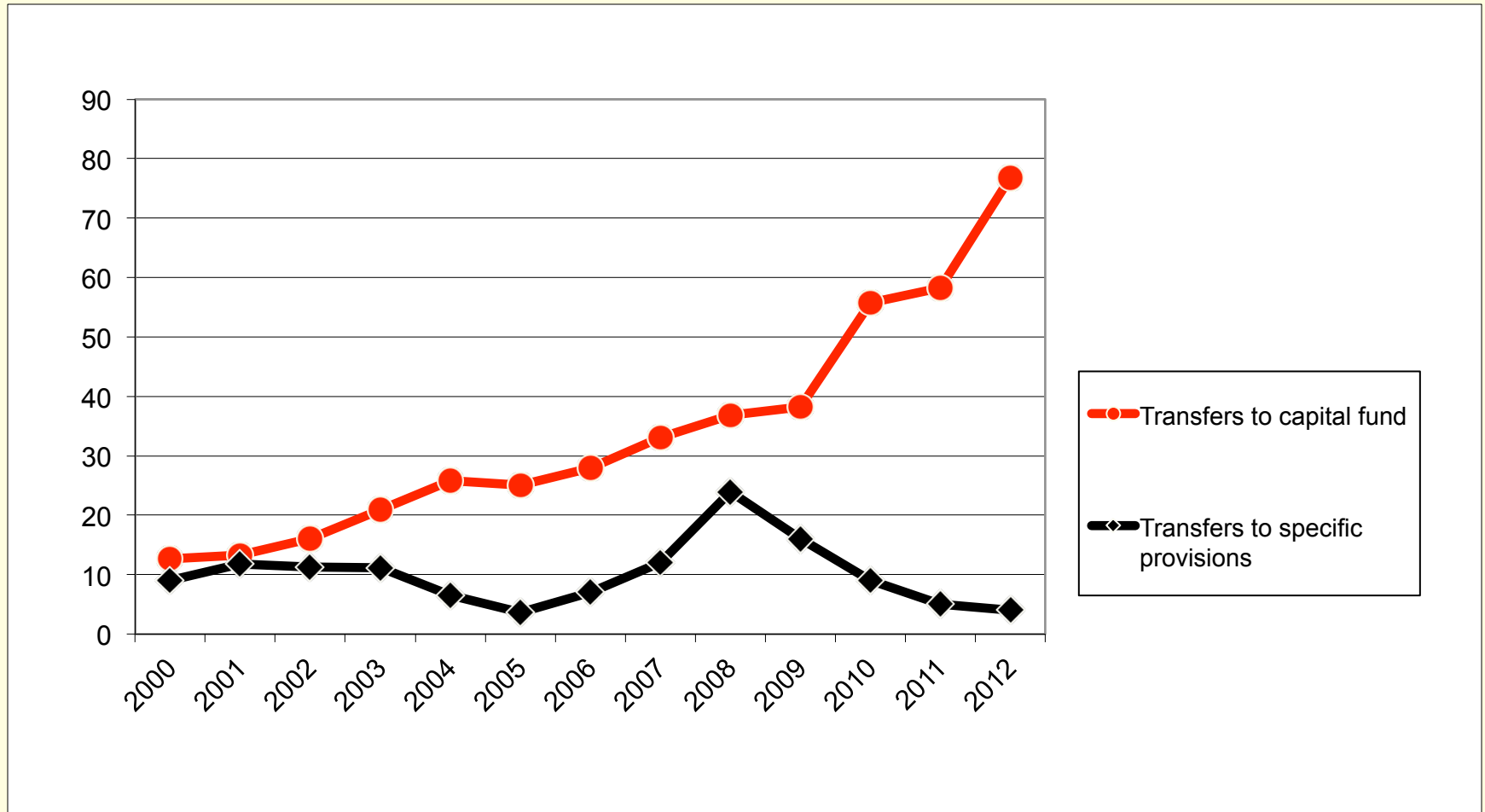
1. Capital assets (\$77 million): acquisition of, or renovations to, buildings, land, office equipment and furniture, heavy equipment, etc.

