

## Counterfeiting Stock 2.0

Illegal naked shorting and stock manipulation are two of Wall Street's deep, dark secrets. These practices have been around for decades and have resulted in trillions of dollars being fleeced from the American public by Wall Street. In the process, many emerging companies have been put out of business. This report will explain the magnitude of this problem, how it happens, why it has been covered up and how short sellers attack a company. It will also show how all of the participants; the short hedge funds, the prime brokers and the Depository Trust Clearing Corp. (DTCC) - make unconscionable profits while the fleecing of the small American investor continues unabated.

**Why is This Important?** This problem affects the investing public. Whether invested directly in the stock market or in mutual funds, IRAs, retirement or pension plans that hold stock – it touches the majority of Americans.

The participants in this fraud, which, when fully exposed, will make Enron look like child's play, have been very successful in maintaining a veil of secrecy and impenetrability. Congress and the SEC have unknowingly (?) helped keep the closet door closed. The public rarely knows when its pocket is being picked as unexplained drops in stock price get chalked up to "market forces" when they are often market manipulations.

The stocks most frequently targeted are those of emerging companies who went to the stock market to raise start-up capital. Small business brings the vast majority of innovative new ideas and products to market and creates the majority of new jobs in the United States. It is estimated that over 1000 of these emerging companies have been put into bankruptcy or had their stock driven to pennies by predatory short sellers.

It is important to understand that selling a stock short is not an investment in American enterprise. A short seller makes money when the stock price goes down and that money comes solely from investors who have purchased the company's stock. A successful short manipulation takes money from investment in American enterprise and diverts it to feed Wall Street's insatiable greed - the company that was attacked is worse off and the investing public has lost money. Frequently this profit is diverted to off-shore tax havens and no taxes are paid. This national disgrace is a parasite on the greatest capital market in the world.

**A Glossary of Illogical Terms** – The securities industry has its own jargon, laws and practices that may require explaining. Most of these concepts are the creation of the industry, and, while they are promoted as practices that ensure an orderly market, they are also exploited as manipulative tools. This glossary is limited to naked short abuse, or counterfeiting stock as it is more correctly referred to.

1. **Broker Dealer or Prime Broker** – The big stockbrokers who clear their own transactions, which is to say they move transacted shares between their customers directly, or with the DTC. Small brokers will clear through a clearing house – also known as a broker's broker.
2. **Hedge Funds** – Hedge funds are really unregulated investment pools for rich investors. They have grown exponentially in the past decade and now number over 10,000 and manage over one trillion dollars. They don't register with the SEC, are virtually unregulated and frequently foreign domiciled, yet they are allowed to be market makers with access to all of the naked shorting loopholes. Frequently they operate secretly and



collusively. The prime brokers cater to the hedge funds and allegedly receive eight to ten billion dollars annually in fees and charges relating to stock lend to the short hedge funds.

3. **Market Maker** – A broker, broker dealer or hedge fund who makes a market in a stock. In order to be a market maker, they must always have shares available to buy and sell. Market makers get certain sweeping exemptions from SEC rules involving naked shorting.
4. **Short Seller** – An individual, hedge fund, broker or institution who sells stock short. The group of short sellers is referred to as “the shorts.”
5. **The Securities and Exchange Commission** – The SEC is the federal enforcement agency that oversees the securities markets. The top-level management is a five-person Board of Governors who are Presidential appointees. Three of the governors are usually from the securities industry, including the chairman. The SEC adopted Regulation SHO in January 2005 in an attempt to curb naked short abuse.
6. **Depository Trust Clearing Corp** – Usually known as the DTCC, this privately held company is owned by the prime brokers and it clears, transacts and holds most stock in this country. It has four subsidiaries, which include the DTC and the NCSS. The operation of this company is described in detail later.
7. **Short Sale** – Selling a stock short is a way to make a profit while the stock price declines. For example: If investor S wishes to sell short, he borrows a share from the account of investor L. Investor S immediately sells that share on the open market, so investor S now has the cash from the sale in his account, and investor L has an IOU for the share from investor S. When the stock price drops, investor S takes some of the money from his account and buys a share, called “covering”, which he returns to investor L’s account. Investor S books a profit and investor L has his share back.

This relatively simple process is perfectly legal - so far. The investor lending the share most likely doesn’t even know the share left his account, since it is all electronic and occurs at the prime broker or DTC level. If shares are in a margin account, they may be loaned to a short without the consent or knowledge of the account owner. If the shares are in a cash account, IRA account or are restricted shares they are not supposed to be borrowed unless there is express consent by the account owner.

8. **Disclosed Short** – When the share has been borrowed or a suitable share has been located that can be borrowed, it is a disclosed short. Shorts are either naked or disclosed, but, in reality, some disclosed shorts are really naked shorts as a result of fraudulent stock borrowing.
9. **Naked Short** – This is an invention of the securities industry that is a license to create counterfeit shares. In the context of this document, a share created that has the effect of increasing the number of shares that are in the market place beyond the number issued by the company, is considered counterfeit. This is not a legal conclusion, since some shares we consider counterfeit are legal based upon today’s rules. The alleged justification for naked shorting is to insure an orderly and smooth market, but all too often it is used to create a virtually unlimited supply of counterfeit shares, which leads to widespread stock manipulation - the lynchpin of this massive fraud.

Returning to our example, everything is the same except the part about borrowing the share from someone else’s account: There is no borrowed share – instead a new one is created by either the broker dealer or the DTC. Without a borrowed share behind the short sale, a naked short is really a counterfeit share.

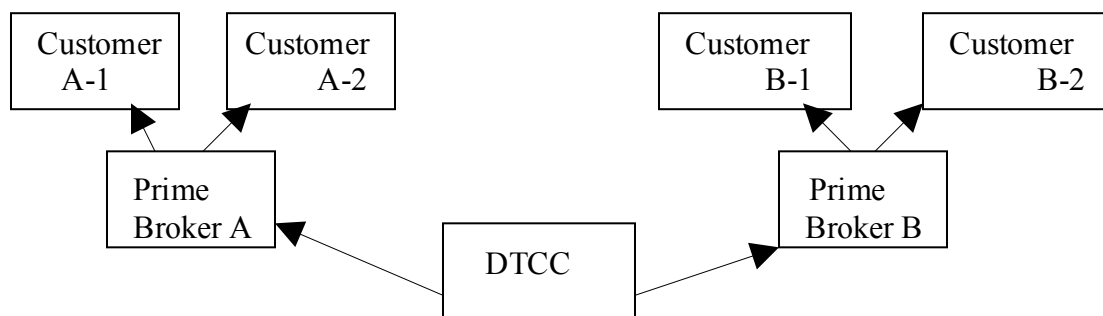


10. **Fails-to-Deliver** – The process of creating shares via naked shorting creates an obvious imbalance in the market as the sell side is artificially increased with naked short shares or more accurately, counterfeit shares. Time limits are imposed that dictate how long the sold share can be naked. For a stock market investor or trader, that time limit is three days. According to SEC rules, if the broker dealer has not located a share to borrow, they are supposed to take cash in the short account and purchase a share in the open market. This is called a “buy-in,” and it is supposed to maintain the total number of shares in the market place equal to the number of shares the company has issued.

Market makers have special exemptions from the rules: they are allowed to carry a naked short for up to twenty-one trading days before they have to borrow a share. When the share is not borrowed in the allotted time and a buy-in does not occur, and they rarely do, the naked short becomes a fail-to-deliver (of the borrowed share).

11. **Options** – The stock market also has separate, but related markets that sell options to purchase shares (a “call”) and options to sell shares (a “put”). Options are an integral part of short manipulations, the result of SEC promulgated loopholes in Reg SHO. A call works as follows: Assume investor L has a share in his account that is worth \$25. He may sell an option to purchase that share to a third party. That option will be at a specific price, say \$30, and expires at a specific future date. Investor L will get some cash from selling this option. If at the expiration date, the market value of the stock is below \$30 (the “strike price”), the option expires as worthless and investor L keeps the option payment. This is called “out of the money.” If the market value of the stock is above the strike price, then the buyer of the option “calls” the stock. Assume the stock has risen to \$40. The option buyer tenders \$30 to investor L and demands delivery of the share, which he may keep or immediately sell for a \$10 profit.
12. **Naked call** – The same as above except that investor L, who sells the call, has no shares in his account. In other words, he is selling an option on something he does not own. The SEC allows this. SEC rules also allow the seller of a naked short to treat the purchase of a naked call as a borrowed share, thereby keeping their naked short off the SEC’s fails-to-deliver list. A share of stock that has a naked call as its borrowed shares is marked as a disclosed short when it is sold, even though nobody in the transaction actually owns a share.

**How The System Transacts Stocks** – This explanation has been greatly simplified in the interest of brevity.



1. **Customers** – These can be individuals, institutions, hedge funds and prime broker’s house accounts.



2. Prime Brokers – They both transact and clear stocks for their customers. Examples of prime brokers include Goldman Sachs; Merrill Lynch; Citigroup; Morgan Stanley; Bear Stearns, etc.
3. The DTCC – This is the holding company that owns four companies that clear and keep track of most stock transactions. This is where brokerage accounts are actually lodged. The DTC division clears over a billion shares daily. The DTCC is owned by the prime brokers, and, as a closely held private enterprise, it is impenetrable. It actively and aggressively fights all efforts to obtain information regarding naked shorting, with or without a subpoena. When the prime brokers sell directly to one another, circumventing the DTC, it is called ex-clearing.

Stocks clear as follows:

If Customer A-1 purchases ten shares of XYZ Corp and Customer A-2 sells ten shares, then the shares are transferred electronically, all within prime broker A. Record of the transaction is sent to the DTC. Likewise, if Investor A-1 shorts ten shares of XYZ Corp and Investor A-2 has ten shares in a margin account, prime broker A borrows the shares from account A-2 and for a fee lends them to A-1.

If Customer A-1 sells shares to Customer B-2, in order to get the shares to B-2 and the money to A-1, the transaction gets completed in the DTC. The same occurs for shares that are borrowed on a short sale between prime brokers.

