UNIVERSITY OF TORONTO

and

University of Toronto
Asset Management Corporation (UTAM)

Review and Recommendations
2007

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Introduction and Purpose

The University of Toronto Asset Management Corporation (UTAM) was created on May 1, 2000 as a wholly owned and controlled subsidiary to manage the financial assets of the University of Toronto and of the U of T pension plans.

The purpose of this report is to review the governance and operation of UTAM, to assess whether it has fulfilled the objectives set out when it was created, and to make recommendations for the future.

Formation and Development of UTAM

Prior to the formation of UTAM in 2000, University of Toronto had managed its endowment and expendable assets and pension funds in-house. For many years, university administrators had interacted with a President's Investment Advisory Committee (PIAC) to determine investment targets, strategy and execution. Investment targets, asset mix, and other key elements were imbedded in policy documents that were approved by the U of T Business Board. Asset mix was quite simple, focusing on balanced funds and passive investing. There was not a great deal of work involved in selecting the strategy, implementing it and ensuring compliance. Financial assets were small compared to current levels.

By 1999, treasury department staff totaled 12, due to expanding treasury requirements, the growth of investments, the growth of investment products, their increased complexity and the level of support required to a much more sophisticated PIAC.

By 1999, the assets under management and the investment environment had also changed significantly:

- The University had increased in size and both the expendable funds and pension funds had also increased significantly. Pension funds exceeded $2 billion and expendable funds were about $0.5 billion.
- U of T had engaged in major fundraising and endowments had increased significantly. By April 1999, endowments topped $1 billion for the first time.
- Large U.S. endowments had dramatically changed their investment approach, diversifying broadly into hedge funds and alternative investment strategies.
- Several U.S. universities had incorporated investment subsidiaries to assist them to bring appropriate investment expertise to bear on these new and complex strategies.

- The long-running bull market had raised expectations with respect to investment return, expectations that were not being met with the longstanding approach to investments.

As a result of these pressures, the decision was taken to review and consider the advisability of a new investment governance structure and process.

The resulting report, submitted to the Business Board in September 1999, identified a number of issues and problems with the then-existing approach:

- Concern about a lack of critical mass of in-house professional talent, which resulted in a more generalist approach instead of utilizing specialized expertise in various asset classes. This resulted in the chief financial officer and PIAC being involved in tactical decisions rather than focusing on policy and oversight.
- concern about the market competitiveness of compensation.
- concern about pension fund returns.
- concern that the size of the investment portfolio, about $3.5 billion, could not be sustained from the standpoint of prudent investment governance and management with the existing structures.

The report noted that a feasibility study and best practices review had been conducted with Yale, Princeton, Stanford, Duke, Texas system and Harvard universities and had heavily influenced the report's conclusions and recommendations. A Business Board advisory group had then been established to provide advice and act as a sounding board for the various ideas and proposals being considered. The key recommendation of this report was for an investment management organization with the following expected benefits:

- Improved corporate governance and control.
- Improved investment expertise.
- Potential for greater returns.

The Business Board accepted the recommendations and approved the formation of UTAM, effective May 1, 2000. Also, in 2000, the investment policies for expendable, endowment and pension funds were revised with an expectation of higher returns. In the case of endowments and pensions, the expectation was "over any four year period, achieve an annualized return of at least five percentage points above the Consumer Price Index for the same period " (that is, a 5% real return). Risk levels were not specifically articulated. Business Board continued to be responsible for approving the investment return targets and asset mix, with investment execution delegated to the UTAM Board.

By 2002-03, it became apparent that further changes were needed both to the target investment returns and to the relationship between the U of T Business Board and the UTAM Board. In April 2003, the Business Board approved revised investment return targets for LTCAP and pension funds, and for the first time, specific risk targets were specified. Responsibility for investment strategy, including asset mix, was delegated to the expert UTAM Board, with accountability reporting to be provided from UTAM to the Business Board on a regular basis. At that time, Business Board reserved to itself the approval of market and peer benchmarks against which UTAM's performance would be measured, upon the recommendation of the UTAM Board.

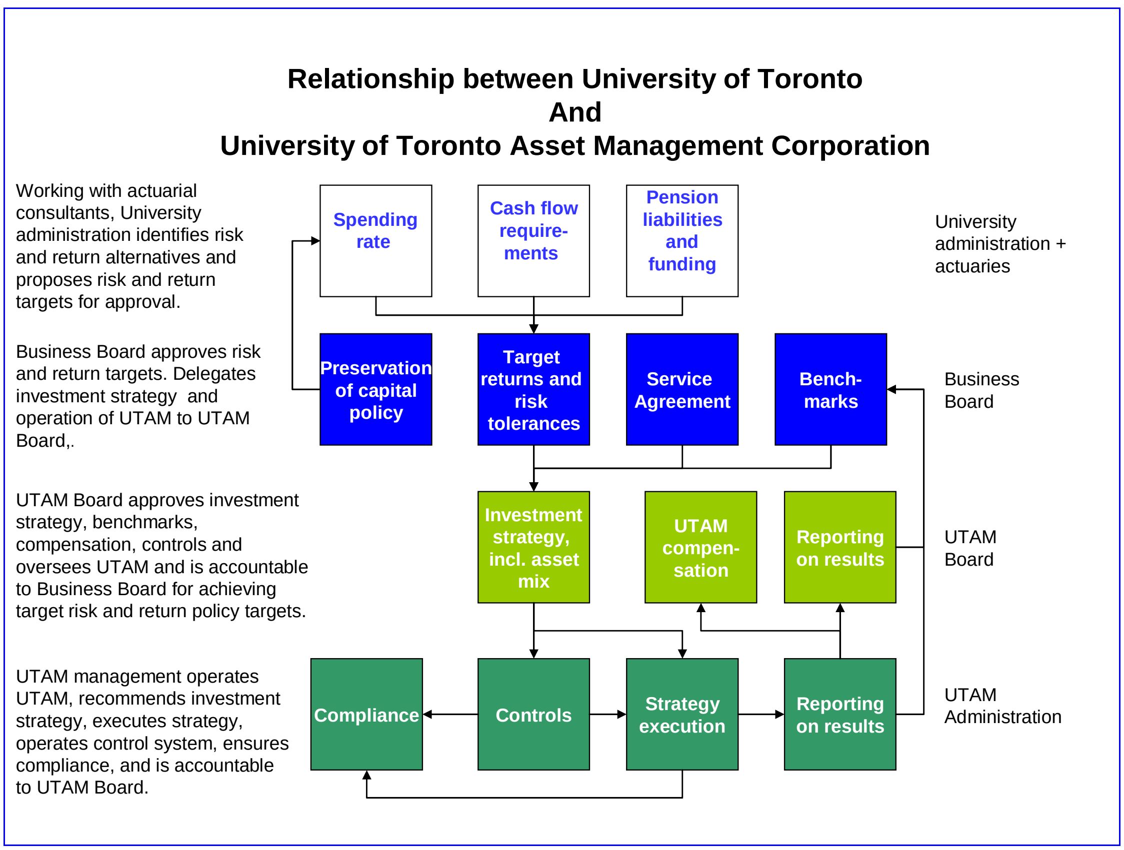
Current Relationship between the University and UTAM

UTAM has now been in operation for 7 years. It currently has 11 FTE, comprised as follows

1 FTE	President and CEO
4 FTE	Managing directors/directors
3 FTE	Investment analysts
2 FTE	Investment reporting and operations
1 FTE	Compliance
2 FTE	Office support

The UTAM Board has 13 members. It has the following subcommittees – audit and compliance, compensation and executive. The relationship between the University of Toronto and UTAM is illustrated below in exhibit 1.

Exhibit 1



UTAM's key focus is on managing risk and achieving the University's target investment returns with the minimal risk possible. UTAM particularly strives to preserve capital and avoid negative returns. However, UTAM does not only focus on risk. Here is where UTAM aims to add value:

- **Reducing risk:** engaging in comprehensive risk budgeting to ensure that risk targets are not exceeded and that return is maximized for the permitted level of risk.

- **Excess return:** attempting to earn greater returns than would be available with passively invested funds, within the risk targets noted above.

- **Infrastructure:** providing investment expertise, custody oversight, investment execution, compliance monitoring, reconciliations, and reporting at a professional investment standard.

- **Controls:** providing an extensive control system to ensure completeness of the assets and accurate execution and recording of each transaction as well as extensive monitoring of external investment managers for performance and for compliance with UTAM instructions.

How Risk and Investment Return Targets are Set

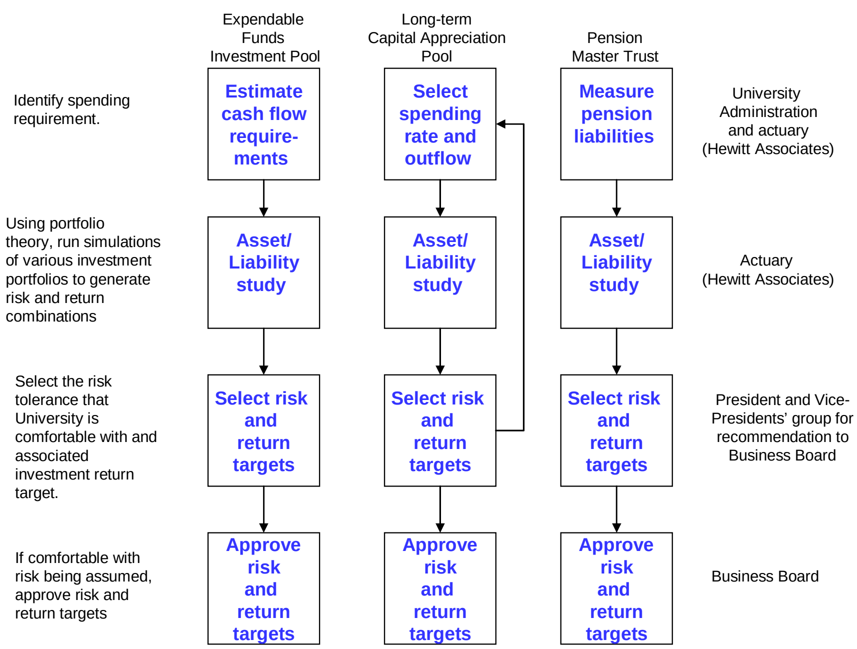
As noted earlier in this report, investment risk and return targets are proposed by the University administration and approved by the Business Board. The current targets are as follows:

	Risk	Return
Expendable funds investment pool (EFIP):		
U of T component	Minimal	30 day T-bills
UTAM component	Minimal	1 year T-bills + 50 bps
Long-term loans to capital projects	n/a	various
Long-term capital appreciation pool (LTCAP)	10%/10 yrs	4.0% real
Pension master trust	10%/10 yrs	4.0% real

This section describes the methodology used and the process by which the investment return and risk targets are developed and approved, as summarized in exhibit 2. Each step will be described in detail.

