Attachment-1

RIC
RODGERS INVESTMENT CONSULTING

Analysis of Long-Term Investment Options

December 2020

Contents

Analysis of Investment Options

Guelph currently invests funds not needed immediately in accordance with section 418 of the Municipal Act and Part I of Ontario Regulation 438/97 (referred to throughout this report as the legal list) and is now considering whether it should move to a Prudent Investor (PI) regime.

Legal List Investments

As of June 30, 2020 Guelph held approximately $220 million in long-term investments. Of this amount approximately 70% was Self Managed and approximately 30% was held in ONE Investment portfolios.

Self Managed Investments

In the 70% of the long-term investments that are self managed Guelph staff make the decisions on what to invest in. These decisions are made with the advice of a number of Financial Advisors from various Investment Dealers. These Investment Advisors are not authorized to manage portfolios on a discretionary basis and are held to a Suitability Standard (recommendations must be suitable).

ONE Investment Portfolios

The 30% of the long-term assets that are held in the ONE Investment Portfolios comply with the Legal List and are managed on a discretionary basis by firms registered as Portfolio Managers. Due to the discretionary nature of these portfolios these firms are held to a Fiduciary Standard of Care and must act in the client's best interest.

Legal List Cost Comparisons

To determine which of these two approaches has been better for Guelph we examined both the cost of each option and the returns earned.

From a cost perspective it may appear that the ONE option is more expensive since the fees are clearly disclosed and fully transparent. The fees are charged as a percentage of assets and the portfolios' full compliance with the legal list are guaranteed by ONE Investment. The following fees apply to each of the ONE portfolios and these fees include investment management, custody, compliance and administrative costs.

ONE Government Bond – 0.40%

ONE Corporate Bond – 0.45%

ONE Canadian Equity – 0.60%

By contrast there is no fee applied by the Investment Dealers to the self managed portions of the portfolio. Compensation to the Investment Dealers is embedded in initial price of the security and is not disclosed. Staff time is also required for this component but no estimate of staff cost has been made for the purpose of this report.

Legal List Return Comparisons

For the return comparisons we requested time weighted rates of return from each of the Investment Dealers so that it could be compared to the time weighted rate of return of the ONE portfolios, net of fees. This detailed analysis is included in Appendix One.

To calculate the approximate return of the self-managed portfolios we used a weighted average based on the allocation of each Investment Dealer to the short, mid, and long-term bond sectors.

Overall, it appears that significant value could be added by expanding the professionally managed component of the portfolio given the strong and less volatile returns as demonstrated through the comparators.

PI Regime

Guelph now has the ability to opt in to the Prudent Investor Standard for its long-term investments either by establishing its own Investment Board (IB) or joining a Joint Investment Board (JIB).

If establishing an IB or joining an existing JIB the City establishes its own Investment Policy and the IB or JIB then implements that Policy.

Costs to Establish an Investment Board

There are significant costs involved in establishing and running an IB. In 2017 the City of Toronto approved a budget of $557,000 to establish its IB. This amount included $135,000 of staff time and support and $72,500 in Board member remuneration based on an anticipated five meetings in 2017. The document can be found at https://www.toronto.ca/legdocs/mmis/2017/ex/bgrd/backgroundfile-101513.pdf [1].

It is likely that Guelph could establish an IB for less money, particularly if Toronto was willing to share their experience and learnings. However, it would be prudent to estimate the up-front costs at $250,000 to $300,000 at a minimum and $600,000 at a maximum. These costs would be incurred to recruit members of the Board, conduct robust investment manager searches, develop governance documents and administrative procedures, as well as legal fees to review all documentation.

The ongoing costs of an IB would normally be offset against investment earnings. Toronto's estimated annual costs are approximately $215,000 per annum. These annual costs include Board Compensation and administration. They do not include investment management and custodial fees which are offset against investment earnings. While Guelph's costs could be somewhat lower in absolute dollars it would likely be higher when measured as a percentage of assets. Toronto's long-

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[1] 2017.EX23.2 Report for Action, Executive Committee. Establishment of an Investment Board Attachment #2

term General Fund investments were approximately $3 billion in 2019 which would give them significant fee negotiating power with their external managers, compared to Guelph's approximately $220 million in long-term funds.

