**Portfolio 3**

Medium Risk Portfolio. Quarterly Report.

|  |  |
| --- | --- |
| Account Balance, CAD (as of June 1, 2019) | 449040.1 |
| Account Opening Date | April 1, 2014 |
| Initial Amount Invested | $200,000 |
| Cash Contribution, CAD (semi-annual) | $20,000 |
| Total Return since Inception (annualized) | 16.7% |

Graph of Portfolio growth

Investment Objectives

|  |  |
| --- | --- |
| Investment Tenure | 5 years |
| Target Wealth, CAD (without additional contributions) | $300,000 |
| Desired Probability of Reaching Target Wealth | 75% |
| Minimum Acceptable Wealth, CAD | $100,000 |
| Probability of Maintaining Minimum Wealth | 95% |

Portfolio Composition

Bar Chart of Weights

|  |  |
| --- | --- |
| Security Ticker | Number of Shares Held as of June 1, 2019 |
| MRD.TO | 2583.7 |
| CIM.AX | -677.9 |
| GAPSX | 3662.2 |
| LNC | -306.9 |
| KNEBV.HE | 382.7 |
| HBD.TO | 3076.4 |
| HGU.TO | 2303.6 |
| OIH | -1835.4 |
| RIT.TO | 9173.0 |
| EMB | 1046.8 |
| DJI\_365\_17000\_P | 18 |

Pie Chart of Absolute Percentage Exposure to Asset Class

Pie Chart of Absolute Percentage Exposure to Country

Pie Chart of Absolute Percentage Exposure to Sector

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Security Ticker** | **Instrument Type** | **Asset Class** | **Country** | **Sector** |
| MRD.TO | Equity | Equity:CAD | Canada | Real Estate |
| CIM.AX | Equity | Equity:AUD | Australia | Industrials |
| GAPSX | Equity | Equity:USD | NaN | NaN |
| LNC | Equity | Equity:USD | United States | Financial Services |
| KNEBV.HE | Equity | Equity:EUR | Finland | Industrials |
| HBD.TO | Equity | ETF:FixedIncome | CAD | NA |
| HGU.TO | Equity | Equity:CAD | CAD | NA |
| OIH | Equity | Equity:USD | USD | NA |
| RIT.TO | Equity | Equity:CAD | CAD | NA |
| EMB | Equity | ETF:FixedIncome | USD | NA |
| DJI\_365\_17000\_P | Equity | VOL:US | USD | NA |

Return Metrics

Graph of Portfolio Growth vs Benchmark

Account Balance

|  |  |
| --- | --- |
|  | CAD (as of June 1, 2019) |
| Portfolio | 449040.1 |
| Benchmark[[1]](#footnote-1) | 554461.9 |
| Portfolio w/o Rebalancing | 478173.0 |
| Benchmark w/o Rebalancing | 518813.3 |
| Portfolio w/o Cash Contributions & Rebalancing | 273225.6 |
| Benchmark w/o Cash Contributions & Rebalancing | 311624.1 |

Simple Return, % annualized

|  |  |  |  |
| --- | --- | --- | --- |
|  | Last Quarter | Last Year | Since Inception |
| Portfolio | 28.2% | 24.2% | 17.4% |
| Benchmark[[2]](#footnote-2) | 3.3% | 9.2% | 21.8% |
| Portfolio w/o Rebalancing | 16.1% | 17.2% | 18.9% |
| Benchmark w/o Rebalancing | 3.4% | 10.1% | 20.2% |
| Portfolio w/o Cash Contributions & Rebalancing | 25.8% | 10.2% | 6.7% |
| Benchmark w/o Cash Contributions & Rebalancing | 3.4% | 1.3% | 9.0% |

Money-Weighted Return, % annualized

|  |  |  |  |
| --- | --- | --- | --- |
|  | Last Quarter | Last Year | Since Inception |
| Portfolio | 55.4% | 37.2% | 34.6% |
| Benchmark[[3]](#footnote-3) | 19.7% | 17.7% | 37.8% |
| Portfolio w/o Rebalancing | 38.5% | 28.3% | 35.7% |
| Benchmark w/o Rebalancing | 21.0% | 19.4% | 36.5% |
| Portfolio w/o Cash Contributions & Rebalancing | 73.3% | 28.5% | 26.2% |
| Benchmark w/o Cash Contributions & Rebalancing | 34.8% | 15.3% | 27.5% |

Time-Weighted Return, % annualized

|  |  |  |  |
| --- | --- | --- | --- |
|  | Last Quarter | Last Year | Since Inception |
| Portfolio | 6.6% | 12.7% | 3.7% |
| Benchmark[[4]](#footnote-4) | -10.3% | 1.5% | 9.6% |
| Portfolio w/o Rebalancing | -1.9% | 7.3% | 5.9% |
| Benchmark w/o Rebalancing | -11.1% | 1.9% | 7.9% |
| Portfolio w/o Cash Contributions & Rebalancing | -6.4% | -5.4% | -9.1% |
| Benchmark w/o Cash Contributions & Rebalancing | -19.4% | -10.6% | -5.8% |

Comments about TWR vs MWR, Vol & Ret of benchmark vs Portfolio

Return Attribution by Security

|  |  |
| --- | --- |
| Security | Return Contributed over Last Quarter,  % annualized |
|  |  |
|  |  |
|  |  |

