



# Borrowing Smart In A Debt-Filled World

by Eric Petroff ([Contact Author](#) | [Biography](#))

[Leverage](#) (or debt) has become an integral aspect of our society and learning to use it effectively is essential to almost any individual's financial well-being.

Consider for a moment the pervasiveness of leverage in the economy. The U.S. government relies on debt to support its daily operations, and only a fraction of corporations operate without applying debt to their balance sheets. Similarly, home ownership, higher education and even basic consumer goods are often beyond the grasp of ordinary individuals without the use of loans or credit cards.

Regardless of where you look in our economy, leverage is there in one form or another. It is a tool - the financial equivalent of a double-edged sword - that must be wielded with wisdom and prudence. In this article, we will look at home ownership, investing and lifestyle leverage and show you how to stay debt-free in a debt-filled world.

## 1. Leverage and Home Ownership

One of the least considered forms of leverage for individuals is the home loan, or [mortgage](#). From a psychological standpoint, most individuals perceive a home loan as being just another cost of living overlaid with the benefits of long-term increases in the value of real estate. This is generally true over long periods of time, but the reality is that a home loan represents a highly levered real estate investment. For example:

- If you provide a 20% [down payment](#) for the purchase of your home, you are actually taking a 5:1 levered position
- If you do an [FHA loan](#) with a 3% down payment, this equates to approximately a 33:1 levered position

Like it or not, a home is like any other investment: it can go up or down in value. By leveraging this investment anywhere from 5:1 to 33:1 you are introducing substantial volatility to your overall net worth should you be forced to sell your home due to unforeseen circumstances. (To learn more, see [Investing In Real Estate](#), [Home-Equity Loans: The Costs](#) and the [Mortgage Basics](#) tutorial.)

### *Leverage and Home Ownership Example*

To illustrate, consider the following table that describes how a 5% [realized loss](#) on a home would affect the value of your down payment (or [home equity](#)).

As you can see in Figure 1, a 5% loss can be substantially magnified by leverage and manifest itself in a loss as small as 25% of home equity, or a loss well in excess of your original investment.

Leverage	Value of	Actual Cash	Resulting	Dollar	Remaining	Loss as
----------	----------	-------------	-----------	--------	-----------	---------

Ratio	Home	Investment/Down Payment	Total Investment Exposure	Value of a 5% Loss on Total Investment	Cash Value After Loss	a % of Down Payment
5:1	\$200,000	\$40,000	\$200,000	-\$10,000	\$30,000	-25%
33:1	\$200,000	\$6,000	\$200,000	-\$10,000	-\$4,000	-167%

Figure 1

Fortunately, home values are relatively stable and have historically trended higher over time. However, [bear](#) real estate markets can and do happen - just ask anyone who owned a home in 2007. (Read more about this in [Why Housing Market Bubbles Pop.](#))

## 2. Investment Leverage

In addition to home mortgages, many investors seek to further complicate their financial lives through the use of leverage through [margin accounts](#) and options and [futures contracts](#).

Generally speaking, investment leverage can be used for a wide variety of purposes. It can enhance the return of directional bets on market movements either up or down, or even generate profit should markets remain unchanged. Moreover, derivative instruments can provide investment exposure to more than just stocks and bonds, but to commodity and interest rate markets as well.

In fact, the potential applications of leverage and derivatives for individual investors are literally unlimited depending on your level of creativity and willingness to engage in these sorts of financial transactions. (Learn more about options and futures in our [Futures Fundamentals](#) and [Options Basics](#) tutorials.)

However, investment leverage can be a dangerous thing. In stark contrast to the housing example above, securities and derivatives markets are substantially more volatile than housing markets. Furthermore, individual securities have even greater levels of volatility than broad markets.

### *Investment Leverage Example*

Because margin accounts and options and futures contracts can entail huge amounts of leverage, the fluctuations in your portfolio's net worth can be tremendous. Consider the examples in the table below that incorporate very realistic movements in equity and commodities markets over short periods of time.

