DALHOUSIE UNIVERSITY INVESTMENT COMMITTEE PENSION TRUST FUND and RETIREES' TRUST FUND TRUSTEES

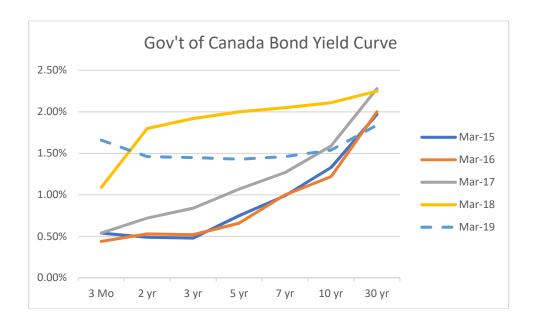
ANNUAL REPORT TO Finance, Audit, Investment & Risk Committee, Board of Governors Endowment Funds Pension Trust Fund Retirees' Trust Fund

June 2019

Chair, Members of the Finance, Audit, Investment & Risk Committee::

Market Overview & Summary

The April 1, 2018 – March 31, 2019 was a tumultuous 12-month period for the financial markets. Equity markets started this period strongly, but then sold off sharply late in 2018, apparently scared off by a series of interest rate increases by central banks. In response, the U.S. Federal Reserve and the Bank of Canada signalled a halt to the hikes, citing softness in the economy. With this signal, equity markets roared back with very strong results in the first quarter of 2019. The bond market also rallied, leading to a slight inversion to the yield curve. In a number of past occasions, such an inversion has preceded an economic slowdown, but this time the markets still maintained a fair amount of exuberance.



Commodity markets showed strength later in the year, especially with oil and base metal prices. West Texas Intermediate oil was down 7.4% for the year, but climbed 32% in the most recent quarter. The beleaguered Western Canada Select oil rose over 18% for the year, largely from a 71% increase in the last quarter. Copper went up over 11% in the last quarter, while gold remained flat on low inflation expectations.

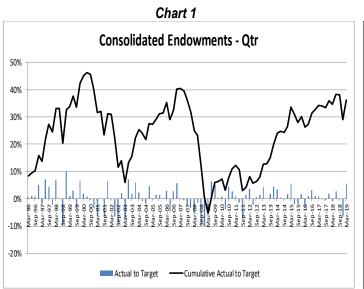
The Canadian dollar lost ground versus its U.S. counterpart, but gained strength against a basket of the other major international currencies. International equities were sluggish for the twelve-month period, and weaker still when converted to Canadian dollars. Canada's equity market produced a reasonable 8.1% return, with seven of the eleven sectors generating double-digit returns. Large cap growth stocks continued to drive the U.S. market, led by information technology, health care, and consumer discretionary sectors. Smaller sectors such as real estate and utilities also had strong years.

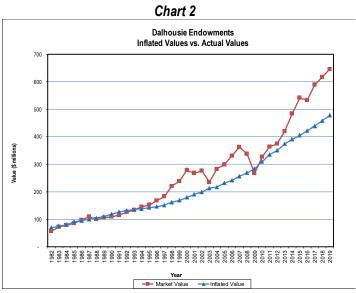
Annualized returns as of March 31, 2019	1 year	2 years	3 years	4 years	10 years
Canada -TSX	8.11%	4.86%	9.26%	5.07%	9.49%
U.S. –S&P 500, CAD	13.49%	11.84%	14.77%	11.95%	16.62%
U.S. –S&P 500, USD	9.49%	11.72%	13.51%	10.46%	15.92%
EAFE - CAD	- 0.21%	5.24%	8.46%	4.55%	9.61%
EAFE – local currency	2.84%	4.09%	8.54%	3.23%	9.75%
Canada Bonds – TMX universe	5.27%	3.29%	2.70%	2.21%	4.41%
CPI	1.89%	2.10%	1.92%	1.76%	1.74%

The Dalhousie Funds' allocations to the public markets, particularly in the U.S., lagged primarily to the Funds' lower capitalization tilt and lower exposure to growth stocks. That said, the Funds continued to receive steady returns from their private investments in real estate, infrastructure, and private equity. In addition, the Funds' public investments in real estate and infrastructure also contributed strong absolute double-digit returns. Fixed income returns were in line with the broad market for the past year. The Funds' allocations to corporate debt, private debt and active duration strategies provide the Funds' with shorter duration profiles, reducing risk in this low interest rate environment.