As a practical matter, what happens is prime broker A, at the end of the day, totals all of his shares of XYZ owned and all of the XYZ shares bought and sold, and clears the difference through the DTC. In theory, at the end of each day when all of the prime brokers have put their net positions in XYZ stock through the system, they should all cancel out and the number of shares in the DTC should equal the number of shares that XYZ has sold into the market. This almost never happens, because of the DTC stock borrow program which is discussed later.

**Who are the Participants in the Fraud?** The participants subscribe to the theory that it is much easier to make money tearing companies down than making money building them up, and they fall into two general categories: 1) They participate in the process of producing the counterfeit shares that are the currency of the fraud and/or 2) they actively short and tear companies down.

The counterfeiting of shares is done by participating prime brokers or the DTC, which is owned by the prime brokers. A number of lawsuits that involve naked shorting have named about ten of the prime brokers as defendants, including Goldman Sachs, Bear Stearns, Citigroup, Merrill Lynch; UBS; Morgan Stanley and others. The DTCC has also been named in a number of lawsuits that allege stock counterfeiting.

The identity of the shorts is somewhat elusive as the shorts obscure their true identity by hiding behind the prime brokers and/or hiding behind layers of offshore domiciled shell corporations. Frequently the money is laundered through banks in a number of tax haven countries before it finally reaches its ultimate beneficiary in New York, New Jersey, San Francisco, etc. Some of the hedge fund managers who are notorious shorters, such as David Rocker and Marc Cohodes, are very public about their shorting, although they frequently utilize offshore holding companies to avoid taxes and scrutiny.



Most of the prime brokers have multiple offshore subsidiaries or captive companies that actively participate in shorting. The prime brokers also front the shorting of some pretty notorious investors. According to court documents or sworn testimony, if one followed some of the short money trails at Solomon, Smith Barney, they led to accounts owned by the Gambino crime family in New York. A similar exercise with other prime brokers, who cannot be named at this time, leads to the Russian mafia, the Cali drug cartel, other New York crime families and the Hell's Angels.

One short hedge fund that was particularly destructive was a shell company domiciled in Bermuda. Subpoenas revealed the Bermuda company was wholly owned by another shell company that was domiciled in another tax haven country. This process was five layers deep, and at the end of the subterfuge was a very well known American insurance company that cannot be disclosed because of court-ordered sealing of testimony.

Most of the large securities firms, insurance companies and multi-national companies have layers of offshore captives that avoid taxes, engage in activities that the company would not want to be publicly associated with, like stock manipulation; avoid U.S. regulatory and legal scrutiny; and become the closet for deals gone sour, like Enron.

**The Creation of Counterfeit Shares** – There are a variety of names that the securities industry has dreamed up that are euphemisms for counterfeit shares. Don't be fooled: Unless the short seller has actually borrowed a real share from the account of a long investor, the short sale is counterfeit. It doesn't matter what you call it and it may become non-counterfeit if a share is later borrowed, but until then, there are more shares in the system than the company has sold.

The magnitude of the counterfeiting is hundreds of millions of shares every day, and it may be in the billions. The real answer is locked within the prime brokers and the DTC. Incidentally, counterfeiting of securities is as illegal as counterfeiting currency, but because it is all done electronically, has other identifiers and industry rules and practices, i.e. naked shorts, fails-to-deliver, SHO exempt, etc. the industry and the regulators pretend it isn't counterfeiting. Also, because of the regulations that govern the securities, certain counterfeiting falls within the letter of the rules. The rules, by design, are fraught with loopholes and decidedly short on allowing companies and investors access to information about manipulations of their stock.

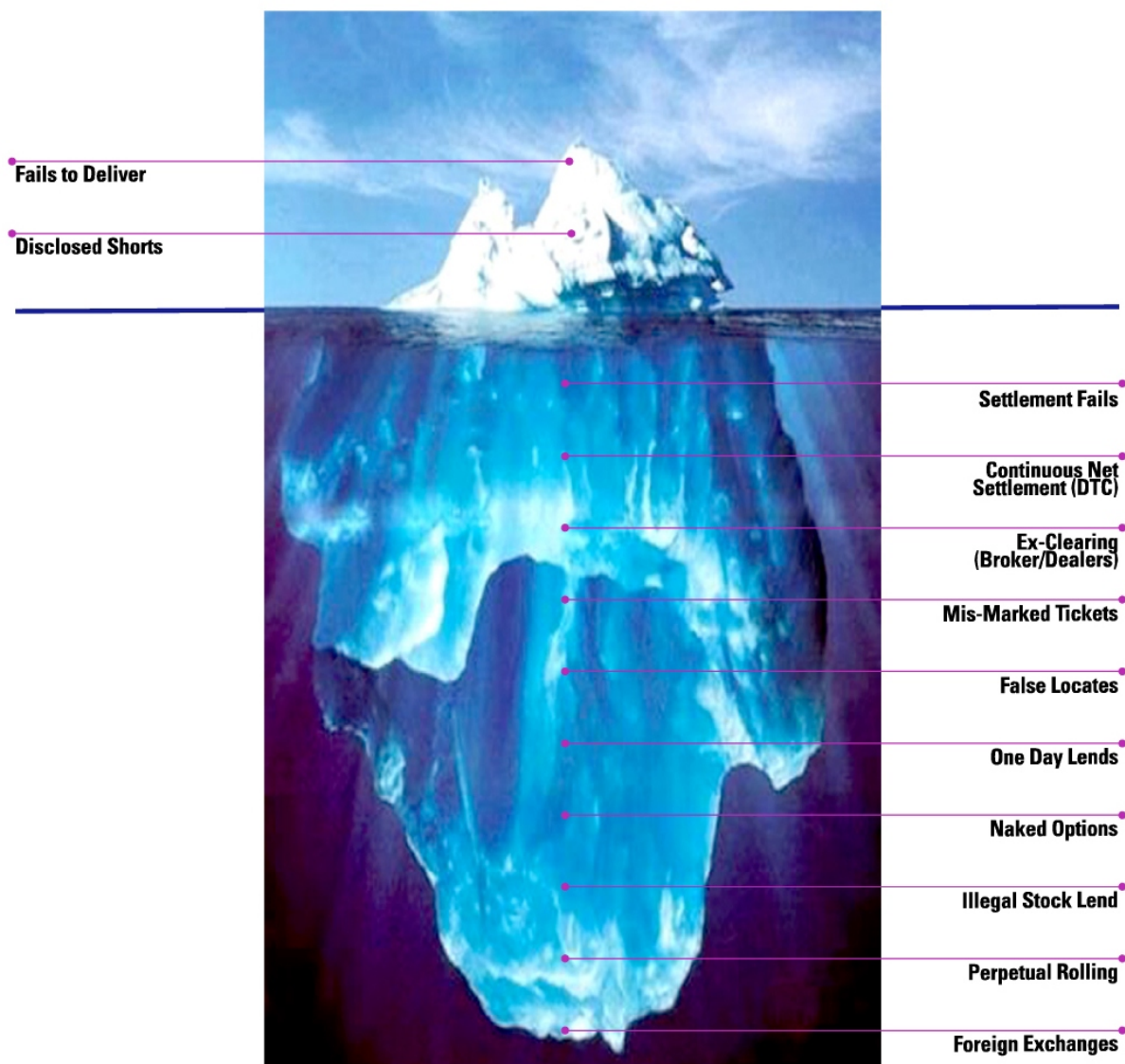
The creation of counterfeit shares falls into three general categories. Each category has a plethora of devices that are used to create counterfeit shares.

1. Fails-to-Deliver – If a short seller cannot borrow a share and deliver that share to the person who purchased the (short) share within the three days allowed for settlement of the trade, it becomes a fail-to-deliver and hence a counterfeit share; however the share is transacted by the exchanges and the DTC as if it were real. Regulation SHO, implemented in January 2005 by the SEC, was supposed to end wholesale fails-to-deliver, but all it really did was cause the industry to exploit other loopholes, of which there are plenty (see 2 and 3 below).

Since forced buy-ins rarely occur, the other consequences of having a fail-to-deliver are inconsequential, so it is frequently ignored. Enough fails-to-deliver in a given stock will get that stock on the SHO list, (the SEC's list of stocks that have excessive fails-to-deliver) - which should (but rarely does) see increased enforcement. Penalties amount to a slap on the wrist, so large fails-to-deliver positions for victim companies have remained for months and years.



## Short Iceberg



A major loophole that was intentionally left in Reg SHO was the grandfathering in of all pre-SHO naked shorting. This rule is akin to telling bank robbers, “If you make it to the front door of the bank before the cops arrive, the theft is okay.”

Only the DTC knows for certain how many short shares are perpetual fails-to-deliver, but it is most likely in the billions. In 1998, REFCO, a large short hedge fund, filed bankruptcy and was unable to meet margin calls on their naked short shares. Under this scenario, the broker dealers are the next line of financial responsibility. The number of shares that allegedly should have been bought in was 400,000,000, but that probably never happened. The DTC – owned by the broker dealers – just buried 400,000,000



counterfeit shares in their system, where they allegedly remain – grandfathered into “legitimacy” by the SEC. Because they are grandfathered into “legitimacy”, the SEC, DTC and prime brokers pretend they are no longer fails-to-deliver, even though the victim companies have permanently suffered a 400 million share dilution in their stock. (See Appendix A for more on **The Grandfather Clause**).

A significant amount of counterfeiting is the result of the options market exemptions. The rule allows certain options contracts to serve as borrowed shares for short sales even though there is no company issued share behind the options contract. The loophole is easily abused, helped in part by SEC’s apparent inability to globally monitor compliance. There has been considerable pressure on the SEC to close the Options Maker Exemption, but through January 2008, they have refused to act. (See Appendix B for more on **The Options Maker Exemption**).

Three months prior to SHO, the aggregate fails-to-deliver on the NASDAQ and the NYSE averaged about 150 million shares a day. Three months after SHO it dropped by about 20 million, as counterfeit shares found new hiding places (see 2 and 3 below). It is noteworthy that aggregate fails-to-deliver are the only indices of counterfeit shares that the DTC and the prime brokers report to the SEC. The bulk of the counterfeiting remains undisclosed, so don’t be deceived when the SEC and the industry minimize the fails-to-deliver information. It is akin to the lookout on the *Titanic* reporting an ice cube ahead.

