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Date: November 9, 2006

To: Governing Council Business Board Members

From: George Luste, President, University of Toronto Faculty association

Re: Agenda Item #3: University of Toronto Pension Plan & its Problems – comments

My 5-minute time limit requires I be very brief. This is a serious constraint for what I have to say.

Background. UTFA members are the major stakeholder group in the UofT Registered and SRA pension plans. About 65% of the liabilities and assets pertain to faculty and librarians. In briefest terms:

(i) **$1, 422 million resides in "holidays"**. During the past 20 years, most of the annual pension service costs, as evaluated by Hewitt Associates, have not been funded with new contributions. Instead the employer and employees have taken numerous pension contribution holidays because of both the favourable changes in actuarial assumptions and the unprecedented market conditions. This was not prudent and not in the best interests of the stakeholders. Table-1 in Appendix A tabulates the annual service costs, the actual contributions, and the pension holidays from 1987 to 2006. Columns 5 and 9 show the cumulative dollar value of these holidays for the employee and employer respectively. The cumulative totals incorporate the actual annual pension plan interest rate (shown in column 10). Chart - 1 graphs the cumulative growth of the holiday dollars[1] for the employer and the employees.

(ii) **$840 million in new "unfunded going concern[2] liability".** This new and large increase follows[3] from assuming a 2.5% real rate of return going forward for pension assets instead of the current 4.0% assumption. The following four reasons would justify going to a 2.5% assumption:
- (a) The current zero risk real return bond rate is about 1.8%., much less than 4.0%. See Appendix B, Chart-3. Any assumption higher than this does imply an imbedded and unfunded risk.
- (b) In the late 1980's the UofT plan did assume a 2.5% real return rate[4]. See Appendix A, Chart-2. The decision by the Administration to increase this assumption in 1990 to 3.0%, in 1996 to 3.5% and in 1998 to 4.0% reduced the pension liability total and thus encouraged more "holidays". Going back to the 2.5% of 1990 today would increase the pension liability by about $840 million.
- (c) The Ontario Teachers Pension Plan (OTPP) currently assumes a 2.5% real return going forward. See Appendix C for recent comments by Robert Korthals on this point.
- (d) The 2.5% real return target encourages less investment volatility (risk?) than a 4.0% target.

(iii) **Governance and Stakeholders**. Pension liabilities represent deferred compensation and pension assets are a trust that should have an arms-length, un-conflicted governance. It should not be under the unilateral control of the UofT Administration, its budgeting needs and policies. Chart-2 shows the consequences. Stakeholders should have a say in the governance. At present they do not.

(iv) **Pension plan operating costs**. Unit operating expenses have tripled from 10 years ago. This issue was raised at the March 27, 2006 Business Board meeting and is updated in Appendix D.

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[1] Note that this $1,258 million + $165 million represents the additional assets that could exist today for current and future pensioners if each year, from 1987 to 2004, the service cost had actually been funded by both employer and employee.
[2] The wind-up solvency issue and its unfunded liability is a different issue and is not presented here.
[3] Claude Lamoureux, President and CEO of the Ontario Teachers Pension Plan, in the 2005 OTPP Report (see http://www.otpp.com/web/website.nsf/web/rm05_presidents_message), states, "Every 1% change in the assumption causes the plan's liability to increase or decrease by 22%". We assume that this same ratio of 1% to 22% is applicable to the UofT pension plan. Thus 0.33 x $2,541 million is about $840 million. (The note at the bottom of page 5 on compounding corroborates this assumption.)
[4] Prior to 1987, the assumed real return rate was 2.25% in the UofT pension plan. This is less than the suggested 2.5% real return here.

Appendix A

U of T Pension Plan Data

November, 2006

The U of T Pension Plan - Contribution Holidays - Summary Data

All dollar figures are totals for both faculty and support staff at U of T

Excepting columns [5] and [9], all annual numbers come from the annual Hewitt Actuarial Reports.