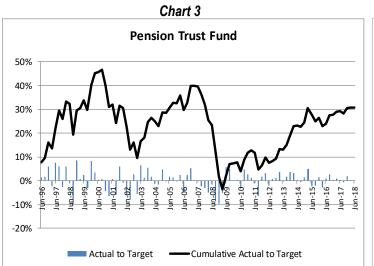
Dalhousie has followed a total rate of return (`TROR`) investment approach for its endowments in conjunction with a banded inflation spending model to provide stable and sustainable spending levels, while preserving the real purchasing power of the gifted capital. Chart 1 illustrates that over the last twenty-four years, the endowment funds have achieved sustainable spending as the return objective has been met. The bars depict the Funds' returns versus the objectives on a quarterly basis. The endowment return objective is the spend rate plus administrative fees plus inflation. Since 1995, the Funds' annualized return was 8.2% as compared to an annualized objective of 6.9%, despite two major downturns in global equity markets, 2002-03 and 2008-09, during this period.

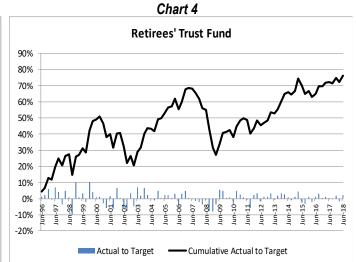
The other principle endowment objective is the preservation of the real economic value of the capital. Since 1980, a full decade before TROR was fully adopted, the market value of the endowments in aggregate has stayed ahead of the indexed values on a fairly consistent basis as demonstrated by Chart 2. The endowments' market value is 35% ahead of the indexed target for this 40 year period.





The obligations of the Dalhousie University Staff Pension Plan are supported by the combined assets of the Pension Trust Fund ("PTF") and the Retirees' Trust Fund ("RTF"). The following Charts 3 and 4 illustrate that the two funds have each met and exceeded their respective return targets over the last twenty-two years to the Funds' most recent June 30, 2018 fiscal year-ends, despite volatility of the markets. The PTF had an annualized net return of 8.0% as compared to the actuarial target of 6.7% over this 23-year period. Likewise, the RTF was ahead of its 5.05% objective with a 7.7% annualized net return. As in the case with the University's endowment investments, the PTF and RTF had to contend with the two major declines in equity markets during this period. Despite each fund exceeding its respective return targets, the Plan had a deficit position at its last actuarial valuation in March 31, 2018. Improving mortality rates have increased the plan liabilities significantly, and past use of previous surpluses for benefit enhancements, contribution holidays and surplus distributions have also contributed to the deficit.





Each Fund's primary return objective is defined by its funding requirement – currently the endowment has a 4.95% real return targets, while the PTF and RTF have targets of 6.00% and 5.05% respectively. The PTF target represents its actuarial discount rate, while the RTF's 5.05% represents the return hurdle required after which excess returns can be applied for pension indexation. As a result, each Fund has had its own distinct set of investment objectives that have yielded over time different asset mix policies for each Fund, and consequently different return results. With the growth of the RTF assets, its asset mix policy has drifted closer to that of the PTF to where they match today. However, the RTF's more recent policy allocation to private investments will require some time to be actually funded, thus return results will continue to differ from the PTF for a while.

Each Fund also has a defined asset mix return benchmark that serves as secondary reference points. Over the past year the endowments posted a 7.9% return that slightly exceeded its 7.2% policy benchmark. The PTF was also ahead of its policy benchmark for the year (8.2% vs 7.5%), and the RTF was also ahead of its benchmark (7.4% vs 7.0%). Appendix A summarizes each Fund's investment objectives and related investment structure.

