

York University Endowment Fund

Annual Investment Report to the Board of Governors

For Year Ended December 31, 2015

Board Investment Committee, May 30, 2016

Board of Governors, June 28, 2016

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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 mainly permanent gifts and bequests to York University received from donors, enhanced where eligible with matching capital provided by University and government programs. University-designated endowments held for support of specific priorities are invested alongside donor-endowed assets. 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 (the Policy). The Board of Governors annually approves the Policy 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 eight portfolio managers each assigned with distinct mandates. All mandates are actively managed with the exception of one-half of the Canadian bonds invested passively to track an index.

The Fund in Review - 2015

The market value of the Fund as at December 31, 2015 was \$410.7 million, a decrease of \$23.4 million relative to the December 31, 2014 valuation of \$434.1 million. The decrease in 2015 was the net effect from combined inflows, outflows and appreciation. Inflows of \$7.3 million in contributed capital plus income and appreciation of \$23.9 million increased the value of the fund. Investment expenses of \$3.0 million together with University withdrawals of \$13.1 million in regular distributions, \$3.5 million of other distributions and \$35.0 million representing Board-restricted capital decreased the value of the fund.

The combined outflows to the University of \$51.6 million amounted to over 10% of Fund assets, and in magnitude considerably exceeded past years' withdrawals. One quarter of this amount was to fund the regular annual spending for endowment beneficiaries. Threequarters of the amount withdrawn was for extraordinary purposes, representing repatriation of the University-designated investment of the proceeds of sale in 2004 from the Southlands properties. These proceeds had been invested to accommodate future University priorities and including capital appreciation have been allocated to support specific capital projects, including construction of the new Engineering Building.

Distributions to support endowment beneficiaries form the greatest part of the withdrawals. Over the past four years, cumulatively \$50 million has been removed from the endowment and directed specifically to the purposes established by the University's donors. The Fund one-year rate of return as of December 31, 2015 was 4.98% compared to 9.70% as of December 31, 2014. The Fund performance for 2015 fell short of the benchmark one-year rate of return of 7.11% by 2.13%.

The Fund four-year rate of return as of December 31, 2015 of 11.03% marginally trailed the annualized benchmark performance for the same period of 11.74% by 0.71%.

Major equity markets during 2015 fell heavily in third quarter but wrapped up sufficiently sanguine with a return of 18.9% as measured in Canadian dollar terms by key indicator, MSCI World Index (excludes emerging markets). The return was dominated by the strong US markets (S&P 500, 21.6%), followed by developed non-North American markets (MSCI EAFE, 19.0%), emerging markets (MSCI EM, 2.0%) and, lastly, in negative territory, Canadian equities (S&P/TSX, -8.3%).

US dollar appreciation continued during 2015, rising by 3.6% relative to the Canadian dollar. Oil prices hit extreme lows, surprising markets and heavily impacting Canada and other petro-dominated countries.

Global fixed income markets took a turn when the US raised its benchmark rate late in the year. Other major central banks mainly held rates low but steady and consequently returns from fixed income were generally in low positive territory. The broad Canadian bond market measured by FTSE TMX Universe Bond Index returned 3.5%.

During 2015, the Fund return of 5.0% was an effect of its asset allocation (benchmark 7.1%). The 2.1% performance shortfall was a function of the underperformance of one equity portfolio, whereas all other portfolios combined contributed positively against the composite benchmark. In terms of asset mix, the Policy overweight to emerging markets equity was a significant dampener to return while the global equity portfolio underweight in the US had the further effect of lowering prospective return during a period dominated by US equities.

The currency hedging strategy, while strategically much reduced in size and impact in late 2014, continued to temper results in 2015 as hedging of the US during a period of declining Canadian dollar subtracted 1.7% from total fund return.

Direct expenses charged to the Fund for investment management, custody, performance measurement and consulting in 2015 were \$2.4 million, a total expense ratio of 0.57%. Expenses were down slightly from the prior year expensed amount of \$2.7 million and ratio of 0.66%.