2. Ex-clearing counterfeiting – The second tier of counterfeiting occurs at the broker dealer level. This is called ex-clearing. These are trades that occur dealer to dealer and don’t clear through the DTC. Multiple tricks are utilized for the purpose of disguising naked shorts that are fails-to-deliver as disclosed shorts, which means that a share has been borrowed. They also make naked shorts “invisible” to the system so they don’t become fails-to-deliver, which is the only thing the SEC tracks. The SEC does not examine ex-clearing transactions as they don’t believe that Reg SHO applies to short shares held in ex-clearing.

Some of the tricks are as follows:

- Stock sales are either a long sale or a short sale. When a stock is transacted the broker checks the appropriate box. By mismarking the trading ticket -checking the long box when it is actually a short sale the short never shows up, unless they get caught, which doesn’t happen often. The position usually gets reconciled when the short covers.
- Settlement of stock transactions is supposed to occur within three days, at which time a naked short should become a fail-to-deliver, however the SEC routinely and automatically grants a number of extensions before the naked short gets reported as a fail-to-deliver. Most of the short hedge funds and broker dealers have multiple entities, many offshore, so they sell large naked short positions from entity to entity. Position rolls, as they are called, are frequently done broker to broker, or hedge fund to hedge fund, in block trades that never appear on an exchange. Each movement resets the time clock for the naked position becoming a fail-to-deliver and is a means of quickly getting a company off of the SHO threshold list. (See Appendix C for more on **Short Squeezes**).
- The prime brokers or others may do a buy-in of a naked short position. If they tell the short hedge fund that we are going to buy-in at 3:59 EST on Friday, the hedge



fund naked shorts into their own buy-in (or has a co-conspirator do it) and rolls their position, hence circumventing Reg SHO.

- Most of the large broker dealers operate internationally, so when regulators come in (they almost always “call ahead”) or compliance people come in (ditto), large naked positions are moved out of the country and returned at a later date.
- The stock lend is enormously profitable for the broker dealers who charge the short sellers large fees for the “borrowed” shares, whether they are real or counterfeit. When shares are loaned to a short, they are supposed to remain with the short until he covers his position by purchasing real shares. The broker dealers do one-day lends, which enables the short to identify to the SEC the account that shares were borrowed from. As soon as the report is sent in, the shares are returned to the broker dealer to be loaned to the next short. This allows eight to ten shorts to borrow the same shares, resetting the SHO-fail-to-deliver clock each time, which makes all of the counterfeit shares look like legitimate shares. The broker dealers charge each short for the stock lend.
- Margin account buyers, because of loopholes in the rules, inadvertently aid the shorts. If short A sells a naked short he has three days to deliver a borrowed share. If the counterfeit share is purchased in a margin account, it is *immediately* put into the stock lend and, for a fee, is available as a borrowed share to the short who counterfeited it in the first place. This process is perpetually fluid with multiple parties, but it serves to create more counterfeit shares and is an example of how a counterfeit share gets “laundered” into a legitimate borrowed share.
- Margin account agreements give the broker dealers the right to lend those shares without notifying the account owner. Shares held in cash accounts, IRA accounts and any restricted shares are not supposed to be loaned without express consent from the account owner. Broker dealers have been known to change cash accounts to margin accounts without telling the owner, take shares from IRA accounts, take shares from cash accounts and lend restricted shares. One of the prime brokers recently took a million shares from cash accounts of the company’s founding investors without telling the owners or the stockbroker who represented ownership. The shares were put into the stock lend, which got the company off the SHO threshold list, and opened the door for more manipulative shorting.

This is a sample of tactics used. For a company that is under attack, the counterfeit shares that exist at this ex-clearing tier can be ten or twenty times the number of fails-to-deliver, which is the *only* category tracked and policed by the SEC.

3. Continuous Net Settlement – The third tier of counterfeiting occurs at the DTC level. The Depository Trust and Clearing Corporation (DTCC) is a holding company owned by the major broker dealers, and has four subsidiaries. The subsidiaries that are of interest are the Depository Trust Company (DTC) and the National Securities Clearing Corporation (NSCC). The DTC has an account for each broker dealer, which is further broken down to each customer of that broker dealer. These accounts are electronic entries. Ninety seven percent of the actual stock certificates are in the vault at the DTC with the DTC nominee’s name on them. The NSCC processes transactions, provides the broker dealers with a central clearing source, and operates the stock borrow program.

When a broker dealer processes the sale of a short share, the broker dealer has three days to deliver a borrowed share to the purchaser and the purchaser has three days to



deliver the money. In the old days, if the buyer did not receive his shares by settlement day, three days after the trade, he took his money back and undid the transaction. When the stock borrow program and electronic transfers were put in place in 1981, this all changed. At that point the NSCC guaranteed the performance of the buyers and sellers and would settle the transaction even though the seller was now a fail-to-deliver on the shares he sold. The buyer has a counterfeit share in his account, but the NSCC transacts it as if it were real.

At the end of each day, if a broker dealer has sold more shares of a given stock than he has in his account with the DTC, he borrows shares from the NSCC, who borrows them from the broker dealers who have a surplus of shares. So far it sounds like the whole system is in balance, and for any given stock the net number of shares in the DTC is equal to the number of shares issued by the company.

The short seller who has sold naked - he had no borrowed shares - can cure his fail-to-deliver position and avoid the required forced buy-in by borrowing the share through the NSCC stock borrow program.

*Here is the hocus pocus that creates millions of counterfeit shares.*

When a broker dealer has a net surplus of shares of any given company in his account with the DTC, only the *net amount* is deducted from his surplus position and put in the stock borrow program. However the broker dealer does *not* take a like number of shares from his customer's individual accounts. The net surplus position is loaned to a second broker dealer to cover his *net* deficit position.

Let's say a customer at the second broker dealer purchased shares from a naked short seller - counterfeit shares. His broker dealer "delivers" those shares to his account from the shares borrowed from the DTC. The lending broker dealer did not take the shares from any specific customers' account, but the borrowing broker dealer put the borrowed shares in specific customer's accounts. Now the customer at the second prime broker has "real" shares in his account. The problem is it's the same "real" shares that are in the customer's account at the first prime broker.

The customer account at the second prime broker now has a "real" share, which the prime broker can lend to a short who makes a short sale and delivers that share to a third party. *Now there are three investors with the same counterfeit shares in their accounts.*

Because the DTC stock borrow program, and the debits and credits that go back and forth between the broker dealers, only deals with the net difference, it never gets reconciled to the actual number of shares issued by the company. As long as the broker dealers don't repay the total stock borrowed and only settle their net differences, they can "grow" a company's issued stock.

This process is called Continuous Net Settlement (CNS) and it hides billions of counterfeit shares that never make it to the Reg. SHO radar screen, as the shares "borrowed" from the DTC are treated as a legitimate borrowed shares.

For companies that are under attack, the counterfeit shares that are created by the CNS program are thought to be ten or twenty times the disclosed fails-to-deliver, and the true CNS totals are only obtained by successfully serving the DTC with a subpoena. The SEC doesn't even get this information. The actual process is more complex and arcane than this, but the end result is accurately depicted.

Ex-clearing and CNS counterfeiting are used to create an enormous reserve of counterfeit shares. The industry refers to these as "strategic fails-to-deliver." Most people



would refer to these as a stockpile of counterfeit shares that can be used for market manipulation. One emerging company for which we have been able to get or make reasonable estimates of the total short interest, the disclosed short interest, the available stock lend and the fails-to-deliver, has fifty “buried” counterfeit shares for every fail-to-deliver share, which is the only thing that the SEC tracks, consequently the SEC has not acted on shareholder complaints that the stock is being manipulated.

**The Anatomy of a Short Attack** – Abusive shorting are not random acts of a renegade hedge funds, but rather a coordinated business plan that is carried out by a collusive consortium of hedge funds and prime brokers, with help from their friends at the DTC and major clearinghouses. Potential target companies are identified, analyzed and prioritized. The attack is planned to its most minute detail.

The plan consists of taking a large short position, then crushing the stock price, and, if possible, putting the company into bankruptcy. Bankrupting the company is a short homerun because they never have to buy real shares to cover and they don’t pay taxes on the ill-gotten gain. (See Appendix D for more on **Bankrupting The Victim Company**).

When it is time to drive the stock price down, a blitzkrieg is unleashed against the company by a cabal of short hedge funds and prime brokers. The playbook is very similar from attack to attack, and the participating prime brokers and lead shorts are fairly consistent as well.

Typical tactics include the following:

1. Flooding the offer side of the board – Ultimately the price of a stock is found at the balance point where supply (offer) and demand (bid) for the shares find equilibrium. This equation happens every day for every stock traded. On days when more people want to buy than want to sell, the price goes up, and, conversely, when shares offered for sale exceed the demand, the price goes down.

