
UNIVERSITY OF
TORONTO

# University of Toronto Pension Plans

## Annual Financial Report

## For the Year Ended June 30, 2008

# Highlights[1]

## As at July 1, 2008

### With Comparative Figures at July 1, 2007

| At July 1, 2008 (millions of dollars) | Accrued Liabilities | Market Value of Assets | Market surplus (deficit) |
|---|---|---|---|
| **University of Toronto Pension Plan (RPP)** | | | |
| Going concern actuarial valuation | 2,889.6 | 2,724.2 | (165.4) |
| Solvency actuarial valuation [2] | 2,940.4 | 2,723.2 | (217.2) |
| Hypothetical wind-up actuarial valuation [2] | 3,862.2 | 2,723.2 | (1,139.0) |
| **University of Toronto (OISE) Pension Plan - RPP(OISE)** | | | |
| Going concern actuarial valuation | 104.2 | 105.9 | 1.7 |
| Solvency actuarial valuation [2] | 108.7 | 105.5 | (3.2) |
| Hypothetical wind-up actuarial valuation [2] | 140.6 | 105.5 | (35.1) |
| **Supplemental Retirement Arrangement (SRA)** | | | |
| Going concern actuarial valuation | 139.8 | 174.2 | 34.4 |

| At July 1, 2007 (millions of dollars) | Accrued Liabilities | Market Value of Assets | Market surplus (deficit) |
|---|---|---|---|
| **University of Toronto Pension Plan (RPP)** | | | |
| Going concern actuarial valuation | 2,745.8 | 2,929.7 | 183.9 |
| Solvency actuarial valuation [2] | 2,628.4 | 2,928.7 | 300.3 |
| Hypothetical wind-up actuarial valuation [2] | 3,441.6 | 2,928.7 | (512.9) |
| **University of Toronto (OISE) Pension Plan - RPP(OISE) - including partial wind-up** | | | |
| Going concern actuarial valuation | 115.3 | 131.6 | 16.3 |
| Solvency actuarial valuation [2] | 113.9 | 131.2 | 17.3 |
| Hypothetical wind-up actuarial valuation [2] | 142.9 | 131.2 | (11.7) |
| **Supplemental Retirement Arrangement (SRA)** | | | |
| Going concern actuarial valuation | 145.4 | 170.0 | 24.6 |

| Going Concern Key Actuarial Assumptions | July 1, 2008 | July 1, 2007 |
|---|---|---|
| Increase in consumer price index (CPI) | 2.5% | 2.5% |
| Increase in salaries | 4.5% | 4.5% |
| Discount rate on liabilities | 6.5% | 6.5% |

[1] Going concern valuations assume that the plan is continuing to operate for the foreseeable future. Solvency and hypothetical wind-up valuations assume that the plan will be wound-up as at the valuation date. See pages 10 and 11 for a full discussion of the different types of valuations.

[2] The market value of assets are net of wind-up expenses which are estimated to be $1.0 million for the RPP and $0.4 million for the RPP(OISE).

# TABLE OF CONTENTS

# Purpose of this Report

The University of Toronto (the "University") provides pension benefits to current and future retired members via three defined benefit pension plans:

- the University of Toronto Pension Plan (RPP).
- the University of Toronto OISE Pension Plan (RPP(OISE)).
- the Supplemental Retirement Arrangement (SRA), an unregistered arrangement that provides pensions above the maximum pension benefit allowed under the Income Tax Act, based on a University specified maximum salary of $150,000.

The Governing Council of the University of Toronto is the legal administrator of the registered RPP and RPP(OISE), both of which are separate legal entities. Plan advisors are State Street Trust Company (custodian of assets), Hewitt Associates (actuaries and consultants), Ernst & Young (external auditors) and University of Toronto Asset Management Corporation (investment manager). The Vice-President, Human Resources and Equity, is responsible for formulation of pension policy, member communication, benefits administration and negotiation of benefits. The Vice-President, Business Affairs, is responsible for the financial administration of the funds including liaison with the custodian, actuarial consultant, investment manager and external auditors.

The purpose of this report is to provide the Audit Committee and the Business Board with:

- an assessment of the current financial health of the plans.
- an assessment whether the current policies and strategies are adequate to ensure sufficient assets to pay current and future pension benefits.
- an assessment whether the requirements for provision of pensions can be achieved without exposing the University to undue risk. Undue risk would be a requirement to make large unplanned special payments to meet regulatory requirements.

The purpose of this report is also to seek approval of the audited pension fund financial statements for the RPP and RPP(OISE) at June 30, 2008.

# How a Defined Benefit Pension Plan Works

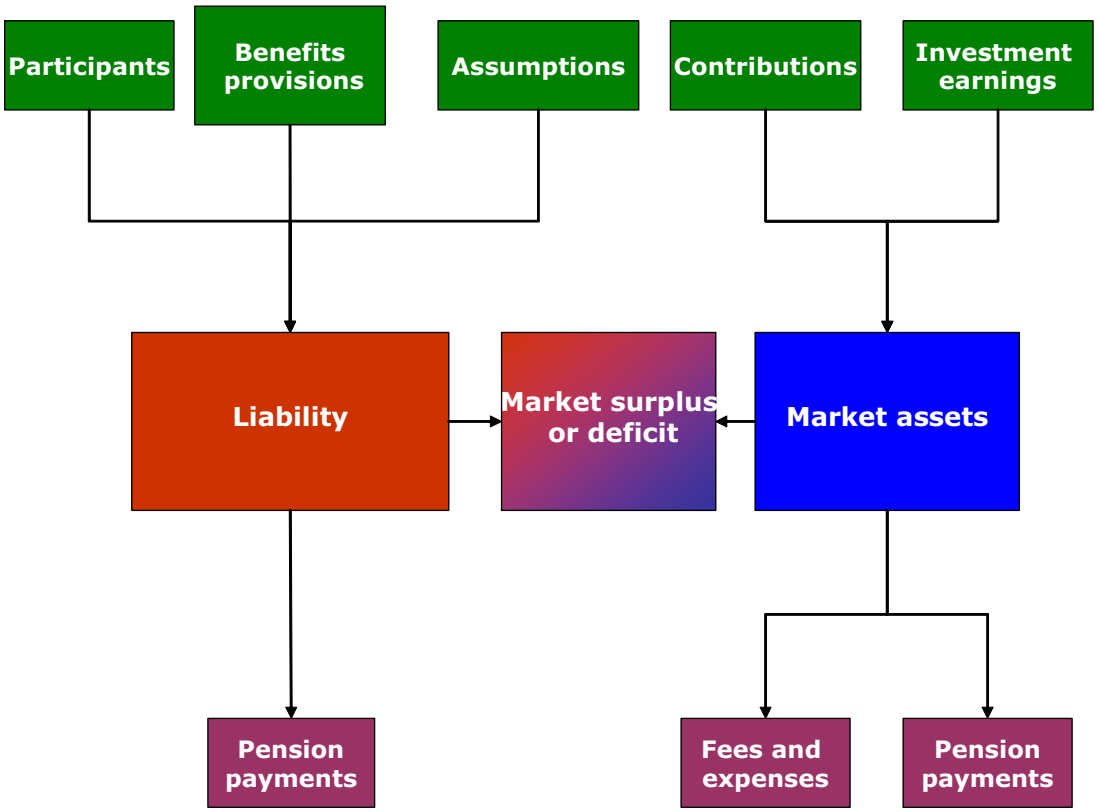
A pension plan is any arrangement by which an employer promises to provide retirement income to members. There are essentially two types of pension plans currently permitted under pension legislation in Ontario – a defined contribution plan and a defined benefit plan. A defined contribution plan provides pension benefits to each retired member on the basis of member and employer contributions and investment earnings on those contributions over time. The ultimate pension benefit depends on the amount of funding contributed and the investment earnings both before and after the date of retirement. The investment risk is borne by the member in a defined contribution plan.

A defined benefit pension plan provides pension benefits to each retiring member on the basis of defined percentages applied to salary and years of service. Members and the employer provide funding but the employer essentially guarantees the ultimate pension benefit that results from the salary and years of service formula. The investment risk is borne by the employer in a defined benefit plan.

The University of Toronto pension plans are defined benefit plans and the pension benefits are ultimately guaranteed by the University. For each year that the member works and participates in the plan, an additional year of pensionable service is earned. At retirement, the number of years of pensionable service is multiplied by a percentage of the average of the highest 36 months of average earnings to determine the annual pension payable to that person. After retirement, pension payments are indexed at 75% of the consumer price index (CPI).

The objective of a defined benefit pension plan is to ensure that there are sufficient resources to pay for the current pensions of retired members and to ensure that there will be sufficient funds to pay for the pensions of members who will retire in the future. The plan engages an actuary to figure out what the annual funding of the plan must be to ensure that this objective is met.

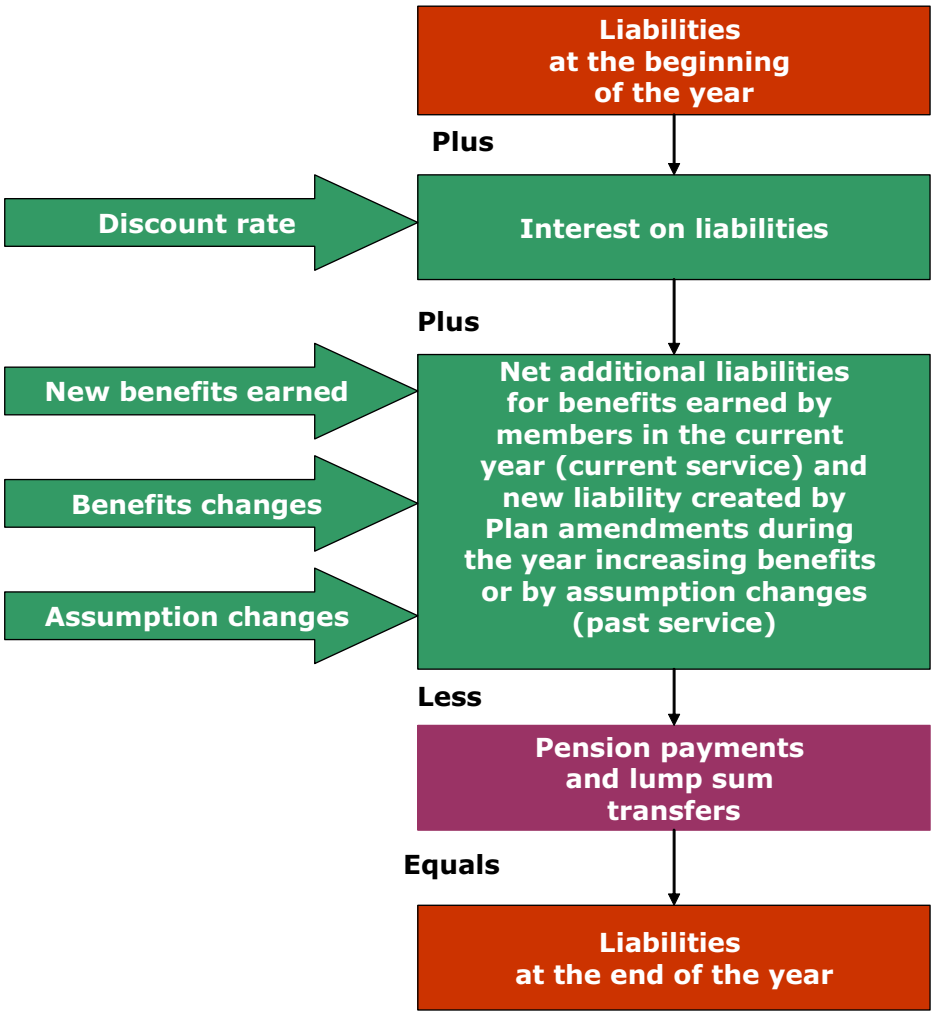
The challenge for defined benefit plans is to find a way to reasonably estimate the current net present value of what pensions will be paid to retired members over time (the liabilities) and to set aside money now to support payment of those pensions in future (the assets). The relationship is illustrated as follows.




As you can see from the diagram, the difference between the estimated net present value of current and future pensions (the liabilities), and the amount of funds actually on hand (the market assets) is the market surplus or deficit.

## The Liability

The net present value of current and future pensions (the liability) depends on assumptions made about the members in the pension plan, including their length of service, their estimated salaries at retirement, the kinds of benefits they are receiving or will receive, and future inflation. The liability represents the discounted net present value of pension benefits earned for service up to the valuation date, based on those assumptions. The following table shows how liabilities change from year to year.



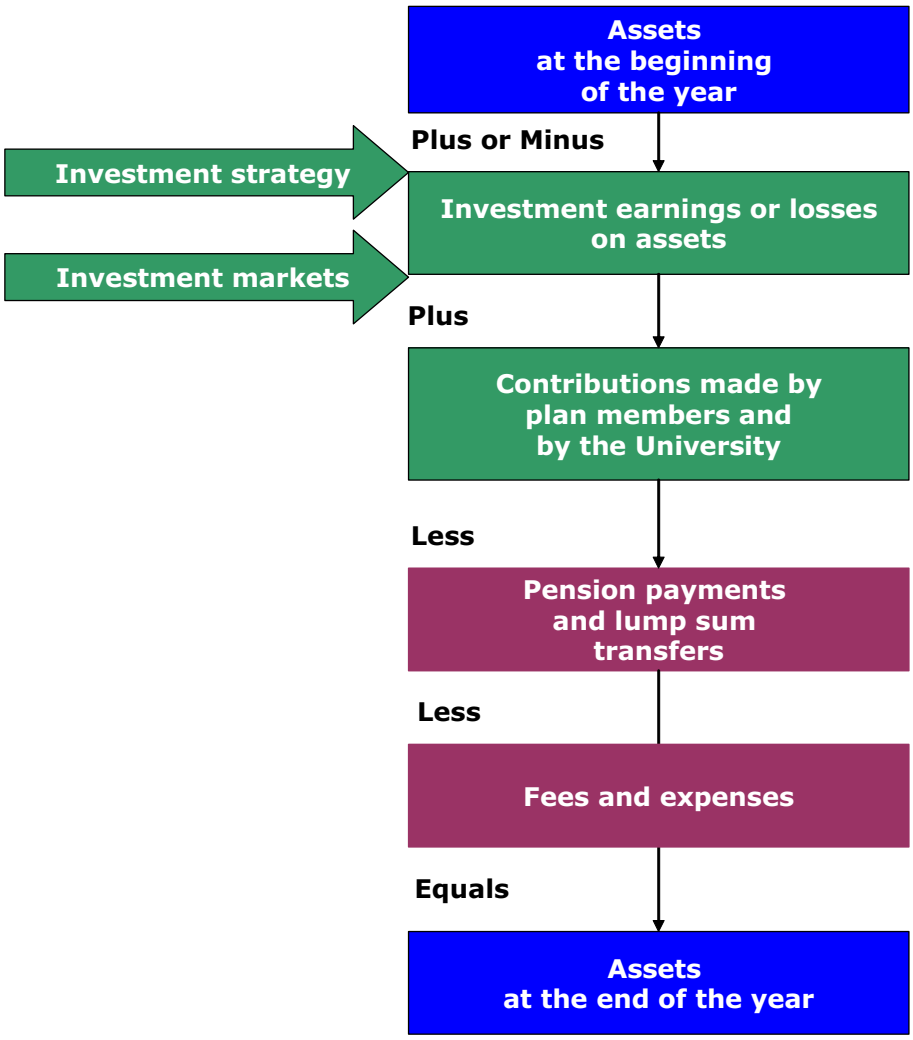

As shown above, liabilities change when:

- members work an additional year, thus increasing their pension benefit at retirement. This is known as current service and increases the liability.
- members receive a larger pension benefit for the same salary and years of service through improvements to past service benefits. This increases the liability.
- new participants are added to the plan. This adds to the liability over time.
- assumptions that forecast the amount of pension benefits to be paid in future (e.g. salary increase assumption) change. These changes may increase or decrease the liability.
- assumptions that discount future liabilities to the present change. Increases in the discount rate DECREASE liabilities while decreases in the discount rate INCREASE liabilities.

Liabilities also have interest calculated on them, just like any other discounted obligation that has to be paid in future. This interest is added to the liabilities and also increases them.

## The Assets

The amount of money that has actually been set aside (the assets) comes from only two sources: 1) contributions from members and from the University (including transfers in from other plans), and 2) investment earnings. The pension financial statements report the assets at fair value (which is essentially market value) at June 30th. (The SRA assets are University assets which are reported in the University's financial statements at April 30th of each year and which are also valued at June 30th each year and included in a footnote in the SRA actuarial report.) The following table shows how assets change from year to year.



## The Surplus or Deficit

The difference between the liabilities and assets is a surplus if the assets exceed liabilities or a deficit if liabilities exceed assets. When the assets are valued at market value, the difference is a "market" surplus or deficit. Pension regulation also permits an "actuarial" surplus or deficit, whereby changes in market value are smoothed over more than one year instead of being recognized immediately. The actuarial surplus is used for certain requirements under the Pension Benefits Act. However, for our financial evaluation purposes, to assess the financial health of our plans, the market surplus or deficit is more useful, since it records all gains or losses immediately. This report and our analysis focus on the market value of assets and the market deficit.

## Tools for Assessment of Pensions

The key tools for assessing the current financial health of the pension plans are actuarial reports and financial statements:

- **Pension financial statements** provide an audited confirmation of the fair value (essentially market value) of the pension assets contained in each registered plan, which is a separate legal entity, at the valuation date. The plan fiscal year for the RPP and RPP(OISE) is July 1 to June 30. Assets for each registered plan are valued at June 30 of each year and reported on the registered pension plan balance sheets. The changes in assets from one year to the next are shown on the registered pension plan income statements, which are called the *statement of changes in net assets available for benefits*. (SRA assets are University assets, which are reported on the University's audited financial statements.)

- **Pension actuarial reports** estimate the net present value of the pension benefits based on assumptions, as noted earlier, and compare that net present value to the audited assets reported in the financial statements to determine the financial status of the plan at the valuation date. For all plans, the actuarial valuation date is July 1 of each year, incorporating the annual salary increases that become effective on that date.

Various financial reporting and regulatory requirements result in four types of valuations that make different assumptions and that produce very different results. Under these different types of valuations, the liabilities can change dramatically. However the assets are normally valued at fair value as of the date of valuation, with some very minor adjustments made to asset values for different types of valuations. Here are the similarities and differences between them.

**Going Concern Actuarial Valuation:**

This valuation assumes that the pension plan is a going concern. This means that it is expected to be continuing to operate for the foreseeable future. Assumptions that determine the net present value of the benefits are long-term. Assets are valued at the fair value as of the date of valuation as reported on the audited financial statements. This valuation is done for a single point in time, as of July 1 each year and is used for purposes of funding the pension plan.

**Solvency Actuarial Valuation:**

This valuation varies from the going concern valuation in that it assumes the plan will be wound-up on the valuation date and uses a market interest rate assumption. It assumes that benefits will be settled through purchase of annuities or payment of lump sum values. However, indexation (inflation) after termination or retirement is excluded from the liability calculation, in accordance with regulation. This valuation utilizes the audited fair value of the assets as reported on the audited financial statements, and adjusts that audited value with a provision for hypothetical wind-up costs. It is done on the plan year, as of July 1 each year. To the extent there is a deficiency under a filed solvency valuation, additional funding may be required.

**Hypothetical Wind-up Actuarial Valuation:**

This valuation takes the solvency valuation and provides for the indexation that occurs before and after retirement. It also assumes that benefits will be settled through purchase of annuities or payment of lump sum values. And it also adjusts the audited fair value of the assets with a provision for

hypothetical wind-up costs. It is done on the plan year, as of July 1 each year.

**Accounting Valuation:**

This valuation is done for accounting purposes and estimates numbers that are required to be included in the University's financial statements (not the pension financial statements). This valuation is done on the University's fiscal year end, April 30th. Although this valuation assumes that the pension plans are a going concern, it does not permit any advance recognition of risk premium that is expected to be earned from investments in equities or other types of non-fixed income risk-bearing investments. Therefore, it requires that the liabilities be discounted at the then-current long-term corporate bond rate. The results from this valuation can be quite different from a going concern actuarial valuation, depending largely on the size of the difference between the discount rates used in the two cases, and contributes to significant differences we are currently seeing between going concern actuarial results as reported in the actuarial reports and accounting results as reported in the University financial statements. SRA assets are not taken into account in the accounting valuation. However, liabilities for salaries in excess of the Income Tax Act maximum salary up to the University-specified maximum salary ARE included in the accounting valuation. This also contributes to the differences between the accounting valuation and the going concern valuation.

While it is important to be aware of the existence of these various valuations, and their purposes, this report assumes that the pension plans are going concerns and evaluates pension financial health using the going concern actuarial valuation. The following sections will show the status of the pension plans at July 1, 2008 and will apply the elements of defined benefit pension plans shown in the diagram on page 6 to the University pensions, with particular emphasis on the assumptions, the contributions, and the investment earnings, and their associated policies and strategies.