Exhibit 2

Process for Determining Risk and Return Targets



1. **Identify spending requirement:** The first step in determining what the investment risk and return targets should be is to look at what the funds will be used for. For each of EFIP, LTCAP and pensions, a study is undertaken periodically to identify the liabilities to be supported from these various funds.
    a. **EFIP:** all the funds in this pool can be spent and will be spent in time. An extensive analysis is conducted around historical cash inflows and outflows and cash forecasts are created on a daily, monthly, quarterly, annual and multi-year basis. This work is performed by University financial analysts and confirmed by the actuaries prior to its use in modeling potential risk tolerance and investment return targets.
    b. **LTCAP:** this is a unitized pool, and spending is determined as a rate in dollars per unit in the pool, based on a target spending rate. The target spending rate results in amounts being available for spending on endowed chairs, scholarships, etc. The target spending rate drives the risk and investment return rates. If a high spending rate is sought, then more risk must be incurred to attempt to earn a higher return. The University's preservation of capital policy also requires that sufficient funds be reinvested to ensure comparable purchasing power in the future.
    c. **Pensions:** the purpose of the pension funds is to pay pensions to current and future pensioners. The amounts that will have to be paid now and in future are determined by the pension benefits promised, the salaries of the participants, their lengths of service and their life expectancies. Pension liabilities are estimated annually by the actuaries based on actuarial assumptions. Pensions must be funded from a combination of employee and employer contributions and investment returns. The relationship between the sums derived from contributions and the sums desired from investment return drive the risk that would be incurred to earn pension investment returns.

2. **Model risk and return alternatives:** once the spending requirements are understood, an asset/liability study is undertaken. Monte Carlo simulations of 5,001 scenarios are run by the actuaries of a variety of investment portfolios to generate risk and return combinations that, (together with pension contributions in the case of pensions), will meet the spending requirements identified in the previous step. Risk is specified in terms of standard deviation around a target investment return. Where possible, risk is also quantified in dollars to make it easier to understand risk in terms of its impact on University finances. Separate studies are performed on each of EFIP, LTCAP and pensions. The EFIP study needs to be updated annually due to the short-term nature of that pool while the LTCAP and pension studies have longer term durations of several years with updating on a 4-5 year cycle.

3. **Select risk tolerance and resulting return target:** once a series of target risk and return portfolios, and their associated impacts on University budgets have been identified, the President and Vice-President select a risk and return target combination that represents a reasonable level of risk given other financial factors facing the University, such as operating budget constraints. At this stage, any iteration required with spending requirements would be undertaken. For example, if the LTCAP spending target would result in an unacceptably high level of risk, then the spending target would need to be modified and the study revised to take that into account.

4. **Approve risk and return targets:** once PVP has assessed the risk involved in the various alternatives and has selected a risk/return target that it believes is prudent, Business Board is asked to approve the targets. Business Board assesses whether the risk level is appropriate for the University based on the rationale provided, and if satisfied, approves the risk and its resulting investment return target.

An asset/liability study for LTCAP was conducted in 2002-03 and the current risk and return targets were adopted in April 2003. Pension targets were derived from the LTCAP study and also adopted in April 2003. An asset/liability study was conducted of EFIP in 2004 and risk and return targets for EFIP were adopted in January 2005.

Updated EFIP and pension studies have recently been completed.

Once the risk and return targets have been approved, they are provided to UTAM which is responsible for setting the asset mix, creating the risk budget, evaluating and selecting managers, monitoring compliance, creating benchmarks and reporting on performance.

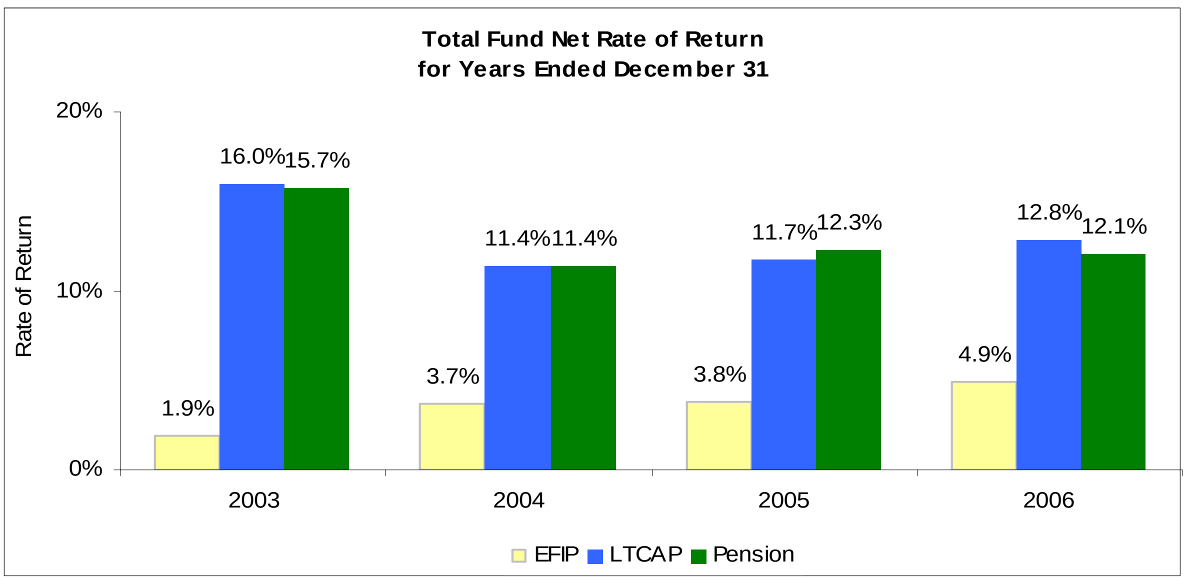
UTAM Performance Results

This section shows UTAM performance results for the period 2003 to 2006. All results are shown on a calendar year basis.

This review also contains a section on evaluating performance (beginning on page 22) which discuses what are the measures that should be used to evaluate performance. That section also contains further analysis of UTAM's results, including peer universe comparisons for the period form 1997 to 2006.

The total net return for each portfolio for 2006, and for the prior three years, is summarized in Exhibit 3.

Exhibit 3



The Pension fund generated a net return of 12.1% in 2006, which was slightly lower than the 2005 result. LTCAP produced a net return of 12.8%, which exceeded the 11.7% return of the prior year. EFIP earned 4.9% in 2006, which was notably higher than the prior year's 3.8% return.

The Pension fund and LTCAP had the same policy asset mix as of January 1, 2006. However, for Pension this represented a new policy asset mix which came into affect on that date. As a result, there was a transition period required to realign Pension holdings. This transition required changes to the allocations to third-party investment managers, in order to bring Pension closer to the new policy asset mix and therefore more in line with LTCAP. On a steady-state basis, the net return for Pension and LTCAP are expected to be closer together, since their policy asset mix and return objectives are now the same.

UTAM's investment performance is currently evaluated in three key ways, each of which is discussed below:

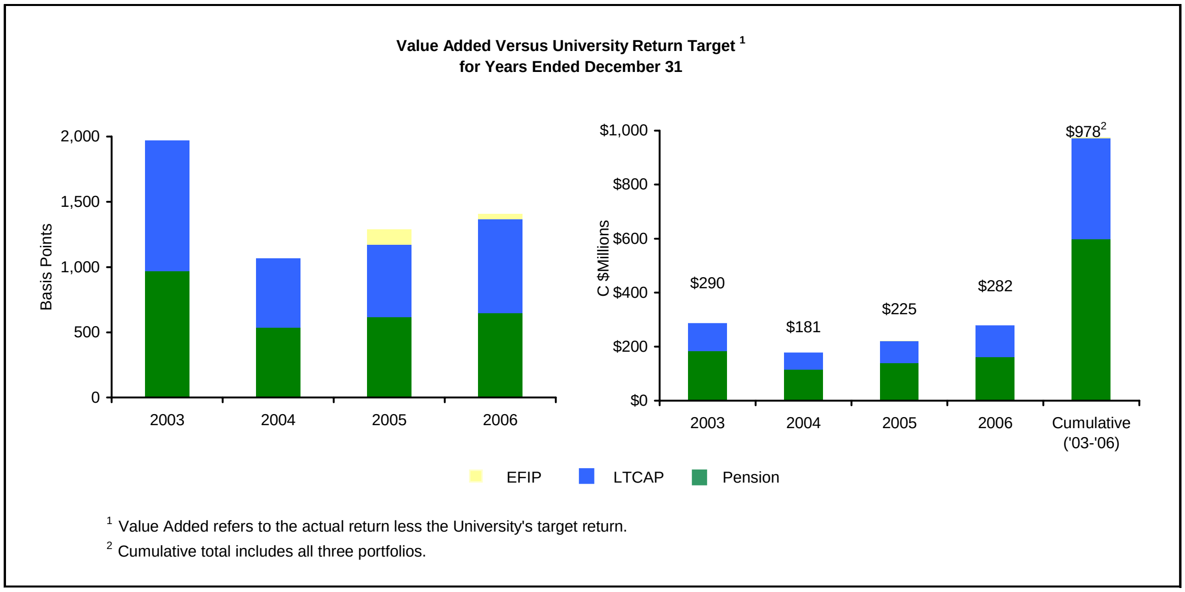
- versus the University's return target;
- versus passive market index returns (benchmarks) at the portfolio and asset class levels; and
- versus peers based on total portfolio performance.

