



York University Endowment Fund

Annual Investment Report

For Year Ended December 31, 2019

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The Endowment Fund (the Fund) is a pool of commingled assets held for the endowments in long-term investments. The endowments are permanent gifts and bequests to York University from donors, enhanced where eligible with matching capital provided by University and government programs. Annual distributions are generated by the Fund investments for support of scholarships and academic chairs.

The Fund is governed by objectives and constraints as documented in the Statement of Investment Policies and Procedures (SIP&P). The Board of Governors annually approves the SIP&P and any changes to the investment strategy or asset mix as proposed by the Investment Committee. The Investment Committee oversees the investments, portfolio managers and implementation of investment strategy.

The Fund assets are allocated for investment to thirteen portfolio managers each assigned with distinct mandates. All mandates are actively managed with the exception of one-half of the Canadian bonds which are invested passively to track an index.

The Fund in Review - 2019

The market value of the Fund as at December 31, 2019 was \$512.9 M, an increase of \$48.7M relative to the December 31, 2018 valuation of \$464.2M. The increase in 2019 was the net effect from combined inflows, outflows and depreciation. Inflows of \$3.3M in contributed capital plus income increased the value of the fund while investment expenses (\$2.0M), fund distributions (\$25.3M) and a strong return on invested assets (\$72.7M) increased the fund's value.

Distributions to support endowment beneficiaries form the greatest part of the withdrawals. Over the past five years, \$79M has been directed specifically to the purposes established by the University's donors.

The Fund one-year rate of return as of December 31, 2019 was 16.2%, compared to the returns of -1.3% and 8.6% for the one-year periods ending December 31, 2018 and 2017 respectively. The Fund performance for 2019 was eclipsed by the benchmark one-year rate of return of 16.3% by 0.1%.

The Fund four-year rate of return as of December 31, 2019 of 7.6% trailed the annualized benchmark performance, for the same period, of 8.1% by 45 basis points (bp).

Major equity markets provided strong returns in 2019, with the global equity benchmark, the Morgan Stanley Capital International All Country World Index (MSCI ACWI), gaining 20.2% in Canadian dollar terms. Meanwhile, the Canadian equity benchmark (S&P/TSX Composite) rose 22.9% while the US small-mid cap index, represented by the Russel 2500, rose 24.4% during calendar 2019.

Fixed income market returns posted gains as the Bank of Canada kept its key benchmark overnight target rate steady at 1.75% in 2019, in contrast to the 75 bp of rate hikes it administered during 2018. In the United States, the Federal Open Market Committee

(FOMC) backtracked in 2019 by cutting the federal funds target rate by 25 bp during each of the months of August, September, and October thereby reducing the target rate to 1.75% from the 2.50% level that had been in place since December 20, 2018.¹ The broad Canadian bond market measured by the FTSE TMX Universe Bond Index returned 6.9% while at the short end, the representative Canadian bond index returned 1.6%. With the Bank of Canada staying the course and not moving short term rates, most of the gains in the Canadian fixed income market were at the long end of the yield curve where the FTSE Canada Long Term Overall Bond index returned 12.7%.

In 2019, the US dollar (USD) index recorded its smallest-ever annual move, rising 0.24% for the year after a drop in December reversed early gains. Prior to softening of sentiment in December, the USD index had risen 2.18% for the year. The 2019 return fell short of the 2018 figures when the USD rose 4.4% against a basket of currencies.²

While the Fund underperformed the benchmark by 0.1% in 2019 after returning 16.2% versus the benchmark return of 16.3%, it remained a 2nd quartile in its peer group with returns in the 31st percentile, compared to the benchmark return at the 29th percentile. The equity component of the Fund underwent significant changes in Q2 of 2019, whereby the geographically oriented equity managers were replaced with global equity managers. In contrast to the legacy managers who were principally value oriented in their investment style, the new managers employed various investment approaches in a core-satellite structure where the core funds comprise of two low volatility managers, and the satellite funds comprise of five managers with varying investment approaches. During the first half of 2019, the fund returned 10.3% (49th percentile) lagging the benchmark by 0.4% while in the second half the fund returned 5.4% (12th percentile) beating the benchmark by 0.4%. All percentile figures refer to funds ranked in the Aon manager universe. During the second half of 2019, the funds value went sideways from June to August during a challenging Q3 for equity markets, before finishing strongly in the last quarter.

