

XYZ at a premium of \$5 a share) and invests the remaining \$4,500 in a relatively risk-free investment such as Treasury bills. (For purposes of this example, it is assumed that all of the calls are purchased when they have six months remaining until expiration, and that the risk-free investment bears interest at an annual rate of, say, 3.25%—which means that a \$4,500 investment will earn approximately \$73 in interest over six months.) Investor C invests his entire \$5,000 in 10 XYZ 50 calls.

If each option is held for six months and, if it is profitable, is either sold or exercised immediately before it expires, the following table illustrates the dollar and percentage profit or loss that each investor would realize on his \$5,000 investment, depending upon the price of XYZ stock when the option expires.

Price of XYZ stock at expiration of option	Investor A		Investor B		Investor C	
	Profit or Loss	% Return	Profit or Loss	% Return	Profit or Loss	% Return
62	+ 1,200	+ 24%	+ 773	+ 15.5%	+ 7,000	+ 140%
58	+ 800	+ 16%	+ 373	+ 7.5%	+ 3,000	+ 60%
54	+ 400	+ 8%	+ 27	+ 0.5%	+ 1,000	+ 20%
50	0	0	- 427	- 8.5%	- 5,000	- 100%
46	- 400	- 8%	- 427	- 8.5%	- 5,000	- 100%
42	- 800	- 16%	- 427	- 8.5%	- 5,000	- 100%
38	- 1,200	- 24%	- 427	- 8.5%	- 5,000	- 100%

The table demonstrates how increased leverage results in greater profit potential on the upside and greater risk of loss on the downside. Investor C, as the most leveraged investor, would realize the highest percentage return if the price of XYZ increased to 62, but would incur a 20% loss even if the price of XYZ increased to 54 (assuming he did not sell his options while they had significant remaining time value), and would lose all of his investment if the price of XYZ stayed at or below 50.

2. The more an option is out of the money and the shorter the remaining time to expiration, the greater the risk that an option holder will lose all or part of his investment in the option. The greater the price movement of the underlying interest necessary for the option to become profitable (that is, the more the option is out of the money when purchased and the greater the cost of the option) and the shorter the time within which this price movement must occur, the greater the likelihood that the option holder will realize a loss. This does not necessarily mean that an option must be worthwhile to exercise in order for a holder to realize a profit. Instead, it may be possible for the holder to realize a profit by selling an option prior to its expiration