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# Presentation on Pension Matters

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## Agenda

- Funding the Defined Benefit Pension Promise—Back to Basics
- Current Pension Environment—How Did We Get Here?
- Pension Risk Matters
- University-Specific Solvency Relief
- What Are Other Universities Doing?

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# Starting Point for Any Presentation on University Pension Plans

## Goals for All Stakeholders

- To ensure an effective and sustainable pension system for Ontario universities, with reasonable risk sharing and greater cost certainty for universities and members
- To continue to recognize the importance of pensions in the total compensation package for university faculty and staff
- To have a system that facilitates the systematic retirement of faculty and staff with safe and secure retirement income



# Funding the Defined Benefit Pension Promise— Back to Basics

# Funding the Defined Benefit Pension Promise

## Funding Sources

Member Contributions



University Contributions



Investment Earnings



## Cost of Pension Plan

Benefits paid to members,  
as determined by plan provisions

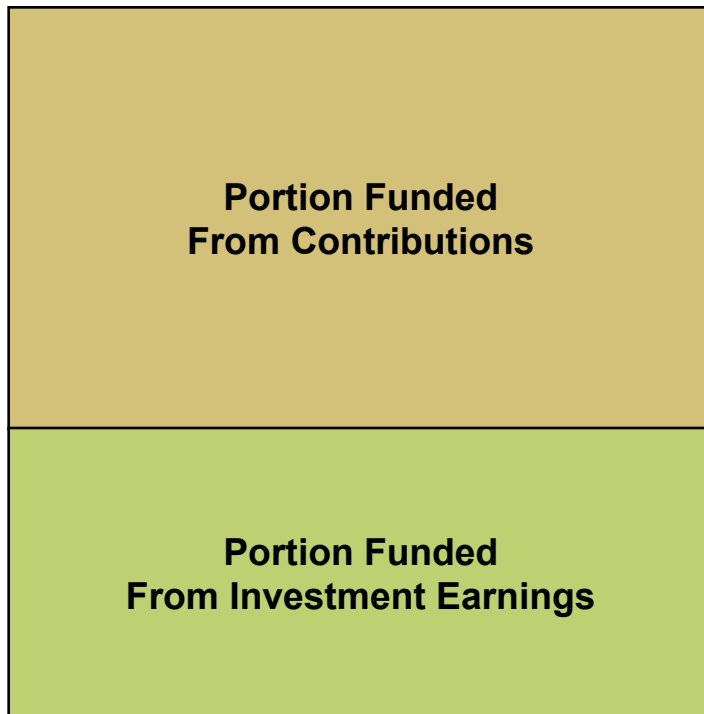
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Costs to administer pension plan

# Balancing Contributions and Investment Earnings

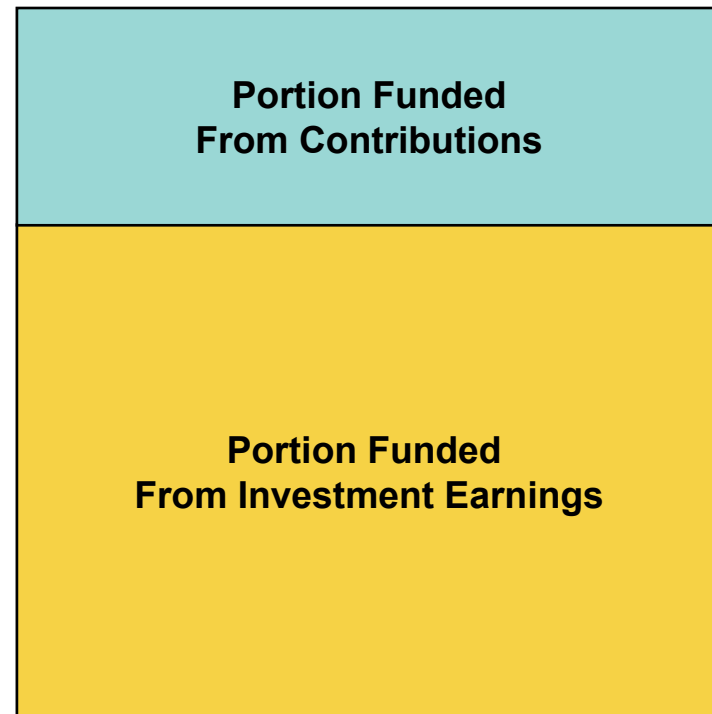
**Take Less Investment Risk  
Target Lower Expected Returns  
Target Higher Expected Contributions**