The passive currency hedging strategy had a positive impact and increased the value of total fund by 0.3% in 2019. During 2019, the Canadian dollar (CAD) appreciated by 4.8% versus the USD year over year, going from 1.3642 to 1.2988 CAD/USD from 2018 to 2019.³

Direct expenses charged to the Fund for investment management, custody, performance measurement and investment consulting services during calendar 2019 were \$2.0 M for a total expense ratio of 0.43%. The 2019 expenses and expense ratio were lower than during the prior year, which were \$2.8 M and 0.59% respectively. The decrease was primarily the result of a decreased fee structure and favourable pricing for investment managers because of sharing of equity managers with the Pension Fund. The result was a reduction of 18 bp in fees compared to the fee structure of the legacy managers, which translates to \$583K in dollar terms.⁴

The balance of this Report reviews the investments, asset mix and manager allocations. Performance of the Fund to December 31, 2019 is reviewed in absolute, relative and comparative terms. The Investment Committee's activities conducted during calendar 2019 are summarized in the last section.

¹ The federal funds target rate is typically a 25 bp range where the high end of the range is published, so on October 31, 2019 the FOMC cut the target rate to 1.50-1.75%

² The USD index is calculated by factoring in the exchange rates of six major world currencies, which include the Euro (EUR) weighted at 57.6%, Japanese yen (JPY) at 13.6%, Canadian dollar (CAD) at 9.1%, British pound (GBP) at 11.9%, Swedish krona (SEK) at 4.2%, and Swiss franc (CHF) at 3.6%.

³ On December 31, 2018 1 USD bought 1.3642 CAD, on December 31, 2019 1 USD bought 1.2988 CAD.

⁴ The savings assumes a static market value of \$321M.

Asset Mix

The Policy asset mix (Figure 1) summarizes the asset class weights that the Fund was managed to throughout 2019.

Figure 1

<u>Asset Class</u>	<u>Target Weight</u>	
Equities		
Global	<u>60%</u>	60%
Fixed Income		
Canadian Bonds - Universe	10%	
Canadian Bonds - Short Term	10%	
Global High Yield Bonds	<u>10%</u>	30%
Real Assets		
Canadian Real Estate	<u>10%</u>	10%

The Policy asset mix, determined through a periodic process involving an asset-liability study that incorporates projections for capital markets returns over a ten-year horizon, is selected for its expected ability to meet the Fund's investment objective of funding endowment commitments each year, into perpetuity. The asset mix is geared to provide income to the University for the annual payouts to support endowed spending and to preserve the value of endowed capital.

The Fund's Statement of Investment Policies and Procedures lists the strategic target mix as equities at 50%, and real assets at 20%. Since there is a phase-in period for the real assets asset class, the benchmark weight will be held at 10% until the exposure has been fully developed to at or near 20%, at which time the 20% benchmark weight shall apply. The offset weight during the phase-in period will be applied to the equity asset class.

The Fund's actual asset mix compared to the Policy target weights effective throughout 2019, including currency overlay, as at December 31, 2019, is shown in Figure 2.

Figure 2

Actual Versus Target Asset Class Weights - December 31, 2019

<u>Asset Class</u>	<u>Market Value (\$Mil)</u>		<u>Actual Weight</u>		<u>Target Weight</u>		<u>Over/Under</u>	
Equities								
Global	340.1	\$ 340.1	66.3%	66.3%	60.0%	60.0%	6.3%	6.3%
Real Assets								
Canadian Real Estate	41.1	41.1	8.0%	8.0%	10.0%	10.0%	-2.0%	-2.0%
Fixed Income								
Canadian Universe Bonds	39.7		7.7%		10.0%		-2.3%	
Canadian Short Term Bonds	38.2		7.4%		10.0%		-2.6%	
Global High Yield Bonds	49.9		9.7%		10.0%		-0.3%	
Short-Term Investments	3.1	130.9	0.6%	25.5%	0.0%	30.0%	0.6%	-4.5%
Currency Hedge	0.8	0.8	0.2%	0.2%	0.0%	0.0%	0.2%	0.2%
		\$ 512.9		100.0%		100.0%		

