SHORT INTRODUCTION OF SHORT SELLING

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Introduction

Short sale represents one of the useful tools to achieve profit if stock prices are high. This paper deals with the general term of short selling, basic principles of short sale and the main entities. Moreover, short selling has information content that is described as well. The main approaches to short sale by technical analysts and fundamental analysts are mentioned. The last part of paper informs the reader about the main reasons why market entities go short.

The Equity Lending Market

Short sale is defined by SEC[2] as the sale of a security that the seller does not own or that the seller owns but does not deliver.[3] The practice when the seller does not own the shares and thus has no plan to locate and borrow the stock by the settlement date is called naked short sale.[4] Thus, short sellers sell stocks they do not own. Another definition says that short sale is accomplished by borrowing, through a broker, a stock from another investor's margin account and selling the

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[2] Security and Exchange Commission, see: http://www.sec.gov/

[3] D'Avolio, G. (2002). "The Market for Borrowing Stock", The Journal of Financial Economics, Vol. 66, No. 2-3, pp. 272.

[4] Culp, Ch. L., Newton, J. B. (2007). " Naked Shorting", Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=982898

stock in the market.[5] The role of the equity lending market is to match these short sellers with owners of the stock who are willing to lend their shares for a fee. An investor who wants to sell a stock short must first find a party willing to lend the shares. If a lender has been located and the shares are sold short, the exchange procedure generally requires that the short-seller delivers shares to the buyer the third day after the transaction, it means the delivery period t + 3.[6] It is also necessary to post an initial margin requirement at its brokerage firm. Initial margin requirement is 50 percent. [7, 8]

Different situation is in self–regulatory organizations, e.g. NYSE, where the initial margin was set at least 30 percent of the market value of the short position. The proceeds from the short sale are deposited with the lender of the stock. For U.S. stocks, the lender requires 102 percent of the value of the loan in collateral. This value is marked to market daily which results in requiring additional collateral or returning some of the collateral to the borrower. While a stock is an item of loan, the lender invests the collateral and receives interest on this investment. Generally, the lender returns part of the interest to the borrower in the form of a negotiable rebate rate.[9]

Lenders

The largest equity lenders are custodian banks that clear and hold positions for large institutional investors. In last several years other entities entered the equity lending market. These entities are represented by third party agent lenders. These agent lenders work as middlemen and the loan is negotiable between the agent lender and the borrower. The agent lender often cooperates with a custodian bank in the process of arranging delivery of the shares to the borrower. The owner of the security can decide to lend assets directly without any cooperation with the

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[5] Brent, A., Morse, D., Stice, E. K. (1990). "Short Interest: Explanations and Tests", The Journal of Financial and Quantitative Analysis, Vol. 25, No. 2, pp. 274.

[6] Fabozzi, J.F. (2004). Short Selling: strategies, risks and rewards. 1st ed. New Jersey: John Wiley & Sons, Inc, pp. 10.

