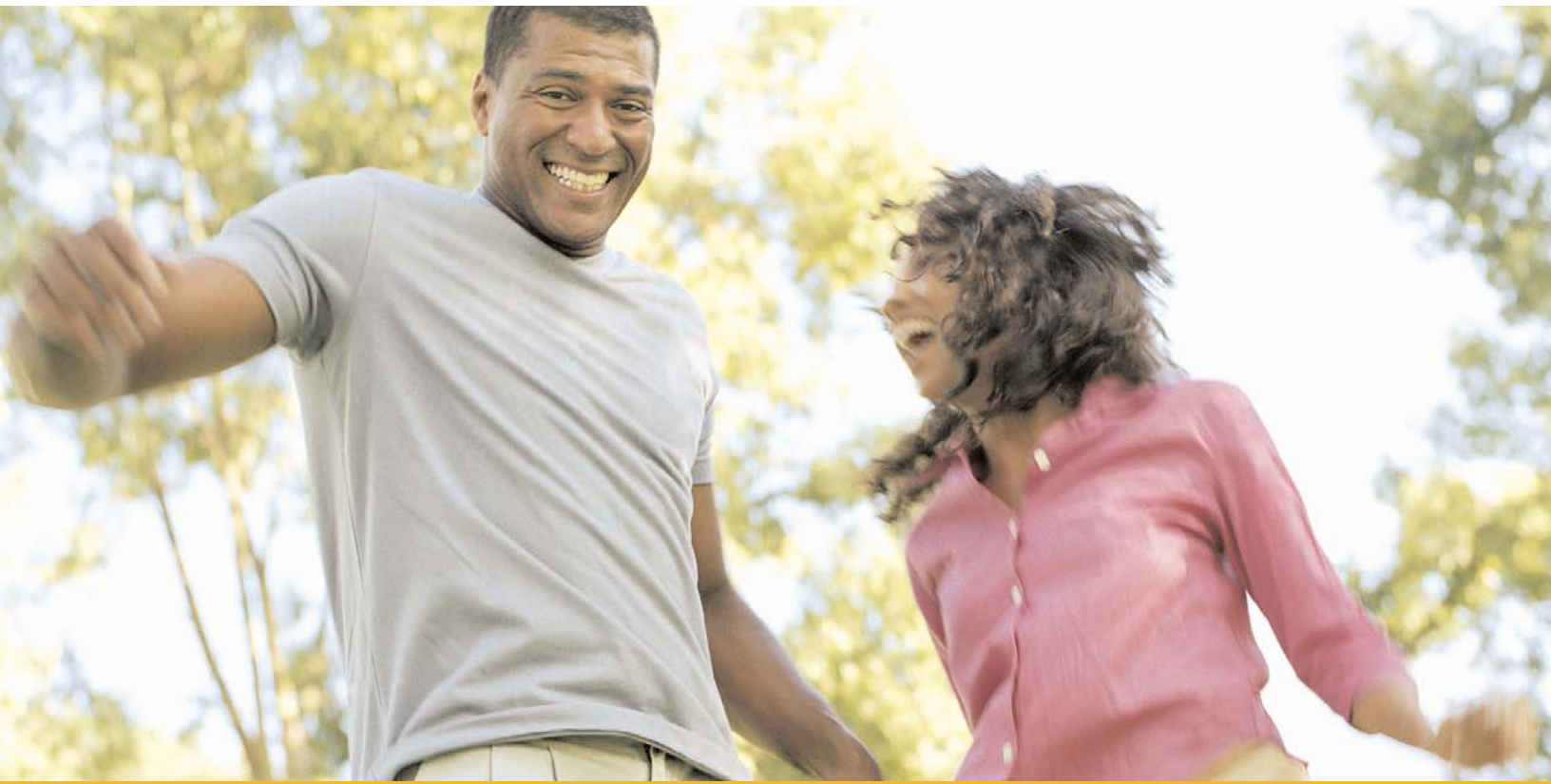




# Understanding Investment Leverage



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Each year, more and more Canadians are taking advantage of a simple yet powerful wealth-creation strategy – investment leverage. For those unfamiliar with investment leverage, this strategy may sound a bit intimidating. But it's actually quite simple. This guide explains, in easy to understand language, what investment leverage is and how it works. And, at the end, there are some questions to help you determine if investment leverage is right for you.