An IB may also present challenges in recruiting members of sufficient expertise and experience. The following excerpt from a City of Toronto Report (February 21, 2017) indicates the qualifications required of members.[2]

> D. Qualifications of Members
>
> It is important that Investment Board members are experienced and skilled to help ensure high quality decision-making consistent with their fiduciary responsibilities. The qualification of members is particularly important given the amount of the portfolio they will be responsible to invest and their delegation of authority in this regard.
>
> Public members of the Board shall collectively represent a range of skills, knowledge and experience to discharge their duties in an effective manner including:
>
> • Executive level experience in a major public or private organization;
>
> • Senior level experience in the investment industry such as the management of institutional portfolios including pension funds, endowments, foundations, mutual funds, and closed-end funds;
>
> • Professional skills relating to investment and/or debt management as well as an understanding of risk and financial administration within the framework of the PI standard;
>
> • Post-graduate degree in any one of the fields of: finance, business, economics, risk management, accounting, public administration or related fields that may include certification such as CFA designation, Canadian Investment Manager Certification or equivalent;
>
> • Possession of sound judgement and knowledge of good governance; and
>
> • Understanding of the principles of public accountability and integrity. A minimum of three (3) board members must have senior level experience in the investment industry such as the management of institutional portfolios including pension funds, endowments, foundations, mutual funds, and closed-end funds.

The senior level experience in the investment industry may be difficult to find outside of Toronto, Montreal and Vancouver.

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[2] Toronto 2017.EX23.2 Report for Action, Executive Committee. Establishment of Investment Board

In order to compare the potential costs of an IB and JIB we will make the following assumptions;

- Average portfolio size - $235 million
- Initial costs to establish an IB - $300,000 to $600,000
- Ongoing annual costs of IB - $150,000 to $225,000
- No staff support costs included
- Annual investment management and custody fees - $750,000 to $850,000*
    - Assumes 25% of portfolio at 0.5% (equity) and 75% of portfolio at 0.25% (fixed income).
- Total ongoing annual costs - $900,000 or 0.38% of $235 million to $1.075 million or 0.457% of $235 million

*In Toronto these costs are incurred but offset against investment earnings and are therefore not disclosed publicly.

These estimates assume that Guelph, on its own, would be able to negotiate management and custody fees similar to what ONE has negotiated. It also assumes that the costs of establishing its own IB could be significantly less than what Toronto incurred. Given the significant difference in portfolio size between ONE and Guelph and between Toronto and Guelph, it would be reasonable to take the high estimate and potentially add a contingency amount.

Joining an existing JIB

If Guelph prefers to join an existing JIB rather than take on the financial costs and potential risks of establishing its own IB the only option currently available is the ONE JIB. ONE Investment has spent over a year developing a JIB with a number of founding municipal partners[3]. ONE has absorbed all of the upfront and initial costs and will recover those over time from the annual fees.

To join the existing ONE Investment JIB there are no initial costs for Guelph to establish the Board, recruit members, undertake a management search or establish governance and administrative frameworks. The annual fees cover the initial set-up and the ongoing cost of operating the JIB. The fees are as follows:

ONE Government Bond – 0.32%

ONE Corporate Bond – 0.37%

ONE Canadian Equity – 0.52%

ONE Global Equity – 0.72%

Assuming the same asset mix of 25% equity and 75% fixed income that is in place currently, this would result in annual fees of approximately $980K or 0.417% of assets. With the exception of the Global Equity, these fees are lower than what is

[3] Whitby, City of Kenora, District Municipality of Muskoka and towns of Bracebridge, Huntsville and Innisfil

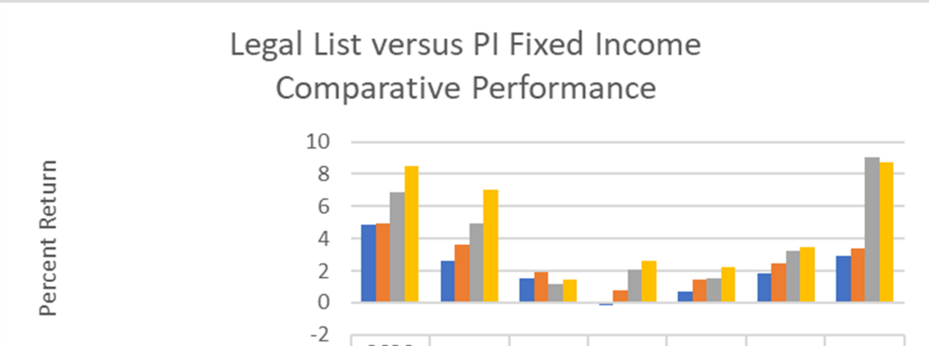
currently charged on the ONE legal list portfolios. We have not included Global Equity in these fee calculations since Global equity is not a permitted investment under the Legal List so there is no available comparison. If Global equity was included the cost would be marginally higher, depending on the size of the allocation, but as discussed later the potential increase in returns would also be significant.

In the best-case scenario establishing its own IB could result in slightly lower annual costs of 0.04% (4 basis points), although Guelph would still incur substantial start-up costs and would have to accept the risk of cost overruns or unexpected costs on an ongoing basis.

At the other end the annual costs could be 0.04% higher (4 basis points) than joining an existing JIB.

