Investment loans

Borrowing to invest: risks and benefits

NATIONAL BANK FINANCIAL

Borrowing to invest

An introduction to leveraged investing

In the same way an entrepreneur borrows to invest in his company, allowing it to grow more quickly and generate additional income, you can borrow to invest in a portfolio of securities in order to increase your chances of reaching your long-term financial goals. However, the issues involved are complex, and it is very important that they be fully understood.

“Investment leverage” consists of borrowing money, in one form or another, for investment purposes. There are four main ways of borrowing this money.

Margin account

A margin account is an investment account with a line of credit that’s set according to the value of your investments held in this account. In other words, you use securities you own and hold in your margin account as collateral to borrow money – typically to be used to make additional investments. Margin accounts are simple vehicles offered exclusively by investment dealers. They are typically used to make tactical investments, in order to capitalize on short- or medium-term market opportunities.

Home equity line of credit

Most banking institutions can give you a line of credit secured against the equity in your home. You can use this line of credit to borrow in order to purchase investments. This instrument also lends itself to tactical operations and is used in the short- or medium-term.

Investment equity line of credit

An investment equity line of credit is similar to the home equity loan. The only difference is that, here, you are pledging investments you already own as collateral, rather than your personal residence. Investment equity lines of credit are typically negotiated with a bank, and used for more strategic operations over a longer term, such as financing a specific transaction.

Investment loan

Also referred to as a “leverage loan”, an investment loan is used to finance a major investment – usually $100,000 or more – using no collateral other than the investment assets you intend to purchase. Investment loans are used for strategic operations, typically as a component of a growth-oriented investment portfolio managed with a long-term time horizon.

This brochure deals specifically with the **investment loan** and serves as an introduction to its benefits, its risks and how it should be used. If you’d like more information on other forms of borrowing that can be used as leverage, please see your Investment Advisor.

The investment loan – benefits and risks

Properly used, an investment loan can be a powerful tool in a well-conceived investment strategy. However, investment loans also carry risks that must be properly quantified and understood.

Key benefits of the investment loan

When compared to other leverage strategies or to buying securities without financial leverage, the investment loan offers seven key benefits.

* You're investing a large sum of money right from the outset, which will allow you to benefit from the returns on this large amount over a long period of time. This should ultimately result in a greater capital accumulation than gradually investing smaller sums over time, with or without borrowing.
* Typically the interest rate charged on an investment loan will be the prime rate, which is usually the lender's lowest rate.
* Interest expenses incurred on an investment loan can generally be deducted from your taxable income, which reduces the cost of servicing the loan and makes the strategy more attractive.
* You don't have to liquidate or pledge your real estate as security.
* The amount you can borrow is usually greater than with a simple secured credit margin.
* Guarantees required by lending institutions on such loans are generally less binding.
* Finally, unlike a margin account or investment equity line of credit where the lending institution can require immediate repayment if the value of the securities pledged as collateral falls below the amount outstanding on the loan, this type of financing doesn't usually include a margin call mechanism.† With an investment loan, as long as the interest payments are made, the lender will not "call" the loan. However, if you default on your payments, procedures to recover the debt will obviously be initiated.

Key risks of the investment loan

An investment loan also carries four principal types of risks.

Liquidity risk

If the interest rate on the loan fluctuates upward, your monthly payments will also increase. Since an increase in interest rates usually affects the stock market negatively, your portfolio's performance might suffer at the same time. As well, over the long period during which you'll be using the investment loan, your personal income might drop, which could make it difficult or impossible for you to continue meeting your interest payments.

Market risk

This risk exists with all investment strategies but it is magnified with a leverage strategy since your rate of return has to be high enough to cover the cost of servicing your loan. Also, you will have to reimburse the borrowed capital at some point. If the value of the investment you purchased with the loan is lower at that point than the amount borrowed, you will be out of pocket for the difference.

Tax risk

The deductibility of interest you pay on investment loans is an important element in making a leverage strategy work from a financial perspective. Revenu Québec has already imposed limits on the amount of interest that can be deducted on its provincial tax return, and the Federal government has announced its intention to make changes in this area as well – which could make the use of leverage in investing far less attractive. Furthermore, the impact of taxation on investment returns must also be considered – interest income, dividends, and capital gains and losses are each taxed differently.

Emotional risk

While fear and greed exert powerful influences in the financial markets, they aren't the best factors on which to base investment decisions. If you experience fits of anxiety when your investments take a downturn, you should avoid using leverage since it will only magnify any short term losses. Nowadays, stock market results are an integral part of the daily news, so you will be constantly reminded of the consequences of your investment decision – which could lead to a lot of sleepless nights. Similarly, if you think you're going to get rich quick using "other people's money", investment loans are not for you. Leverage can make a good investment strategy better, but it doesn't work miracles. Patience, discipline and 10-year time horizons are required – which don't usually fit with a "get rich quick" mindset.

