UNIVERSITY OF TORONTO PENSION PLAN

FINANCIAL STATEMENTS

JUNE 30, 2018

INDEPENDENT AUDITORS' REPORT

To the Administrator of the
University of Toronto Pension Plan

We have audited the accompanying financial statements of the **University of Toronto Pension Plan**, which comprise the statement of financial position as at June 30, 2018, and the statements of changes in net assets available for benefits and changes in pension obligations for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian accounting standards for pension plans, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' responsibility

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 comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of the **University of Toronto Pension Plan** as at June 30, 2018, and the changes in its net assets available for benefits and changes in its pension obligations for the year then ended in accordance with Canadian accounting standards for pension plans.

Ernst & Young LLP

Chartered Professional Accountants
Licensed Public Accountants

Toronto, Canada
December 12, 2018

UNIVERSITY OF TORONTO PENSION PLAN

STATEMENT OF FINANCIAL POSITION
(with comparative figures as at June 30, 2017)
(thousands of dollars)

As at June 30

	2018	2017
ASSETS		
Investment in Master Trust, at fair value *(note 3(a))*	**5,106,821**	4,690,693
Receivables and prepaid expenses	**19,094**	18,092
	5,125,915	4,708,785
LIABILITIES		
Refunds payable	**9,632**	3,563
Accrued expenses	**2,247**	7,006
	11,879	10,569
Net assets available for benefits	**5,114,036**	4,698,216
Pension obligations *(note 7)*	**5,332,356**	5,077,137
Deficit	**(218,320)**	(378,921)

See accompanying notes

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

(signed)
Ms. Sheila Brown
Chief Financial Officer

(signed)
Ms. Sheree Drummond
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, 2017)
(thousands of dollars)

Year ended June 30

	2018	2017
INCREASE IN NET ASSETS		
Increase in fair value of investment in Master Trust *(note 3(b))*	**434,460**	582,336
Employer contributions *(note 4)*	**194,742**	187,376
Employee contributions *(note 1(b))*	**78,540**	66,727
Transfers from other plans	**3,412**	2,563
Total increase in net assets	**711,154**	839,002
DECREASE IN NET ASSETS		
Retirement benefits	**207,182**	197,074
Refunds and transfers *(note 5)*	**41,664**	33,763
Fees and expenses (*note 6)*	**46,488**	41,314
Total decrease in net assets	**295,334**	272,151
Net increase in net assets for the year	**415,820**	566,851
Net assets available for benefits, beginning of year	**4,698,216**	4,131,365
Net assets available for benefits, end of year	**5,114,036**	4,698,216

See accompanying notes

UNIVERSITY OF TORONTO PENSION PLAN

STATEMENT OF CHANGES IN PENSION OBLIGATIONS

(with comparative figures for the year ended June 30, 2017)
(thousands of dollars)

Year ended June 30

	2018	2017
INCREASE IN PENSION OBLIGATIONS		
Interest on accrued benefits	**280,223**	270,095
Benefits accrued	**189,277**	170,901
Assumption changes	**41,662**	161,155
Transfers from other plans	**3,412**	2,563
Total increase in pension obligations	**514,574**	604,714
DECREASE IN PENSION OBLIGATIONS		
Benefits paid	**248,846**	230,837
Experience gains	**10,509**	22,731
Total decrease in pension obligations	**259,355**	253,568
Net increase in pension obligations for the year	**255,219**	351,146
Pension obligations, beginning of year	**5,077,137**	4,725,991
Pension obligations, end of year	**5,332,356**	5,077,137

See accompanying notes

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 should 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 (Ontario) (Ontario Registration Number 0312827) and with the Canada Revenue Agency.

The Governing Council of the University of Toronto acts as sponsor and administrator for the Plan and the investments, through the University of Toronto Master Trust ("Master Trust"), are managed by the University of Toronto Asset Management Corporation ("UTAM"), a separate non-share capital corporation whose members are appointed by the University of Toronto.

b) Funding

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

c) Retirement benefits

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: i) 75% of the increase in the Consumer Price Index in Canada ("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 ii) the increase in the CPI for the previous calendar year minus 4%.

2. Summary of significant accounting policies

a) Basis of presentation

These financial statements have been prepared by the University in accordance with Canadian accounting standards for pension plans in Part IV (Section 4600) of the Chartered Professional Accountants of Canada ("CPA Canada") Handbook applied within the framework of the significant accounting policies summarized below.

