Investment strategy insights

Why borrow if you're already wealthy?

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- Investors tend to shy away from borrowing, and view debt as a sign of living beyond one's means. While borrowing does come with costs and risks, it also represents an often-overlooked opportunity.
- In our view, borrowing should be considered as part of a sensible financial strategy, even—and perhaps especially—for wealthy individuals.
- Rather than reserving borrowing as a strategy for emergencies only, we believe investors should use it as a tool to provide flexibility, enhance returns, and increase the probability of achieving their financial goals.
- In this report, we highlight the main circumstances in which borrowing can support you in achieving your financial goals, averting the need to sell high-return assets, mitigating taxes, improving returns, and increasing diversification.

In this report

Borrowing is viewed by many investors as a last resort, for emergencies only. Debt comes at a price, since creditors demand to be compensated, and there can be significant risks if you're not able to repay on time. But while it might seem counterintuitive, borrowing is often a vital tool for wealthy individuals.

The risks and costs of borrowing are well-known, but its benefits are often overlooked. Although borrowing doesn't directly generate returns, it can facilitate gains and enable investors to avoid locking in temporary losses.

In this paper, we will show that leverage can be a valuable part of a sensible financial strategy. We will also examine the main reasons to consider borrowing and demonstrate how debt can be a tool to help you meet your financial goals. We will also show that the costs and risks of borrowing should be managed, not avoided.

Why might I borrow?

Research has shown that many investors have an aversion to taking on debt, even when it's the best option available.[1,2] We believe that a well-rounded wealth management strategy should incorporate both the asset and the liability side of a client's balance sheet.

[1] UBS Investor Watch, The 'new normal' is here to stay, 2Q 2013.

[2] Meissner, Thomas. "Intertemporal Consumption and Debt Aversion: An Experimental Study." Technical University of Berlin; Berlin, Germany (2013).

A wealthy investor should consider debt as a tool to help meet four main objectives:

1. To provide a "bridge loan" or secure liquidity
You need funds temporarily, and don't want to sell assets that offer the potential for strong returns. Borrowing can also help avoid realizing taxable capital gains and transaction costs, fund business ventures, or improve portfolio returns as long as expected returns outweigh borrowing cost.

The ability to borrow can increase an investor's freedom to buy assets (or avoid selling assets) at distressed prices, but these opportunities can only be fully exploited if the investor manages liabilities proactively to ensure there's borrowing capacity when it's needed.

2. To increase diversification
Your net worth is overly concentrated—perhaps even in a single asset. This is often the case for entrepreneurs or top executives, whose wealth can be highly focused prior to selling a business or tied up in restricted company stock. If this is your case, borrowing can help fund a diversified portfolio, with investments that are less correlated to the bulk of your net worth. Using leverage in this way can help improve risk-adjusted returns, when done carefully.

3. To increase return potential
You are considering borrowing as a way to boost the growth rate of your net worth. For a long-term investor, returns on risk assets can often exceed the cost of borrowing. Such strategies, however, involve the risk that investment returns undershoot expectations, or that the investor faces liquidity needs that reduce their ability to ride out bear markets.

4. To mitigate taxes
Certain forms of debt servicing—for example mortgage interest—can be tax-deductible in some countries. Borrowing strategies may also confer tax advantages in estate planning.

At the end of this paper, we will present some case studies to demonstrate how high net worth investors might implement borrowing strategies. But first, let's consider why investors tend to shy away from borrowing, and then outline our framework for assessing the costs, risks, and benefits of borrowing strategies.

Is borrowing worth the risk and cost?

Before you choose to borrow, you should address the key question of whether a particular borrowing strategy would increase the probability that you will meet your financial goals. However, this alone does not provide a "green light." You will also need to "stress test" your portfolio for risks that could derail your plan.

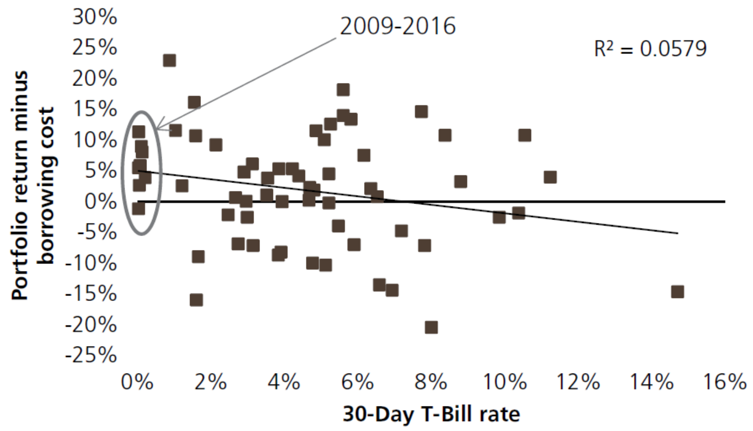
To help us evaluate the merits of borrowing, we must first assess **cost** and **robustness**.