	Employee - Pension Plan Member				Employer - U of T, Plan Administrator					
[1] Academic Year to July 1	[2] Pension Service Cost $ in Mil	[3] Actual Pension Input $in Mil	[4] Yearly Pension Holiday $ in Mil	[5] Cumulative Pension Holiday $ in Mil	[6] Pension Service Cost $ in Mil	[7] Actual Pension Input $in Mil	[8] Yearly Pension Holiday $ in Mil	[9] Cumulative Pension Holiday $ in Mil	[10] Actual Market Return Rate	[11] RPP Cost (Fees) $ in Mil
1987	8.9	6.9	2.0	**2.3**	24.8	11.1	13.7	**15.5**	**13.2%**	**1.3**
1988	9.6	8.5	0.0	**2.3**	26.6	0.0	26.6	**42.2**	**0.3%**	**1.5**
1989	10.4	8.8	1.6	**4.4**	28.5	0.0	28.5	**79.8**	**12.8%**	**1.9**
1990	11.2	5.2	6.0	**10.6**	31.4	0.0	31.4	**113.3**	**1.9%**	**1.7**
1991	12.2	12.2	0.0	**11.4**	28.6	0.0	28.6	**153.5**	**8.2%**	**1.8**
1992	13.1	13.1	0.0	**12.7**	35.7	25.6	10.1	**182.0**	**11.2%**	**1.9**
1993	17.2	17.6	0.0	**14.5**	36.4	14.7	21.7	**232.2**	**14.0%**	**1.9**
1994	16.8	17.1	0.0	**15.0**	37.0	0.0	37.0	**278.6**	**3.5%**	**2.2**
1995	16.0	16.4	0.0	**17.1**	35.8	0.0	35.8	**358.4**	**14.0%**	**1.6**
1996	15.5	16.4	0.0	**19.2**	30.8	0.0	30.8	**438.3**	**12.6%**	**2.3**
1997	16.1	15.7	0.0	**23.3**	30.6	0.0	30.6	**568.7**	**21.3%**	**2.6**
1998	16.9	1.8	15.1	**44.1**	31.1	0.0	31.1	**687.4**	**14.6%**	**4.8**
1999	18.0	0.0	18.0	**63.3**	30.9	0.0	30.9	**732.7**	**2.0%**	**4.4**
2000	19.8	0.0	19.8	**97.1**	33.3	0.0	33.3	**895.4**	**16.9%**	**4.9**
2001	20.7	0.0	20.7	**111.8**	34.7	0.0	34.7	**882.7**	**-5.1%**	**8.6**
2002	22.3	11.5	10.8	**119.7**	37.3	0.0	37.3	**897.9**	**-2.4%**	**11.8**
2003	24.4	24.4	0.0	**119.3**	42.9	0.0	42.9	**938.0**	**-0.3%**	**12.6**
2004	25.6	25.6	0.0	**137.7**	47.1	41.0	6.1	**1,089.5**	**15.4%**	**13.1**
2005	26.7	26.7	0.0	**152.7**	51.6	64.1	-12.4	**1,194.5**	**10.9%**	**14.4**
2006	29.5	29.6	0.0	**164.6**	56.0	83.9	-27.9	**1,257.6**	**7.8%**	**15.6**
Sum	350.9	257.5	94.0		711.1	240.4	470.8			