Return Comparisons of Legal List and PI

The following charts compare the professional management historic performance between the legal list options and the broad universe of professional management which would be available under PI. Although a Municipality could retain professional management they would still be restricted to the legal list and be unable to access equities directly or the longer-term corporate bonds that ONE can access.



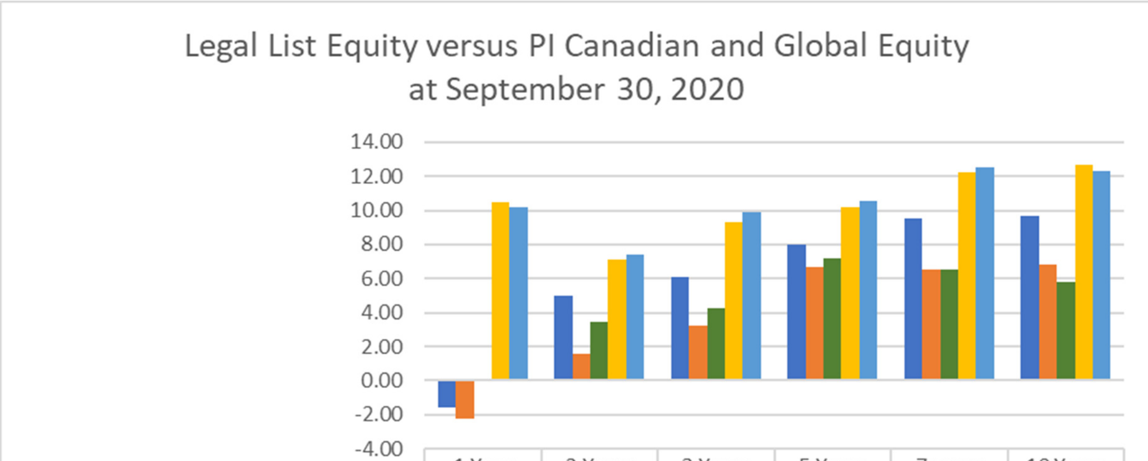
	2020 YTD	2019	2018	2017	2016	2015	2014
Legal List Short Term - ONE	4.9	2.61	1.51	-0.2	0.7	1.9	2.9
PI - Median Short Term Bond	4.95	3.62	1.95	0.77	1.5	2.49	3.43
Legal List Universe - ONE	6.9	4.96	1.16	2.05	1.56	3.25	9.02
PI - Median Universe Bond	8.51	7.01	1.46	2.64	2.21	3.51	8.71

Within the short-term fixed income sector, the PI approach, represented by the Median Short Term Bond performance has performed better than the Legal List performance, represented by the ONE Short Term Government Bond Fund.

The Median Universe Bond performance, which includes bonds with longer dated maturities, is the performance of the institutional investment manager ranking at the 50th percentile. The Median Universe manager has outperformed the legal list manager in all time periods with the exception of 2014.

The reason for this outperformance is the wider availability of fixed income securities, especially corporate issues and the greater flexibility of maturity dates. All bonds held within all portfolios are Investment Grade rated.

Including Global equities, which can only be done under the PI regime, would have also improved performance[4]. All returns in the equity charts are presented in Canadian dollars and are gross of fees in order to provide direct comparisons.



	1 Year	2 Years	3 Years	5 Years	7 years	10 Years
Legal List ONE Equity	-1.61	5.01	6.10	8.00	9.52	9.65
PI Median Canadian Equity	-2.27	1.54	3.24	6.67	6.53	6.82
PI TSX Composite Total Return Index	-0.03	3.46	4.26	7.16	6.54	5.8
PI Median Global Equity	10.51	7.11	9.30	10.18	12.23	12.67
PI MSCI World Index	10.19	7.42	9.89	10.58	12.51	12.33

We don't know what the future returns will be but based on history we can expect global equity markets to outperform Canadian equity markets on a risk adjusted basis.

Global equity markets are more diversified than Canadian equity markets providing investors with a broader array of large companies for investors to select from. In addition, the Canadian equity markets are heavily biased toward the Financials, Materials (including gold) and Energy sectors resulting in a more commodity-based investment environment. The following table demonstrates the different equity market sector structures.

Sector	**MSCI World Weighting**	**S&P TSX Composite Weighting**
Information Technology	21.6%	10.3%
Healthcare	13.5%	0.9%

[4] *Legal List equity investments include restrictions which exclude some securities within the broader Canadian equity universe*

Sector	MSCI World Weighting	S&P TSX Composite Weighting
Financials	12.1%	28.4%
Consumer Discretionary	11.9%	3.5%
Industrials	10.4%	12.5%
Communication Services	9.2%	5.2%
Consumer Staples	8.1%	4.4%
Materials	4.5%	15.5%
Utilities	3.4%	5.3%
Real Estate	2.8%	3.2%
Energy	2.4%	10.8%

The Sharpe Ratio is a common method of measuring return per unit of risk. It measures the excess return over the risk-free rate per unit of volatility. The higher the number the better. For Canadian equities the Sharpe Ratio is 0.61 over the past 10 years. Global equities had a Sharpe Ration of 1.13 over the same period. The added diversification offered by Global equities would add to the risk adjusted returns.

