



This worksheet is designed to provide a quick and easy method of determining a rough yet meaningful estimate of the amount of your spending and the size of your savings once you reach retirement. It also provides an... “is there enough”... reasonableness check, which does not (can not) estimate the taxation on registered savings withdrawal.

Using Future Value (FV) Tables

The factors in the Future Value Tables represent the increased value of money over a number of years in the future (period) at a specific return on investment (ROI) %.

Multiply the current or present value (today’s value) of a sum of money by the factor located at the number of years in the future (period) and the expected ROI %.

There are two sets of tables provided. One set contains the factors applicable to each *existing* \$1 in a fund invested over a period of time (to be used for existing lump sum savings). The other set contains the factors applicable to *adding* \$1 *every year* to the existing fund over a period of time (use for annual contribution to savings).

Rate of Return, Inflation, and Tax

The calculated growth of an investment over a period of time using an expected rate of return (ROI) is independent of inflation and taxes. In order to determine the real or net gain, inflation and taxes must be taken into account.

As an example... If you are in the 35% tax bracket and inflation is 2.5%, your break even ROI will likely be in the range of 4.0%. As an example if you are not getting better than a 4% ROI on your savings, your fund is not actually growing.



First Step: Estimate Your Expenses at Retirement (1st year)

- (1) Your current monthly living expenses
(from your Cash Flow Statement) \$ _____
- (2) The Percentage of current living expenses (1)
that you anticipate needing in retirement _____ %
- (3) An estimate of annual inflation (inflation rate)
(2%-3% is a reasonable assumption) _____ %
- (4) Number of years in the future for the calculation
(how many years will it be until you retire) _____
- (5) Factor from FV Table (\$1 *invested*)
Lookup in tables using (3) and (4) _____
- (6) Calculation of your first year expenses at retirement
 $(1) \times (2) / 100 \times (5) \times 12 =$ \$ _____

Example using 2.5% inflation and 12 years until retirement:

$$\$ 6,000 \times 70 / 100 \times 1.34489 \times 12 = \$ 67,782$$



**Second Step: Estimate Your Registered Savings at Retirement
(RRSPs, Spousal RRSPs, LIRAs, DC Pensions)**

- (1) Amount of your registered savings (present value)
(from your Net Worth Statement) \$ _____
- (2) The annual contribution to your registered savings
(average amount added each year to the savings) \$ _____
- (3) Average rate of return (ROI) on registered savings
(expected interest percentage or annual growth rate) _____ %
- (4) Number of years in the future for the calculation
(how many years will it be until you retire) _____
- (5) Factor from FV Table (\$1 *invested* – lump sum)
Lookup in table using (3) and (4) _____
- (6) Factor from FV Table (\$1 *invested each year*)
Lookup in table using (3) and (4) _____
- (7) Calculation of total registered savings at retirement
 $((1) \times (5)) + ((2) \times (6)) =$ \$ _____

Example using 6% ROI and 12 years until retirement:

$$(\$ 200,000 \times 2.01220) + (\$ 10,000 \times 17.8821) = \$ 581,261$$



**Third Step: Estimate Your Non-Registered Savings at Retirement
(stock savings plans, investment accounts)**

- (8) Amount of your non-registered savings (present value)
(from your Net Worth Statement) \$ _____
- (9) The annual increase of your non-registered savings
(average amount added each year to the savings) \$ _____
- (10) Average rate of return (ROI) from non-registered savings
(expected interest percentage or annual growth rate) _____ %
- (11) Number of years in the future for the calculation
(how many years will it be until you retire) _____
- (12) Factor from FV Table (\$1 *invested* – lump sum)
Lookup in table using (3) and (4) _____
- (13) Factor from FV Table (\$1 *invested each year*)
Lookup in table using (3) and (4) _____
- (14) An estimate of the amount of taxes that will be payable
(see Tax Tables or consult a Tax Accountant) \$ _____
- (15) Calculation of total non-registered savings at retirement
 $(8) \times (12) + (9) \times (13) - (14) =$ \$ _____

Example using 6% ROI and 12 years until retirement:

$(\$ 50,000 \times 2.01220) + (\$ 2,000 \times 17.8821) - \$ 50,000 = \$ 86,374$



Fourth Step: Estimate Your Tax Free Savings at Retirement
(Total of all Tax Free Savings Accounts)

- (16) Amount of your tax free savings (present value)
(from your Net Worth Statement) \$ _____
- (17) The annual contribution to your tax free savings
(average amount added each year to the savings) \$ _____
- (18) Average rate of return (ROI) on registered savings
(expected annual growth rate percentage) _____ %
- (19) Number of years in the future for the calculation
(how many years will it be until you retire) _____
- (20) Factor from FV Table (\$1 *invested* – lump sum)
Lookup in table using (18) and (19) _____
- (21) Factor from FV Table (\$1 *invested each year*)
Lookup in table using (18) and (19) _____
- (22) Calculation of total tax free savings at retirement
 $((16) \times (20)) + ((17) \times (21)) =$ \$ _____

Example using 6% ROI and 12 years until retirement:

$$(\$ 12,000 \times 2.01220) + (\$ 3,000 \times 17.8821) = \$ 77,793$$



Fifth Step: Reasonableness Check - Is there Enough?

(1) First year expenses at retirement
(from First Step - estimated expenses) \$ _____

(2) Annual pension income
(all pension income - company and government) \$ _____

(3) Other income (total annual amount)
(annual income from all other sources) \$ _____

(4) Reasonableness check calculation

 $((1) - (2) - (3)) \times 20 =$ \$ _____

Example: (\$ 67,782 – \$ 30,000 – \$ 4,000) x 20 = \$ 675,640

(5) Sum of registered, non-registered, and tax free savings
(from 2nd Step (7), 3rd Step (15), 4th Step (22)) \$ _____

(6) Excess or shortfall calculation (Enough?)

 $(5) - (4) =$ \$ _____

(\$581,261 + \$86,374 + \$ 77,793) – \$ 675,640 = \$69,788

If the amount (6) is negative, then you likely need to save more and/or spend less.

If the amount (6) is positive, then you may be able to spend more and/or save less.