2. Specific provisions (\$4.4 million): internally restricted funds

# *Inter-fund transfers from Operating to Specific Provisions – 2012 (\$ millions)*

<b>Item</b>	<b>Amount</b>
Unit specific projects (carryover), special projects and improvements	\$- 0.9
Capital asset replacement	<u>5.3</u>
Total	<u>\$4.4</u>

# Transfers out of Operating Fund (\$ million)





*Can the cash generated by net revenue be used to pay increased compensation?*

Average excess cash flow 2006-2011  
= \$18 million per year

Long term bond investment in General Fund  
= \$131 million

Admin response: \$131 million is “cash in the bank” and cannot be used to fund ongoing expenses; would be dishonest to reallocate money once earmarking decisions are made.

# Using the information

- Series of newsletters and workshops to members over six months prior to start of bargaining
- Memos from university president to entire university disputing newsletters (and association responses) - 2010
- Bargaining

# U of M: 2013 bargaining

## Bargaining context: 2013

- Not great salary settlement in 2010: 0.5%, 1% and 2.9%, and then provincial government promises of 5% funding increase for each of 11-12, 12-13, 13-14
- 2013: In spite of promise, provincial government cuts 13-14 funding increase to 2.5% - seems like bad times are coming

# Bargaining 2013

## What to do with our financial analysis?

- Make a really strong case to the administration
- Mutually assured destruction?
- Threaten MAD
  
- Our strategy: Start with a strong case across the table to the administration

# UM vs. U12 Salaries

	Full professor	Associate professor	Assistant professor
Mean U12	\$149,514	\$117,317	\$96,443
Median U12	\$149,973	\$116,704	\$95,860
UM	\$133,073	\$98,705	\$80,319
UM rank in U12	12	12	12
UM as % of mean	89%	84%	83%

# UM vs. Saskatchewan 8 Salaries

	Full professor	Associate professor	Assistant professor
Mean S8	\$146,482	\$114,604	\$93,708
Median S8	\$148,085	\$116,184	\$95,006
UM	\$133,073	\$98,705	\$80,319
UM rank in Sask 8	8	8	8
UM as % of mean	91%	86%	86%

# UM salary structure 2012-2013

	FLOOR	INCREMENT	THRESHOLD	INCREMENT	MAXIMUM
Professor	\$96,607	\$3,549	\$128,551	\$2,334	\$143,187
Assoc Professor	\$74,877	\$2,744	\$99,584	\$1,936	\$110,912
Asst Professor	\$64,125	\$2,128	\$83,272	\$1,627	\$92,055

## UMFA Proposal

- Increase floors and maxima
- Remove thresholds
- Increase increments for ranks below Professor and Librarian
- Salary scale increases of 4% (one-year deal)

# U of M offer

- Focus on median salaries within each rank rather than mean salaries
- Scale increases of 2.9%, 2%, 2% and 2% over a four-year contract
- Some improvements to salary grid
- “Market adjustments”: \$1,500 for each associate prof below the threshold; \$900 for each assistant prof below the threshold
- Cost of UM proposal equal to cost of UMFA in first year



# Outcome

- Money was not an issue in the negotiations – we accepted UM proposal with only small modifications
- Strike vote on other issues and negotiated up until strike deadline
- Important gains on academic freedom
- Some gains on performance management and faculty restructuring

Did our financial analysis make a difference?

# Did our financial analysis make a difference?

Disappearing information: Schedules showing how faculties spent their operating budgets are no longer available on UM website.

Schedules from past years have been removed.

# Accounting for Pensions in Universities

January 2014

# Pension Plans in Trouble

- Low interest rates
- Unfavourable mortality experience
- Volatile and sometimes terrible stock market returns
- Insufficient ongoing contributions

# Agenda

1. Pension vocabulary
2. Defined benefit pension illustration
3. Funding a defined benefit pension plan
4. Where does UM go from here?

# 1. Pension vocabulary

## Pension plan

A pension is a form of deferred compensation. Pension benefits are earned during working years and paid out after retirement. At U of M, approximately 10% - 20% of total compensation is deferred until after retirement in the form of pension and postretirement health benefits.