The balance of this Report reviews the investments, asset mix and manager allocations. Performance of the Fund to December 31, 2015 is reviewed in absolute, relative and comparative terms. The Investment Committee's activities conducted during calendar 2015 are summarized in the final section.

Asset Mix

The Policy asset mix (Figure 1) effective throughout 2015, states the asset class weights set out in the Statement of Investment Policies and Procedures. Target weights are adjusted in accordance with the phase in period of Real Estate.

Figure 1							
Policy Asset Mix - 2015							
Asset Class	Target W	/eight					
Equities							
Canadian	15%						
US Small/Mid Cap	20%						
Global	25%						
Emerging Markets	<u>10%</u>	70%					
Fixed Income							
Canadian Universe Bonds	10%						
Canadian Short Term Bonds	10%						
Global High Yield Bonds	<u>10%</u>	30%					

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 chosen 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.

igure 2									
Actual Versus Target Asset Class Weights - December 31, 2015									
Asset Class	Mar	ket Va	lue (\$Mil)	Actual \	<u>Neight</u>	Target W	/eight	<u>Over/U</u>	<u>nder</u>
Equities									
Canadian	\$	63.0		15%		15%		0%	
US Small/Mid Cap		89.9		22%		20%		2%	
Global		86.5		21%		25%		-4%	
Emerging Markets		37.4	\$ 276.8	<u>9%</u>	67%	<u>10%</u>	70%	-1%	-3%
Real Assets									
Canadian Real Estate		2.6	2.6	1%	1%	0%	0%	1%	1%
Fixed Income									
Canadian Universe Bonds		39.9		10%		10%		0%	
Canadian Short Term Bonds		40.4		10%		10%		0%	
Global High Yield Bonds		47.0		11%		10%		1%	
Short-Term Investments		5.3	132.6	<u>1%</u>	32%	<u>0%</u>	30%	1%	2%
Currency Hedge		(1.3)	(1.3)	0%	0%	0%	0%	0%	0%
			\$ 410.7	_	100%	_	1 00%		

The Fund's actual asset mix compared to the Policy target weights effective throughout 2015, including currency overlay, as at December 31, 2015, is shown in Figure 2.

Asset class weights are permitted to vary within a range of +/- 5% of the target weights and are rebalanced periodically back to the target. The allocation in 2014 to Canadian direct real estate is accorded a 0% weight in the composite benchmark which shall be the case until the allocation reaches a meaningful level (5%), a function of manager capital calls.

The University has engaged eight investment managers to manage ten specialty investment mandates including an allocation to handle operating liquidity held in a short term investment fund. The managers have been selected to provide specific investment expertise. A specialty mandate is established for each that describes the asset class, investment objectives, constraints, and performance benchmark for that portfolio. The managers, their mandates, market values and fund weights are shown in Figure 3. The currency hedge applies to 50% of the USD exposure contained in the high yield bonds class. The passive overlay is composed of liquid three-month foreign exchange forward contracts and reported on a marked-to-market basis.

Figure 3			
Specialty Mandat	es and Asset Allocations	- December 31, 2	015
Investment Manager	Mandate	Market Value (\$ Mil)	<u>Weight</u>
	Equities		
Foyston, Gordon & Payne	Canadian	28.0	6.8%
Mawer	Canadian	35.0	8.5%
Westwood	US Small/Mid Cap	89.9	21.9%
Aberdeen	Global	86.5	21.1%
Aberdeen	Emerging Markets	37.4	9.1%
	Real Assets		
Bentall Kennedy	Canadian Real Estate	2.6	0.6%
	Fixed Income		
TD Asset Management	Canadian Universe Bonds	39.9	9.7%
TD Asset Management	Canadian Short Term Bonds	s 40.4	9.8%
Stone Harbor	Global High Yield Bonds	47.0	11.4%
TD Asset Management	Short-Term Investments	5.3	1.3%
Mesirow	Currency Hedge	(1.3)	-0.3%
		\$ 410.7	100.0%

Performance Objectives

The Fund's return objective is quantified in the form of a performance benchmark and is a weighted composite of total returns produced by specified capital markets indices. Each component index broadly represents an asset class as defined in the Policy asset mix and is a transparent and reproducible sample of publically-traded investable equities or bonds for a specific country or area. A Canadian real estate benchmark index is set to be introduced in the performance benchmark once the allocation to real estate investments reaches the meaningfully measureable level of 5% of total fund. The performance benchmark in effect throughout 2015 follows in Figure 4.