Cost is the first consideration. In particular, we recommend evaluating the difference between the estimated interest rate on the loan versus the expected return of the asset you plan on investing in.

If the expected return of the asset you plan to invest in is lower than the borrowing cost, then borrowing clearly does not make financial sense. If the expected return is higher than the borrowing cost, then taking on debt could make sense, but it is important to remember that short-term returns often deviate significantly from long-term expected returns (Fig. 1). As a result, we advise against using this borrowing cost-to-"expected carry" analysis as the only criterion for deciding when to use liabilities.

Fig. 1: Don't rely solely on borrowing costs when deciding how to use liabilities

Calendar year rates and portfolio returns, 1954–2016



Source: Morningstar, UBS. Portfolio is approximately 60% stocks, 40% bonds. For illustration purposes only.

Robustness is a crucial second component. Borrowing that results in an investor being forced to sell assets to make a loan repayment is almost never a good idea. There are usually two main culprits that can lead to this scenario materializing: *market risk* and *spending commitments*.

Market risk. If the value of your loan collateral falls, breaching agreed loan-to-value ratios, and you lack alternative funds, you might be forced to sell assets to meet a margin call or repay debt.

To assess this risk, we recommend looking at historical "maximum drawdowns." For a traditional stock/bond portfolio, you can use Fig. 2. Any estimate of potential haircuts should also account for illiquidity. Stocks, bonds, and many investment funds tend to be fairly liquid, while property, private business interests, and other illiquid assets could fetch far less if you needed to sell in a rush.

Spending plans are equally important. If you expect to tap your portfolio for large expenditures, such as university tuition for children or a home purchase, you need to consider the implications for your portfolio's overall loan-to-assets ratio.

If your assets will still hold enough value to avoid a margin call in a worst-case scenario, and after making your planned expenses, your plan can be considered robust. If, however, your plan leaves little margin for error—or there is a projected shortfall—you may need to reduce leverage.

Fig. 2: Bear markets provide a conservative "haircut" estimate
Post-WWII bear market performance statistics based on asset allocation (US large-cap stocks and intermediate US gov't bonds)

Allocation (stock/bond)	Worst drawdown	Longest time under water (months)
100% / 0%	-51%	74
90% / 10%	-46%	73
80% / 20%	-41%	65
70% / 30%	-36%	59
60% / 40%	-30%	50
50% / 50%	-24%	40
40% / 60%	-17%	29
30% / 70%	-12%	24
20% / 80%	-7%	24
10% / 90%	-4%	19
0% / 100%	-3%	5

Source: Morningstar Direct, R: PerformanceAnalytics, UBS

How should I choose a borrowing strategy?

Time horizon?
We also need to consider the length (or "tenor") of the loan, which can vary from as little as a few weeks to many years. There are three key things you need to think about before deciding on the tenor of your loan:

1. The reason for borrowing
Some loans, including bridge loans, will be needed only for a limited time pending an influx of cash. It is prudent to leave a margin for error where the timing of such an influx is uncertain, to avoid being unable to repay or service loans. The sale of a business, for example, may take more time than expected. While the vesting schedule for company stock offers a little more predictability, the final value of the payouts will still fluctuate.

Other loans, such as adding leverage to a portfolio to enhance yield, will likely need to be longer-term in nature. In this case, it is important to identify the appropriate leverage ratio for the long term.

2. Ability to refinance
There are clear risks to taking short-term loans if you are likely to require funds for a longer period. When such loans come due, it could be harder or more expensive to refinance them. The ability of investors to refinance loans could diminish for various reasons. Market financing conditions could deteriorate if, for example, a recession causes bank lending standards to tighten. Alternatively, the assets that an investor uses to collateralize a loan could fall in value, reducing access to fresh credit. Finally, an investor's income could fall—for example, a job loss or a business owner who needs to reinvest in the company—reducing the ability to service debt. You can reduce, although not eliminate, refinancing risks by taking out longer loans.