# 1. Pension vocabulary

## Defined benefit (DB) pension plan

Pension benefits are determined by some formula, typically as a function of years of service and employee salary.

## Defined contribution (DC) pension plan

Contributions to pension plan are determined by some formula. Pension benefits depend on amount of contributions, investment strategy, luck, etc.

## 2. (Simplified) Defined benefit pension illustration

January 1, 2015: 35-year-old professor starts work at a salary of \$60,000 per year.

Normal retirement: December 31, 2044.

Guaranteed defined pension at retirement

= 2% x best average annual salary  
(computed over five-year period) x years  
of service



# Defined pension benefit earned in 2015

## Key assumptions

Assumed salary inflation = 4% per year +  
promotion and merit = 5%

Assuming constant 5% rate of salary  
increase,

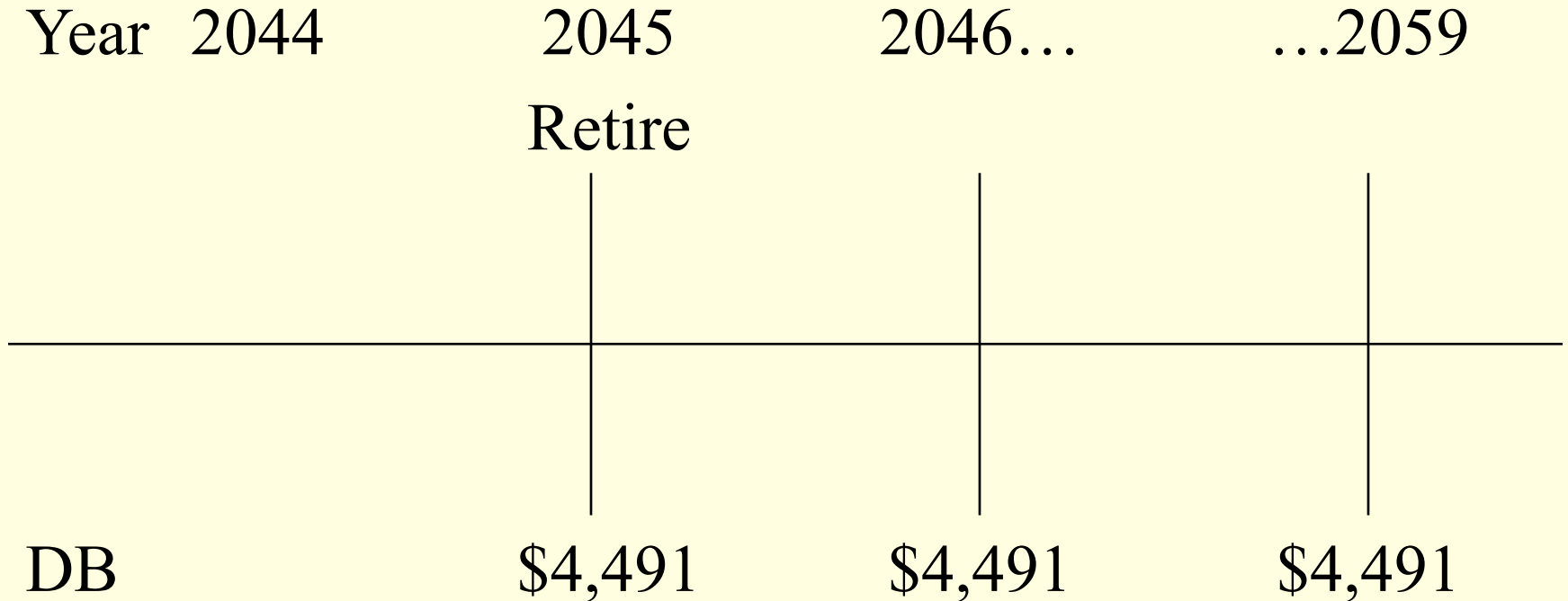
projected 2044 salary = \$246,968.