# Pension Status at July 1, 2008

At July 1, 2008, the going concern accrued liabilities and market value of assets for the University of Toronto defined benefit plans were:

| July 1, 2008 | Going Concern Liabilities | Market Value of Assets | Market Surplus (Deficit) | Market Surplus (Deficit) as % of Liabilities |
|---|---|---|---|---|
| RPP | 2,889.6 | 2,724.2 | (165.4) | -6% |
| RPP(OISE) -see note | 104.2 | 105.9 | 1.7 | 2% |
| SRA | 139.8 | 174.2 | 34.4 | 25% |
| Total | 3,133.6 | 3,004.3 | (129.3) | -4% |

At July 1, 2007, the liabilities and assets for the University of Toronto defined benefit plans were:

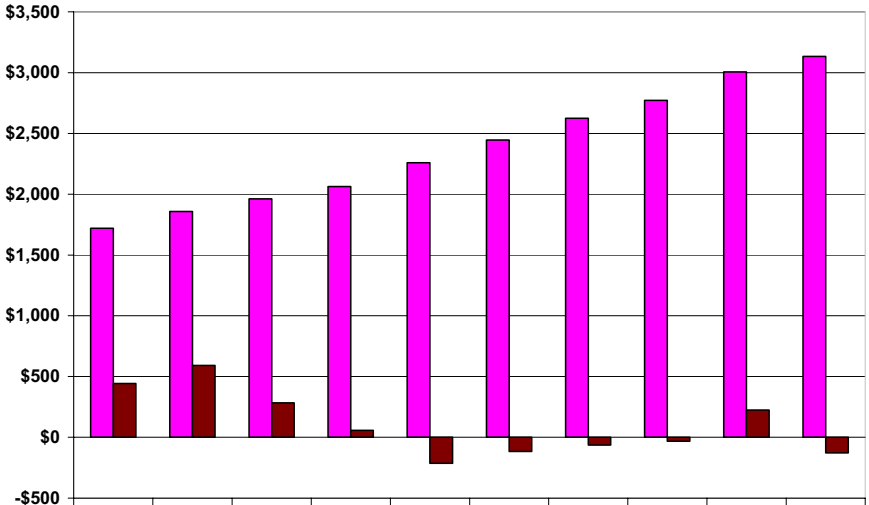
| July 1, 2007 | Going Concern Liabilities | Market Value of Assets | Market Surplus | Market Surplus as % of Liabilities |
|---|---|---|---|---|
| RPP | 2,745.8 | 2,929.7 | 183.9 | 7% |
| RPP(OISE) -see note | 115.3 | 131.6 | 16.3 | 14% |
| SRA | 145.4 | 170.0 | 24.6 | 17% |
| Total | 3,006.5 | 3,231.3 | 224.8 | 7% |

Note: on August 16, 2000, the Superintendent of Financial Services ordered that the Plan be wound-up in part in relation to participants who terminated employment between February 1996 and June 1996 under special voluntary retirement or severance programs in effect at that time. On June 23, 2005, a Partial Plan Wind-up Report was filed with the Financial Services Commission of Ontario to determine the portion of assets allocable to the partial wind-up group as of June 30, 1996, and to update the assets allocable to the partial wind-up group to June 30, 2004. For valuations on or after July 1, 2005, the valuation results exclude assets and liabilities related to partial wind-up participants. They are included in the July 1, 2007 status (above) since they were still part of the plan at that time, and the assets were reported on the June 30, 2007 pension financial statements. On July 1, 2007, after excluding the partial wind-up, the RPP(OISE) going concern accrued liabilities were $100.6 million and the assets were $116.9 million. On October 1, 2007 the Financial Services Commission of Ontario approved the partial wind-up distribution. The valuation results for July 1, 2008 exclude the assets and liabilities related to partial wind-up participants.

As you can see from the above tables, the overall financial health of pensions deteriorated between July 1, 2007 and July 1, 2008. The reasons were mainly poor investment performance offset by additional actual special funding of $28.1 million ($6.7 million to the RPP and $21.4 million to the SRA in 2008) injected by the University in addition to the normal current service cost contributions made by

members and by the University. This amount exceeds the budgeted $27.2 million mainly due to additional transfers made by the University to cover the Voluntary Early Academic Retirement Program plan liability. The special funding of $27.2 million in 2008 exceeded the $5.8 million required to be put into the plans under the terms of the Pension Benefits Act and its regulations. A longer history of combined results for the three plans is shown on the following graph.

**University of Toronto RPP, RPP(OISE)[1] and SRA Combined as at July 1**
**(millions of dollars)**




| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|
| Total accrued liablities | 1,718.9 | 1,857.5 | 1,961.1 | 2,062.6 | 2,258.7 | 2,445.3 | 2,623.6 | 2,771.3 | 3,006.5 | 3,133.6 |
| Total market surplus (deficit) | 442.8 | 591.1 | 284.2 | 57.6 | (213.8) | (115.9) | (63.4) | (31.4) | 224.8 | (129.3) |

[1] Including partial wind-up members in years up to 2007

Until market turmoil began to impact asset market values in 2008, an improvement trend can be seen as part of a larger pattern between 2003 and 2007. In support of pension financial health, the University has the following strategies:

- The pension contribution strategy, approved by the Business Board in January 2004, requires 100% current service contributions by members and the University, and an additional $27.2 million special payment by the University in support of pensions. This strategy was put in place to eliminate the pension deficit and to provide a reserving mechanism to protect against future poor investment markets.

- The pension master trust investment policy that governs the RPP and RPP(OISE) investments, originally approved by the Business Board in April 2003 and confirmed annually, that establishes a risk objective that is an annual standard deviation of 10.0% or less in nominal terms, and a return objective of at least 4.0% real, inflation-adjusted return, over 10 year periods.

- The investment policy for university funds, that governs the long-term capital appreciation pool (LTCAP), including SRA investments, approved by the Business Board in April 2003, that establishes a 10% standard deviation risk tolerance and a 4.0% real investment return target over 10 year periods.

We want to assess whether the pension plans are financially healthy and whether the current strategies are appropriate. To do this we need information on current financial health and projections of future financial health.

## IMPORTANT NOTE

**For the purposes of the following analysis, we have added together the three plans so that the big picture can easily be discerned.**

**However, it is very important to note that each of the registered plans (RPP, RPP(OISE)) is a separate legal entity in which the assets are held in trust. Funds cannot be transferred between the two registered plans or from either of the registered plans to the SRA.**

**SRA assets are not held in trust. For financial accounting purposes the University from time to time appropriates funds which are set aside as a "fund for specific purpose" in respect of the obligations under the SRA. In accordance with an Advance Income Tax Ruling, which the University has received, such assets do not constitute trust property, are available to satisfy University creditors, may be applied to any other purpose that the University may determine from time to time, are commingled with other assets of the University, and are not subject to the direct claim of any members.**

**Strategies that are put in place from time to time must take these important restrictions into account. Nevertheless, for purposes of analysis and assessment of the University's ability to satisfy the pension promise, it is helpful to consider the registered plans and the SRA together since the pension payment to any particular member may include two of these entities. Liabilities move back and forth between the RPP and the SRA depending on increases in the Income Tax Act maximum pension, increases in salaries and age at retirement.**

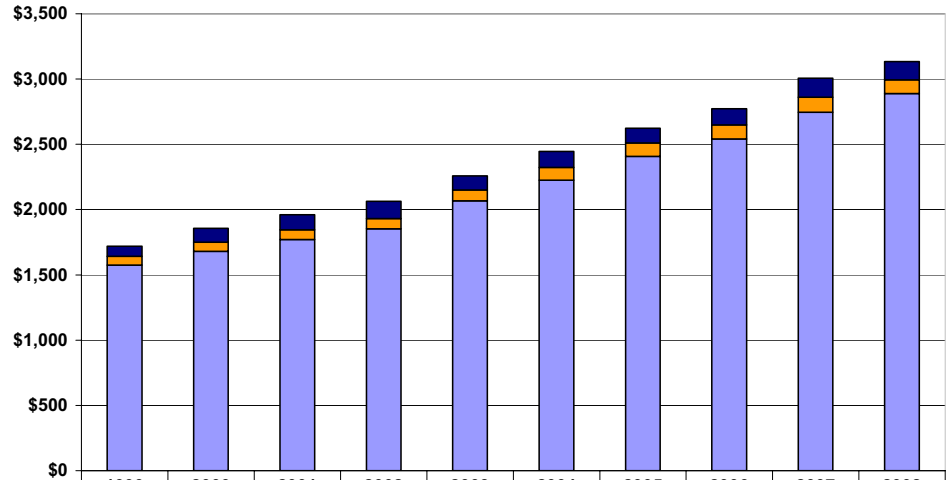
# Pension Liabilities

Going concern pension liabilities for the University of Toronto plans totaled $3,133.6 million at July 1, 2008, comprising:

| | |
|---|---|
| $2,889.6 million | RPP pension liabilities |
| $ 104.2 million | RPP(OISE) pension liabilities |
| $ 139.8 million | SRA pension liabilities |

The growth in those liabilities since 1999 is shown on the following chart.

**Going Concern Pension Liabilities [1]**
**at July 1**
**(millions of dollars)**




| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|
| SRA liabilities | 77.9 | 107.9 | 116.8 | 131.8 | 108.6 | 122.7 | 112.9 | 122.1 | 145.4 | 139.8 |
| RPP(OISE) liabilities | 65.9 | 69.4 | 73.8 | 77.9 | 83.4 | 97.6 | 103.7 | 108.6 | 115.3 | 104.2 |
| RPP liabilities | 1,575.1 | 1,680.2 | 1,770.5 | 1,852.9 | 2,066.7 | 2,225.0 | 2,407.0 | 2,540.6 | 2,745.8 | 2,889.6 |

[1] Including partial wind-up members in RPP(OISE) liabilities in years up to 2007

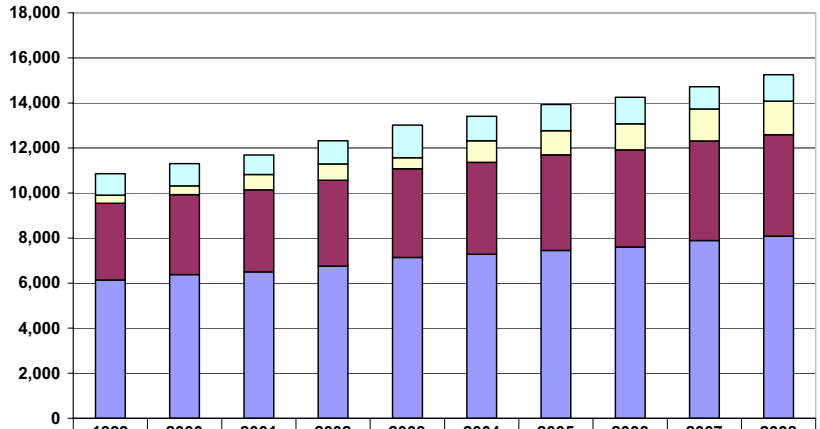
As noted earlier, pension liabilities are valued at July 1 and are dependent on a number of factors. The following sections will examine the impact of these factors on the total going concern pension liabilities for the University of Toronto plans.

# Pension Liabilities

## Participants

The RPP is a growing plan, with member participation increasing over time. An increase in the number of plan participants adds to pension liabilities over time. At July 1, 2008, total member participation was 15,253.

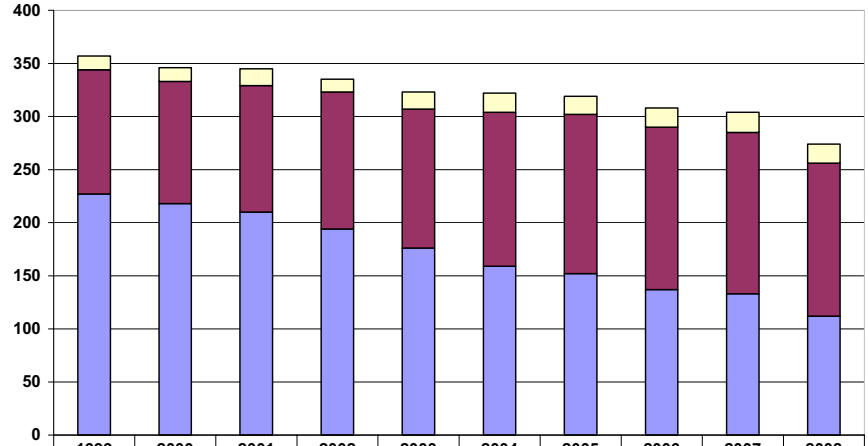
**RPP**
**Member Participation**
**at July 1**




| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|
| Suspended, exempt, pending | 957 | 987 | 868 | 1,033 | 1,447 | 1,076 | 1,164 | 1,178 | 999 | 1,168 |
| Terminated, vested | 362 | 396 | 677 | 724 | 489 | 961 | 1,072 | 1,154 | 1,413 | 1,493 |
| Retired members | 3,409 | 3,543 | 3,642 | 3,813 | 3,942 | 4,078 | 4,246 | 4,323 | 4,421 | 4,514 |
| Active members | 6,137 | 6,381 | 6,504 | 6,759 | 7,141 | 7,288 | 7,452 | 7,599 | 7,894 | 8,078 |

The RPP(OISE) is a closed plan, and has been closed to new entrants since 1996 when the Ontario Institute for Studies in Education had merged with the University of Toronto's Faculty of Education. All new employees who are eligible for the University's pension plan become members of the RPP. Therefore, the RPP(OISE) has a declining participation that totaled 274 at July 1, 2008.

**RPP(OISE)**
**Member Participation [1]**
**at July 1**




| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|
| Terminated, vested | 13 | 13 | 16 | 12 | 16 | 18 | 17 | 18 | 19 | 18 |
| Retired members | 117 | 115 | 119 | 129 | 131 | 145 | 150 | 153 | 152 | 144 |
| Active members | 227 | 218 | 210 | 194 | 176 | 159 | 152 | 137 | 133 | 112 |

[1] Including partial wind-up members up to 2007. The partial wind-up distribution was approved by the Financial Services Commission of Ontario on October 1, 2007, and partial wind-up members have been excluded in 2008.

# Pension Liabilities

## Pension Benefit Provisions

The pension benefit is the provision of retirement income to participants in the pension plan. It is calculated on the basis of defined percentages ("benefit rates") applied to the salary and years of pensionable service for each plan participant. Pension benefits are the same for the members in any particular member group, and the SRA provides coverage for all members whose salary exceeds the Income Tax Act maximum pension, regardless of whether they have service in the RPP or the RPP(OISE).

Benefits improvements arise from negotiations with member groups and from mediation and arbitration and are not normally determined unilaterally. Pension benefits are the same for the RPP and the RPP(OISE), with the SRA providing pensions above the Income Tax Act maximum benefit in support of both plans.

Key benefit provisions are as follows.

**Benefits accrual:** Pension benefits accrue at the rate of 1.5% of highest average salary up to the average CPP maximum salary (1.6% for USW members, various other unions and non-unionized administrative staff) plus 2.0% of highest average salary in excess of the average CPP maximum salary to a maximum of $150,000 per annum.

**Retirement dates:** The normal retirement date is the June 30$^{th}$ following the 65$^{th}$ birthday. Retirement is possible within 10 years of the normal retirement date, with a minimum of 2 years of service, with a reduction of 5% per annum between actual retirement and normal retirement. No reduction is applied once members reach 60 years of age, and meet certain service requirements, which vary by staff group. There is no longer a requirement to retire at age 65. There are various early retirement windows with various end dates in place for certain administrative staff and unions.

**Cost of living adjustments:** The pension benefits of retired members are subject to cost of living adjustments equal to the greater of a) 75% of the increase in the CPI for the previous calendar year to a maximum CPI increase of 8% plus 60% of the increase in CPI in excess of 8% and b) the increase in the Consumer Price Index for Canada (CPI) for the previous calendar year minus 4.0%. The first cost of living adjustment is made at date of retirement.

**Augmentation:** In the past there have been plan augmentations that resulted in an increase in inflation protection to the augmentation date from 75% of CPI to 100% of CPI.

An improvement in the benefit being provided to current retired members and/or to be provided to future retired members results in an increase to the pension liabilities. There were no new benefit improvements during the year ended July 1, 2008.

When benefits improvements are agreed, they may be implemented in various ways – for active participants only, or for both retired and active participants, on current service only or on both current and past service. When provided for current service, they require current service contributions from members and the university on a go forward basis. When provided for past service as well as current service, they require current service contributions and funding of past service costs as well. Benefits improvements to retired persons, such as augmentation, generate past service costs. There are only two ways of funding defined benefit pension plans, including benefits improvements – contributions and investment earnings. These elements of defined benefit plans will be discussed in later sections of this report.

As noted earlier, the SRA provides defined benefits for members with salaries in excess of the salary at which the Income Tax Act maximum pension is reached (currently $127,892, increasing to $133,000 in 2009 and 3.5% per annum thereafter) to a capped maximum salary of $150,000 per year. For many years, the Income Tax Act maximum pension was fixed, resulting in growing membership in the

SRA. Beginning in 2004, the Income Tax Act maximum pension has begun to increase at a rate exceeding the rate of inflation. Therefore, beginning in 2004, participation in the SRA fluctuates depending upon the relationship between salary increases for member plan participants and the increase in the Income Tax Act maximum pension.

Over time, provided that government policy remains unchanged and the Income Tax maximum pension continues to increase at the rate of increase in the average industrial wage, and provided that the RPP and RPP(OISE) retain maximum salaries at $150,000, participation in the SRA is expected to decline, eventually to zero once the Income Tax Act maximum pension is reached at a salary of $150,000. At the current rates of increase, this would be expected to occur in the period from 2012 to 2014. The liabilities in the SRA dropped from $145.4 million in 2007 to $139.8 million in 2008.

# Pension Liabilities

## Assumptions

No one knows what salaries will be for member plan participants at retirement, and therefore, what their actual pension benefit will be, how long plan participants will receive those benefits after retirement or what the cost of living adjustments will be after retirement. Actuarial assumptions are used to estimate the pension benefits that will be paid to current and future retired members in the future. Those estimated pension benefits are then discounted to the present time, using net present value calculations using an interest discount rate.

Changes in actuarial assumptions impact the value of the liabilities. Some changes increase liabilities while other changes decrease liabilities and some assumptions are interrelated in their impact on the value of the liabilities.

Actuarial assumptions are established annually by the plan's actuary, Hewitt Associates, and reviewed with university administration. The same actuarial assumptions are in place for all three pension plans. Key actuarial assumptions at July 1, 2008 are as follows (see appendix 3 for a full list).

| **Assumption** | **Description** | **Impact of assumption change on liabilities** |
|---|---|---|
| **Retirement age** | *Academic staff and librarians* – retirement rates from ages 60 to 70, but not earlier than one year after valuation date, subject to early retirement provisions, if applicable. *Administrative Staff, unionized administrative staff, unionized staff and research officers* – age 63, subject to early retirement provisions. | The earlier the retirement age with an unreduced pension, the higher the liability. |

| | | |
|---|---|---|
| **Mortality rates:** | 1994 Uninsured Pensioner Mortality Table, with mortality improvements under Scale "AA" projected to 2015. | Increases in life span increase liabilities. |
| **Increase in consumer Price index (CPI):** | 2.5% per annum. | An increase in CPI alone increases liabilities, but should be considered in concert with salary increases and discount rate. |
| **Cost of living adjustments:** | 1.875% per annum (75% of CPI). | An increase in cost of living adjustments increases liabilities**.** |
| **Increase in CPP maximum salary:** | 3.5% per annum. | An increase in CPP maximum salary decreases liability since pensionable service is accumulated at 1.5% or 1.6% up to the CPP maximum salary and at 2.0% over that maximum. |
| **Increase *in Income Tax Act* maximum benefit limit:** | $2,333.33, increasing to $2,444.44 in 2009, 3.5% thereafter (assumes a maximum salary of $127,892, increasing to $133,000 in 2009 and at 3.5% per annum thereafter). | An increase in the Income Tax Act maximum pension increases the liability in the RPP and decreases the liability in the SRA. |
| **Increase in Salaries:** | 4.5% per annum (2.5% CPI plus 2.0% merit and promotion). | An increase in the total assumption, whether impacted by CPI or by merit and promotion, increases liabilities. |

| | | |
|---|---|---|
| **Interest rate (Discount rate on liabilities):** | 6.5% per annum (2.5% CPI plus 4.0% real return). | An increase in the interest rate, whether through an increase in CPI or real return, DECREASES liabilities. Conversely, a decrease in the interest rate INCREASES liabilities. |

It is very important to note that these assumptions are **long-term** assumptions. In other words, they predict the results over a very long-term horizon.

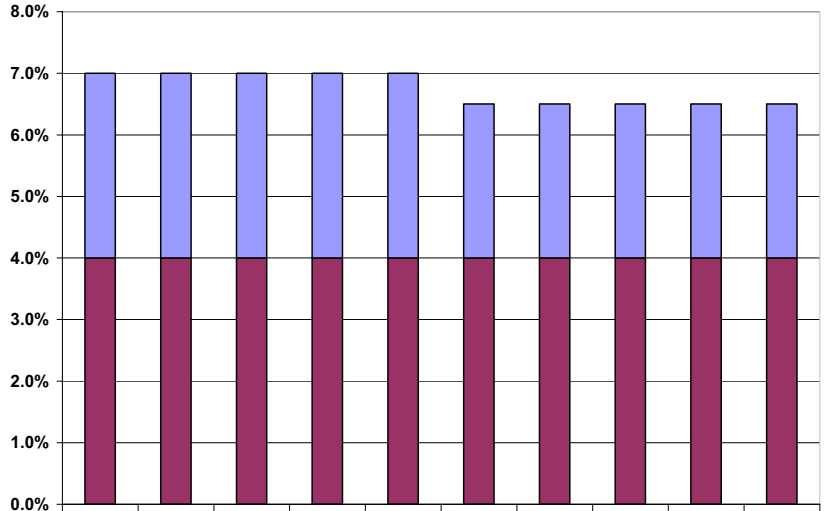
Each year, the actuarial valuation records the actual results and compares them to the assumptions. These variances, over time, provide a rationale for ongoing adjustments to the assumptions. Consistent variances in one direction, either negative or positive, suggest that an assumption needs to be changed. When actuarial assumptions do change, they tend to be adjusted in very small increments, rather than in the larger swings that can be experienced in the short and medium term.

Key interdependent assumptions are the assumed increase in CPI, and the assumed increases in salaries and the interest rate (discount rate), both of which reflect the CPI assumption. At July 1, 2008, they are 2.5% increase in CPI, 4.5% increase in salaries (2.5% CPI and 2.0% merit and promotion), and 6.5% interest rate (2.5% CPI and 4.0% real return). **There has been no change in these assumptions from 2007.**

## A Matter of Interest (Discount Rate on Liabilities)

The following chart illustrates the history of this assumption from 1999 and shows that the discount assumption has remained quite steady over the past several years with the only variation coming from changes in CPI. For purposes of the actuarial report, a 4.0% real return discount assumption has been in place for many years.