Section 4600 provides specific accounting guidance on investments and pension obligations. In accordance with Section 4600, Canadian accounting standards for private enterprises in Part II of the CPA Canada Handbook have been chosen for accounting policies that do not relate to the investment portfolio or pension obligations to the extent that those standards do not conflict with the requirements of Section 4600.

b) Investments and investment income

Investments are carried at fair value. The Plan is invested in 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.

Income from investments is recorded on an accrual basis. Distributions from a master trust arrangement are recorded when declared. Changes in fair values, representing realized and unrealized gains and losses, from one year to the next are reflected in the statement of changes in net assets available for benefits.

c) University of Toronto Master Trust

Investments within the Master Trust 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.

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

(i) Short-term notes and treasury bills are valued based on cost plus accrued interest, which approximates fair value. Money market funds are valued based on closing quoted market prices.

(ii) Bonds and equities are valued based on quoted closing market prices. If quoted closing market prices are not available for bonds, estimated values are calculated using discounted cash flows based on current market yields and comparable securities, as appropriate.

(iii) Investments in pooled funds (other than private investment interests and hedge funds) are valued at their reported net asset value per unit.

(iv) Hedge funds are valued based on the most recently available reported net asset value per unit adjusted for the expected rate of return of the fund through June 30. The University believes the carrying amount of these financial instruments is a reasonable estimate of fair value.

(v) Private investment interests consisting of private investments and real assets are comprised of private externally managed funds with underlying investments in equities, debt, real estate assets and commodities. The investment managers of these interests perform valuations of the underlying investments on a periodic basis and provide valuations periodically. Annual financial statements of the private investment interests are audited and are also provided by the investment managers. The value of the investments in these interests is based on the most recent valuation provided, adjusted for subsequent cash receipts and distributions from the fund and cash disbursements to the fund through June 30. The University believes the carrying amount of these financial instruments is a reasonable estimate of fair value.

(vi) 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.

(vii) Monetary assets and liabilities denominated in foreign currencies are translated into Canadian dollars at the exchange rate in effect at 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. Realized gains and losses on investments are recorded based on the average cost of the related investments. 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 trade date basis, and transaction costs are expensed as incurred.

d) 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.

e) Use of estimates

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of increases and decreases in net assets during the reporting period. The more significant estimates used in these financial statements would involve the determination of the fair value of investments where the values are based on non-observable inputs that are supported by little or no market activity, and the use of actuarial assumptions in the determination of the pension obligations. Actual results could differ materially from those estimates.

f) Pension obligations

Pension obligations are determined based on an actuarial valuation prepared by an independent firm of actuaries using an actuarial valuation report prepared for funding purposes. This valuation uses the projected benefits method pro-rated on service and management's best estimate of various economic and non-economic assumptions.

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. As at June 30, 2018 and 2017, all of the units of the Master Trust were held by the Plan. The value of each unit increases or decreases monthly 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 in the following month.

a) Investment in Master Trust

The investments of the Master Trust consisted of the following as at June 30, taking into account certain reclassifications resulting primarily from the allocation of the effect of futures and swap contracts. These futures and swap contract reclassifications at the Master Trust level resulted in: $241,904 (2017 – $240,508) of Canadian equities, $267,779 (2017 – $353,538) of United States equities, nil (2017 – $28,571) of global equities, $48,493 (2017 – $6,482) of emerging markets equities, and $353,986 (2017 – $303,463) of government and corporate bonds being reclassified from short-term investments; and $2,327 (2017 – nil) of United States equities, $16,462 (2017 – $31,156) of international equities, $3,247 (2017 – nil) of global equities, and nil (2017 – $2,074) of government and corporate bonds being reclassified to short-term investments.

	2018	2017
Short-term investments *(note 3(d))*	**8,756**	37,542
Government and corporate bonds	**1,639,265**	1,439,877
Canadian equities	**506,796**	464,635
United States equities	**1,010,653**	931,049
International equities	**765,426**	695,677
Emerging markets equities	**503,438**	469,471
Global equities	**254,384**	233,171
Other	**384,238**	391,851
	5,072,956	4,663,273
Derivative-related net receivable *(note 3(d))*	**33,865**	27,420
	5,106,821	4,690,693

Short-term investments of the Master Trust consist of cash, money market funds, short-term notes and treasury bills totalling $1,380,960 (2017 – $1,391,037), investment-related receivables of $604,534 (2017 – $338,722), offset by investment-related payables of $1,086,612 (2017 – $792,885) and the net effect of futures and swap contracts of $890,126 (2017 – $899,332) that were reclassified to other investment categories.