2018/19 Committee & Trustee Activity

The Committee and trustees meet a number of times during each year to provide oversight and insight on the strategic direction of the Funds. The Committee and Trustees review investment performance each quarter, using a number of measures including each Fund's return requirement, investment policy benchmark, and to a lesser extent, peer universe comparisons. Each Fund's specific return requirement is obviously the most important measure over time. However, each Fund's investments are subject to the variations of market conditions, and as such, the investment policy benchmark is another important measure.

Each of the Funds made additional commitments to another private debt strategy. The Funds now have allocations to three private debt strategies. Each Fund also made changes in U.S. large cap equity strategies. A semi-annual risk review dashboard and process was also implemented. The Committee and Trustees are now provided with a semi-annual profile and review of each Fund's investment risk as well as ESG assessment. Reviews are made at each of the investment manager, asset class and total fund levels.

The Committee and Trustees also completed a review of each Fund's investment policies. These policies are reviewed annually. The primary investment objectives and underlying assumptions were revisited and compared to those defined during the development of the policies. The investment policies were reaffirmed given that the primary investment objectives remained valid and that there were no major changes in underlying investment and economic assumptions.

The members of the Investment Committee and Trustees for the past year are listed on the last page of this report.

DALHOUSIE UNIVERSITY Endowment Funds

Dalhousie University has over 1,400 endowments that provide annual funding to the operating budget to support academic chairs and salaries, fellowships, scholarships, student bursaries, library enhancement, research, equipment and facilities. Investment returns from these endowed gifts plus \$2.0 million received from externally-held endowments supported program spending of \$19.8 million for 2018/19. With the inclusion of \$3.4 million of investment and related administrative costs, total 2018/19 spending was \$25.2 million.

During the past year, the University's Endowment Funds grew by \$34.6 million from \$611.2 to \$645.8 million. This year-over-year growth included \$45.1 million of investment returns, as well as \$15.4 million in new gifts and designated net transfers. Offsetting the additions was \$25.9 million provided for the year's spending allocations.

The endowment spending and associated investment policies are reviewed frequently to ensure that spending is kept at a sustainable level to enable preservation of the real economic value of the corpus and to provide an intergenerational equality balance. Dalhousie uses a banded inflation model that commences spending at 4.25% percentage of the gift and increases spending at the rate of inflation in subsequent years so long as the spending remains within a band of 3.75% to 5.00% of each endowment's market value.

DALHOUSIE UNIVERSITY ENDOWMENT FUNDS

Manager	Asset Class	Market Value (\$ Millions)		
<u> </u>		March 31, 2019	March 31, 2018	
Burgundy Asset Management	Canadian Equities	\$ 54.8	\$ 52.5	
Montrusco Bolton	Canadian Equities – dividend growth	23.6	23.7	
Fiera Capital Management	Canadian Equities – market neutral	20.7	21.1	
Ashford Capital Management	US Equities	33.0	37.8	
Wedge Capital Management L.L.P.	US Equities – Large Cap	-	59.7	
Fiera Capital Management	US Equities – Large Cap	49.4	-	
Wellington Management Canada LLC	US Equities – SMID	15.4	14.2	
State Street Global Asset Management	US Equities – Mid Cap Index	30.8	33.5	
First Eagle	Non-North American Equities	24.4	24.0	
Addenda Capital Inc.	NNA Equities	25.4	24.5	
Burgundy Asset Management	NNA Equities	26.1	25.5	
Fiera Capital	NNA Equities	29.2	27.0	
CIBC Global Asset Management	Canadian Bond – Index	52.2	39.0	
Addenda Capital Inc.	Canadian Bonds - active	26.1	23.4	
BlackRock Asset Management	Canadian Bonds - active	30.5	29.3	
Canso Investment Counsel	Canadian Bonds - active	32.5	25.3	
Brookfield	Private Loans & Mortgage	3.6	1.7	
Crestline	Private Debt	4.3	=	
Commonfund Capital	Private Equity	52.7	49.5	
JP Morgan	Private Equity	20.0	18.5	
BMO F&C	Private Equity	12.1	11.2	
Pantheon	Private Equity	2.2	3.0	
Lazard Asset Management	Infrastructure securities	10.8	9.6	
JP Morgan	Infrastructure & Shipping	11.9	11.1	
CBRE Clarion	Global Real Estate Securities	21.4	18.5	
GPM	Canadian Real Estate	16.2	13.6	
Canadian Urban	Canadian Real Estate	6.5	8.9	
Crestpoint	Canadian Real Estate	3.0	2.1	
Jarislowsky Fraser	Global Balanced	2.1		
	General*	4.9	3.0	
TOTAL ASSETS		\$645.8	\$611.2	

^{*} Includes other funds invested in a manner as specified by donor and cash in-transit.