1. Performance Versus University's Return Target

The return target specified by the University, for both Pension and LTCAP, is a 4% real return net of all fees. For EFIP, the target is 1-year Canadian Treasury Bills plus 50 basis points (on a rolling 12-month basis).

The difference between actual investment performance and the applicable target can be measured on an investment return basis (e.g. 12% actual return versus 11% target return results in 1% value added) and converted to a dollar value equivalent (e.g. 1% return, or 100 basis points, above the target return on a $500 million portfolio equates to $5 million of value added). The performance of the three portfolios on both of these bases is summarized in Exhibit 4.

Exhibit 4



Over the past four years (2003-2006), UTAM has generated cumulative value added of more than $970 million above the return target for Pension and LTCAP combined. This represents 20% of the total value of these portfolios at December 31, 2006. The University's return targets are meant to be achieved over a 10-year period. In this regard, the investment return achieved over the past four years is equivalent to the investment return that should be achieved over nine years at the target return level.

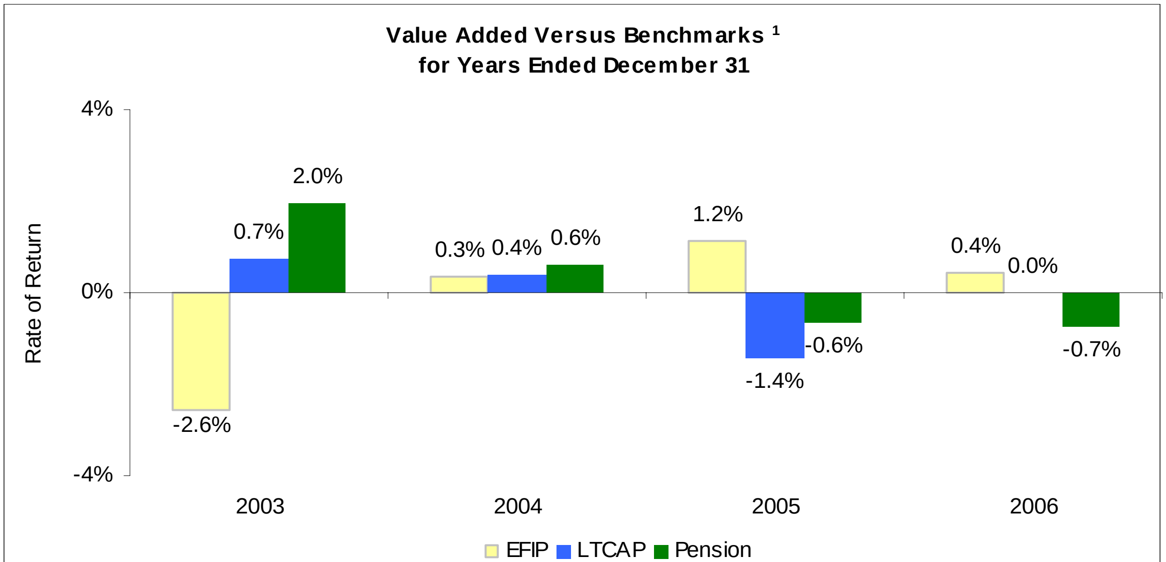
Investment performance in 2006 substantially exceeded the University's return targets for all three portfolios. Value added of 647 basis points was generated for the Pension fund, 720 basis points for LTCAP and 42 basis points for EFIP. In total, this equates to $279 million of value added across the three portfolios. This continues the favourable results produced over the past several years.

The return target for EFIP (which is also the benchmark return) was reset at the beginning of 2005. For 2006, UTAM generated value added of about $2 million above the University's return target.

2. Performance Versus Benchmarks (Passive Market Index Returns)

Formal policy benchmarks, based on passive market indices, are in place at the total portfolio level and at asset class levels. Total portfolio performance versus benchmark is summarized in Exhibit 5.

Exhibit 5



[1] Value Added refers to the actual return, net of fees, less the benchmark return.

For 2006, LTCAP performed at the market benchmark. Pension was 72 basis points behind its benchmark. This was due to the transition of Pension holdings to the new policy asset mix that became effective January 1, which was reflected in a change to the benchmark as of that date. However, the actual transition of holdings took place throughout January. If the change in benchmark for Pension had been set at the end of January, to allow for transition, then Pension value added would also be at benchmark. EFIP outperformed its market benchmark by 42 basis points in 2006.

In key respects, the investment performance results versus benchmarks for 2006 reflect partial completion of a substantial portfolio restructuring process for Public Markets (mainly Equities, but also Fixed Income) that was commenced partway through 2005.

3. Performance Versus Peers

Pension and LTCAP both achieved second quartile performance versus peers on a 1-year basis for 2006, with Pension at the 43rd percentile and LTCAP at the 27th percentile. The different percentile ranking reflects the impact of the Pension transition in January 2006 and the different manager allocations, as discussed previously. Detailed peer universe rank information is provided in Exhibit 6.

Exhibit 6

Peer Comparison Percentile Ranking [1]
for Periods Ended December 31

	Pension				LTCAP			
	2006		2005		2006		2005	
	1-Year	3-Year	1-Year	3-Year	1-Year	3-Year	1-Year	3-Year
Total Fund	**43**	**21**	**30**	**14**	**27**	**20**	**36**	**12**
Canadian Equities	35	26	36	33	35	18	37	17
US Equities[2]	35	53	64	54	31	51	61	42
International Equities[2]	59	56	60	40	60	55	59	33
Fixed Income	99	12	11	14	99	11	11	8

[1] RBC Global Services Balanced Fund and Asset Class Universes.
[2] Unhedged CDN$ returns.

Although not all the multi-year results are shown in Exhibit 6, on a 2-year, 3-year and 4-year basis both portfolios are consistently 1st quartile, except for Pension on a 2-year basis, which was just below 1st quartile (28th percentile).

This is strong overall performance, which was generated despite the challenges from restructuring the portfolios.

Review Process

As noted earlier, the objectives that were established for UTAM in 1999 included improved governance and control, improved investment expertise and potential for greater returns. UTAM aims to add value in the following areas:

- Reducing risk
- Generating excess returns.
- Providing infrastructure.
- Providing a comprehensive control system.

While there has been a significant increase in professionalism of the investment process since UTAM's formation seven years ago, there continue to be questions on the part of governors and others about UTAM's contribution. Seven years of operation provides a solid base of information on which to base this review. which has included the following:

- We assessed whether the University's process for setting risk and return targets is appropriate.

- We assessed what is most important to the University with respect to investment performance. Is it:
  - meeting the University's investment risk and return targets,
  - meeting or exceeding market benchmarks, or
  - beating our university and pension peers?

- We reviewed the current governance and assessed whether the relationship between the University and UTAM can be further clarified and enhanced.

- We sought input from a consultant (KPA Associates) on the governance issues.

- We compared UTAM to various outside standards:
  - 7 university peers with sophisticated investment strategies and infrastructure.
  - investment practice standards for investment stewards promulgated by Fiduciary360.

- investment fees and expenses benchmarks as provided by CEM and by Commonfund.

- We sought input from a communications consultant (Craib Strategic Directions) on:
  - UTAM stakeholder perceptions.
  - benchmarking of UTAM's communications against 13 university and 3 pension fund peers.

This review process identified the following issues, each of which is discussed in the following section:

- communications.
- evaluating performance.
- investment fees and expenses.
- compensation, and
- governance.

Following the discussion of issues are the overall conclusions from this review and recommendations for the future.

Current Issues

Communications

Two studies on communications were recently commissioned by UTAM. The first study focused on UTAM stakeholder perceptions, while the second benchmarked UTAM's communications to the communications programs of 13 peer universities and three pension asset managers.

Study # 1- UTAM Stakeholder Perceptions:

Craib Strategic Directions conducted interviews comprising 18 questions with 36 individuals representing the following stakeholder groups:

- UTAM management
- UTAM Board
- U of T Business Board
- U of T administration
- U of T faculty members.

Craib made a number of observations about the communications challenges related to complex investment processes and strategies and reached a number of conclusions and recommendations. These observations, conclusions and recommendations have great relevance for this review and are summarized below. Craib observes:

> "A recent article in the Economist entitled The Ivory Trade examined the ability of universities in the United States, including the Massachusetts Institute of Technology, Yale and Harvard, to consistently outperform the market by "thinking more boldly than the pack". It discusses the use of "alternative" assets, and "portable alpha strategy" to reduce risk and enhance returns – near heresy in the birthplace of the efficient market hypothesis.
>
> These complex investment strategies and exotic vehicles are perplexing to many investment professionals, even those who consider themselves information junkies. They are mysterious, slightly frightening black boxes to those who have little knowledge or interest in the investment world. Unfortunately some of these lay people are forced to make sufficient sense of this brave new

world in order to fulfill their fiduciary responsibilities as the stewards of funds under management by organizations like UTAM.

To complicate the situation at the University of Toronto, it became clear through our interviews that UTAM is burdened with the mistakes of past managers of the University's pension and endowment funds. We were told that during the past decade, stakeholders were assured that a blue ribbon team was managing the funds, yet substantial losses were incurred and the pension plan was left with insufficient funds to match its liabilities. As a defined benefit plan, the obligations to retired employees must be funded by the University's administration. With its financial capacity already challenged, deans are being told that new staff can't be hired, classrooms must be larger and money for resources to improve, indeed sustain, the quality of education is constrained by the need to fund the pension plan's obligations. At the same time, the deans are finding donors reluctant to endow the University because they don't understand the management of the University's endowment fund.

Recognizing the challenges, the current UTAM management team made changes in UTAM's business model and investment strategy. UTAM internal costs, which were $2.9 million in 2001, have risen by 20% to $3.5 million in 2006. The move from the previous passive investment style to an active investment style for the LTCAP and Pension portfolios also led to an increase in absolute costs as external investment advisory fees, which are netted against portfolio returns, were added. Total costs, which include external management fees and custody fees in addition to UTAM internal costs, have declined as a percentage of LTCAP and Pension assets, as follows: 0.58% in 2003 (first data available), 0.58% in 2004, 0.67% in 2005 (subsequently revised to 0.54%) and 0.47% in 2006. Nevertheless there remains the perception among key stakeholders that the total costs of managing the UTAM assets are unacceptably high.