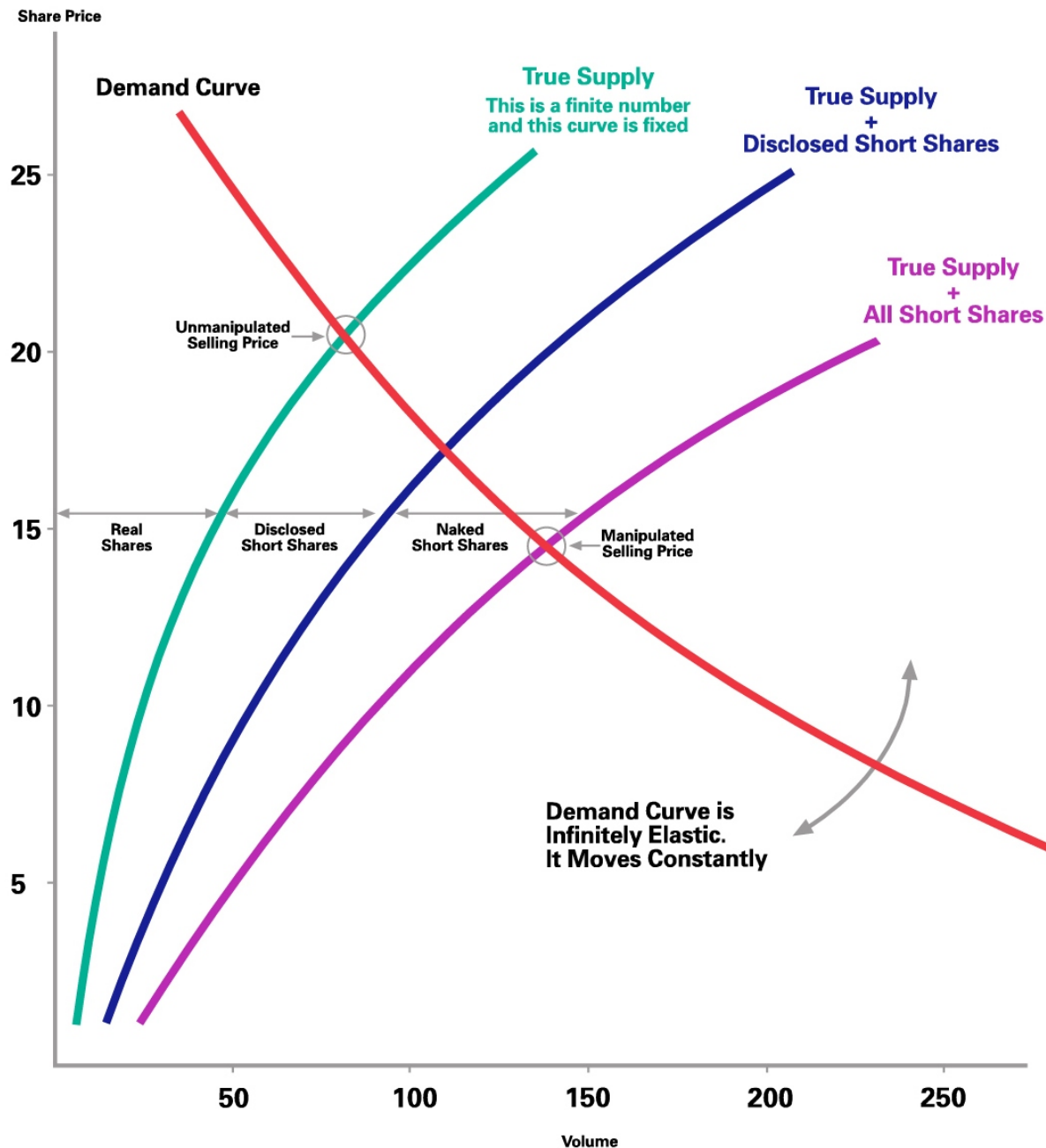
The shorts manipulate the laws of supply and demand by flooding the offer side with counterfeit shares. They will do what has been called a short down ladder. It works as follows: Short A will sell a counterfeit share at \$10. Short B will purchase that counterfeit share covering a previously open position. Short B will then offer a short (counterfeit) share at \$9. Short A will hit that offer, or short B will come down and hit Short A’s \$9 bid. Short A buys the share for \$9, covering his open \$10 short and booking a \$1 profit.

By repeating this process the shorts can put the stock price in a downward spiral. If there happens to be significant long buying, then the shorts draw from their reserve of “strategic fails-to-deliver” and flood the market with an avalanche of counterfeit shares that overwhelm the buy side demand. Attack days routinely see eighty percent or more of the shares offered for sale as counterfeit. Company news days are frequently attack days since the news will “mask” the extraordinary high volume. It doesn’t matter whether it is good news or bad news.

Flooding the market with shares requires foot soldiers to swamp the market with counterfeit shares. An off-shore hedge fund devised a remarkably effective incentive program to motivate the traders at certain broker dealers. Each trader was given a debit card to a bank account that only he could access. The trader’s performance was tallied, and, based upon the number of shares moved and the other “success” parameters; the hedge fund would wire money into the bank account daily. At the end of each day, the traders went to an ATM and drew out their bribe. Instant gratification.



## Impact of Counterfeit Shares On Stock Price



Global Links Corporation is an example of how wholesale counterfeiting of shares will decimate a company's stock price. Global Links is a company that provides computer services to the real estate industry. By early 2005, their stock price had dropped to a fraction of a cent. At that point, an investor, Robert Simpson, purchased 100%+ of Global Links' 1,158,064 issued and outstanding shares. He immediately took delivery of



his shares and filed the appropriate forms with the SEC, disclosing he owned all of the company's stock. His total investment was \$5205. The share price was \$.00434. The day after he acquired all of the company's shares, the volume on the over-the-counter market was 37 million shares. The following day saw 22 million shares change hands – all without Simpson trading a single share. It is possible that the SEC has been conducting a secret investigation, but that would be difficult without the company's involvement. It is more likely the SEC has not done anything about this fraud.

Massive counterfeiting can drive the stock price down in a matter of hours on extremely high volume. This is called “crashing” the stock and a successful “crash” is a one-day drop of twenty-percent or a thirty-five percent drop in a week. In order to make the crash “stick” or make it more effective, it is done concurrently with all or most of the following: (see Appendix E for more on **Crashing The Stock**).

2. Media assault – The shorts, in order to realize their profit, must ultimately put the victim into bankruptcy or obtain shares at a price much cheaper than what they shorted at. These shares come from the investing public who panics and sells into the manipulation. Panic is induced with assistance from the financial media.

The shorts have “friendly” reporters with the Dow Jones News Agency, the *Wall Street Journal*, *Barrons*, the *New York Times*, Gannett Publications (*USA Today* and the *Arizona Republic*), CNBC and others. The common thread: A number of the “friendly” reporters worked for The Street.com, an Internet advisory service that short hedge-fund managers David Rucker and Jim Cramer owned. This alumni association supported the short attack by producing slanted, libelous, innuendo laden stories that disparaged the company, as it was being crashed.

One of the more outrageous stories was a front-page story in *USA Today* during a short crash of TASER's stock price in June 2005. The story was almost a full page and the reporter concluded that TASER's electrical jolt was the same as an electric chair – proof positive that TASERs did indeed kill innocent people. To reach that conclusion the reporter over estimated the TASER's amperage by a factor of one million times. This “mistake” was made despite a detailed technical briefing by TASER to seven *USA Today* editors two weeks prior to the story. The explanation “Due to a mathematical error” appeared three days later – after the damage was done to the stock price.

Jim Cramer, in a video-taped interview with The Street.com, best described the media function:

“When (shorting) ... The hedge fund mode is to not do anything remotely truthful, because the truth is so against your view, (so the hedge funds) create a new 'truth' that is development of the fiction... you hit the brokerage houses with a series of orders (a short down ladder that pushes the price down), then we go to the press. You have a vicious cycle down – it's a pretty good game.”

This interview, which is more like a confession, was never supposed to get on the air; however, it somehow ended up on YouTube. Cramer and The Street.com have made repeated efforts, with some success, to get it taken off of YouTube.

3. Analyst Reports – Some alleged independent analysts were actually paid by the shorts to write slanted negative ratings reports. The reports, which were represented as being independent, were ghost written by the shorts and disseminated to coincide with a short attack. There is congressional testimony in the matter of Gradient Analytic and Rucker



Partners that expands upon this. These libelous reports would then become a story in the aforementioned “friendly” media. All were designed to panic small investors into selling their stock into the manipulation.

4. Planting moles in target companies – The shorts plant “moles” inside target companies. The moles can be as high as directors or as low as janitors. They steal confidential information, which is fed to the shorts who may feed it to the friendly media. The information may not be true, may be out of context, or the stolen documents may be altered. Things that are supposed to be confidential, like SEC preliminary inquiries, end up as front-page news with the short-friendly media.
5. Frivolous SEC investigations – The shorts “leak” tips to the SEC about “corporate malfeasance” by the target company. The SEC, which can take months processing Freedom of Information Act requests, swoops in as the supposed “confidential inquiry” is leaked to the short media. (See Appendix F for more on **Frivolous Investigations**).  
The plethora of corporate rules means the SEC may ultimately find minor transgressions or there may be no findings. Occasionally they do uncover an Enron, but the initial leak can be counted on to drive the stock price down by twenty-five percent. The announcement of no or little findings comes months later, but by then the damage that has been done to the stock price is irreversible. The San Francisco office of the SEC appears to be particularly close to the short community.
6. Class Action lawsuits – Based upon leaked stories of SEC investigations or other media exposes, a handful of law firms immediately file class-action shareholder suits. Milberg Weiss, before they were disbanded as a result of a Justice Department investigation, could be counted on to file a class-action suit against a company that was under short attack. Allegations of accounting improprieties that were made in the complaint would be reported as being the truth by the short friendly media, again causing panic among small investors. (See Appendix G for more on **Class Action Lawsuits**).
7. Interfering with target company’s customers, financings, etc. – If the shorts became aware of clients, customers or financings that the target company was working on, they would call and tell lies or otherwise attempt to persuade the customer to abandon the transaction. Allegedly the shorts have gone so far as to bribe public officials to dissuade them from using a company’s product.
8. Pulling margin from long customers – The clearinghouses and broker dealers who finance margin accounts will suddenly pull all long margin availability, citing very transparent reasons for the abrupt change in lending policy. This causes a flood of margin selling, which further drives the stock price down and gets the shorts the cheap long shares that they need to cover. (See Appendix H for more on **Pulling Margin**).
9. Paid bashers – The shorts will hire paid bashers who “invade” the message boards of the company. The bashers disguise themselves as legitimate investors and try to persuade or panic small investors into selling into the manipulation. (See Appendix P for **Confessions Of A Paid Stock Basher**).

This is not every dirty trick that the shorts use when they are crashing the stock. Almost every victim company experiences most or all of these tactics.



**How Pervasive Is This?** – At any given point in time more than 100 emerging companies are under attack as described above. This is not to be confused with the day-to-day shorting that occurs in virtually every stock, which is purportedly about thirty percent of the daily volume.