Cash Investment	Degree of Leverage	Actual Investment Exposure	Gain/Loss on a 10% Move	%Gain/Loss on Cash Investment	Gain/Loss on a 20% Move	% Gain/Loss on Cash Investment
\$1,000	2:1	\$2,000	\$200	20%	\$400	40%
\$1,000	5:1	\$5,000	\$500	50%	\$1,000	100%
\$1,000	10:1	\$10,000	\$1,000	100%	\$2,000	200%

\$1,000	20:1	\$20,000	\$2,000	200%	\$4,000	400%
---------	------	----------	---------	------	---------	------

Figure 2

As you can see in Figure 2, although the math is quite simple, picking an investment that moves in the correct direction is not. As such, investors should recreate this table based on their own investment strategies to determine tolerable levels of volatility (or risk) in their portfolios. One must assume the worst-case scenario when applying leverage to investments and be able to tolerate the associated investment risk. (See [Determining Risk And The Risk Pyramid](#) and [Personalizing Risk Tolerance](#) for more information.)

### 3. Lifestyle Leverage

The most insidious forms of leverage in modern society is one that is best described as "lifestyle leverage." One form of this is the practice of enhancing your lifestyle through discretionary spending on consumer items, even if the purchases can be rationalized as being necessary, such as groceries, cars and clothing.

Unfortunately, this form of leverage has no payoff down the road and is simply a tradeoff between consuming now versus later, but with an overlay of [interest](#) cost that actually decreases overall consumption over the long term. Needless to say, this is a very bad form of leverage.

On the other hand, there are productive forms of "lifestyle leverage," most notably the use of borrowing to purchase an education. Unlike the aforementioned use of leverage, this one actually has a payoff down the road net of any borrowing costs. However, like any investment, undertaking a [cost-benefit analysis](#) is prudent. Put simply, the total cost of the education, including interest over time, must be less than value of the marginal increase in income potential - otherwise, you will have worsened your financial situation. (For more on paying for education, see [Invest In Yourself With A College Education](#).)

### Use Leverage to Your Benefit

In a society that is permeated with debt, the use of leverage can be taken for granted and subsequently misused. Many individuals may find themselves in a financially unpleasant, if not ruinous, situation of their own making through the thoughtless or inappropriate application of leverage. The key to successfully employing leverage of any kind is quite simple - just sit down and put pen to paper to determine what the leverage would actually do to your financial life.

- Can you afford to maintain the cost of leverage (such as mortgages, student loans, credit cards, short-term investment losses, etc.)?
- What would happen to your financial situation if the worst-case scenario played out (such as losing a job or taking a loss on your investment)? (To prepare for any rainy days, see [Build Yourself An Emergency Fund](#).)
- Can you afford to bear the cost of a worst-case scenario?
- What are the potential benefits of using leverage successfully and do they outweigh the risks?

By going through this process you will likely end up establishing a tolerable risk profile for your

given situation and be prepared for the nasty eventualities that can sometimes accompany leverage.

Mostly importantly, learn from the mistakes of others. If you take a look at the most publicized instances of leverage gone wrong, which involve the demise of investment firms such as [hedge funds](#), you will see one common thread that ultimately precipitated their failures - insufficient liquidity to ride out the worst-case scenario. (Learn about hedge fund losses in [Massive Hedge Fund Failures](#).)

### **Conclusion**

With that in mind, remember to set aside ample cash reserves, or even credit reserves, to weather rainy days. Taking these precautions can literally mean the difference between a positive or negative experience with leverage.

To find out how to get out of debt, see [Digging Out Of Personal Debt](#), [Get Your Finances In Order](#) and [The Indiana Jones Guide to Getting Ahead](#).

by **Eric Petroff**, ([Contact Author](#) | [Biography](#))

Eric Petroff is the director of research of Wurts & Associates, an institutional consulting firm advising nearly \$40 billion in client assets. Before joining Wurts & Associates, Petroff spent eight years at Hammond Associates in St. Louis, another institutional consulting firm, where he was a senior consultant and shareholder. Prior to Hammond Associates, he spent five years in the brokerage industry advising retail clientele and even served as an equity and options trader for three of those years. He speaks often at conferences and has published dozens of articles for Investopedia.com and the *New Zealand Investor Magazine*.

**\*\* This article and more are available at Investopedia.com - Your Source for Investing Education \*\***