The complexity of the investment strategy, the baggage from past failures and escalating costs has created an environment ripe for concern, if not serious anxiety. This concern identifies as the distance from UTAM increase and the quantity and quality of information diminishes."

Craib reached a number of conclusions from its analysis of the climate and from the answers to the 18 questions by members of the various stakeholder groups:

- Most participants believe UTAM's management team is highly disciplined and knowledgeable.
- There is general – but not widespread or deep – satisfaction with UTAM's investment returns versus the targets established by the University.

- There is great confusion around the benchmarks and how UTAM's performance should be measured.
- Too few UTAM stakeholders understand that the change in investment strategy is designed to achieve an absolute return every year with less – not more – risk.
- There was widespread lack of satisfaction with UTAM's communication from every group except the UTAM board of directors – and not all members of the UTAM board are entirely pleased.
- It is not clear to many participants that the extra costs of a more complex investment strategy have added value. This is partly because they are assigning value only to higher returns and ignoring the inherent value in stability and reduced risk.
- There are disagreements between the administration and UTAM over responsibility for various tasks. Where there is agreement, there are conflicts over time lines. This creates tension which can spiral into hostility and destruction of a productive working relationship.

As a result of these observations and conclusions from the interview process, Craib has made a number of recommendations, as follows:

- Explain with more clarity how and why UTAM was established, its mandate and targets.
- Clarify the responsibilities of UTAM, the UTAM Board, the University's Business Board and the University administration.
- Explain UTAM's investment process.
- Particular attention should be paid to explaining how UTAM reduces investment risk.
- Develop a reporting template that UTAM uses every time it reports on its performance to the administration and Business Board.
- End the confusion over UTAM's performance by clearly distinguishing the relative significance of the three "benchmarks".
- UTAM should consider publishing a quarterly report that engages stakeholders with a more comprehensive analysis and discussion of performance along with a few "war stories".
- The University administration should hold an annual information meeting for members of the pension plan at which UTAM could explain its business model, strategy and the performance of the pension plan. A similar meeting should be held for donors, also organized by the University's administration.
- Work with the administration to establish a line of communication with the faculty.
- Consider publishing research papers written by UTAM's staff on the website.
- Develop a glossary of terms for the annual report and website.
- Create an email alert function on the UTAM website.

This report captures succinctly the challenges involved communicating these very complex concepts and makes a series of practical, concrete recommendations for improving communications.

UTAM management has noted that the Craib report highlights a need for UTAM to communicate more effectively to stakeholders on a wide variety of fronts and has indicated that they will be pursing the recommendations and also surveying perceptions again at the end of 2007 to ascertain the progress made. It is important to note that some of the recommendations are not within the purview of UTAM. They will be considered by the University outside the scope of this review.

Study # 2 – Benchmarking UTAM's Communications:

For this benchmarking study, Craib Strategic Directions selected the following institutions from the Times Higher Education supplement on the top 200 universities in the world:

Harvard University (1)	University of Cambridge (2)
University of Oxford (3)	Massachusetts Institute of Technology (4)
Yale University (5)	Stanford University (6)
California Institute of Technology (7)	University of California, Berkeley (8)
Princeton University (10)	Cornell University (15)
McGill University (21)	University of Texas (32)
University of British Columbia (50)	

Craib also included three organizations that manage pension assets/plans. They included TIAA-CREF and Vanguard, which administer the pension plans of almost every U.S. university in the peer group, and Ontario Teacher's Pension Plan, which was often identified by UTAM stakeholders as a model of excellent communications.

Craib noted that "simply hosting a website, publishing an annual report, revealing management fees and discussing investment policy, targets and performance makes UTAM's transparency exceptional". Craib concluded that "in fact, there weren't many best practices within the peer group to share with UTAM", but did identify individual items of interest in the review of each communication program. Craib made the following recommendations:

- Publish pamphlets on the University's pension assets and endowment fund that discuss contributions and obligations/spending as well as investment management and performance.
- If you cannot publish a report jointly with the University's administration, provide copies of the UTAM annual report for distribution to donors and pension plan members.

- Include a comparison to a passive portfolio within your discussion of performance.
- Publish some news.
- Post your speeches and presentations on the website.
- Publish your research.
- Profile one external manager a month or quarter on your website.
- Publish commentaries that cover current issues in the capital markets or simply explain concepts and trends.
- Publish a quarterly report.
- Aim to hold an open house within 12 months.

UTAM is also implementing recommendations from this 2nd study that are within its scope.

Current Issues

Evaluating Performance

Question: in hypothetical year 1, returns are 18%, while in hypothetical year 2, returns are 5%. Were these good returns or bad returns? Did the investor do a good job or a poor job?

This section will attempt to answer these questions by discussing how performance may be evaluated and what would be appropriate measures of performance.

In general terms, actual investment performance in a given time period is not absolutely good or bad, but must be compared to something.

Sharpe et al[1] define a benchmark portfolio as "a portfolio of equivalent risk, against which the performance of an investor's holdings can be compared for the purpose of determining investment skill. A benchmark portfolio represents a relevant and feasible alternative to the investor's actual portfolio and, in particular, is similar in terms of risk exposure."

In other words, you cannot simply compare performance between different funds. Performance for any given period is a function of the risk which the investor is willing to take, the underlying investment markets, and investment skill. The broad challenge in evaluating performance is to evaluate each of these elements to determine the extent to which performance reflects investment skill, the ability to add returns in excess of those delivered by investment markets, *for that level of risk.* The specific challenge is to find comparators that have similar characteristics.

The key question for U of T is what targets do we want UTAM to achieve for us?

- Should UTAM's performance be evaluated on its achievement of U of T's risk and return targets. In this case the target comparator would be the policy targets laid out in the University's investment policies, e.g. LTCAP, 10% risk tolerance with a 4.0% real investment return target over a period of 10 years? This is an absolute benchmark.

- Should UTAM's performance be evaluated on whether it added value in excess of what can be obtained by simply investing in market index kinds of investments? Should success be measured on the investment skill to find investments that will return more than what can be obtained by investing in indices, which investments require less skill? In this case target comparators would be

[1] Sharpe, Alexander, Bailey, Fowler, Domian, Investments, Third Canadian Edition, Prentice-Hall, 2000, p. 827.

market benchmarks within our risk parameters that are defined by the UTAM Board. This is a relative benchmark.

- Should UTAM's performance be evaluated on whether U of T's investments do better than those of other Canadian universities, American universities, pension funds, etc?

- Should UTAM's performance be measured against some combination of the above?

The answer, from a University financial health perspective, is that U of T should be primarily concerned with the achievement of the risk and return targets as stated in Business Board approved policies over time. All of our multiyear financial modeling around, for example, what should be the endowment spending targets, or what should be a sustainable funding model for pensions, is based on these targets.

The challenge is to find a way to evaluate performance towards these longer-term targets over a multi-year period while taking into account the contributions of underlying financial markets to short-term results and to put those short-term results in perspective.

In the context of the University's requirement for meeting the risk and return targets, the absolute return benchmark is the most important metric. The portfolios are constructed to achieve the return target with a high level of confidence. The key focus is to capture capital appreciation when markets are rising and to preserve capital when markets are falling.

A relative return benchmark is nevertheless relevant given the portfolios are managed actively. Actual results should be compared to what could have been achieved if passive indexing was used. This is the primary performance measure currently in place for evaluating UTAM's performance and for staff compensation. A primary focus on relative benchmarks however, does not reflect UTAM's focus on achieving consistent long term absolute return above the return target and represents a misalignment and a misperception of UTAM's performance.

At present, relative performance is evaluated using benchmarks approved by Business Board. Those benchmarks take into account the current investment strategy involving alternative investments. We are considering changing the market benchmark so that it would reflect a very different investment strategy – the kind of passive, public markets based investment strategy that would be employed in the absence of UTAM. This "reference benchmark"

- would likely represent a simple balanced portfolio of public markets investments.
- would be approved by Business Board and not change significantly over time.

- would give a sense of how much value is added by an investment strategy that involves hedge funds, private equity and other non-traditional investments, through its comparison to actual investment performance.
- would not be used by UTAM for evaluation of staff performance or for staff compensation, and it would not be used for evaluation of external investment managers. Those evaluations would be based on market benchmarks that would be selected by UTAM and that would likely differ quite significantly from the reference benchmarks.

The concept of a “reference” benchmark is currently being explored with our actuaries to determine its feasibility and to assess its appropriateness to provide an independent evaluation of the value added by UTAM.

Finally, should performance be compared with a peer universe of other similar funds?

Comparison against peers assumes that the return target and risk appetite of peers are similar. This is not typically the case. As an example in 2006, UTAM and the Ontario Teacher’s Pension Plan had very similar results (approximately 13%). UTAM just beat its relative benchmark while Teacher’s reported that it beat its relative benchmark by 4%. The current official peer universe for UTAM is the RBC Canadian Balance Funds. This universe contains smaller funds with much simpler asset mix and there is no information about risk. UTAM has proposed that peer universes be used at the individual asset class level where the data is more homogeneous. U of T should not be concerned with bragging rights in comparison to other endowments and pension funds and should have our sights firmly fixed on the risk that it is prepared to tolerate.

Finally, evaluation of performance should be over a multi-year period. The investment strategies are not designed to cater to the short term fluctuations of markets and premature reaction will result in inconsistent results. Patience is the key to successful long-term investment performance.

At the present time, the University evaluates UTAM’s performance against all three measures – University targets, market benchmarks, peer universes - as noted in the section on UTAM results which provides a comprehensive review of UTAM results against these three areas of comparison. As noted earlier, the primary focus must be the achievement of the University’s target return while controlling risk to within the specified risk targets. Exhibits 7 and 8 show the key sources of change 2003-2006 for LTCAP and pension and the cumulative return of actual against target for LTCAP.

