

Brock University Pension Plan Update Pensioner Update

COVID-19 containment measures enacted throughout the world over the last few months have impacted all investors. Pension plans, including the Brock University Pension Plan (the "Plan"), have been affected by the associated market volatility.

The rate of return earned on the Plan assets affects your Money Purchase Pension benefit, and both the University and the Pension Committee are monitoring the markets and their impact on the Plan carefully and receiving updates from the Plan's investment consultant. We feel it is important to convey as much information to you as possible so that you can have an understanding of how the financial markets and the Plan has been affected thus far, and what the potential implications may be for your pension benefit. For your information, we will also provide a review of how the Plan operates and how the Minimum Guaranteed Pension is funded.

We have formatted this document in a series of questions. Some have been asked by Plan members, others we felt should be included to provide the best possible information for pensioners. This document contains summary information and examples to help support your understanding of the Plan. Detailed information is also available via the Plan Booklet and Annual Pension Reports located on the pension web site. If there is a discrepancy between this document and the official plan text, or questions of interpretation arise, the official plan text will prevail.

As always, pensioners can contact Pension staff at pension@brocku.ca or 905-688-5550 extension 3186 regarding pension related matters.

1. How have the markets been affected thus far in the 2019/2020 Plan year?
Rates of return (from the standpoint of a Canadian investor) in related equity and fixed income market indices are summarized in the following two tables. (Rates of return for the Plan are outlined in question number 2 below)

Market Returns January 1, 2020 to March 31, 2020
(reflecting COVID-19 impact in first quarter of 2020)

Component Asset Class	Benchmark	% Return
Canadian Equities	S&P/TSX Capped Composite Index	(21.5)
Global Equities	MSCI World Index (Net Dividend Reinvested)	(13.9)
Fixed Income	FTSE Canada Universe Bond Index	0.1

Market Returns July 1, 2019 to March 31, 2020
(reflecting the first 9 months of the Plan year)

Component Asset Class	Benchmark	% Return
Canadian Equities	S&P/TSX Capped Composite Index	(16.36)
Global Equities	MSCI World Index (Net Dividend Reinvested)	(6.15)
Fixed Income	FTSE Canada Universe Bond Index	1.9

2. What are the net investment results thus far for the Brock University Pension Plan in the current Plan year?

The Plan's net monthly rates of return are available on the University's pension web site brocku.ca/human-resources/pension/ throughout the Plan year. The known rates to date are in the table below.

Plan Returns July 1, 2019 to March 31, 2020
(reflecting the first 9 months of the Plan year)

Month	% Return
July 2019	0.3243
August 2019	0.6319
September 2019	0.4883
October 2019	0.3717
November 2019	2.1820
December 2019	0.1722
January 2020	1.2893
February 2020	(2.0437)
March 2020	(4.4264)
Cumulative Rate of Return	(1.1620)

3. **When will I have an idea of what the July 1, 2020 pension adjustment will be?**
All monthly rates of return for the Plan year must be known before adjustment calculations can begin. The June rate of return is normally finalized during the third week of July, once the Plan's custodian has prepared financial statements for each fund manager. Following that, there is additional time required for the actuary to complete the adjustment calculations, update and review values in applicable data systems and prepare communications.

Monthly rates of return will continue to be posted on the University's web site so that members can be aware of the Plan's performance over the last three months of the Plan year.

4. **Given that the pension adjustment is not known until after July 1st, when will my monthly pension deposit be impacted?**

Although the adjustment is effective July 1st, the actual change to a pensioner's payment occurs with the October 1st payment, and has a retroactive component for the 3 month period July to September. If the adjustment is positive, any retroactive payment owing to the pensioner is paid with the October 1st payment. If the adjustment is negative, any retroactive amount owed back by the pensioner, related to the overpayment, is deducted from payments over the next 9 months (October to June). Given this, it is important to plan for potential changes in pension amounts. As outlined in item 2 in this document, the net rate of return for the Plan as at March 31, 2020 is (1.1620). Unless there are positive net rates of return over the last three months of the Plan year that produce an overall rate of return greater than 6%, Money Purchase Pension amounts will decrease (before consideration of mortality experience). At the time this document was prepared, applicable equity and bond indices for the month of April were positive, however the Plan's rate of return for April is unknown.

5. **How are pension amounts adjusted?**

The Plan is a hybrid pension plan, composed of both a Defined Contribution component (Money Purchase Pension "MPP") and a Defined Benefit component (Minimum Guaranteed Pension "MGP"). At pension commencement, the MPP and MGP are calculated, and the pensioner receives the greater of the two pension amounts. For clarity, the MGP serves as a "floor"; the pensioner will never receive an amount less than their MGP amount. If a pensioner has a MGP that is greater than their MPP, they receive a MGP supplement to make up the difference between the MGP and MPP amount to ensure that the pension amount they receive is not less than their MGP amount. For example, if a pensioner's monthly MPP amount is \$2,000 and their monthly MGP amount is \$2,200, the pensioner receives their MPP amount of \$2,000 plus a MGP supplement of \$200 to bring their payment to \$2,200.