If you do not have the contractual rights to the debt, assume that the lender can force you to pay it off at any time. Ensure you have enough assets available to pay off the liability if necessary. And if you are planning to pay off your loan with an illiquid asset, make sure that you lock in the terms of the borrowing for at least as long as it might take to sell the asset in a worst-case scenario.

3. Expectations for rates across the yield curve
Taking out a longer-term fixed rate loan makes less sense if you expect borrowing costs across the curve to decline. If central banks are reducing rates at the early stages of an economic downturn, it may be worth considering shorter-term loans that can be refinanced at a lower cost. By contrast, in a period where rates are on a fast-rising trajectory or inflation is accelerating, investors may place greater value on a fixed borrowing cost.

Of course, predicting the course of rate moves is not always easy and investors can be tripped up by changes in financing conditions, as mentioned above.

Fixed or floating
You also need to think about whether the loan is fixed rate, or floating rate, i.e. whether repayments will vary with changes in short-term interest rates.

There are three considerations here:

1. Your preference for certainty, or capacity to accept changes in borrowing costs
A fixed rate confers greater peace of mind for risk-averse investors, while other investors will be less worried by fluctuations in debt servicing costs. Equally, some investors will run into trouble if borrowing costs rise even modestly, while others will have the flexibility to pay higher rates if needed.

If you are willing and able to accept uncertainty, you can benefit from the typically cheaper upfront cost of floating or short-term loans. In some cases, fixed-rate loans may also charge a prepayment fee, so "rolling" a series of short-term loans may be preferred to locking in a loan with a very long tenor.

Some kinds of fixed-rate borrowing, including mortgages, offer an attractive degree of optionality, combining the certainty of a fixed rate with a degree of flexibility usually associated with a floating rate. Many homeowners can refinance a mortgage without penalty. If rates decline, the homeowner can therefore take advantage of lower borrowing costs. If rates increase, the homeowner can hold the mortgage through the full term and take advantage of below-market rates of borrowing.

2. Asset-liability matching
The composition of your portfolio can affect the type of debt you should consider. If you have a portfolio with a large allocation to credit and take a floating-rate loan, a rise in interest rates could cause the value of your assets to fall at the same time as your financing costs rise.

The risks can be even greater if you collateralize a floating-rate loan using assets whose returns are sensitive to interest rate increases. For example, long-duration bonds tend to lose value if interest rates rise quickly. Since this would also result in a rising borrowing cost for a floating-rate loan, it could result in a margin call that forces the investor to sell assets. This risk can be managed by diversifying the portfolio, incorporating equities and other asset classes that tend to benefit from rising interest rates (such as senior loans). By doing so, higher investment returns can at least partly offset rising debt service costs if interest rates increase.

3. If you expect interest rates to rise more (or less) than market pricing
The price of locking in interest rates for longer will typically increase if the yield curve steepens. This can sometimes be a price worth paying, if, for instance, you expect short-term interest rates to rise very quickly. However, if you feel that the steepness of the yield curve is unjustified—for example, because you believe short-term rates will rise more slowly than the market is pricing—a floating-rate approach may offer greater value.

How should I pay off my debt?

Regardless of the objective for your borrowing strategy, it's vital to develop a specific plan for paying off the loan:

1. **Identify a specific source of funds.** This could be the sale of an asset, or projected cash inflows from a business or salary.

2. **Formalize a timeline.** Make sure to formalize a schedule. While it's okay to reassess your plan as things change, setting out a formal schedule can stop you from procrastinating and keep you focused on managing the risk and cost of your debt.

3. **Develop a "Plan B."** Identify an alternative source of funds to repay debt in case the asset sale or cash inflow you are expecting doesn't occur or is delayed. Set specific criteria for triggering this backup strategy, especially if the liability is growing over time.

4. **Stress test your plan.** Consider how you would deal with unexpected expenses, or with market stresses impacting the asset side of your balance sheet. Make sure to account for the risk of a "margin call" and act proactively to keep a buffer against that scenario.

It's impossible to fully anticipate all possibilities, but attaching your borrowing strategy to a specific objective—and formalizing a payback plan—can help to mitigate the risks and costs of carrying a debt balance over time.

When borrowing against a portfolio, diversification is essential. Poorly diversified strategies are more subject to large price swings. They can also be derailed by more lasting drawdowns, increasing the risk that a margin call forces the investor to sell at "fire sale" prices. By contrast, well-diversified portfolios are more resilient throughout the economic cycle and can support a higher sustained leverage amount.