Exhibit 7

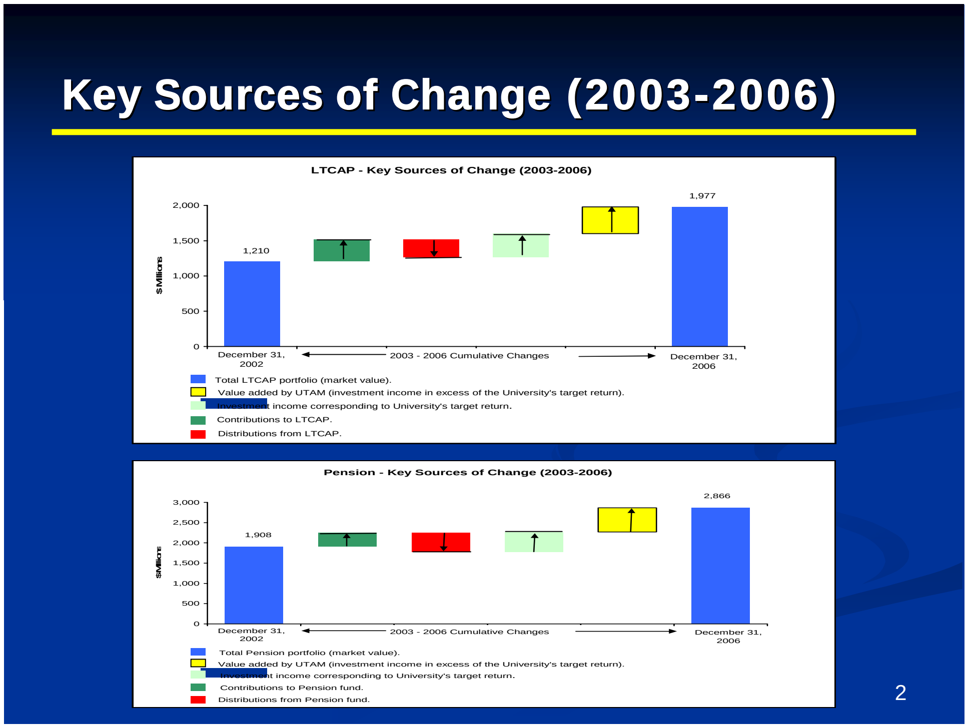


Exhibit 8

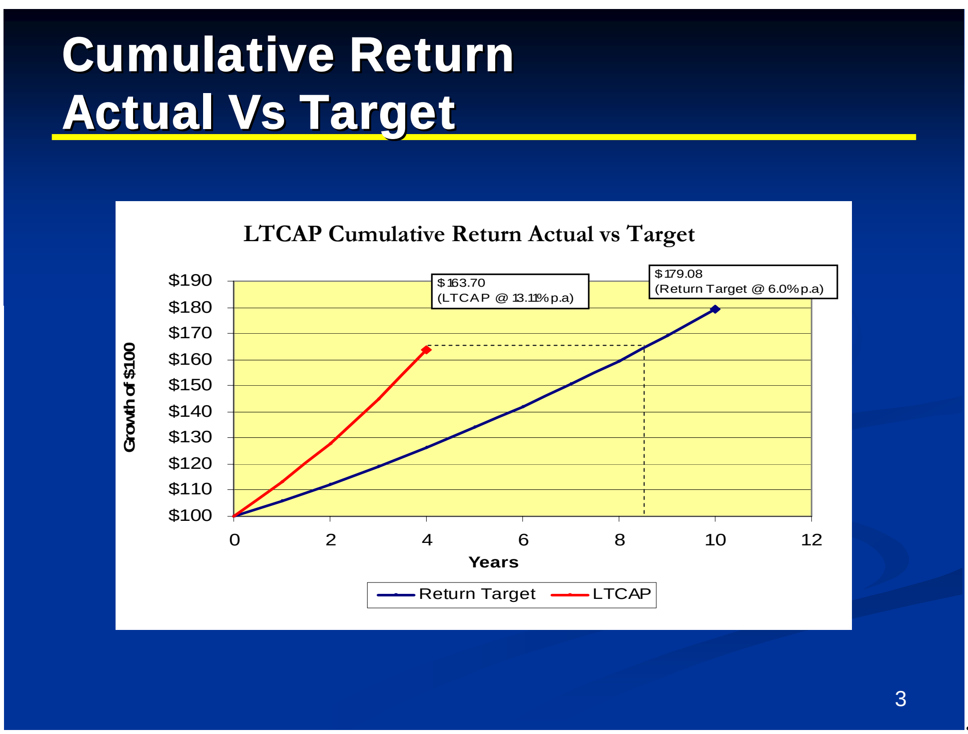
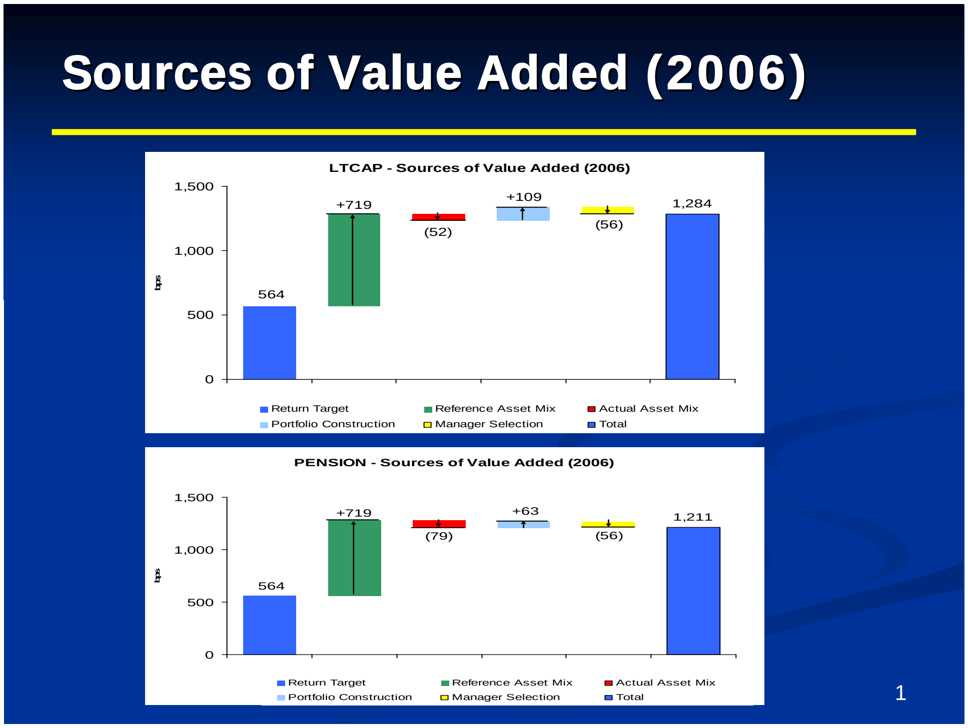


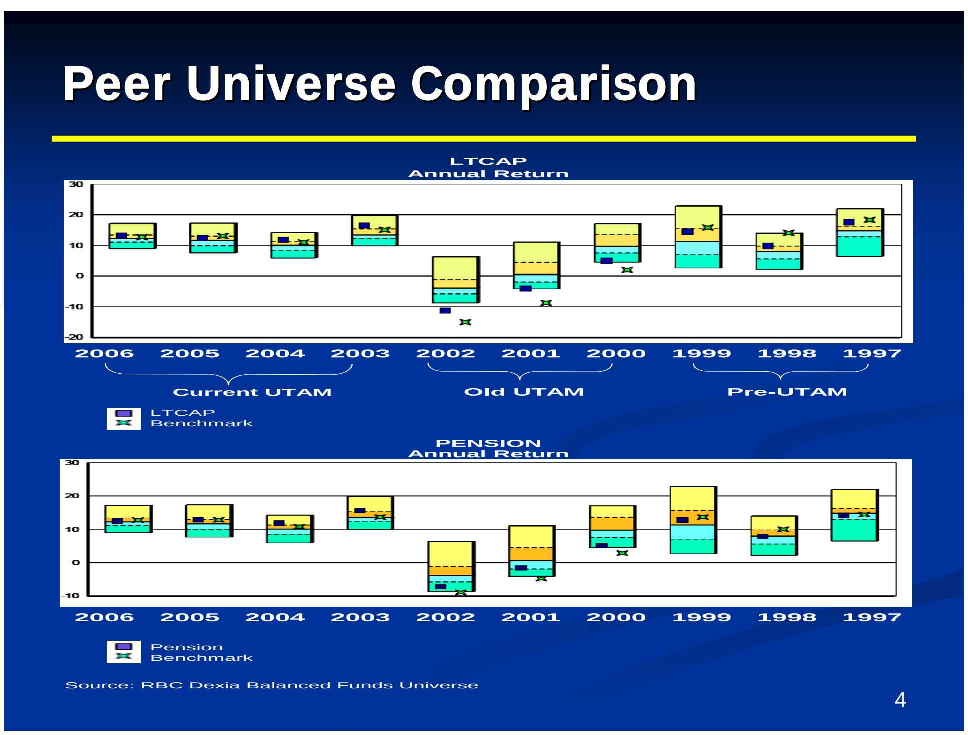
Exhibit 9 shows how UTAM has added value in 2006, illustrating the contributions from portfolio construction, the reference asset mix, management selection and the actual asset mix.

Exhibit 9



Finally, exhibit 10 illustrates how UTAM has performed in comparison to its peers over the 10 year period from 1997 to 2006. The box for each year describes the highest and lowest performers in the peer universe. The "x" shows the market benchmark in each year and the small dark box shows UTAM's performance in comparison to that universe. The source of the data is the RBC Dexia balance funds universe.

Exhibit 10



Current Issues

Investment Fees and Expenses

This section provides some perspective on the cost and value of UTAM's operations from 2003-2006. Earlier data is not available for a comparison on a net return basis.

Investment management costs fall in three general categories - external manager fees, custody costs, and the cost of UTAM's operations. Two perspectives on value added are provided in Exhibit 11 - versus market benchmarks and versus University defined targets.