## What is investment leverage?

Investment leverage, simply put, is borrowing to invest. That is, it is using someone else's money to achieve your investment goals. Whether you know it or not, you may have already taken advantage of this strategy. For example, if you've had a mortgage, a student loan or an RRSP loan, you've used someone else's money to achieve your goal of home ownership, higher education or a more comfortable retirement.

Investment leverage is similar to the examples above. Leverage is simply borrowing money to purchase investments, with the goal of achieving greater wealth.

Now, it's probably easy for you to see how a mortgage can help you achieve the goal of home ownership. However, it may be less clear how taking out a loan to buy an investment can help you achieve the goal of greater wealth.

## How does investment leverage work?

With traditional investing, you set aside a portion of your income each month to purchase investments and your investments gradually grow over a long period of time. With leveraged investing, you take out a loan and make a single large investment purchase on day one. Then, you set aside a portion of your income each month to make interest payments on the loan.

The amount you pay for loan interest may be the same as the

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amount you would normally contribute to a traditional investment plan. But while your “out of pocket” costs may be the same under both strategies, leveraged investing has the potential to generate far greater returns. Here’s why:

- 1. Compound returns.** Compound returns refers to the fact that investment growth accelerates over time as the growth from one year is added to your initial investment to create a larger investment that can grow the next year, and so on. The key to successful compounding is having the largest possible amount growing for the longest possible time.

While traditional investing benefits from compound returns, it fails to fully take advantage of them. Assume you have 15 years to invest and plan to make regular

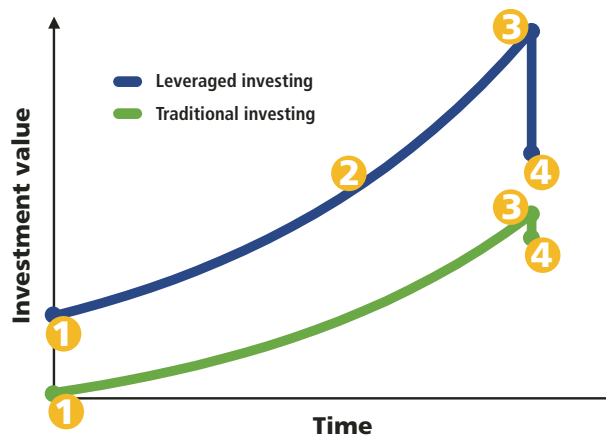
contributions each year. Only the contribution you make today will grow for the full 15 years. The contribution you make one year from now will only have 14 years to grow, and so on.

With leveraged investing, you contribute a much larger amount on day one and the whole amount can grow for the full amount of time, say 15 years. The effect of compound returns is much stronger with leverage, which can result in better investment results over the long term.

- 2. Tax deductibility.** Since the interest you pay on a loan reduces your investment return, it’s important that you pay as little interest as possible. Luckily, the interest you pay on an investment loan is generally tax deductible. This reduces the overall cost of this strategy.

### With leveraged investing, a larger initial investment can result in greater overall growth of the investment

Even though the out-of-pocket costs are the same, compounding can help provide a greater value at the end of the investment period, even after the loan is repaid.



- 1** Leverage allows you to start with a larger initial investment.
- 2** Because a larger amount is growing, compounding allows a leveraged investment to grow faster.
- 3** Value before taxes are paid (on both types of investing) and loan is repaid (leverage only).
- 4** Final investment value returned to the investor.