**Cost of Pension Plan**



**Take More Investment Risk  
Target Higher Expected Returns  
Target Lower Expected Contributions**

**Cost of Pension Plan**

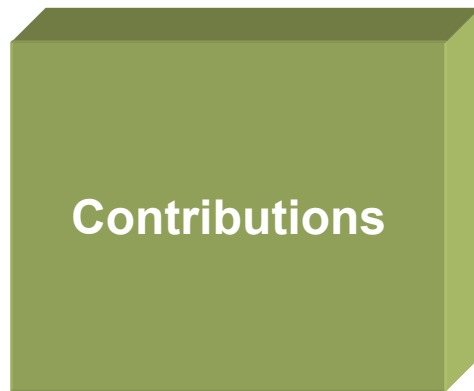


# Pension Funding Risk

Long-Term Risk	Short-Term Risk
<ul style="list-style-type: none"><li>Expected investment return that was used to set the funding balance between contributions and investment income is not achieved</li></ul>	<ul style="list-style-type: none"><li>Short-term volatility of investment return could generate unfunded liabilities which require special payments</li></ul>
<ul style="list-style-type: none"><li>Higher pension benefits than expected due to levels of inflation and salary increases</li></ul>	<ul style="list-style-type: none"><li>Short-term fluctuations in inflation, interest rates and salary increases could generate unfunded liabilities which require special payments</li></ul>
<ul style="list-style-type: none"><li>More pension benefits than expected due to retirement ages and retiree longevity</li></ul>	<ul style="list-style-type: none"><li>Short-term fluctuations in retirement ages and mortality rates could generate unfunded liabilities which require special payments</li></ul>

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# Managing Long-Term Health and Sustainability of a Pension Plan



**Reviewing  
member and University  
contribution levels**



**Monitoring  
if investment return  
expectations are achievable**



**Assessing cost  
of the various  
benefit provisions**



## Comparison of Going Concern and Solvency Valuations

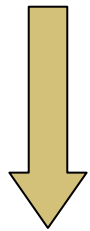
	Going Concern Valuation	Solvency Valuation
<b>Basis for Valuation</b>	Plan continuing	Plan winding up
<b>Discount Rate</b>	Expected long-term rate of return on pension fund based on asset mix, with margin for adverse deviation	Annuity purchase rates and market interest rates for lump sums based on Government of Canada bonds
<b>Future Salary Increases</b>	Included	Excluded
<b>Future Indexation of Pension Benefits</b>	Included	Excluded
<b>Retirement Ages</b>	Range of retirement ages based on plan experience which reflects plan provisions	Earliest possible retirement age which generates the highest value based on plan provisions and legislated "grow-in" provisions
<b>Amortization Periods for Deficits</b>	15 years	5 years (10 years with temporary solvency relief)



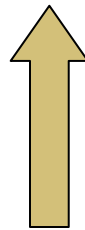
# Current Pension Environment— How Did We Get Here?

## A Confluence of Factors

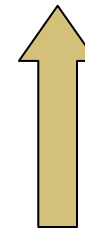
- The “perfect storm” that keeps returning



Market meltdown that created unprecedented negative rates of return



Lower interest rates driving up liabilities



Continually increasing longevity driving up liabilities

- Market cycles that have created long periods of favourable returns (leading to funding excesses) and unfavourable returns (leading to funding shortfalls)
- Plans not establishing sufficient reserving mechanisms to set aside surplus funds generated during the “good times”
- Low limits set by the Federal Government on the amount of surplus that could be retained in a registered pension plan (essentially 10% of liabilities)

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## A Confluence of Factors (continued)

- Continued deferral in the 1980's and 1990's of increases to the *Income Tax Act* maximum pension, followed by significant increases after surpluses were essentially used up
- Pension legislation and case law that discouraged higher levels of funding (asymmetrical risk)
- Expectations from Ontario government in the 1990's that universities should use surplus in their pension funds to address shortfalls in university funding from the province
- Growth in the size of pension plans relative to the size of the operating budgets, including significant portion of fixed retiree liabilities
- Continuing cuts to university operating budgets which diminish ability to cope with pension funding variability



# Pension Risk Matters

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## What Risks Are We Typically Talking About?

- Investment risk
- Inflation risk
- Longevity risk
- Other demographic risks
- Default risk

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## Who Can the Risks Be Shared With?

- Employer
- Active Members
- Pensioners

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## How Could These Risks Be Shared?

- Directly Through the Pension Plan
  - Through increases/decreases to the member contributions to the pension plan or increases/decreases in retirement income from the pension plan
- Indirectly Through the Operating Budget
  - Universities do not have external shareholders; increases/decreases in University contributions flow directly through to the operating budget



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## What Are the Objectives of Any Risk Sharing Discussion?

