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Short Selling

Market Efficiency or Hooliganism?

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There are many myths with respect to short selling. One of the more recent occasions of misconception came from Hans Eichel, the German finance minister, who wrote an article for the *Personal View* column of the *Financial Times*. According to the article, the German government has included in its draft of a fourth Financial Market Promotion Act a clause enabling short-selling of shares to be temporarily banned in Germany. In the article the finance minister warns that in a largely integrated international financial system, distortions in national financial markets and financial institutions can pose a threat to global financial stability. Mr. Eichel points to the two main factors for instability: weak banking supervision in offshore financial centres, and insufficient monitoring of risk positions of hedge funds.

Short selling provides the market with two important benefits: market liquidity and pricing efficiency. Substantial market liquidity is provided through short selling by market professionals, such as market makers, block traders, and specialists, who facilitate the operation of the markets by offsetting temporary imbalances in the supply and demand for securities. To the extent that short sales are effected in the market by securities professionals, such short sale activities, in effect, add to the trading supply of stock available to purchasers and reduce the risk that the price paid by investors is artificially high because of a temporary contraction of supply.

Short selling can also contribute to the pricing efficiency of the equities markets. Efficient markets require that prices fully reflect all buy and sell interest. When a short seller speculates on a downward movement in a security, his transaction is a mirror image of the person who purchases the security based upon speculation that the security's price will rise. Both the purchaser and the short seller hope to profit by buying the security at one price and selling at a higher price. The strategies primarily differ in the sequence of transactions. Market participants who believe a stock is overvalued may engage in short sales in an attempt to profit from a perceived

divergence of prices from true economic values. Such short sellers add to stock pricing efficiency because their transactions inform the market of their evaluation of future stock price performance. This evaluation should be reflected in the resulting market price of the security. Arbitrageurs also contribute to pricing efficiency by utilising short sales to profit from price disparities between a stock and a derivative security, such as a convertible security or an option on that stock. For example, an arbitrageur may purchase a convertible security and sell the underlying stock short to profit from a current price differential between two economically similar positions.

One of the main ingredients of any market place therefore is the presence of buyers as well as sellers. In other words, a market place needs heterogeneity not homogeneity. One of the phenomena of financial bubbles (as the recent internet bubble showed) is that it is difficult for short-sellers to borrow stocks and sell them short. A bubble is a departure of prices from their intrinsic value and is caused by an imbalance between buyers and sellers. In addition, in a collapse, long investors are more likely to start selling in a panic. The short seller is more likely to buy to close out his position. The astronomic rise and subsequent fall of the NEMAX, to take a German example, would seem to argue against the ban the local finance ministry is seeking.

The most significant error made with respect to short selling is to describe hedge funds as a homogenous mass of like minded investors. In practice there are a multitude of different types of hedge fund each with different investment criteria and different risk reward objectives. However, in general, the majority of those investing in equities fall into two categories: arbitrage and long/short. The arbitrage hedge funds will be short a security as a hedge against a commensurate long in a closely connected security (say a convertible bond, a warrant, or a company being bid for where there is a share for share deal). Thus their activity may involve large transactions, but is neutral to the direction of the overall entity or market. The long/short investors are investing on the fundamentals of the companies and as well as holding short positions in "overvalued" companies they will hold long positions in "undervalued" companies. Thus, again, their activities may involve large transactions but are

close to net neutral from a market perspective. There are some funds that are more directionally orientated: macro funds; and short sale funds. However these are actually a very small proportion of the hedge fund universe; say about 5%. Hedge funds run about US$500 billion. Thus even accounting for leverage, the actual amount of net shorts run by hedge funds is negligible in the overall scheme of markets.

The banning of short selling increases market inefficiencies: one of the characteristics of an efficient market is that new information is disseminated quickly and enters the price rapidly. Bad news (normally) decreases the price whereas good news increases the price of a security or asset. This mechanism causes the price to reflect the available news at all times. Banning short selling causes good news to enter the price mechanism fast whereas it limits the price mechanism to adjust for the bad news. In other words, the price mechanism, i.e. the interaction between buyers and sellers becomes dysfunctional, i.e. market efficiency decreases.

Miller (1987) suggests an amendment to the efficient market hypothesis (EMH) by arguing that "prices are bounded by limits set by the buying and short-selling of informed investors". Short sellers who will stop the ascent of the price if the potential return is great enough to augment the costs of being short set the upper limits of securities prices. The short seller's ability to sell becomes the critical variable in the upper-price boundary. Because there are many restrictions on short selling (as the suggested ban of the German finance ministry, institutional prohibitions, prohibitive transaction costs, limited universe of borrowable shares, etc.), stocks trade not at one efficient price but within a band of prices. Miller (1987) advises portfolio managers to search for mispriced stocks to sell because more overpriced than underpriced stocks can be identified.

As with any other economic activity there are always individuals who do not play the game according to its rules. Short selling is no different. The main offence (and perhaps most practised) is spreading rumours. Such short sellers will spread news with a negative content, hoping the market will "react" to

the news and put pressure on the price. Another offence is spreading good news, i.e. a rumour of a merger just around the corner. Internet chat rooms have in the past been sometimes used as a platform for dissemination of false information. A further strategy could involve "talking down" the price of a stock ahead of a hostile take-over. The take-over company circulates negative information that is either false or grossly exaggerated. Because it is inherently difficult for companies to combat bad news, this simple strategy can serve to drive down the share price of the target company to levels that allow the take-over company to accumulate cheap shares before the target company can correct its position in the market. Another example of manipulation is the "bear raid" where a stock is sold short in an effort to drive down the price by creating an imbalance of selling pressure.

After the terrorist atrocities of last September, many articles have been written in the press about hedge funds exploiting the tragic events and how short selling has been driving markets lower. This has led to criticism of the stock loan market itself. Much of what has been said is at best ill informed speculation and at worst arrant nonsense. It may well be human nature to look to blame someone when markets gap down, but blaming hedge funds and short selling is not only missing the point but also in danger of upsetting some of the better workings of the market place. Stock loan is needed in many areas of market activity: any trader providing liquidity to a buyer needs to be able to borrow the stock in order to deliver on the sale; stock loan is required to ease the settlement process to prevent trades failing; anyone trading derivatives needs to be able to borrow stock to hedge their positions. On top of this the majority of the professional stock loan market surrounds dividends and is traded between investors with different tax liabilities. And yes, stock loan is also used by hedge funds, when they want to sell short. If stock loan disappeared, the knock on effects would be a dramatic drying up of liquidity, a vast reduction in the amount of derivatives available, and an increased friction cost in transactions due to delayed settlement.

Staley (1997) quotes Bernard Baruch on the first page of her book. This quote summarises the issues surrounding short selling and summarises the issues:

"Bears can make money only if the bulls push up stocks to where they are overpriced and unsound.
Bulls always have been more popular than bears in this country because optimism is so strong a part of our heritage. Still, over-optimism is capable of doing more damage than pessimism since caution tends to be thrown aside.
To enjoy the advantages of a free market, one must have both buyers and sellers, both bulls and bears. A market without bears would be like a nation without a free press. There would be no one to criticise and restrain the false optimism that always leads to disaster."

The views expressed are those of Alexander Ineichen, and not necessarily those of UBS Warburg.

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