

## On A Sunshine Rule For Preventing Fraud In Short Selling

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### Overview

The shorting of stocks has always been controversial. Some academic studies employing statistical analyses have found it beneficial, citing its use for hedging, hedging options, long-short strategies, etc. Other studies oppose it, claiming increased volatility due to shorting and that it harms the economy. We explicitly state at the outset that this paper makes no preference for either side. Rather, this note discusses how shorting of stocks might contribute to fraudulent activity using possibly three different mechanisms, and how a proposed “sunshine” rule could prevent such frauds yet still permit the full and free functioning of the market.

The critic may say: “Let’s see some evidence of fraud.” Unfortunately, we have a “chicken or the egg” dilemma: until the sunshine rule we propose is enacted, or until the SEC releases raw data of short trades, evidence of potential fraud will be difficult if not impossible to produce. Given the magnitude of the potential damage due to such fraud, and the fact that many knowledgeable people believe it occurs, it appears prudent to us if the SEC were to enact a rule preventing the fraud.

### Shorting Stocks

In *short selling*, a trader borrows shares, often of a struggling stock weakened by poor financial conditions, and then later sells those shares. The borrower expects to reap profits by repurchasing, or *covering*, the stock later after its price has dropped<sup>1</sup>[1].

One important property of shorting is that it involves the selling of stock and that action, depending upon its volume and nature, might depress the stock price. Consider an analogy. Suppose a firm dilutes its shares by issuing more stock. Repeatedly historically, that has depressed the stock, often just by announcing the dilution, as has happened recently with Citicorp, Wells Fargo and others<sup>2</sup>[2].

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<sup>1</sup>[1] The idea that shorting drives the stock price down has been asserted for centuries, with very little evidence backing the claim.

<sup>2</sup>[2] The drop in stock price may be temporary, since new issues bring in new capital, which ought not to change the market value of the firm in the long run.

Shorting, which creates selling and produces some temporary increase in the shares offered for sale, thus has the potential to push the stock down<sup>3[3]</sup>. The degree to which that occurs might be imperceptible, if done in small quantities and for a short duration, and the market is sufficiently active. But there are potentially fraudulent means to introduce a sizable number of shorts to the market and thus create considerable selling. Here, we consider three such means.

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<sup>3[3]</sup> For most stocks, the average daily volume is 1-3% of the shares outstanding. Short selling say, 0.5% of the shares outstanding may be enough to depress the day's stock price significantly, inasmuch as the shorted shares will comprise roughly  $0.5\% / (0.5\% + 1\%)$  to  $0.5\% / (0.5\% + 3\%)$ , or 14% to 33% of the stock's average daily volume.

### Three Means to Fraudulently Short

The first is the ABCD method, which theoretically has the potential to create an infinite supply of shorted shares. Trader A's broker lends 10,000 shares to B, who sells them short to C. C's broker then lends the stocks to D, who sells them short to E. At this point 20,000 shares are short. E's broker may lend them to F who sells them short to G, creating 30,000 shares short. At least in theory, it is possible to create an infinite number of shorted shares, from a limited number of actual shares issued<sup>4</sup>[4].

A group with criminal intent might perpetrate a fraud employing this ABCD mechanism. If the first round, A to B to C, is not sufficient to push the market down, they would continue to the next round, and if necessary still the next. Eventually, the overload of shorted shares could depress the stock.

But there is a second and perhaps more effective means of depressing the stock price which is by flooding the market with shorted shares that are naked.

*Naked short selling* is the act of selling without owning or borrowing shares. Because no borrowing is necessary, naked short selling can be executed faster and in larger volume than the ABCD method of short selling. A criminal might introduce a sizable quantity of shorts for sale, destabilizing the market and driving the price of the stock down.

Usually, naked short sellers have three trading days to borrow the shares backing the shorts. But Regulation SHO of 2005 allowed close-out of *fail-to-deliver* positions for as long as 13 more trading days. Additionally, under the "(Bernard) Madoff exemption", Regulation SHO exempted bona fide market making, although, as discussed below, this has been revised.

A third means to employ shorts in a possibly questionable manner, occurs if a person obtains insider information that a stock might fall<sup>5</sup>[5]. Selling a sizable number of shares short would likely make money for the person, due to the impending decrease of the stock price. It, in addition, might tend to increase the drop in the market by adding

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<sup>4</sup>[4] It is interesting to note that this means of short selling may create "derivatives-like" contracts: suppose trader A asks for his common shares, forcing B to buy shares from say, trader G. Circularity in claims on ownership results: C's broker lends his shares to D, who sells them short to E, whose broker lends them to F, who sells them short to C. Note that there are no physical securities backing these claims of ownership, but there are merely "derivatives-like" contracts between parties. Additionally, it is interesting that too many shorted shares can cause serious fail-to-deliver problems for the transfer agent. More precisely, let  $x$ , where  $1 \geq x \geq 0$ , be the fraction of common and shorted shares demanded by shareholders to be taken off "street name", and let  $S$  be the number of shorted shares. It is easy to show that, for any  $x > 0$ , no matter how small  $x$  is, for all  $S$  large enough, the transfer agent will fail to deliver some shareholder's demand that his shares be taken off "street name".