International equities include developed equity markets in Europe, Australasia and the Far East (EAFE) and exclude the United States and Canada. Global equities include all developed equity markets as well as various emerging equity markets. Investments in the "other" category consist mainly of absolute return funds.

The Master Trust may enter into repurchase (or reverse repurchase) agreements that involve the sale (or purchase) of bonds to (from) a financial institution and the simultaneous agreement to repurchase (resell) that same security for a fixed price, reflecting a rate of interest, on a specific date. The affected securities sold (or purchased) under these agreements are not derecognized (or recognized) as investments as the Master Trust (or the seller) retains substantially all the risks and rewards of ownership. The difference between the sale and repurchase price (or purchase and resell price) is treated as interest expense (income) and is recognized over the life of the agreement using the effective interest rate method. These transactions involve risks that the value of the securities being relinquished (acquired) may be different than the price to be paid (received) on the expiry date or that the other party to the agreement will be unable or unwilling to complete the transaction as scheduled, which may result in losses to the Master Trust. As at June 30, 2018, the Master Trust had entered into a number of these agreements with expiry dates in July 2018. The amount that the Master Trust has committed to repurchase securities under repurchase agreements is recognized as investment-related payables of $581,968 (2017 – $470,244), and the amounts the Master Trust expects to receive under reverse repurchase agreements are recognized as investment-related receivables of $1,323 (2017 – $2,897).

Included within the Master Trust's investments are hedge funds, private investments and real assets. These investments have been classified as follows:

	2018						
	Canadian equities	United States equities	International equities	Emerging markets equities	Government and corporate bonds	Global equities and other	**Total**
Hedge funds		**375,412**	**18,158**	**102,572**	**67,826**	**476,227**	**1,040,195**
Private investments	**92,512**	**224,507**	**27,988**	**84,223**	**326,343**		**755,573**
Real assets	**48**	**14,881**	**16,911**			**17,415**	**49,255**
	92,560	**614,800**	**63,057**	**186,795**	**394,169**	**493,642**	**1,845,023**

	2017						
	Canadian equities	United States equities	International equities	Emerging markets equities	Government and corporate bonds	Global equities and other	Total
Hedge funds		317,503	17,361	109,512	66,281	478,864	989,521
Private investments	82,136	137,786	27,887	51,091	348,265		647,165
Real assets	17,181	25,605	32,006			16,995	91,787
	99,317	480,894	77,254	160,603	414,546	495,859	1,728,473

b) Changes in the Master Trust

The following table shows the components of the net increase in net assets of the Master Trust for the years ended June 30:

	2018	2017
Increase in fair value		
Interest income		
Government and corporate bonds	**40,446**	35,308
Short-term investments	**1,318**	1,229
Dividend income		
Canadian	**4,494**	15,848
Foreign	**21,509**	31,203
Other income	**2,352**	371
	70,119	83,959
Net realized and unrealized gains from investments	**364,341**	498,377
Total increase in fair value of the Master Trust	**434,460**	582,336
Cash received on purchase of Master Trust units by pension plan	**276,694**	256,666
Cash paid on redemption of Master Trust units by pension plan	**(295,026)**	(265,567)
Net increase in net assets of the Master Trust for the year	**416,128**	573,435
Net assets of the Master Trust, beginning of year	**4,690,693**	4,117,258
Net assets of the Master Trust, end of year	**5,106,821**	4,690,693

c) Individually significant investments

The details of investments where the fair value exceeds 1% of the total fair value or cost of the Master Trust in the underlying portfolios are listed below:

	Fair value
Government and corporate bonds	
RP Corporate Index Plus Fund	**224,756**
Canadian equities	
Picton Mahoney 130/30 Alpha Extension Canadian Equity Fund	**134,475**
United States equities	
AQR Offshore Multi-Strategy AlphaPort Fund L.P	**344,344**
Landsdowne Developed Market Strategic Investment Fund, L.P.	**124,305**
StepStone Maple Opportunities Fund, L.P.	**66,284**
International equities	
Arrowstreet EAFE Alpha Extension Fund II	**248,609**
MW TOPS International Equities Fund Class B1 USD Shares	**243,505**
Artisan International Value Fund Inst. Shares	**124,996**
Indus Japan Long Only Fund	**51,995**
Emerging markets equities	
Blackrock CDN Emerging Markets Portable Alpha Fund	**96,908**
RWC Emerging Markets Equity Fund Limited.	**93,460**
Arjuna Offshore Fund L.P.	**70,903**

Springs Maple SP Series 1	**52,962**
Global equities	
FPA Select Maple Fund L.P.	**91,989**
Egerton Investment Partners L.P.	**71,127**
Other	
MW TOPS Composite Funds Class B USD Shares	**78,684**
CFM Stratus Feeder LLC CL 1.5 USD	**51,177**

d) Derivative financial instruments

Description

The Master Trust has entered into equity and fixed income index futures contracts which oblige it to pay the difference between a predetermined amount and the market value 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 United States dollars, euros, Japanese yen and British pound sterling.

