



NUMBER CRUNCHING BY TALBOT STEVENS

# Equities in or out of an RRSP?

*First, make a fair comparison between the registered and unregistered investments*

**T**HE 2000 DROP IN THE capital gains inclusion rate from 75% to 50% raises the question: is it better to keep equity investments outside RRSPs?

Ironically, the RRSPs-vs-capital gains issue was even more relevant in earlier years. Until as recently as 1994, every Canadian had a \$100,000 capital gains exemption. That meant the capital gains inclusion rate on the first \$100,000 gained was not 75% or even 50%. It was 0%. In fact, until 1972, there were no capital gains taxes.

The first challenge in trying to analyze whether capital gain investments should be sheltered is to establish a fair comparison between registered and unregistered investments. A common approach is calculating before-tax values, but this compares apples and oranges — it does not reflect the net amount left after taxes. Another option, if the client's goal is to maximize his or her estate, is calculating after-tax future values.

But for the majority of clients, the primary investment goal is retirement. The objective is not to produce a lump sum on the day they retire, as it is with estates. For all but the wealthy, the goal is to produce an income that lasts from their final paycheque to the death of the last spouse. Because taxes and clawbacks affect the net amount we get to keep, a more precise definition of most Canadians' primary investment goal is to maximize net after-tax income over their expected retirement period.

What is needed to evaluate

different strategies to maximize net after-tax income properly is an after-tax income calculator that accurately does the math (time value of money) and allows for taxes (different strategies are taxed differently) and, perhaps most important, human behaviour.

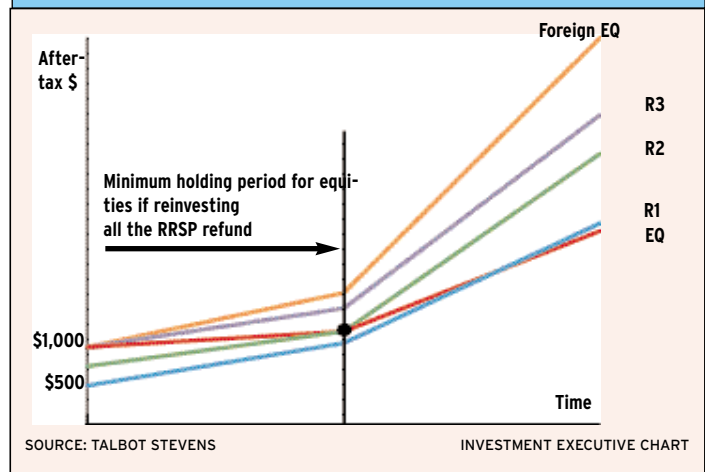
In general, all financial goals are focused on producing either a lump sum or an income over a number of years. But a lump-sum goal, such as saving to buy a car, is simply a special case of an income goal for which the withdrawal period is one year. This means that an accurate after-tax income (ATI) analysis model could be used to evaluate any investment strategy properly for any investment goal, including lump-sum goals such as maximizing an estate or income goals such as retirement or education.

Human behaviour is a more significant, and often overlooked, factor affecting retirement strategies. What the client does with RRSP refunds and how much of the annual refund, if any, is reinvested in RRSPs instead of being spent can define the client's commitment to his or her retirement goal.

There are five different refund strategies. In order for RRSPs to be the best strategy there is a minimum holding period, depending on the refund strategy used and the type of investment. The above illustration shows the after-tax lump-sum value of each strategy over time. This is not what the real goal is, but focusing on after-tax future values is an easier-to-understand starting point.

Let's say Kim is in a 50% tax

## Minimum holding period for RRSPs



bracket and has \$1,000 to invest. If she invests in unregistered equities, her initial after-tax investment is \$1,000. The after-tax value over time is shown above as EQ.

If Kim invested her \$1,000 in RRSPs and spent her \$500 refund, as most clients do, her initial after-tax investment and commitment to her retirement goal is only \$500. Spending the refund is the first and most common RRSP refund strategy, which we might label R1, and represents the minimum result possible with RRSPs.

One analogy that may be helpful is to think of a car race in which the unregistered vehicle, EQ, starts at the \$1,000 "starting line" and grows at a certain speed that is hindered slightly by annual tax "emissions" or distributions. An RRSP is the most (tax) efficient vehicle and grows at the fastest speed possible for a given race class (return). This means that the growth curve for any RRSP strategy is steeper and grows faster than the EQ curve. But when the refund is spent, the

most efficient RRSP vehicle is forced to start at the \$500 mark, well behind the original \$1,000 starting line. Due to starting \$500 behind (because the driver spent the refund), it takes the R1 vehicle some time to catch up to the slower EQ vehicle. This defines the minimum holding period for the "spend refund" RRSP strategy to produce a larger after-tax estate value than the unregistered equities strategy.

The second refund strategy, R2, represents more disciplined investors who reinvest all their refunds in RRSPs. This results in an initial contribution of \$1,500, which equates to an initial after-tax value of \$750 for someone in the 50% tax bracket. The R2 strategy or vehicle grows at the same speed as R1, but starts at the \$750 starting line. This is closer but still behind the \$1,000 starting line for the unregistered strategy and still requires a minimum period for RRSPs to come out ahead.

Only the third strategy puts the most efficient vehicle on the same starting line as the unregis-

tered alternatives. R3, which I've called the "gross-up" approach, results in Kim's \$1,000 being increased or "grossed up" to a \$2,000 initial RRSP contribution, which equates to a \$1,000 after-tax value. One way to achieve the gross-up strategy is to borrow an extra \$1,000 for a \$2,000 RRSP contribution. When this is done in late RRSP season, the resulting \$1,000 refund almost immediately repays the loan.

By using the more disciplined, higher-commitment approach of grossing-up RRSP contributions, we have the most efficient

vehicle on the same starting line. Conceptually, we would be tempted to think that as long as we have the discipline to gross-up RRSPs, this would always be the best strategy.

But what if we open the race to "foreign" cars, which may not have the efficiency of the RRSP vehicles? Despite some tax emissions, these foreign vehicles have more raw horsepower and produce higher returns than the environmentally restricted Canadian cars. If the difference between foreign returns and Canadian RRSP returns is great

enough, even the grossed-up RRSP strategy will not win the race of producing after-tax estate values or after-tax retirement income. These higher-power foreign equity vehicles start beside the R3 and EQ vehicles and, by going faster, are the best cars to be in.

There are an infinite number of possible behaviours with RRSP refunds, not just three. The "worst" case, producing the minimum results, is R1, in which the refund is spent. The best theoretical case, R3, yields the maximum value possible.

It is important clients understand the range of possibilities so they can move "up" the graph to get higher after-tax results. **IE**

*Talbot Stevens is a financial educator, speaker and author of **Dispelling the Myths of Borrowing to Invest**. Contact him at [talbot@TalbotStevens.com](mailto:talbot@TalbotStevens.com).*

---

*Reproduced with permission from **Investment Executive** and the author. This story first appeared in the October 2001 issue of **Investment Executive**.*