Return Attribution by Currency

|  |  |
| --- | --- |
| Currency | Return Contributed over Last Quarter,  % annualized |
| AUD | 0.006% |
| CAD | 0% |
| EUR | 0.03% |
| USD | 1.1% |

Risk Metrics

Volatility, % annualized

|  |  |  |  |
| --- | --- | --- | --- |
|  | Last Quarter | Last Year | Since Inception |
| Portfolio | 4.7% | 8.9% | 11.8% |
| Benchmark[[5]](#footnote-5) | 15.6% | 15.0% | 12.3% |
| Portfolio w/o Rebalancing | 2.8% | 7.3% | 9.6% |
| Benchmark w/o Rebalancing | 9.9% | 10.6% | 10.4% |
| Portfolio w/o Cash Contributions & Rebalancing | 4.7% | 6.9% | 8.6% |
| Benchmark w/o Cash Contributions & Rebalancing | 15.6% | 13.8% | 10.6% |

Sharpe Ratio

|  |  |  |  |
| --- | --- | --- | --- |
|  | Last Quarter | Last Year | Since Inception |
| Portfolio | 5.51 | 2.49 | 1.41 |
| Benchmark[[6]](#footnote-6) | 0.07 | 0.47 | 1.71 |
| Portfolio w/o Rebalancing | 4.96 | 2.05 | 1.89 |
| Benchmark w/o Rebalancing | 0.11 | 0.76 | 1.87 |
| Portfolio w/o Cash Contributions & Rebalancing | 5.05 | 1.17 | 0.70 |
| Benchmark w/o Cash Contributions & Rebalancing | 0.07 | -0.06 | 0.78 |

Max Drawdown

|  |  |  |  |
| --- | --- | --- | --- |
|  | Last Quarter | Last Year | Since Inception |
| Portfolio | 0.0% | -0.7% | -7.1% |
| Benchmark[[7]](#footnote-7) | -5.1% | -9.0% | -9.0% |
| Portfolio w/o Rebalancing | 0.0% | -0.7% | -4.3% |
| Benchmark w/o Rebalancing | -3.2% | -5.7% | -7.3% |
| Portfolio w/o Cash Contributions & Rebalancing | 0.0% | -3.1% | -8.7% |
| Benchmark w/o Cash Contributions & Rebalancing | -5.1% | -10.4% | -10.4% |

VaR of Portfolio

Marginal VaRs

|  |  |
| --- | --- |
|  | **MVaR** |
| **MRD.TO** | 1380.01 |
| **CIM.AX** | -1421.01 |
| **GAPSX** | 8469.3 |
| **LNC** | -3144.28 |
| **KNEBV.HE** | 2395.87 |
| **HBD.TO** | 12900.5 |
| **HGU.TO** | 5176.73 |
| **OIH** | -4841.46 |
| **RIT.TO** | 4612.59 |
| **EMB** | 4100.49 |

Marginal VaRs on risk factors

|  |  |
| --- | --- |
| **Risk Factors** | **MVaR** |
| **Mkt-RF\_log** | 548.412074 |
| **SMB\_log** | -166.254785 |
| **HML\_log** | 2128.924781 |
| **RMW\_log** | -199.905209 |
| **CMA\_log** | -1827.612444 |
| **Mkt-RF\_log\_global** | 4260.09726 |
| **SMB\_log\_global** | -762.488153 |
| **HML\_log\_global** | 26.34688 |
| **RMW\_log\_global** | 178.708377 |
| **CMA\_log\_global** | 6038.343439 |
| **CADUSD=X** | 80.390233 |
| **AUDUSD=X** | -73.08073 |
| **Mkt-RF\_log\_EUR** | 1721.423927 |
| **SMB\_log\_EUR** | 89.413987 |
| **HML\_log\_EUR** | 157.007373 |
| **RMW\_log\_EUR** | -30.211929 |
| **CMA\_log\_EUR** | 351.053813 |
| **EURUSD=X** | 107.183494 |
| **SP500** | 5984.00332 |
| **US Large Cap** | -4231.85078 |
| **US Small Cap** | -456.378736 |
| **US Mid Cap** | 470.285205 |
| **TSX** | -771.84747 |
| **Europe** | -329.359636 |
| **EM** | 1501.858201 |
| **US Treasury** | 611.061131 |
| **US Corp High Yield** | 1423.251916 |
| **US IG 5-10 yr** | 152.87143 |
| **CGOV 10y** | -361.209267 |
| **CGOV 5y** | -154.418689 |
| **CGOV 2y** | 456.246369 |
| **Gold** | 9891.431663 |
| **Crude Oil** | 473.066105 |
| **US Real Estate** | 429.023766 |
| **CAN Real Estate** | 150.539926 |
| **Toronto Real Estate** | 267.194983 |
| **VIX** | 1495.265981 |

Comments and Recommendations

1. 100% investment in ACWI ETF considered as a benchmark [↑](#footnote-ref-1)
2. 100% investment in ACWI ETF considered as a benchmark [↑](#footnote-ref-2)
3. 100% investment in ACWI ETF considered as a benchmark [↑](#footnote-ref-3)
4. 100% investment in ACWI ETF considered as a benchmark [↑](#footnote-ref-4)
5. 100% investment in ACWI ETF considered as a benchmark [↑](#footnote-ref-5)
6. 100% investment in ACWI ETF considered as a benchmark [↑](#footnote-ref-6)
7. 100% investment in ACWI ETF considered as a benchmark [↑](#footnote-ref-7)