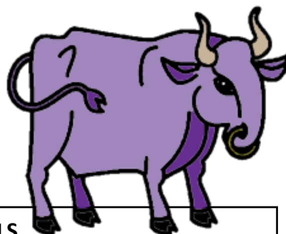
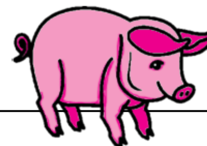
Getting Fancy: The Bulls, The Bears, And The Pigs

In this lesson, you will learn about buying on margin and selling short. You will learn how buying on margin and selling short can increase potential gains on stock purchases, but at the risk of greater potential losses.

THE BEARS
A bear market is a stock market with falling prices over an extended period of time. ***Selling short can increase gains in a bear market.***



THE BULLS
A bull market is a stock market with rising prices over an extended time. ***Buying on margin can increase gains in a bull market.***



THE PIGS
A pig is a greedy animal. Stock buyers who try to make every last cent of gain on an investment may end up with losses.

An old stock market saying is, "Bulls can make money, bears can make money, but pigs end up getting slaughtered."

A Marginal Play

Stockbroker, Jane, and Eric are sitting around the desk in a "Brokerage Office." The Moderator is standing in front of the classroom.

ERIC	Last year the Dow Jones Average was up 30%. I think this year looks just as good. The bull market is roaring. How can I make the most of this?
STOCKBROKER	First, buy quality companies. Secondly, remember that stocks also go down.
JANE	Eric, you’re sounding like a pig, and pigs don’t always make money.
ERIC	No, I just want to take full advantage of a bull market.
MODERATOR	Jane and Eric are about to learn how buying on margin can increase their returns on their stock purchases as well as their risks.
JANE	What exactly is “buying on margin”?
STOCKBROKER	Buying on margin is buying stock on credit. It's similar to borrowing money to buy a car or a house. Only instead of borrowing to buy goods and services, you borrow to buy more stock.
ERIC	Could you give us an example of buying on margin?
STOCKBROKER	Suppose a person wants to buy 100 shares of a stock at $100 per share for a total cost of $10,000. Unfortunately, the person has only $5,000. She could still buy these 100 shares by borrowing money from a brokerage company. Borrowing money from a brokerage company in order to buy stock is called buying stock on margin.
JANE	Can you borrow as much money as you want?
STOCKBROKER	Actually, you can borrow only up to 50% or one-half of the money needed to buy the stock. This is true for all brokerage firms. The limit is set by the Federal Reserve System, which has the authority to determine this margin requirement.
MODERATOR	The Federal Reserve System is the central bank that regulates all banks and many other financial institutions in the United States. You can just call it "the Fed" for short.

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ERIC	How do we begin to buy on margin?
STOCKBROKER	In order to buy stocks on margin, the stock buyer must set up a margin account in a brokerage office. A margin account is an account that allows a buyer to buy stock on credit.
JANE	Don't brokerage firms worry that stock buyers won't pay back the money they have borrowed?
STOCKBROKER	Brokerage firms limit their risk by requiring collateral. Collateral consists of shares of stock or cash that can be used to repay the loan.
MODERATOR	Whenever an individual borrows large sums of money in the real world, the lender often asks for collateral. Collateral is something of value that a borrower uses as a promise to repay the loan. The borrower signs a legal agreement allowing the lender to take the collateral if the loan isn't repaid. A house is often signed over as collateral for a mortgage loan. A car is often used as collateral for a car loan. In a margin account, cash and stocks already owned are held as collateral by the brokerage firm for loans made to buy stock.
ERIC	Do brokerage firms charge anything for this service?
STOCKBROKER	In addition to the fee for buying and selling the stock, the brokerage firm charges interest on the loan. The interest would be deducted from your account.
JANE	What happens if the value of the stock you purchased on margin goes down?
STOCKBROKER	Then the value of your account goes down. If it goes down enough, you may have to put up more collateral. This is called a margin call. If you can't meet this margin call, your stock will be sold.
MODERATOR	We have seen that by borrowing the money to buy stock, stock buyers can increase their gains if the stock rises. However, if the stock falls, stock buyers can lose a greater proportion of their money than if they just paid cash for the stock.