Figure 4 Performance Benchmark 2015							
Asset Class	<u>Weight</u>	Index					
Canadian Equities	15%	S&P/TSX Composite					
Small/Mid Cap US Equities	20%	Russell 2500					
Global Equities	25%	MSCI World					
Emerging Markets Equities	10%	MSCI Emerging Markets					
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.

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 semiannually for review by the 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 2015 and successive annualized periods out to ten years (2006-2015), providing a snapshot of the longer-term success of the investment program.

Figure 5										
Endowment Fund Long-Term Performance										
		Anr	nualized I	Returns f	or Perioc	ls Ended	Decemb	er 31, 20	015	
	<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	5.0%	7.3%	10.5%	11.0%	8.9%	9.5%	11.2%	6.9%	6.1%	6.9%
Benchmark	7.1%	8.9%	11.9%	11.7%	9.0%	9.6%	11.1%	6.8%	6.3%	6.9%
	-2.1%	-1.6%	-1.4%	-0.7%	-0.1%	-0.1%	0.1%	0.1%	-0.2%	0.0%

In absolute terms, on a ten-year annualized basis, the 6.9% performance of the Fund has covered the sum of the approximated real spending target of 4.5%, expenses of 0.5%, and inflation of 1.9%. The return however is low relative to other 10 year periods as it includes several negative market periods that particularly affected 2007, 2008 and 2011.

The investment program continues to be developed in response to shifts in the investment environment, changes in the cash flows and evolving risks affecting various components of the Fund. The Committee has concentrated on diversifying among selected strategies and managers that align 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 ten years, 2006 to 2015, and the four-year annualized return to December 31, 2015 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			Ende	owment	Perform	nance -	Annual	Returns			
	One-Year Returns as at December 31									Annualized Four Years	
	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	2008	<u>2007</u>	2006	2012-15
Fund	5.0%	9.7%	17.3%	12.5%	0.9%	12.8%	21.7%	-19.1%	-0.3%	15.1%	11.0%
Benchmark	7.1%	10.6%	18.1%	11.4%	-1.5%	12.9%	20.2%	-18.6%	1.9%	12.7%	11.7%
	-2.1%	-0.9%	-0.8%	1.1%	2.4%	-0.1%	1.5%	-0.5%	-2.2%	2.4%	-0.7%

The one-year total rate of return as at December 31, 2015 for the Fund and its benchmark were respectively 5.0% and 7.1%. Excluding the impact of currency hedging, they were 6.7% and 8.8%. The currency hedging of 100% of foreign exposures contained in the high yield bonds portfolio, was adjusted to a 50% hedge of USD exposure in October 2015 to reflect the equity-like element of the asset class. During this year of rising foreign exchange rates, mainly the appreciation of the USD to all world currencies including the Canadian dollar, the hedge decreased overall results by 1.7%.

The 2.1% shortfall of total fund versus its benchmark in 2015 was attributable mainly to the underperformance of one active manager and, to a lesser degree, the effect of the Fund's asset allocation. The Fund was relatively underweight in US equities, which had continued to outperform, and overweight in emerging markets which returned to positive territory, but barely. The allocation to negative-returning Canadian equities and the hedging of USD exposure during a period of appreciating USD both pulled down overall performance.

Over four years to December 31, 2015, the annualized return for the Fund was 11.03%. This result trailed the Policy benchmark four-year annualized return of 11.74% by 71 basis points. With the effect of fees, the results were approximately 1% behind target.

