



## Money-Weighted Rate of Return Disclosure

The reporting system uses the money-weighted rate of return method to calculate personal rates of return for all levels (accounts, investments and investment structure). This method is industry-standard and required, effective July 15, 2016, by the Canadian Securities Administrators (CSA) following the release and phase-in of the Client Relationship Model – Phase 2 (CRM2). Previously, the time-weighted rate of return method was commonly used to calculate personal rates of return.

The money-weighted rate of return method gives an individual investor a better sense of the actual rate of return achieved on their investments than the former time-weighted rate of return methodology. The size and timing of any deposits or withdrawals into an investment account affects the money-weighted rate of return. Deposits and withdrawals are usually the investor's decision. Therefore, two investors with otherwise identical investments can have different money-weighted rates of return caused by differences in the timing and size of deposits and withdrawals. Because money-weighted rates of return are affected by both the investor and the fund manager's decisions, it is more difficult to evaluate the performance of the fund manager.

Here is an example of a money-weighted rate of return calculation:

John Smith began the year with \$10,000. He earns 6% on his money over the half year until June 30. He then earns 3% from July 1 to December 31. At the end of the year, his account value is:

$$\$10,000 \times (1 + 6\%) \times (1 + 3\%) = \$10,812$$

$$\text{His return for the year is } = (\$10,812 - \$10,000) / \$10,000 = 9.2\%$$

Because there were no deposits or withdrawals during the year, John's money-weighted and time-weighted rates of return are identical. However, if John Smith were to have added \$5,000 to his account on July 1, his account value at the end of the year is:

$$\$10,000 \times (1 + 6\%) \times (1 + 3\%) + \$5,000 \times (1 + 3\%) = \$16,068$$

His time-weighted rate of return is still 9.2% because this method ignores deposits and withdrawals. In other words, John earned 6% in the first half of the year and 3% in the second half of the year regardless of any new money put in or taken out during the year. However, he no longer earned 9.2% on every dollar in his account, he only earned 3% over half the year (equivalent to 6.1% annually) on the \$5,000 he deposited on July 1. In this scenario, John's money-weighted rate of return (MWR) will be lower than his time-weighted rate of return:

$$\$10,000 \times (1 + \text{MWR}) + \$5,000 \times (1 + \text{MWR}^{0.5}) = \$16,068, \text{ solving for MWR by computer or trial and error, we can determine that John's money-weighted rate of return is } 8.6\%.$$

All values in the performance calculations systems are stored to the fifth decimal point and for reporting purposes are rounded to the second decimal point.