



REPORT

To: ONE Joint Investment Board
From: Keith Taylor, Chief Investment Officer, ONE Investment
Date: February 17, 2021
Re: Updating Investment Return Assumptions in the Outcomes Framework
Report: 21-004

1. RECOMMENDATIONS

It is recommended that the Board:

1. Approve the following revised investment return assumptions to be used in the ONE Joint Investment Board Outcomes Framework:

Asset Class / Fund	Annual 10-yr Compound Return Assumptions	
	Current Assumptions	Revised Assumptions
91-day T-Bills // HISA	0.92%	0.15%
Canadian Equity Fund	6.00%	6.00%
Global Equity Fund	6.10%	6.10%
Canadian Government Bond Fund	2.10%	0.88%
Canadian Corporate Bond Fund	2.20%	1.09%
Global Bond Fund	3.60%	3.00%

2. SUMMARY

Dramatic dislocations in the financial markets in 2020 have impacted the outlook for investment returns, especially for fixed income assets. The ONE Joint Investment Board (ONE JIB) Outcome Framework contains projected returns that are used in the Investment Plans of Participating Municipalities. The report proposes updated return assumptions.

3. BACKGROUND

The current return assumptions are based on a study by Aon, a consultant

In May 2019, an investment consultant, Aon, provided an asset allocation study that detailed

investment returns, correlations, and variances of various asset classes. The details of this study were used to build the investment allocations for the outcomes in the ONE JIB Outcome Framework that was adopted on May 20, 2020. Additionally, the forward-looking return assumptions provided by AON gave guidance for the returns that were associated with the Outcome Framework.

Over the last year, there has been a notable change in the investment outlook and, in particular, the interest rate environment has changed considerably. On a forward-looking basis, interest rates are expected to be sharply lower than the assumptions provided by AON in their study.

This report updates the return assumptions that are associated with the Outcome Framework to ensure they are more reflective of the current environment and outlook.

4. ANALYSIS

The investment return assumptions for the outcome framework will be comprehensively revised at a later date

This report has a limited objective: to revise fixed income return assumptions that are clearly outdated and no longer reflects reasonable long-term expectations. A more comprehensive update of the return assumptions could be carried out in the future, potentially provided by an external consultant that updates the return, variance and correlation details of all the relevant asset classes. Until this is done, the existing asset allocation study will continue to be used, with only the fixed income return assumptions being revised.

The return assumptions for the fixed income funds revised to reflect the lower interest rate environment.

The yield on both 2-year and 10-year Government of Canada bonds was approximately 1.7% on December 31, 2019. By the end of 2020, the 10-year bond yield had dropped to 0.67% and the 2-year bond yield had dropped to 0.2%. The decrease in bond yields has been more pronounced for shorter duration bonds. It is appropriate for the forward-looking returns used in the Outcome Framework to be revised lower to reflect more realistic assumptions for fixed income returns. Returns on cash-like securities have similarly been reduced to reflect the new interest rate outlook.

Equity returns and variance-covariance assumptions remain unchanged

There is insufficient information to assess how changes in the capital market environment and growth assumptions will affect long-term equity returns. It is reasonable to assume that lower interest rates imply higher equity valuations (theoretically the price-earnings ratio will tend to go up as interest rates fall). It is also reasonable to expect that the pandemic could reduce future earnings growth. These two forces should theoretically have opposite impacts on equity returns.

While it may be clear that future long-term bond returns are likely to be lower, with movements in the yield curve providing some guidance in making a projection, it is much less clear if equity return assumptions should be lowered or raised, and by what magnitude. For this reason, the

equity returns used in the Outcome Framework have not been changed.

The swings in financial markets over the last year dramatically affected both volatility and correlations and reflect a crisis. Updating the Asset Allocation Study to include more recent gyrations in the markets is likely to distort the correlations and volatility used in the study and is not likely to improve the analysis or conclusions. For this reason, the variance-covariance matrix provided by AON in May 2019 remains appropriate for use in the Outcome framework.

Changes in the return assumptions for the funds imply corresponding changes in the expected returns for the outcomes in the Outcome Framework

Table 1 shows the assumptions used in the Outcomes Framework that was adopted by the ONE JIB on May 20, 2020, along with the proposed revised assumptions. The key difference is lower returns for fixed income investments, particularly the shorter maturity exposures. The returns for the Global Bond Fund have been reduced less than the other fixed income funds. The Global Bond Fund is less likely to be affected by the lower interest rate environment than a traditional bond fund, because it uses an unconstrained fixed income approach where returns are less dependent on the level of prevailing interest rates than traditional fixed income mandates. This type of mandate allows the positioning of the fund to deviate significantly from traditional bond benchmarks allowing the manager to select investments based on return potential. This means the manager has much greater flexibility to generate returns regardless of the interest rate environment.

Table 1: Proposed change in Fund Return Assumptions

Asset Class / Fund	10-yr Compound Return Assumptions		Annual Standard Deviation
	Current Assumptions	Proposed Assumptions	(Unchanged)
91-day T-Bills // HISA	0.92%	0.15%	1.30%
Canadian Equity Fund	6.00%	6.00%	12.60%
Global Equity Fund	6.10%	6.10%	10.40%
Canadian Government Bond Fund	2.10%	0.88%	1.80%
Canadian Corporate Bond Fund	2.20%	1.09%	3.40%
Global Bond Fund	3.60%	3.00%	4.00%

The proposed changes in investment return assumptions for the funds affect the returns for the Outcome Framework. While the standard deviations and correlations in the Outcome Framework are assumed to be unchanged, the returns are lower. Table 2 provides current and revised returns for the Outcomes Framework.

Table 2: Returns Assumptions of Outcomes with Proposed change in Fund Returns

Outcome	10-yr Compound Return Projections	
	Current Projections	New Projections
Cash Outcome	0.92%	0.15%
Stable Return Outcome	3.81%	3.27%
Contingency Outcome	4.91%	4.60%
Asset Management Reserves Outcome	5.78%	5.70%
Target Date 3-5 Year Outcome	3.01%	2.31%
Target Date 5-10 Year Outcome	4.62%	4.23%
Target Date 10+ Year Outcome	5.34%	5.15%

Changed return assumptions may have implications for investment allocations

The investment allocations associated with the Outcome Framework were built on a set of assumptions that are now being altered. It may be appropriate to review these investment allocations to ensure they remain appropriate. As appropriate the Outcome Framework can be modified to incorporate any changes in the investment assumptions. This should be reviewed by the ONE JIB separately at a later date.

5. CONCLUSION

The return assumptions for the ONE JIB's funds and the Outcome Framework should be updated to reflect significant changes in the capital markets outlook, especially for fixed income securities. These projections are used in Investment Plans of Participating Municipalities and are relevant for municipalities that may consider joining the ONE JIB.

Drafted by: Keith Taylor, Chief Investment Officer

Approved for submission by: Judy Dezell and Donna Herridge - Co-Presidents/CEO