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

eturns	(CAD)			
	(
	Annualized			
2015			2012	<u>Four Years</u> 2012-15
2013	2014	2013	2012	2012-13
-8.3%	10.6%	13.0%	7.2%	5.3%
16.5%	16.7%	46.0%	15.3%	23.0%
18.9%	14.4%	35.2%	13.3%	20.1%
2.4%	7.0%	4.3%	16.0%	7.3%
3.5%	8.8%	-1.2%	3.6%	3.6%
2.6%	3.1%	1.7%	2.0%	2.4%
13.3%	11.1%	14.4%	12.2%	12.7%
	16.5% 18.9% 2.4% 3.5% 2.6%	2015 2014 -8.3% 10.6% 16.5% 16.7% 18.9% 14.4% 2.4% 7.0% 3.5% 8.8% 2.6% 3.1%	-8.3% 10.6% 13.0% 16.5% 16.7% 46.0% 18.9% 14.4% 35.2% 2.4% 7.0% 4.3% 3.5% 8.8% -1.2% 2.6% 3.1% 1.7%	2015201420132012-8.3%10.6%13.0%7.2%16.5%16.7%46.0%15.3%18.9%14.4%35.2%13.3%2.4%7.0%4.3%16.0%3.5%8.8%-1.2%3.6%2.6%3.1%1.7%2.0%

Review of Comparative Performance

Aon Hewitt 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, 2014 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, typically driven by each fund's purpose and objectives, can cause large divergences in returns among members of the peer group members. In terms of magnitude of impact, asset mix has the highest, followed by the impacts from currency strategy and active management. The statistics presented in Figure 8 exclude outlier returns that fall outside the range between 5th and 95th percentiles.

	A	Annual Re	eturns (%)		Ann	ualized R	leturns (%)
	2015	<u>2014</u>	2013	2012	<u>2 Yrs</u>	<u>3 Yrs</u>	<u>4 Yrs</u>	10 Yr
Percentile Rank								
5th (highest)	8.3	13.1	20.6	12.4	10.2	13.3	12.8	7.6
25th	6.8	11.9	18.3	10.7	9.1	11.6	11.3	6.9
50th (median)	5.4	10.9	16.1	9.1	7.9	10.6	10.0	6.2
75th	3.6	9.8	14.7	8.1	6.6	9.8	9.8	5.9
95th (lowest)	(1.2)	8.1	13.1	5.8	3.4	7.8	8.1	4.8
Comparative								
York University	5.0	9.7	17.3	12.5	7.3	10.5	11.0	6.9
Quartile Rank	Q3	Q4	Q2	Q1	Q3	Q3	Q2	Q1

Figure 8

The Fund's one-year rate of return of 5.0% ranked in the third quartile in 2015, up from its fourth quartile ranking in 2014. The Fund's comparatively poor positioning in 2014 relative to peers, had followed three years of strong performance and first and second quartile rankings. The four-year result of 11.0% fared well compared to the sample group, ranking high in the second quartile and the ten-year result continued with a first quartile standing.

The comparative result for the latest year is explained by manager underperformance and asset mix. The Endowment Fund's asset mix is overweight in emerging markets and total equities and underweight in US equities and longer bonds relative to the average balanced fund, representative of pension fund policies. The Fund's more risky strategy and asset mix are characteristic of the asset-liability structure adopted by endowment funds with perpetual investment horizons, a stance that performs well in many but not all markets. The strategy is reviewed at regular intervals and is adapted when changes in capital markets structure indicate that a more efficient and appropriate strategy will serve more effectively over the long term.

Endowments Growth

Over the five years since 2011, the Endowment Fund has grown from net contributions by \$3 million. The Fund's market value, inclusive of contributions, investment income and capital appreciation and net of distributions for endowed spending and investment expenses, has grown by \$84.3 million. Withdrawals of Board-designated and internally-restricted investment capital and appreciation 2015 have skewed the numbers away from strictly true endowments.

Pooled Endowments - Growth (\$ Millions)								
	Market Value	Book Value*	MV-BV Ratio					
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					
December 31, 2012	350.5	256.5	1.47					
December 31, 2011	326.4	250.2	1.30					

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. Effective with the fiscal year beginning May 1, 2014, the endowment fund accounting and record keeping for book value and market value of individual endowments was converted to a unitized market valuation based system.