Five key factors when considering an investment loan

There are five important factors involved in using an investment loan effectively.

Factor 1: invest in stocks

In simple terms, the strategy behind using leverage for investment purposes is to borrow money and make an investment that will generate a higher after-tax return than the after-tax cost of servicing your loan. You must therefore focus on asset classes and assets that stand the best chance of delivering such returns. There are two elements to consider here – the actual gross return produced by the investment, and the tax treatment of these returns. In the table below we compare the net returns earned by leveraged investments made in equities and fixed-income securities, after factoring in taxation and the cost of the loan.

The benefits and risks of using leverage are most often illustrated with scenarios built on historical rates of return. Past performance data can give us some useful information, but it certainly offers no guarantees for the future, and does have some real limitations. While we are reasonably comfortable using past performance as an indication of future returns for Canadian stocks, we strongly feel that historical returns for bonds present a much too optimistic picture of what can realistically be expected from fixed-income securities – at least in the foreseeable future. Interest rates have fallen steadily over most of the past 25 years, which has pushed returns on bonds to historically high levels over this period. For instance, the average annual return over the past 20 years for the SC Universe Index (Canada's principal bond

index) is close to 9%, whereas the current yield on long Government of Canada bonds is only in the 4.5% range.

In light of this, we have decided to take the following approach in comparing our leveraged investments. Since leverage loans should really be considered over periods of 10 years, we used the average compound annual return for the S&P/TSX over a 10-year period ending in 2006 as the expected annual return for Canadian equities. This period includes years which were very favourable for this asset class, as well as years where Canadian stocks suffered double digit losses. Our average annual compound return for stocks over this period worked out to be 9.45%. Since interest rates are unlikely to fall much from their current low levels, and in fact could well rise (which would negatively impact returns from bonds), our best forecast for fixed-income returns is what could be earned on a 10-year bond purchased as this is being written: 4.5%. We assume an interest rate on the leverage loan of 4.96%, which is the average prime rate over the last 10 years.

Net returns on leveraged Canadian stock and fixed-income portfolios

	Equities	Fixed income
Loan	$ 100,000	$ 100,000
Annual interest rate on loan	4.96 %	4.96%
Annual loan servicing cost	$ 4,960	$ 4,960
Annual after-tax cost of loan	$ 2,659 [1]	$ 2,659 [1]
Expected rate of return	9.45% [2]	4.5% [3]
Pre-tax return	$ 9,450	$ 4,500
After-tax return	$ 7,229 [4]	$ 2,412 [1]
Net return after taxes and carrying costs	$ 4,570	$ (247)

[1] Assuming a marginal tax rate of 46.4%

[2] Average annual compound return for the S&P/TSX 1997-2006

[3] 10-Year Government of Canada Bond Yield, October 2007

[4] Assumes 50% of return is dividends, taxed at 23.8%, and 50% is capital gains, taxed at 23.2%

As expected, the table shows that the leveraged investment in equities comes out far ahead of the leveraged investment in fixed-income securities. However, a more important point to note is that even though we assumed the carrying cost of the loan was fully deductible, the leveraged fixed-income investment actually ends up losing money when everything is considered. Once again, the huge difference between the two leveraged strategies is that stocks generally produce higher returns than bonds, and that dividends and capital gains are taxed at a much lower rate than interest income.

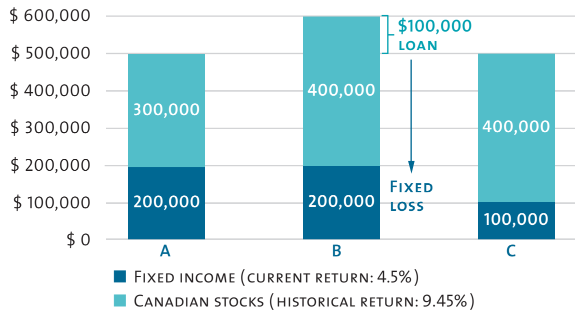
Factor 2: consider your investor profile

Before you decide on any type of leveraged investing, make sure you consider your investor profile very carefully, since the probability of turning a profit with such a strategy is directly linked to the notion of investment risk premium. If your profile is somewhat conservative, an investment loan is not suitable for you.

Let's look at an example where an investor owns a portfolio composed of $200,000 of fixed-income securities and $300,000 of common stocks (portfolio A). If this investor decides to borrow $100,000 to purchase more stocks, he or she will end up with portfolio B ($200,000 of fixed-income securities, and $400,000 of common stocks). This strategy should increase the total accumulation and overall return, since there is $100,000 more at work, and a greater proportion of the portfolio is invested in an asset class that offers higher returns over the long term.