**University of Toronto Pension Plans**
**Interest Rate Assumed on Investments, including CPI, at July 1**




| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|
| CPI | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% |
| Interest rate in excess of CPI | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% | 4.0% |

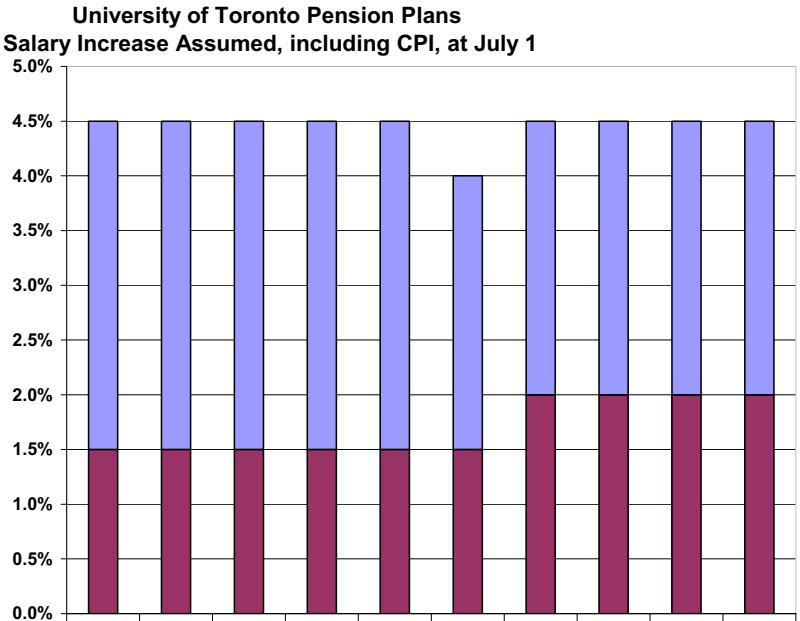
The discount rate that has been assumed by defined benefit pension plans has been the subject of considerable debate in the pension community over the past several years.

The key point of debate currently in the pension community is the difference between the assumed rate of return and what the long-term assumption would be for minimal risk, essentially fixed income, investments. When the assumed rate is higher than the minimal risk rate, a pension plan is assuming that it will receive additional investment return over the long-term from investments such as equities, which are more risky than fixed-income investments, in advance of it being earned. This is known as the *risk premium*.

The significance of this assumption is that the liabilities represent the discounted net present value of future pension payments, and the discount rate is used to discount the pension payments to the present. The lower the discount rate, the higher the liabilities and the higher the funding needed for the defined benefit pension. Or another way of looking at this, the lower the expected investment earnings, the more funding that has to come from contributions.

## Salary increase assumption

With the exception of 2004, the salary increase assumption has remained steady at 4.5% for the past several years. This assumption attempts to predict what salary increases will be over the long term, and thus what will be the 36 months of highest average earnings for each plan participant at retirement.




| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|
| CPI | 3.0% | 3.0% | 3.0% | 3.0% | 3.0% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% |
| Increase in salaries in excess of CPI | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 1.5% | 2.0% | 2.0% | 2.0% | 2.0% |

The percentage increase in salary in excess of CPI was adjusted in 2005 to reflect ongoing salary settlements that, including merit and promotion, are trending higher than 4.0%. Although the inflation assumption was reduced, the salary settlements themselves did not seem to decline. Therefore, the 4.5% total percentage assumption was re-established in 2005.

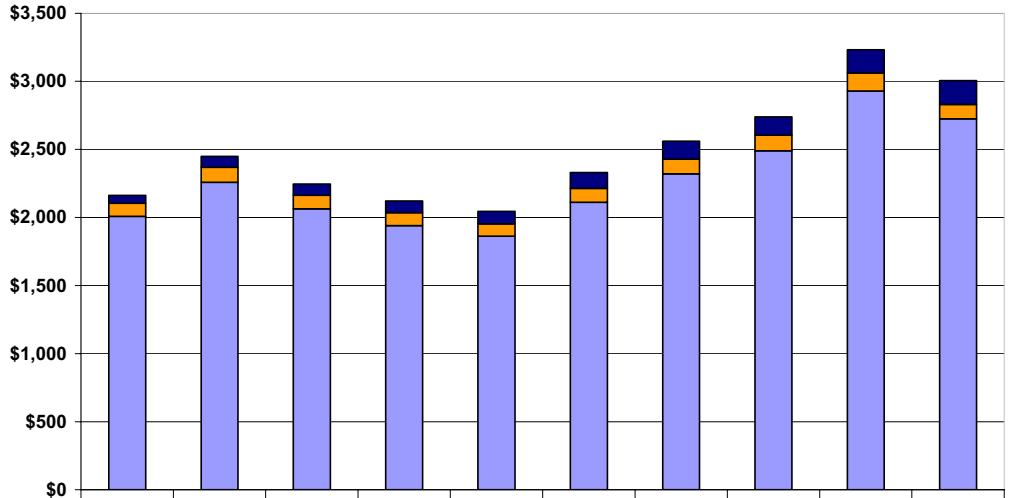
# Pension Assets

Total assets for the three pension plans were $3,004.3 million at June 30, 2008, comprising:

| | |
|---|---|
| $ 2,724.2 million | RPP pension assets |
| $ 105.9 million | RPP(OISE) pension assets |
| $ 174.2 million | SRA university assets |

The change in those assets since 1999 is shown on the following chart.

**Market Value of Pension Assets** [1]
**at July 1**
**(millions of dollars)**




| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|
| SRA assets | 57.5 | 80.2 | 82.2 | 85.5 | 91.2 | 115.8 | 130.6 | 136.2 | 170.0 | 174.2 |
| RPP(OISE) assets | 95.5 | 109.0 | 100.2 | 94.7 | 90.5 | 101.8 | 109.0 | 113.8 | 131.6 | 105.9 |
| RPP assets | 2,008.7 | 2,259.4 | 2,062.9 | 1,940.0 | 1,863.2 | 2,111.8 | 2,320.6 | 2,489.9 | 2,929.7 | 2,724.2 |

[1] Including partial wind-up members in RPP(OISE) assets in years up to 2007

The RPP and RPP(OISE) represent separate legal trusts containing pension assets, and their financial statements are attached in appendix 4. The SRA assets are University funds that are not held in trust. This report considers contributions to the SRA but does not focus on investment earnings for the SRA, which is invested together with the University's endowments under those policies. The investment issues for the SRA, however, are similar to those for pension assets.

As noted earlier, there are only two ways of funding a defined benefit pension plan – contributions and investment earnings. Contributions, plus investment earnings, minus the fees and expenses incurred in administering the pension plans and earning investment returns, and minus the payments to retired members results in the pension assets that are on hand and set aside to meet the pension liabilities.

It is important to note that there is a strong relationship between contributions and investment earnings. Since the amount that must be set aside in assets is driven by the pension liabilities, the key question on the asset side is:

**How much of the pension funding should come from contributions and how much should be targeted to come from investment earnings?**

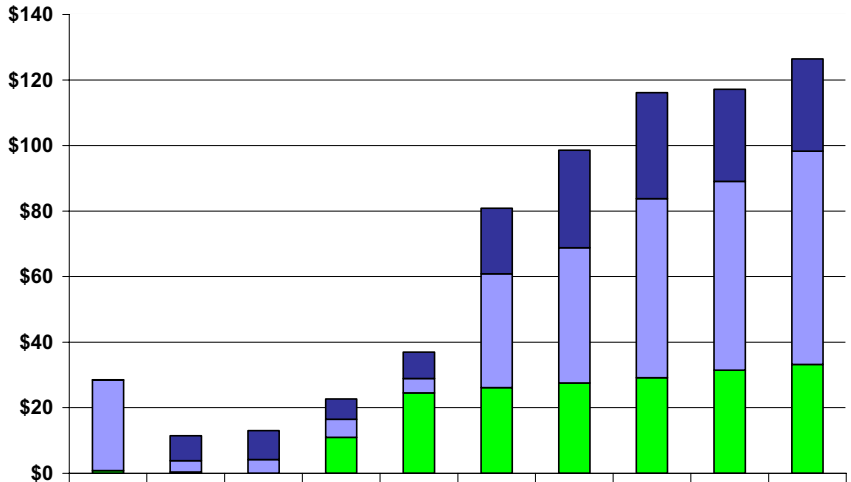
The higher the investment earnings that can be generated, the lower the contributions needed to be provided by members and by the University. However, there are significant risks inherent in investment markets and the higher the return that is targeted, the higher the risk of losing money is likely to be. The next two sections will examine the role of contributions and investment earnings and the following two sections will discuss fees & expenses and payments.

# Pension Assets

# Contributions

The University of Toronto pension plans are defined benefit **contributory** plans. The following chart shows the contributions made by employees and by the University over the past several years.

**Contributions by Source (Employee and Employer) Across All Plans [1]**
**for the year ended June 30**
**(millions of dollars)**




| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|
| ER special payments | 0.0 | 7.6 | 8.8 | 6.2 | 8.1 | 19.9 | 29.8 | 32.4 | 28.1 | 28.1 |
| ER current service contribution | 27.7 | 3.5 | 4.2 | 5.5 | 4.4 | 34.7 | 41.3 | 54.6 | 57.6 | 65.1 |
| EE current service contribution | 0.8 | 0.4 | 0.0 | 11.0 | 24.5 | 26.2 | 27.5 | 29.2 | 31.4 | 33.2 |

[1] Voluntary Early Academic Retirement Program (VEARP) contributions included in ER special payments

Contributions:

- are to be made by members and by the employer to fund pension benefits earned in the current year, also known as the current service cost. The member share of those contributions is determined by formula, with the employer contribution representing the difference between the total current service contribution required (actuarially determined) and the portion paid by members.
- by employers are not permitted under the Income Tax Act (Canada) into registered plans when there is an actuarial surplus greater than 10% of accrued liabilities.

- by employers are required to fund any going concern deficits over 15 years. These special payment contributions are in addition to regular current service contributions.
- by employers are required to fund any solvency deficits over 5 years. These special payment contributions are in addition to regular current service contributions.

The required level of contributions is calculated by our actuaries, taking into account the assumptions used in determining the liabilities and assumptions about investment returns. Since the member contribution is formulaic, the University ultimately bears the risk associated with ensuring adequate funding to provide the promised pension benefits.

During most years from the late 1980's to 2002, the RPP had a sufficiently high actuarial surplus that no employer contributions were permitted except for a few years in the early 1990's. Members experienced a pension contribution holiday from 1997 to 2002. The University redirected $88.1 million of its contribution holiday to fund the SRA over the 5 year period following its establishment in 1997, which included current service contributions and special payments to fund past service. The RPP(OISE) was in surplus throughout the period.

After 2002, due in large part to poor investment markets, the surplus declined significantly. The University adopted a new pension contribution strategy, approved by the Business Board in January 2004, with the objective of providing smoothed funding to deal with these deficits over a multi-year period, while permitting stable, predictable funding via the University's operating budget and while taking the Income Tax Act funding constraint into account. The key elements of the pension contribution strategy are as follows:

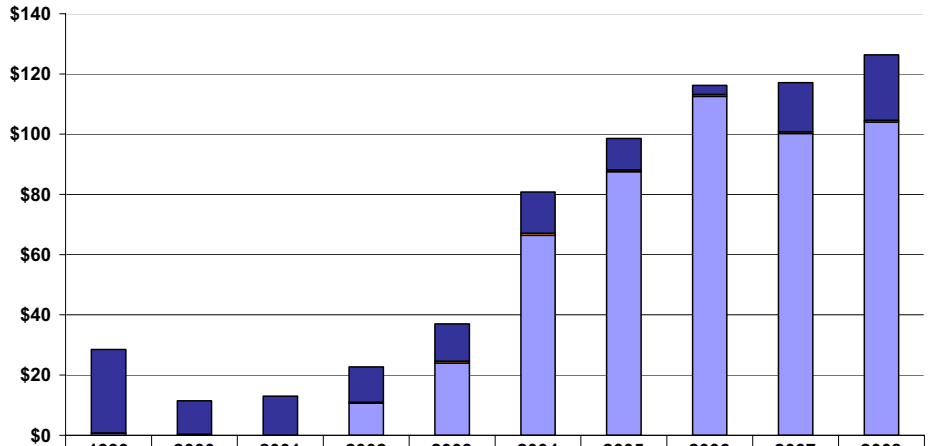
- Members and the University contribute 100% annual current service contributions (no contribution holidays).
- The SRA is "funded" on the same basis as the registered pension plans.
- The University allocates special payments of no less than $26.4 million (increased to $27.2 million to reflect subsequent benefits enhancements) to deal with the RPP and SRA deficits by way of a smoothed budget allocation over 15 years. This smoothed approach provided for higher payments than required in the earlier years, with the intent of protecting against solvency

issues and providing for budget predictability within the University's operating fund.

- If some, or all, of the special payment amount is not needed or permitted to be made into the RPP under the Income Tax Act, it must be set aside and reserved outside the RPP.

The following chart shows the employee and employer allocation of contributions by plan over the past several years.

**Allocation of Contributions by Plan**
**for the year ended June 30**
**(millions of dollars)**




| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|
| SRA | 27.7 | 11.1 | 13.0 | 11.7 | 12.4 | 13.7 | 10.5 | 3.0 | 16.3 | 21.8 |
| RPP (OISE/UT) | 0.1 | 0.0 | 0.0 | 0.3 | 0.6 | 0.7 | 0.6 | 0.6 | 0.6 | 0.6 |
| RPP | 0.7 | 0.4 | 0.0 | 10.7 | 24.0 | 66.4 | 87.5 | 112.6 | 100.2 | 104.0 |

Commentary on the effectiveness of this strategy can be found in a later section. Its effectiveness must be judged in concert with the evaluation of investment strategy, which is discussed in the next section.

# Pension Assets
# Investment Earnings

As noted earlier, pension assets arise from only two sources of funding – contributions (including transfers in) and investment earnings. These sources of funding must pay for the fees and expenses incurred in administering and investing the pension plans, and payments to retired members and lump sum transfers. Investment earnings are dependent on several elements:

- how much risk are we willing to take to try to achieve an acceptable level of investment earnings, understanding that the higher the investment earnings we want, generally speaking, the higher the risk of loss we are going to have to tolerate and plan for?
- what investments do we make – the investment strategy, including the asset mix – to try to achieve investment earnings?
- how are investment markets generally performing, in Canada and around the world?

In the funding model described above, there is obviously pressure to earn good investment returns. However, the overriding purpose of the pension assets – to be there to fund payments to retired members – means that pension plans should not incur too much risk of loss in trying to earn acceptable investment returns. To assess the appropriateness of the policy around investment earnings, we can ask:

- how are the investment risk and return targets established?
- how risky are the investment risk and return targets and are they appropriate for the pension plans?
- do they provide sufficient investment earnings to moderate contributions to an acceptable level without exposing the pension plans to a large risk of loss?
- who manages the investments and are there sufficient controls in place to ensure that the assets are complete and accurate?
- what happens if there is a large investment loss?

This section will attempt to answer these questions.

The registered pension plans are invested through the unitized pension master trust which combines for investment purposes the assets of the RPP and the RPP(OISE). The master trust was created on August 1, 2000 to provide the two funds' assets with the same economies of scale, diversification and investment performance.

Investment risk and return targets are established on the basis of actuarial modeling that evaluates the likely outcome of various investment strategies under a large variety of market conditions. The *Pension Master Trust Investment Policy* ("policy") was most recently approved by the Business Board on December 17, 2007. As required by the Financial Services Commission of Ontario, the Business Board annually reviews the investment policies and goals and confirms or amends them as appropriate. The policy stipulates a maximum 10% risk tolerance and a minimum 4.0% real investment return target, both measured over 10-year periods, which is considered to provide a sufficient risk-adjusted return within an acceptable level of risk. There are additional risk protection strategies in place to complement the risk tolerance specified in the investment policy. These include the annual $27.2 million special payment contribution for pensions, over and above the amount allocated annually for current service cost, and the requirement for reserving, both of which were discussed earlier under *Contributions*.

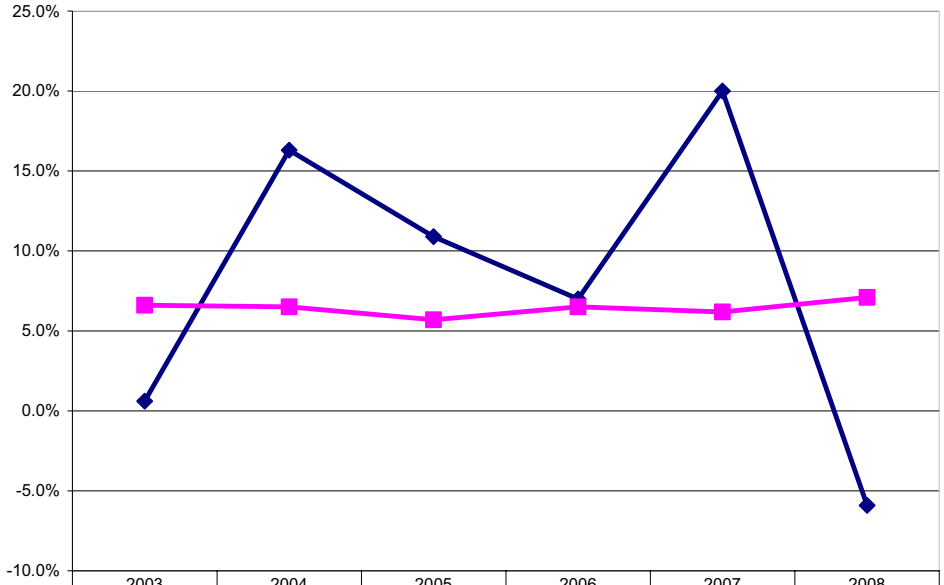
Investment strategy and management of these policy asset mix targets have been delegated by the Business Board to the University of Toronto Asset Management Corporation (UTAM). UTAM is charged with several professional service objectives: adherence to the policy including the management of return and risk to within the target levels stated in the policy; assistance to the University to help ensure that the plan's custodian maintains complete and accurate records of the assets; and maintenance of an appropriate infrastructure to attain the aforementioned objectives.

The pension master trust investment strategy has been established, and is designed, to deliver the desired performance based on a long-term horizon as stipulated by the policy and its return and risk targets, against which investment performance should be evaluated.

The one-year return to June 30, 2008 for the pension master trust was -5.9%, net of investment fees and expenses, which was below the University's target

return of 7.1 % (4.0% real return plus 3.1% CPI). The following chart summarizes investment performance for the past six fiscal years ending June 30. Except for fiscal years 2003 and 2008, the actual investment return exceeded the target return each year. On an aggregate basis over the period, the actual return also exceeded the target return.

**Pension Master Trust**
**1-Year Annual Rates of Return**




| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|
| Actual investment return * | 0.6% | 16.3% | 10.9% | 7.0% | 20.0% | -5.9% |
| 4.0% plus CPI | 6.6% | 6.5% | 5.7% | 6.5% | 6.2% | 7.1% |

* Returns are time-weighted, calculated in accordance with industry standards, are net of investment fees and expenses, and exclude returns on private investment interests prior to 2008.

A detailed review of the investment performance, which is managed and measured on a calendar basis by UTAM, is available at www.utam.utoronto.ca.

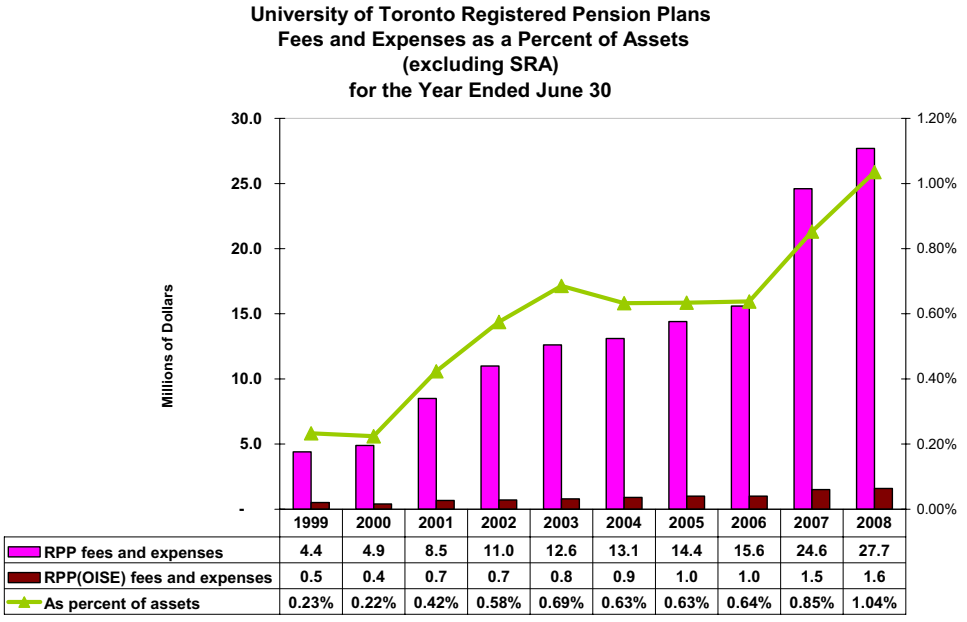
Please see the next section for a discussion of investment fees and expenses.

# Pension Assets
# Fees and Expenses

It costs money to manage, administer and invest pension plans. There are several categories of fees, including those for pension administration services (e.g. recordkeeping, calculation of benefits, payments to retired members), custody of pension assets, and investment of pension funds. The fees and expenses incurred for the pension master trust (excluding the SRA which is managed together with University endowments) for the year ended June 30, 2008 were as follows, for the RPP and RPP(OISE), in millions of dollars:

| | RPP | RPP(OISE) | 2008 Total | 2007 Total |
|---|---|---|---|---|
| Investment management fees - external managers | 21.4 | 1.1 | 22.5 | 19.3 |
| Investment management costs - UTAM | 2.0 | 0.1 | 2.1 | 2.0 |
| Transaction fees | 1.4 | 0.1 | 1.5 | 1.6 |
| Custodial costs | 0.9 | 0.0 | 0.9 | 0.8 |
| Actuarial and audit fees | 0.4 | 0.1 | 0.5 | 0.5 |
| Pension administration services | 0.7 | 0.1 | 0.8 | 0.8 |
| University of Toronto administrative costs | 0.7 | 0.1 | 0.8 | 0.9 |
| Other | 0.2 | 0.0 | 0.2 | 0.2 |
| Total | 27.7 | 1.6 | 29.3 | 26.1 |

The following chart provides a historical perspective on the fees and expenses.



