

## **Review of Short Sales and Margin Account**

Investors typically buy shares with the expectation to profit from an increase in price. What if you anticipate a decline in a security's price and would like to profit? Short sales allow investors to do exactly that. A short sale allows an investor to borrow shares from a broker and sell them. Later on, the short-seller must purchase the shares in order to replace the ones that were borrowed. Of course, the expectation is that the price will go down and therefore the shares can be purchased at a lower price, creating a profit for the short-seller.

Let's look at this transaction more closely.

Suppose you are pessimistic about the future of Martians.Com. Its current market price is \$100 per share. You call your broker to sell short 1000 shares. The broker borrows the 1000 shares (usually brokers have a large inventory of securities). The \$100,000 proceeds from the short sale are deposited into your account. Suppose later on the share price drops down to \$80 and you reverse your position by buying the 1000 shares at this new price and replacing the ones that you borrowed. This transaction leaves you with a profit of \$20,000 which is the difference between the amount you received when you short-sold the shares and what you had to pay for them when you replaced them.

Now you might have some questions about this transaction. First, how did you borrow the 1000 shares? And more importantly, what happens if you were wrong about the direction of the price? The following example will provide answers to these questions.

First, in order to short sell shares, you will have to set up a margin account with your broker. This requires putting cash or cash-like securities in an account that will work as collateral when you borrow the shares. So, for example, remember when you sold 1000 shares of Martians.com short, \$100,000 was credited into your account. If the broker has a 50% margin requirement, you will have to have \$50,000 in cash or securities in your account to serve as the margin on the short sale.

What if the price of Martians.com increases instead of declining? Suppose it goes up to \$120. The value of the shares you borrowed is now \$120,000. To keep 50% margin requirement, you would have to now deposit an additional amount of \$10,000 to meet the margin requirement,  $\$60,000 / \$120,000 = 50\%$ . Typically, there is a minimum level of margin that will be allowed by the broker called the maintenance margin. Suppose the maintenance margin is 30%. This means that your equity must at least be 30% of the value of your short position. Falling below this level will trigger a margin call which will require you to put additional cash into the account or to cover your position by buying shares to replace the ones that were borrowed.