Conclusions

The detailed analysis contained in Appendix One demonstrates that Guelph would have been better served utilizing the professional management of ONE for the management of the long-term portfolio in accordance with the legal list.

The options for Guelph are as follows:

Comparisons	Control and Management	Investment Options	Initial Costs	Estimated Costs	Internal Admin & Staff Costs	Return Potential
Self-Managed	Guelph	Legal List	None	^Unknown	Unknown	Lower
Legal List Professional Management	Guelph	*Legal List	None	$1.1 mil.	Minimal	Higher
IB	IB	PI	$300K - $600K	$0.9 mil.	Minimal	Highest
JIB	JIB	PI	None	$0.98 mil.	Minimal	Highest

*The Legal List for ONE includes Canadian Equity and longer term corporate Fixed Income

^The cost is embedded in the purchase price and not disclosed.

Guelph would be well served moving to the PI regime. It would offer the opportunity for higher risk adjusted returns and provide professional management of long-term assets.

The decision between an IB or a JIB is less clear cut. The cost of establishing an IB is assumed to be at least $300K but based on the experience of Toronto could be significantly higher. In the case of Toronto, they had a reasonably robust internal investment department to assist in the management of the process and budgeted over $550K. Guelph does not have any resources fully dedicated to investment management – it is part of the jobs of three people in the Finance department.

The difference between the estimated annual costs for either an IB or JIB is relatively small. In the case of a JIB the annual expenses are known and can be easily forecast once the asset allocation has been determined. In the case of an IB these expenses can only be estimated and must be negotiated with each investment manager and custodian.

There is a lower risk of unexpected costs or delays with a JIB since it has already been established.

Appendix One, Return Comparisons

Methodology

The return data in this portion of the report has been obtained from a number of sources.

Information on the returns of the ONE Canadian Equity, ONE Government Short Term Bond and ONE Corporate Bond portfolios, which are legal list professionally managed portfolios, were obtained directly from ONE Investments. These returns are net of management fees and trading expenses.

Information on returns from portfolios held at Investment Dealers (TD, NBF, BMO, & CIBC) were obtained directly from the firms. These are net of trading costs. It is our understanding that there are no management fees for these accounts. Return information was requested only on the marketable securities. The decision to use only marketable securities (which excludes GICs and term deposits) was made to ensure a fair comparison. A portfolio being managed under PI would not use GIC or term deposit investments due to the lack of transparent liquidity and pricing prior to the maturity date. As a result, it would create an unfair comparison, and be biased toward the GIC's during periods of market declines and biased towards the marketable securities during periods of positive returns since GIC's are carried at book value which does not change.

Information on the Median Returns of institutional managers was obtained from Global Manager Research Database, a Canadian Investment Manager and Performance Measurement data base. The firm was established in 1986 and tracks over 300 institutional investment managers.

The bond market is broken into three maturity sectors, short term (1-5 years), mid term (5-10 years) and long term (10+ years).

Performance was compared on a calendar year basis in order to capture the volatility of returns. The year-to-date returns are to September 30, 2020.