Asset class weights are permitted to vary within a range of +/- 5% of the target weights and are rebalanced periodically back to the target when necessary. The overweight to global equity at the end of 2019 was the result of surging equity markets in Q4 2019.

The Fund underwent a transition in equity managers in Q2 2019 whereby four of the five legacy equity managers were replaced. The managers, their mandates, market values and fund weights are shown in Figure 3. The equity component of the Fund now has a core-satellite structure. The core funds are low volatility mandates managed by TDAM Low Vol and Unigestion. The satellite funds are managed by C Worldwide, the legacy manager retained for the new structure, and new managers Baillie Gifford, Morgan Stanley, Lazard, and Fiera (Harris Oakmark). The currency hedge applies to 50% of the USD exposure contained in high yield bonds and global real estate. The passive overlay is composed of liquid three-month foreign exchange forward contracts and reported on a marked-to-market basis.

Figure 3

Specialty Mandates and Asset Allocations - December 31, 2019

<u>Investment Manager</u>	<u>Mandate</u>	<u>Market Value (\$ Mil)</u>	<u>Weight</u>
Equities			
C Worldwide	Global Equity	47.1	9.2%
TDAM Low Vol	Global Equity	48.9	9.5%
Baillie Gifford	Global Equity	50.9	9.9%
Morgan Stanley	Global Equity	48.7	9.5%
Lazard	Global Equity	47.3	9.2%
Fiera (Harris Oakmark)	Global Equity	48.4	9.4%
Unigestion	Global Equity	48.8	9.5%
Real Assets			
Bentall Green Oak	Canadian Real Estate	30.7	6.0%
Landmark VIII	Global Real Estate	10.4	2.0%
Fixed Income			
TD Asset Management	Canadian Universe Bonds	39.7	7.7%
TD Asset Management	Canadian Short Term Bonds	38.2	7.4%
Stone Harbor	Global High Yield Bonds	49.9	9.7%
TD Asset Management	Short-Term Investments	3.1	0.6%
TD Asset Management	Currency Hedge	0.8	0.2%
		\$ 512.9	100.0%

Performance Objectives

The Fund's return objective is quantified in the form of a performance benchmark, which is a weighted composite of specified capital markets indices. Each asset class is assigned a specific index or index-relative target for performance measurement and evaluation. For portfolios of publicly traded securities, representing 92% of the Fund, each component index is broadly representative of a specified market, and is a transparent and reproducible sample of publicly traded investable equities or bonds. For real assets, the target benchmarks are the Canadian Real Estate benchmark for Bentall Green Oak, and Canadian CPI + 4% for Landmark VIII.

The performance benchmark in effect throughout 2019 follows in Figure 4.

Figure 4

Performance Benchmark 2019		
<u>Asset Class</u>	<u>Weight</u>	<u>Index</u>
Global Equities	60%	MSCI ACWI
Real Assets	10%	Canadian Real Estate Benchmark Canadian CPI + 4%
Canadian Universe Bonds	10%	FTSE TMX Canada Bond Universe
Canadian Short Term Bonds	10%	FTSE TMX Short Term Bond
Global High Yield Bonds	10%	Citigroup High Yield Market Capped

The Fund return objective is to meet or exceed the four-year annualized rate of return of the Policy composite benchmark for the same period over most four-year annualized periods as measured year to year.

Fund performance is expressed as a total rate of return, gross of fees, in Canadian dollars. Fund rates of return are calculated by an independent performance measurement provider, CIBC Mellon.