Conclusion

According to Roman philosopher Seneca, "Wealth is the slave of a wise man and the master of fools." The same can be said of debt. If used imprudently, debt can be ruinous. But by thinking proactively, investors can use borrowing as an alternative to selling assets at bear market prices, which could in turn significantly amplify return potential in the first stages of a recovery period.

For any investor planning to use leverage as a part of their strategy, we recommend following these three guiding principles:

1. Use debt to diversify and build resilience.
2. Avoid a mismatch between the duration of your liabilities and the duration of your assets.
3. Manage your liabilities proactively.

Case studies

Case study 1: Barry's "bridge loan"
Barry inherits a USD 30 million portfolio from his father. The portfolio is fully invested in US stocks, and had been worth about USD 38 million before a recent bear market. Due to the inheritance, Barry faces a USD 17 million estate tax bill and would need to sell part of the portfolio to meet this obligation. But Barry believes the stock market will rebound and wants to avoid locking in the loss on the portfolio.

In terms of funding sources, Barry has access to a securities-backed lending facility (SBL). He can borrow up to 60% of the portfolio value, or USD 18 million, at a 12-month cost of about 5%.

Barry and his advisor first assess the potential upside of staying invested, along with the cost and robustness of different borrowing options.

Based on market history, the long-term return outlook appears favorable. Stocks usually go higher over 12-month periods (83% of the time), with the S&P 500 giving an average 12-month return of 11.8% since the end of 1987. Forward-looking returns usually look even more favorable when looking at markets that have already entered a bear market, so Barry and his advisor estimate an expected excess return of at least 6.8% for borrowing versus selling.

However, if Barry borrows all of the USD 17 million needed to pay his tax bill off of the SBL, he will be very close to a "margin call." Even a 6% drop in stocks would force him to begin selling parts of the portfolio at an even lower level.

So Barry chooses a more conservative level of leverage, selling USD 5 million of the portfolio, and borrowing the other USD 12 million. At a 60% loan-to-value limit, his remaining USD 25 million portfolio supports a USD 15 million loan, and stocks would need to fall another 20% before he begins receiving margin calls.

Barry uses a floating-rate loan because he wants the flexibility to pay down the balance if and when markets recover, and early prepayment of fixed-rate loans can incur a fee.

After making his decision, markets fall nearly 10% before finding their low. Twelve months later, Barry's portfolio has returned nearly 30% from its starting point, and is now worth USD 32.5 million. He pays off his loan balance—including interest—for USD 12.6 million. Even after USD 600,000 of interest payments, Barry's net worth of USD 19.9 million is about 18.5% higher than the USD 16.8 million he would have had left if he had sold stocks to pay the tax bill.

Case study 2: Daniel's diversification dilemma
Daniel Chen is a 50-year-old entrepreneur. His firm, which makes customized parts for car manufacturers, is currently valued at about USD 60 million.

Daniel and his wife also have about USD 10 million in a growth-oriented investment portfolio. They spend about USD 1 million per year, derived from cash flow of the business. Daniel plans to invest that cash flow, plus USD 5 million more, into the business over the next 12 months. At the same time, he's worried that an economic downturn could delay the sale of his business and force him to sell down all of his asset portfolio for personal spending.

In terms of funding sources, the Chens have the ability to borrow up to USD 10 million against shares in the business—at a floating interest rate of 9%—or up to USD 6 million using an SBL tied to their portfolio at a floating borrowing cost of 6%. There are also fixed-cost offerings, which offer a lower starting interest cost but also carry a possible "breakage fee" if the Chens pay the debt off earlier.

Daniel and his wife review their options and perform a cost and robustness check. Because they plan to spend such a significant portion of their liquid assets, borrowing using the SBL would leave them open to a margin call if markets sell off. Instead, they decide to borrow against the company shares. They also borrow just USD 5 million, well short of their full USD 10 million borrowing capacity in order to ensure a strong buffer.

They set aside USD 5 million in a bond ladder to meet the next five years of spending and reallocate the remainder of their investment portfolio (USD 5 million) into a globally diversified balanced portfolio with a sizable allocation to longer-duration high-quality bonds.

Even though this strategy incurs a higher interest cost, the Chens decide that robustness is more important. After all, the company is their primary asset. They also choose a floating-rate option because they aren't sure when they'll be able to pay down the debt, and if there is a recession—the main risk to their plan—borrowing costs should remain low.