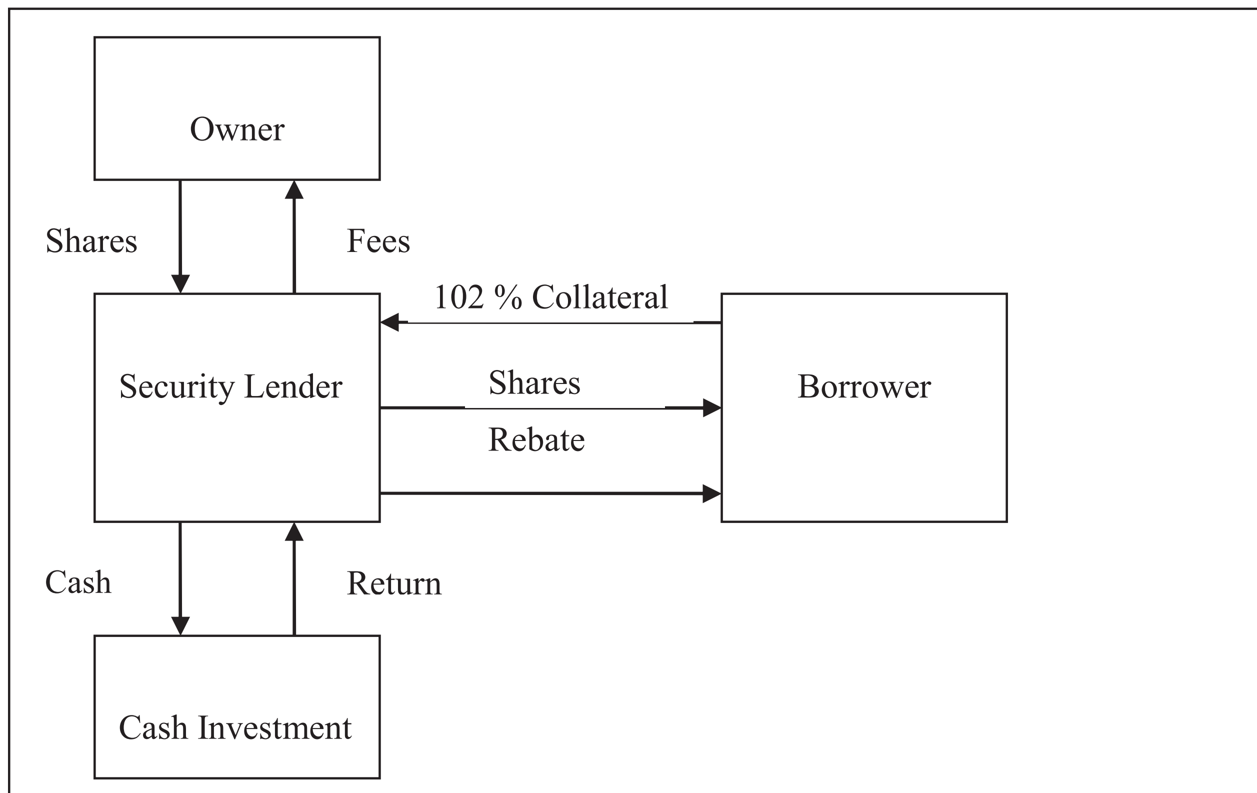
[7] Fabozzi, J.F. (2004). Short Selling: strategies, risks and rewards. 1st ed. New Jersey: John Wiley & Sons, Inc, pp. 10.

[8] Regulation T requires an investor to deposit 50 percent of the value of the shares held short with the brokerage house.

[9] Fabozzi, J.F. (2004). Short Selling: strategies, risks and rewards. 1st ed. New Jersey: John Wiley & Sons, Inc, pp. 10.

agent lender's custodian bank. In this case he or she lends assets via an exclusive arrangement, where the owner commits assets to one particular borrower for a specific period of time.

Fig. 1 Equity Loan Structure



Source*: Fabozzi, J.F. (2004). Short Selling: strategies, risks and rewards. 1st ed. New Jersey: John Wiley & Sons, Inc, pp. 11.*

Borrowers

The largest borrowers of stocks are brokerage firms that satisfy short demand for their own trading, for hedge clients or for other leveraged clients. Borrowers face two risks – loan recall risk and decrease in rebate rate risk. Recall risk is related to recalling the stock by the lender before the borrower is prepared to close out their own position. This happens approximately in 2 percent of cases.[10] If the loan is not recalled by the lender, it is the borrower's responsibility to return shares to the lender either by buying shares in the market or borrowing the shares from

[10] Fabozzi, J.F. (2004). Short Selling: strategies, risks and rewards. 1st ed. New Jersey: John Wiley & Sons, Inc, pp. 14.

another lender. If the borrower fails to return the shares, the lender can use the borrower's collateral to buy the shares and close the position.

Information Content of Short Selling

This situation is known as a buy-in. NYSE, AMEX or NASDAQ report short interest figures for individual stocks on a monthly basis. The short interest is the aggregate number of stocks that have been sold short but have not been covered yet.[11] If short interest figures could offer valuable information about future performance is a subject of a long-term controversy between investors and security analysts. On the one hand, technical analysts use higher level of short interest as a bullish technical indicator, on the other hand, fundamental analysts find that high short interest predicts negative future returns and therefore can be used as a signal of bearish sentiment. [12] Academic studies mention costs of short selling that are higher than costs relative to regular sell or buy orders. These studies suggest that those that are willing to short sale, despite of these costs, are likely to trade using some superior information. In these cases, increase in short interest may indicate that the informed investors have become more bearish about the stocks and thus stock price will decline. But there is also technical analysts' view of this issue. They suggest that rising short interest is a bullish signal. It is based on the idea that current rising interest in a particular stock represents later demand for this stock. Because this stock has to be repurchased in the future to cover the short sale open position. Second reason why technical analysts view rising short interest as a bullish signal is based on the point that the proposition that high short interest results from speculative excess in the form of increased short selling into lengthy price decline that tend to reverse eventually.[13] This first technical analysts' explanation of bullish sentiment reflects that all short positions must be covered or that short position may be forced to cover early. This can happen when a short seller's broker recalls the borrowed stocks at the request of the lender, with no other stocks available to lend, or if the process of the shorted stocks increase until the short seller receives a margin call. Thus, high short interest can attract buyers and make a short position extremely risky. The second explanation that short selling tends to increase after the sustained price declines reflects the possibility of short sellers creating downward price pressures in which the last short sellers are more likely to be the least informed, especially