Taken together, the effects of compound returns and tax deductibility greatly increase the likelihood that a leveraged investing strategy will outperform a traditional investing strategy. To illustrate this point, let's look at an example:



## The story of Mike and Liz

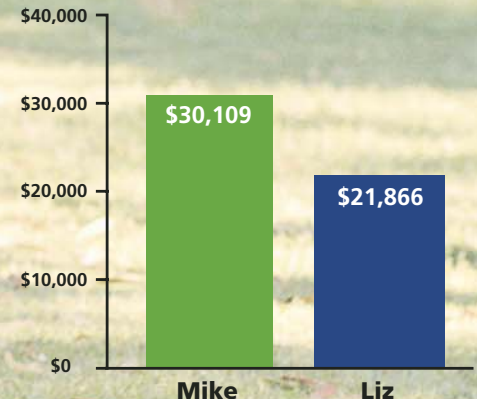
Mike and Liz both want to invest to save for a dream vacation in 10 years. Liz diligently makes a lump sum deposit at the end of each year. Mike borrows \$30,000 at an average interest rate of 7.0% to invest immediately. During the next 10 years, Liz contributes a total of \$16,616 to her investment plan. Mike makes annual interest payments which, after tax deductions, cost him the same \$16,616. Both investors earn an annual return of 8% on their investment. After 10 years, they sell their investments, pay their taxes, and Mike repays his loan.

They compare their results and discover that even though the cost of investing has been the same, Mike ends up with an additional \$8,000 to spend on his vacation.

### Is leverage always better?

In this example, Mike's investment leverage strategy outperformed Liz's traditional investing strategy. Does this mean that leverage will always outperform? Unfortunately, no. Because leverage offers the potential for increased growth in good times, it also carries the risk of increased loss during bad times. So, we need to ask, under what circumstances would Liz, with her traditional investing strategy, end up better off than Mike with his leveraged investing strategy?

### After-tax investment value 10 years after Mike's loan is repaid<sup>1</sup>



<sup>1</sup> Assumptions: Liz makes end-of-year contributions equivalent to Mike's net cost of borrowing. Cost of borrowing for Mike is 7.0% annually and his loan interest is 100% deductible. Both clients: A taxable portion of fund return is 33%, tax rate on income allocations from funds is 35%, and marginal tax rate is 40%. All assumptions are for illustration purposes only. Results will vary slightly in Quebec.

# Leverage and break-even returns

To answer the question of when would traditional investing be more advantageous than leveraged investing, we need to look at the concept of break-even returns. Let's assume that prior to starting her investment program, Liz had two choices: traditional investing or putting her money under the mattress. The concept of "break-even return" attempts to answer the question, "What rate of return does Liz's investment need to earn to make her better off than if she had simply put her money under her mattress?" In this case, the answer is fairly simple. If her investment earns more than 0% return, she's better off with the strategy she chose. If her investment earns less than 0% return, she would have been better off with the mattress strategy. So Liz's break-even return is 0%.

Now, let's assume Mike is also choosing from between two strategies: traditional investing or leveraged investing. Determining Mike's break-even between these two strategies is not quite as straightforward since the leverage strategy includes interest payments that need to be covered. The question we need still to answer is, "What return would Mike's investment need to earn to make him better off with a leveraged investing strategy than with a traditional investing strategy?"

This break-even return depends on factors such as tax rate and interest costs (it isn't important to detail the formula here) and, in Mike's case, the break-even return is 5.43%.

That is, if Mike's investment earns more than 5.43% per year, he's better off with a leverage strategy.

Now, since we used all of the same assumptions for Mike as we did for Liz, we can state the following:



The break-even return will vary from investor to investor. Your financial advisor can help you determine your own personal break-even return. But the point to remember is that you generally don't need huge returns for leverage to work. In Mike's case, his 5.43% break-even is well below the median 10-year return of 9-10% for Canadian equities.<sup>2</sup>

<sup>2</sup> The median 10-year return for the TSX Total Return Index for rolling 10-year periods between 1956 and 2004 was 9.61%. Past returns are not an indication of future returns.

