



York University Endowment Fund

Annual Investment Report Board of Governors - Investment Committee

For Year Ended December 31, 2021

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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 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.

The Fund in Review - 2021

The market value of the Fund as of December 31, 2021, was \$632.7M, an increase of \$38.4M relative to the December 31, 2020, valuation of \$594.3M. The increase in 2021 was the net effect from combined inflows, outflows, and depreciation. The fund increased by \$4.3M in contributed capital plus income of \$53.1M on invested assets and decreased by \$3.4M in investment expenses and \$15.6M in fund distributions.

Distributions to support endowment beneficiaries form the greatest part of withdrawals. Over the past seven years, \$110.7M has been directed specifically to the purposes established by the University's donors.

The Fund one-year rate of return as of December 31, 2021, was 9.1%, compared to the returns of 16.9% and 16.2% for the one-year periods ending December 31, 2020, and 2019, respectively. The Fund performance for 2021 lagged the benchmark one-year rate of return of 10.5% by 1.4%.

The Fund four-year rate of return of 10.0% (as of December 31, 2021) beat the annualized benchmark performance of 9.2% by 74 basis points (bp), for the same period.¹

Market volatility remained at the forefront in 2021 as investors looked for direction on the trajectory of the global economy. The distribution of vaccines and the easing of lockdowns were positive developments, signaling an economic rebound, but the emergence of new variants and global supply chain delays created different challenges. Despite these obstacles, global gross domestic product (GDP) grew, and inflation emerged as a challenge in the latter half of the year. The global equity benchmark, the Morgan Stanley Capital International All Country World Index (MSCI ACWI), gained 17.5% in Canadian dollar terms in 2021, with strong annualized returns of 18.6% and 14.2% over 3 and 5 years, respectively.

Fixed income markets were lackluster in terms of growth opportunities as major central banks stayed the course in maintaining low policy rates thereby subjecting fixed income to a high probability of interest rate risk in the event of future policy rate increases. For example, the Bank of Canada's key benchmark overnight target rate had remained at 0.25% since March 27, 2020. Similarly, the United States Federal Open Market Committee (FOMC) has maintained the federal funds target rate at 0.25% since March 15, 2020. As a result, North American central banks had kept their target policy rates at 0.25% for 21 consecutive months by 2021 year end.

In 2021, the US dollar (USD) index futures gained 6.7% year over year, its strongest gain since 2015 thanks to strong employment figures for the American economy and anticipated annualized GDP growth of 6%. Furthermore, there was anticipation of the US Federal Reserve raising interest rates aggressively starting in Q1 2022.

In 2021 the Fund underperformed the benchmark by 1.4% after outpacing the benchmark return of 11.5% by 5.4% in 2020. The Fund was 4th quartile in its peer group with returns in the 96th percentile for 2021. The Fund's percentile ranking against peers remains 1st quartile over 2, 3, 4, 5, and 10 years. At the end of 2021, the global equity component, which accounts for approximately 60% of the Fund's allocation, had returned 12.19% trailing the MSCI ACWI benchmark by 5.34%. This was due to the Fund's equity bias in favour of growth style managers. The sector rotation in equities which began early in 2021 continued and favoured value-oriented managers over growth managers for the year.²

¹ The four year annualized return of the Fund is 9.98% beating the benchmark of 9.24% by 0.74% or 74 bp. All returns have been rounded off to 1 decimal within the report.

² Sector rotation is the movement of money invested in stocks from one industry to another as investors and traders anticipate the next stage of the economic cycle. Typically, different styles of investing (e.g., growth vs. value vs. quality vs. growth at a reasonable price) are favoured during different stages of economic growth.

The currency hedging strategy had a marginally positive impact and increased the value of total fund by 5 basis points (bp) in 2021. During 2021, the Canadian dollar (CAD) similarly appreciated versus the USD year over year, going from 1.2751 to 1.2745 CAD/USD from 2020 to 2021.³

Direct expenses charged to the Fund for investment management, custody, performance measurement and investment consulting services during calendar 2021 were \$3.4 million for a total expense ratio of 0.57%. For 2021 total expenses were \$1.4 million higher (2020 expenses were \$2 million), attributable to the higher assets under management, while the expense ratio remained the same. The expense ratio for 2021 was in line with the ratios observed in previous years (e.g., 2020 (0.57%), 2019 (0.43%), 2018 (0.59%) and 2017 (0.61%)).