The Master Trust has entered into total return equity and bond swap contracts to obtain exposure to a security or market without owning such security or investing directly in that market. Total return swaps contracts are agreements for the exchange of cash flows whereby one party commits to making payments based on the total return (income plus capital gains or losses) of an underlying instrument in exchange for fixed or floating rate interest payments. To the extent the total return of the instrument or index underlying the transaction exceeds or falls short of the offsetting interest rate obligation, the Master Trust will receive a payment from or make a payment to the counterparty.

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 maturity dates of all foreign currency forward contracts as at June 30, 2018 are in July 2018. The total return equity and bond swap contracts with notional values of $414,401, $310,916, and $83,543 mature in July 2018, October 2018 and July 2019, respectively. Under the terms of these contracts, the swaps settle periodically, either on a monthly or quarterly basis. The futures contracts with notional values of $58,209 and $19,316 mature in September 2018 and December 2018, respectively. Collateral has been provided against these futures contracts as at June 30, 2018 in the form of short-term investments with a fair value of $3,394 (2017 – $9,591).

The notional and fair value amounts of the derivative financial instruments as at June 30 are as follows:

	2018		2017	
	Notional Value	**Fair value**	Notional value	Fair value
Derivative-related receivables:				
Foreign currency forward contracts				
- United States dollar	**1,110,295**	**12,449**	1,072,243	29,536
- Euro	**208,995**	**1,951**	257,049	1,003
- Other	**202,821**	**3,383**	261,434	3,206
		17,783		33,745
Equity futures contracts				
- United States dollar	**17,491**	**339**		
- Canadian dollars	**1,349**	**12**		
- Other			23,705	333
		351		333
Fixed income futures contracts				
- Canadian dollar	**69,504**	**1,230**	2,074	50
Equity swap contracts				
- United States dollar	**283,822**	**822**	169,730	7,007
- Canadian dollar	**240,555**	**15,058**		
		15,880		7,007
Total derivative-related receivables		**35,244**		41,135
Derivative-related payables:				
Foreign currency forward contracts				
- United States dollar	**66,448**	**(63)**	240,807	(8,448)
- Euro	**7,497**	**(49)**	24,843	(2)
- Other	**6,423**	**(78)**	20,358	(63)
		(190)		(8,513)
Equity futures contracts				
- United States dollar	**27,905**	**(336)**	218,861	(788)
- Other			7,451	(23)
		(336)		(811)
Fixed income futures contracts				
- Canadian dollar			11,892	(274)
Equity swap contracts				
- Canadian dollar			239,974	(2,109)
Bond swap contracts				
- Canadian dollar	**284,482**	**(853)**	292,105	(2,008)
Total derivative-related payables		**(1,379)**		(13,715)
Derivative-related net receivable		**33,865**		27,420

e) Risk management

Risk management relates to the understanding and active management of the risks associated with all areas of the Master Trust's investments. The investments of the Master Trust are primarily exposed to market risk (which includes foreign currency risk, interest rate risk and other price risk), credit risk and liquidity risk. To manage these risks within reasonable risk tolerances, the Master Trust, through UTAM, 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 note 3(d)).

f) Market risk

Market risk is the risk that the value of an investment will fluctuate because of changes in market prices. The Master Trust is exposed to market risk from its investing activities. Market risk encompasses a variety of financial risks, such as foreign currency risk, interest rate risk and other price risk. Significant volatility in interest rates, equity values and the value of the Canadian dollar against the currencies in which the Master Trust investments are held can significantly impact the value of these investments. The Master Trust manages market risk by investing across a wide variety of asset classes according to the approved policy asset mix and hedging strategies established in the University of Toronto Pension Master Trust Statement of Investment Policies and Procedures ("SIPP"). The following are the key components of market risk:

(i) Foreign currency risk

Foreign currency exposure arises from the Master Trust's direct and indirect holdings of investments denominated in currencies other than the Canadian dollar. Fluctuations in the relative value of the Canadian dollar against these foreign currencies can result in a positive or a negative effect on the fair value of investments. To manage foreign currency risk, the currency hedging policy of the benchmark is to hedge 50% of the currency exposure in the US and EAFE equity portfolios and 0% of the currency exposure in the Emerging Markets and Global equity portfolios. The actual unhedged currency exposure for the entire portfolio is allowed to range from 25% to 40% of the fair value of the investment in the Master Trust.