The success rate for short attacks is over ninety percent - a success being defined as putting the company into bankruptcy or driving the stock price to pennies. It is estimated that 1000 small companies have been put out of business by the shorts. Admittedly, not every small company deserves to succeed, but they do deserve a level playing field.

The secrecy that surrounds the shorts, the prime brokers, the DTC and the regulatory agencies makes it impossible to accurately estimate how much money has been stolen from the investing public by these predators, but the total is measured in billions of dollars. The problem is also international in scope.

**Who Profits from this Illicit Activity?** – The short answer is everyone who participates. Specifically:

1. The shorts – They win over ninety percent of the time. Their return on investment is enormous because they don't put any capital up when they sell short – they get cash from the sale delivered to their account. As long as the stock price remains under their short sale price, it is all profit on little investment.
2. The prime brokers – The shorts need the prime brokers to aid in counterfeiting shares, which is the cornerstone of the fraud. Not only do the prime brokers get sales commissions and interest on margin accounts, they charge the shorts “interest” on borrowed shares. This can be as high as five percent per week. *The prime brokers allegedly make eight to ten billion dollars a year from their short stock lend program.* The prime brokers also actively short the victim companies, making large trading profits.
3. The DTC – A significant amount of the counterfeiting occurs at the DTC level. They charge the shorts “interest” on borrowed shares, whether it is a legitimate stock borrow or counterfeit shares, as is the case in a vast majority of shares of a company under attack. The amount of profit that the DTC receives is unknown because it is a private company owned by the prime brokers

**The Cover Up** – The securities industry, certain “respected” members of corporate America who like the profits from illegal shorting, certain criminal elements and our federal government do not want the public to become aware of this problem.

*The reason for the cover up is money.*

Everyone, including our elected officials, gets lots of money. Consequently there is an active campaign to keep a lid on information. The denial about these illegal practices comes from the industry, the DTC, the SEC and certain members of Congress. They are always delivered in blanket generalities. If indeed there is no problem, as they claim, then why don't they show us the evidence instead of actively and aggressively fighting or deflecting every attempt at obtaining information that is easily accessible for them and impossible for companies and investors? Accusers are counter attacked as being sour-grapes losers, lunatics or opportunistic lawyers trying to unjustly enrich themselves. Death threats are not an unheard of occurrence.

The securities industry counters with a campaign of misinformation. For example, they proudly pointed out that only one percent of the *dollar* volume of *listed* securities are fails-to-deliver. What they don't mention:

- that the fails-to-deliver are concentrated in companies being attacked



- for companies under attack, for every disclosed fail-to-deliver there maybe ten to forty times that number of undisclosed counterfeit shares
- companies under attack have seen their stock price depressed to a small fraction of the price of an average share, therefore the fails-to-deliver as a percentage of number of shares is considerably higher than as a percentage of dollar volume
- the examples cited are limited to listed companies, but much of the abuse occurs in the over the counter market, regional exchanges and on unregulated foreign exchanges that allow naked shorting of American companies, who are not even aware they are traded on the foreign exchanges.

**Why does this continue to happen?** It is no accident that the most pervasive financial fraud in the history of this country continues unabated. The securities industry advances its agenda on multiple fronts:

1. The truth about counterfeiting remains locked away with the perpetrators of the fraud. The prime brokers, hedge funds, the SEC and the DTC are shrouded in secrecy. They actively and aggressively resist requests for the truth, be it with a subpoena or otherwise. Congressional subpoenas are treated with almost as much disdain as civil subpoenas. (See Appendix I for more on **A Lack of Transparency**).
2. The body of securities law at the *federal* level is so stacked in favor of the industry that it is almost impossible to successfully sue for securities fraud in federal court.

For example, in a normal fraud case, a complaint can be filed based upon “information and belief” that a fraud has been committed. The court then allows the plaintiff to subpoena evidence and depose witnesses, including the defendants. From this discovery, the plaintiff then attempts to prove his case.

Federal securities fraud cases can’t be filed based upon “information and belief”; you must have evidence first in order to not have the complaint immediately dismissed for failure to state a cause of action. This information is not available from the defendants (see above) without subpoenas, but you can’t issue a subpoena because the case gets dismissed before discovery is opened. (See Appendix J for more on **Federal Securities Law**).

This is only one example of the terrible inequities that exist in federal securities law.

3. The SEC is supposed to protect the investing public from Wall Street predators. While some SEC staffers are underpaid, overworked, honest civil servants, the top echelons of the SEC frequently end up in high-paying Wall Street jobs. (See Appendix K for more on former SEC administrator **Richard Sauer**). The five-person Board of Governors, who oversee the SEC, is dominated by the industry. The governors are presidential appointees and the industry usually fills three slots, frequently including the chairmanship. (See Appendix L for more on **The Enforcement Apparatus**).
4. For those rare occasions when the SEC prosecutes an industry insider, the cases almost never go to a judgment or a criminal conviction. The securities company settles for a fine and no finding of guilt. The fine, which may seem like a large sum, is insignificant in the context of an industry that earned 35 billion dollars in 2006. Fines, settlements and legal expenses are just a cost of doing business for Wall Street.
5. The root cause of the impossibly skewed federal laws and the ineffectiveness of the SEC and other regulatory bodies rests squarely with our elected officials. The securities industry contributes heavily to both parties at the presidential and congressional levels.



As long as the public is passive about securities reform, our elected officials are happy to take the money, which at the federal level was 65 million dollars in 2006.

The Democrats swept into power with a promise of ethics reform. Their majority in congress allowed Christopher Dodd (D-CT) to ascend to the chairmanship of the Senate Banking Committee, which regulates the securities industry. His largest single contributor (\$175,400) in the first quarter of 2007 was (employees of) SAC Capital, a very aggressive short hedge fund. Are we surprised that Dodd has opposed additional regulation of hedge funds. They are virtually unregulated. (See Appendix M for more on **Buying Political Influence**).

6. Some states have their own securities laws and their own enforcement arm. Certain states including Connecticut, Illinois, Utah, Louisiana and others, have begun active enforcement of their own laws. The state laws are not nearly as pro industry as federal laws and plaintiffs are having success.

To thwart this, the industry with the support of the SEC, is attempting to have the federal court system and federal agencies, be the sole venue for securities matters. The SEC is working hand in hand with the industry to advance this theory of federal preemption, which would put all securities matters under federal law, all litigation in federal courts, and all enforcement with the SEC. (See Appendix N for more of how **The SEC Shelters The Securities Industry**).

The following are recent examples of how the SEC is advancing the industry agenda:

- The San Francisco office of the SEC issued subpoenas to various short friendly media outlets after congressional hearings about David Rocker and Gradient Analytic. This investigation into the media involvement with the shorts was ended by the chairman of the SEC, Christopher Cox, who withdrew the subpoenas, apparently concluding that the First Amendment right to free speech protected participants in an alleged stock manipulation. Jim Cramer ripped up his subpoena on his television show, thumbing his nose at the SEC. (See Appendix O for more on **Gradient Analytic**).
- In early 2007, the SEC completely exonerated Gradient, citing Gradient's First Amendment rights.
- The Nevada Supreme court heard a case captioned Nanopierce vs. DTCC. Nanopierce is an emerging company that was attacked by the shorts and subjected to massive counterfeiting of their stock by the DTCC. This state court case is close to opening discovery against the DTCC, so the industry is attempting to kill the lawsuit by arguing it should be in federal court - where it will be DOA. The SEC showed up as a friend of the defendant DTCC, and filed a brief in support of the DTCC efforts to remove the case to the federal court system.
- Both houses of the Utah legislature passed a bill that required daily disclosure of fails-to-deliver, including identifying specific companies and the specific broker dealer positions in that company. The bill also outlawed naked shorting of companies domiciled in Utah. The industry threatened litigation based upon federal preemption and backed the state down. The bill was not signed into law.
- A bill was introduced to the Arizona legislature that required disclosure similar to the Utah bill, but without the illegal naked shorting provision. This is the same information that the DTC confidentially provides to the SEC. Certain prime broker's lobbying effort allegedly managed to get the bill killed in committee. The



industries efforts to curtail state authority, is an effort to draw all securities matters under the federal umbrella, where small investors don't have a chance of obtaining justice.

- In February 2007 the SEC determined that the hedge fund industry did not require any additional regulation – they are virtually unregulated. This may be the height of arrogance.
- In an effort to thwart political efforts to regulate hedge funds and clean up Wall Street, the industry is advancing politically the theory of counterparty discipline. Essentially what they are arguing is akin to Al Capone calling the chief of police and telling him we don't need the police, because we have rival gangs and they will make sure everyone follows the rules. This argument is apparently at least partially subscribed to by the SEC and Christopher Dodd, Chairman of the Senate Banking Committee and Richard Shelby former Chairman and ranking member. Both Senators are the beneficiaries of large amounts of Wall Street generosity.

**Sources** – Information used was obtained from public records; the SEC; the Leslie Boni Report to the SEC on shorting; evidence and testimony in court proceedings; conversations with attorneys who are involved in securities litigation; former SEC employees; conversations with management of victim companies; and first hand experience as investors in companies that have suffered short attacks. This web site is sponsored by Citizens for Securities Reform.

**What to Do?** – Many of our elected officials at the federal and state level do not understand most of what is contained in this paper. They *must* come to understand this fraud, and, more importantly, understand that their constituents are angry.

Pass this information to everyone you know – put it in the public conscience. Then the citizenry needs to engage in a massive letter-writing campaign. Feel free to attach this report. Make sure your elected officials, at the federal level and state level know how you feel. Ultimately, votes in the home district will trump money from the outside.

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## **Appendix A**

**The Grandfather Clause** was one of many loopholes in the initial SHO regulations enacted in January 2005. This exemption essentially granted amnesty to counterfeit shares sold prior to 2005. The reason given by the SEC for this provision was they (the SEC) “were concerned about creating volatility through short squeezes.” The SEC offered no empirical or analytic data in support of the grandfather exemption, and did not offer any explanation of why they were essentially granting a safe haven for those who had engaged in the practice of selling unregistered securities (counterfeiting). The number of shares that were grandfathered in is unknown, except to the DTC and the prime brokers, but it was likely in the billions and possibly trillions. The DTC and the securities industry deny that a meaningful number of counterfeit shares were protected by the grandfather clause; investor advocates believe otherwise.