The change in the market value of the Fund during calendar 2015, shown in Figure 10, illustrates the effects of cashflows and earnings during the year.

gure 10		
Change in Total Fund Market Value	e (\$ Million	s)
Market Value, December 31, 2014		434.1
Contributions:		
Donations	7.3	
Reinvested Distributions	-	
Withdrawals:		
Regular Distributions and Expenses	(13.1)	
Special Distributions	(3.5)	
Withdrawals	(35.0)	
Expenses	(3.0)	
Earnings:		
Investment Income and Market Appreciation	23.9	
Net Change		(23.4)
Market Value, December 31, 2015		\$410.7

Over the last four years, a total of \$50.7 million has been distributed to endowment account beneficiaries. The conversion to the unitized market value system for accounts has improved the amount of the distribution as seen in Figure 11 by the increase in annual distributions in 2014-15 and on.

Figure 11 Distributions to Endowed Beneficiaries							
Lindowe							
	Annual Distributions \$ Million						
	•						
2015-16	\$ 17.4						
2014-15	13.7						
2013-14	10.8						
2012-13	8.8						
Cumulativ	e \$50.7						

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 2015, over 2,000 individual endowed accounts were in existence.

Oversight

The Investment Committee conducts activities in accordance with its terms of reference and the Board-approved Statement of Investment Policies and Procedures. 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 – 2015

During 2015, activities undertaken by the Investment Committee and administration included:

- Revision of Statement of Investment Policy and Procedures, incorporating changes to the asset mix, target weights, and performance benchmark, to amend the Canadian fixed income benchmark and align with Fund liquidity requirements. The changes placed into effect as of January 1, 2015, approved by the Board of Governors were:
 - 10% reduction to existing Canadian Universe Bonds for a revised allocation of 10%;
 - 10% new allocation to Canadian Short Term Bonds; with the Universe Bonds above continuing with a total allocation of 20% to Canadian bonds; and
 - Amendment of the performance benchmark to incorporate the addition of a 10% weight in Short Term Bonds and reduction to 10% weight in Universe Bonds.
- Significant capital and earnings withdrawal activity in excess of \$50 million from underlying portfolios was necessarily undertaken in 2015 to provide required funding for University purposes including regular and special distributions and funding of capital projects from University-designated funds that had been invested alongside endowments for a period of 11 years. To achieve the target liquidity, investments in high yield bonds, US equities and global equities were reduced.
- An adjustment to the application of the currency hedging strategy was adopted based on the asset class specific hedge ratios following to address the part-equity, part-fixed income asset class characteristics of high yield bonds, resulting in a 50% hedge ratio and a conversion from the initial 100% hedge ratio. The Policy currency hedging strategy continues as follows:

Foreign Equity Exposures	0% hedged
Foreign Real Assets	50% hedged
Foreign Fixed Income Exposures	100% hedged

- A global equity review and portfolio optimization project was launched with assistance from the investment consultant.
- Introduction of a Board level performance and Fund highlights semi-annual report with provision for presentation to the Committee by the investment consultant.
- Inaugural payout to endowment beneficiaries following the introduction of the Smoothed Banded Inflation methodology for calculating the distribution to endowed account holders was initiated with a baseline payout rate of \$3.90 per unit for initial distribution in 2015-16.
- Establishment of the 2016-17 payout rate of \$3.96 per unit for accrual of distribution.
- To address the conversion to a unitized system and new spending formula for distribution to endowment beneficiaries, a new donor report was created for reporting the fiscal year end status of endowed gifts and magnitude of in-year spending on beneficiaries.

- The responsible investment program initiatives and developments are ongoing. Administration continued to review the expanding activities and provide support to the York University Advisory Committee on Responsible Investing.
- Review of the Committee's Terms of Reference, last revised in 1998, was initiated with an expected completion in 2016.

Board Investment Committee, May 30, 2016 Board of Governors, June 28, 2016