Marginal Questions

1. What is "buying on margin"?
2. When you buy on margin, how much of the purchase price must you put up?
3. Who determines the percentage?
4. Why do you think there is a limit on the amount of money that brokers can lend?
5. What are the advantages of buying stock on margin?
6. What are the disadvantages of buying stock on margin?

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Marginal Problems

The amount of collateral that the investor must deposit to open a margin account to buy stock is called the initial margin requirement. The initial margin requirement must be 50% (one-half) of the total value of the stocks being purchased or sold short. This means that to make a $10,000 stock purchase on margin, the investor must put $5,000 worth of collateral into the margin account.

The actual amount of ownership the investor has in the account is called the equity. It is determined by subtracting the debt (what is owed the brokerage firm) from the value of the stock (what is owned).

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Current value of stock purchased	$10,000
Debt (money owed to broker)	- 5,000
Equity (amount owned by investor)	5,000

Suppose the price of stock increases. The market value of the stock will rise, and so will the equity.

Current value of stock	$11,000
Debt	- 5,000
Equity	6,000

Suppose the price of the stock falls. The market value of the stock will fall, and so will the equity.

Current value of stock	$9,000
Debt	- 5,000
Equity	4,000

Now see if you understand this by completing the problems below.

Situation 1: Mrs. Jones buys on margin 100 shares of Coca-Cola at $30 per share.

1. The total market value of the stock Mrs. Jones buys is ____________.
2. The amount of money that Mrs. Jones must pay for this purchase (her initial margin requirement) is ____________.
3. The maximum amount of money that a brokerage firm could lend Mrs. Jones (her debt) is ____________.
4. Mrs. Jones's equity is ____________.

Situation 2: The value of Mrs. Jones's shares of Coca-Cola rises to $40 per share.

1. The market value of Coca-Cola in Mrs. Jones's account is now ____________.
2. The amount of money she owes the brokerage firm (her debt) is ____________.
3. Mrs. Jones's equity is ____________.

Situation 3: The value of Mrs. Jones's 100 shares of Coca-Cola falls to $20 per share.

1. The market value of Coca-Cola in Mrs. Jones's account is now ____________.
2. The amount of money she owes the brokerage firm (her debt) is ____________.
3. Mrs. Jones's equity is ____________.

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Get Shorty: A Stock Market Play

Stockbroker, Jane, and Eric are once again sitting around the desk in a "Brokerage Office." The Moderator is still standing in front of the classroom.

JANE	Hi, friendly office stockbroker. That stock you helped me buy last year has really done well. This is my brother, Eric. He's interested in buying stock. [Eric shakes hands with Stockbroker]
ERIC	We've heard there is a way to make money when the price of stock goes down. Is this really possible? I think we're going into a bear market.
STOCKBROKER	Yes, definitely. It's a strategy called "selling short." But it's very risky. Are you sure you're interested? Remember, pigs don't often make money.
ERIC	I'm game. Give us the short stuff.
STOCKBROKER	Selling short reverses the regular way you buy and sell stock. In a normal trade, you buy stock first and sell later, just as Jane did when she bought PepsiCo last year. Selling short, however, means that you sell stock first and buy it back later.
JANE	Sounds really weird. How can you sell stock that you don't own?
MODERATOR	Jane, like many other buyers of stocks, is confused. Perhaps the Stockbroker can make this process clearer to you and Jane.
STOCKBROKER	Let me continue. As you said, Jane, selling short means selling stock you don't already own. Investors can do this simply by borrowing stock from a broker. Brokerage companies have a large number of stocks that they are holding for customers or that they own themselves. They are willing to lend these shares of stock to buyers of stock who are interested in selling short.
ERIC	Do the short sellers get to keep the money from the short sale?
STOCKBROKER	No way! We stockbrokers aren't that crazy. Stock owners who sell short must later buy back the stock and return it to the broker. The broker is only lending the stock for the sale. The broker holds the money collected from the sale of the stock as "collateral" (or security) on the loan of the stock shares.
MODERATOR	When the stock buyer buys back the stock to return it to the broker, it is called a "short cover."
JANE	Well, if they don't get to keep the money, why would the stock buyer want to sell borrowed stock?
STOCKBROKER	That's an easy one to answer. Stock owners sell short only when they think the price of a stock will fall. Short sellers must later buy back the stock and return it to the brokerage company, which is a short cover. Eventually, they must cover their shorts. They hope they can buy it back at a lower price.
ERIC	So if I decided to short sell 100 shares of PepsiCo, your firm would lend me the stock. You would sell it for me tomorrow at, say, $40. You would hold the $4,000 in my account until I decide to buy back the PepsiCo.
JANE	And if the price of PepsiCo falls to $30, then Eric could replace the borrowed stock at the lower price of $3,000 and make a gain of $1,000.
MODERATOR	The broker would use the $4,000 Eric received for the original short sale to buy back the stock (or the short cover). Since only $3,000 is needed to buy back the stock, Eric made a gain of $1,000.

