



BONI ANALYSIS OF FAILURES-TO-DELIVER

Robert Shapiro
November 2004

A new study documents that significant failures to promptly deliver shares sold short (“fails” or “failures”) are not, as many market participants assume, rare, brief and inadvertent, but rather *pervasive, extended and deliberate*. The analysis was done by Dr. Leslie Boni, recently a visiting financial economist at the SEC and now economics professor at the University of New Mexico. *Boni’s data show that failures-to-deliver affect almost all public companies and usually last several weeks. On any day, there are 180 million-to-300 million shares involving more than 10 percent of public companies that have gone undelivered for at least two months.* Failures of these dimensions can seriously distort the normal economic operations of U.S. equity markets.

The National Securities Clearing Corporation (NSCC) gave Boni unique access to data on undelivered stock for three random days (9/23/2003, 11/17/2003, and 1/21/2004), including the number of shares, by company, sold but not delivered for each clearing firm, with how long the shares had gone undelivered, for all listed stocks (NYSE, NASDAQ and AMEX) and unlisted stocks (OTC-Bulletin Board and Pink Sheets). These data produced the following key findings:

- ***Failure-to-deliver are pervasive:*** 80.3 percent of all listed stocks and 58.2 percent of unlisted stocks had failures-to-deliver shares sold short on at least one of the three days examined in the study.
- ***These failures are substantial and extended:*** Among listed stocks with fails, total failures averaged 0.19 percent of a firm’s outstanding shares, and their duration averaged 13 business-days. For unlisted stocks with fails, total failures averaged 1.56 percent of the firm’s outstanding shares, with an average duration of 56.6 business-days or almost three months.
- ***Very extended failures-to-deliver are common:*** On any day, over 1,000 listed stocks have failures-to-deliver shares sold short that have persisted for at least one month (20 business days), and more than 700 listed firms have fails at least two-months old (40 business days). For unlisted stocks, over 900 have fails at least one-month old and over 800 have fails at least two-months old.
- ***Very extended failures-to-deliver are also substantial:***
 - On any day, there are 60 million-to-120 million shares of listed companies that have gone undelivered for at least two months (40 business days); the number of shares of unlisted companies that remain undelivered for at least two months averages 120 million-to-180 million/day.

- On any day, 4 percent of all listed stocks had failures-to-deliver equal to at least 0.5 percent of its outstanding shares for at least 10 business-days (the new standard for “threshold” securities under SEC Regulation SHO).

The dimensions and duration of this phenomenon indicate, as Boni concludes, that most failures-to-deliver are “strategic” or deliberate, not “inadvertent delivery errors or delays.” It is clear that these failures do not reflect lack of opportunities to borrow shares in order to complete the transaction: In addition to the NSCC’s stock-borrow program, a substantial private market in stock loans also exists through institutional investors. Boni believes that the main reason for such extensive failures is cost: Short sellers deliberately choose to not deliver shares that would be expensive to borrow. In this regard, Boni shows that the likelihood of persistent fails increases with a stock’s borrowing cost.

Whatever the motive, the large-scale, extended naked shorts documented by Boni’s data have been part of way Wall Street, the NSCC and its parent Depository Trust and Clearing Corporation (DTCC) conduct business. The DTCC and NSCC, owned by the major broker-dealers and banks, have had these data for years without releasing them, notifying the SEC or even suggesting that a problem has existed. Further, while NSCC rules have long allowed brokers who fail to receive their shares to direct the NSCC to “buy in” those shares, this option has been rarely used: Boni’s data found, for example, that in 1998-1999, one market maker failed to deliver all or part of the shares sold in 69,063 transactions; but the NSCC eventually bought in the shares in only 86 of these cases or barely one-tenth of one percent.

The two major exchanges appear to have tacitly accepted pervasive and extended naked shorts: NYSE and NASD rules have exempted market makers and specialists from requirements to locate shares before selling them short, and NASD rules have exempted market makers, specialists and those conducting hedging or arbitrage transactions from a mandatory buy-in even when failures-to-deliver shares sold short in a company total 0.5 percent of its outstanding shares and at least 10,000 shares. Finally, the SEC seems to have given little attention to naked shorts, holding hearings and conducting inquiries since 1989 without compelling the NSCC to produce these data or taking any action for almost 15 years -- until Regulation SHO, which goes into effect January 2005. Even SHO maintains market-maker and specialist exemptions from requirements to locate shares before selling them short and requires buy-ins only for extended failures that reach a “threshold” level of 0.5 percent of a firm’s outstanding shares and 10,000 shares.

The persistent naked shorts of the dimensions found in these data produce significant distortions in the equity markets and losses for investors. When short-sellers can effectively dispense with borrowing and delivering the shares they have sold short, the basic economic constraint on short sales is removed, and manipulative short sellers can drive down a stock’s price. There are costs even when such manipulation does not occur: Broker-dealers electronically record the undelivered purchases in the buyers’ accounts; and since forced buy-ins are rare under the current rules and practices of the DTCC and the stock exchanges, those naked shorts produce “phantom” shares for weeks or months at a time. This process effectively increases the supply of shares and so tends to depress the value of each share. To the extent that widespread naked shorts do *not* produce phantom shares in the buyers’ accounts, those buyers are not receiving what they paid for. In either case, the integrity of equity trading in the United States has been eroded or impaired, with at least the tacit assent of the institutions charged with ensuring it.