***Your financial advisor can help you determine your own personal break-even return.***

# Understanding the risk of investment leverage

Before deciding to invest with leverage, it's important to understand that this strategy involves a greater degree of risk than traditional investing. If you use your own cash to purchase an investment, your gain or loss you experience will equal the gain or loss of the investment. However, if you use borrowed money to purchase an investment, the gain or loss you experience will be greater, relative to the performance of the investment.

For example, if you invest \$50,000 of your own money and the investment declines in value to \$40,000 over 10 years, you will have lost \$10,000. However, if you borrow \$50,000 at a rate of 6.0% and invest this amount and the value declines to \$40,000 over 10 years, you will be in a worse financial position. To repay the loan you must come up with an additional \$10,000, to supplement the \$40,000 raised from the sale of the investment. In addition, you will have paid \$30,000 in loan interest over the 10 years. In other words, you will have lost \$40,000 with this investment strategy.

In addition, regardless of how your investment is performing, you're still obligated to pay the interest on your loan. Investment leverage can be a powerful tool for accelerating investment growth. But be sure you understand and are comfortable with the potential downside before you decide to use this strategy.

*If you purchase an investment using borrowed money, the gain or loss you experience will be magnified relative to the performance of the investment.*

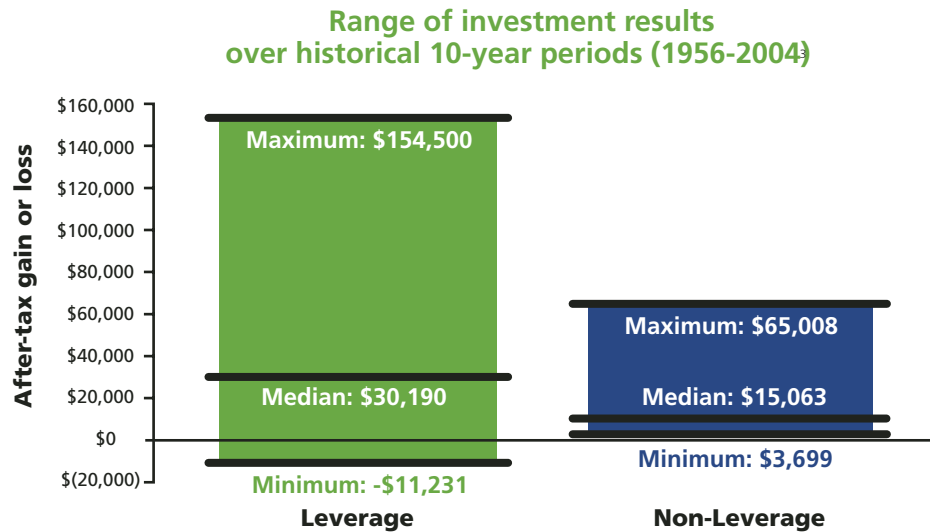




## Historical risk

Leveraged investing can magnify both losses and gains and, to get a better understanding of how this strategy might perform in the future, it can be helpful to look at how this strategy would have performed in the past. To do this, we can look at historical 10-year periods, assuming we had invested in Canadian equities (as represented by the S&P/TSX Total Return Index), and paid interest at the prevailing prime lending rate +1.25%.

In the illustration below, the green bar shows the results for a leverage strategy for an investor with a 35% marginal tax rate who borrowed and invested \$50,000 for 10 years<sup>3</sup>. The maximum represents the amount of money they would have earned, after taxes and loan repayment, if they had invested during the best 10-year period between 1956 and 2004. The minimum represents the amount this investor would have earned after taxes and loan repayment if they had invested during the worst 10-year period. The blue bar shows the comparable results for a non-leverage strategy and assumes that the amount of money invested each year would have been the same as the net cost of investing under the leverage strategy.



As the illustration shows, the highs are higher and the lows are lower with a leverage strategy than with a non-leverage strategy. However, it's important to note that, historically, the median return would have been significantly higher with a leverage strategy than with a non-leverage strategy.

