

Overleverage

...try to make up for lost ground.

Let's unpack the convexity of returns offered by leverage and the danger of overleverage.

Just as we saw in the last lesson, a levered structure alters the amount of the investor's capital, but not the notional amount of the investment made. Each levered portion represents a full investment in the underlying, just with a lower amount of owner capital at risk for each tranche.

When gains are made on each levered tranche, the gains must equal the gains on the unlevered instrument. However, because of the fixed financing costs, the net dollar return on a levered investment is reduced in proportion to the amount of capital borrowed. The lender's fee is fixed, so when the investment is successful, the lender participates in the success.

However, when the underlying security suffers a loss, the investor must suffer the entire burden of the loss him or herself. In the case of overleverage, a small or moderate loss in the underlying instrument can end up wiping out the investor's equity.

The lender's interest fees are fixed, so must be paid even if the investment is *not* a success. As such, even if a reserve is set aside as cash, that cash is effectively just as at risk as the capital supporting the investment.

If you don't believe me, ask this fellow... Nick Leeson, who suffered losses on an institutional option position on the Japanese Nikkei index, then tried to trade his way out of the loss with increasingly high notional value index futures positions. Within a month, he had burned through \$1.3 billion, bankrupting the 233-year old bank he worked for, Barings...

Vocabulary

N/A