The following table summarizes the Master Trust's foreign currency exposure from directly held investment holdings, including an estimate of the indirect exposure to foreign currency risk within certain directly held investment holdings, the impact of the currency hedging program and the net currency exposure as at June 30:

	2018			2017
	Currency exposure	**Net currency hedge**	**Net currency exposure**	Net currency exposure
United States dollar	**1,667,387**	**(1,031,478)**	**635,909**	581,335
Chinese renminbi	**230,792**		**230,792**	138,415
Euro	**352,529**	**(199,635)**	**152,894**	138,296
Japanese yen	**213,406**	**(102,328)**	**111,078**	97,098
British pound sterling	**121,031**	**(37,603)**	**83,428**	74,360
South Korean won	**74,550**		**74,550**	76,810
New Taiwan dollar	**60,708**		**60,708**	61,542
Indian rupee	**44,909**		**44,909**	43,234
Swiss franc	**52,786**	**(16,222)**	**36,564**	36,103
South African rand	**33,461**		**33,461**	32,717
Australian dollar	**47,029**	**(14,615)**	**32,414**	29,458
Brazilian real	**30,141**		**30,141**	32,286
Russian ruble	**18,561**		**18,561**	15,627
Hong Kong dollar	**24,722**	**(7,649)**	**17,073**	14,660
Mexican peso	**14,707**		**14,707**	18,170
Swedish krona	**17,418**	**(5,396)**	**12,022**	12,177
Other	**99,743**	**(9,308)**	**90,435**	92,123
Total	**3,103,880**	**(1,424,234)**	**1,679,646**	1,494,411

Since all other variables are held constant in assessing foreign currency risk sensitivity, it is possible to extrapolate a 5% absolute change in foreign exchange rates to any absolute percentage change in foreign exchange rates. A 5% absolute change in foreign exchange rates would have the following impact on the fair value of foreign currency denominated assets, net of the currency hedges, of the Master Trust:

	2018	2017
	Change in net investment value	Change in net investment value
United States dollar	**31,795**	29,067
Chinese renminbi	**11,540**	6,921
Euro	**7,645**	6,915
Japanese yen	**5,554**	4,855
British pound sterling	**4,171**	3,841
South Korean won	**3,728**	3,718
Other	**19,549**	19,404
Total	**83,982**	74,721

(ii) Interest rate risk

Interest rate risk refers to the effect on the fair value of the Master Trust's assets and liabilities due to fluctuations in interest rates. Among the Master Trust's assets, the most significant interest rate risk relates to its fixed income investments. This risk arises from fixed income securities held directly by the Master Trust and from fixed income securities held indirectly by the Master Trust (e.g. where there are underlying fixed income investments within a pooled fund).

The following table summarizes the profile of the Master Trust's directly held fixed income securities which are subject to interest rate risk (indirect holdings within a pooled fund are excluded), based on term to maturity as at June 30:

	2018		2017	
Maturity range	**Fair value**	**Weighted average yield**	Fair value	Weighted average yield
0-5 years	**270,748**	**2.15%**	210,880	1.46%
>5-10 years	**134,574**	**2.54%**	116,878	2.03%
>10 years	**228,021**	**2.82%**	173,599	2.72%
	633,343	**2.47%**	501,357	2.03%

As at June 30, 2018, for every 1% increase (decrease) in prevailing market interest rates, the fair value of the direct fixed income holdings in the Master Trust is estimated to decrease (increase) by approximately $51,200 (2017 – $40,093).

(iii) Other price risk

Other price risk is the risk that the fair value of an investment will fluctuate because of changes in market prices (other than those arising from foreign currency risk or interest rate risk), whether those changes are caused by factors specific to the individual investment, its issuer, or factors affecting all similar securities traded in the market. The Master Trust's exposure to other price risk is primarily due to its public equity investments. These investments include public equity securities held directly by the Master Trust and public equity securities held indirectly by the Master Trust.