<sup>3</sup> Assumptions: 35% marginal tax rate, 100% interest deductibility, 25% tax rate on investment income, 25% taxable portion of return. Rate of return is the annualized return of the S&P/TSX Total Return index for rolling 10-year periods between February 1956 and December 2004. Interest rate is the average prime lending rate +1.25% for each 10-year period. Past results are not indicative of future results. Historical results will differ slightly for Quebec investors.

# Leveraged investing – keys to success

Leveraged investing involves more risk than traditional investing. However, there are a number of things you can do to reduce the risk of this strategy:

## 1. Invest for the long term

The amount of risk involved in leveraging decreases as your investment horizon (the length of time the money is invested) increases. This is because the return of stocks and stock-based investment funds varies widely from year to year. But these fluctuations tend to even out over the longer term. Plan to leverage for 10 years or more to reduce the impact of short-term market movements.

## 2. Commit to the strategy

Even for long-term investors, short-term market volatility carries the risk of emotional decision-making – i.e. selling at the first sign of trouble. Emotional decision-making can derail an investment strategy before it has time to work. Ensure that you are in this for the long-term. Start your investment plan with the expectation that, in some years, the value of your investment will rise and, in others, it will fall. Keeping your eyes on the long-term results will reduce the risk that you will get cold feet and lock in short-term losses.

## 3. Borrow less than you can afford

Since a long-term horizon is key to the success of this strategy, the last thing you want to worry about is being forced to cash out early because of an unforeseen change in your ability to make interest payments. Start by borrowing less than you can afford so that you can comfortably absorb the bumps that life may throw your way without abandoning your investment strategy.

## 4. Consider a “no margin-call” loan

When you take out an investment loan, the lending institution holds the investment you purchase for the loan. If the value of your investment falls below a pre-determined level, you will be asked to make an additional deposit to the account. This is a margin call. Many investment loans now offer a “no margin-call” feature (sometimes at a slightly higher interest rate). Unless you could easily come up with cash to cover a margin call, choose a loan with a no margin-call feature.

## 5. Diversify your investments

Don’t increase your risk by investing in a single investment or by investing in high-risk investments. While the goal of leverage is to accelerate investment growth, it works best with a diversified portfolio of long-term investments.

## 6. Make principal payments

If you’re particularly concerned about the amount of risk involved, you can reduce the risk by repaying the loan gradually over time. This will reduce the magnification of potential losses but it will also reduce the magnification of potential gains.

Investment leverage can be a powerful strategy for accelerating your investment growth and helping you achieve your financial goals sooner. While this strategy involves an increased level of risk, much of the risk can be reduced with careful planning.