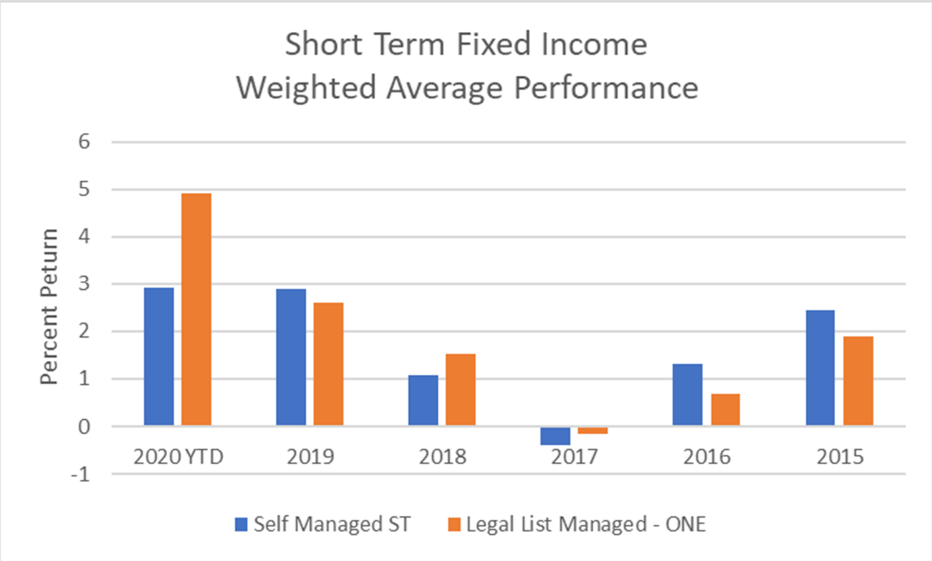
Fixed Income Investments

Guelph utilizes one of the two available legal list fixed income investment strategies offered by ONE Investment, the Corporate Bond Strategy. This strategy allows for longer term corporate bonds than would be available directly to Guelph under the legal list. At September 30, 2020 this portfolio has an exposure of 71% to Corporate Issues with a duration of 5.81 Years and average maturity of 7.57 Years.

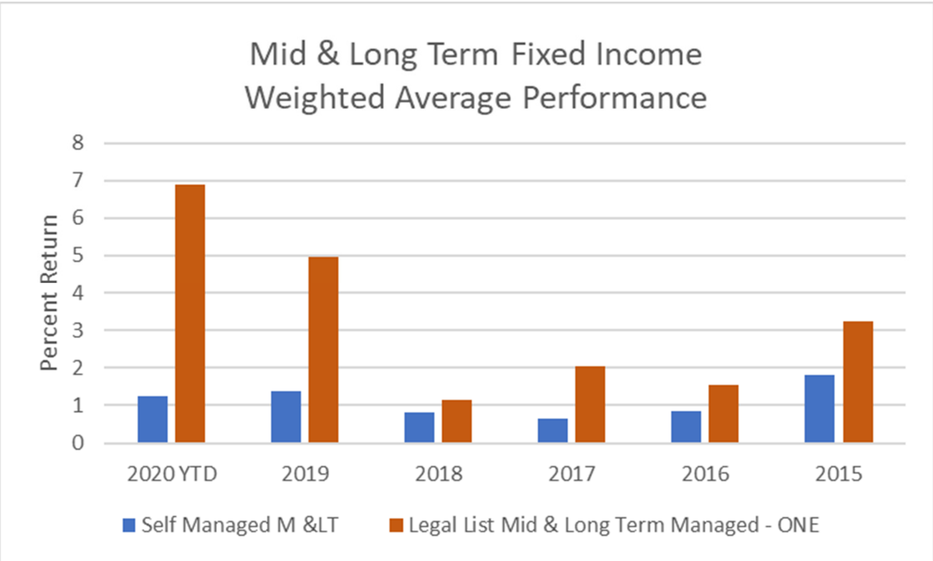
Performance Comparisons

We have estimated the returns for Short Term fixed income and Medium and Long-Term fixed income using a weighted average based on the allocation of funds to each of the term sectors and allocations to the various investment dealers Guelph deals with.

The following charts represent the returns of the fixed income portfolios invested in legal list securities. The Legal List – ONE is the legal list portfolios offered by ONE Investments. The Self-Managed are the portfolios managed by Guelph staff with the advice of the Investment Dealers.

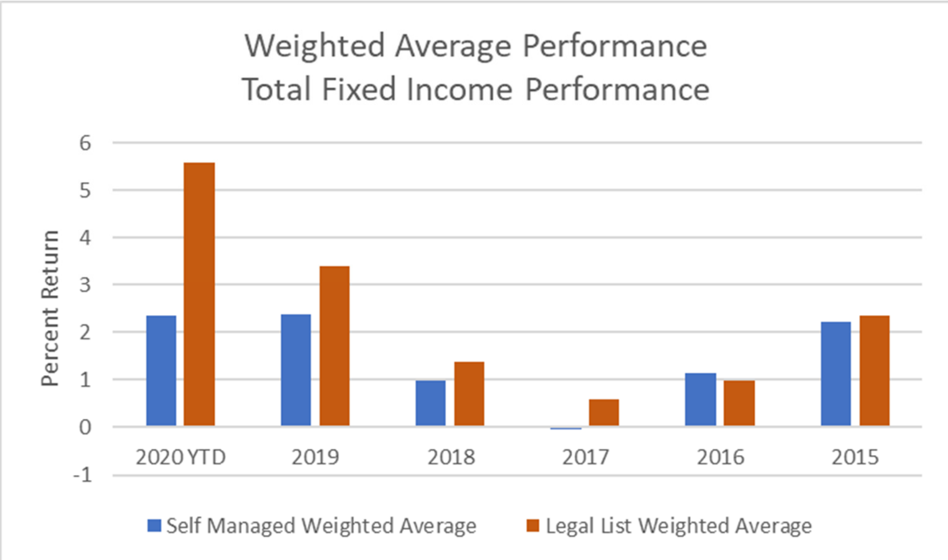


Within the Short Term Fixed Income (those with maturities of 1-5 years), the performance of both components has been similar.