COST & VALUE ADDED
(LTCAP & PENSION)[1]

Exhibit 11

	2006	**2005**	**2004**	**2003[2]**
Average Assets ($ millions)	4,087	3,728	3,402	2,986
Costs (bps)				
• External Investment Management	36	43	45	44
• Custody	3	3	4	4
• UTAM Internal Costs	8	8	9	10
Total Cost (bps)	**47**	**54**	**58**	**58**
Actual return, net (%)	12.40	12.07	11.45	15.81
Benchmark return (%)	12.83	13.02	10.92	14.14
University Target, net[3] (%)	5.64	6.15	6.12	5.99
Value Added (bps)				
• vs. Benchmark	(43)	(95)	53	167
• vs. University Target (bps)	676	592	533	982
Value Added ($ millions)				
• vs. Benchmark	(18)	(36)	18	50
• vs. University Target	276	221	181	293
Cumulative Value Added ($ millions)				
• vs. Benchmark	14	32	68	50
• vs. University Target	971	695	474	293

[1] Based on marketable assets. EFIP excluded; benchmark set only in 2005. Value Added after costs was +42 bps ($2 million) in 2006 and +115 bps ($4.9 million) in 2005.
[2] Full reporting of gross and net returns available since 2004. Numbers for 2003 have been reconstructed but do not have the same level of precision.
[3] University target reflects 4% real return plus annual CPI inflation. Return reported on a net of fee basis.

The exhibit indicates that:

- investment-related costs were lower and benefited from economies of scale.

- cumulative value added versus approved benchmark has been negatively impacted by 2005 and 2006 results. Including 2006 EFIP value added, cumulative value-added since 2003 is $21 million.

- the portfolios continued to add value versus the University's defined target. The value added for 2006 was $276M (vs. $221M in 2005), which resulted in a cumulative value-added of $971 million since 2003.

Other external measures evaluate the reasonableness of investment fees and expenses included the Commonfund Survey and CEM.

COMMONFUND SURVEY

Exhibit 12

	Commonfund FY 2006 Survey[1]	**UTAM**[1]
# of managers used	75	63
Average cost	82 bps	45 bps
% of institutions in Survey that reported following costs[2]:		
• Investment Management Fees	90%	Included
• Consulting	62%	Included
• Custody	86%	Included
• Internal Costs	62%	Included
Professional Staff (FTE's)	10.7	10
Investment Committee Members (FTE's)	10.2	10

[1] Institutions over US$1 Billion in assets under management. UTAM's data based on 2006 for all three portfolios. Average cost based on marketable assets.
[2] Based on FY 2005 survey. 2006 results do not provide equivalent breakdown.

a) CEM (COST EFFECTIVENESS MEASUREMENT) SURVEY

Exhibits 13 and 14 on the following pages show value added vs. policy benchmarks as measured by CEM. The charts show that relative to UTAM's broad peer group and the Canadian peer group, UTAM has consistently ranked in the top quartile in both measures since 2003, a marked improvement over 2001 when the ranking was bottom quartile vs. the broad peer group and 2nd quartile vs. Canada peers.

Exhibit 15 on a following page shows UTAM's value added versus its excess cost. While UTAM's costs are marginally higher than Commonfund's benchmark cost by 3 bps, UTAM added significant value to the tune of 170 bps. These results are in close proximity to the ideal top left quadrant position (i.e. lower cost, higher value added), which remains the objective.

Overall Conclusion – Investment Fees and Expenses:

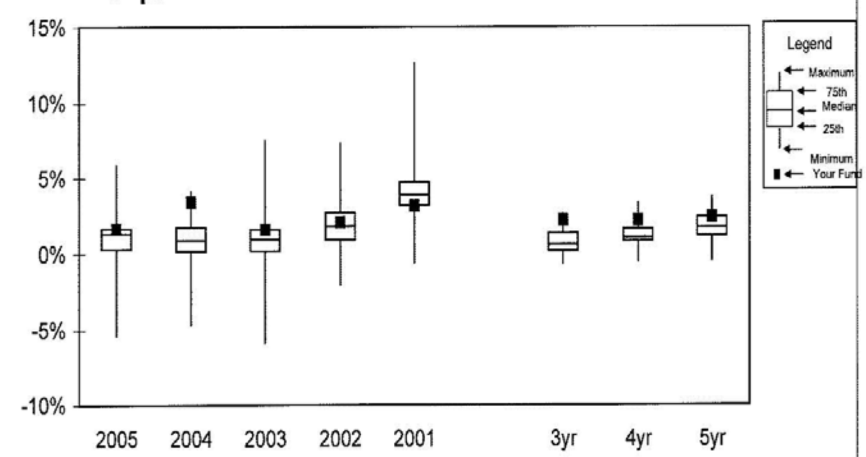
The cost effectiveness of UTAM may be summarized as follows:

- 2006 cost was 47 bps (58 bps in 2003).
- Peer costs were 85 bps (as per 2006 Commonfund Survey).
- Cost effective for value added: UTAM was in the top 25% (as per CEM Survey).

Fees paid by asset class were less than average (details by asset class not shown above, but data available upon request).

Exhibit 13

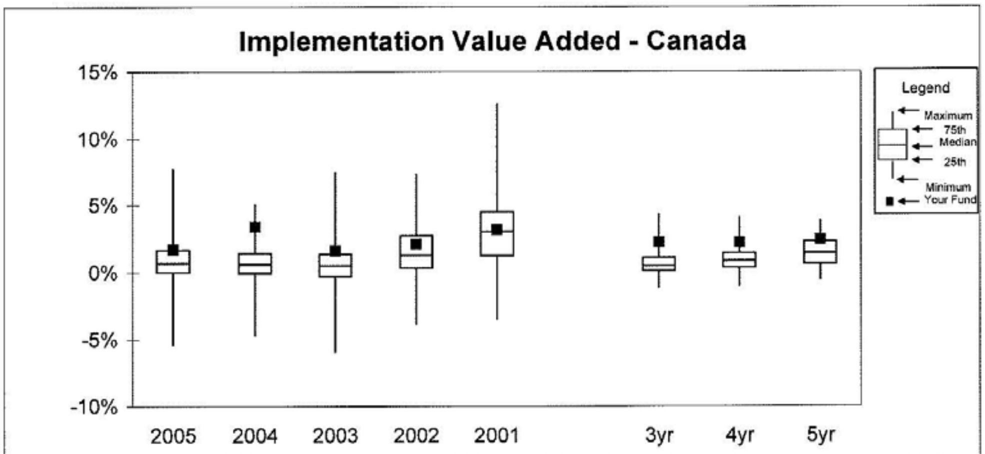
Implementation Value Added Comparison to Peers



	2005	2004	2003	2002	2001	3yr	4yr	5yr
Maximum	5.9	4.2	7.6	7.4	12.6	2.7	3.4	3.8
75th	1.7	1.8	1.6	2.7	4.7	1.4	1.7	2.4
Median	1.3	0.9	0.9	1.8	3.9	0.6	1.1	1.7
25th	0.3	0.2	0.2	0.9	3.2	0.2	0.8	1.2
Minimum	-5.4	-4.7	-5.9	-2.1	-0.6	-0.7	-0.5	-0.5
Average	0.8	0.9	1.0	2.1	4.0	0.8	1.2	1.8
Count	21	20	20	19	19	19	18	17
University of Toronto								
Your Value	1.7	3.4	1.6	2.1	3.2	2.2	2.2	2.4
Your %	75%	95%	79%	61%	22%	89%	88%	75%

Implementation Value Added is the difference between your Total Return and your policy return. It is a measure of the value produced over what could have been earned passively.

Implementation Value Added Comparison to Canada

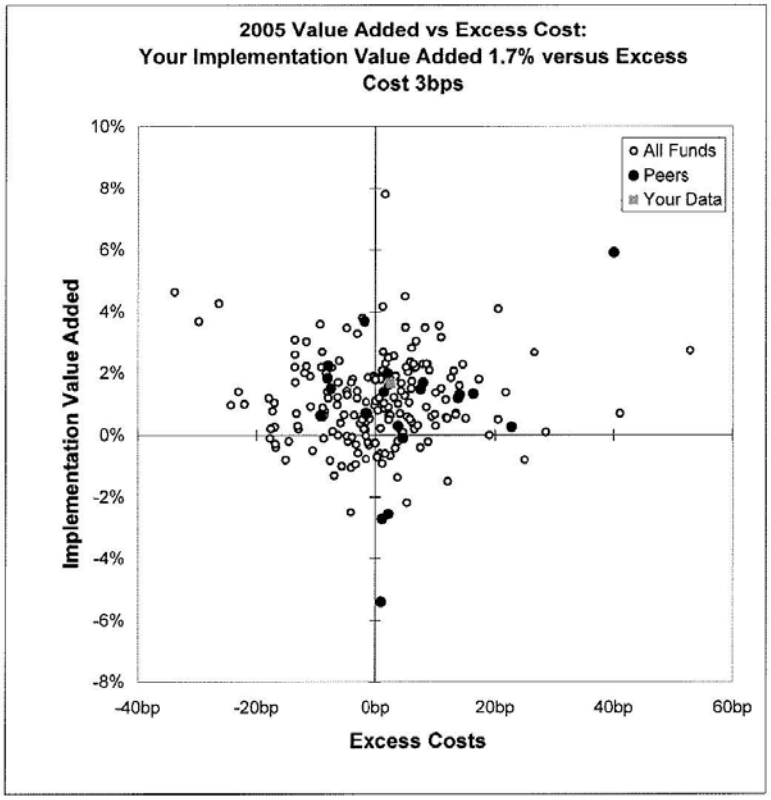


	2005	2004	2003	2002	2001	3yr	4yr	5yr
Maximum	7.8	5.1	7.6	7.4	12.6	4.4	4.1	3.9
75th	1.7	1.5	1.4	2.8	4.5	1.1	1.5	2.3
Median	0.7	0.6	0.5	1.3	3.0	0.5	0.8	1.4
25th	0.0	-0.1	-0.3	0.3	1.2	0.1	0.3	0.6
Minimum	-5.4	-4.7	-5.9	-3.9	-3.5	-1.2	-1.0	-0.6
Average	0.9	0.7	0.7	1.6	3.1	0.7	0.9	1.5
Count	92	95	95	98	98	64	59	53
University of Toronto								
Your Value	1.7	3.4	1.6	2.1	3.2	2.2	2.2	2.4
Your %	74%	96%	79%	67%	54%	92%	91%	81%

Your 5-year Implementation Value Added of 2.4% was among the highest in our Canada universe.