Table-1

Appendix A

U of T Pension Plan Data

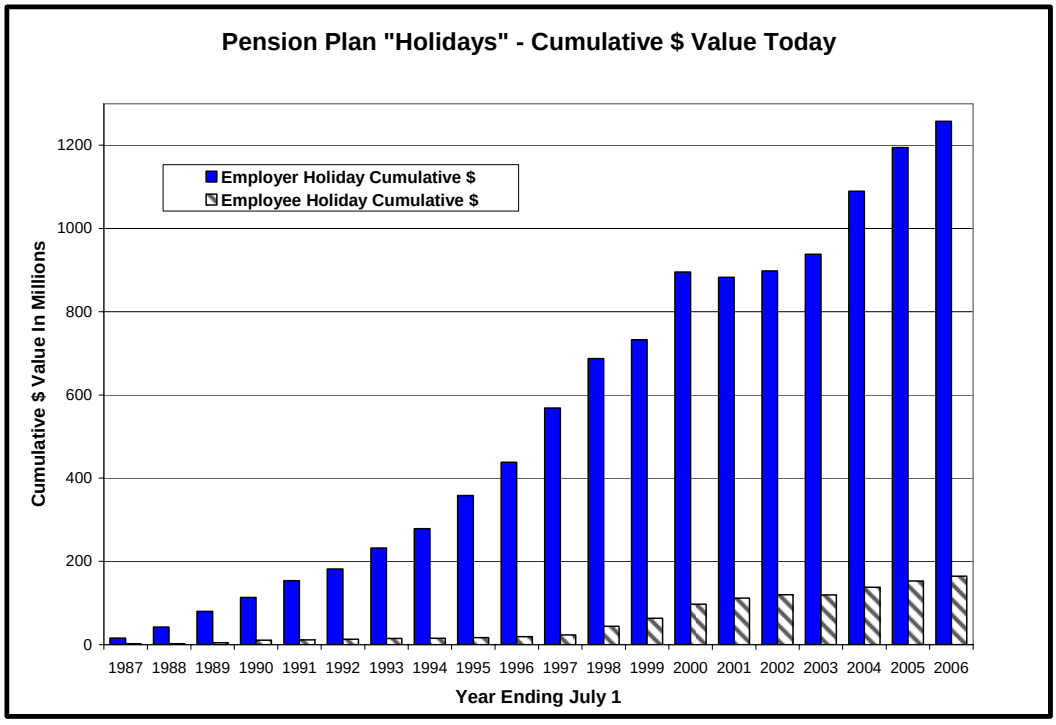

Chart-1

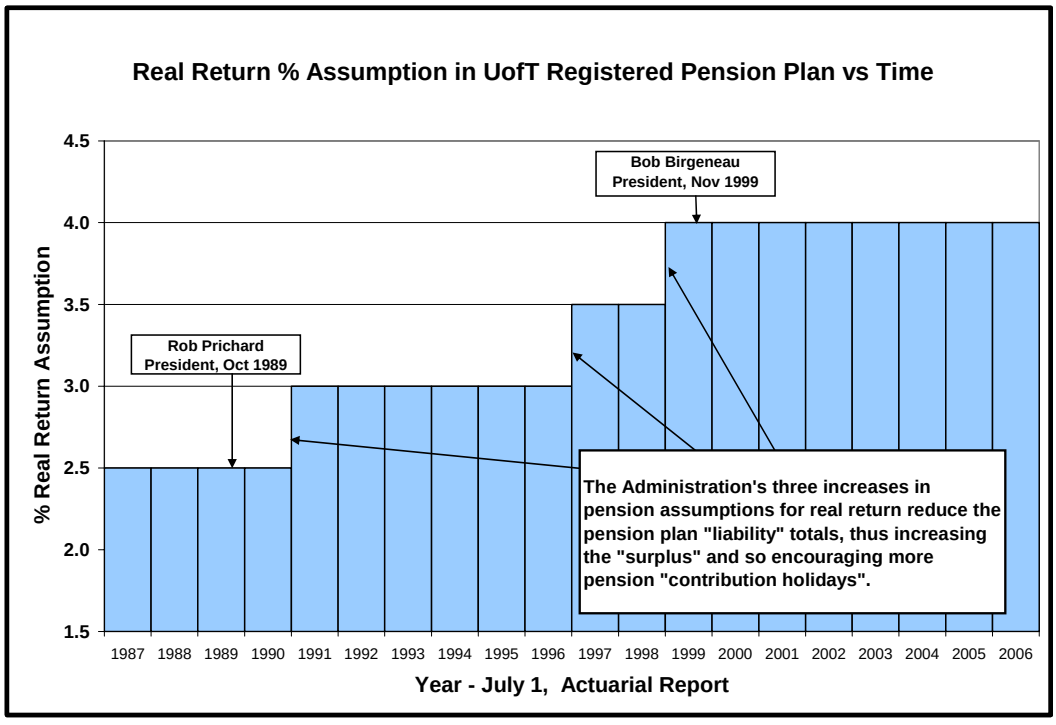

Chart-2

Appendix B

Real Return Bonds (RRBs)