The management expense ratio (MER) is a standard investment industry ratio that compares the costs of investment management, both direct and indirect, to the total assets under management. The MER includes expenses incurred by UTAM, all investment management fees and the University of Toronto investment management overhead fee. It excludes other pension administration costs such as external audit fees, records administration and actuarial fees. It also uses the average annual market values for the year. The MER for the pension master trust was 0.86% for 2007-08, as compared to an MER of 0.78% for 2006-07.

It is important to understand that fees from external investment managers, which represent 77% of total fees in 2008, normally are set at a percentage of assets, while the other fees, generally speaking, are not. Therefore, as assets increase, the overall fee would normally increase in actual dollar terms as well. In the case of the pension master trust, total fees increased from $4.9 million, or 0.23% of assets in 1999 to $29.3 million, or 1.04% of assets, in 2008, while assets for these plans increased from $2,104.2 million to $2,830.1 million during the same period.

A question of obvious interest is why total fees and expenses for the RPP and RPP(OISE) have increased in percentage terms, particularly during the period from 2000 to 2003, and during 2007 and 2008. The answer is that investment management for pension changed between 2000 and 2003 from a passive, balanced fund, type strategy that was managed internally by the University's administration pre-2000, to an active professional investment strategy managed by UTAM since 2000. In addition, the investment strategy also placed increasing emphasis on alternative assets such as hedge funds and private equity investments, which generally have higher investment management fees than traditional or passive investments such as public fixed income or public equities. It is anticipated that despite their higher management fees, alternative assets will generate higher investment returns in the long-run as well as diversify portfolio risk. As a result, the total amount of alternative investments rose from about $600 million in June 2006 to over $1.1 billion in June 2008. Also of note is that alternative investments were the strongest performing asset classes in calendar 2007. It should also be noted that when the asset base falls, fees and expenses become a higher proportion of assets.

It is important to note that fees and expenses cannot be evaluated on their own, but need to be viewed in the context of the returns generated. While

investment return in 2007 exceeded 20% (net of investment fees and expenses), well above the University target return of 6.2% (i.e. CPI+4%), 2008 was a challenging year for investments generally as evidenced by the market turbulence associated with credit and liquidity concerns that emerged in mid-2007. The pension master trust return for 2008 was -5.9% (net of investment fees and expenses), which was below the University target return of 7.1%. Fees and expenses as a percentage of assets, as can be seen from the previous graph, increased from 0.85% in 2007 to 1.04% in 2008, largely due to increased alternative investments. While it is desirable to have positive and high investment returns each year, it is important to bear in mind that there will be variability in returns from one year to another due to general market cycle and conditions, but perhaps more importantly, that the investment strategy is crafted for a long-term horizon that aligns with pension master trust's 10-year target objectives of a 4% real return and a 10% standard deviation of returns (i.e. risk tolerance).

# Pension Assets

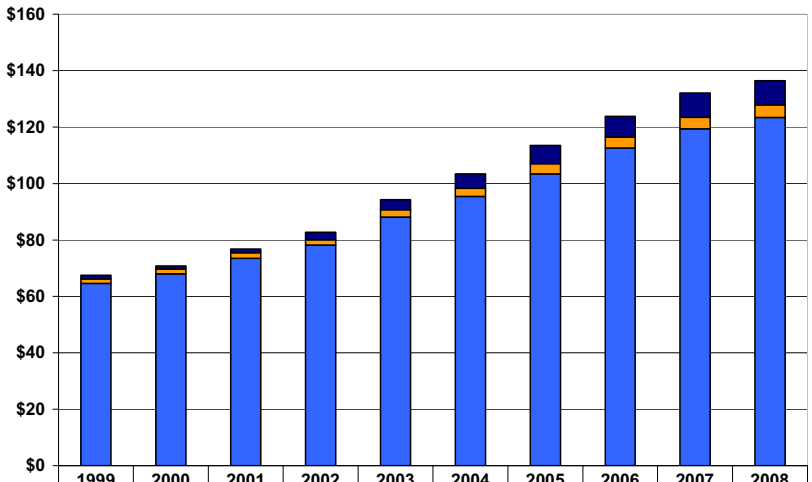
# Payments

The section on participants showed that the number of retired members in the RPP has increased from 3,409 in 1999 to 4,514 in 2008, an increase of 32.4% while the number of retired members in the RPP(OISE) has increased from 117 to 144, an increase of 23.1%. During this period, payments to retired members reflect this increase in numbers as well as the cost of living adjustments and augmentations that have occurred in certain years for certain member groups.

The dollar value of payments for the three plans has increased from $67.5 million in 1999 to $136.4 million in 2008, an increase of 102.1%.

The rate of increase in payments is higher than the rate of increase in the number of members mainly due to pension indexation, augmentation of existing pension payments and higher starting pensions for more recent retired members reflecting higher average earnings.

**University of Toronto Pension Plans**
**Retirement Payments for the year ended June 30**
**(millions of dollars)**




| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|
| SRA retirement payments | 1.3 | 1.1 | 1.3 | 2.6 | 3.6 | 5.1 | 6.5 | 7.3 | 8.6 | 8.5 |
| RPP(OISE) retirement payments | 1.6 | 1.7 | 2.0 | 1.9 | 2.6 | 2.9 | 3.6 | 3.9 | 4.1 | 4.5 |
| RPP retirement payments | 64.6 | 68.0 | 73.5 | 78.2 | 88.1 | 95.4 | 103.4 | 112.6 | 119.4 | 123.4 |

# Pension Market Surplus (Deficit)

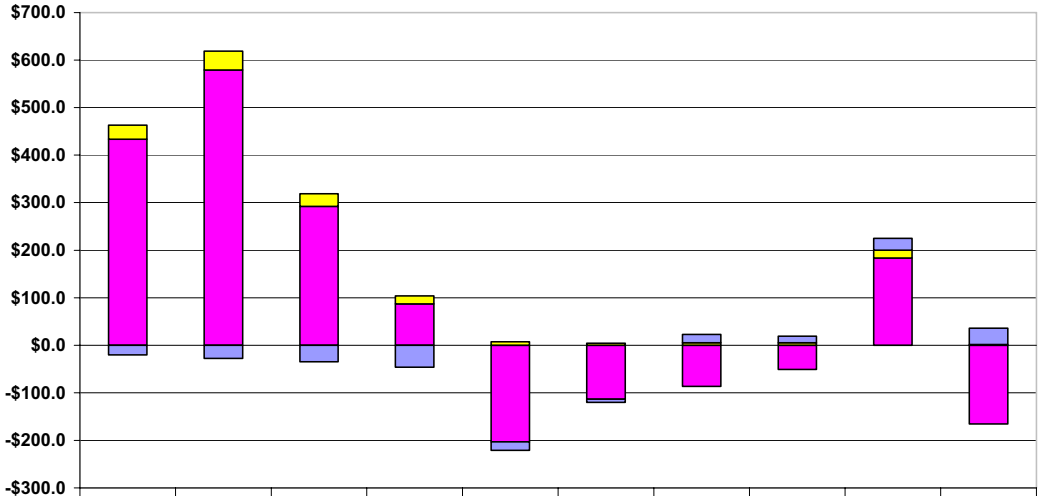
Going concern pension liabilities minus pension assets at market value results in the net funded status of the pension plans, the market surplus or market deficit. The going concern market deficit at July 1, 2008 totaled $129.3 million, comprising:

| | |
|---|---|
| $(165.4) million | RPP market deficit |
| $ 1.7 million | RPP(OISE) market surplus |
| $ 34.4 million | SRA market surplus (market reserve) |

As noted earlier, funds cannot be transferred between the two registered plans or from either of the registered plans to the SRA. Funds can be transferred from the SRA into either of the registered plans.

The change in the market surplus or deficit since 1999 is shown on the following chart:

**Going Concern Market Surplus (Deficit)**
**as at July 1**
**(millions of dollars)**




| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|
| SRA | (20.4) | (27.7) | (34.6) | (46.3) | (17.4) | (6.9) | 17.7 | 14.1 | 24.6 | 34.4 |
| RPP(OISE) | 29.6 | 39.6 | 26.4 | 16.8 | 7.1 | 4.2 | 5.3 | 5.2 | 16.3 | 1.7 |
| RPP | 433.6 | 579.2 | 292.4 | 87.1 | (203.5) | (113.2) | (86.4) | (50.7) | 183.9 | (165.4) |

Since 1999, the RPP position has varied from a surplus high of $579.2 million to a low of a deficit of $203.5 million. The current market deficit of $165.4 million

was the result of a year of poor investment performance, which eliminated last year's small surplus of $183.9 million.

Since 1999, the RPP(OISE) position has been a surplus throughout, varying from a high of $39.6 million in 2000 to a low of $1.7 million in 2008. The surplus fell from $16.3 million in 2007 mainly due to lower market asset values resulting from investment losses during the year.

The SRA was established in 1997, with a five year funding plan. Subsequent benefit enhancements affecting SRA funding were also funded over five years. In 2004, SRA funding was put on the same basis as the registered plans (deficits funded over 15 years). The current surplus in the SRA is $34.4 million, and this surplus varies with the variation in where liabilities are recorded, reflecting the impact of the Income Tax Act maximum pension.

The financial position of the plans has worsened since 2007, moving from a small surplus overall, representing about 7% of liabilities to a small deficit overall representing about 4% of liabilities. However, it must be stressed that this current deficit, while small, could grow significantly with another year of poor investment returns, especially in light of the market turmoil that has gripped world markets during the latter half of 2008. A number of other issues could impact future results, including a potential need to make current service payments into the RPP(OISE), ongoing expected volatility in investment returns and financial markets and potential variances from other actuarial assumptions.

The market surplus (deficit) varies with the type of actuarial valuation and with the assumptions used to estimate the liabilities. The following section shows the impact of solvency and hypothetical wind-up assumptions on the surplus or deficit. The subsequent section provides a sensitivity analysis, showing the impact on surplus/deficit and on current service cost of variation in the discount rate used to calculate the net present value of the pension liabilities.

# The Role of Solvency and Hypothetical Wind-up Valuations

As noted earlier, we are legally required to do solvency and hypothetical wind-up actuarial valuations, which have different assumptions from the going concern valuation. The solvency valuation essentially determines the status of a pension plan on a hypothetical wind-up basis and requires that the liabilities be discounted at current market rates, rather than at long-term rates, but without indexing.

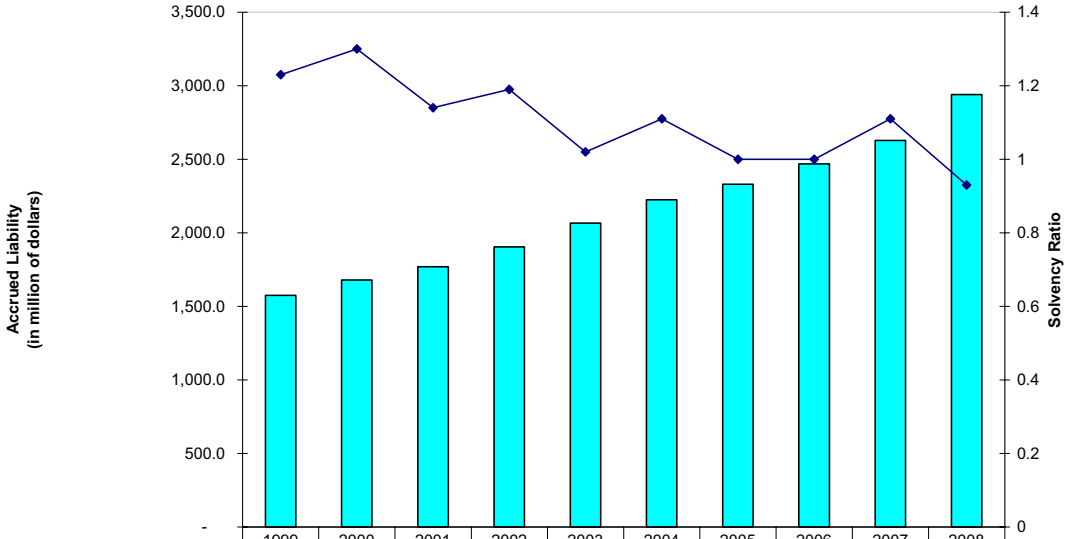
The RPP solvency ratio (the ratio of assets to solvency liabilities) worsened from 1.11 at July 1 2007 to 0.93 at July 1, 2008. As of July 1, 2008, the plan had a solvency deficit of $217.2 million versus a solvency excess of $300.2 million as of July 1, 2007. If there were a requirement to file the July 1, 2008 actuarial valuation with the Financial Services Commission of Ontario, annual special payments of $38.6 million would be required over 5 years, in addition to the going concern special payments of $9.8 million, to amortize the solvency deficiency over 5 years (this is the statutory amortization period).

The two main reasons for the drop in the solvency position of the RPP are (i) the lower prescribed interest rates used to discount the liabilities, and (ii) the investment losses during the year. As discussed on page 10, a prescribed market interest rate assumption is used to discount liabilities under the solvency valuation. The rates used for various participant groups are lower in 2008 than in 2007 (reflecting falling market interest rates during the year), which results in higher discounted liabilities.

The hypothetical wind-up valuation extends the solvency valuation by adding in the indexing and incorporating early retirement windows. On a hypothetical wind-up basis, the RPP market deficit would be $1,139.0 million.

The RPP(OISE) solvency ratio was 0.97 at July 1, 2008 as compared to 1.17 at July 1, 2007 on the same basis, excluding the impact of the partial wind-up members.

**RPP**
**Solvency Ratio and Accrued Liability**
**as at July 1**




| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|---|---|---|
| Accrued liabilities | 1,575.1 | 1,680.2 | 1,770.5 | 1,904.9 | 2,066.7 | 2,225.0 | 2,330.2 | 2,467.6 | 2,628.4 | 2,940.4 |
| Solvency Ratio | 1.23 | 1.30 | 1.14 | 1.19 | 1.02 | 1.11 | 1.00 | 1.00 | 1.11 | 0.93 |

It is necessary to maintain a solvency ratio of at least 1.00 to avoid triggering the 5 year deficit elimination requirement. Until 2008, this ratio has been maintained for the RPP, with higher special payments funding than required under regulation for 2004, 2005 and 2006, in addition to full current service contributions from members and from the University.

With the ratio falling below 1.00 in 2008, it would appear that mandatory special payments over five years would be required. However, this special funding is only required upon filing an actuarial valuation with the Financial Services Commission of Ontario, which is required at least every three years. The last filing dealt with the required contributions for the period July 1, 2007 to June 30, 2010. Our next filing is anticipated to be during the 2011 pension year, with contributions covering the period July 1, 2010 to June 30, 2013. University administration will continue to monitor the RPP solvency deficit and determine if any further funding is needed in addition to the current budgeted special payments of $27.2 million, but it is hoped that existing special payments, and improved investment performance during 2009 and 2010, will remove the need for solvency funding in 2011 or earlier. If the solvency deficit remains an issue, the additional special payments could also be funded from assets set aside in respect of obligations under the SRA.

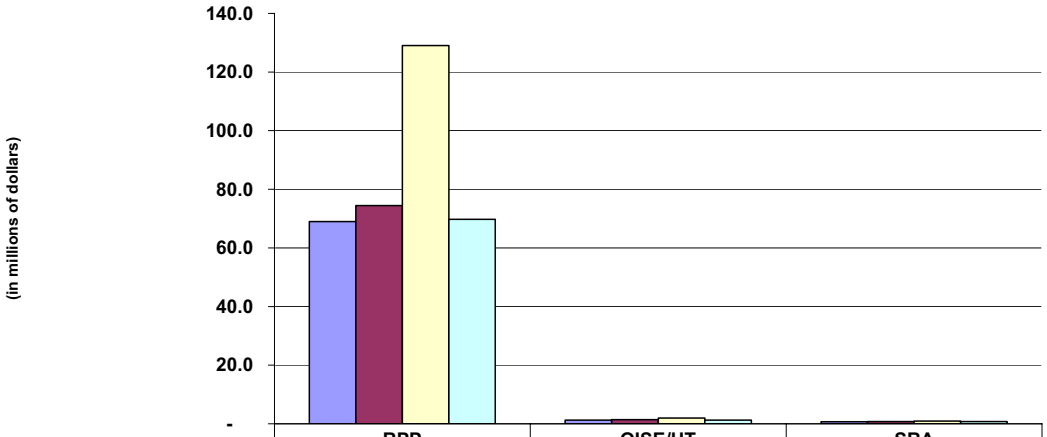
# Sensitivity

The charts below show the impact of changes in the real rate of return (4.00%, 3.75% and 2.00%), as well as a change to the mortality rates table, on the employer current service cost for 2008-09, and the market surplus (deficit) as at July 1, 2008. The 2% real rate of return represents the approximate yield on real return bonds as of July 1, 2008 (the minimum investment risk portfolio). The extension of the mortality improvement scale from 2015 to 2020 tests the sensitivity to continued improvements in mortality.

It is important to note that the intent of the sensitivity modeling around the discount rate is not to predict a range of investment outcomes. Rather, its intent is to illustrate the effect on contributions and the surplus/deficit of recognizing different proportions of risk premium (the additional investment return over the long-term from investments, such as equities, which are more risky than fixed-income investments) in advance of it being earned.

The current actuarial assumption for the discount rate is 6.5%, composed of 2.5% CPI and 4.0% real return, net of all fees. It should be noted that inflation would impact the results under all the real discount rate assumptions below.

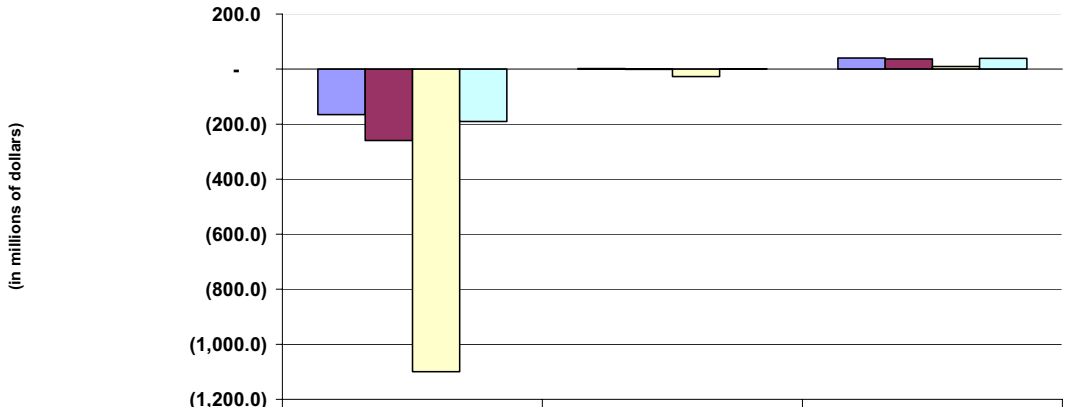
**University of Toronto Pension Plans**
**Employer Current Service Cost for 2008-09**
**Under Varying Real Discount Rate Assumptions for Liabilities**




| | RPP | OISE/UT | SRA |
|---|---|---|---|
| 4.00% | 69.0 | 1.3 | 0.7 |
| 3.75% | 74.4 | 1.4 | 0.8 |
| 2.00% | 129.0 | 2.0 | 1.0 |
| 4.00% + improvements * | 69.8 | 1.3 | 0.8 |

* With a change in mortality improvements extended from 2015 to 2020

**University of Toronto Pension Plans**
**Market Surplus (Deficit) at July 1, 2008**
**Under Varying Real Discount Rate Assumptions for Liabilities**




| | RPP | OISE/UT | SRA |
|---|---|---|---|
| 4.00% | (165.4) | 1.7 | 40.1 |
| 3.75% | (259.6) | (1.4) | 36.8 |
| 2.00% | (1,099.6) | (27.0) | 9.1 |
| 4.00% + improvements * | (190.3) | 0.8 | 38.8 |

* With a change in mortality improvements extended from 2015 to 2020

The above graphs show the sensitivity of our pension plans to changes in the real discount rate. A reduction of 2.00% in the RPP real discount rate from 4.00% to 2.00% (i.e. including CPI, a reduction in the discount rate from 6.50% to 4.50%) would:

- Increase the employer current service cost for 2008-09 by $60.0 million to $129.0 million.
- Increase the market deficit of $165.4 million by $934.2 million at July 1, 2008, resulting in a July 1, 2008 deficit of $1,099.6 million.
- Increase the special payment requirement significantly to fund this deficit over the required period.

As the graphs show, even a small change in the discount rate of 0.25% from 4.0% to 3.75% would have an impact, since the actual numbers are so large. It would:

- Increase the current service cost for 2008-09 by $5.4 million to $74.4 million.

- Increase the market deficit by $94.2 million from $165.4 million to $259.6 million at July 1, 2008.
- Increase the special payment requirement.

As noted earlier, a defined benefit pension plan has only two sources of funding – contributions and investment earnings. This sensitivity analysis with respect to the discount rate clearly illustrates the relationship between these two sources of funding. A higher discount rate assumes that more of a pension plan's required funding will come from investment earnings. A lower discount rate assumes that less of a pension plan's required funding will come from investment earnings (see page 24). Therefore, the lower the discount rate assumption, the higher the current service contributions required into the future. Whether or not the discount rate impacts the special payment requirement depends on whether the plan is in surplus or deficit at any particular point in time.

The current 4.0% discount rate represents a balance between assumed future investment earnings and contributions. The $27 million special payment budget provides for a reserving mechanism to recognize the volatility of investment earnings in the short term and provides for possible lower investment earnings over the longer term.

It is also important to note that poor investment returns in 2008-09 would increase the market deficit in the RPP significantly.