The fair value of directly held public equity investments and indirectly held public equity investments (excluding public equity investments within hedge funds and private equity funds) subject to other price risk is $1,437,943 (2017 – $1,273,984). Since all other variables are held constant in assessing other price risk sensitivity, it is possible to extrapolate a 10% absolute change in the fair value to any absolute percentage change in fair value. A 10% absolute change in the fair value of these public equity investments which are exposed to other price risk would be $143,794 (2017 – $127,398).

g) Credit risk

Credit risk of financial instruments is the risk of loss arising from the potential failure of a counterparty, debtor or issuer (collectively, the "debtor") to honour its contractual obligations. Credit risk can take the form of an actual default, such as a missed payment of borrowed principal or interest when it comes due, or can be based on an increased likelihood of default, which could result in a credit rating downgrade by credit rating agencies. Both scenarios would result in a decrease in the fair value of the obligations issued by the debtor. The Master Trust's investments in non-government-guaranteed securities are exposed to credit risk. The fair value of these investments and other assets as presented in the statement of financial position represents the maximum credit risk exposure at the date of the financial statements. The use of forward foreign currency contracts to hedge foreign currency risk exposure also exposes the Master Trust to credit risk. In addition to credit risk arising from direct holdings, the Plan also has indirect exposure to credit risk to the extent that the Master Trust's direct holdings have underlying investments in non-government-guaranteed securities.

The following table summarizes the fair value of directly held fixed income securities which were exposed to credit risk (indirect holdings and exposure from forward foreign currency exchange contracts are excluded), by credit rating, as at June 30:

	2018		2017	
Credit rating	**Fair value**	**% of fixed income securities**	Fair value	% of fixed income securities
AAA	**332,586**	**52.51**	270,563	53.97
AA	**255,023**	**40.27**	201,947	40.28
A	**40,328**	**6.37**	22,283	4.44
BAA and other	**5,406**	**0.85**	6,564	1.31
	633,343	**100.00**	501,357	100.00

h) Liquidity risk

Liquidity risk is the risk of the Plan not being able to settle or meet its commitments in a timely manner. These commitments include payment of the Plan's pension obligations and operating expenses, margin requirements associated with synthetic investment strategies, and the Master Trust's future commitments in private investment interests. These liquidity requirements are managed through income and distributions generated from investments, monthly contributions made by the University and Plan members, and having a sufficient amount of assets invested in liquid instruments that can be easily sold and converted to cash.

i) Fair value hierarchy

The Plan is required to disclose, for each class of financial instruments, the methods and, when a valuation technique is used, the assumptions applied in determining fair values, through a three-level hierarchy, as at the financial statement date. The three levels are defined as follows:

Level 1: Fair value is based on quoted market prices in active markets for identical assets or liabilities. Level 1 assets and liabilities generally include equity securities traded in an active exchange market.

Level 2: Fair value is based on observable inputs other than Level 1 prices, such as quoted market prices for similar (but not identical) assets or liabilities in active markets, quoted market prices for identical assets or liabilities in markets that are not active, and other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. This category generally includes mutual and pooled funds, hedge funds, Government of Canada, provincial and other government bonds, Canadian corporate bonds, and certain derivative contracts.

Level 3: Fair value is based on non-observable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Financial instruments are classified in this level when the valuation technique is based on at least one significant input that is not observable in the market or due to a lack of liquidity in certain markets. This category generally includes private investment interests (which are comprised of private, externally managed pooled funds with underlying investments in equities, real estate assets and commodities) and securities that have liquidity restrictions.

	2018			
	Level 1	**Level 2**	**Level 3**	**Total**
Short-term investments	**897,810**	**1,072**		**898,882**
Government and corporate bonds		**925,728**	**359,550**	**1,285,278**
Canadian equities	**37,857**	**134,475**	**92,560**	**264,892**
United States equities		**474,746**	**270,456**	**745,202**
International equities		**736,990**	**44,898**	**781,888**
Emerging markets equities		**365,057**	**89,887**	**454,944**
Global equities		**148,227**	**109,405**	**257,632**
Absolute return funds		**375,584**	**8,654**	**384,238**
	935,667	**3,161,879**	**975,410**	**5,072,956**
Derivative-related net receivable *(note 3(d))*	**16,271**	**17,594**		**33,865**
	951,938	**3,179,473**	**975,410**	**5,106,821**