The balance of this Report reviews the investments, asset mix and manager allocations. Performance of the Fund to December 31, 2021, is reviewed in absolute, relative, and comparative terms. The Investment Committee's activities conducted during calendar 2021 are summarized in the final section.

Asset Mix

The Policy asset mix (Figure 1) summarizes the asset class weights that the Fund was managed to, throughout 2021.

Figure 1

Policy Asset Mix		
<u>Asset Class</u>	<u>Target Weight</u>	
Equities		
Global	<u>60%</u>	60%
Fixed Income		
Global Fixed Income	20%	
Global High Yield Bonds	<u>10%</u>	30%
Real Assets		
Real Estate	<u>10%</u>	10%

The Policy asset mix, determined through a periodic process involving an asset-

³ On December 31, 2020 1 USD bought 1.2751 CAD, on December 31, 2021, 1 USD bought 1.27452 CAD.

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 SIP&P 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. This approach is consistent with clause 6.6 of the SIP&P which states "During the phase-in period for the Real Assets asset class, the current 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 equity classes."

The Fund's actual asset mix compared to the Policy target weights effective throughout 2021, including currency overlay, as of December 31, 2021, is shown below in Figure 2.

Figure 2

Actual Versus Target Asset Class Weights - December 31, 2021								
Asset Class	Market Value (\$Mil)		Actual Weight		Target Weight		Over/Under	
Equities								
Global	380.4	\$ 380.4	60.1%	60.1%	60.0%	60.0%	0.1%	0.1%
Real Assets								
Real Estate	47.7	47.7	7.5%	7.5%	10.0%	10.0%	-2.5%	-2.5%
Fixed Income								
Global Fixed Income	106.4		16.8%		20.0%		-3.2%	
Global High Yield Bonds	55.0		8.7%		10.0%		-1.3%	
Short-Term Investments	43.3		6.8%		0.0%		6.8%	
Subtotal	204.8	204.8	32.4%	32.4%	30.0%	30.0%	2.4%	2.4%
Currency Hedge	(0.2)	(0.2)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
		\$ 632.7		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 short-term investments was for the purpose of liquidity management in anticipation of future distributions and capital calls anticipated in 2022.

The managers, their mandates, market values and fund weights are shown in Figure 3. The equity component of the Fund has had a core-satellite structure in place since June 2019. The core funds are low volatility mandates managed by TDAM Low Vol and Unigestion. The satellite funds are managed by C- Worldwide, 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, 2021

<u>Investment Manager</u>	<u>Mandate</u>	<u>Market Value (\$ Mil)</u>	<u>Weight</u>
Equities			
C Worldwide	Global Equity	60.6	9.6%
TDAM Low Vol	Global Equity	45.1	7.1%
Baillie Gifford	Global Equity	61.8	9.8%
Morgan Stanley	Global Equity	56.0	8.8%
Lazard	Global Equity	53.8	8.5%
Fiera	Global Equity	55.5	8.8%
Unigestion	Global Equity	47.6	7.5%
Real Assets			
Bentall Green Oak	Canadian Real Estate	34.5	5.5%
Landmark VIII	Global Real Estate	13.2	2.1%
Fixed Income			
Manulife	Global Fixed Income	51.4	8.1%
PH&N	Global Fixed Income	55.0	8.7%
Stone Harbor	Global High Yield Bonds	55.0	8.7%
TD Asset Management	Short-Term Investments	43.3	6.8%
TD Asset Management	Currency Hedge	(0.2)	0.0%
		<u>\$ 632.7</u>	<u>100.0%</u>

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 real assets, the target benchmark is Canadian CPI + 4% for Landmark VIII and Bentall Green Oak. For the global unconstrained fixed income (UFI) mandates, there are two benchmarks: (i) Bloomberg Barclays Global Aggregate Corporate (CAD hedged) for Manulife's strategic fixed income strategy; (ii) 75% Bloomberg Barclays Global Aggregate Corporate (CAD hedged) + 25% FTSE Canada Short Term Overall Bond Index for PH&N's bespoke fixed income strategy.