Five-year average (2040-44) = \$224,541

Defined pension benefit earned in 2015

= \$224,541 x 2% = \$4,491/yr in retirement

# Defined benefit earned in 2015



Assume life expectancy of 80 years (15 years of retirement)

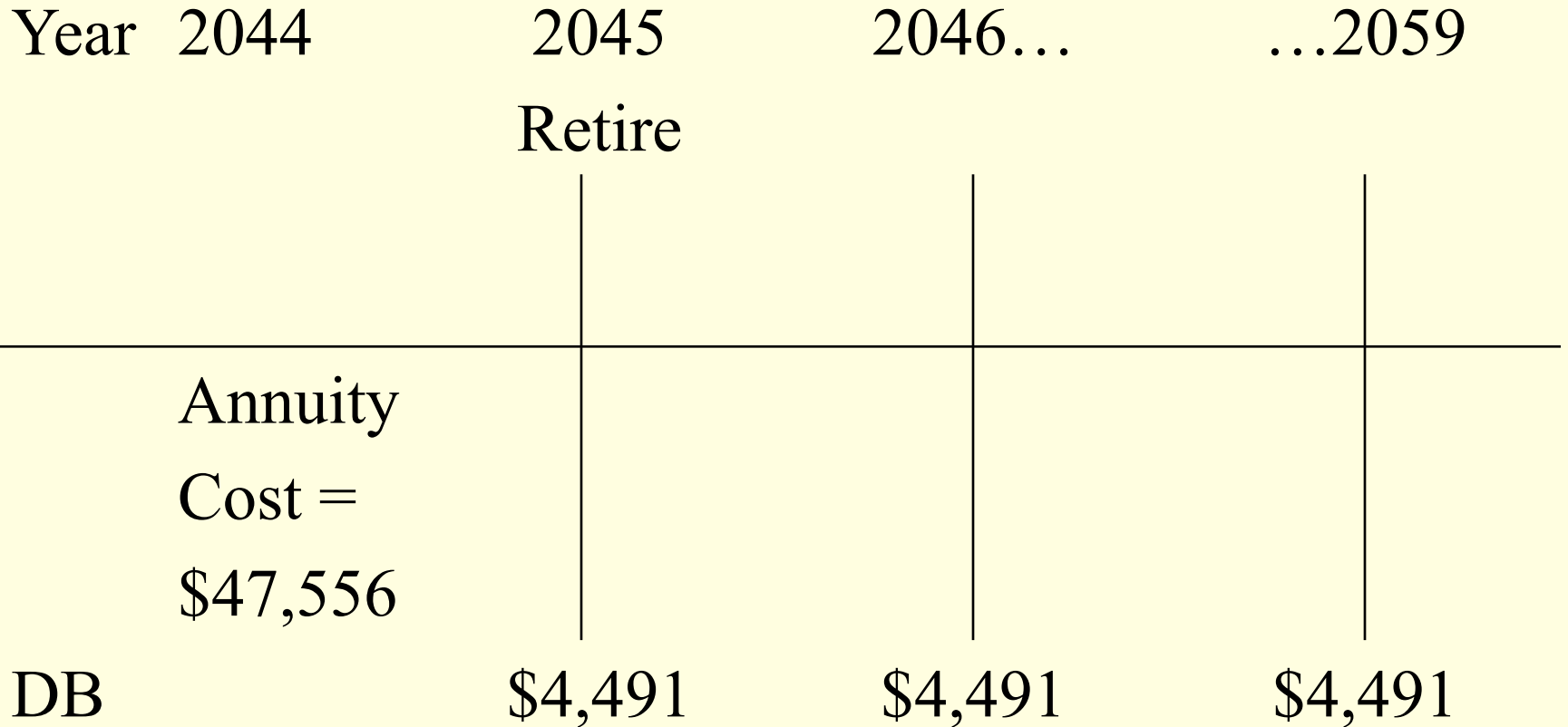
# 3. Funding a defined benefit pension plan

Pension legislation requires that pension plan sponsors fund pension plans on an ongoing basis (i. e., sponsors must set aside in an independent trust) now to ensure sufficient funds are in place to pay out pension benefits when they are due.

## Step 1

To pay out \$4,491 per year from 2045 to 2059, plan must buy an annuity at end of 2044. At end of 2044 (assuming annuity interest rate is 5.5%), this annuity would cost \$47,556.