Evaluating Absolute Performance

Performance evaluation is conducted regularly on a monthly basis. The total fund rate of return is compared to the return of the composite benchmark and reported for intervals spanning one month to ten years. A formal performance evaluation is conducted semi-annually for review by the Investment Committee that focuses on one-year and four-year returns to assess recent performance and longer-term success toward meeting Policy objectives. The results of individual portfolios and managers are reviewed, incorporating comparisons to performance statistics for portfolio risk and return and to the objectives and targets specified in each of the manager mandates.

Figure 5 presents the Fund's performance record for 2019 and successive annualized periods out to ten years (2010-2019), providing a snapshot of the longer-term success of the investment program.

Figure 5

Endowment Fund Long-Term Performance

Annualized Returns for Periods Ended December 31, 2019

	<u>1 Yr</u>	<u>2 Yrs</u>	<u>3 Yrs</u>	<u>4 Yrs</u>	<u>5 Yrs</u>	<u>6 Yrs</u>	<u>7 Yrs</u>	<u>8 Yrs</u>	<u>9 Yrs</u>	<u>10 Yrs</u>
Fund	16.2%	7.1%	7.6%	7.6%	7.1%	7.5%	8.9%	9.3%	8.3%	8.8%
Benchmark	16.3%	7.1%	7.7%	8.1%	7.9%	8.3%	9.7%	9.9%	8.6%	9.0%
	-0.1%	0.0%	-0.1%	-0.4%	-0.8%	-0.8%	-0.8%	-0.6%	-0.2%	-0.2%

In absolute terms, on a ten-year annualized basis, the 8.8% performance of the Fund has covered the sum of the approximated real spending target of 4.0%, expenses of 0.5%, and inflation of 2.0%.

The Endowment Fund's investment program is fluid and developed in response to shifts in the investment environment, changes in the cash flows and evolving risks affecting various components of the Fund. The Investment Committee has concentrated on revisiting the target asset mix that aligns with the investment objectives of preserving capital through a range of capital market outcomes and providing annual distributions for inflation-adjusted spending.

Measuring Relative Performance

Figure 6 shows annual one-year returns for eleven years, 2009 to 2019, and the four-year annualized return to December 31, 2019 relative to the Policy benchmark approved by the Board that prevailed for each of those past years. Currency strategy was introduced as an integral element of investment strategy in 2010.

Figure 6

Endowment Performance - Annual Returns

	One-Year Returns as at December 31											Annualized
	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2016-19</u>
Fund	16.2%	-1.3%	8.6%	7.7%	5.0%	9.7%	17.3%	12.5%	0.8%	12.8%	21.7%	7.6%
Benchmark	16.3%	-1.3%	8.7%	9.4%	7.1%	10.6%	18.1%	11.4%	-1.5%	12.9%	20.2%	8.1%
	-0.1%	0.0%	-0.1%	-1.6%	-2.1%	-0.9%	-0.8%	1.1%	2.3%	-0.1%	1.5%	-0.4%

The one-year total rate of return as at December 31, 2019 for the Fund and its benchmark were respectively 16.2% and 16.3%.

Excluding the impact of currency hedging, they were 16.0% and 16.0%. The global high yield bonds portfolio and the global real estate portfolio are hedged 50% of their USD exposure. During this year the hedge was accretive by 0.3%.

In 2019, the Fund was marginally below the funds' benchmark by 12bp. Value-added from Baillie Gifford and Fiera (Harris Oakmark) in the second half of 2019 was offset by weaker performance from the remaining global equity managers. The core-satellite equity structure was implemented in late June 2019 and the variety of investment styles is meant to outperform their respective benchmarks over the course of a business cycle.

Over four years to December 31, 2019, the annualized return for the Fund was 7.6% trailing the Policy benchmark four-year annualized return of 8.1% by 45 basis points

Capital markets returns for the indexes composing the performance benchmark for the past four calendar years and annualized for the four-year period are shown in Figure 7.