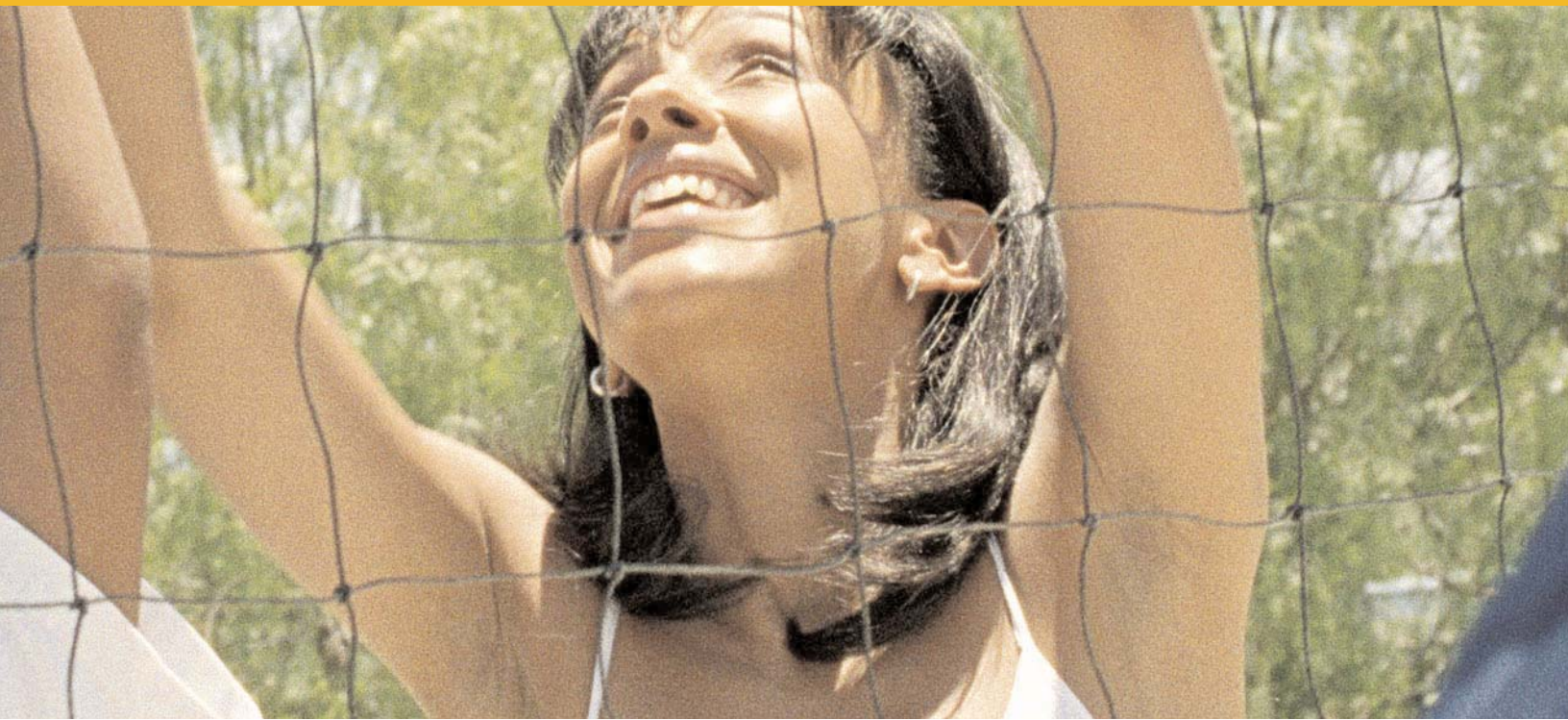


# Is leverage right for me?



Leverage isn't right for everyone. The best way to decide if it's right for you is through a discussion with your financial advisor. Here are some of the things you need to ask yourself and discuss with your advisor:

- **Do I have a specific financial goal in mind?** Ensure you have a specific goal you're trying to achieve before starting this (or any) investment strategy.
- **For how long am I planning to invest?** Leverage may be appropriate if you have a long-term horizon of perhaps 10 years or more.
- **How much other debt am I carrying?** You should ensure you have your current debt load well under control before assuming further debt through leverage. A good rule of thumb is that your total borrowing cost each month, including the interest you pay on an investment loan, should not exceed 35% of your before-tax income.
- **How stable is my income?** A relatively stable and predictable income will make it easier to make the required interest payments each month.
- **What is my tolerance for risk?** Are you comfortable seeing the value of your investment move up and down? Are you comfortable with the possibility that leverage may not outperform traditional investing?



## How do I get started?

If this sounds like a strategy that you might be interested in, speak to your financial advisor. Your advisor can answer any questions you have about investment leverage and provide you with a customized leverage illustration. This illustration will show you, based on assumptions that are appropriate for your unique situation, how leverage might work for you and what your own personal break-even return is.

Investment leverage can be a powerful tool for helping you achieve your financial goals sooner. Speak to your advisor to learn more about this strategy and find out if it is right for you.

#### **Important notes**

Borrowing to invest is suitable only for investors with higher risk tolerance. You should be fully aware of the risks and benefits associated with investment loans since losses as well as gains may be magnified. The value of your investment will vary and is not guaranteed, however you must meet your loan and income tax obligations and repay your loan in full. Please read the terms of your loan agreement and the investment details for important information and discuss with your financial advisor before deciding to borrow to invest.

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