Real Return Bonds are Government of Canada[5] bonds that pay you a rate of return that is adjusted for inflation. Unlike regular (nominal) bonds, this feature assures that your purchasing power is maintained regardless of the future rate of inflation. RRBs pay interest semi-annually based on an inflation-adjusted principal, and at maturity they repay the principal in inflation-adjusted dollars. This bond offers a rate of return that is tied to the value of the Consumer Price Index (CPI). For example, if the RRB is listed as paying, say, 4.25%, the investor will receive 4.25% plus the change in consumer price index; if inflation is at 2% (the center of the Bank of Canada band), the investor will receive 4.25% + 2%, or 6.25%. After the bonds are issued by the Government of Canada, promising a fixed % real return on the original bond price, the secondary bond market will of course determine day to changes in the bond price and so determine the actual % real yield of these bonds at the time of purchase by the investor. This investor return is charted below.

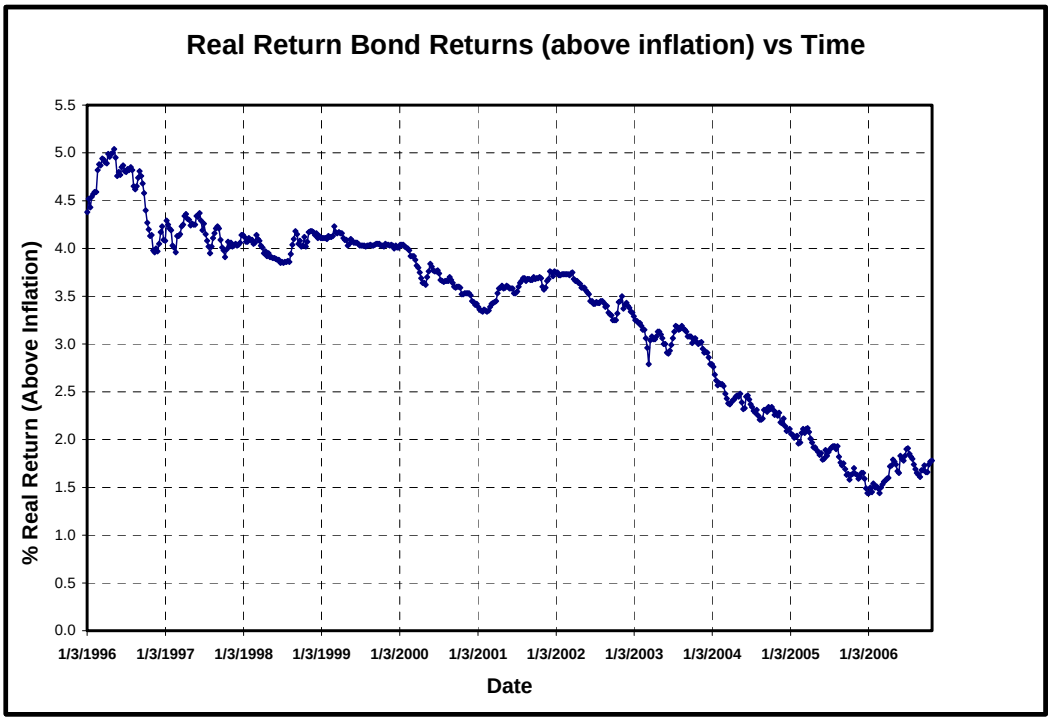

Chart-3

The above chart (the data is from the Bank of Canada website) illustrates that the recent real return of these "zero risk" bonds has been less than 2% in the secondary bond market. Thus any current assumption of a real return above this zero-risk RRB rate of 1.8% today (like the 4% assumption in the UofT pension plan) is not a certainty and has an imbedded risk. The current UofT pension plan stakeholders, faculty and staff, should be asking: "Who bears the risk of a future unfunded liability in our pension plan?"