Both pension amounts (MPP and MGP) are adjusted effective July 1st of every year and pensioners will receive the greater of their two amounts for the next 12 months. Pensioners receive a letter every year in September that provides the new MPP and MGP amounts for that pension year. A review of how the two pension amounts are calculated at pension commencement date and adjusted every July 1st is below. It is important to note that every pensioner's employment and pension related data used in the calculations is different and the examples are for illustrative purposes only.

Money Purchase Pension

Calculation at pension commencement

At pension commencement the starting MPP is calculated as the amount of pension that a member's Money Purchase Account (MPA) can purchase.

It is calculated as follows:

Total Money Purchase Account Balance at Pension Commencement
divided by
Annuity cost of \$1 annual lifetime pension

Example:

Member's age at pension commencement date:	65
MPA Balance at pension commencement date:	\$450,000
Annuity cost of \$1 annual lifetime pension:	12.1502

Annual MPP: $\$450,000 / 12.1502 = \$37,036.43$

The above pension is payable for the life of the member, with a guarantee that the pension payments will continue to be made for at least 5 years. If a member elects a different form of pension, the pension amount is actuarially adjusted according to the pension form elected by the member (i.e. the amount of a Joint & Survivor Pension is less than that of a Life Pension, guaranteed 5 years). This pension, together with other pensioner's MPP payments is paid from the Plan's variable annuity fund, which must be self-sustaining in total.

Annual adjustment

The MPP is adjusted annually, starting with the July 1st pension payment following pension commencement. The adjustment is based on the difference between the actual investment and mortality experience of the pension fund during the preceding Plan Year vs the rate of return and mortality assumed in determining the monthly pension. Periodically, there may also be an adjustment related to a change in mortality table. The current fund rate of return assumption is 6%. As such, before taking into account any mortality related adjustments, the pension fund must earn 6% to maintain a constant pension. Accordingly, the MPP amount will increase or decrease in any given year. Below is a chart showing Money Purchase Pension adjustments for the last 12 Plan years:

Pension Plan year ending	Net fund rate of return (%)	Adjustment for rate of return (%)	Adjustment for mortality (%)	Adjustment for change in mortality table (%)	MPP adjustment (%)
June 30, 2019	8.3413	2.3413	0.2851		2.6264
June 30, 2018	8.3453	2.3453	(0.5230)		1.8223
June 30, 2017	9.6688	3.6688	(0.0233)	(3.4858)	0.1597
June 30, 2016	3.1421	(2.8579)	0.5425	(1.5491)	(3.8645)
June 30, 2015	9.5487	3.5487	(0.5040)		3.0447
June 30, 2014	15.8129	9.8129	(1.0564)		8.7565
June 30, 2013	10.2725	4.2725	0.3659		4.6384
June 30, 2012	1.9658	(4.0342)	0.4241		(3.6101)
June 30, 2011	12.5885	6.5885	0.5217	(3.845)	3.2652
June 30, 2010	7.5145	1.5145	0.2821	(2.8434)	(1.0468)
June 30, 2009	(15.2114)	(21.2114)	(0.5737)		(21.7851)
June 30, 2008	(1.7586)	(7.7586)	0.3471		(7.4115)

Minimum Guaranteed Pension

Calculation at pension commencement

At pension commencement the starting MGP is calculated as 1.7% of a member's 5 years of best average earnings multiplied by years of pensionable service, reduced by 1/35th of the CPP benefit for each year of pensionable service (service capped at 35 years), subject to Income Tax Act maximum pension limits in the year of pension commencement.

Example:

Age at retirement:	65
Date of retirement:	June 30, 2019
Best Average Earnings:	\$61,000
Pensionable Service:	29 years
Final Average Yearly Maximum Pensionable Earnings:	\$55,420

$$\text{Annual MGP} = (1.7\% \times \$61,000 \times 29) - 1/35 \times (25\% \times \$55,420 \times 29) = \$18,593$$

The above pension is payable for the life of the member, with a guarantee that the pension payments will continue to be made for at least 5 years. If a member elects a different form of pension, the pension amount is actuarially adjusted according to the pension form elected by the member. (i.e. the amount of a Joint & Survivor Pension is less than that of a Life Pension, guaranteed 5 years).

Annual adjustment

The MGP is adjusted annually, starting with the July 1st pension payment following pension commencement, by the Consumer Price Index to a maximum of 2.0%, cumulative from pension commencement date.