# Conclusions about Pension Financial Health

**RPP and SRA:**

When the pension contribution strategy was formulated in January 2004, it projected a market deficit for the RPP of $236 million in 2005 and $144.6 million in 2015. Since then, the University has contributed full current service costs and had made significant additional special payments well in excess of those required under legislation.

During the intervening years, the pension master trust has experienced investment returns (net of fees and expenses and excluding returns on private investment interests until 2007) of 16.3% in 2004, 10.9% in 2005, 7.0% in 2006, 20.0% in 2007 and -5.9% in 2008, all greater than the target investment return of 4.0% plus inflation except in 2008. This has contributed to an improvement in the assets beyond that projected in January 2004.

At the same time, there have been several factors that contributed to the growth in the liabilities resulting in a market deficit at July 1, 2008 of $165.4 million, as compared to a market deficit of $213.9 million predicted for 2008 back in January 2004:

*Assumption changes:*

- CPI assumption reduced from 3.0% to 2.5% in 2004 resulting in decrease in nominal interest rate from 7.0% to 6.5%.
- Salary increase assumption increased from 4.0% to 4.5% in 2005.
- Strengthening of mortality rates in 2007 to reflect future mortality improvements

*Benefits changes:*

- Accrual rate below the CPP maximum was increased from 1.5% to 1.6% for USW members, various other unions and non-unionized administrative staff for both past and future pensionable service.
- Augmentation from 75% CPI to 100% CPI occurred for retired faculty members each year.

The SRA has a market reserve of $34.4 million. As noted earlier, these funds represent a reserve to deal with investment volatility, solvency funding issues and other uncertainties and would be available to be deposited into the RPP should the need arise.

The RPP solvency ratio, which is a measure of the assets' market value as compared to the solvency liability of the RPP (before indexing), was 0.93 at July 1, 2008. It has decreased from 1.11 at July 1, 2007. On a hypothetical wind-up basis (after indexing and incorporating early retirement windows), the deficit would be $1,139.0 million.

As stated previously in the section on solvency, special solvency payments may be necessary in the future if the solvency position of the RPP does not improve.

The Council of Ontario Universities' brief to the Expert Commission on Pensions in the fall of 2007 recommended that University pension plans be exempted from solvency valuation requirements in Ontario, as they have been in some other provinces. The release of the Report of the Expert Commission on Pensions is expected in November.

**RPP(OISE):**

When the pension contribution strategy was formulated in January 2004, it projected a market surplus for the RPP(OISE). It also seemed unlikely at the time that the University would have to make current service contributions in the near future. At July 1, 2003, the market surplus was $7.1 million.

Within the past four years, the same changes have occurred to the RPP(OISE) as to the RPP. In addition, an actuarial report for partial plan wind-up was filed with the Superintendent of Financial Services of Ontario. With good investment returns between 2004 and 2007, combined with the various changes to the plan, the market surplus had increased to $16.3 million at July 1, 2007. The solvency ratio was 1.15 at July 1, 2007. During 2008, the RPP(OISE) market surplus decreased to $1.7 million and the solvency ratio decreased to 0.93 as at July 1, 2008

As with the RPP, special solvency payments may be required if the solvency deficiency is not eliminated during the next couple of years.

**Overall conclusion:**

The result for 2008 was a $165.4 million market deficit for the RPP, a $1.7 million market surplus for RPP(OISE), and a $34.4 million SRA market reserve (excess of SRA assets over SRA liabilities). The $34.4 million SRA market reserve represents University assets that are available to be deposited into the RPP or RPP(OISE) should that be required. However, there cannot be any transfers of funds between the RPP and the RPP(OISE) or from either the RPP or RPP(OISE) to the SRA.

The unfunded position has deteriorated during the past year. There is a small deficit, as well as a number of issues that continue to cause concern, including the fall in market indices worldwide during the latter half of 2008 and expected volatility in investment returns over the coming years, the potential need to make payments into the RPP(OISE) and whether we will meet the long-term return expectations given financial market trends.

We are continuing to review the pension contribution strategy and will continue to monitor the impact of the financial crisis on the pension plans to determine whether changes are needed.

# Appendix 1

# Pension Contribution Strategy

January 12, 2004

To: Members of the Business Board

From: Sheila Brown, Acting Chief Financial Officer

Subject: **Pension Strategy - Funding of Pension Plans and Supplemental Retirement Arrangement**

The purpose of this report is to recommend a strategy for funding the pension plans and supplemental retirement arrangement to ensure that the plans can continue to meet their obligations to provide pensions to current and future pensioners.

The University of Toronto has two registered pension plans and one unregistered plan. The University of Toronto Pension Plan ("RPP") is the main plan which covers most employees at the university. The University of Toronto (OISE) Pension Plan ("OISE") covers University of Toronto employees who were previously employees of OISE prior to June 30, 1996 and are either continuing employees of the University or retirees. The unregistered Supplemental Retirement Arrangement ("SRA") was established in 1997 and provides additional retirement income to compensate for the limitations prescribed under the Income Tax Act (Canada) on the amount of lifetime retirement benefits payable from the registered pension plans.

**Financial Status of Pension Plans at July 1, 2003:**

University of Toronto Pension Plan:

- Deficit based on market value of assets $203.5 million
- Surplus based on actuarial value of assets $ 2.2 million
- Solvency ratio excluding indexing 1.02

Supplemental Retirement Arrangement:

- Deficit at market value of assets $17.4 million

University of Toronto (OISE) Pension Plan:

- Surplus based on market value of assets $ 7.1 million
- Surplus based on actuarial value of assets $18.0 million

**Current pension funding strategy:**

The current pension plan funding strategy was approved by the Business Board in 1997 and was imbedded in the University's long-range budget plan. This strategy recognized that the University was prohibited under the Income Tax Act from contributing to the University Pension Plan since the pension surplus at the time was greater than 10% of liabilities. This strategy established the supplemental retirement arrangement and provided for the funding of its past service cost over five years as a first priority for allocation of funds generated from the required employer contribution holiday. The resulting operating budget strategy provided for the ongoing base budget for the current service costs of the RPP to be maintained at its then current level,

which amounted to 75% of the annual employer current service cost. The OISE current service cost base budget was eliminated since the interest on the OISE surplus each year was sufficient to cover the yearly current service cost obligations.

**What has changed since 1997?**

The RPP has moved from a market surplus position to a market deficit position due to poor investment returns, pension enhancements and employer and employee contribution holidays. The SRA is no longer a new plan and enough funds have been set aside to cover the original SRA obligation of $78.0 million. Some of the liability is transferring back and forth between the SRA and the RPP in accordance with the increase in the Income Tax Act maximum pension. The University and employees must contribute the full current service cost and the University will be required to make additional special payments to deal with the pension deficit. These factors require a revised pension strategy going forward.

**Proposed pension strategy:**

The University's actuary, Hewitt Associates, has modeled a number of alternative strategies that have been considered. The proposed strategy is the one that best combines the need for financial prudence, maintenance of a solvency ratio greater than 1.0, and operating budget predictability. The proposed strategy incorporates the following recommendations:

1. Employees make their regular annual contributions.

2. For the 2003-04 fiscal year, the University contributes $26.8 million to the RPP and $9.5 million to the SRA.

3. Beginning May 1, 2004, the University contributes 100% of the required employer current service cost for the RPP and SRA. This will require restoration of the operating budget pension budget to 100% of the RPP current service cost.

4. Beginning May 1, 2004, the SRA is put on the same basis as the RPP with respect to deficits. With the achievement of full funding of the original past service liability occurring at the time the SRA was established in 1997 and because a portion of the liabilities will move back and forth between the SRA and the RPP in accordance with the Income Tax Act maximum pension over time, future SRA deficits should now be treated like those of the RPP and funded over 15 years.

5. Beginning May 1, 2004, the University makes special payments of no less than $26.4 million annually to deal with the RPP and SRA deficits by way of a smoothed budget allocation over about 15 years. This smoothed approach provides for higher payments than required in the earlier years, thus holding off any possible solvency issues and providing for predictability.

6. The OISE plan is a closed plan (no new members) and is still in a surplus position. It is unlikely that the university will have to make a current service cost contribution to this plan in the near future and therefore no budget is proposed for this.

7. Steadfastly make a special payment of no less than $26.4 million annually in respect of the RPP and the SRA even if investment returns reduce plan deficits. By doing this, the University will be making provision for future periods of poor investment returns.

8. Continue to set these funds aside, regardless of Income Tax Act restrictions. If not permitted to make contributions to the RPP, reserves should be set aside outside the RPP.

This strategy provides for prudent financial management of the pension plans combined with a level of predictability for the operating long-range budget plan.

**Pension Projections Illustrating this Strategy:**

The graphs at the end of this paper illustrate the impact of the proposed strategy on the pension surplus (Graph # 1) and on the pension budget (Graph # 2). It is important to note that:

-the nominal investment return assumption used for both the RPP and the SRA is 7% for 2004 and thereafter. The models are therefore based on a 7% per annum average return over 15 years. It should be noted that 67% of the time, actual returns will fluctuate between minus 3% and plus 17%.

-The annual special payment has been determined by the actuary to be $26.4 million representing approximately the amount that would be required to amortize the expected market value deficit as of July 1, 2004 in the combined RPP and the SRA over 15 years. The $26.4 million annual payment will be allocated as follows, $24.8 million in the RPP and $1.6 million in the SRA.

-the proposed strategy, and thus these projections, includes the cost of pension augmentation from 75% of CPI to 100% of CPI for faculty and librarian retirees up to and including July 1, 2004, but not beyond July 1, 2004.

**What about Possible Future Augmentations**

As noted above, the recent UTFA settlement provided for an augmentation to faculty and librarian pensioners benefits from 75% to 100% of inflation for 2003 and 2004. The cost of that augmentation is $12 million for faculty and librarian retirees. The cost of this augmentation has been amortized over 15 years with the addition of $1.4 million per annum to the annual special payment required. This does not however address the possibility of other future augmentations. Over the past years, augmentation has essentially represented a distribution of surplus. In the absence of a pension surplus, provision of further augmentation is very uncertain. However any augmentations that might be provided in future would have to be funded, either by contributions to the plan or from any future pension surpluses. The latter strategy makes the most sense given the rationale for making augmentations. Therefore, this gives rise to the following additional recommendation:

9. Make provision for funding any future augmentations that might occur by setting aside the corresponding amount from pension surpluses existing at the time.

To implement this strategy, the University's operating budget allocation for pensions must rise from $31.2 million for fiscal year 2003-04 to $65.9 million for 2004-05, $75.5 million for 2005-06, $77.8 million in 2006-07, $80.3 million in 2007-08, $82.7 million in 2008-09 and $85.0 million in 2009-10.

With these contributions and if the assumptions contained in the projections with respect to investment returns, participation, etc. would be achieved, the RPP deficit would increase to about $236 million in 2004-05 and then gradually decline over time. The SRA deficit would remain approximately at current levels even though liabilities are projected to rise. There is

considerable variability expected in these liabilities since they will be influenced by the rate of increase in the Income Tax Act maximum pension, which is pegged to the increase in the industrial wage starting in 2006.

The impact on the financial statements is expected to be an increase in pension expense on the income statement from $39.7 million in 2002-03 to about $90 million annually. Pension liability on the balance sheet is expected to rise to about $131 million by 2007-08 and then begin to fall as the deficit is reduced over time.

**Recommendation**

That the Business Board approves the funding strategy contained in the nine recommendations provided above.

# Appendix 2

# Pension Fund Master Trust Investment Policy


UNIVERSITY OF
TORONTO

## PENSION FUND MASTER TRUST INVESTMENT POLICY


# PENSION FUND MASTER TRUST INVESTMENT POLICY

# (STATEMENT OF INVESTMENT POLICIES & PROCEDURES)

---

## PREAMBLE

The Governing Council of the University of Toronto is the legal administrator of the University of Toronto Pension Plan and the University of Toronto (OISE) Pension Plan to provide pension benefits to its employees. These plans are contributory defined benefit pension plans registered under and subject to the Ontario Pension Benefits Act.

For investment purposes, the University of Toronto pension plan and the plan for its OISE employees are pooled into a pension master trust. This pooling enables both funds to enjoy economies of scale and eliminates discrepancies in investment performance.

The University determines the return expectation and risk tolerance via this *University of Toronto Pension Fund Master Trust Investment Policy*, which is approved annually by its Business Board.

The University owns the University of Toronto Asset Management Corporation (UTAM). The University has formally delegated to UTAM the authority for management of pension master trust investments by resolution of the Business Board of Governing Council and establishes the terms and conditions under which UTAM provides investment management services. The investment decisions of UTAM and its Board of Directors are subject to the overall policy direction of the University.

## 1. PLAN DESCRIPTION AND GOVERNANCE

### 1.1 TYPE OF PENSION PLAN

The pension plans are contributory defined benefit plans registered under and subject to the Ontario Pension Benefits Act. The Governing Council of the University of Toronto is the registered plan administrator. The current plans provide defined pension benefits for eligible employees, currently members of the academic, librarian, administrative and unionized staff of the University, the OISE division of the University, and its related affiliated organizations.

As of August 1, 2000, the University of Toronto pension fund for its OISE division was pooled into a master trust for investment purposes with the University's main pension fund. While they are two separate and distinct plans (University of Toronto Pension Plan registration number 0312827 and OISE Pension Plan registration number 0353854), the pooling for investment purposes enables both funds to enjoy economies of scale and eliminates discrepancies in investment performance. The plan provisions for the OISE Plan are identical to the University of Toronto Pension Plan. Required member contributions under the plan each year are 4.5% or 5% of salary (depending on the staff group) up to the year's maximum pensionable earnings (YMPE), plus 6% of salary in excess of the YMPE.

### 1.2 Nature of Plan Liabilities

The purpose of the plans is to provide retirement income for members of its plans. The plans provide an annual pension benefit to members based on a prescribed formula applied to years of participation.

Pension benefits are adjusted each year by an amount equal to the greater of:

(a) 75% increase in the Consumer Price Index (CPI) for the previous year; or
(b) the increase in the CPI for the previous year minus four percentage points.

As of July 1, 2007, there were 7,894 active members in the University of Toronto Pension Plan, 4,421 retired participants, 1,413 terminated vested members and 999 exempt or pending status. The average age of active members was 47.1 years, average service 12.3 years, and average pay was $81,395. As of July 1, 2007 the market value of assets of the plan was $2,929.7 million versus going concern accrued liabilities of $2,745.8 million.

As of July 1, 2007 the OISE Pension Plan had 133 active members, 152 retired members, and 19 terminated vested members. The average age of active members was 56.8 years, average service was 23.9 years and average pay was $96,481. As of July 1, 2007 the market value of assets of the plan was $131.6 million versus going concern accrued liabilities of $115.3 million (including partial wind-up).

The going-concern liabilities are influenced by real interest rates, salary increases, CPI increases, turnover, mortality and retirement age patterns. Appropriate allowance is made for these factors in the assumptions used for actuarial valuation purposes and it is not expected that actual experience will vary significantly from the valuation amounts over the long term.

The duration (a weighted-average sensitivity measure) of plan liabilities is 13.9 years and 12.6 years respectively for the University of Toronto and OISE pension plans. Duration is lengthened due to the plans' automatic inflation protection, which increases benefit payments over time. The long duration of liabilities is indicative of a long-term investment horizon for the assets.

Going-concern liabilities are determined using long-term assumptions and are not affected by short-term changes in interest rates. Solvency liabilities do fluctuate from year to year with market interest rates, but because the plans provide guaranteed indexing of 75% of the increase in the CPI, the market interest rate used to determine solvency liabilities depends more on the yield of real return bonds than on nominal bond yields. Real yields on real return bonds have been less volatile than nominal interest rates. Fluctuations in solvency liabilities caused by real interest rate changes can have an impact on cash contributions or pension expenses.

## 2. INVESTMENT POLICIES AND GOALS

### 2.1 Introduction

The University of Toronto has engaged the University of Toronto Asset Management Corporation (UTAM) to manage the pension master trust assets. As a client of UTAM, it is important that the University delivers to its fund manager a concise statement of return objectives as well as risk tolerance, and that these two components are congruous. The purpose of this policy is to establish both of these objectives with regard to the pension master trust.

### 2.2 Risk and Return Objectives

To keep risk at a reasonable level,the risk objective is an annual standard deviation of 10.0% or less in nominal terms over 10 year periods. The University has less appetite for downside risk than for upside risk and prefers that risk be managed to minimize the downside, and particularly to avoid returns less than 0% where ever possible.

In order to meet the planned payments of pensions to pensioners, the return objective is at least a 4.0% real, inflation-adjusted return over a 10 year period, net of all investment fees and expenses, plus CPI, but with the target real return to be no greater than that which is achievable within the 10% allowable risk objective.

Actual investment performance will be evaluated against these objectives over time.

### 2.3 Asset Mix

The University has formally delegated to UTAM the authority for investment strategy and execution including. without limitation, establishment of the asset mix investment mandates, selection of investment managers to be responsible for the management of the portfolios in accordance with those mandates, determination of portfolio diversification, categories and subcategories of investments, use of derivatives, and investment restrictions.

Each investment manager shall adhere to this policy and shall follow the investment policies and goals with the care, diligence, and skill that a person skilled as a professional investment manager would use in dealing with pension plan assets and shall use all relevant knowledge and skill that the investment manager possesses or ought to possess. Investment managers are expected to be in compliance with the standards of professional conduct and code of ethics administered by the Association for Investment Management and Research (AIMR).

### 2.4 Restrictions

In addition to the restrictions developed by the University and UTAM, the policy will adhere to the restrictions specified within the Pensions Benefits Act, Regulation 909 of the Revised Regulations of Ontario 1990, and the Federal Income Tax Act, all as amended from time to time.

## 3. GENERAL

### 3.1 Conflict of Interest Guidelines

Anyone involved directly or indirectly with the University's fund investments shall immediately disclose to the Business Board, at the time of its discussion of the policy or of matters related to the investment of University funds, any actual or perceived conflict of interest that could be reasonably expected to impair, or could be reasonably interpreted as impairing, his/her ability to render unbiased and objective advice to fulfill his/her fiduciary responsibility to act in the best interests of the funds.

This standard applies to the University and to its employees, to the members of the Governing Council, its boards and committees and to employees and members of the board of UTAM, as well as to all agents employed by them in the execution of their responsibilities under the Pension Benefits Act (Ontario) (the "Affected Persons").

An "agent" is defined to mean a company, organization, association or individual, as well as its employees who are retained by the University to provide specific services with respect to the investment, administration and management of the assets of the Plan.

Disclosure:

In the execution of their duties, the Affected Persons shall disclose any conflict of interest relating to them, or any material ownership of securities, which could impair their ability to render unbiased advice, or to make unbiased decisions, affecting the administration of the Plan assets.

Further, it is expected that no Affected Person shall make any personal financial gain (direct or indirect) because of his or her fiduciary position. However, normal and reasonable fees and expenses incurred in the discharge of their responsibilities are permitted upon notification to the University.

No affected Person shall accept a gift or gratuity or other personal favour, other than one of nominal value, from a person with whom the employee deals in the course of performance of his or her duties and responsibilities for the Plan.

It is incumbent on any Affected Person who believes that he or she may have a conflict of interest, or who is aware of any conflict of interest, to disclose full details of the situation to the attention of the Business Board immediately. The Business Board in turn, will decide what action is appropriate under the circumstances but, at a minimum, will table the matter at the next regular meeting of the Business Board.

No Affected Person who has or is required to make a disclosure as contemplated in this Policy shall participate in any discussion, decision or vote relating to any proposed investment or transaction in respect of which he or she has made or is required to make disclosure, unless otherwise determined permissible by unanimous decision of the Business Board.

### 3.2 Custody

The University has overall responsibility for custody of pension assets, operational oversight of which it delegates to UTAM.

### 3.3 Related Party Transactions

The University, on behalf of the plan, may not enter into a transaction with a related party unless

a) the transaction is both required for operation and or administration of the Plan and the terms and conditions of the transaction are no less favourable than market terms and conditions;
b) securities of the related party are acquired at a public exchange; or
c) the combined value of all transactions with the same related party is nominal or the transaction(s) is immaterial to the fund.

For the purposes of this section, only the market value of the combined assets of the Plan shall be used as the criteria to determine whether a transaction is nominal or immaterial to the Plan.

A 'related party' is defined to mean the administrator of the Plan, including any officer, director or employee of the administrator, or any person who is a member of the University. It also includes UTAM and their employees, investment managers and their employees, a union representing employees of the employer, a member of the plan, a spouse or child of the persons named previously, or a corporation that is directly or indirectly controlled by the persons named previously, among others. Related party does not include government or a government agency, or a bank, trust company or other financial institution that holds the assets of the Plan, where that person is not the administrator of the Plan.

### 3.4 Responsibilities of Fund Managers and Professionals

The University has overall responsibility for the plans. The University has delegated certain responsibilities to UTAM and to third party agents.

a) Investment managers
The University as delegated responsibility for investment managers to UTAM. The Investment managers will:

(i) invest the assets of the Plans in accordance with this Policy,
(ii) notify UTAM in writing of any significant changes in the investment manager's philosophies and policies, personnel or organization and procedures,
(iii) reconcile their own records with those of the custodian, at least monthly,
(iv) meet with UTAM as required and provide written reports regarding their past performance, their future strategies and other issues requested by UTAM,
(v) file compliance reports as frequently as required by UTAM.

b) Custodian/trustee:
The University has delegated responsibility to UTAM for the custodian/trustee. The custodian/trustee will:
(i) maintain safe custody over the assets of the Plans,
(ii) execute the instructions of the University, of UTAM and of the investment managers,
(iii) record income and provide monthly financial statements to the University and to UTAM as required,
(iv) meet with UTAM as required.

c) Actuary:
The University appoints the actuary. The actuary will:
(i) perform actuarial valuations of the Plans as required,
(ii) advise the University on any matters relating to the Plans design, membership and contributions, and
(iii) assist the University in any other way required,
(iv) meet with the University as required.

d) Accountant:
The University appoints the accountant. The accountant will provide annual audited financial statements of the Plans and meet with the University as required.