[11] Fabozzi, J.F. (2004). Short Selling: strategies, risks and rewards. 1st ed. New Jersey: John Wiley & Sons, Inc, pp. 233.

[12] Fabozzi, J.F. (2004). Short Selling: strategies, risks and rewards. 1st ed. New Jersey: John Wiley & Sons, Inc, pp. 233.

[13] Fabozzi, J.F. (2004). Short Selling: strategies, risks and rewards. 1st ed. New Jersey: John Wiley & Sons, Inc, pp. 238.

if short interest is high to begin with. Thus, the price can be pushed too low and a rebound is inevitable.

Motivation for going short

There are several potential reasons for going short: first, investors may defer capital gain taxes on a long position by holding the same stock short. Second, investors believe that the stocks are overpriced and thus they speculate in price decreasing; third, using short sale as a method of hedging; and the last, short sale is used for arbitrage actions.[14]

Tax Motivations

This investor behavior is also known as shorting against the box. The term is used in a situation when the investor has taken a short position in a security that he or she has already held long. There are no arbitrage profits from holding the same security long and short. By going short in the same stock held long, an investor can lock in a profit, but delay the recognition of a capital gain. Before 1950, an investor could lock in short-term capital gains from a long position by going short in the stock. After holding the stock for six months, the gain would become long-term and be taxed at a lower rate. Converting short-term gains into long-term gains is no longer allowed.[15]

Arbitrage, Hedging and Speculation

Short selling is also considered to be a part of arbitrage strategies. Investors use options jointly with short sales and other securities to achieve arbitrage positions. Options can also act as a substitute for going short when trading on pessimistic beliefs. Research performed in 1947 and quoted by McDonald and Barron in 1973 indicated that about 60 percent of the total short interest was due to the speculative motive.[16] Investors use short sale to expect profit through a decline in

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[14] Brent, A., Morse, D., Stice, E. K. (1990). "Short Interest: Explanations and Tests", The Journal of Financial and Quantitative Analysis, Vol. 25, No. 2, pp. 273 – 289.

[15] Brent, A., Morse, D., Stice, E. K. (1990). "Short Interest: Explanations and Tests", The Journal of Financial and Quantitative Analysis, Vol. 25, No. 2, pp. 275.

[16] Brent, A., Morse, D., Stice, E. K. (1990). "Short Interest: Explanations and Tests", The Journal of Financial and Quantitative Analysis, Vol. 25, No. 2, pp. 277.

the security price. The short interest ratio[17] (number of stocks going short, it means short interest, to the average daily volume of trade) is also considered to be a predictive signal. A high short interest ratio is a bullish signal because the short interest represents future demand for the security when the short seller must purchase to replace the security. On the other hand, there are also studies that confirm negative predictive function of high short interest and thus signal of bearish sentiment. [18]

Conclusion

This paper deals with the issues of short selling. In the first part the equity lending market that plays an essential role in the security lending process is introduced. The main short selling entities are shortly presented– lenders and borrowers, and reasons why investors go short. Moreover, it also mentions the information content of short selling and two alternative approaches to short selling.

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[17] Short interest ratio SIR is the aggregate short interest in a stock as a percentage of its average daily trading volume over some preceding period, usually four weeks. Academic studies focus on relative SIR called RIS, the aggregate short interest in a stock as a percent of the firm's total shares outstanding. See Fabbozzi pp. 235.

[18] Fabozzi, J.F. (2004). Short Selling: strategies, risks and rewards. 1st ed. New Jersey: John Wiley & Sons, Inc., pp. 223.