# DB benefit payout earned in 2015



# Funding a defined benefit pension plan

## Step 2

Sponsor must invest funds in 2015 that will grow to \$47,566 by the end of 2044. If the funds can earn a return of 6% (assumed asset allocation of 55% equities, 45% fixed income), UM must invest \$8,777 in 2015.

\$8,777 = Current service cost = Basic funding requirement

# Funding a defined benefit pension plan

Go through the same exercise each year. Amount of current service cost is contributed to pension fund which earns 6% per year. By date of retirement, balance in pension fund is:

\$1,426,686

This is exactly enough to buy a 15-year annuity equal to  $(30 \text{ years} \times \$4,491 =)$  \$134,730 per year, which is equal to  $30 \text{ years} \times 2\% \times \$224,541$  (some rounding errors).

# Current service cost

Increases as:

- Pension benefits improve (e. g., DB formula increases from 2% per year to 2.5%)
- Mortality improves (longer retirement)
  - 15-year retirement, 2015 CSC = \$8,777
  - 16-year retirement, 2015 CSC = \$9,148
  - 17-year retirement, 2015 CSC = \$9,500

# Current service cost

Increases as:

- Interest (annuity) rates decrease
  - Rate = 5.5%, 2015 CSC = \$8,777
  - Rate = 4.5%, 2015 CSC = \$9,302
  - Rate = 3.5%, 2015 CSC = \$9,880
- Employee approaches retirement
  - CSC in 2015 = \$8,777
  - CSC in 2016 = \$9,303
  - CSC in 2034 = \$26,555



# Funding a defined benefit pension plan

Funding requirement = Current Service Cost + Special payments

Special payments are required if experience turns out differently than predicted (interest rates change, plan assets return something other than 6%, retiree longevity changes, etc.)

Special payments can be negative (e. g., asset returns greater than 6%) or positive (e. g., asset returns less than 6%).

# Accounting for a defined benefit pension plan

Pension expense = Current service cost + interest cost – expected return on plan assets +/- recognition of actuarial gains/losses

# Actuarial loss example: Bad investment returns

Back to our example. Assume only one person in the plan. Regular contributions made each year and returns are exactly 6% per year. By end of 2029 (sixteen years before retirement), Plan Assets should be \$297,653.

Suppose that in 2029, the Plan loses money in the market such that Plan Assets at the end of 2029 are \$197,653. There is now a \$100,000 deficit in the Plan.

# Funding an actuarial loss

Pension legislation requires that any net deficits must be funded over either a five-year period (solvency deficit) or a fifteen-year period (going concern deficit). U of M has a solvency exemption so the \$100,000 deficit is funded over fifteen years.

This means that UM must make special payments in the amount of \$10,296 per year, in addition to current service cost.

# Accounting for an actuarial loss

Most pension sponsors take a “defer-and-amortize” approach to actuarial gains and losses.

Actuarial gains and losses are amortized on a straight line basis over the expected average remaining service life (EARSL) of the active employees

- UM annual report, p. 27

EARSL at UM is nine years. \$100,000 actuarial cost would result in increased pension expense of ( $\$100,000 \div 9 =$ ) \$11,111 per year for 9 years.