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ERIC	But what happens if the price goes up?
STOCKBROKER	You're in trouble. Of course, if the price goes up, you must replace the shares at the higher price. This would cost you money. That's why selling short is so risky. There is no limit on how high the price can go.
MODERATOR	If the price of PepsiCo goes up to $50 per share, Eric would have to buy it back (or short cover) for $5,000. Since Eric already had $4,000 in his account from the short sale, he would have to come up with an additional $1,000 to buy back the stock. In this case, Eric would lose money.
JANE	Obviously, you would only want to sell stock short if you thought the price was going to go down.
ERIC	I have heard of several companies that are not doing so well lately. I think maybe their stock prices just might go down. Would you be willing to help me choose stocks to short sell? I know I need a broker to complete the trades involved.
STOCKBROKER	Of course. However, I must tell you about the costs involved. Our company charges a fee for all short sales and short covers. The fees are determined by how much the stock sold short or short covered is worth.
MODERATOR	The broker's fee is called a commission. It is charged on all transactions: buys, sales, short sales, and short covers.
JANE	You mean that Eric would pay you a commission on the short sale and again on the short cover. That's what I did when I bought Disney stock first and sold it later.
STOCKBROKER	Since you two seem to understand this so well, I'd like to explain one more thing about selling short. A short seller must open a margin account with at least 50% of the value of the short sale in the account. You may use cash to open this account, but we won't pay you interest on it.
MODERATOR	The margin account is required by the Federal Reserve Board. It is a way of protecting brokerage firms. If the price of stock sold short goes up too much, too fast, the short seller may not be able to buy it back to return it to the brokerage company.
ERIC	Thank you so much for your time. I'll go home and do some research and call you.
JANE	Yes, thanks. I learned a lot, but short selling isn't for me. I'll stick to the regular way of buying and selling stock.

Short Sale Questions

1. How would you define a "short sale"?

2. Why is a short sale the reverse of the usual stock trade?

3. What is a "short cover"?

4. Why do people sell stock short?

5. Why might the price of stock drop?

6. Why is selling short so risky?

7. What costs are involved in selling short?

8. Why must an investor open a margin account with at least 50% of the value of the short sale in the account?

Short Sale Problems

Read each situation below and fill in the blanks. Be sure to include the cost of the broker's fee in your calculations. The broker's fee is 2% for the short sale and 2% for the short cover. Show your work in the space provided.

Situation 1: A stock owner sells short 200 shares of a stock at $50 per share. He buys them back for replacement (short covers) at $40 per share.

Did he make a gain or loss? _______________

How much? _______________

Situation 2: A stock owner sells short 100 shares of XYZ Corporation at $20 per share and has to short cover them at $40.

Did she make a gain or loss? _______________

How much? _______________

Situation 3: A stock owner sells short 100 shares of Apple Pie Corporation at $50 per share. The initial margin requirement is 50%.

How much money must be deposited in the margin account? _______________