Exhibit 14

Your Cost Effectiveness Ranking - 2005



Benchmark Cost - 15

Exhibit 15

Current Issues

Compensation

The UTAM Board is responsible for approving the policy, parameters, and annual compensation for UTAM management. To do this, the UTAM Board has established a compensation committee to manage the process and recommend compensation to the full UTAM Board, which approves the compensation. The compensation committee is comprised of the following:

Ira Gluskin, Chair of the UTAM Board
Bob Morrison, Vice-Chair, UTAM Board
David Naylor, President of the University of Toronto and member, UTAM Board
Catherine Riggall, Vice-President, Business Affairs, U of T and member, UTAM Board
Tom Simpson, former member of Governing Council and member, UTAM Board

This committee receives no compensation from UTAM and members have no personal interest in the compensation awards that are made to UTAM management. Rather, this committee is charged with ensuring that UTAM management is appropriately compensated for their efforts in the context of what is required to ensure that UTAM can attract and retain competent investment professionals, their individual performance and UTAM's overall performance in achieving the University's return and risk targets as approved by the Business Board.

The committee has established an annual process to review compensation in comparison to the market, using the Canadian Investment Management Compensation Survey prepared by Mercer HR consulting. Base pay is set at the median level, while the 25^{th} to 75^{th} percentiles establish the range for the positions. The bonus component of compensation includes weights for individual qualitative performance, target return, benchmark return and peer universe.

This process ensures that UTAM employees are paid within the parameters for the investment industry and that their individual contributions are appropriately recognized.

Current Issues

Governance

UTAM Board and Business Board Roles

UTAM was established with its own bylaw that defines the powers of the Corporation and its Board and with a service agreement to confirm the relationship with the University. This service agreement, called now “The Amended and Restated Service and Personnel Agreement”, is a multi-purpose document that is no longer efficient to work with. The original and (the Amended) agreement included many provisions related to the benefits and rights that would accrue to University employees transferred to UTAM. None of these employees remain with the company and the provisions no longer apply. The document as it exists is a mixture of what is best described as a delegation of authority and a service agreement. This reflects to some degree the rather schizophrenic relationship the University has had with UTAM, being both the owner and the primary customer. The documents also attempt to deal in one form with the various funds managed by UTAM for the University – the expendable funds (EFIP), the endowments, and the pension funds. While the investment approaches are similar, there are different reporting requirements that complicate matters and lead to some confusion. For example, the UTAM board and the administration of UTAM deal only with the investment aspects of the pension funds, while the University administration and the Business Board have fiduciary responsibilities and are required to deal with the liabilities issues as well. The merging of everything into the UTAM model has blurred these accountabilities.

Just as the relationship between the University and UTAM has been confused, so has the relationship between the Business Board and the UTAM Board.

The UTAM board members are recruited for their investment and business expertise and are appointed by the Executive Committee of Governing Council on the recommendation of the President of the University. They dedicate a significant amount of time to reviewing the strategy, the asset allocation, the risk and risk management, the controls and specific investment proposals in the case of private equity. They monitor and evaluate performance against target returns, benchmarks and peers. They also review the budget of the corporation and review and approve the financial statements. The compensation committee determines compensation plans, and assesses the market competitiveness of the compensation plan.

The Business Board has the responsibility for financial policy and transactions of the University of Toronto, including:

1. Review and approval of investment policies and specifically annual approval of investment policies for the pension funds, including normal asset mixes, asset mix range, risk tolerances, quality criteria and rate of return objectives, including benchmarks for each fund.
2. Approval of conditions for delegation of authority to UTAM
3. Review of reports on the investment of University and pension funds
4. Acceptance of annual reports and financial statements of incorporated ancillaries.

In addition, the Business Board reports annually to the Governing Council on its receipt and discussion of reports on investment matters.

Business Board members have expressed their uneasiness with the responsibility for making decisions in this complex technical area. The governance process needs to provide for appropriate exercise of the University's fiduciary responsibilities by parties who are comfortable with the responsibilities they are required to undertake. Additionally, it is clear that with regard to the Pension funds at least, that there is duplication of policy approval.

In the winter of 2007, the University engaged Keith Ambachtsheer (KPA Associates), a well known pension consultant to review UTAM governance and make recommendations for improvement. Mr Ambachtsheer looked at the issues from a different perspective, examining issues from the perspective of investment management principles and whether UTAM was organized to achieve " integrated, value-adding asset management processes." The three principles that he set out as critical success drivers were alignment of interests, good governance and sufficient scale.

He concluded, among other things, that the University has " an operationally useful way of expressing its investment targets and risk budgets" and that " UTAM has become a stable organization that has effective oversight, an experienced management/professional team and a diversified approach to investment policy implementation that has been producing strong absolute and relative investment results." However, some irritants remain related to…"some continuing fuzziness about the respective responsibilities of UTAM management, the UTAM board, the University administration and the University Business Board."

He made recommendations about the structure and governance of the pension plans which are outside the scope of this report and which have been taken under advisement by the University.

He also recommended that UTAM become an independent investment firm, with a number of clients, including the University of Toronto, and a larger pool of assets under management. This recommendation would require further research, analysis and discussion of the risks and opportunities, both within the

University and at the UTAM Board. In our view, the risks involved in managing significant sums for others outweigh the potential benefits of further economies of scale, at the present time.

The membership of the UTAM Board should also be reviewed. It should be predominantly composed of experts with investment backgrounds but should continue to have representation from the University's administration, as it currently does. However, the President should have the authority to determine the University representatives and not be required to participate personally on the UTAM Board.

In conclusion, it clearly is time to review the roles and responsibilities of the various groups and to revise the various documents and agreements that define these relationships. It will likely be necessary to revise:

- The UTAM By-law.
- The Amended and Restated UTAM Service and Personnel Agreement - replacing the agreement with two documents – a delegation of authority from the University to UTAM and a service agreement that outlines the working relationships. This should be modeled on a standard investment industry customer service agreement.
- The Terms of Reference of the Business Board
- The Statement of Investment Policies and Priorities for the pension plans.

The delegation of authority should be reviewed and consideration given to delegating to the UTAM Board the responsibility for establishing the market benchmarks and peer universes against which UTAM's external managers and UTAM management are evaluated. The duplicate pension approvals also need to be addressed although this needs to be considered in the context of the University's role as the legal pension administrator.

An option that should be considered to make the management of the University investments a model of good governance and to reduce the conflict and duplication that now recurs would be to have the UTAM board become a committee of the Governing Council, reporting directly to it, rather than through the Business Board. This would reduce the stress felt by many business board members who are not clear about their role with regard to investments, and uncomfortable that they do not have the knowledge to be effective in assessing UTAM's performance, something that the UTAM board members are quite comfortable doing.

Conclusions

Are the objectives being met?

The original objectives around the creation of UTAM were improved governance and control, improved investment expertise, and potential for greater returns. UTAM aims to add value by reducing risk, generating excess returns and by providing infrastructure and controls. Have these objectives been met?

Improved governance and control:

Partly. The changes implemented in 2003 have brought greater clarity to the roles and responsibilities of the University and UTAM. However, more work is needed to deal with ongoing duplication, to ensure that all parties are clear on what constitutes added value, the criteria for evaluating performance, that those evaluations are clearly communicated and to ensure that members with fiduciary responsibilities are comfortable with those responsibilities. Fine-tuning of the relationship is needed to ensure that this occurs. Pre-UTAM and pre-2003, the Business Board was responsible for asset mix. That responsibility is now with the expert UTAM Board. However, benchmarks are still the responsibility of the Business Board as is the Statement of Investment Policies and Priorities for the pension plans.

Improved investment expertise:

Yes. UTAM has engaged a President and CEO with many years of senior management experience in investments, and has also brought on board specialists in public and private markets and risk budgeting. The UTAM Board is a blue-chip board with most members (except University reps) bringing significant investment experience to the benefit of the University, on a volunteer basis. Pre-UTAM, the University had very few staff with investment expertise and those staff had other treasury duties as well as investments. The investment committee was involved at the tactical level, rather than at the strategic level, as is the case today.

Excess returns at reduced risk:

Yes. UTAM has implemented investment strategies involving alternative investment classes which have been demonstrated to generate higher returns for the same risk levels. Those strategies require significant investment and risk management expertise and cannot prudently be implemented without that level of expertise. Pre-UTAM, the investment strategy focused predominantly on passive investments that could be directed by a volunteer investment committee.

Infrastructure:

Yes. UTAM has developed the appropriate infrastructure to decide, implement, manage and monitor the complex investment strategies that are needed to earn excess returns while ensuring that risk is controlled. Pre-UTAM there was very little infrastructure supporting investments.

Controls:

Yes. UTAM has a compliance function and has developed, maintains and monitors a number of control and compliance systems including internal controls, controls with compliance monitoring over its external managers and oversight of the custodian. Pre-UTAM, the compliance function was very weak and minimal resources were allocated to compliance monitoring of external managers. The process, practices and controls of the University and UTAM meet the standards of prudent practices for investment stewards that have been promulgated by Fiduciary360 and promoted by NACUBO (see appendix for the detailed comparison).

Overall Conclusion:

UTAM has essentially achieved the objectives set out for it, but the University and UTAM have not effectively communicated its achievements so that they are well understood by the broader community of stakeholders. There still remains some confusion about roles and responsibilities. The following section outlines a number of recommendations that are expected to fine-tune the relationship between the University and UTAM and to improve communications.

Recommendations

The foregoing analysis shows that UTAM is a strong, well-managed organization that essentially meets the objectives that have been set out for it. While the current process, infrastructure and control environment are vastly improved over the pre-2000 period, there remain areas whether further improvement is needed. There continue to be some areas of confusion within the governance process, what constitutes good performance is not well understood, and communications, while comparing very favourably to peers, could be further enhanced. The following recommendations address these needs.

1. Confirm that the University's overriding objective with respect to investment performance is the achievement of the investment risk and return targets as approved by the Business Board. Focus on achievement of those University investment risk and return targets, with secondary emphasis on market benchmarks, and low emphasis on peer comparisons, except with respect to fees and expenses.

2. Explore the concept of a "reference" benchmark reflecting a passive public markets portfolio. If it proves feasible, seek approval from Business Board for use of this reference benchmark for evaluation of the value added by UTAM.

3. Delegate to the UTAM Board the selection of market benchmarks and peer universes against which UTAM's external managers and UTAM management will be evaluated.