	2017			
	Level 1	Level 2	Level 3	Total
Short-term investments	931,809	5,065		936,874
Government and corporate bonds		758,188	380,299	1,138,487
Canadian equities	32,662	92,150	99,316	224,128
United States equities	664	368,754	208,095	577,513
International equities		666,939	59,893	726,832
Emerging markets equities		407,634	55,355	462,989
Global equities		100,591	104,008	204,599
Absolute return funds		300,596	91,255	391,851
	965,135	2,699,917	998,221	4,663,273
Derivative-related net receivable *(note 3(d))*	2,187	25,233		27,420
	967,322	2,725,150	998,221	4,690,693

The following table summarizes the changes in the fair value of financial instruments classified in Level 3 of the Master Trust for the years ended June 30:

	2018	2017
Fair value, beginning of year	**998,221**	1,001,924
Purchases	**257,945**	231,809
Sales	**(313,049)**	(247,912)
Total realized gains	**13,657**	46,609
Total unrealized gains (losses)	**18,636**	(34,209)
Fair value, end of year	**975,410**	998,221

j) Hedge funds and private investment interests

The Master Trust invests in certain hedge funds and private investment interests which are comprised of externally managed funds with underlying investments in equities, debt, real estate assets and commodities. Because these investment interests are not readily tradable, 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 interests existed. Sensitivity analysis demonstrates that a 10% absolute change in the fair value of investments in hedge funds and private investment interests would result in a change to the total fair value of these investments of the Master Trust of $184,502 (2017 – $172,847).

k) Uncalled commitments

As at June 30, 2018, approximately 15.8% (2017 – 15.8%) of the Master Trust's investment portfolio is invested in private investment interests managed by third party managers. These private investment interests typically take the form of limited partnerships managed by a General Partner. The legal terms and conditions of these private investment interests, which cover various areas of private equity investments, private credit investments and real asset investments (e.g., real estate and infrastructure), require that investors initially make an unfunded commitment and then remit funds over time (cumulatively up to a maximum of the total committed amount) in response to a series of capital calls issued to the investors by the manager. As at June 30, 2018, the Master Trust had uncalled commitments of approximately $814,993 (2017 – $720,794). The capital committed is called by the manager over a pre-determined investment period, which varies by fund but is generally about three to five years from the date the fund closes. In practice, for a variety of reasons, the total amount committed to a fund is very rarely all called.

4. Employer contributions

The University has made $116,082 (2017 – $108,716) in current service cost contributions and $78,660 (2017 – $78,660) in additional special payments. The special payments were made to fund the unfunded liability, since the actuarial funding valuation as of July 1, 2017 disclosed the present value of pension obligations was in excess of the actuarial value of assets.

5. Refunds and transfers

Refunds and transfers consist of the following:

	2018	2017
Refunds of contributions and other benefit payments:		
Upon termination	**12,414**	10,835
Upon death	**6,385**	4,375
	18,799	15,210
Transfers to other plans upon termination	**22,865**	18,553
	41,664	33,763

6. Fees and expenses

Fees and expenses consist of the following:

	2018	2017
Investment management fees:		
External managers[1,4]	**39,748**	34,420
UTAM[1,2]	**3,868**	3,689
Pension records administration	**948**	933
Administration cost – University of Toronto[2]	**695**	658
Actuarial and related fees	**459**	504
Transaction fees[1,3]	**259**	263
Trustee and custodial fees[1]	**187**	336
External audit fees	**55**	54
Other fees	**269**	457
	46,488	41,314

[1] Reflect expenses that are directly charged to the Master Trust and are allocated back to the Plan.
[2] Represent related party transactions.
[3] Transaction fees represent the cost of purchasing and selling investments.
[4] External managers fees exclude performance-based management fees, which are netted against the net realized and unrealized gains from the investments, but include external service provider fees.

7. Pension obligations

Pension obligations are determined by applying best estimate assumptions agreed to by the University and the projected benefits method pro-rated on service. The pension obligations were determined by Aon Hewitt, a firm of actuaries, using an actuarial funding valuation performed as of July 1, 2017, which was extrapolated to June 30, 2018.

Significant assumptions used in the actuarial valuation are as follows:

	2018 %	2017 %
Interest rate	**5.55**	5.55
Consumer Price Index	**2.00**	2.00
Salary escalation rate	**4.00**	4.00

8. Capital management

The funding surpluses or deficits determined periodically in funding valuations prepared by an independent actuary are defined as the Plan's capital. The actuary's funding valuation is used to measure the long-term health of the Plan. A funding valuation is required to be filed with the pension regulator at least every three years. The most recently filed valuation for the Plan was as of July 1, 2017, which disclosed unfunded actuarial liabilities of $362,427 on a going concern basis, and a deficit of $864,550 on a solvency basis. The next required actuarial funding valuation to be filed with the regulator will be as of July 1, 2020.