The University has the authority to retain other consultants/suppliers, as it deems necessary from time to time.

### 3.5 Policy Review

This statement shall be reviewed at least once a year and either confirmed or amended as necessary.

_____

Catherine Riggall
Vice-President, Business Affairs
December 17, 2007

## Appendix 3

## RPP Actuarial Report (Excerpts)

# Actuarial Report (Excerpts)

University of Toronto Pension Plan (RPP)

As of July 1, 2008

# Summary

| (Thousands of Dollars) | As of July 1, 2007[1] | As of July 1, 2008 |
|---|---|---|
| **Going Concern Valuation Results** | | |
| ***Past Service*** | | |
| Actuarial Value of Assets | $ 2,690,046 | $ 2,797,128 |
| Less: Accrued Liability | 2,745,819 | 2,889,572 |
| Surplus (Unfunded Accrued Liability) | $ (55,773) | $ (92,444) |
| As a % of Accrued Liability | (2.0%) | (3.2%) |
| Market Value of Assets | $ 2,929,659 | $ 2,724,186 |
| Deferred Asset Gain (Loss) | $ 239,613 | $ (72,942) |
| ***Current Service*** | | |
| Total Current Service Cost | $ 96,754 | $ 102,885 |
| Less: Required Participant Contributions[2] | 32,017 | 33,896 |
| Remaining Current Service Cost | $ 64,737 | $ 68,989 |
| As a % of Participant Salary Base (Capped at $150,000) | 10.67% | 10.77% |
| Participant Salary Base (Capped at $150,000) | $ 606,887 | $ 640,837 |
| **Solvency Valuation Results** | | |
| Solvency Assets[3] | $ 2,928,659 | $ 2,723,186 |
| Solvency Liability – Without Escalated Adjustments[4] | 2,628,435 | 2,940,418 |
| Solvency Excess/(Deficit) | $ 300,224 | $ (217,232) |
| Solvency Ratio | >1.00 | 0.93 |
| **Hypothetical Wind-Up Valuation Results** | | |
| Wind-Up Assets[3] | $ 2,928,659 | $ 2,723,186 |
| Wind-Up Liability—With Escalated Adjustments[4] | 3,441,589 | 3,862,179 |
| Wind-Up Excess/(Deficit) | $ (512,930) | $ (1,138,993) |
| Transfer Ratio | 0.85 | 0.71 |

[1] Reflects change in assumptions (mortality rates; retirement rates for Academic Staff and Librarians) and pensioner augmentation

[2] Includes participant contributions made by University on behalf of disabled participants

[3] Net of provision of $1,000,000 for estimated wind-up expenses

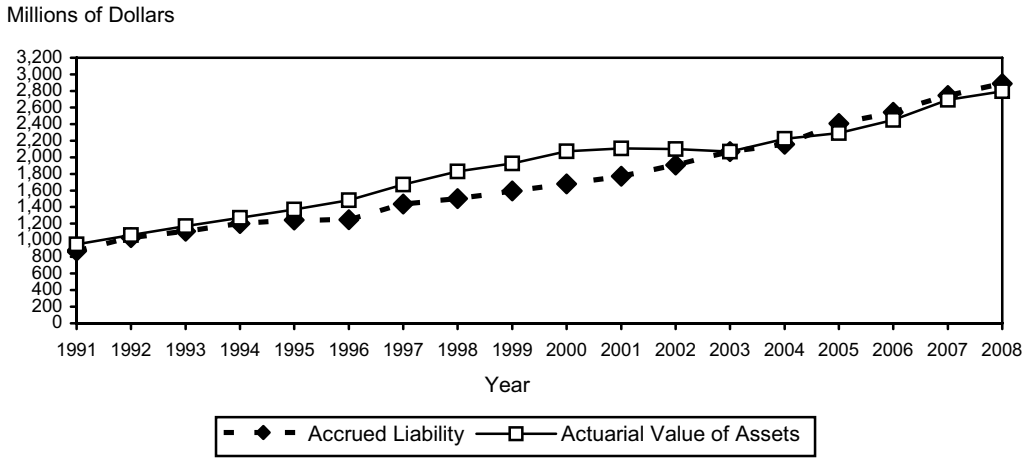
[4] The Solvency Liability excludes the liabilities associated with future escalated adjustments (indexing) pursuant to the Regulations to the *Pension Benefits Act* (Ontario). The Wind-Up Liability is calculated including the value of future escalated adjustments, as well as the value of the temporary early retirement windows for those members who would be retirement age eligible before the end of the window period

## Summary (continued)

| (Thousands of Dollars) | As of July 1, 2007 | As of July 1, 2008 |
|---|---|---|
| **Funding Requirements** | | |
| Required Participant Contributions | $ 32,017 | $ 33,896 |
| Remaining Current Service Cost | 64,737 | 68,989 |
| Plus: Special Payments to Amortize Unfunded Liability | 5,762 | 9,789 |
| Plus: Special Payments to Amortize Solvency Deficiency | 0 | 0[1] |
| Minimum Required University Contributions | $ 70,499 | $ 78,778 |
| As a % of Participant Salary Base (Capped $150,000) | 11.62% | 12.30% |
| **Personnel Data** | | |
| Active and Disabled Participants | 7,894 | 8,078 |
| Retired Participants | 4,421 | 4,514 |
| Terminated Vested Participants | 1,413 | 1,493 |
| Suspended, Exempt or Pending Status | 999 | 1,168 |
| Total | 14,727 | 15,253 |

[1] Based on no requirement to file the July 1, 2008 actuarial valuation with the Financial Services Commission of Ontario

## History of Accrued Liability and Surplus




| Year | Actuarial Value of Assets (AVA) | Accrued Liability (AL) | Surplus/(Deficit) | Surplus as a Percentage of AL |
|---|---|---|---|---|
| (millions of dollars) | | | | |
| 1991 | $ 949.4 | $ 869.7 | $ 79.8 | 9.2% |
| 1992 | $ 1,061.0[1] | $ 1,031.5[1] | $ 29.4[1] | 2.9% |
| 1993 | $ 1,169.3 | $ 1,110.3 | $ 59.1 | 8.3% |
| 1994 | $ 1,271.7 | $ 1,201.9 | $ 69.9 | 5.8% |
| 1995 | $ 1,370.5 | $ 1,243.6 | $ 126.9 | 10.2% |
| 1996 | $ 1,484.3 | $ 1,249.1[2] | $ 235.2[2] | 18.8% |
| 1997 | $ 1,671.4 | $ 1,436.7[3] | $ 234.7[3] | 16.3% |
| 1998 | $ 1,830.6 | $ 1,503.3 | $ 327.4 | 21.8% |
| 1999 | $ 1,927.2[4] | $ 1,593.6[4] | $ 333.6[4] | 20.9% |
| 2000 | $ 2,072.0 | $ 1,680.2 | $ 391.9 | 23.3% |
| 2001 | $ 2,108.2 | $ 1,770.5 | $ 337.7 | 19.1% |
| 2002 | $ 2,098.9 | $ 1,904.9[5] | $ 194.1[5] | 10.1% |
| 2003 | $ 2,068.9 | $ 2,066.7 | $ 2.2 | 0.1% |
| 2004 | $ 2,155.8 | $ 2,225.0 | $ (69.2)[6] | (3.1%) |
| 2005 | $ 2,289.8 | $ 2,407.0 | $ (117.2)[7] | (4.8%) |
| 2006 | $ 2,447.3 | $ 2,540.6[8] | $ (93.4)[8] | (3.7%) |
| 2007 | $ 2,690.0 | $ 2,745.8[9] | $ (55.8)[9] | (2.0%) |
| 2008 | $ 2,797.1 | $ 2,889.6 | $ (92.5) | (3.2%) |

[1] After plan amendments and restatement of actuarial value of assets
[2] After six-year deferral of the increase in the maximum pension limit
[3] After plan amendments and change in actuarial assumptions
[4] After plan amendments for all staff groups (interim cost certificate) and change in assumptions
[5] After plan amendments
[6] After plan amendments and change in actuarial assumptions
[7] After plan amendments and change in actuarial assumptions
[8] After plan amendments (and related assumptions changes)
[9] After plan amendments and change in actuarial assumptions

**GOING CONCERN VALUATION RESULTS** (Thousands of Dollars)
The going concern valuation results are shown below with the Accrued Liability broken down by participant category.

| | | |
|---|---|---|
| **Past Service** | | |
| Actuarial Value of Assets | | $ 2,797,128 |
| Less: Accrued Liability | | |
| Active and Disabled Participants | $ 1,368,540 | |
| Retired Participants | 1,399,161 | |
| Terminated Vested Participants | 60,007 | |
| Suspended, Exempt or Pending Status | 61,864 | |
| Total | | $ 2,889,572 |
| Surplus (Unfunded Accrued Liability) | | $ (92,444) |
| As a % of Accrued Liability | | (3.2%) |
| Market Value of Assets | | $ 2,724,186 |
| Deferred Asset Gain (Loss) | | $ (72,942) |
| **Current Service** | | |
| Total Current Service Cost | | $ 102,885 |
| Less: Required Participant Contributions | | 33,896[1] |
| Remaining Current Service Cost | | $ 68,989 |
| As a % of Participant Salary Base (With $150,000 Pay Cap) | | 10.77% |
| Participant Salary Base (With $150,000 Pay Cap) | | $ 640,837 |

[1] Includes participant contributions made by University on behalf of disabled participants

## SOLVENCY AND HYPOTHETICAL WIND-UP VALUATION RESULTS

| (thousands of dollars) | Solvency Valuation | Hypothetical Wind-Up Valuation |
|---|---|---|
| (1) Market Value of Assets | $ 2,724,186 | $ 2,724,186 |
| (2) Less: Estimated Wind-Up Expenses | 1,000 | 1,000 |
| (3) Assets Net of Wind-Up Expenses | $ 2,723,186 | $ 2,723,186 |
| (4) Solvency/Wind-Up Liability | | |
| Active and Disabled Participants | $ 1,396,094 | $ 1,947,427 |
| Retired Participants | 1,415,115 | 1,745,956 |
| Terminated Vested Participants | 64,846 | 104,433 |
| Suspended, Exempt or Pending Status | 64,363 | 64,363 |
| Total | $ 2,940,418 | $ 3,862,179 |
| (e) Surplus/(Deficiency), (3) - (4) | $ (217,232) | $ (1,138,993) |
| (f) Present Value of Existing Special Payments Over 5 Years | $ 43,945 | N/A |
| (g) Statutory Solvency Deficiency | (173,287) | N/A |
| (h) Transfer Ratio, (1)/(4) | N/A | 71% |

As permitted under the Regulations to the *Pension Benefits Act* (Ontario), the Solvency Liability excludes the liabilities associated with escalated adjustments (future indexing). Reflecting future escalated adjustments in the Hypothetical Wind-Up Valuation increases the liabilities by $921,761,000.

The assumptions used to determine the Solvency Liability are summarized on page 44 of this report. Note that the interest rates-with escalated adjustments reflect the value of future indexation of pensions during both the preretirement and postretirement periods.

In our opinion, the value of Plan assets, less a reasonable allowance for wind-up expenses, would be less than the actuarial liabilities (including escalated adjustments) by $1,138,993,000 if the Plan were wound-up on the valuation date, assuming that there is a competitive market for inflation-indexed annuities, or that a reasonable fixed rate of indexation could be substituted for inflation-linked indexation to facilitate annuity purchases.

# Experience

**RECONCILIATION OF GOING CONCERN SURPLUS/(DEFICIT)** (Thousands of Dollars)

| | | | |
|---|---|---|---|
| Surplus/(Deficit) at July 1, 2007 | | $ | (55,773) |
| Less: | University Current Service Cost for Plan Year Ending June 30, 2008, and Special Past Service Contributions Under VEARP | | 65,651 |
| Plus: | University Contributions: | | |
| | University Current Service Cost Contributions | | 64,737 |
| | Minimum Required Special Payments | | 5,762 |
| | Special Past Service Contributions for VEARP | | 914 |
| Plus: | Interest at 6.5% per annum | | (519) |
| Equals: | Expected Surplus/(Deficit) at July 1, 2008, Before Experience Gains (Losses) | $ | (50,530) |
| Plus: | Increase (Decrease) at July 1, 2008 Due to: | | |
| | Gains (Losses): | | |
| | Return on Actuarial Value of Assets | $ | (36,494) |
| | Salary Increases | | (7,266) |
| | Indexation of Benefits | | 1,061 |
| | Termination Experience | | 1,338 |
| | Retirement Experience | | (4,795) |
| | Mortality Experience | | 3,129 |
| | All Other Sources | | 1,113 |
| Equals: | Surplus/(Deficit) at July 1, 2008 | $ | (92,444) |

## COMMENTS REGARDING EXPERIENCE

### Return on Assets

The assumed rate of return for actuarial valuation purposes was 6.5% per annum or $173,840,000, based on the actuarial value of assets as at July 1, 2007. After allowance is made for the market value adjustment under the asset valuation method of $(36,494,000), the net return on the actuarial value of assets was 5.1% or $137,375,000. The market value adjustment of $(36,494,000) represents the asset loss under the asset valuation method. The total return based on the actual market value of assets after allowing for the full amount of capital depreciation during the year was -6.0% after expenses, assuming contributions and benefit payments take place in the middle of the year.

### Salary Increases

The assumed salary increase used for the July 1, 2007 actuarial valuation was 4.5% per year. Actual salary increases varied by staff group, resulting in an actuarial loss of $7,226,000.

### Indexation of Benefits

Benefit entitlements for retired and terminated vested participants as of July 1, 2008 increased by 1.8% under the regular indexation formula. The increase was lower than the 1.875% increase anticipated under the actuarial assumptions, resulting in an actuarial gain of $1,061,000. There was also an augmentation of 0.6% as of July 1, 2008 for participants who retired from employment as a member of the Academic Staff or as a Librarian. This augmentation was taken into account in the July 1, 2007 actuarial valuation.

### Mortality Experience

Mortality rates since July 1, 2007 were higher than expected under the valuation assumptions. This resulted in an actuarial gain of $3,129,000.

### Retirement Experience

Retirement ages for retirements since July 1, 2007 were earlier than expected under the valuation assumptions. This resulted in an actuarial loss of $3,795,000. The loss was primarily attributable to a higher than expected number of retirements under the temporary early retirement windows (due to anticipation of the temporary windows not being extended). There was also a loss of approximately $1,000,000 arising from retired members taking their pension entitlement in the form of a commuted value.

### Termination Experience

Termination experience since July 1, 2007 was higher than expected under the valuation assumptions. This resulted in an actuarial gain of $1,338,000.

### All Other Sources

Other factors such as personnel changes and data adjustments, etc., deviated from expected, resulting in a net actuarial gain of $775,000.

# Actuarial Assumptions

## Going Concern Valuation

### Demographic Assumptions

| | |
|---|---|
| Retirement Age | **Academic Staff and Librarians**<br>In accordance with Table A following, but no earlier than one year after valuation date, subject to early retirement provisions.<br><br>**Administrative Staff, Unionized Administrative Staff, Unionized Staff and Research Associates**<br>Age 63, subject to early retirement provisions<br><br>**Terminated Vested Participants**<br>Age 65-1/2[1]. |
| Mortality Rates | 1994 Uninsured Pensioner Mortality Table, with mortality improvements under Scale "AA" projected to 2015. |
| Withdrawal Rates | Table B following. |
| Disability Rates | None assumed. |
| Percentage With Spouse | 86.7%; female spouse assumed to be 4 years younger than male spouse. |

### Economic Assumptions

| | |
|---|---|
| Increase in Consumer Price Index (CPI) | 2.5% per annum. |
| Cost-of-Living Adjustments | 1.875% per annum (75% of CPI). |
| Increase in CPP Maximum Salary | 3.5% per annum. |
| Increase in *Income Tax Act* Maximum Benefit Limit | $2,333.33, increasing to $2,444.44 in 2009;<br>3.5% per annum thereafter. |
| Increase in Salaries | 4.5% per annum<br>(2.5% CPI + 2.0% merit and promotion). |
| Interest Rate | 6.5% per annum<br>(2.5% CPI + 4.0% real return, net of all fees). |
| Interest Rate on Participant Contributions | 6.5% per annum. |
| Loading for Administrative Expenses | Implicit in interest rate. |

[1] Reflects that Normal Retirement Date is June 30th coincident with or following age 65

## Going Concern Valuation (continued)

**Methods**

| | |
|---|---|
| Valuation of Assets | The actuarial value of assets has been determined by writing up the prior year's actuarial value and net cash flow at the valuation interest rate and then adjusting the result 33-1/3% toward market value. |
| Actuarial Cost Method | Unit credit cost method. |

# Actuarial Report (Excerpts)

University of Toronto (OISE) Pension Plan (RPP(OISE))

As of July 1, 2008

# Summary

| Summary (Thousands of Dollars) | As of July 1, 2007[1] | As of July 1, 2008 |
|---|---|---|
| **Going Concern Valuation Results[2]** | | |
| ***Past Service*** | | |
| Actuarial Value of Assets | $ 107,630 | $ 108,852 |
| Less: Accrued Liability | 100,668 | 104,204 |
| Surplus (Unfunded Accrued Liability) | $ 6,962 | $ 4,648 |
| As a % of Accrued Liability | 6.9% | 4.5% |
| Market Value of Assets | $ 116,908 | $ 105,856 |
| Deferred Asset Gain (Loss) | $ 9,278 | $ (2,996) |
| ***Current Service*** | | |
| Total Current Service Cost | $ 2,118 | $ 1,852 |
| Less: Required Participant Contributions[3] | 595 | 550 |
| Remaining Current Service Cost | $ 1,523 | $ 1,302 |
| As a % of Participant Salary Base (Capped at $150,000) | 13.49% | 13.41% |
| Participant Salary Base (Capped at $150,000) | $ 11,290 | $ 9,712 |

[1] After change in assumptions (mortality rates; retirement rates for Academic Staff and Librarians) and pensioner augmentation

[2] On August 16, 2000, the Superintendent of Financial Services ordered that the Plan be wound-up in part in relation to participants who terminated employment between February 1996 and June 1996 under special voluntary retirement or severance programs in effect at that time. On June 23, 2005, a Partial Plan Wind-Up Report was filed with the Financial Services Commission of Ontario to determine the portion of assets allocable to the partial wind-up group as of June 30, 1996, and to update the assets allocable to the partial wind-up group to June 30, 2004. For valuations on or after July 1, 2005, the valuation results exclude assets and liabilities related to partial wind-up participants

[3] Includes participant contributions made by University on behalf of disabled participants

## Summary (continued)

| (Thousands of Dollars) | As of July 1, 2007 | As of July 1, 2008 |
|---|---|---|
| **Funding Requirements** | | |
| Required Participant Contributions | $ 595 | $ 550 |
| Remaining Current Service Cost | $ 1,523 | $ 1,302 |
| Plus: Special Payments to Amortize Solvency Deficiency | 0 | 0[1] |
| Less: Permitted Application of Surplus | (1,523) | (1,302)[1] |
| Minimum Required University Contributions | $ 0 | $ 0 |
| **Solvency Valuation Results** | | |
| Solvency Assets[2] | $ 116,508 | $ 105,456 |
| Solvency Liability—Without Escalated Adjustments[3] | 99,280 | 108,720 |
| Solvency Excess/(Deficit) | $ 17,228 | $ (3,264) |
| **Hypothetical Wind-Up Valuation Results** | | |
| Wind-Up Assets[2] | $ 116,508 | $ 105,456 |
| Wind-Up Liability—With Escalated Adjustments[3] | 128,249 | 140,644 |
| Wind-Up Excess/(Deficit) | $ (11,741) | $ (35,188) |
| Transfer Ratio | 0.91 | 0.75 |

[1] Based on no requirement to file the July 1, 2008 actuarial valuation with the Financial Services Commission of Ontario
[2] Net of provision of $400,000 for estimated wind-up expenses
[3] The Solvency Liability excludes the liabilities associated with future escalated adjustments (indexing) pursuant to the Regulations to *the Pension Benefits Act (Ontario)*. The Wind-Up Liability is calculated including the value of future escalated adjustments

| | As of July 1, 2007 | As of July 1, 2008 |
|---|---|---|
| **Personnel Data** | | |
| ***Participants Not Affected by Partial Wind-Up*** | | |
| Active and Disabled Participants | 124 | 106 |
| Retired Participants | 132 | 144 |
| Terminated Vested Participants | 19 | 18 |
| Suspended Participants | 4 | 4 |
| Total | 279 | 272 |
| ***Partial Wind-Up Participants With Entitlements Remaining in Plan*** | | |
| Partial Wind-Up Participants Receiving Immediate Pension | 20 | 0[1] |
| Partial Wind-Up Participants Pending Elections | 5 | 2 |
| Total | 25 | 2 |

[1] Annuities purchased

## Going Concern Valuation Results (Thousands of Dollars)

The going concern valuation results are shown below with the Accrued Liability broken down by participant category.

| | | |
|---|---|---|
| **Past Service** | | |
| Actuarial Value of Assets | | $ 108,852 |
| Less: Accrued Liability | | |
| Active and Disabled Participants | $ 47,686 | |
| Retired Participants | 54,369 | |
| Terminated Vested Participants | 1,659 | |
| Suspended Participants | 490 | |
| Total | | $ 104,204 |
| Surplus (Unfunded Accrued Liability) | | $ 4,648 |
| As a % of Accrued Liability | | 4.5% |
| Market Value of Assets | | $ 105,856 |
| Deferred Asset Gain (Loss) | | $ (2,996) |
| **Current Service** | | |
| Total Current Service Cost | | $ 1,852 |
| Less: Required Participant Contributions | | 550[1] |
| Remaining Current Service Cost | | $ 1,302 |
| As a % of Participant Salary Base (With $150,000 Pay Cap) | | 13.41% |
| Participant Salary Base (With $150,000 Pay Cap) | | $ 9,712 |

[1] Includes participant contributions made by University on behalf of disabled participants

## Solvency and Hypothetical Wind-Up Valuation Results

| (thousands of dollars) | Solvency Valuation | Hypothetical Wind-Up Valuation |
|---|---|---|
| (1) Market Value of Assets | $ 105,856 | $ 105,856 |
| (2) Less: Estimated Wind-Up Expenses | 400 | 400 |
| (3) Assets Net of Wind-Up Expenses | $ 105,456 | $ 105,456 |
| (4) Solvency/Wind-Up Liability | | |
| Active and Disabled Participants | $ 51,673 | $ 69,093 |
| Retired Participants | 54,773 | 68,163 |
| Terminated Vested Participants | 1,784 | 2,898 |
| Suspended Participants | 490 | 490 |
| Total | $ 108,720 | $ 140,644 |
| (5) Surplus/(Deficiency), (3) - (4) | $ (3,264) | $ (35,188) |
| (6) Transfer Ratio, (1)/(4) | 0.97 | 0.75 |

As permitted under the Regulations to the *Pension Benefits Act* (Ontario), the Solvency Liability excludes the liabilities associated with escalated adjustments (future indexing). Reflecting future escalated adjustments in the Hypothetical Wind-Up Valuation increases the liabilities by $31,924,000.