Within the Mid and Long Term components, the Legal List professionally managed portfolio has significantly outperformed the Self Managed component.

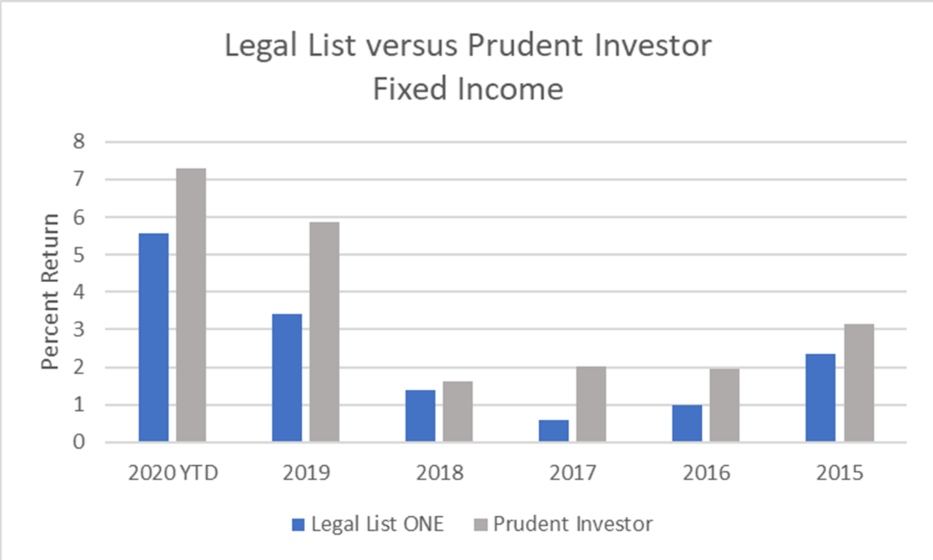
Of the marketable securities, approximately 66% were invested in Short Term issues and 34% were invested in Mid and Long Term securities. The weighted average Total Portfolio estimated performance is shown in the following chart.



This gives a 5-year compounded average return at December 31, 2019 of 1.44% for the Self-Managed portfolio and 1.79% for the Legal List professionally managed portfolio. The result is a 0.35% difference in the average annual performance.

On a portfolio value of $200 million that would represent approximately $698K annually in additional earnings while still remaining with legal list investments.

When considering the difference in returns possible from a move to PI we have used the Fixed Income Median performance of institutional managers in the same 66%/34% allocation. The Median performance is the performance of the manager that ranked at the 50th percentile. All of the securities held in these Median portfolios are investment grade.



In all periods, investing in accordance with a PI regime would have resulted in significantly better fixed income returns.

The five-year annualized performance at December 31, 2019 under a PI regime would have been 2.47% compared to the five-year Legal List of 1.79%, or 0.68% higher return.

On the same hypothetical $200 million portfolio this would have represented approximately an additional $1.36 million on average annually more than on the legal list professionally managed and just over $2 million more than the legal list self-managed portfolio earned.

Equity

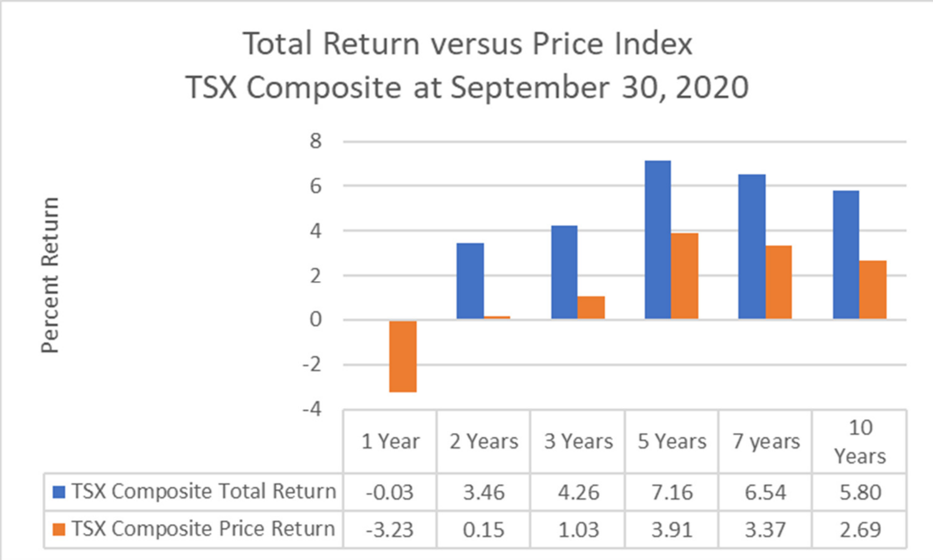
Guelph has invested in a number of equity substitutes using Principle Protected Notes (PPN's) in addition to the ONE Canadian Equity Fund.