But, it's likely that the fixed-income securities in this portfolio will generate after-tax returns that are lower than the after-tax amount of interest the investor must pay on the loan, resulting in a fixed loss. In light of this, it would make sense to sell $100,000 of fixed-income securities and pay off the loan – resulting in portfolio C ($100,000 of fixed-income securities, $400,000 of common stocks). Conclusion: as the diagram shows, the investor could have increased his or her potential return without having recourse to borrowing by simply increasing the stock portion of the portfolio. The problem here is that if portfolio A was appropriate for the investor's profile, portfolio C will not be. Portfolio C is a growth portfolio, whereas portfolio A is a balanced portfolio.

Does your leveraged portfolio correspond to your profile?



Portfolios composed exclusively of common stocks will maximize the economic benefits of leverage. So before considering the use of leverage, you have to make sure your investor profile is such that you will be comfortable with this kind of portfolio.

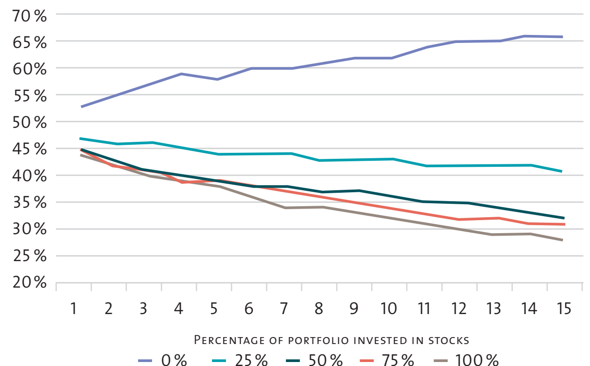
Factor 3: focus on the long term

It takes many years – usually at least 10 – for an investment loan to show its true potential.

While expected returns calculated using past performance data are useful, we must recognize that our actual experience could turn out to be somewhat higher – or lower – than this expected return. This is particularly important to understand when using leverage, since it magnifies the impact of performance – both on the upside and the downside. With leverage, it is very important to understand – and accept – how high the probability of losing money might actually be. Using Monte Carlo simulation – a mathematical tool that calculates the probability of different scenarios – we can estimate how likely it would be to incur a loss after the impact of income taxes and interest expenses for different portfolios.

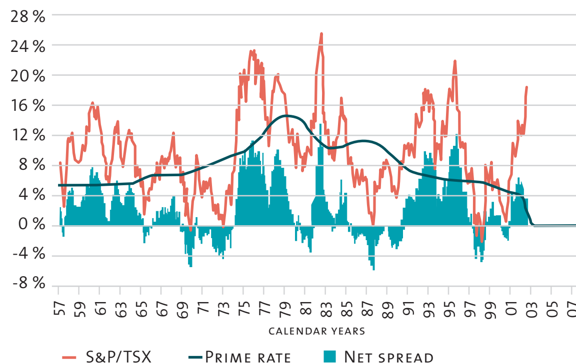
In the following diagram, the bottom line represents a 100% equity portfolio, while the top line shows a 100% fixed-income portfolio – the three lines between these

Probability of incurring a net loss with a leveraged investment



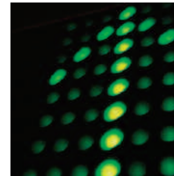
extremes illustrate portfolios with different mixes of fixed-income securities and equities. As you can see, not only does the all-equity portfolio have a much smaller probability of losing money after subtracting taxes and interest charges, but the probability of incurring such a loss decreases substantially the longer the portfolio is held. Unfortunately, the diagram also shows that even over a very long time period – 15 years for instance – there is still more than a one-in-four probability of losing money with a leveraged investment in equities.

Spread between investment returns and the cost of loans since 1957



The diagram above shows the spread between the cost of the loan (the prime rate) and the return for the S&P/TSX Composite Index over the past 50 years in rolling five-year periods (as if we were disposing of the portfolio every five years). As you can see, the spread between the two (the blue area) is usually above the zero mark, meaning that investment returns exceeded borrowing costs. But, this spread also ventures into negative territory, showing that borrowing costs can exceed investment returns, and can stay negative for periods of several years.

This is why it's important to have a long investment horizon when borrowing to invest. Otherwise, the leverage strategy could be jeopardized because of short-term fluctuations in the spread between the cost of the loan and the rate of return.



Factor 4: Be aware of the impact of taxation

The deductibility of interest charges for an investment loan is an integral component of a leverage strategy.

According to current tax legislation, the Canada Revenue Agency (CRA) considers interest on a loan contracted for investment purposes to be fully deductible provided that the investment offers a reasonable expectation of profit. However, federal legislation in this area is under review, and may change.