<sup>5</sup>[5] Of course, insider selling may be done through the ABCD method or through naked short selling.

additional shares for sale above the quantity that ordinarily would have been sold. Of course, trading on insider information is illegal. However, that additional or accelerated drop in stock price due to shorting is market manipulation, which is also illegal.

### Possible Example

A flagrant example occurred on Tuesday, March 11, 2008, when someone bought roughly 6 million of very cheap put options on Bear Stearns for \$1.7 million. (The 6 million shares underlying the puts were 2.5% of the roughly 240 million shares of Bear Stearns stock outstanding.) This crazy bet would make money only if the bank's shares were to lose more than half their value within 9 days.

It required only three trading days for the stock to plummet from \$60 to around \$30, and six trading days to bottom at around \$2, one-fifth of the \$10 buyout price announced by J P Morgan a few days later. That someone made 159 times his money, \$270 million without even tripping the close-out rule of Regulation SHO. The question of alleged fraud and manipulation has been raised.

Did some crazy bettor sell 6 million puts and lose the \$270 million? Most likely not<sup>6</sup>[6]. Rather, the Madoff exemption may have been the vehicle used: a trader bought shorted shares, with their replacement guaranteed in a few days, and simultaneously, put options from a collaborating market maker. The illiquid puts were employed only to make the buying of the shorted shares "bona fide" market making. Selling without shorting the highly liquid shorted shares was where the trader made money.

### Difficult to Detect

There are, no doubt, other means beyond these three to potentially perpetrate frauds by employing the vehicle of shorted shares. Moreover, since they probably occur rarely, are done discretely, and last for a short duration, they are difficult to detect. That explains in part, as mentioned, why statistical studies of the market have not clearly identified these situations. Due to the nature of fraud, broad-brush statistical studies have difficulty identifying it. A second reason is that the fraud can often be justified as the normal activity of a person taking advantage of a weak market, meaning the criminal has a plausible cover story.

### Revisions in the Law Are Inadequate

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<sup>6</sup>[6]If the bet occurred solely in the derivatives market, with eyes-wide-open traders willing to take the other side of that bet, then clearly, the trade would be satisfactory. But, if there was only a fictitious counter-party of the bet in the derivatives market, and a corresponding short sale in the stock market, as substantiated by the over 11 million failure-to-deliver shares during that period, then that would be market manipulation, Note that, had the sunshine rule been in place then, it would have exposed short selling in real time after the 6 million puts were placed.

In reaction to the recent financial collapse, the SEC promulgated Rule 240 in July, 2009 which, among other things, eliminates the Madoff exemption, forces the close-out of naked short sales within three trading days of the trade and requires publication of information on short sales on a daily basis.

However, enforcing this new rule is complex, cumbersome, and will require considerable resources from the SEC. Besides, three trading days is an eternity today when milliseconds matter, and a single (furtive) rollover of a short position is all it may require to crush a stock. Rule 240 keeps open this sizable loophole for fraud.

#### A “Sunshine” Rule Proposal

We propose a “sunshine” rule to expose and prevent these possible frauds committed with shorted stock: flag a trade when it is a sell short, a naked short sale or a cover; and identify the category of the short seller: market maker, specialist, insider, institution, accredited investor, or unclassified.

This rule we propose will allow the public to determine, in real time, the number of shorted shares outstanding. This would signal excess demand for shares or an excess supply of shorted shares in the stock. Traders can instantaneously track major players as they short or cover a stock. The information levels the playing field and helps traders in their buy/sell decisions.

New information will become available in a variety of ways. For example, if a stream of short sales by strong players crosses the tape, traders may decide to avoid the stock, and the ensuing lower price may encourage short sellers to think twice. If the tape is indicating no short selling, or better yet, a stream of covering, traders may discern a buy signal for the stock. Similarly, if market makers are short prior to market close, that information would be bullish because most market makers want to be neutral by market close. If there are significant naked short sales, traders may reconsider their decisions for the next three trading days.

Short sellers may object to our proposal on grounds of “privacy” and “tipping their hand”. These objections cannot be justified. The prevention of market manipulation trumps their privacy concerns, because, after all, they are selling shorted shares, intending to push the stock price down. Besides, they will retain privacy based on the categories that we propose. Many of them want their privileged data to remain exclusive, thwarting the SEC’s mandate to inform the public. Their self-serving arguments enable a pathway to questionable activities and fraud.

Since these frauds are difficult to detect, the SEC does not have the resources to adequately thwart them, even if it is vigilant of attempts to corner or short squeeze the stock. Hence, the need for a sunshine rule. Sunshine rules have the advantage of exposing the violation for all to see, yet do not restrict the trading in the market. If it is done honestly, the trading then can occur freely.

Fraud in all its forms has to be stopped, since public trust in the market is paramount. With the eyes of the entire public watching, as our proposal suggests, honesty will be upheld, and the market will retain its openness, integrity and trust.

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