4. Clarify the relationship between the UTAM Board and the Business Board by defining the responsibilities associated with the roles of owner and customer. Consider whether there are any other options for oversight within the current governance structure.

5. Review the membership of the UTAM Board and delegate to the President of the University the selection of University representatives to the UTAM Board.

6. Separate the delegation of authority from the service agreement. The delegation of authority will clearly state what are the University's responsibilities and what the University is delegating to UTAM. The service agreement will become a more standardized description of the services to be provided by UTAM to the University.

7. Report semi-annually to governance with a full annual report to be provided after each calendar year end.

8. Produce a quarterly report for public distribution.

9. Implement the communications consultant’s recommendations that are within the scope of UTAM.

Appendix

Comparison: "Fiduciary360's "Prudent Practices for Investment Stewards" with University of Toronto and UTAM Practices

A topic of interest at the 2007 NACUBO endowment management forum was Fiduciary360's presentation of their global fiduciary standard that it has defined for investment stewards, supported by technical review by the American Institute of Certified Public Accountants. Fiduciary360 has issued a *Handbook of Prudent Practices for Investment Stewards*, whom they define as "trustees, investment committee members, attorneys, accountants, institutional investors, and anyone else who is involved in managing investment decision-making". While the legal references pertain to the U.S.A., we felt that it would be useful to assess the practices of the University and UTAM against the 22 standards promulgated in the Handbook. Having done so (see below) we have concluded that the University and UTAM operate to these standards.

	Practice Reference	**Response**
S-1.1	**Investments are managed in accordance with applicable laws, trust documents, and written investment policy statements (IPS)**	**[UTAM]** Yes. The Investment Policy provided by the client, i.e. the University of Toronto, defines duties and responsibilities, and investment related criteria, etc. The detailed operational Policies implemented by UTAM support this Investment Policy and provide a framework for the enactment of this Investment Policy. These are supplemented by Statements of Investment Policies and Guidelines provided to Investment Managers in the Public Markets and Absolute Return programs. UTAM is registered with the Ontario Securities Commission ("OSC") and acts within the applicable legislation, rules and regulations consistent with the maintenance of good standing. In this UTAM has a designated Chief Compliance Officer as well as a Manager, Compliance and has developed a Policies and Procedures Manual and monitoring program to oversee investment activities.
S-1.2	**The roles and responsibilities of all involved parties (fiduciaries and non-fiduciaries) are defined, documented and acknowledged.**	**[University]** Yes. University and pension investment policies are clearly defined and approved by governance. There is clear articulation in governance of the role of the Business Board. Business Board has delegated some of its authority to the UTAM Board through the service agreement. The UTAM Board is accountable to the Business Board for meeting the objectives and for regularly reporting on performance.

S-1.3	**Fiduciaries and parties in interest are not involved in self-dealing**	**[UTAM]** Yes. In the case of UTAM employees a 'best practices' Code of Ethics ("the Code") is in effect that specifically addresses areas in which there is potential for actions in self-interest by employees. This includes: • Provisions addressing the personal investment practices of employees. The Code is applicable to all employees and requires disclosure of investment accounts and trading transactions. • Provisions addressing acceptance and disclosure of gifts and entertainment by third parties. • Provisions addressing other potential conflict of interests such as acceptance of outside positions, etc. Annual certification is required to confirm that employees understand and are in compliance with the terms of the Code. UTAM's Manager, Compliance, monitors disclosed trading accounts and transactions, gifts and entertainment and other terms of the Code and reports breaches to the Chief Compliance Officer and where necessary to the Audit & Compliance Committee. In the case of Investment Managers retained by UTAM, policies dealing with potential conflicts of interest are reviewed as part of the Operational Due Diligence ("ODD") program. Consideration is given as to their adequacy and of compliance programs in place to monitor the application of the policies. The ODD program also considers relationships that the Investment Manager has with its service providers and evaluates them for potential conflicts of interest and again any policies in place to mitigate them. Investment Managers who are SEC registered are required to disclose their potential conflicts of interest on the Form ADV Part II (a required SEC filing), which we review also. Hiring decisions are brought before the Investment Committee and recommendations are supported by investment and operational due diligence. Additionally, in the case of Private Markets decisions are brought before the Private Markets Committee, a committee of the UTAM Board.

S-1.4	**Service agreements and contracts are in writing, and do not contain provisions that conflict with fiduciary standards of care**	**[UTAM]** Yes. Service agreements and contracts conform to standard industry norms and subject to either detailed internal scrutiny or external counsel review where necessary with additional provisions added to UTAM's benefit where possible.
S-1.5	**Assets are within the jurisdiction of appropriate courts, and are protected from theft and embezzlement**	**[UTAM]** Yes. UTAM custodies assets with State Street, a well established financial institution operating in Canadian and US jurisdictions.
S-2.1	**An investment time horizon has been defined.**	**[University]**Yes. The university and pension investment risk and return targets are established based on a review of the term and nature of the liabilities. **[UTAM]** Not applicable
S-2.2	**A risk level has been identified.**	**[University]** Yes, the University has established quantified risk targets for LTCAP and pensions and has defined a "minimal risk" target for EFIP. **[UTAM]** Not applicable
S-2.3	**An expected, modelled return to meet investment objectives has been identified.**	**[University}** Yes, efficient frontier analysis has been performed and is updated regularly to facilitate selection of investment risk and return targets. **[UTAM]** Not applicable
S-2.4	**Selected asset classes are consistent with the identified risk, return and time horizon.**	**[UTAM]** Yes. Within the requirements and risk return, time horizon and other constraints imposed by clients UTAM applies an asset mix in a combination considered appropriate. Methodologies have been implemented to facilitate this process and investment programs are subject to continuous review and evaluation.
S-2.5	**Selected asset classes are consistent with the implementation and monitoring constraints.**	**[UTAM]** Yes. Qualified staff with access to adequate technological, data and research resources is engaged in implementing and monitoring investment decisions. Processes are in place for regular reporting on the results of investment decisions and implement adjustments where necessary.
S-2.6	**There is an IPS which contains the detail to define, implement, and manage a specific investment strategy.**	**[UTAM]** Yes. The Investment Policy provided by the client, i.e. the University of Toronto, defines duties and responsibilities, and investment related criteria, etc. The detailed operational Policies implemented by UTAM support this Investment Policy and provide a framework for the enactment of this Investment Policy. These are supplemented by Statements of Investment Policies and Guidelines provided to Investment Managers in the Public Markets and Absolute Return programs.
S-2.7	**The IPS defines appropriately structured, socially responsible investment (SRI) strategies (where applicable).**	**[University]** Yes. The University has a policy on socially responsible investing that provides a mechanism for dealing with issues. Very recently, the University has decided to no longer invest in tobacco stock. That decision is currently being implemented by UTAM. **[UTAM]**

S-3.1	**The investment strategy is implemented in compliance with the required level of prudence.**	**[UTAM]** Yes. In the case of the Public Markets and Absolute Return programs, UTAM has implemented separate investment and operational due diligence programs that evaluate the investment expertise of subject Investment Managers on an initial and ongoing basis. Investment Managers are subject to biannual investment reviews and biennial operational reviews. Investment Managers are required to certify quarterly that they are in compliance with UTAM's investment guidelines. In the case of Private Markets, UTAM has implemented a combined investment and operational due diligence program that evaluates the expertise of subject investments on an initial basis. Private Market investments are reviewed regularly.
S-3.2	**Applicable "Safe Harbor" provisions are followed (when elected).**	**[University}** Not applicable in Canada. **[UTAM]** Yes. Not applicable
S-3.3	**Investment vehicles are appropriate for the portfolio size.**	**[UTAM]** Yes.
S-3.4	**A due diligence process is followed in selecting service providers, including the custodian.**	**[UTAM]** Yes. Although engagement of State Street by the University for its assets is outside UTAM's scope, periodically UTAM will meet with State Street to evaluate operational developments and request and review such documents as its SAS 70. In respect of service providers engaged by UTAM's Investment Managers the operational due diligence program evaluates these relationships. This may include consideration of custodians, administrators, prime brokers, auditors, bankers etc.
S-4.1	**Periodic reports compare investment performance against appropriate index, peer group and IPS objectives.**	**[UTAM]** Yes. Investment Manager performance against peers and benchmarks is evaluated monthly and in the case of Public Markets and Absolute Return programs is considered by the Investment Committee. Decisions reached by the Investment Committee in its review of manager performance are documented in meeting minutes and where action is required may be added to the 'Action Items' log. The Investment Committee also maintains a 'Watchlist' governed by guideline procedures that indicate action required where managers may be under performing in relation to its objectives and/or peers etc. The Watchlist is also regularly reported to UTAM's Board.
S-4.2	**Periodic reviews are made of qualitative and/or organizational changes of investment decision-makers.**	**[UTAM]** Yes, as noted in respect of S-3.1 above, UTAM has mandated the requirement to review the operational structure of its subject Investment Managers. This requires a detailed review at least every two years and in practice, operational due diligence files are updated for annual filings such as Form ADV, financial statements, etc.

S-4.3	**Control procedures are in place to periodically review policies for best execution, "soft dollars", and proxy voting.**	**[UTAM]** Yes. Although UTAM does not itself engage directly in securities transactions, the best execution, soft dollar and proxy voting practices of its subject Investment Managers is evaluated as part of the initial and ongoing Operational Due Diligence program. In addition, in respect of Proxy Voting, Investment Managers are required to provide a list of their proxies voted in respect of UTAM's investments.
S-4.4	**Fees for investment managers are consistent with agreements and with all applicable laws.**	**[UTAM]** Yes. The level of fees charged by Investment Managers is periodically brought before the Investment Committee as issues arise and there is ongoing peer and industry comparison. Where fees are considered to be 'out of line', action may be taken including discussion with the Investment Manager and even as a reason for termination where appropriate.
S-4.5	**"Finder's fees" or other forms of compensation that may have been paid for asset placement are appropriately applied, utilized and documented.**	**[UTAM]** Not applicable – not paid

S-4.6	**There is a process to periodically review the organization's effectiveness in meeting its fiduciary responsibilities.**	**[University}** Yes. **[UTAM]** Not applicable