- Finding the right balance between benefit security, contribution rate stability and intergenerational equity

## Interest Risk

- Declining nominal and real interest rates

Year	Yields on Long-Term Government of Canada Bonds	
	Nominal Bonds	Real Return Bonds
1993	7.85%	4.28%
1997	6.42%	4.14%
2001	5.78%	3.58%
2005	4.39%	1.82%
2009	3.89%	1.91%
2010 (November)	3.65%	1.30%

- More equity risk premium required to achieve expected real rate of return on which current allocation of pension cost between contributions and investment earnings is based

## Longevity Risk

- Improving longevity has lengthened pension payment period:

Mortality Table	Life Expectancy at Age 65 (yrs)	
	Male	Female
1971 Group Annuity Table	15.2	19.2
1983 Group Annuity Table	16.7	21.3
1994 Uninsured Pensioner Table With Projection to 2009	18.6	21.4
1994 Uninsured Pensioner Table With Projection to 2020	19.4	21.8



# Temporary Solvency Funding Relief For Ontario Universities

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## Government's Perspective on University Pension Funding Issues

- ❑ Government has expressed concerns over sustainability of university pension plans without a reconfiguration of current cost sharing with members and without an improvement in cost efficiency of operating the plans
- ❑ Government has focused on the level of member contribution rates and benefit changes made to the large Ontario public sector pension plans to address their funding issues

## Government's Perspective on University Pension Funding Issues (continued)

- ▣ Recent changes to Ontario public sector pension plans:
  - Ontario Teachers' Pension Plan increased member and matching employer contribution rates to 10.4%/12.0%; reduced guaranteed indexation for post-2009 benefits from 100% of CPI to 50% of CPI (indexation beyond 50% of CPI based on plan funded status)
  - Colleges of Applied Arts and Technology Pension Plan increased member and matching employer contribution rates to 12.1%/10.3%/12.1%; guaranteed indexation at 75% of CPI eliminated for post-2007 benefits
  - Healthcare of Ontario Pension Plan eliminated guaranteed 75% of CPI indexation for post-2005 benefits
  - Ontario Public Service Pension Plan increased member contribution rates to 6.4%/9.5%
  - OPSEU Pension Trust is increasing member contribution rates and matching employer contribution rates from 6.4%/8.0% to 9.4%/11.0% over a three-year period
  - OMERS is increasing member contribution rates and matching employer contribution rates from 6.4%/9.7% to 9.3%/12.6% over a three-year period

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## Legislative/Regulatory Framework

- Temporary solvency funding relief introduced for Ontario universities on August 5, 2010
- Phase 2 of broader pension reform legislation, which focuses on pension funding rules, introduced on August 24, 2010
- Regulation for university-specific solvency relief expected to be issued between mid-December and mid-January

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## Elements of Temporary Solvency Funding Relief

- ❑ Temporary solvency funding relief driven off date of required valuation:
  - August 1, 2010 for University of Guelph Pension Plans
- ❑ Two stages to temporary solvency funding relief:
  - Stage One:
    - > Three-year moratorium from valuation date on funding solvency deficit, subject to minimum special payments (e.g., going concern special payments cannot be less than interest charge on solvency deficit)
    - > Requires University to submit a plan on how it intends to address sustainability (to be shared with members and bargaining agents)
    - > Likely no requirement to file actuarial valuation in three-year period (i.e., next required valuation as of August 1, 2013)
  - Stage Two:
    - > Funding of solvency deficit at end of three-year moratorium required but based on 10-year amortization period (versus regular 5-year period)
    - > Requires University to demonstrate changes have been made to enhance sustainability





# What Are Other Universities Doing?

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## Funded Status of Canadian University Pension Plans

- Wide range of plan types, provisions and cost-sharing arrangements
- Based on data provided in late 2009, going concern funded ratios primarily fall in the 75% to 85% range based on the market value of assets
- Solvency funded ratios much more varied depending on plan provisions and provincial pension legislation

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## Recent Changes to University Pension Plans

### ▣ University of Waterloo

- Increased member contribution rates from 4.55% up to YMPE / 6.50 above YMPE to 5.80% up to 1x YMPE / 8.30% between 1x and 2x YMPE / 9.60% above 2x YMPE
- Removed indexing in deferral period (except for long-service employees)
- Removed commuted value option for members age 55 and over

### ▣ Trent University (Faculty Plan)

- Raised threshold for excess interest indexing and limited indexing in any one year to 50% of CPI
- Increased member contribution rates from 6.5% to 7.0% permanently and to 9.0% for a three-year period

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## Recent Changes to University Pension Plans (continued)

### ➤ McMaster University

- Increased member contribution rates to 6.50% up to YMPE / 8.75% above YMPE (all groups except Faculty)
- 80-point rule changed to 85-point rule for new hires and phased in over 10 years for existing members (Faculty and management)
- Added age 60 requirement to 80-point rule for unionized administrative staff and introduced lower provisions for new hires

### ➤ Alberta Universities Academic Pension Plan (jointly-trusteed plan)

- Increased member contribution rates from 8.27% up to YMPE / 11.21% above YMPE to 9.77% up to YMPE / 12.71% above YMPE

### ➤ McGill University

- Removed DB guarantee and annuitization option from hybrid pension plan for new hires (i.e., defined contribution plan for new hires)

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## Recent Changes to University Pension Plans (continued)

- University of Montreal (risk-shared plan)
  - Increased member contribution rates to 7.40% up to YMPE / 9.90% over YMPE
- UBC Staff Plan (risk-shared plan)
  - Increased member contribution rates
  - Lowered benefit formula for future service
  - Removed commuted value option for members age 55 and over



# Questions?