Prior to 2000 a real 4% return rate could have been guaranteed by the Real Return Bonds issued by the Government of Canada. There was a window of opportunity prior to 2000 to lock in[6] the 4.0% (or better) real return rate. The UofT Administration of the day chose not to exercise this zero risk option and instead established UTAM, took the equity market route and lost the gamble, with hindsight a very expensive gamble.

Unlike UofT, with a 4.0% real return assumption, the Ontario Teachers Pension Plan currently assumes it will realize 2.5% real return going forward, or about 0.7% better than the current RRB return. More from OTPP in Appendix C.

[5] Real Return Bond Prospectus at the Bank of Canada website http://www.bankofcanada.ca/en/pdf/real_return_eng.pdf

[6] Currently there are four series of RRBs, 30-year to 2036, 25-year to 2031, 20-year to 2026 and 15-year to 2021. The current yields for the four series vary in the range from about 1.70% to 1.80% real return (above CPI). Both the 2021 and 2026 series were issued at 4.25%, the 2031 at 4.0% and the 2036 at 3.0%.

Appendix C

Ontario Teachers Pension Plan (OTPP) - 2005 Annual Report[7]

(The following extract is from the OTPP Board Chairman's report for 2005. The bold emphasis is added by GL)

.....

At the end of 2005, we assumed a long-term average rate of return of 5.10%, minus long-term average inflation of 2.60%, which yields a real return of 2.50%.

This rate is viewed as conservative. But, as I mentioned earlier, the plan offers better benefits than most, and those benefits represent an unconditional promise. Consequently, the entire risk of a too-optimistic forecast of future returns is borne by the new teachers and taxpayers and generations after them. Such a plan could become ever less attractive to our teachers of tomorrow.

Only time (i.e., decades) will tell whether the funding rate assumption was too high or too low. If the assumption was too conservative, then the plan would collect more contributions than required by a generation of teachers, and there would be surplus in the plan to distribute in the future. If the assumption was too liberal, then the plan would not collect as much as was required by a generation of teachers, who by then would be retired, and the plan would be in a deficit position. This would create intergenerational inequity, placing undue financial strain on young and future plan members, as well as taxpayers, who would have to increase their contributions to fund the resulting deficit.

Estimating long-term returns

The 2.50% long-term real (over and above inflation) rate is at the low end of the assumptions being adopted by major Canadian pension funds. Many funds have been assuming long-term real returns in the high-three% to low-four% range. These calculations make a tremendous difference in determining funding surpluses or shortfalls. ***In Teachers' case, a presumed long-term real rate of 4.10% (as opposed to 2.50%) would eliminate almost all of the $31.9 billion funding shortfall as shown at 2005 year end.***

……

Robert W Korthals
Chair, OTPP Board
In the 2005 OTPP Annual Report

The compounding effect. Compounding small differences over 30 years (assumed duration of pension assets for an individual in the plan) results in large differences at the end of the 30 years. For example:

$3.34 is the end result of $1.00 if compounded at 4.1% over 30 years.
$2.10 is the end result of $1.00 if compounded at 2.5% over 30 years.

That is, **there is a 37% reduction in the final sum**, from $3.34 to $2.10. This simple calculation appears to be consistent with the above statement by Robert Korthals in the OTPP annual report.

[7] On the web at http://www.otpp.com/web/Website.nsf/web/ar05resources/$FILE/AnnRepCommentary2005.pdf

Appendix D

Summary Data of Total Annual UofT Pension Plan Expenses

(Data come from Hewitt Associates Annual Actuarial Reports)

