# How Short Selling Works

*Here's a primer on the mechanics of a 'short sale.'*

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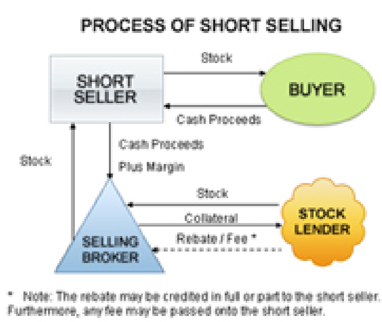
Short selling is often looked at as a nefarious aspect of trading and investing. However, it is quite legal, serves a necessary function in the securities markets and can be a valuable tool for an investor -- whether on an individual or professional level.

Short selling provides investors with the ability to profit from the decline in a stock's price, hedge positions or portfolios, manage taxes and create arbitrage positions. Since short selling is complex and operates outside of the sight of many investors, short selling is highly misunderstood. So in this installment of The Finance Professor, I will offer a primer on short selling by covering the mechanics behind the short selling process, the account requirements and the federal regulations that govern the transaction.

**What Is Short Selling?**

Short selling in its most basic form is when an investor takes a stance that a security will decline in value. In doing so, the short seller will sell stock that they *do not* own. This transaction will trigger a series of processes that ensure that the sale of this stock can take place. I have created the following chart to help walk us through what happens.

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Every short sale can involve up to four different parties -- beyond that of clearing organizations, such as depositories and banks, which may also have a role in the transaction. Here are the functions that each player has in the process:

## The Short Sale

The transaction (known as a "short sale") is initiated by an individual or organization (known as a "short seller"), who desires to " short" a stock. Once the stock is sold short, the short seller must deliver the stock to the buyer. The buyer cannot differentiate whether the seller is a short seller or a long seller of stock -- nor do they care. The buyer is only interested in receiving the stock they have paid for. The short seller has a problem though. He or she does not own the stock sold to the buyer. Hence, the short seller must *borrow* the stock to be able to deliver it to the buyer. How? The short seller will utilize a selling broker to arrange to borrow the stock from a stock lender to be used to satisfy the short seller's sale of stock to the buyer.

This transaction takes place in a margin account and might have other economic consequences, which I will discuss later on. Please note that in some instances, the selling broker may in fact be the stock lender while in other circumstances, the selling broker must borrow stock from a third party securities lender.

When the buyer receives the stock and pays for it, he or she is satisfied and no longer has any involvement in the transaction. The other three parties (the short seller, selling broker and stock lender) are still linked together by the stock loan.

## Short Position

Since the stock lender has lent out securities, it will require that the borrower (the short seller) post collateral to secure the loan. This collateral is derived from the short sale proceeds, which the short seller receives from the buyer. However, the selling broker will actually receive the cash from the buyer and will not disburse it to the seller. Instead, the selling broker will withhold those short sale proceeds, make a "memo entry" in the short seller's account and then use the short sale proceeds to post as collateral against the stock that was borrowed from the stock lender.

As the short seller has sold stock but not received cash he or she will miss out on the ability to reinvest the sale proceeds that are now in the hands of the stock lender. The stock lender appears to get a free lunch from this transaction by benefiting from the reinvestment of the sale proceeds. If you are an individual investor, then this is indeed the case. However, if you are an institutional investor, such as a hedge fund or pension plan, then this inequality is cured by the stock lender paying a rebate to the selling broker. The rebate represents a sharing arrangement on the interest that the stock lender earns on the collateral, which it holds. For example, if the stock lender earns 3.5% on the cash it holds, it might pay the short seller 3.0%.

Furthermore, institutional short sellers may have to pay a fee instead of receiving a rebate on stocks that are hard to borrow (in other words, stocks that are in limited supply with large short seller demand). As an example, **Amazon.com** ( **AMZN**) may be a stock which is heavily shorted with a limited amount of stock that can be borrowed. So an institutional borrower of Amazon might have to pay a fee of 2% instead of receiving a rebate in order to borrow Amazon stock.

When all aspects of the short sale transaction and process are put together, this creates a " short position" for the short seller.

**Short Covering**

At a later date, the short seller will "cover" the short position. When the short seller does this, he or she will buy the same stock in the open market and the entire process that I've described so far will unwind.

The short seller buys stock from another seller. The short seller's broker will then pay for the stock out of it's client account, by using the stock to then return the stock loan to the stock lender, freeing up the cash collateral and margin requirement in the process.

So, how does a short seller economically benefit from this series of transactions? Like any other investment. As a short seller, if you sell for more than you buy then you will generate a profit. The short sale process, however, creates this optical illusion since the sale comes *before* the purchase. Simply put, if the price of the short sale was *greater* than the price at which the "buy to cover" took place, then the short seller will make money. On the other hand, if the price of the short sale is *less* than the price of the buy to cover, then the short seller will lose money.

**Requirements and Regulations**

The borrowing and lending of securities is governed under **Federal Reserve** Regulation T. According to Regulation T, as it pertains to short selling, the short sale must take place in a margin account (see "Understanding Leverage"). Furthermore, the short sale must be collateralized by the short sale proceeds plus 50% of the short market value, which can be in cash or other marginable securities.

Short sellers cannot execute their orders with reckless abandon. They must obtain confirmation that their broker-dealer is able to borrow stock *before* transacting the short sale. As a result, the **Securities and Exchange Commission** ( SEC) enacted Regulation SHO to control short selling and combat abusive practices. The SEC states under Regulation SHO that:

- Short selling is legal except when done to manipulate the price of a stock. Quite often these manipulative practices are referred to as "bear raids."
- Broker-dealers must have reasonable grounds to believe that the security can be borrowed and delivered on the settlement date.
- Broker-dealers are required to "close out" (i.e., buy into) short sales in "threshold securities" that have failed to deliver for 13 consecutive settlement days. Threshold securities are defined as having an aggregate failure to deliver for five consecutive days at a registered clearing agency, composed of 10,000 shares or more and at least half of the total shares outstanding.
- "Naked" short selling is not permissible unless it is for purposes of creating market liquidity and stability as is the role of market makers or specialists.

This installment of The Finance Professor has introduced you to the mechanics and regulations that support the practice of short selling, stock borrowing and securities lending. Next time, I will explain the trading and investment aspect of short selling.

*At the time of publication, Rothbort had no positions, although positions can change at any time.*

*Scott Rothbort has over 20 years of experience in the financial services industry. In 2002, Rothbort founded LakeView Asset Management, LLC, a registered investment advisor based in Millburn, N.J., which offers customized individually managed separate accounts, including proprietary long/short strategies to its high net worth clientele.*

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