Regardless of whether a recession occurs, this leaves the Chens prepared to meet their expenses, and the balanced portfolio also provides diversification versus the business, which remains their largest asset.

Case study 3: Leighann's levered portfolio

Leighann is a 25-year-old architect with a USD 1 million portfolio that she inherited from her grandmother. She needs to take USD 250,000 out of her portfolio to start a business, and plans to pull about USD 200,000 over the next five years to meet her day-to-day expenses.

Leighann would like to keep her remaining USD 750,000 portfolio value roughly stable despite the planned withdrawals. Without borrowing, Leighann would need to invest in an aggressive-risk portfolio to earn the 6% annual return needed to offset the USD 200,000 of cash outflows over the next five years.

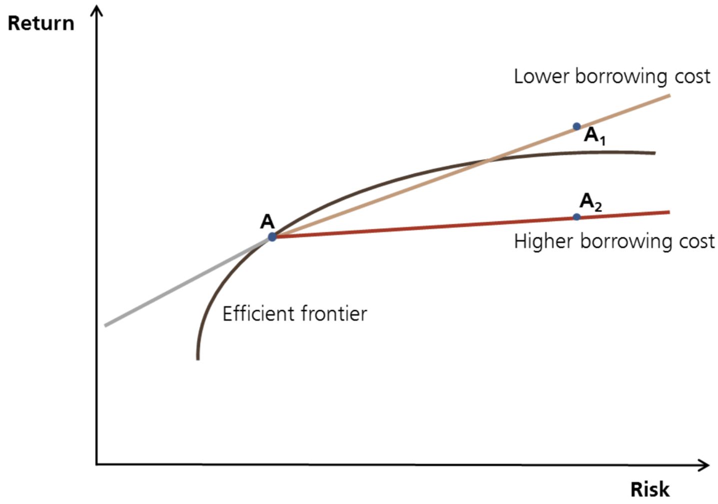
After discussing her options, Leighann and her financial advisor decide that using leverage on a moderate-risk portfolio might deliver higher risk-adjusted returns more than simply adding stock to the portfolio (see A_1 in Fig. 3, next page).

Interest rates are very low in this hypothetical scenario, and between a small business loan and her SBL tied to her portfolio, Leighann can safely borrow up to USD 500,000 at a cost of about 4% per year.

With this in mind, Leighann and her advisor assess the potential upside, along with the cost and robustness of two main borrowing strategies. Both strategies involve floating rates, since Leighann and her advisor anticipate little risk of significantly higher rates over the coming years. For the calculation, they assume that Leighann withdraws the full USD 200,000 in year 1, and that she will sell her business in year 11.

Fig. 3: According to Modern Portfolio Theory (MPT), leverage may be able to enhance risk-adjusted returns more than simply increasing the stock allocation

Efficient frontier and capital allocation line, based on funding cost assumptions



For illustrative purposes only. Note: **A** reflects the investor's gross portfolio, while $\mathbf{A_1}$ and $\mathbf{A_2}$ represent the characteristics of the net portfolio accounting for the loan balance. Source: UBS.

Option 1. Borrow USD 200,000 at a 4% interest cost, and invest the USD 750,000 in a well-diversified portfolio of stocks and bonds, with an expected return of 4.5%.

After an annual interest cost of about USD 8,000 per year, this portfolio has an expected return of about USD 25,750 per year. That is approximately 3.4% based on the gross starting portfolio value, but 4.7% of the net portfolio value of USD 550,000. After 10 years, the portfolio's expected value is USD 1.06 million. In a bear market, this well-diversified portfolio is expected to fall an average of about 11% and spend about 14 months "underwater" before recovering its losses (see the Bear market guidebook for details).

Option 2. Sell USD 200,000 of the portfolio and invest the remaining USD 550,000 in an aggressive-risk portfolio with an annual return expectation of 7%.

This portfolio has an expected return of about USD 38,500 per year. After 10 years, the portfolio's expected value is USD 1.08 million. In a bear market, this equity-heavy portfolio is expected to fall an average of 28%, and take about 35 months to recover.

Leighann chooses Option 1, deciding that her ability to borrow gives her enough of a buffer against bear market losses—especially for a portfolio with a balanced level of risk. Her business loan is deductible as a business expense, and she doesn't need to realize capital gains to fund her expenses, so this strategy is more tax-efficient as well.

Appendix

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