Figure 7

	Index Returns (CAD)				Annualized Four Years 2016-19
	<u>Annual Returns</u>				
	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	
Equity Indices					
MSCI ACWI (All Countries)	20.2%	-1.3%	15.8%	4.1%	9.4%
Fixed Income Indices					
FTSE TMX Canada Bond Universe	6.9%	1.4%	2.5%	1.7%	3.1%
FTSE TMX Canada Short Term Bond	3.1%	1.9%	0.1%	1.0%	1.5%
Citigroup High Yield Markets Capped	8.3%	6.6%	-0.1%	13.5%	7.0%
Real Estate Indices					
Canadian Real Estate Benchmark	8.9%	3.4%	4.5%	3.7%	5.1%

Review of Comparative Performance

Aon provides data for comparison in the form of a sample of Balanced Funds. Comparative performance results for one-year and multi-year periods ended December 31, 2019 are presented in Figure 8.

The Balanced Funds group is provided for comparison as constituents are most likely to have common asset mix characteristics with the Endowment Fund. Differences in investment strategy arise from constituent funds' unique purpose, investment objectives and philosophy, size and program resources. These lead to variation in investment holdings and divergences in returns among members constituting the peer group members. In terms of magnitude of divergence from the median, asset mix typically has the highest impact, followed by the currency strategy and active management.

Figure 8

	Balanced Funds - Comparative Analysis as of December 31, 2019							
	<u>Annual Returns (%)</u>				<u>Annualized Returns (%)</u>			
	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2 Yrs</u>	<u>3 Yrs</u>	<u>4 Yrs</u>	<u>10 Yrs</u>
Percentile Rank								
5th (highest)	17.8	0.2	11.7	13.6	8.2	8.9	8.3	9.2
25th	16.4	-1.4	10.5	11.1	6.4	7.5	7.6	8.5
50th (median)	15.0	-2.4	8.8	7.8	5.8	6.6	7.0	8.1
75th	13.5	-3.8	7.3	6.6	5.0	5.9	6.4	7.6
95th (lowest)	10.3	-5.2	5.1	4.7	3.0	5.2	5.3	6.5
Comparative								
York University	16.2	-1.3	8.6	7.7	7.1	7.6	7.6	8.8
Quartile Rank	Q2	Q1	Q3	Q2	Q1	Q1	Q1	Q1

The statistics presented in Figure 8 exclude outlier returns that fall outside the range between 5th and 95th percentiles.

The Fund's one-year rate of return of 16.2% ranked in the 31st percentile (second quartile) in 2019, down from the Fund's first quartile ranking in 2018 but improving upon the Fund's third quartile ranking in 2017, and 2015. The ten-year result had a first quartile standing. The Fund's bias remains toward equities, and the strategy was reviewed in 2018 with an eye to achieving similar returns at a lower level of risk going forward. The new strategic target asset mix that targets a 50% weighting in global equities and 20% weighting in real assets came into effect in 2019 but its implementation will take time due to the nature of allocating capital to real assets.

Endowments Growth

Over the seven years since 2013, the Endowment Fund capital (book value) has expanded by \$19.8M due to net contributions while market value has grown by \$107.6M as a result of the contributed capital plus investment income and capital appreciation, net of distributions for endowed spending and investment expenses.

Figure 9

Pooled Endowments - Growth (\$ Millions)

	<u>Market Value</u>	<u>Book Value*</u>	<u>MV-BV Ratio</u>
December 31, 2019	\$ 512.9	280.3	1.83
December 31, 2018	464.2	276.6	1.68
December 31, 2017	476.7	271.4	1.76
December 31, 2016	438.8	269.2	1.63
December 31, 2015	410.7	253.2	1.62
December 31, 2014	434.1	264.9	1.64
December 31, 2013	405.3	260.5	1.56

* Donations and Matching Funds

Endowment Fund book value constitutes the historical value of capital received from donors plus the historical value of capital matches from government and University matching programs. The endowment accounting and record keeping for book value and market value of individual endowments is performed on a unitized market valuation system basis, as introduced on May 1, 2014.

The change in the market value of the Fund during calendar 2019, shown in Figure 10, illustrates the effects of cashflows and earnings during the year.