The assumptions used to determine the Solvency Liability are summarized on page 41 of this report. Note that the interest rates-with escalated adjustments reflect the value of future indexation of pensions during both the preretirement and postretirement periods.

In our opinion, the value of Plan assets, less a reasonable allowance for wind-up expenses, would be less than the actuarial liabilities (including escalated adjustments) by $35,188,000, if the Plan were wound-up on the valuation date, assuming that there is a competitive market for inflation-indexed annuities, or that a reasonable fixed rate of indexation could be substituted for inflation-linked indexation to facilitate annuity purchases.

# Experience

**RECONCILIATION OF GOING CONCERN SURPLUS** (Thousands of Dollars)

| | | | |
|---|---|---|---|
| Surplus at July 1, 2007 | | $ | 6,962 |
| Less: | Surplus Applied Against Current Service Cost | | 1,558 |
| Plus: | Interest at 6.5% per annum | | 402 |
| Equals: | Expected Surplus at July 1, 2008, Before Experience Gains (Losses) | $ | 5,806 |
| Plus: | Increase (Decrease) in Surplus at July 1, 2008 Due to: | | |
| | Gains (Losses): | | |
| | Return on Assets | $ | (1,498) |
| | Salary Increases | | 383 |
| | Indexation of Benefits | | 32 |
| | Mortality Experience | | (288) |
| | Termination Experience | | 82 |
| | Retirement Experience | | (864) |
| | All Other Sources | | 995 |
| Equals: | Surplus at July 1, 2008 | $ | 4,648 |

## Comments Regarding Experience

### Return on Assets

The assumed rate of return for actuarial valuation purposes was 6.5% per annum or $6,861,000, based on the actuarial value of assets as at July 1, 2007. After allowance is made for the market value adjustment under the asset valuation method of $(1,498,000), the net return was 5.0% or $5,363,000. The market value adjustment of $(1,498,000) represents the asset loss under the asset valuation method. The total return based on the actual market value of assets was -6.1% after expenses (excluding partial wind-up expenses), assuming contributions and benefit payments take place in the middle of the year.

### Salary Increases

The assumed salary increase used for the July 1, 2007 actuarial valuation was 4.5% per year. Actual salary increases varied by staff group, resulting in an actuarial gain of $383,000.

### Indexation of Benefits

Benefit entitlements for retired and terminated vested participants as of July 1, 2008 increased by 1.8% under the 75% of CPI indexing provision (and corresponding higher percentages for retirees under one of the pre-integration provisions). The increase was less than the 1.875% increase anticipated under the actuarial assumptions, resulting in an actuarial gain of $32,000. There was also an augmentation as of July 1, 2008 to bring indexation as of July 1, 2008 up to 100% of CPI for participants who retired from employment as a member of the Academic Staff or as a Librarian. This augmentation was taken into account in the July 1, 2007 actuarial valuation.

### Mortality Experience

Mortality rates since July 1, 2007 were lower than expected under the valuation assumptions. This resulted in an actuarial loss of $288,000.

### Retirement Experience

The age at which members retired since July 1, 2007 was earlier than expected under the valuation assumptions. This resulted in an actuarial loss of $864,000.

### Termination Experience

Termination experience since July 1, 2007 was slightly higher than expected under the valuation assumptions. This resulted in an actuarial gain of $82,000.

### All Other Sources

Other factors such as personnel changes and data adjustments, etc., deviated from expected, resulting in a net actuarial gain of $995,000.

# Actuarial Report (Excerpt)

Supplemental Retirement Arrangement

As of July 1, 2008

# Valuation Results

| (Thousands of Dollars) | As of July 1, 2007[1] | As of July 1, 2008 |
|---|---|---|
| **Going Concern Valuation Results** | | |
| ***Past Service***[2] | | |
| Accrued Liability for SRA | | |
| Active Participants | $ 34,353 | $ 27,384 |
| Retired Participants | 111,040 | 112,369 |
| Total | $ 145,393 | $ 139,753 |
| ***Current Service***[2] | | |
| Current Service Cost for SRA | $ 609 | $ 745 |
| As a % of Participant Salary Base (With $150,000 Pay Cap) | 0.10% | 0.15% |
| Participant Salary Base[2] | $ 618,176 | $ 650,966 |

For financial accounting purposes, the University from time to time appropriates funds which are set aside as a "fund for specific purpose" in respect of the obligations under the SRA. The assets in this fund are $174,182,500 as of June 30, 2008. In accordance with an Advance Income Tax Ruling which the University has received, such assets do not constitute trust property, are available to satisfy University creditors, may be applied to any other purpose that the University may determine from time to time, are commingled with other assets of the University, and are not subject to the direct claim of any members.

[1] Reflects change in assumptions (mortality rates; retirement for Academic Staff and Librarians) and pensioner augmentation
[2] Includes participants in both the University of Toronto Pension Plan and University of Toronto (OISE) Pension Plan

## Appendix 4 – Pension Financial Statements

## University of Toronto Pension Plan

# Financial Statements

University of Toronto
Pension Plan

June 30, 2008

# AUDITORS' REPORT

To the Administrator of the
**University of Toronto Pension Plan**

We have audited the statement of net assets available for benefits of the **University of Toronto Pension Plan** (the "Plan") as at June 30, 2008 and the statement of changes in net assets available for benefits for the year then ended. These financial statements are the responsibility of the Plan's Administrator. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the Plan's Administrator, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as at June 30, 2008 and the changes in its net assets available for benefits for the year then ended in accordance with Canadian generally accepted accounting principles.

Toronto, Canada,
October 30, 2008.

Chartered Accountants
Licensed Public Accountants

## UNIVERSITY OF TORONTO PENSION PLAN

## STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS

(with comparative figures as at June 30, 2007)
(thousands of dollars)

As at June 30

| | **2008** | 2007 |
|---|---|---|
| | **$** | $ |
| **ASSETS** | | |
| Investments, at fair value *(note 3(a))* | **2,715,629** | 2,923,749 |
| Receivables and prepaid expenses | **12,516** | 10,286 |
| | **2,728,145** | 2,934,035 |
| **LIABILITIES** | | |
| Refunds in transit | **1,959** | 2,602 |
| Accrued expenses | **2,000** | 1,774 |
| | **3,959** | 4,376 |
| **Net assets available for benefits** | **2,724,186** | 2,929,659 |

*See accompanying notes*

On behalf of the Governing Council of the University of Toronto:

Ms. Catherine J. Riggall
Vice-President, Business Affairs

Mr. Louis Charpentier
Secretary of the Governing Council

**UNIVERSITY OF TORONTO PENSION PLAN**

**STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS**

(with comparative figures for the year ended June 30, 2007)
(thousands of dollars)

Year ended June 30

| | **2008** | 2007 |
|---|---|---|
| | **$** | $ |
| **INCREASE IN NET ASSETS** | | |
| Employer contributions *(note 4)* | **71,413** | 69,403 |
| Employee contributions | **32,624** | 30,824 |
| Net investment income from Master Trust *(note 3(b))* | | 499,339 |
| Transfers from other plans | **2,203** | 1,648 |
| **Total increase in net assets** | **106,240** | 601,214 |
| **DECREASE IN NET ASSETS** | | |
| Net investment loss from Master Trust *(note 3(b))* | **147,429** | |
| Retirement payments | **123,379** | 119,375 |
| Refunds and transfers *(note 5)* | **13,154** | 17,441 |
| Fees and expenses (*note 6)* | **27,751** | 24,667 |
| **Total decrease in net assets** | **311,713** | 161,483 |
| **Net increase (decrease) in net assets for the year** | **(205,473)** | 439,731 |
| Net assets available for benefits, beginning of year | **2,929,659** | 2,489,928 |
| **Net assets available for benefits, end of year** | **2,724,186** | 2,929,659 |

*See accompanying notes*

# UNIVERSITY OF TORONTO PENSION PLAN

## NOTES TO FINANCIAL STATEMENTS

## JUNE 30, 2008

### 1. Description of Plan

The following description of the University of Toronto Pension Plan (the "Plan") is a summary only. For more complete information, reference may be made to the official Plan text.

#### a) General

The Plan is a contributory defined benefit plan open to all full-time and part-time employees of the University of Toronto (the "University") meeting the eligibility conditions.

The Plan is registered under the Pension Benefits Act of Ontario (1990) (Ontario Registration Number 0312827) and with the Canada Revenue Agency.

The Governing Council of the University of Toronto acts as administrator for the Plan and the investments are managed by the University of Toronto Asset Management Corporation.

#### b) Funding

Plan benefits are funded by contributions and investment earnings. Member contributions are made in accordance with a prescribed formula. The University's contribution is determined annually on the basis of an actuarial valuation taking into account the assets of the Plan and all other relevant factors.

#### c) Retirement Pensions

At retirement, the number of years of pensionable service earned by a member is multiplied by a percentage of the average of the highest 36 months of earnings to determine the annual pension payable to that member. There are various early retirement provisions in place for different employee groups. Benefits are also payable in the case of termination of employment prior to retirement.

#### d) Death Benefits

Death benefits are available for beneficiaries on the death of an active member, and may be taken in the form of a survivor pension or a lump sum payment. Death benefits may also be available for a spouse on the death of a retired member.

#### e) Escalation of Benefits

The pension benefits of retirees are subject to cost of living adjustments equal to the greater of a) 75% of the increase in the CPI for the previous calendar year to a maximum CPI increase of 8% plus 60% of the increase in CPI in excess of 8% or, b) the increase in the Consumer Price Index for Canada (CPI) for the previous calendar year minus 4.0%.

## 2. Summary of significant accounting policies

These financial statements have been prepared by the University in accordance with Canadian generally accepted accounting principles applied within the framework of the significant accounting policies summarized below:

### a) Investments and investment income

Investments, which include accrued income, are carried at fair value.

The Plan is invested in the University of Toronto Master Trust (the "Master Trust"). The unit value of the Master Trust is calculated based on the fair value of the underlying investments of the Master Trust. Net investment income (loss) includes interest, dividends, foreign exchange gains (losses), realized gains (losses) and net change in unrealized gains (losses) on investments held by the Master Trust.

### b) University of Toronto Master Trust

Investments are carried at fair value. Fair value amounts represent estimates of the consideration that would be agreed upon between knowledgeable, willing parties who are under no compulsion to act. It is best evidenced by a quoted market price, if one exists. The calculation of estimated fair value is based upon market conditions at a specific point in time and may not be reflective of future fair values. Changes in fair values from one year to the next are reflected in the statement of changes in net assets available for benefits.

Fair values of the investments held by the Master Trust are determined as follows:

(i) The fair values of publicly traded bonds and equities are determined based on quoted market values. Investments in pooled funds are valued at their net asset value per unit. Infrequently traded securities are based on quoted market yields or prices of comparable securities, as appropriate. Private investment interests, which include private equities with underlying investments in equities, debt and real estate assets, are determined based on the latest valuations provided by the external investment managers, adjusted for cash receipts, cash disbursements and securities distributions. The University believes the carrying amount of these financial instruments is a reasonable estimate of fair value. Because alternative investments are not readily traded, their estimated values are subject to uncertainty and therefore may differ from the value that would have been used had a ready market for such investments existed.

(ii) Derivative financial instruments are used to manage particular market and currency exposures for hedging and risk management purposes with respect to the Master Trust's investments and as a substitute for more traditional investments. Derivative financial instruments and synthetic products that may be employed include debt, equity, commodity and currency futures, options, swaps and forward contracts. These contracts are supported by liquid assets with a fair value approximately equal to the fair value of the instruments underlying the derivative contract.

For all derivative financial instruments, the gains and losses arising from changes in the fair value of such derivatives are recognized as investment income (loss) in the year in which the changes in fair value occur. The fair value of derivative financial instruments reflects the daily quoted market amount of those instruments, thereby taking into account the current unrealized gains or losses on open contracts. Investment dealer quotes or quotes from a bank are available for substantially all of the Master Trust's derivative financial instruments.

(iii) Monetary assets and liabilities denominated in foreign currencies are translated into Canadian dollars at the exchange rate in effect at the year-end.

Interest income is recorded by the Master Trust on an accrual basis. Dividends are recorded by the Master Trust as revenue on the record date. Unrealized gains and losses on investments are recorded by the Master Trust as a change in fair value since the beginning of the year or since the date of purchase when purchased during the year.

Income and expenses are translated at exchange rates in effect on the date of the transaction. Gains or losses arising from those translations are included in income.

Purchases and sales of investments are recorded by the Master Trust on a settlement date basis and transaction costs are expensed as incurred.

**c) Revenue and expense recognition**

All employer and employee contributions and other revenue are reflected in the year in which they are due. All expenses are recorded on an accrual basis.

## 3. University of Toronto Master Trust

On August 1, 2000, the Master Trust was established to facilitate the collective investment of the assets of the University's pension plans. Each pension plan holds units of the Master Trust. The value of each unit held by a plan increases or decreases every month based on the change in fair value of the underlying assets of the Master Trust. This value is used as the basis for the purchase and sale of units by the pension plans in the following month.

**a) Statement of net assets**

(thousands of dollars)

As at June 30, 2008, the Plan held 18,767,526 (2007 – 18,955,631) of the 19,555,272 (2007 - 19,806,915) outstanding units of the Master Trust. The Master Trust investments held at fair value as at June 30 are summarized below, and have been classified by asset-mix category based on the intent of the investment strategies of the underlying portfolios of the Master Trust. This classification required $1,070 million (2007 - $1,203 million) of pooled and hedge funds, and $44 million (2007 - $233 million) of cash, money market funds, short-term notes and treasury bills to be reclassified to their appropriate investment category.

| | **2008** **$** | 2007 $ |
|---|---|---|
| Cash, money market funds, short-term notes and treasury bills | **139,775** | 60,404 |
| Government and corporate bonds | **660,797** | 689,069 |
| Canadian equities | **442,966** | 473,435 |
| United States equities | **441,884** | 598,690 |
| International equities | **576,419** | 654,754 |
| Hedge funds | **236,178** | 205,948 |
| Private equities | **246,242** | 125,330 |
| Real assets | **126,324** | 126,021 |
| | **2,870,585** | 2,933,651 |
| Derivative related net receivable (payable) (*note 3(d)*) | **(40,971)** | 121,401 |
| | **2,829,614** | 3,055,052 |
| **University of Toronto Pension Plan (96.0% of Master Trust)** | **2,715,629** | 2,923,749 |

**b) Statement of changes in net assets**
(thousands of dollars)

**For the year ended June 30**

| | **2008** | 2007 |
|---|---|---|
| | **$** | $ |
| Net investment income (loss) | **(153,716)** | 522,211 |
| Cash received on purchase of Master Trust units by pension plans | **105,900** | 102,456 |
| Cash paid on redemption of Master Trust units by pension plans | **(177,622)** | (166,195) |
| **Net increase (decrease) in net assets for the year** | **(225,438)** | 458,472 |
| **Net assets, beginning of year** | **3,055,052** | 2,596,580 |
| **Net assets, end of year** | **2,829,614** | 3,055,052 |
| **University of Toronto Pension Plan (96.0% of Master Trust)** | **2,715,629** | 2,923,749 |

Net investment income (loss) for the year ended June 30 for the Master Trust is comprised of the following:

| | **2008** | 2007 |
|---|---|---|
| | **$** | $ |
| Interest income | | |
| Government and corporate bonds | **24,414** | 25,091 |
| Short-term investments | **13,226** | 24,086 |
| Dividend income | | |
| Canadian | **18,725** | 13,402 |
| Foreign | **22,170** | 17,738 |
| Net realized gains from investments | **31,484** | 175,807 |
| Net unrealized gains (losses) from investments | **(264,234)** | 265,848 |
| Other income | **499** | 239 |
| | **(153,716)** | 522,211 |
| **University of Toronto Pension Plan (96.0% of Master Trust)** | **(147,429)** | 499,339 |

The net investment income (loss) is reported in the Plan's statement of changes in net assets available for benefits as net investment income from Master Trust.

**c) Individually significant investments**
(thousands of dollars)

The details of investments where the fair value exceeds 1% of the total fair value or book value of the Master Trust are listed below.

| | Weighted average coupon rate | Maturity range | Fair value |
|---|---|---|---|
| Money market funds, treasury bills and government bonds | | | |
| Government of Canada Bonds | 4.58% | 2009 – 2041 | 377,921 |
| Government of Canada T-Bills | 2.46% | 2008 – 2008 | 54,962 |
| Province of Quebec Bonds | 5.31% | 2009 – 2038 | 46,468 |
| Province of Ontario Bonds | 6.47% | 2009 – 2039 | 36,255 |
| Province of Ontario T-Bills | 2.60% | 2008 – 2008 | 36,074 |
| Canadian equities | | | |
| BGIC Active Canadian Equity Fund | | | 114,236 |
| Hedge funds (prior to reclassification) | | | |
| Blackrock Alternative Advisors Inc. | | | 96,643 |
| Trent River Offshore Ltd. | | | 75,517 |
| DGAM Diversified Fund | | | 63,111 |
| Blackstone Capital Partners | | | 57,679 |
| Pioneer Alternative Investment Management Ltd. | | | 57,464 |
| Robec-Sage Capital International | | | 52,638 |
| Muirfield Absolute Performance Fund | | | 48,227 |
| Lighthouse Diversified Fund Ltd. | | | 48,155 |
| Aetos Capital | | | 42,565 |

**d) Risk management**

Risk management relates to the understanding and active management of the risks associated with all areas of the Master Trust's investments. Investments are primarily exposed to foreign exchange risk, interest rate price risk and market and credit risks. To manage these risks within reasonable risk tolerances, the Master Trust, through the University of Toronto Asset Management Corporation, has formal policies and procedures in place governing asset mix among equity, fixed income and alternative assets, requiring diversification within categories, and setting limits on the size of exposure to individual investments and counterparties. In addition, derivative instruments are used in the management of these risks (see below).

During the year, the Master Trust recognized as investment income $3.3 million (2007 - $3.7 million) as a change in fair value that was estimated using a valuation technique based on assumptions that are not supported by observable market prices or rates. Management believes there are no other reasonable assumptions for these investments which would generate any material changes in investment income.

## e) Derivative financial instruments

(thousands of dollars)

**Description**

The Master Trust has entered into equity and commodity index futures contracts which oblige it to pay the difference between a predetermined amount and the market value of certain equities when the market value is less than the predetermined amount, or receive the difference when the market value is more than the predetermined amount.

The Master Trust enters into foreign currency forward contracts to minimize exchange rate fluctuations and the resulting uncertainty on future financial results. All outstanding contracts have a remaining term to maturity of less than one year. The Master Trust has significant contracts outstanding held in U.S. dollars, the Euro, Japanese yen and British pound.

The notional amounts of the derivative financial instruments do not represent amounts exchanged between parties and are not a measure of the Master Trust's exposure resulting from the use of financial instrument contracts. The amounts exchanged are based on the applicable rates applied to the notional amounts.

**Risks**

The Master Trust is exposed to credit-related losses in the event of non-performance by counterparties to these financial instruments, but it does not expect any counterparties to fail to meet their obligations given their high credit ratings.

**Terms and conditions**

The notional and fair value amounts of the financial instruments are as follows:

| | **2008** | | 2007 | |
|---|---|---|---|---|
| | **Notional Value** | **Fair Value** | Notional Value | Fair Value |
| Foreign currency forward contracts: | | | | |
| - United States | **1,510,310** | **(2,361)** | 1,572,876 | 90,986 |
| - International | **478,226** | **(3,212)** | 598,901 | 35,316 |
| | | **(5,573)** | | 126,302 |
| Equity and commodity index futures contracts: | | | | |
| - Canadian | **7,385** | **(2,275)** | 134,752 | 1,796 |
| - United States | **419,327** | **(26,620)** | 563,965 | (8,217) |
| - International | **135,919** | **(6,503)** | 203,533 | 1,520 |
| | | **(35,398)** | | (4,901) |
| **Total** | | **(40,971)** | | 121,401 |

## f) Other commitments

In order to increase the allocation to alternative assets to meet the target policy asset mix, the Master Trust has made commitments to invest $840.5 million in private equities and real assets as at June 30, 2008.

**4. Plan contributions**

The University has made $64.7 million (2007 - $57.2 million) in current service cost contributions and $6.7 million (2007 - $12.2 million) in additional special payments. The special payments were made to amortize the unfunded liability, since the actuarial valuation as at July 1, 2007, showed the present value of accrued pension benefits exceeding the Plan's actuarial value of assets.