The performance benchmark in effect throughout 2021, follows in Figure 4.

Figure 4

Performance Benchmark 2021		
<u>Asset Class</u>	<u>Weight</u>	<u>Index</u>
Global Equities	60%	MSCI ACWI
Real Assets	10%	Canadian CPI + 4%
Global Fixed Income	20%	Bloomberg Barclays Multiverse PH&N Benchmark
Global High Yield Bonds	10%	Citigroup High Yield Market Capped

The Fund's return objective is to meet or exceed the four-year annualized benchmark return on a rolling basis.

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 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 against benchmarks and longer term against policy objectives of exceeding spending targets. 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, below, presents the Fund's performance record for 2021, and successive annualized periods out to eleven years (2011-2021), 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, 2021										
	<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	9.1%	12.9%	14.0%	10.0%	9.7%	9.4%	8.7%	8.9%	9.8%	10.0%
Benchmark	10.5%	11.2%	13.0%	9.2%	9.1%	9.2%	8.9%	9.1%	10.1%	10.2%
	-1.4%	1.7%	1.0%	0.7%	0.6%	0.2%	-0.1%	-0.2%	-0.3%	-0.2%

In absolute terms, on a ten-year annualized basis, the 10% performance of the Fund has covered the sum of the approximated real spending target of 4%, expenses of 0.5%, and inflation of 2%.

The Endowment Fund's investment program is fluid and developed in response to shifts in the investment environment, changes in cash flows and evolving risks (e.g., market, regulatory, climate) 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, below, shows annual one-year returns for eleven years, 2011 to 2021, and the four-year annualized return to December 31, 2021 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												Annualized Four Years
	One-Year Returns as at December 31											
	<u>2021</u>	<u>2020</u>	<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>2018-21</u>
Fund	9.1%	16.9%	16.2%	-1.3%	8.6%	7.7%	5.0%	9.7%	17.3%	12.5%	0.8%	10.0%
Benchmark	10.5%	11.5%	16.3%	-1.3%	8.7%	9.4%	7.1%	10.6%	18.1%	11.4%	-1.5%	9.0%
	-1.4%	5.4%	-0.1%	0.0%	-0.1%	-1.6%	-2.1%	-0.9%	-0.8%	1.1%	2.3%	0.9%

The one-year total rate of return as of December 31, 2021 for the Fund and its benchmark were respectively 9.1% and 10.5%.⁴ Excluding the impact of currency hedging, they were 9.1% and 10.5%.⁵ 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 0.05%.

In 2021, the Fund trailed its benchmark by 1.4%. The global equity portfolio, which accounts for 60% of the Fund, lagged its respective benchmark by 5.4%.

Over four years to December 31, 2021, the annualized return for the Fund was 10.0% beating the Policy benchmark four-year annualized return of 9.3% by 72bp.

Capital markets returns for the indexes composing the performance benchmark for

⁴ More precisely, 9.1314% for the hedged return, and 10.4910% for the hedged benchmark

⁵ More precisely, 9.0806% for the unhedged return, and 10.4910% for the unhedged benchmark

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
	<u>Annual Returns</u>				<u>2018-21</u>
	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	
Equity Indices					
MSCI ACWI (All Countries)	17.5%	14.2%	20.2%	-1.3%	12.3%
Fixed Income Indices					
Bloomberg Barclays Multiverse	-5.3%				N/A
PH&N Benchmark	-0.8%				N/A
Citigroup High Yield Market Capped	4.3%	3.7%	8.3%	6.6%	5.7%
Real Estate Indices					
CPI+4%	4.2%	5.0%	6.2%	5.7%	5.3%

Review of Comparative Performance

Aon provides data for comparison in the form of a peer group of Balanced Funds. Comparative performance results for one-year and multi-year periods ended December 31, 2021, are presented in Figure 8, below.

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 active management, and currency strategy.