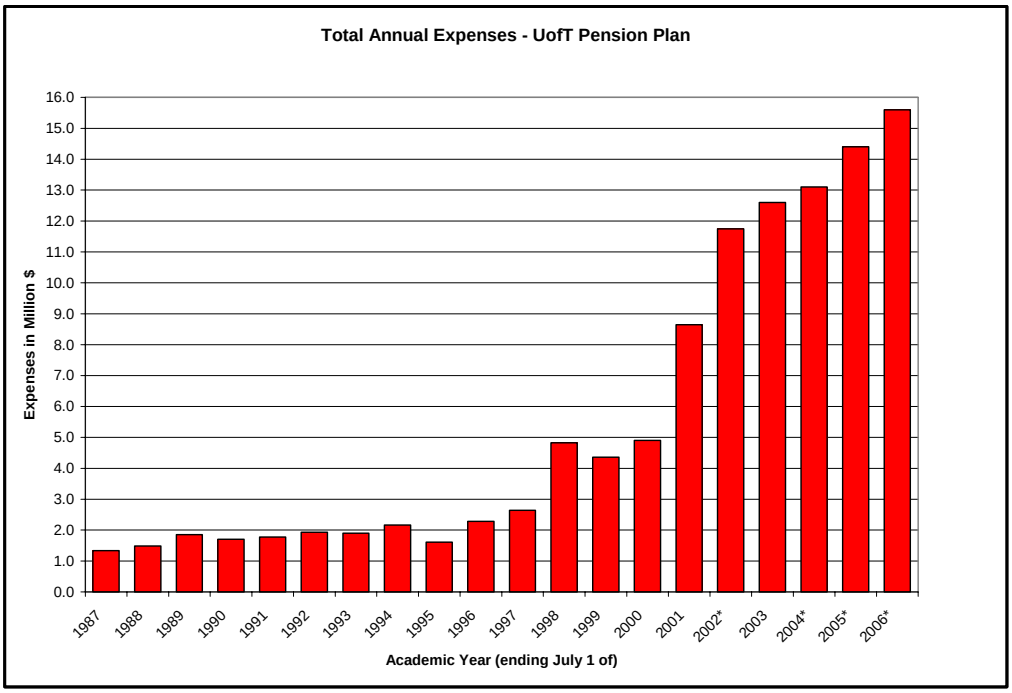

Chart-4

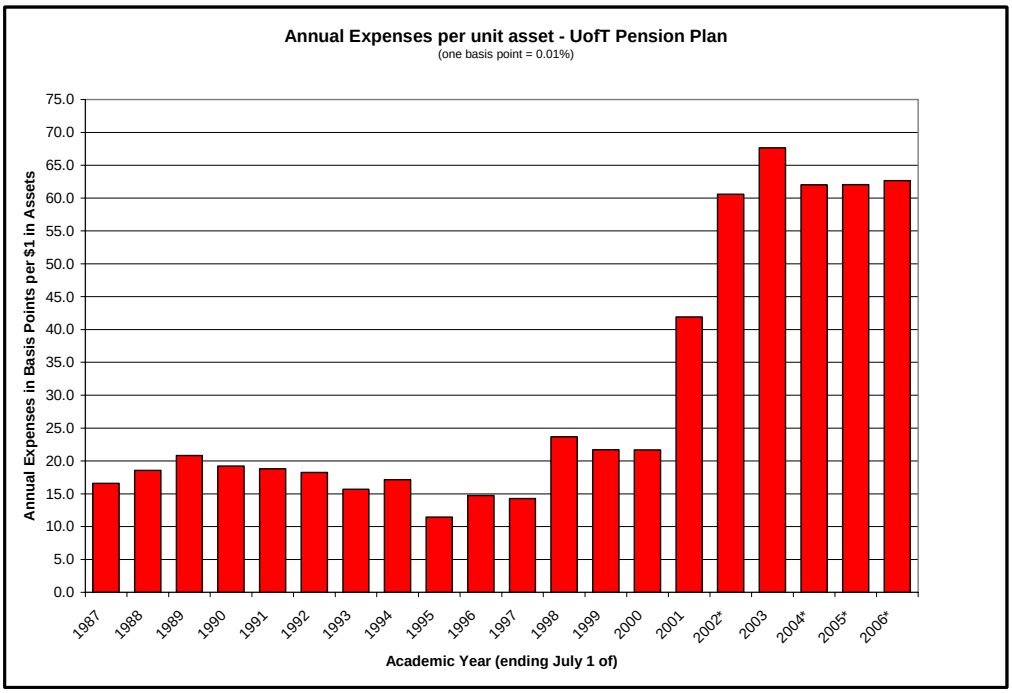

Chart-5