**5. Refunds and transfers**

(thousands of dollars)

Refunds and transfers consist of the following:

| | **2008** | 2007 |
|---|---|---|
| | **$** | $ |
| Refunds of contributions: | | |
| Upon termination | **1,163** | 1,817 |
| Upon death | **3,418** | 3,521 |
| | **4,581** | 5,338 |
| Transfers to other plans upon termination | **8,573** | 12,103 |
| | **13,154** | 17,441 |

**6. Fees and expenses**

(thousands of dollars)

Fees and expenses consist of the following:

| | **2008** | 2007 |
|---|---|---|
| | **$** | $ |
| Investment management fees: | | |
| External managers[1,2] | **21,389** | 18,284 |
| University of Toronto Asset Management Corporation[2,4] | **1,995** | 1,948 |
| Transaction fees[2,3] | **1,400** | 1,569 |
| Trustee and custodial fees[2] | **933** | 786 |
| Actuarial and consulting fees | **318** | 357 |
| Pension records administration | **735** | 685 |
| External audit fees | **34** | 56 |
| Administration cost – University of Toronto[4] | **724** | 768 |
| Other fees | **223** | 214 |
| | **27,751** | 24,667 |

[1] Increase in 2008 mainly due to a $1.6 million increase in fees relating to private equities, and an increase of $2.2 million relating to absolute return investments (i.e. hedge funds) offset by decrease of $0.7 million in public investment fees.

[2] Reflects expenses that are directly charged to the Master Trust and are allocated back to the Plan.

[3] Transaction fees represent the cost of purchasing and selling investments.

[4] Represents related party transactions.

## 7. Obligations for pension benefits

(thousands of dollars)

The actuarial present value of accrued pension benefits is determined by applying best estimate assumptions and the projected benefit method pro rated on services. An actuarial valuation was performed as of July 1, 2008 by Hewitt Associates LLC, a firm of consulting actuaries.

The actuarial present value of accrued pension benefits as at July 1, 2008 and 2007 and the principal components of changes during the year are as follows:

| | **2008** | 2007 |
|---|---|---|
| | **$** | $ |
| **Actuarial present value of accrued pension benefits, beginning of year** | **2,745,819** | 2,540,629 |
| Interest on accrued benefits | **177,237** | 161,336 |
| Benefits accrued | **96,137** | 92,194 |
| Transfer from other plans | **2,203** | 1,648 |
| Benefits paid | **(136,533)** | (136,816) |
| Experience (gain) loss | **4,709** | (8,867) |
| Plan amendments | | 9,042[1] |
| Assumption changes | | 86,653[2] |
| **Actuarial present value of accrued pension benefits, end of year** | **2,889,572** | 2,745,819 |

[1] Reflects augmentation as of July 1, 2007 and July 1, 2008 for pensioners from the Faculty and Librarian staff groups.

[2] Reflects change in mortality rates, and change in retirement rates for the Faculty and Librarian staff groups.

Significant assumptions used in the actuarial valuation are as follows:

| | **2008** | 2007 |
|---|---|---|
| | **%** | % |
| Interest rate | **6.50** | 6.50 |
| Consumer Price Index | **2.50** | 2.50 |
| Salary escalation rate | **4.50** | 4.50 |

# Financial Statements

University of Toronto (OISE) Pension Plan

June 30, 2008

# AUDITORS' REPORT

To the Administrator of the
**University of Toronto (OISE) Pension Plan**

We have audited the statement of net assets available for benefits of the University of Toronto (OISE) Pension Plan (the "Plan") as at June 30, 2008 and the statement of changes in net assets available for benefits for the year then ended. These financial statements are the responsibility of the Plan's Administrator. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the Plan's Administrator, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the net assets available for benefits of the Plan as at June 30, 2008 and the changes in its net assets available for benefits for the year then ended in accordance with Canadian generally accepted accounting principles.

Toronto, Canada,
October 30, 2008.

Chartered Accountants
Licensed Public Accountants

## UNIVERSITY OF TORONTO (OISE) PENSION PLAN

## STATEMENT OF NET ASSETS AVAILABLE FOR BENEFITS

(with comparative figures as at June 30, 2007)
(thousands of dollars)

As at June 30

| | **2008** | 2007 |
|---|---|---|
| | **$** | $ |
| **ASSETS** | | |
| Investments, at fair value *(note 3(a))* | **113,985** | 131,303 |
| Prepaid expenses | **377** | 363 |
| | **114,362** | 131,666 |
| **LIABILITIES** | | |
| Partial wind-up benefit payable *(note 8)* | **8,391** | |
| Accrued expenses | **115** | 109 |
| | **8,506** | 109 |
| **Net assets available for benefits** | **105,856** | 131,557 |

*See accompanying notes*

On behalf of the Governing Council of the University of Toronto:

Ms. Catherine J. Riggall
Vice-President, Business Affairs

Mr. Louis Charpentier
Secretary of the Governing Council

**UNIVERSITY OF TORONTO (OISE) PENSION PLAN**

**STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS**

(with comparative figures for the year ended June 30, 2007)
(thousands of dollars)

Year ended June 30

| | **2008** | 2007 |
|---|---|---|
| | **$** | $ |
| **INCREASE IN NET ASSETS** | | |
| Employee contributions *(note 4)* | **560** | 582 |
| Net investment income from Master Trust *(note 3(b))* | | 22,872 |
| **Total increase in net assets** | **560** | 23,454 |
| **DECREASE IN NET ASSETS** | | |
| Partial wind-up benefits cost and expenses *(note 8)* | **13,387** | |
| Net investment loss from Master Trust *(note 3(b))* | **6,287** | |
| Retirement payments | **4,514** | 4,128 |
| Refunds and transfers *(note 5)* | **437** | 145 |
| Fees and expenses *(note 6)* | **1,636** | 1,456 |
| **Total decrease in net assets** | **26,261** | 5,729 |
| **Net increase (decrease) in net assets for the year** | **(25,701)** | 17,725 |
| Net assets available for benefits, beginning of year | **131,557** | 113,832 |
| **Net assets available for benefits, end of year** | **105,856** | 131,557 |

*See accompanying notes*

# UNIVERSITY OF TORONTO (OISE) PENSION PLAN

## NOTES TO FINANCIAL STATEMENTS

## JUNE 30, 2008

### 1. Description of Plan

The following description of the University of Toronto (OISE) Pension Plan (the "Plan") is a summary only. For more complete information, reference may be made to the official Plan text.

#### a) General

The Plan is a defined benefit plan covering substantially all full-time and part-time employees of the Ontario Institute for Studies in Education (OISE) who were members of the Plan as of June 30, 1996.

The Plan is registered under the Pension Benefits Act of Ontario (1990) (Ontario Registration Number 0353854) and with the Canada Revenue Agency.

Effective July 1, 1996, the Governing Council of the University of Toronto (the "University") became administrators of the Plan. Prior to July 1, 1996, the OISE Board of Governors acted as the administrator. The investments are managed by the University of Toronto Asset Management Corporation.

#### b) Funding

Plan benefits are funded by contributions and investment earnings. Member contributions are made in accordance with a prescribed formula. The University's contribution is determined annually on the basis of an actuarial valuation taking into account the assets of the Plan and all other relevant factors.

#### c) Retirement Pensions

At retirement, the number of years of pensionable service earned by a member is multiplied by a percentage of the average of the highest 36 months of earnings to determine the annual pension payable to that member. There are various early retirement provisions in place for different employee groups.

#### d) Death Benefits

Death benefits are available for beneficiaries on the death of an active member, and may be taken in the form of a survivor pension or a lump sum payment. Death benefits may also be available for a spouse on the death of a retired member.

#### e) Escalation of Benefits

The pension benefits of retirees are subject to cost of living adjustments equal to the greater of a) 75% of the increase in the CPI for the previous calendar year to a maximum CPI increase of 8% plus 60% of the increase in CPI in excess of 8% or, b) the increase in the Consumer Price Index for Canada (CPI) for the previous calendar year minus 4.0%.

## 2. Summary of significant accounting policies

These financial statements have been prepared by the University in accordance with Canadian generally accepted accounting principles applied within the framework of the significant accounting policies summarized below:

### a) Investments and investment income

Investments, which include accrued income, are carried at fair value.

The Plan is invested in the University of Toronto Master Trust (the "Master Trust"). The unit value of the Master Trust is calculated based on the fair value of the underlying investments of the Master Trust. Net investment income (loss) includes interest, dividends, foreign exchange gains (losses), realized gains (losses) and net change in unrealized gains (losses) on investments held by the Master Trust.

### b) University of Toronto Master Trust

Investments are carried at fair value. Fair value amounts represent estimates of the consideration that would be agreed upon between knowledgeable, willing parties who are under no compulsion to act. It is best evidenced by a quoted market price, if one exists. The calculation of estimated fair value is based upon market conditions at a specific point in time and may not be reflective of future fair values. Changes in fair values from one year to the next are reflected in the statement of changes in net assets available for benefits.

Fair values of the investments held by the Master Trust are determined as follows:

(i) The fair values of publicly traded bonds and equities are determined based on quoted market values. Investments in pooled funds are valued at their net asset value per unit. Infrequently traded securities are based on quoted market yields or prices of comparable securities, as appropriate. Private investment interests, which include private equities with underlying investments in equities, debt and real estate assets, are determined based on the latest valuations provided by the external investment managers, adjusted for cash receipts, cash disbursements and securities distributions. The University believes the carrying amount of these financial instruments is a reasonable estimate of fair value. Because alternative investments are not readily traded, their estimated values are subject to uncertainty and therefore may differ from the value that would have been used had a ready market for such investments existed.

(ii) Derivative financial instruments are used to manage particular market and currency exposures for hedging and risk management purposes with respect to the Master Trust's investments and as a substitute for more traditional investments. Derivative financial instruments and synthetic products that may be employed include debt, equity, commodity and currency futures, options, swaps and forward contracts. These contracts are supported by liquid assets with a fair value approximately equal to the fair value of the instruments underlying the derivative contract.

For all derivative financial instruments, the gains and losses arising from changes in the fair value of such derivatives are recognized as investment income (loss) in the year in which the changes in fair value occur. The fair value of derivative financial instruments reflects the daily quoted market amount of those instruments, thereby taking into account the current unrealized gains or losses on open contracts. Investment dealer quotes or quotes from a bank are available for substantially all of the Master Trust's derivative financial instruments.

(iii) Monetary assets and liabilities denominated in foreign currencies are translated into Canadian dollars at the exchange rate in effect at the year-end.

Interest income is recorded by the Master Trust on an accrual basis. Dividends are recorded by the Master Trust as revenue on the record date. Unrealized gains and losses on investments are recorded by the Master Trust as a change in fair value since the beginning of the year or since the date of purchase when purchased during the year.

Income and expenses are translated at exchange rates in effect on the date of the transaction. Gains or losses arising from those translations are included in income.

Purchases and sales of investments are recorded by the Master Trust on a settlement date basis and transaction costs are expensed as incurred.

**c) Revenue and expense recognition**

All employer and employee contributions and other revenue are reflected in the year in which they are due. All expenses are recorded on an accrual basis.

## 3. University of Toronto Master Trust

On August 1, 2000, the Master Trust was established to facilitate the collective investment of the assets of the University's pension plans. Each pension plan holds units of the Master Trust. The value of each unit held by a plan increases or decreases every month based on the change in fair value of the underlying assets of the Master Trust. This value is used as the basis for the purchase and sale of units by the pension plans in the following month.

**a) Statement of net assets**
(thousands of dollars)

As at June 30, 2008, the Plan held 787,746 (2007 – 851,284) of the 19,555,272 (2007 – 19,806,915) outstanding units of the Master Trust. The Master Trust investments held at fair value as at June 30 are summarized below, and have been classified by asset-mix category based on the intent of the investment strategies of the underlying portfolios of the Master Trust. This classification required $1,070 million (2007 - $1,203 million) of pooled and hedge funds, and $44 million (2007 - $233 million) of cash, money market funds, short-term notes and treasury bills to be reclassified to their appropriate investment category.

| | **2008** **$** | 2007 $ |
|---|---|---|
| Cash, money market funds, short-term notes and treasury bills | **139,775** | 60,404 |
| Government and corporate bonds | **660,797** | 689,069 |
| Canadian equities | **442,966** | 473,435 |
| United States equities | **441,884** | 598,690 |
| International equities | **576,419** | 654,754 |
| Hedge funds | **236,178** | 205,948 |
| Private equities | **246,242** | 125,330 |
| Real assets | **126,324** | 126,021 |
| | **2,870,585** | 2,933,651 |
| Derivative related net receivable (payable) (*note 3(d)*) | **(40,971)** | 121,401 |
| | **2,829,614** | 3,055,052 |
| **University of Toronto (OISE) Pension Plan (4.0% of Master Trust)** | **113,985** | 131,303 |

**b) Statement of changes in net assets**
(thousands of dollars)

**For the year ended June 30**

| | **2008** | 2007 |
|---|---|---|
| | **$** | $ |
| Net investment income (loss) | **(153,716)** | 522,211 |
| Cash received on purchase of Master Trust units by pension plans | **105,900** | 102,456 |
| Cash paid on redemption of Master Trust units by pension plans | **(177,622)** | (166,195) |
| **Net increase (decrease) in net assets for the year** | **(225,438)** | 458,472 |
| **Net assets, beginning of year** | **3,055,052** | 2,596,580 |
| **Net assets, end of year** | **2,829,614** | 3,055,052 |
| **University of Toronto (OISE) Pension Plan (4.0% of Master Trust)** | **113,985** | 131,303 |

Net investment income (loss) for the year ended June 30 for the Master Trust is comprised of the following:

| | **2008** | 2007 |
|---|---|---|
| | **$** | $ |
| Interest income | | |
| Government and corporate bonds | **24,414** | 25,091 |
| Short-term investments | **13,226** | 24,086 |
| Dividend income | | |
| Canadian | **18,725** | 13,402 |
| Foreign | **22,170** | 17,738 |
| Net realized gains from investments | **31,484** | 175,807 |
| Net unrealized gains (losses) from investments | **(264,234)** | 265,848 |
| Other income | **499** | 239 |
| | **(153,716)** | 522,211 |
| **University of Toronto (OISE) Pension Plan (4.0% of Master Trust)** | **(6,287)** | 22,872 |

The net investment income (loss) is reported in the Plan's statement of changes in net assets available for benefits as net investment income from Master Trust.

**c) Individually significant investments**
(thousands of dollars)

The details of investments where the fair value exceeds 1% of the total fair value or book value of the Master Trust are listed below.

| | Weighted average coupon rate | Maturity range | Fair value |
|---|---|---|---|
| Money market funds, treasury bills and government bonds | | | |
| Government of Canada Bonds | 4.58% | 2009 – 2041 | 377,921 |
| Government of Canada T-Bills | 2.46% | 2008 – 2008 | 54,962 |
| Province of Quebec Bonds | 5.31% | 2009 – 2038 | 46,468 |
| Province of Ontario Bonds | 6.47% | 2009 – 2039 | 36,255 |
| Province of Ontario T-Bills | 2.60% | 2008 – 2008 | 36,074 |
| Canadian equities | | | |
| BGIC Active Canadian Equity Fund | | | 114,236 |
| Hedge funds (prior to reclassification) | | | |
| Blackrock Alternative Advisors Inc. | | | 96,643 |
| Trent River Offshore Ltd. | | | 75,517 |
| DGAM Diversified Fund | | | 63,111 |
| Blackstone Capital Partners | | | 57,679 |
| Pioneer Alternative Investment Management Ltd. | | | 57,464 |
| Robec-Sage Capital International | | | 52,638 |
| Muirfield Absolute Performance Fund | | | 48,227 |
| Lighthouse Diversified Fund Ltd. | | | 48,155 |
| Aetos Capital | | | 42,565 |

**d) Risk management**

Risk management relates to the understanding and active management of the risks associated with all areas of the Master Trust's investments. Investments are primarily exposed to foreign exchange risk, interest rate price risk and market and credit risks. To manage these risks within reasonable risk tolerances, the Master Trust, through the University of Toronto Asset Management Corporation, has formal policies and procedures in place governing asset mix among equity, fixed income and alternative assets, requiring diversification within categories, and setting limits on the size of exposure to individual investments and counterparties. In addition, derivative instruments are used in the management of these risks (see below).

During the year, the Master Trust recognized as investment income $3.3 million (2007 - $3.7 million) as a change in fair value that was estimated using a valuation technique based on assumptions that are not supported by observable market prices or rates. Management believes there are no other reasonable assumptions for these investments which would generate any material changes in investment income.

**e) Derivative financial instruments**
(thousands of dollars)

**Description**
The Master Trust has entered into equity and commodity index futures contracts which oblige it to pay the difference between a predetermined amount and the market value of certain equities when the market value is less than the predetermined amount, or receive the difference when the market value is more than the predetermined amount.

The Master Trust enters into foreign currency forward contracts to minimize exchange rate fluctuations and the resulting uncertainty on future financial results. All outstanding contracts have a remaining term to maturity of less than one year. The Master Trust has significant contracts outstanding held in U.S. dollars, the Euro, Japanese yen and British pound.

The notional amounts of the derivative financial instruments do not represent amounts exchanged between parties and are not a measure of the Master Trust's exposure resulting from the use of financial instrument contracts. The amounts exchanged are based on the applicable rates applied to the notional amounts.

**Risks**
The Master Trust is exposed to credit-related losses in the event of non-performance by counterparties to these financial instruments, but it does not expect any counterparties to fail to meet their obligations given their high credit ratings.

**Terms and conditions**
The notional and fair value amounts of the financial instruments are as follows:

| | **2008** | | 2007 | |
|---|---|---|---|---|
| | **Notional Value** | **Fair Value** | Notional Value | Fair Value |
| Foreign currency forward contracts: | | | | |
| - United States | **1,510,310** | **(2,361)** | 1,572,876 | 90,986 |
| - International | **478,226** | **(3,212)** | 598,901 | 35,316 |
| | | **(5,573)** | | 126,302 |
| Equity and commodity index futures contracts: | | | | |
| - Canadian | **7,385** | **(2,275)** | 134,752 | 1,796 |
| - United States | **419,327** | **(26,620)** | 563,965 | (8,217) |
| - International | **135,919** | **(6,503)** | 203,533 | 1,520 |
| | | **(35,398)** | | (4,901) |
| **Total** | | **(40,971)** | | 121,401 |

**f) Other commitments**

In order to increase the allocation to alternative assets to meet the target policy asset mix, the Master Trust has made commitments to invest $840.5 million in private equities and real assets as at June 30, 2008.

## 4. Plan contributions

Employer contributions were not made in the current fiscal year since the Plan's assets exceeded the Plan's liabilities as reported in the actuarial valuation as of July 1, 2007.

## 5. Refunds and transfers

(thousands of dollars)

Refunds and transfers consist of the following:

| | **2008** | 2007 |
|---|---|---|
| | **$** | $ |
| Refunds of contributions upon termination | | 16 |
| Transfers to other plans upon termination | **437** | 129 |
| | **437** | 145 |

## 6. Fees and expenses

(thousands of dollars)

Fees and expenses consist of the following:

| | **2008** | 2007 |
|---|---|---|
| | **$** | $ |
| Investment management fees: | | |
| External managers[1,2] | **1,126** | 962 |
| University of Toronto Asset Management Corporation[2,4] | **105** | 103 |
| Transaction fees[2,3] | **60** | 83 |
| Trustee and custodial fees[2] | **47** | 41 |
| Actuarial and consulting fees | **70** | 72 |
| Pension records administration | **110** | 114 |
| External audit fees | **13** | 13 |
| Administration cost – University of Toronto[4] | **59** | 60 |
| Other fees | **46** | 8 |
| | **1,636** | 1,456 |

[1] Increase in 2008 mainly due to a $0.1 million increase in fees relating to private equities, and an increase of $0.1 million relating to absolute return investments (i.e. hedge funds).

[2] Reflects expenses that are directly charged to the Master Trust and are allocated back to the Plan.

[3] Transaction fees represent the cost of purchasing and selling investments.

[4] Represents related party transactions.

## 7. Obligations for pension benefits

(thousands of dollars)

The actuarial present value of accrued pension benefits is determined by applying best estimate assumptions and the projected benefit method pro-rated on services. An actuarial valuation was performed as of July 1, 2008 by Hewitt Associates LLC, a firm of consulting actuaries.

The actuarial present value of accrued pension benefits as at July 1, 2008 and 2007 and the principal components of changes during the year are as follows:

| | **2008** **$** | 2007 $ |
|---|---|---|
| **Actuarial present value of accrued pension benefits, beginning of year** | **100,668** | 95,985 |
| Interest on accrued benefits | **6,459** | 6,110 |
| Benefits accrued | **2,118** | 1,790 |
| Benefits paid | **(4,701)** | (3,962) |
| Experience gain | **(340)** | (1,823) |
| Plan amendments | | 246[1] |
| Assumption changes | | 2,322[2] |
| **Actuarial present value of accrued pension benefits for ongoing members, end of year** | **104,204** | 100,668 |
| Partial plan wind-up benefits *(note 8)* | | 14,649 |
| **Total obligation for pensions** | **104,204** | 115,317 |

[1] Reflects augmentation as of July 1, 2007 and July 1, 2008 for pensioners from the Faculty and Librarian staff groups.

[2] Reflects change in mortality rates, and change in retirement rates for the Faculty and Librarian staff groups.

Significant assumptions used in the actuarial valuation are as follows:

| | **2008** **%** | 2007 % |
|---|---|---|
| Interest rate | **6.50** | 6.50 |
| Consumer Price Index | **2.50** | 2.50 |
| Salary escalation rate | **4.50** | 4.50 |

## 8. Partial plan wind–up

(thousands of dollars)

Certain members and former members employed by the Ontario Institute for Studies in Education between February 1996 and June 1996 were offered special early retirement or voluntary severance packages. Employees who accepted either package became part of a partial wind-up group of the Plan. The decision in the Monsanto case confirms the position of the Superintendent of the Financial Services Commission of Ontario that, on the partial wind-up of a pension plan, the assets of the pension fund related to that part of the pension plan being wound up must be distributed, which includes any surpluses. The assets allocable to the partial plan wind-up group will be used to provide for settlement of pension entitlements through annuity purchase or lump-sum transfer, including surplus allocation for partial wind-up members, and expenses associated with the partial wind-up and surplus distribution. On October 1, 2007, the Financial Services Commission of Ontario approved the partial wind-up distribution effective June 30, 1996 and a net obligation of $13,387 was recorded as a decrease in net assets in the fiscal 2008 statement of changes in net assets. Settlement of pension entitlements to certain partial wind-up members were made and $8,391 remains outstanding at June 30, 2008.