ENDOWMENT FUND PERFORMANCE

ENDOVIMENT FORD I						
	Annualized Returns to					
	March 31, 2019		March	31, 2018		
	Fund	Benchmark**	Fund	Benchmark**		
10 Years	10.8%	9.8%	7.6%	6.6%		
4 Years	7.1%	6.7%	8.5%	8.1%		
3 Years	9.4%	9.2%	6.8%	6.4%		
2 Years	7.7%	7.3%	10.2%	10.0%		
1 Year	7.9%	7.8%	7.4%	6.9%		

^{**} The benchmark is the index return of the Fund's policy asset allocation.

DALHOUSIE UNIVERSITY Pension Trust Fund

The Pension Trust Fund's fiscal year commences on July 1st. For the first nine months of this fiscal year, the Pension Trust Fund's assets decreased \$6.2 million from \$741.9 million to \$735.7 million. The Fund transferred \$58.8 million to the Retirees' Trust Fund for new retirements, disbursed \$6.6 million in benefit payments, and incurred \$3.3 million in expenses. The Fund received \$34.8 million in new contributions, and its 4.1% investment return for this nine-month period added \$27.7 million.

DALHOUSIE UNIVERSITYPENSION TRUST FUND

Manager	Asset Class	Market Value (\$ Millions)				
		March 31, 2019	June 30, 2018*	March 31, 2018		
Burgundy Asset Management	Canadian Equities	\$ 55.1	\$ 58.0	\$ 53.4		
Montrusco Bolton	Canadian Equities	22.1	21.7	22.8		
Fiera Capital Management	Canadian Equities	24.9	24.3	24.2		
Ashford Capital Management	US Equities	33.7	44.8	37.3		
Wedge Capital Management L.L.P. Fiera Capital Wellington Management Canada LLC State Street Global Asset Management First Eagle	US Equities – Large Cap US Equities – Large Cap US Equities – SMID US Equities – Mid Cap NNA Equities	39.7 13.3 25.9 23.6	49.7 14.4 28.4 23.4	48.6 13.1 27.7 23.2		
Addenda Capital Inc	NNA Equities	26.5	26.5	25.6		
Burgundy Asset Management	NNA Equities	27.3	27.0	26.7		
Fiera Capital	NNA Equities	30.6	29.0	28.2		
CIBC Global Asset Management	Canadian Bond - Index	66.1	63.1	62.7		
Addenda Capital Inc.	Canadian Bonds - active	38.3	36.7	36.5		
BlackRock Asset Management	Canadian Bonds – active	51.1	49.0	49.0		
Canso Investment Counsel	Canadian Bonds – active	38.1	36.7	38.1		
Crestline		6.0	2.1	-		
Brookfield	Private Loans & Mortgage	4.5	3.1	2.0		
Commonfund Capital	Private Equity	55.6	53.6	51.6		
JP Morgan	Private Equity	18.8	19.2	17.9		
BMO F&C	Private Equity	17.4	16.5	16.8		
Pantheon Ventures Ltd.	Private Equity	2.2	2.5	3.1		
Lazard Asset Management JP Morgan CBRE Clarion GPM Canadian Urban Crestpoint	Infrastructure securities Infrastructure & Shipping Global Public R.E. Canadian Real Estate Canadian Real Estate Canadian Real Estate	15.1 14.5 34.2 26.5 8.6 8.2	14.3 14.2 31.1 25.0 11.8 5.8	13.4 13.5 29.6 20.5 11.8 5.7		
	Cash in Bank & Other	7.8	10.0	9.1		
TOTAL ASSETS		\$735.7	\$741.9	\$712.1		