After much public and political pressure, the SEC relented and closed the grandfather clause loophole in mid - 2007. This should have resulted in a tremendous increase in short shares being borrowed or covered triggering increased buying with a resultant increase in prices. Yet the abolition of the grandfather clause barely created a ripple.

The reason for the imperceptible level of buy-ins was because the DTC and broker dealers moved huge numbers of counterfeit shares from the DTC to ex-clearing. This strategy is successful, because the SEC does not enforce the requirements of Reg SHO for ex-clearing shares. Another safe haven for counterfeit shares.

Another loophole that is the repository for millions or billions of counterfeit shares is the DTC - sponsored and SEC - condoned RECATS program. The DTC, as a service to its prime broker - member/owners, notifies the broker when a position is about to become a fail-to-deliver. The broker may send the position out of DTC by transferring it overseas or doing a match trade with another party. The position may be returned to the DTC where the account is marked to market (value) and all of the time requirements of naked shorting are reset. The cycle can be repeated as often as is necessary to keep the positions naked.

With loopholes like these, it is delusional to think that SHO or anything else done to date is going to have a meaningful impact on counterfeiting. It is also denial to think that the promulgation of illogical rules and the non-existent enforcement by the SEC is not aiding and abetting the counterfeiting of massive amounts of stock in U.S. companies.



## **Appendix B**

**The Options Maker Exemption** is a loophole that is often abused and is a readily available source of a large number of counterfeit shares. Options trading and abuse thereof, is incredibly complex with many layers of instruments and trading strategies, i.e. straddles, married trades, derivatives, etc. It is far more complex than the simple puts and calls that most investors are familiar with. The fundamental tenant of this loophole is that an options trader may utilize equities (stock) to hedge a trading position. Options traders rarely own any shares in companies they are trading options in. Consequently, the regulators allow the trader to keep his position neutral by offsetting it with an equity transaction.

For example, let's say an options trader writes a put contract for a stock that is near or in the money. The trader, by writing this contract, is agreeing to purchase the shares from a third party at a specific price – let's say \$10 for the sake of this example. If the stock price plummets to \$5, the contract will be put to the trader, forcing him to buy the stock for \$10 – at a loss of \$5. The trader protects himself by selling a naked short at the time he writes the put contract. By doing that, under our example, he has made a \$5 profit on the naked short that offsets the \$5 loss on the option contract. This is considered a legitimate hedge, and the naked short sale is allowed per the options maker exemption.

This exemption is fraught with opportunities for abuse. Once the underlying put contract expires, little effort is made to collect the naked short shares that were sold initially: They tend to remain permanently in circulation. The shorts may purchase huge put contracts for long positions they don't own. For the cost of the put, they have caused the stock of a victim company to be flooded with counterfeit shares from the options trader, thereby driving the price down even more.

It is important to understand that virtually all of the broker dealers are also options traders, so it is all in house. Also important is that in 2000, the enforcement responsibility for these transactions was split between the SEC and the Commodities Futures Trading Commission. Each agency seemingly relies on the other, and, as a consequence, there is virtually no enforcement in this area. Rampant abuse is the predictable result.

The SEC and the broker dealers believe that if the transaction can be made to look like a legitimate hedge, even though it is generating millions of counterfeit shares that are being used to manipulate a stock, then it is okay. The system is easy to game.

Let's say there is a play on, involving a consortium of shorts which includes a number of broker dealers, to crush a stock by flooding the market with counterfeit shares. The play works as follows:

Broker dealer A, who is also an options trader, writes an options contract for 5 million shares to broker dealer B that expires in (say) two years. Based upon writing this contract, broker dealer A is allowed to short 5 million counterfeit shares. Broker dealer B writes the same contract to broker dealer A, except it expires in two years and one day. The extra day fools the regulators and the broker dealers' compliance department into believing this is not a match trade. Now broker dealer B can naked short 5 million counterfeit shares – a 10 million share stock pile of counterfeit shares is now available to use to crush the victim company's stock with. Aside from the Ponzi - scheme nature



of the offsetting puts, the common expectation is that the short cabal will be able to put the company out of business prior to the options contract expiration. At expiration the offsetting contracts “wash out” leaving behind the counterfeit shares. These contracts are almost never put through an options exchange, and, therefore, are invisible to all except the perpetrators.

Not covered under the Options Maker Exemption, but a source of counterfeit shares that flow from the options traders, is the rule that a short may use a current maturity call as his “borrowed” share, enabling him to “legally” sell a counterfeit share. The call has no real share behind it in most cases. If the contract is not a current maturity call, that requirement is circumvented by the short notifying the options trader that he wants delivery of the shares. This causes the SEC to view the sale of the counterfeit share as a legitimate short share being sold.

In most of these abusive transactions, the option contracts only purpose is to facilitate the counterfeiting of large numbers of shares – the option contract is really trading residue. Once the contract has served its purpose of “legitimizing” the counterfeiting and fooling the regulators, it has no value to the short. Frequently these contracts, by agreement between the options trader(s) and/or the short, are unwound before they settle. Within the industry, these are referred to as “walk away” contracts. The counterfeit shares are almost always left behind, perpetually in circulation.

Should the SEC attempt to examine any of these transactions, the broker dealer can move the shares out by doing a match trade with another broker dealer. Essentially this is: You buy 100 of mine and I’ll buy 100 of yours. In an examination, the SEC sees broker A’s naked short position being sold, and, hence, off the books of broker A. They also see that broker A purchased a short position from broker B which resets the fail-to-deliver clock. Broker A is found to be in compliance because the time requirements of his position becoming a failed position have been reset, putting broker A in compliance, hence the investigation is ended. The execution of this simplistic scheme is far more elaborate, with lot sizes changed and multiple stops along the way, frequently outside of the U.S. Figuring this out is laborious but possible, but is rarely undertaken by the SEC.



## **Appendix C**

**Short Squeezes** only exist in the minds of naïve long share holders. As long as the shorts have the ability to make a virtually unlimited supply of counterfeit shares, they can usually meet the buy-side demand and keep a lid on the stock price - or, better yet, drop it.

It is myth to think the shorts have to cover in order to realize a profit. While this may apply to small investors, it does not apply to the broker dealers. Each day their short position is “marked to market.” For example, if a broker dealer shorts 100 shares at \$10, the liability in that account is  $\$10 \times 100$  or \$1000. So long as the stock price is \$10, the money remains in the account. If the stock price drops to \$9, the account is marked to market, which reduces the required funds in the account to \$900. The \$100 that is freed up can be drawn out by the broker on a daily basis. Conversely, if the stock price goes to \$11, he must add \$100 to the account. The equation for the broker becomes: Do I counterfeit more shares, drive the price down and take out more profit or do I stop counterfeiting, watch the price rise and add more money to my account? Morality rarely enters into the decision-making process.

Situations where the broker dealers join with large hedge funds to attack a small to mid-size company are less likely to see covering, even if the stock price gets away from them on a short term basis. Good company news or earnings are shorted into keeping a lid on the stock while driving down the multiple. They are very patient, well financed and have the ability to wait until the company stumbles, then they attack. They can also attempt to hurt the company’s business and earnings utilizing the devices explained in this text. For these reasons short squeezes in emerging companies almost never occur.

When attacks involve very large victim companies that are extremely solid and profitable, the shorts may cover these positions because the stock of these companies is too widely traded to manipulate for a long period of time. The short attack on Apple that occurred in early 2008 is likely a case in point.

The practice of wholesale counterfeiting of stock, that has made short squeezes obsolete, began in earnest in the mid-nineties. Initially attacks were done in the fringe markets, i.e. over the counter or companies that appeared to be easy victims. It was so easy, and so much money was flowing into hedge funds /broker dealers, that the game was expanded and moved up to the fringe exchanges, particularly those whose rules and enforcement apparatus allowed the manipulations to be done from the shadows. The regional exchanges became a haven for shorts that continues to this day. Up to this point the overwhelming majorities of companies were too weak to fight back and frequently went out of business.

The attacks moved up the exchange “food chain” and became increasingly large and vicious, targeting good companies that happened to stumble following a favorable run up in stock price. By 2008, targets included companies such as Bear Stearns, Lehman Brothers and Apple.

This degradation of our capital markets could only exist because of the seriously flawed and compromised enforcement apparatus that starts with the Congress and ends with the broker dealers who are violating, on a large scale basis, the rules they are supposed to be enforcing. Even if the SEC wanted to aggressively investigate large-



scale manipulative trading, they are seriously hampered because they are still a paper-based organization. Requested trading records are delivered in the form of truckloads of paper tickets, with the promise of more truckloads if need be. The electronic capabilities of the SEC to receive, process and analyze data is decades behind Wall Street's.



## **Appendix D**

**Bankrupting The Victim Company** is not necessarily the end of the play. This case is an illustration of how Wall Street can effectuate the takeover of a victim company for nothing. Pending or contemplated litigation prohibits identifying the victim company or the broker dealers, but this occurred earlier this decade.

According to Jim Cramer, the perception of unfavorable industry conditions gave license to the shorts to attack the industry. The events, trading patterns and the precipitous drop in our examples stock price is indicative of a massive short attack, however the definitive information is locked within the DTC.

Our example had about 40 million shares issued and outstanding and with a large debt load and good, but declining earnings, they were a prime short target. Naked shorting was rampant and largely invisible then, consequently the environment was conducive for wholesale counterfeiting of the stock. It is not known what the exact extent of the shorting was, but assume it was 50 million shares for the sake of this illustration. The stock price dropped from over \$25 to under \$2 just prior to the bankruptcy filing. Assuming it was shorted all the way down at an average price of \$15, the potential profit by the shorts would be \$.75 billion.