The objective of managing the Plan's capital is to ensure the Plan is funded to fully pay the benefits over the long-term.

The University negotiates with the various employee groups to change member contribution levels to meet the ongoing funding of the Plan and makes special contributions to eliminate any deficits, all subject to meeting regulatory requirements. Contributions to the Plan have complied with all regulatory funding requirements during the reporting periods. No required contributions were past due as at June 30, 2018. More details on member and employer contributions can be found in the statement of changes in net assets available for benefits and in Note 4.

In addition, the SIPP provides guidance with respect to the investment of the Plan's assets in order to assist with the management of any funding surpluses or deficits. This guidance includes return objectives, risk tolerance, asset allocation, benchmarks for the evaluation of performance, and other elements required by regulation. The most recently amended SIPP was approved by the administrator on May 30, 2018. The more significant changes included: revision of the risk limits to reflect a change in measurement horizon from 5 years to a period of at least 10 years; changes to the definitions in the list of permitted investments; and additional wording to provide clarification in the liquidity section.

The Master Trust invests across various asset classes and different geographical regions primarily through a number of segregated and pooled investments including third party managers. The Plan's investments through the Master Trust expose it to a variety of risks which are discussed in Notes 3(d) through 3(h). UTAM's manager selection and monitoring processes include a review of each third party pooled fund's risk management guidelines and processes. These reviews are generally based on discussions with the fund's manager and material provided by the manager. Reviews occur prior to making an investment and on an on-going basis thereafter to ensure a good understanding of each pooled fund's investment characteristics.

The Master Trust's policy asset mix is approved by the University's Pension Committee as per the SIPP. The performance of the Master Trust is prepared by UTAM and is reviewed periodically by the Plan's administrator. This review includes an assessment of investment returns, comparison of returns to benchmarks contained within the SIPP, and other risk analyses required or requested by the Pension Committee and the University.

The SIPP permits the following broad categories of assets: Equity, Credit, Rates and Other. Performance is measured against a reference portfolio benchmark that was introduced in May 2012. This reference portfolio benchmark return is made up of the weighted average of each category's benchmark return using the target allocation of the SIPP to weight the various categories. The reference portfolio represents a shadow portfolio which is believed to be appropriate to the Master Trust's long-term horizon and risk profile. The overall target real return objective of the Master Trust is 4.0% (net of fees) over 10-year periods. The asset mix targets and ranges, along with the benchmark return indices for each asset category, are as follows:

Asset Categories	Reference Portfolio Benchmark Index	Asset Category Allocation		
		Minimum	Target	Maximum
		%	%	%
Equity				
Canadian	S&P TSX Composite Total Return Index	5.0	10.0	15.0
US	S&P 500 Total Return Index	15.0	20.0	25.0
EAFE	MSCI EAFE Total Return Index (Net)	10.0	15.0	20.0
EM	MSCI Emerging Markets Total Return Index (Net)	5.0	10.0	15.0
Global	MSCI All Country World Total Return Index (Net)	0.0	5.0	10.0
Total		**50.0**	**60.0**	**70.0**
Fixed Income				
Credit	FTSE TMX Canada All Corporate Bond Total Return Index	10.0	20.0	30.0
Rates	FTSE TMX Canada All Government Bond Total Return Index	10.0	20.0	30.0
Total		**25.0**	**40.0**	**50.0**
Other		0.0	0.0	15.0
			100.0	
Unhedged Currency Exposure		25.0	32.4	40.0

The Master Trust's investments fell within the asset mix category ranges as at June 30, 2018.

9. Jointly Sponsored Pension Plan for Ontario's University Sector

The university administrations, faculty associations, unions and non-represented staff at the University of Toronto, University of Guelph and Queen's University have been working to develop a new jointly sponsored pension plan (JSPP) effective January 1, 2020, that would cover employees and retired employees in the existing plans at all three universities, with contributions and accrual of benefits to be effective from a future date (anticipated to be July 1, 2021). Before this can occur, a highly regulated approval process must take place, which includes a consent process for active plan members, former plan members, retired members, and other persons entitled to benefits under the existing plans; and the necessary regulatory approvals. If and when this occurs, the assets and liabilities of the Plan would be transferred to the new JSPP.

10. Comparative financial statements

The comparative financial statements have been reclassified from statements previously presented to conform to the presentation of the 2018 financial statements.