Figure 10**Change in Total Fund Market Value (\$ Millions)**

Market Value, December 31, 2018		\$464.2
Contributions:		
Donations	3.3	
Reinvested Distributions		
Withdrawals:		
Regular Distributions	(24.4)	
Special Distributions	(0.9)	
Fund Expenses	(2.0)	
Earnings:		
Investment Income and Market Appreciation	<u>72.7</u>	
Net Change		<u>48.7</u>
Market Value, December 31, 2019		<u>\$ 512.9</u>

During the last five calendar years, \$79M has been distributed from the Fund to endowment account beneficiaries. The conversion to the unitized market value system for accounts and the smoothed banded inflation methodology for calculating annual distribution has increased the amounts of the annual distribution as seen in Figure 11, from 2015-16 and on. The amount in 2015-16 was larger due to exceptional distribution of \$3.5M. The new spending model has resulted in a greater share of Fund earnings being made available for key spending toward beneficiary purposes, mainly the support of student scholarships and bursaries, and academic chairs.

Figure 11**Distributions to Endowment Beneficiaries**

	Annual Distributions
	\$ Million
2019-20	16.6
2018-19	16.1
2017-18	14.9
2016-17	13.9
2015-16	17.4
Cumulative	<u>\$ 79.0</u>

To track the market value, unit holdings, and historical values of each individual endowment, the University uses the services of an external provider of specialized endowment fund accounting. At the end of 2019 there were 2,135 individual endowed accounts under management.

Oversight

The Investment Committee conducts activities in accordance with its terms of reference and the Board-approved SIP&P. The Committee's responsibilities are principally fund

governance and investment strategy. Activities include regular monitoring of assets and performance, oversight and selection of portfolio managers, development of investment strategy and asset mix, review of fund expenses, and quarterly reporting to the Board. The Committee undertakes further initiatives as deemed timely and in the best interests of the Endowment Fund and its beneficiaries.

Investment Committee Activity – 2019

During 2019, activities undertaken by the Investment Committee and administration included:

- Approval of transitioning the equity component of the Fund from a geographically based allocation which was skewed to value investing and small – mid capitalization stocks in North America to a global core-satellite equity portfolio with low volatility core managers, and capitalization agnostic satellite managers that employed various investing styles (growth, growth at a reasonable price, quality, value).
- Conducting a manager search and interviews for unconstrained fixed income and multi asset credit managers for the fixed income component of the Fund.
- Approval of transitioning the fixed income component of the Fund from having a weighting in Canadian fixed income to becoming a global unconstrained fixed income portfolio. This was approved by the Investment Committee in November 2019, and changes to the SIP&P were approved by the Board in December 2019.
- Educational session on sustainable thematic investing.
- Approval of an inaugural Sustainable Investing Report which was published in Q1 2019.
 - Report covered the ESG integration practices of the Fund’s equity managers from 2018; future reports (2019) will include fixed income managers.
- All the investment managers continued to provide compliance reports confirming that their investments were following their mandates and the SIP&P.
- Continued allocation to real estate asset class toward a target weight of 10% and planning for allocating the remaining 10% to other real assets such as infrastructure.
 - Capital calls for Landmark Real Estate Partners continued throughout 2019.
- Adoption of a 2019-20 payout rate of \$4.17 per unit for purpose of monthly accrual of distribution during 2018-19. The payout rate is set by the Investment Committee in advance for accrual in the leading fiscal period and the distribution occurs early in the following fiscal period. Payout rates by year have increased since 2014.

Fiscal Year End	Return	Unit Accrual	
		Value (FYE)	Distribution Rate Yield
April 30, 2014		\$100.0000	\$3.90/unit 3.90%
April 30, 2015		\$106.8879	\$3.96/unit 3.70%
April 30, 2016		\$98.2817	\$3.96/unit 4.03%
April 30, 2017		\$111.6046	\$4.02/unit 3.60%
April 30, 2018		\$109.6943	\$4.08/unit 3.72%
April 30, 2019		\$115.4543	\$4.17/unit 3.61%