# Defer-and-amortize accounting

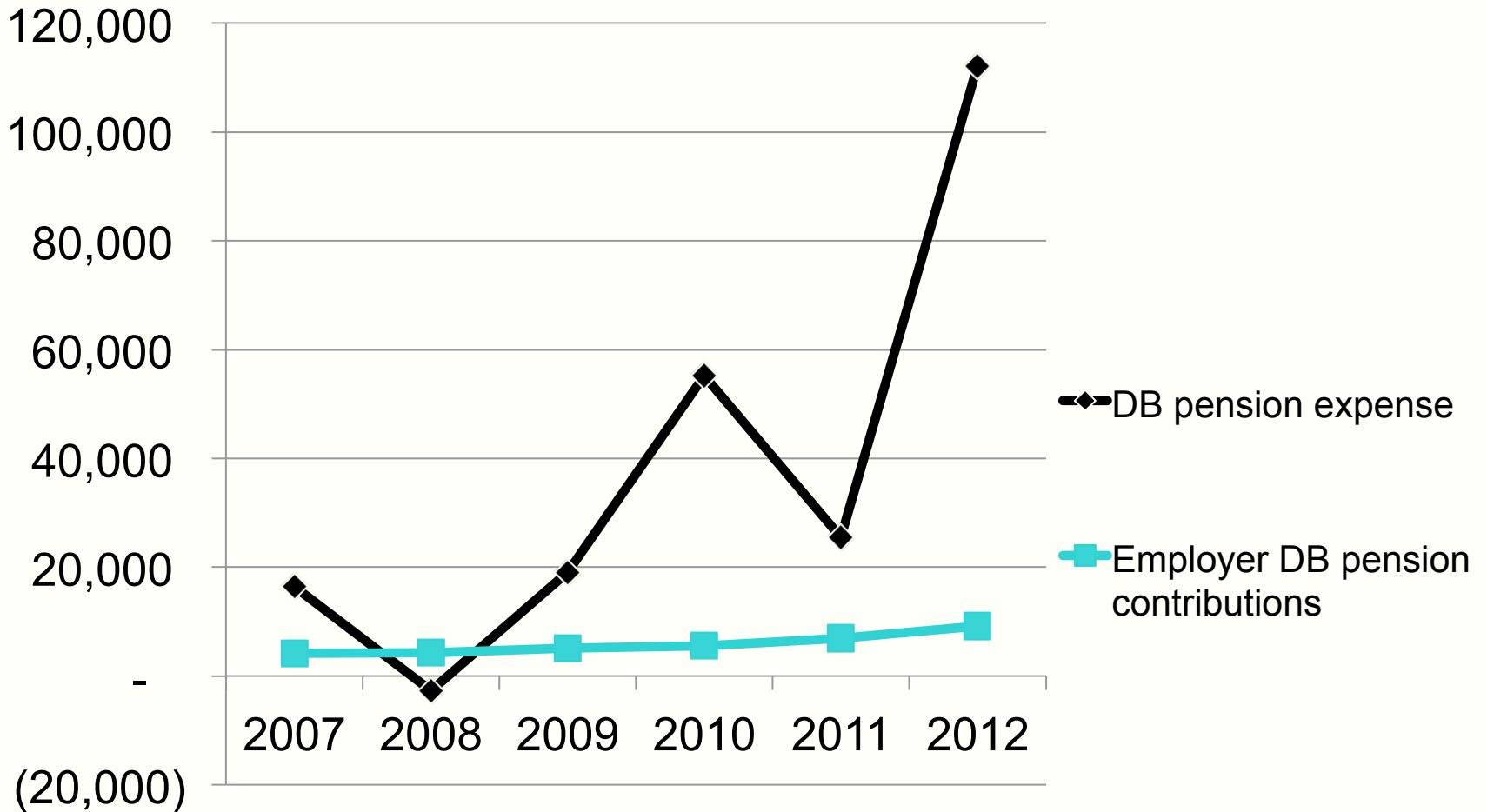
- Smooths out effect of actuarial gains and losses; large gains and losses are spread over several years instead of being recognized as an expense (or gain) of one year
- Makes accounting numbers behave more like funding numbers

# Change in not-for-profit accounting

Not-for-profits must use Accounting Standards for Private Enterprises for much of their accounting, including pension plans. Starting in 2013, the defer-and-amortize approach to pension accounting will no longer be allowed. Instead, actuarial gains and losses must be recognized in income when they occur.

# U of Saskatchewan: Immediate recognition

**Defined benefit (DB) pension plan expense vs. contributions (\$ thousands)**





# Immediate recognition: Why does it matter?

Will likely introduce substantial volatility into pension expense and net revenue/operating surplus numbers.

With low interest rates, small changes have large impact on pension expense. If operating surplus is already low (which you would expect with a not-for-profit), the volatility in pension expense can make the operating surplus look unreliable.

**IMPORTANT:** Pension expense has no immediate on Cash.

# U of S: Net revenue vs. adjusted net revenue (replace pension expense with pension funding)