PENSION TRUST FUND PERFORMANCE

			Annualize	d Returns to			
	March 31, 2018		June -	June 30, 2018*		March 31, 2018	
	Fund	Benchmark**	Fund	Benchmark**	Fund	Benchmark**	
10 Years	10.1%	9.2%	7.6%	6.6%	7.2%	6.3%	
4 Years	6.8%	6.4%	8.6%	7.7%	8.0%	7.7%	
3 Years	9.0%	8.5%	7.9%	7.3%	6.3%	6.0%	
2 Years	7.6%	7.0%	10.2%	9.2%	9.4%	9.0%	
1 Year	8.2%	7.4%	9.5%	8.0%	7.1%	6.5%	

^{*}June 30 is the fiscal year end of the Pension Trust Fund

^{**} The benchmark is the index return of the Fund's policy asset allocation

DALHOUSIE UNIVERSITY Retirees' Trust Fund

For the first nine months of the Retirees' Trust Fund's fiscal year that commenced on July 1, 2018, its asset value grew from \$619.1 million to \$656.4 million, an increase of \$37.3 million. The Fund received \$58.8 million in transfers for new retirees from the Pension Trust Fund, and generated an investment return of \$18.3 million for the period. For these nine months, it made \$36.9 million in benefit payments and incurred \$2.9 million in expenses.

DALHOUSIE UNIVERSITYRETIREES' TRUST FUND

Manager	Asset Class	Market Value (\$ Millions)			
		March 31, 2019	June 30, 2018*	March 31, 2018	
Burgundy Asset Management	Canadian Equities	\$ 49.6	\$ 49.9	\$ 45.7	
Montrusco Bolton	Canadian Equities	21.3	20.0	19.7	
Fiera Capital	Canadian Equities	23.3	22.7	22.5	
Ashford Capital Management	US Equities – Small Cap	33.0	34.9	32.0	
Wedge Capital Management L.L.P.	US Equities – Large Cap	-	44.9	44.0	
Fiera Capital		42.0	-	-	
Wellington Management Canada LLC	US Equities – SMID	16.1	16.3	14.9	
State Street Global Asset Management	US Equities – Mid Cap	29.6	29.6	27.8	
First Eagle	NNA Equities	22.6	22.3	22.2	
Addenda Capital Inc	NNA Equities	24.7	24.7	23.8	
Burgundy Asset Management	NNA Equities	25.0	24.7	24.4	
Fiera Capital	NNA Equities	28.0	26.6	25.8	
CIBC Global Asset Management	Canadian Bond - Index	39.8	38.0	37.8	
Addenda Capital Inc	Canadian Bonds - active	34.6	33.1	32.9	
BlackRock Asset Management	Canadian Bonds - active	48.3	46.3	46.3	
Canso Investment Counsel	Canadian Bonds - active	42.6	41.1	43.3	
Crestline	Private Debt	5.1	1.8		
Brookfield	Private Loans & Mortgage	3.4	2.4	1.6	
Commonfund Capital	Private Equity	13.3	10.4	9.2	
BMO F&C	Private Equity	13.6	12.7	12.6	
JP Morgan	Private Equity	1.8	1.3	-	
Lazard Asset Management	Infrastructure securities	36.4	34.4	32.3	
JP Morgan	Infrastructure & Shipping	10.4	10.2	9.7	
First National	Index Linked Mortgages	1.6	2.4	2.8	
CBRE Clarion	Global Public Real Estate	39.3	35.7	33.9	
GPM	Canadian Real Estate	19.2	18.1	14.2	
Canadian Urban	Canadian Real Estate	5.1	7.0	7.0	
Crestpoint	Canadian Real Estate	7.2	5.1	5.0	
•	Cash in Bank & Other	19.5	2.5	5.6	
TOTAL ASSETS		\$656.4	\$619.1	\$598.1	