The PPN's are linked to the TSX Composite index and the TSX Bank index and have maturity dates ranging from September 2025 to September 2028. These are carried at book value on the CIBC statements.

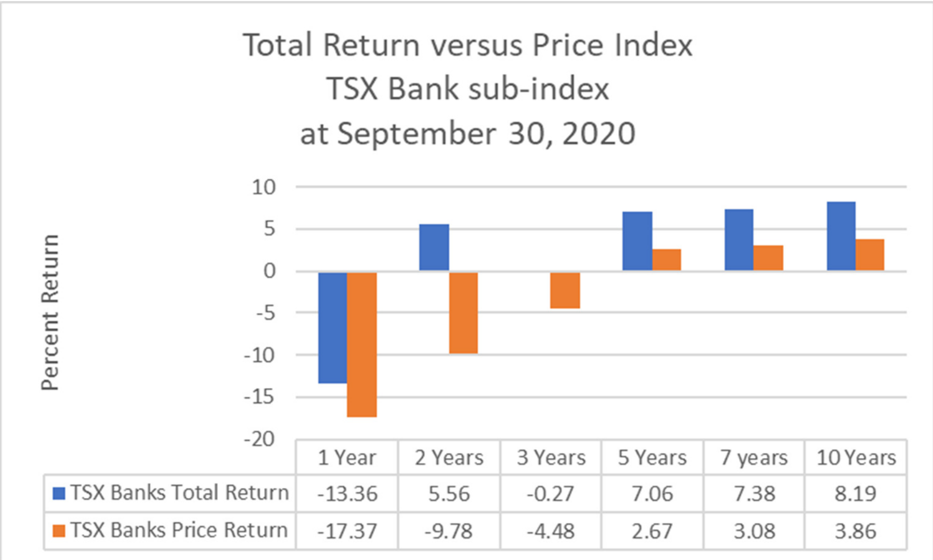
A PPN is a bank deposit note whose return is linked to the performance of a particular stock index. In the case of the four PPN's held by Guelph the index they are linked to is the Price Index, not the Total Return Index which includes dividends. The difference in return between the Price Index and the Total Return Index can be substantial and compounds over time as shown in the following charts.

While a PPN may protect the original capital value of the investment in the short term, this protection is not needed when the maturity dates are more than five years away. They can be sold prior to maturity in the secondary markets but this would normally entail a price that is discounted from the imputed value.

Performance Comparisons



	1 Year	2 Years	3 Years	5 Years	7 years	10 Years
TSX Composite Total Return	-0.03	3.46	4.26	7.16	6.54	5.80
TSX Composite Price Return	-3.23	0.15	1.03	3.91	3.37	2.69

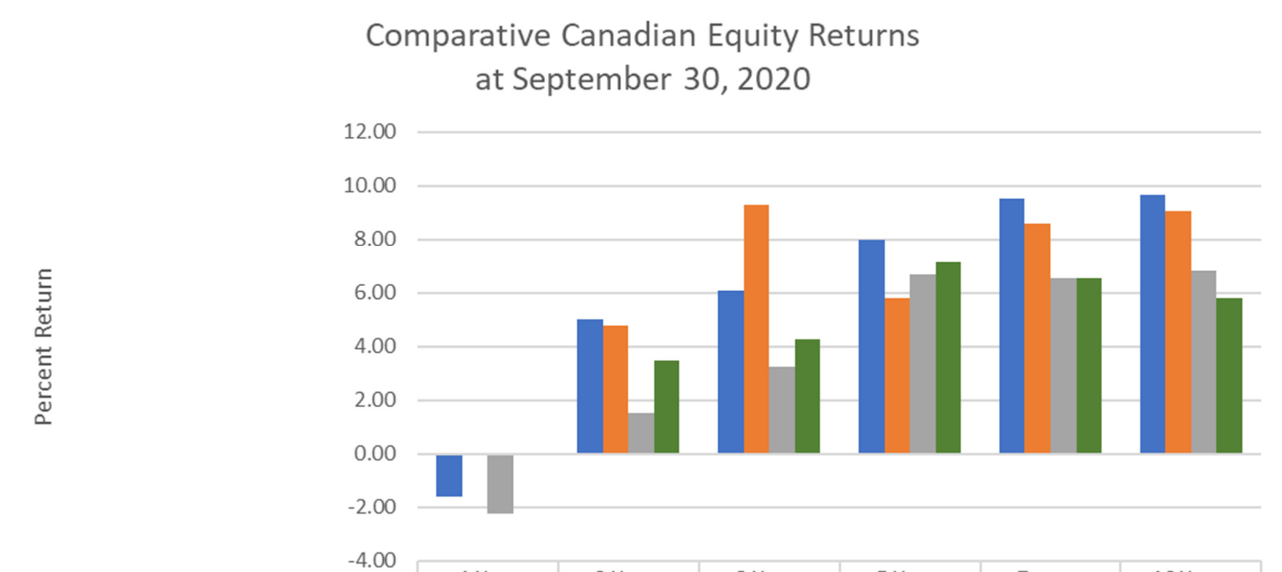


	1 Year	2 Years	3 Years	5 Years	7 years	10 Years
TSX Banks Total Return	-13.36	5.56	-0.27	7.06	7.38	8.19
TSX Banks Price Return	-17.37	-9.78	-4.48	2.67	3.08	3.86