According to court documents, concurrent with the decline in the stock price a group of investment bankers who had shorted the stock began buying participations in the victim's senior credit debt. Typically the investment bankers were purchasing portions of the original bank debt at a deep discount. Large credit facilities are typically spread among a consortium of participating lenders. The investment bankers, by controlling the senior debt were in a position to monitor and facilitate, if necessary, the filing of bankruptcy. A high degree of confidence by the investment bankers that bankruptcy was likely, would give their prop desks a high degree of comfort that the counterfeited shares would never have to be covered or be taxed. The potential profit from the short sales would be enough to purchase the discounted senior debt and still have a sizeable sum left over.

The investment bankers controlled the financial fate of the company by virtue of being the senior creditors. They forced a Chapter 11 filing, then manipulated the asset valuation by the bankruptcy court, insuring that they would own virtually all of the stock in the reorganized, debt free company. The shorting and the bankruptcy manipulation wiped out the original shareholders, the junior creditors and caused substantial losses for the banks who originally made the loans.

The reorganized company was split up by the new owners - the vast majority of whom were the investment bankers who purchased the discounted senior debt participations - and one division was sold to a competitor and one to a private equity firm, for about \$4 billion. The investment bankers made billions of profits on little or no net investment, as a result of allegedly manipulating, the stock price and the valuation of the bankrupt estate. Manipulative naked shorting and bankruptcy fraud are alleged and both are illegal.



## **Appendix E**

**Crashing the Stock** occurs when the price is getting away from the shorts, or when it is time to knock the price down so short positions can be covered at a profit.

The short mindset relative to trades that are going bad is entirely different from a long investor. A long investor typically will cut his losses by reducing his position in a stock that is moving away from him. The short reacts differently. It is important to remember that so long as the stock price is remaining flat or dropping, the short has little net investment. Further he has access to a virtually unlimited supply of shares that are “free” as long as he can keep the price from going up.

A recent case involves an emerging technology company that was allegedly being shorted by a group of B tier shorts that included a west coast brokerage firm. The broker had a million share short position with an estimated short price of \$11. Despite 60-90% of the daily sells being short, the stock price had increases to \$18, putting the broker upside down by \$7 million. A “crash” of the stock was implemented, and, in a matter of days, drove the price down to \$13. The regional broker contributed an estimated additional 250,000 short shares to help drive the price down. At the end of the crash, he was short 1.25 million shares, but was only upside down \$2 per share, or \$2.5 million on his position. By throwing more shares at a position going bad, he was able to improve his position. Eventually, continued massive shorting in the face of very good company news, saw the price drop to \$9/share, putting the shorts in the money.

The shorts do this repeatedly and eventually drive the long buyers out, then they may cover some of their open positions or take profit out by marking to market. Rarely do they get caught out with this strategy.

One of the more flagrant crashes involved CROX in December, 2007. The company manufactures a line of quirky casual footwear that caught on with the American public and small investors, who bought the stock in droves. The stock split and climbed almost exponentially during the summer and fall of 2007, despite being shorted heavily the whole time. By December, the stock price was \$75 and the shorts were seriously upside down. At that point CROX had 80 million shares issued and a typical daily trading volume of 3 – 4 million shares, which included significant short selling.

On Dec.1, 2007, CROX released quarterly earnings that were in line with guidance but were 2¢ short of “Street expectations”. The shorts crashed the stock on this supposed bad news. In a single trading day sixty million shares traded – almost all counterfeit. The shorts, by the sheer volume of their selling and buying, took complete control of trading, aided by the abolition of the up tick rule (The SEC recently dropped the rule that short shares could only be sold on up ticks, thereby allowing shorts to pile on massive quantities of shares very quickly). They dropped the stock price from \$74 to \$47 in a matter of hours.

This huge volume was probably the result of short down laddering. At the end of the day, the shorts sold (say) fifty million short shares, but if they were buying from themselves and covering open short positions, they ended up with a relatively small net increase in the number of short shares in their portfolio. They profited on all trades that day as they dropped the price \$27 and they may have improved the value of their remaining portfolio by \$27/share. Because they covered many short shares before the trades settled, there were few fails-to-deliver created.



So long as the short shares sold fit into one of many loophole exemptions and fails-to-deliver are not created, the enforcement agencies don't seem to view this overt manipulation as illegal, or chose not to prosecute them.



## **Appendix F**

**Frivolous Investigations** of victim companies by the SEC is a surefire way to drop the stock price. In 2004 the shorts allegedly compiled a list of approximately ten target companies they actively and aggressively attacked. This list included Overstock, Krispy Kreme, NovaStar, Pre-Paid Legal and others. After the shorts had taken large positions in these ten companies, eight of them were investigated by the SEC. Preliminary inquiries are supposed to remain secret because the unproven allegations could have a devastating effect on the stock price. Yet, within a matter of days, the news of the investigation would appear in short-friendly media outlets, to be followed almost instantly by a class-action shareholder suit(s).

The case of Universal Express is even more disturbing. Packaging Plus Services was a logistics and transportation firm that emerged from a Chapter 11 reorganization in May 1994 as Universal Express. In 1998, Universal needed financing for an acquisition, so they approached an investment banking firm, who they believed to be legitimate, to arrange PIPE (private investment, public exit) financing.

The lenders, who received bonds that could be converted into stock, got their loan repaid from the conversion and sale of their stock. A “toxic” PIPE continuously resets the conversion price at a fractional percentage of the market value share price. As the share price drops, the company issues more shares to the lender. Because the newly-issued additional shares are less than the market value, the lender immediately dumps them at a profit while further depressing the stock price with the flood of new shares.

Concurrently, the lenders short heavily with a flood of counterfeit shares, resulting in additional profit to them and putting more downward pressure on the stock price. This is called a “death spiral”, and this type of financing is called a toxic PIPE. It almost always succeeds in putting the company out of business. One of the most nefarious PIPE lenders, Steve Hicks, put virtually all of his borrowers out of business before the Department of Justice put him out of business.

Toxic PIPE lenders prey upon emerging or weak credit companies who do not have access to more traditional capital markets. Universal fell into this category, although, by their own admission, they were completely unaware of what they were dealing with.

The investment banker arranged the PIPE financing with about ten off-shore hedge funds. In a matter of thirty days, they drove Universal’s share price from \$2 to 2¢. Volume was the equivalent of the whole company changing hands every three days. Universal’s General Counsel suspended conversion of the bonds into stock by the hedge funds and complained to the SEC, who twice declined to do anything.

The company filed suit against the hedge funds in 1998, and obtained a jury verdict in July 2001 for \$389 million. In April 2003, a second verdict was obtained, this against the agent for the hedge funds in the amount of \$137 million. Due to the off-shore domicile and layers of shell corporations, collection of these judgments proved to be difficult. A subsequent company press release raised the obvious question: If a Florida jury can figure this out, why can’t the SEC?

According to Chris Gunderson, general counsel for Universal, the SEC reacted to these embarrassing revelations by harassing Universal with thirteen subpoenas for documents, including one to “prove the existence of naked shorting.” The SEC also allegedly contacted Universal’s prospective acquisition and some of the transaction lenders, “scaring” them from doing business with Universal.



On March 2, 2004, Universal countered by suing the SEC, for harassment and failing to regulate naked shorting. Three weeks later, the SEC sued Universal, (falsely) alleging that they sold unregistered (counterfeit) securities as part of a bankruptcy-court- approved employee stock incentive program. Universal alleges that the SEC has intentionally withheld information from the court and has unjustly attempted to deny the company's right to a jury trial.

As of the last writing available, the cases are still pending, but it is reported that some SEC officials have been relieved of duty as a result of their participation in this.



## **Appendix G**

**Class-Action Lawsuits** are an integral part of a short attack on a victim company. The most notorious of the class-action firms was Milberg, Weiss and their off-shoot law firms, which included Lerach, Geller and Coughlin. Milberg Weiss was forced to disband by the Justice Department; Lerach was just sentenced to prison time.

During the first half of this decade, about a dozen public companies were under attack by a short cabal that allegedly involved David Rocker and others. The victim companies included Krispy Kreme, Capital One Financial, Pre-Paid Legal, Netflix, Novastar Financial and others. The tactics described in this paper were almost universally applied to these companies. 75% of them were subject to an SEC investigation and about 80% were subject to a class action lawsuit filed by Milberg Weiss or associated firms.

The class-action litigation was closely tied to the SEC investigations. Given that SEC preliminary investigations are supposed to be confidential, the timing of the investigations and the litigation is remarkable. The litigation filing was invariably accompanied with much media coverage. This contributed to the onslaught of negative media coverage that accompanied the heavy volume down laddering of the stock price, making the manipulation look like a sell-off.

Milberg used paid professional plaintiffs as the lead plaintiff in their class action suits. They also used contingent fee expert witnesses. Both of these practices are illegal and have been successfully prosecuted by the Justice Department. Recently, Milberg, individually entered into a plea-bargain agreement that resulted in incarceration.



## **Appendix H**

**Pulling Margin** from long customers during a short attack serves two purposes.

Obviously the flood of shares that are “forced” sales help drive the price down, which aids the short cause in general. More important, for the broker dealers who clear for their retail customers at the same time they short against them, it creates a built-in source of cheap shares from which they can cover their open short positions.

Some of the broker dealers short against their retail customers from their proprietary trading desks, or “prop” desks. These are trades owned by the broker dealer, and, while they are not illegal, ethical questions certainly exist. The retail customers, who may be purchasing long investments that are being pushed by the broker dealer’s retail network, have no inkling that the broker is taking a large short position contrary to the retail investor’s position. With the encouragement of easy margin credit, i.e. 30% equity, the retail customers load up on stock and margin debt.

The broker dealer, in concert with other shorts, may crash the stock by flooding the board with counterfeit shares, dropping the stock price. The broker dealers know the amount of margin debt and the price at which their retail customers get into margin trouble. They can accelerate the squeeze on their retail customers by arbitrarily increasing the equity (percentage) requirement as the price is dropping, frequently citing “volatility”; which is really the shorts flooding the board with counterfeit shares.

The compounding effect of a dropping price and increasing equity requirement flushes out more shares. The broker dealers sometimes will take over the account during a margin sell-off. By engaging in poor trading practices, such as heavy selling over lunch hour; concentrated “dumps” of shares; hitting the bid with market orders; and conspiring with other trading desks, they can further plummet the value of the stock and maximize the shares they have stripped from their retail customers.

