**Portfolio 2**

Medium Risk Portfolio. Quarterly Report.

|  |  |
| --- | --- |
| Account Balance, CAD (as of June 1, 2019) | 566704.6 |
| 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 |
| **HBD.TO** | 2814.2 |
| **HGU.TO** | 1911.2 |
| **OIH** | -1369.6 |
| **RIT.TO** | 16486.6 |
| **EMB** | 1622.4 |

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** |
| HBD.TO | ETF | ETF:FixedIncome | CAD | NA |
| HGU.TO | ETF | Equity:CAD | CAD | NA |
| OIH | ETF' | Equity:USD | USD | NA |
| RIT.TO | ETF | Equity:CAD | CAD | NA |
| EMB | ETF' | ETF:FixedIncome | USD | NA |

Return Metrics

Graph of Portfolio Growth vs Benchmark

Account Balance

|  |  |
| --- | --- |
|  | CAD (as of June 1, 2019) |
| Portfolio | 566704.6 |
| Benchmark[[1]](#footnote-1) | 638386.1 |
| Portfolio w/o Rebalancing | 518600.4 |
| Benchmark w/o Rebalancing | 585308.2 |
| Portfolio w/o Cash Contributions & Rebalancing | 311477.0 |
| Benchmark w/o Cash Contributions & Rebalancing | 376391.3 |

Simple Return, % annualized

|  |  |  |  |
| --- | --- | --- | --- |
|  | Last Quarter | Last Year | Since Inception |
| Portfolio | 18.2% | 22.8% | 22.3% |
| Benchmark[[2]](#footnote-2) | 5.2% | 13.2% | 25.2% |
| Portfolio w/o Rebalancing | 10.6% | 17.7% | 20.2% |
| Benchmark w/o Rebalancing | 4.6% | 12.7% | 23.1% |
| Portfolio w/o Cash Contributions & Rebalancing | 15.0% | 11.7% | 8.9% |
| Benchmark w/o Cash Contributions & Rebalancing | 5.2% | 6.1% | 13.0% |

Money-Weighted Return, % annualized

|  |  |  |  |
| --- | --- | --- | --- |
|  | Last Quarter | Last Year | Since Inception |
| Portfolio | 37.2% | 32.8% | 38.2% |
| Benchmark[[3]](#footnote-3) | 19.6% | 21.0% | 40.6% |
| Portfolio w/o Rebalancing | 29.8% | 28.0% | 36.5% |
| Benchmark w/o Rebalancing | 20.3% | 21.2% | 38.9% |
| Portfolio w/o Cash Contributions & Rebalancing | 51.1% | 28.0% | 27.5% |
| Benchmark w/o Cash Contributions & Rebalancing | 31.1% | 18.4% | 30.6% |

Time-Weighted Return, % annualized

|  |  |  |  |
| --- | --- | --- | --- |
|  | Last Quarter | Last Year | Since Inception |
| Portfolio | 2.4% | 13.8% | 10.2% |
| Benchmark[[4]](#footnote-4) | -7.1% | 6.3% | 13.6% |
| Portfolio w/o Rebalancing | -5.2% | 8.5% | 8.0% |
| Benchmark w/o Rebalancing | -8.6% | 5.2% | 11.4% |
| Portfolio w/o Cash Contributions & Rebalancing | -10.9% | -2.2% | -5.8% |
| Benchmark w/o Cash Contributions & Rebalancing | -14.5% | -4.4% | -0.8% |

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 |
| CAD | 0% |
| USD | 1% |
|  |  |
|  |  |

Risk Metrics

Volatility, % annualized

|  |  |  |  |
| --- | --- | --- | --- |
|  | Last Quarter | Last Year | Since Inception |
| Portfolio | 5.1% | 7.4% | 9.3% |
| Benchmark[[5]](#footnote-5) | 17.2% | 16.3% | 12.7% |
| Portfolio w/o Rebalancing | 2.5% | 6.7% | 8.5% |
| Benchmark w/o Rebalancing | 11.7% | 11.8% | 10.7% |
| Portfolio w/o Cash Contributions & Rebalancing | 4.0% | 6.1% | 6.7% |
| Benchmark w/o Cash Contributions & Rebalancing | 17.2% | 15.5% | 11.5% |

Sharpe Ratio

|  |  |  |  |
| --- | --- | --- | --- |
|  | Last Quarter | Last Year | Since Inception |
| Portfolio | 3.14 | 2.79 | 2.34 |
| Benchmark[[6]](#footnote-6) | 0.17 | 0.68 | 1.93 |
| Portfolio w/o Rebalancing | 3.26 | 2.34 | 2.29 |
| Benchmark w/o Rebalancing | 0.20 | 0.90 | 2.09 |
| Portfolio w/o Cash Contributions & Rebalancing | 3.17 | 1.58 | 1.24 |
| Benchmark w/o Cash Contributions & Rebalancing | 0.17 | 0.26 | 1.07 |

Max Drawdown

|  |  |  |  |
| --- | --- | --- | --- |
|  | Last Quarter | Last Year | Since Inception |
| Portfolio | 0.0% | -1.0% | -4.4% |
| Benchmark[[7]](#footnote-7) | -5.4% | -9.8% | -9.8% |
| Portfolio w/o Rebalancing | 0.0% | -0.6% | -3.2% |
| Benchmark w/o Rebalancing | -3.6% | -6.7% | -6.7% |
| Portfolio w/o Cash Contributions & Rebalancing | 0.0% | -1.9% | -5.2% |
| Benchmark w/o Cash Contributions & Rebalancing | -5.4% | -11.2% | -11.2% |

VaR of Portfolio

Marginal VaRs

|  |  |
| --- | --- |
|  | **MVaR** |
| **HBD.TO** | 8755.41 |
| **HGU.TO** | 4565.62 |
| **OIH** | -3000.85 |
| **RIT.TO** | 8880.06 |
| **EMB** | 9375.24 |

|  |  |
| --- | --- |
| **Risk factors** | **MVaR** |
| **Mkt-RF\_log** | -2761.23 |
| **SMB\_log** | -19.21 |
| **HML\_log** | 415.72 |
| **RMW\_log** | 65.06 |
| **CMA\_log** | -701.18 |
| **Mkt-RF\_log\_global** | 7662.78 |
| **SMB\_log\_global** | -311.56 |
| **HML\_log\_global** | -600.84 |
| **RMW\_log\_global** | 452.76 |
| **CMA\_log\_global** | 6111.75 |
| **CADUSD=X** | 130.78 |
| **SP500** | 6060.26 |
| **US Large Cap** | -4892.34 |
| **US Small Cap** | -136.72 |
| **US Mid Cap** | -632.81 |
| **TSX** | -880.79 |
| **Europe** | 187.53 |
| **EM** | 2923.09 |
| **US Treasury** | 140.55 |
| **US Corp High Yield** | 2545.20 |
| **US IG 5-10 yr** | 978.38 |
| **CGOV 10y** | 262.27 |
| **CGOV 5y** | 199.72 |
| **CGOV 2y** | 81.91 |
| **Gold** | 7227.39 |
| **Crude Oil** | 186.36 |
| **US Real Estate** | 777.71 |
| **CAN Real Estate** | 282.71 |
| **Toronto Real Estate** | 339.13 |
| **VIX** | 2481.12 |

Comments and Recommendations

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