Below is a chart of Consumer Price Index (CPI) values for the last 12 Plan years:

Pension Plan year ending	CPI (%)	Pension Plan year ending	CPI (%)
June 30, 2019	1.42	June 30, 2013	0.94
June 30, 2018	1.88	June 30, 2012	2.40
June 30, 2017	1.46	June 30, 2011	2.51
June 30, 2016	1.40	June 30, 2010	0.75
June 30, 2015	1.50	June 30, 2009	1.65
June 30, 2014	1.43	June 30, 2008	2.16

6. Which pension formula has historically produced the higher pension amount - the money purchase formula or the minimum guarantee pension formula?

Historically, the money purchase formula has produced the higher pension both at pension commencement and during the continuing lifetime for the majority of Brock pensioners.

This outcome is the result of several factors:

- . Investment returns credited to member money purchase accounts and the variable annuity fund
- . Wage increases during working years
- . Size of the minimum guaranteed pension relative to contributions being made to the money purchase component account

7. I am also receiving a pension amount related to Additional Voluntary Contributions or Special Transfer Contributions. How will that amount be impacted?

Pension amounts related to Additional Voluntary Contributions and Special Transfer Contributions are adjusted annually in the same manner as Money Purchase Pensions. There is no Minimum Guaranteed Pension associated with these pension amounts.

8. Is it likely that more pensioners will begin receiving their Minimum Guarantee Pension, as opposed to their Money Purchase Pension, with the July 1, 2020 adjustment?

Unless there are some sustained positive Plan returns over the last three months of the Plan year (April to June), it would be expected that more pensioners will begin receiving a Minimum Guarantee supplement this year, as their MGP amount will become greater than their MPP amount.

9. **How many pensioners currently receive a MGP supplement?**
As at July 1, 2019, there were 441 pensioners, of which 67 were receiving a MGP supplement. The total amount of monthly MGP supplement paid to the 67 pensioners was \$18,605. The amount of MGP supplement is different for each individual, as each pensioner has different MPP and MGP amounts, however the average monthly MGP supplement for the 67 pensioners was \$277.69.
10. **What is my current MPP and MGP amount?**
The annual pension adjustment letter sent in September of each year shows your adjusted pension amounts for your MPP and MGP. Note that pensioners who began receiving their pension in the current Plan year (July 1, 2019 or later) will receive their first annual pension adjustment letter in September 2020.
11. **Who guarantees the Minimum Guaranteed Pension for pensioners?**
The University is responsible for funding the Minimum Guarantee Fund from which the MGP supplemental payments are made for pensioners who have a MGP that exceeds their MPP. Actuarial reports are prepared at regular prescribed intervals to determine the required University contributions for the Minimum Guarantee Fund and are filed with pension regulators. These payments are a contractual obligation, which is met as necessary by the University. Payments related to the defined benefit portion of the Plan are budgeted and paid for from the University's operating funds.
12. **What is the current investment structure of the fund and who are the fund managers?**
As per the Plan's Statement of Investment Policies and Procedures (SIPP), the chart below outlines the Plan's current investment structure:

Asset Class	Allocation	Fund Manager	Allocation/Manager
Equities:			
• Canadian *	0%		
• Global	52.5%	Walter Scott Mawer C WorldWide	21% 21% 10.5%
Fixed Income	32.5%	AllianceBernstein	32.5%
Real Assets			
• Real Estate	10%	Morgan Stanley Prudential	5% 5%
• Infrastructure	5%	IFM	5%

** Specific Canadian Equity allocation was removed from the Plan in December 2019; however, Canadian stocks are part of the investment universe for Global Equity managers*

The fund is well diversified and invested by professional fund managers, according to the Plan's Statement of Investment Policies and Procedures. The global equity managers in place have an emphasis on capital preservation during down markets. Through the volatility, the managers are committed to "staying the course" and finding investment opportunities in alignment with their investment processes.

13. Who monitors the performance of the fund?

The Pension Committee, as part of its mandate, has responsibility to monitor fund performance. Pension Committee members are being very diligent on behalf of pension plan members in their governance responsibilities regarding the Pension Plan in these unpredictable market conditions. The Pension Committee is continuing to monitor the performance of the Plan against benchmarks. They will examine reasons why managers do not meet benchmarks and make every effort to understand how the fund managers are positioning themselves for the future. This includes reviewing and analyzing fund reports and meeting with fund managers, as necessary. The Plan's investment consultant prepares a very detailed performance analysis bi-annually and a performance brief for quarters in-between the bi-annual reports. The Financial Planning and Investment Committee of the University's Board of Trustees is also kept apprised of the fund's performance, briefed on the impact of market conditions and receive reports, as necessary. A performance report is also presented to Plan members at the annual pension meeting each year.

14. Who do I contact for information regarding my pension?

As always, pensioners can contact Pension staff at pension@brocku.ca or 905-688-5550 extension 3186 regarding pension related matters. Pension documents such as the Plan booklet, Annual Pension Reports and Annual Financial Statements are located on the University's pension web site: brocku.ca/human-resources/pension/.