RETIREES' TRUST FUND PERFORMANCE

	Annualized Returns to					
	March 2019		June 30, 2018*		March 31, 2018	
	Fund	Benchmark**	Fund	Benchmark**	Fund	Benchmark**
10 Years	9.0%	8.4%	7.0%	6.3%	6.6%	6.1%
4 Years	5.7%	5.9%	7.2%	7.2%	6.7%	7.2%
3 Years	8.0%	8.0%	6.8%	6.7%	5.1%	5.5%
2 Years	6.6%	6.5%	9.2%	8.8%	8.4%	8.5%
1 Year	7.9%	7.6%	8.2%	7.4%	5.8%	6.0%

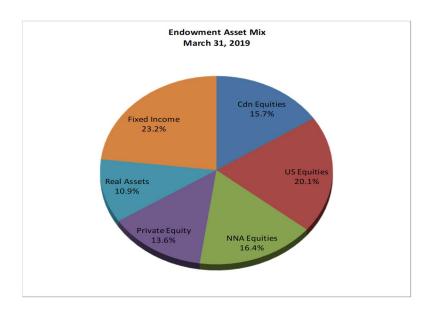
^{*}June 30 is the fiscal year end of the Retirees' Trust Fund

^{**} The benchmark is the index return of the Fund's policy asset allocation

Endowment Objectives:

- · Maintain and preserve the real economic value of the endowment capital;
- Optimize spending levels that achieve objective #1 and that provides for:
 - ✓ annual spending stability in real terms
 - ✓ minimizes the risk of declines in year-to-year spending levels
- Moderate growth (1%) of endowment corpus via capital appreciation once objectives #1 and #2 are satisfied

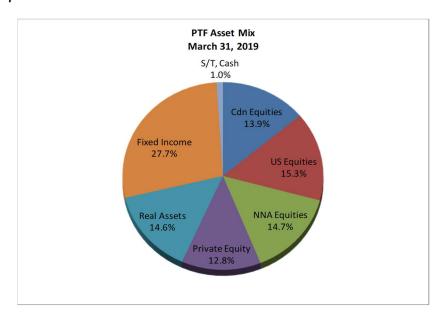
Target: CPI + 4.95%



Pension Trust Fund Objectives:

- Fully funded obligations Achieve and maintain a funded ratio of 100%;
- Stabilize contribution ratios:
- With #1 and #2 satisfied, reduce contribution rates.

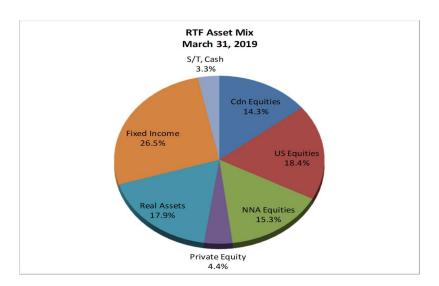
Target: Actuarial Assumption of 6.00%



Retirees' Trust Fund Objectives:

- Meet the current pension promise;
- Provide pension indexation a secondary objective to #1;
- Avoid the requirement for supplemental sponsor funding.

Target: 5.05%



DALHOUSIE UNIVERSITY INVESTMENT COMMITTEE TRUSTEES OF THE PENSION & RETIREES' FUNDS 2018-19

		Investment Committee	Pension Trust Fund	Retirees' Trust Fund	
Mr. Aubrey Palmeter (Chair)	Board Representative / Nominee	1		_ √	_
Mr. Robert Richardson	Board Nominee (February 2018 – present)	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
Mr. Paul Conrod	Non-Board, External	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
Dr. Greg Hebb	Senate Nominee	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
Dr. David Cameron	Non-Board, retiree		,	$\sqrt{}$	
Mr. Ron Pink, Q.C.	DFA Nominee		$\sqrt{}$	$\sqrt{}$	
Mr. Ian Nason (Vice-President, Finance & Administration)	Senior Officer for Liaison and Member	$\sqrt{}$	$\sqrt{}$	\checkmark	
Ms. Susan Robertson (Asst Vice-President, Financial Services)	Internal Appointment	$\sqrt{}$			
Support:					
Secretary/Staff:	Mr. Colin Spinney (Treasurer) Ms. Nancy-Beth Foran (Assistant Treasu	ırer)			
Consultant:	Mr. Bob Mitchell				

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