Figure 8**Balanced Funds - Comparative Analysis as of December 31, 2021**

	Annual Returns (%)				Annualized Returns (%)			
	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2 Yrs</u>	<u>3 Yrs</u>	<u>4 Yrs</u>	<u>10 Yrs</u>
Percentile Rank								
5th (highest)	18.5	14.2	17.8	0.2	14.0	14.9	11.1	10.6
25th	15.2	10.8	16.4	-1.4	12.4	13.6	9.5	9.9
50th (median)	13.1	9.2	15.0	-2.4	11.3	12.5	8.7	9.4
75th	11.7	8.1	13.5	-3.8	10.2	11.6	7.7	9.0
95th (lowest)	9.3	5.0	10.3	-5.2	8.6	9.8	6.2	7.9
Comparative								
York University	9.1	16.9	16.2	-1.3	12.9	14.0	10.0	10.0
Quartile Rank	Q4	Q1	Q2	Q1	Q1	Q1	Q1	Q1

The statistics presented above 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 9.1%, ranked in the 96th percentile (fourth quartile) in 2021, down from the Fund's 3rd percentile (first quartile) ranking in 2020. The focus of the Fund's strategy remains long term. As such, the two, three, four, and ten-year results for the Fund ranks in the first quartile and asset allocation decisions are considered annually.

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 current strategic target asset mix targets a 50% weighting in global equities and 20% weighting in real assets. While this came into effect in 2019, the implementation continues to take time due to the nature of allocating capital to private assets such as infrastructure.

Endowments Growth

Over the seven years since 2013, the market value to book value (MV-BV) ratio has risen from 1.56 to 2.19. Endowment Fund capital (book value) has expanded by \$28.3M due to net contributions, while market value has grown by \$227.4M, through a combination of contributed capital, investment income, and capital appreciation. The market value accounts for (i.e., is 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, 2021	632.7	288.8	2.19
December 31, 2020	594.3	284.8	2.09
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 by CIBC Mellon and BNY Mellon, on a unitized market valuation system basis. The unitization of the Endowment Fund was approved on April 11, 2014 and introduced on May 1, 2014.

The change in the market value of the Fund during calendar 2021, 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, 2020		\$594.3
Contributions:		
Donations	4.3	
Reinvested Distributions		
Withdrawals:		
Regular Distributions	(15.6)	
Special Distributions	-	
Fund Expenses	(3.4)	
Earnings:		
Investment Income and Market Appreciation	53.1	
Net Change		38.4
Market Value, December 31, 2021		\$632.7

During the last seven calendar years, \$110.7 million 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 \$3.5 million. 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
2021-22	15.7
2020-21	16.1
2019-20	16.6
2018-19	16.1
2017-18	14.9
2016-17	13.9
2015-16	17.4
Cumulative	<u>\$ 110.7</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 (BNY Mellon). At fiscal year-end, April 32, 2021 there were 2,188 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 – 2021

During 2021, activities undertaken by the Investment Committee and Administration included:

- The approval of allocating \$90 M to sustainability focused infrastructure that would aid in the transition to a net zero low carbon economy. After an extensive search and interview process, the Fund would be a limited partner to the following closed ended funds:
 - Brookfield Global Transition Fund
 - Copenhagen Energy Transition Fund
 - Carbon Infrastructure Partners Carbon Recapture Fund
- Approval of the third Sustainable Investing Report, covering the ESG integration practices of the Fund's equity and fixed income managers, was published in Q1 2021.
- All the investment managers continued to provide compliance reports confirming that their investments were following their mandates and the SIP&P.
- Reviewing of the Fund's core-satellite equity structure and consideration of restructuring and replacing an equity manager.
- Adoption of a 2020-21 payout rate of \$4.35 per unit for purpose of monthly accrual of distribution during 2020-21. 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 as indicated in the table below.

Fiscal Year End	Unit Value (FYE)	Accrual Distribution Rate	Yield
April 30, 2021	\$136.7113	\$4.35/unit	3.18%
April 30, 2020	\$113.4797	\$4.23/unit	3.73%
April 30, 2019	\$115.4543	\$4.17/unit	3.61%
April 30, 2018	\$109.6943	\$4.08/unit	3.72%
April 30, 2017	\$111.6046	\$4.02/unit	3.60%
April 30, 2016	\$98.2817	\$3.96/unit	4.03%
April 30, 2015	\$106.8879	\$3.96/unit	3.70%
April 30, 2014	\$100.0000	\$3.90/unit	3.90%