Residents of Quebec must give even more careful consideration to the impact of taxation, since they file both a federal and a provincial return, and Quebec's Ministère des finances has taken a more restrictive position with regard to interest deductibility. On the Quebec return, interest from an investment loan may be deducted against investment income only. In other words, Quebec residents must have actually collected interest, dividends or net capital gains to be able to deduct the interest expenses on their loan.

This opens the door to various planning opportunities. For example, Quebec-based entrepreneurs may find it worthwhile to have their companies pay dividends because such dividends allow them to deduct a greater portion of the interest on investment

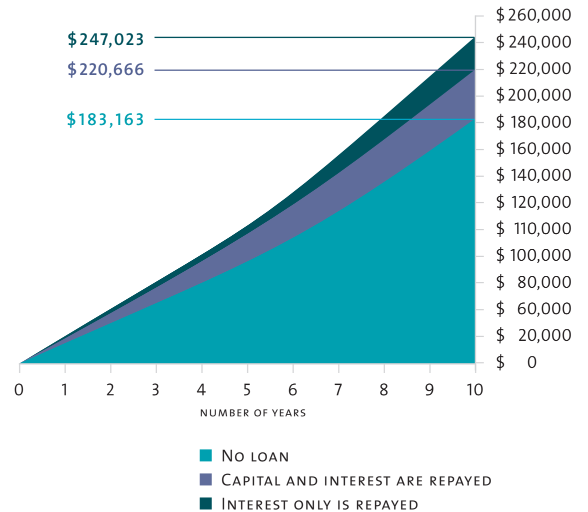
loans. As well, if they have capital gains, dividends or interest income from other portions of their investment portfolios, these can also be used to claim borrowing costs as a deduction. Make sure you discuss interest deductibility with your accountant or tax planner before making use of leverage in your investment strategy.

Factor 5: choose your repayment method carefully

Should you repay the loan interest only, or both the capital and the interest?

You can get the most out of your leverage loan by paying only the loan interest, and not repaying any of the capital until the end of the loan's term, typically when you liquidate your investments. The diagram below shows the results of an investment with and without leverage. The lower area shows what would happen if you made a monthly investment equivalent to the blended payments on a $100,000 loan over 10 years. Here, the estimated amount invested each period is $1,156. As you can see, by investing this amount every month, after 10 years you will have accumulated $183,163, net of income taxes. If, on the other hand, you decide to borrow $100,000 to invest and repay both the capital and the interest on your loan, over a period of 10 years your investment will be worth $220,666 (middle area in the diagram), net of income taxes. And if you repay only the interest over ten years and the capital at the end of the term, you will end up with $247,023 (upper area), once again net of income taxes.

Impact of repayment strategies



No loan
Capital and interest are repayed
Interest only is repayed

Assumptions:
investment: $100,000
rate of return: 9.45%; interest rate on loan: 4.96%
(based on the average prime rate and the S&P/TSX average annual rate of return over the past 10 years)
marginal tax rate: 46.4%

The $26,357 difference between scenarios two and three described above results from the fact that by paying down capital, you will be deducting smaller loan payments. From a net after-tax perspective, you come out ahead by not repaying the capital and deducting larger interest payments. We have assumed a marginal tax rate of 46.4% in this example.

A point to consider, however, is whether you might feel more comfortable repaying a portion of the outstanding capital with each loan payment, even if this makes the overall leverage strategy a little less efficient. You may enjoy greater peace of mind when market corrections occur if you have reduced the outstanding amount of the loan by making regular capital repayments as well as interest payments.

Investment loans – a good investment strategy, when used appropriately

Like any financial leverage strategy, investment loans should only be considered by investors who have a high tolerance for risk.

To reap the biggest benefit, investment loans should be fully invested in portfolios of common stocks or equity funds, which will be a good deal more volatile than balanced or fixed-income portfolios. As well, you must be patient and not worry about market ups and downs, especially during the first few years. Finally, make sure to seek out the help of an accountant or a tax planner to determine whether the tax consequences of using leverage for investment purposes suit your personal situation.

Before you choose this route, ask yourself the following questions:

* Are you comfortable with the idea of taking out a loan for an investment whose return will be constantly fluctuating?
* Are you ready to commit to the loan program for a period of up to 10 years?
* Can you afford to lose the assets you're using to secure this loan? Remember that the lender can recall secured assets to pay back the loan if you default on your payments.[†]
* If your current income dropped suddenly, or if rising interest rates increased the amount of your monthly loan payments, would you be able to continue making these payments?
* Do the stocks in which you're investing match your investment goals and your risk tolerance? Also, have you assessed the expenses related to the purchase and disposition of these stocks?
* What are the tax implications of using leverage to invest? Will you be able to deduct the interest you'll be paying on this loan?

If you need help with these questions, please don't hesitate to consult your Investment Advisor. He or she can assess your situation and help you make an informed decision.

† Certain conditions may apply on investment loans of $250,000 or more.

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25981-202 (2007/09/27)

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