As these charts demonstrate PPN's based on the Price Index will substantially underperform the Total Return Indexes in all periods due to the absence of dividends.

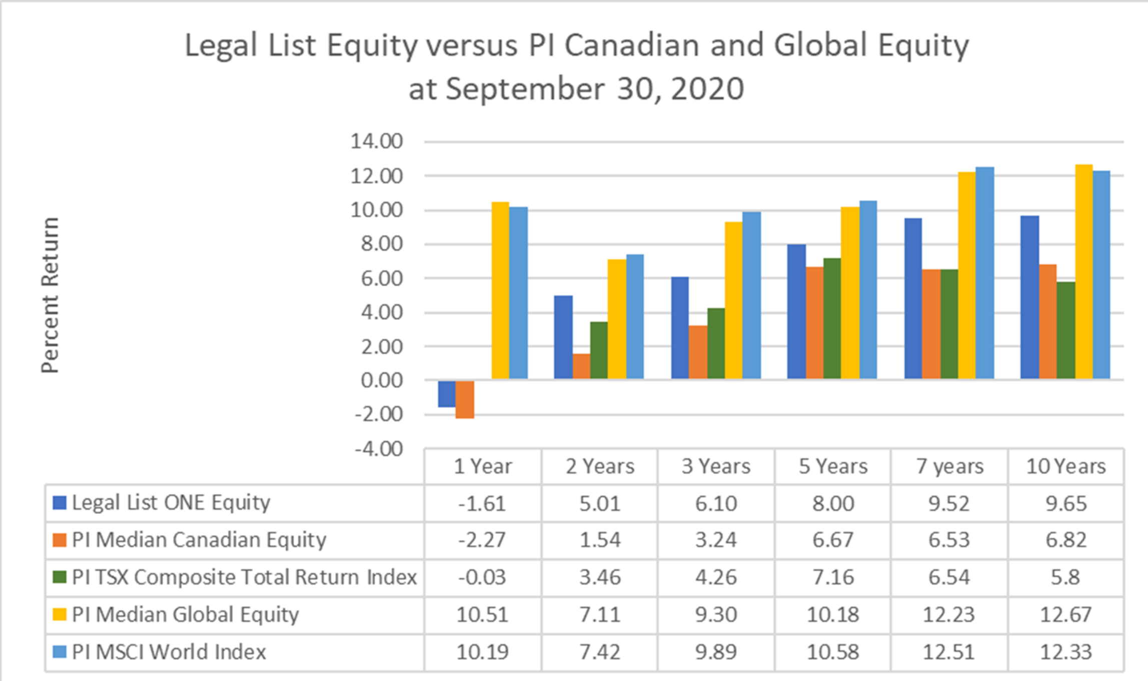
The return of the ONE Equity Fund has been strong since its inception in 2007, despite the sector concentrations of the Canadian equity markets. The following chart shows the return of the ONE Equity fund compared to the fund's custom benchmark and the TSX Composite Total Return Index, the TSX Composite Price Return Index and the Median Canadian equity institutional fund.

The ONE equity fund is the only equity investment that complies with the legal list.



	1 Year	2 Years	3 Years	5 Years	7 years	10 Years
Legal List ONE Equity	-1.61	5.01	6.10	8.00	9.52	9.65
ONE Benchmark	-0.03	4.78	9.28	5.78	8.60	9.04
PI Median Canadian Equity	-2.27	1.54	3.24	6.67	6.53	6.82
PI TSX Composite Total Return Index	-0.03	3.46	4.26	7.16	6.54	5.8

The current legal list does not allow for equity investments outside of Canadian corporations. Non-Canadian investment would be allowed under PI. Historically non-Canadian equity investments have provided for greater diversification and exposure to industries not available in Canadian markets. These benefits have resulted in significantly higher returns from global equities, when measured in Canadian dollars.



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Conclusions

Within the legal list investments, the self-managed and professionally managed short term portfolio have had a similar performance profile. However once the investments are extended to the mid and long term sectors of the fixed income markets, the professionally managed legal list performance was significantly better.

But when we consider the option of moving to PI, the ability to earn significantly higher risk adjusted returns, in both fixed income and equity, becomes apparent.