Most of the broker dealers who have both retail customers and prop-desk trading appear to engage in these practices. Goldman, Morgan Stanley and Merrill Lynch have been named in suits alleging these practices. Goldman made billions shorting against the subprime mortgage industry at the same time they were selling subprime investments to their customers.



## **Appendix I**

**A Lack of Transparency** is an important component of the short infrastructure. This serves a number of purposes: 1) The inability of victim companies, investors and the media to get information about manipulative trading and massive counterfeiting keeps the illegal practices out of the spotlight, thus avoiding a public uproar and resultant political and regulatory backlash. 2) Civil litigation in virtually every other area of fraud can be filed based upon information and belief. In an information and belief lawsuit, the allegations are assumed to be true and discovery is granted, which then results in evidence that proves or disproves the allegations. In a federal securities suit, the evidence must be in hand before the suit is filed. The lack of transparency by the SEC, DTC, the exchanges and the broker dealers insures that the plaintiff does not have access to the evidence necessary to sustain a complaint, or know the identity of the manipulators who would be the defendants. Thus the veil of secrecy continues and the illegal activities continue under a grant of de facto immunity as lawsuits are quashed before they get off the ground.

The SEC, DTC, the broker dealers and the courts have adopted a policy that proprietary trading strategy is a protected secret. This posture by the enforcement agencies essentially ensures that manipulative trading activity and the disclosure of the identity of those doing it never sees the light of day. The contention that trades done in years past are akin to the secret formula for Coke is absurd. It really is an excuse for engaging in a cover-up of sometimes illegal and manipulative activity that is facilitated by a veil of secrecy that is tolerated by the SEC, and frequently advanced by the courts.

The DTC and SEC categorically obfuscate the real magnitude of the counterfeiting; the lack of progress from Reg SHO, and by design, misleads Congress and the public. Some believe that the number of counterfeit shares in circulation exceeds a trillion. The SEC, which only reports aggregate fails-to-deliver, would like the public to believe the fails are about 300 million shares. Information, when it is finally pried from the DTC, never enables the reader to make a concise, accurate appraisal of the amount of shares that have been counterfeited.

Larry Thomson, general counsel of the DTC, is the master of obstruction and misinformation. Typical of the DTC's misleading or non-responsive statements are: the invention of different classifications of "fails" to make it appear that Reg SHO is working; the statistics cited frequently are the NYSE; the victims are most frequently listed on regional exchanges or over-the-counter, the magnitude of counterfeit shares is always expressed as a dollar volume, never the number of shares (many of the victim companies have greatly reduced share values as a result of the shorting), or as a percentage of the dollar value of all instruments, including debt, traded on the NYSE.

Pages could be filled with examples of misleading and partial disclosures by the DTC, which is done with the tacit approval of the SEC, who is charged with regulating the DTC. The true hypocrisy is that the requested information is readily available to the DTC; They are required by law to have it on record and readily available. They chose, however, to keep it secret, for obvious reasons and because they can.

The following is a list of information that a victim company can obtain from the SEC or DTC without a subpoena:

1. Aggregate fails-to-deliver. The SEC compiles, on a daily basis, a list of the number of fails-to-deliver that exist for a given company. Getting this from the



SEC usually requires that a Freedom of Information Act (FOIA) request be submitted. The SEC has been dilatory, at best, when processing this information. They have, however, recently started making this more available, but in reality it is a relatively valueless indicator of the total magnitude of the counterfeiting.

2. The DTC publishes a weekly report that is company specific. It shows the number of long shares that each broker dealer has in his account with the DTC. The ending daily balance and the weekly change are tabulated. This is available to the company, but not investors who are not in the securities industry.

The following is a partial list of the information that is not available to the company or its investors without a subpoena:

1. The DTC and the SEC invented another classification for the failure to deliver real shares by the settlement date. It is called an “open position,” and by inventing this new, unreported and not “illegal” classification, they have reduced the number of reported fail-to-deliver shares. An open position is a trade that has gone beyond T+3 and not had a share delivered. Positions may remain “open” until the other broker demands delivery. If the brokers are operating collusively, the demand is not made.  
This would be similar to law enforcement declaring that murders with knives and clubs no longer fall in the reported category of homicides, hence the reported homicide rate dropped significantly. Opens are not tracked and reported as an indicator of short sales that have no real shares behind them.
2. The aggregate amount of naked short shares is not reported anywhere, by anybody.
3. The aggregate counterfeit shares that are ex-clearing (in accounts of the broker dealers, but not in the DTC) are not investigated or tabulated by the SEC, hence there is no disclosure.
4. Investors are not able to obtain evidence that shares have not been pulled from their accounts and put into the stock lend or if locate(s) have been sold by the broker against shares in their account.
5. The identity of those who are counterfeiting shares is not disclosed anywhere.
6. The identity of who is short in a company is not disclosed, which is the opposite of the disclosure requirement for long investors who hold large positions in companies.
7. The percentage of sells that were disclosed short on a daily basis may be reported, but it is not always available. What isn’t reported is the daily naked short, the daily mismarked tickets, the amount of the disclosed short that is backed up with naked options, and the options that have served as borrowed shares and have expired and not been replaced or bought in.

This obstruction of disclosure is not accidental. The DTC does it because they are protecting its owners (the broker dealers) from public criticism, regulatory action, and, most importantly, civil litigation. The DTC’s zealotry and arrogance in fighting any and all attempts to obtain disclosure, be it with subpoena, public disclosure or regulatory requirement, is well documented. To date they have been quite successful.



The obstructionist posture of the SEC is less explainable than the DTC, and is every bit as effective. The Securities Act of 1933, which remains the cornerstone body of securities law in the United States, is clear. The Act uses the phrase “protecting investors” 186 times. It is also clear that selling unregistered (counterfeit) securities is illegal, as is stock manipulation and that the SEC is the federal agency charged with enforcement.

What the SEC has done is cast a blind eye to transgressions within the securities industry; promulgated rules (sometimes illegally) that create an infrastructure of loop holes and secrecy that the securities industry can navigate with little difficulty and little fear of prosecution; perpetuate and actively fight efforts for additional disclosure that would open the door for civil litigation; and, with the lobbying assistance and political contributions of the securities industry, attempted to consolidate jurisdiction at the federal level and consolidate enforcement power with the SEC.

The exchanges make virtually no disclosures regarding the activities of their member brokers. Listed companies do not get any information about the identity and amounts of counterfeiting that is going on. Complaints by investors or companies are investigated by the self-regulating exchanges in secrecy. The most flagrant manipulations are frequently whitewashed, and the participants are almost never prosecuted or reprimanded.

The reward for complaining companies is to have the exchange reduce the already sketchy level of disclosure. The reward for complaining investors is a scathing how-dare-you personal attack, followed by stonewalling and non-acknowledgement of follow-up complaints.



## Appendix J

**Federal Securities Law** is stacked in favor of the securities industry, making meaningful civil litigation almost impossible. When coupled with the decided lack of federal criminal action, it means the industry has little fear of recrimination for transgressions.

The industry is very influential with Congress, and, as a result, legislation is very pro-industry and legislation that is originally written to curb industry abuses becomes so watered down that the intended purpose isn't served.

Virtually every other kind of civil litigation can be filed based upon the plaintiffs' "information and belief" that a fraud has been committed. There must be reliable information that supports the allegations being made, but it does not have to be evidence on a level that would support a judgment. Assuming the information-and-belief complaint is properly crafted, the court initially assumes the allegations to be truthfully made and allows the plaintiff to move forward with discovery; the necessary evidence can be then uncovered with subpoenas and depositions. Based upon the evidence uncovered and presented, the court makes a ruling. Securities law is virtually the only area of the law that does not follow this practice. The fact that the SEC, DTC, the exchanges and the broker dealers operate in secrecy means the victim companies cannot get any information regarding the identity and magnitude of the counterfeiting or manipulation of their stock. Hence, federal securities lawsuits are frequently dismissed before discovery begins.

Another feature of federal-securities litigation: When the defendants file a motion to dismiss as their answer to the complaint, all discovery is halted. Without the benefit of discovery and the resultant evidence, the motion to dismiss is granted and the suit is over before it starts.

The federal racketeering statute (RICO) is often applied to civil litigation. It involves a "criminal enterprise" committing certain illegal acts (predicate acts) multiple times. The criminal enterprise can be an individual, company or group thereof. It is designed to prosecute groups who engage in repeated patterns of criminal behavior. Civil RICO awards are triple damages plus legal fees. It applies to almost all types of fraud except federal securities fraud. The cabal of shorts who collusively attack multiple victim companies utilizing the same illegal tactics is a text-book example of a RICO "criminal enterprise" engaged in multiple predicate acts. The securities industry managed to exempt themselves from civil RICO litigation during the Clinton administration.

The statute of limitations for federal-securities litigation is relatively short, typically two years from knowledge or five years from the committing of the fraudulent act. Common law fraud typically ranges from five to ten years. The secrecy of the industry and its regulatory apparatus compounds the problem of the relatively short statute of limitations.

States have their own securities laws that generally offer a more level playing field for investors and victim companies. The difficulty for investors suing Wall Street in state court is that the suit is limited to 49 individual plaintiffs. More plaintiffs cause the suit to be a class action, and it is removed to federal court, where it is governed by federal securities law. In the late nineties enterprising lawyers, who wanted to remain in state court, got around this by filing many suits in the same jurisdiction, each with 49 different plaintiffs but otherwise the same.



This abuse was brought to the forefront by certain notorious class action law firms, notably Milberg Weiss, during the Worldcom/Enron era. The Bush administration responded by passing legislation to curb frivolous class-action litigation. The legislation, championed by Christopher Cox when he was in Congress, is loosely written and has not yet been tested in court enough to fully understand its limitations. But, right now, it appears that if the same defendants are named for securities fraud in different state courts by different plaintiffs represented by different lawyers, there is the risk that the court may combine the suits into one class-action suit and kick it up to federal court, where successful prosecution of the case becomes exceedingly difficult. If the courts adopt this most expansive interpretation of this poorly-drafted law, the result will be that the securities industry has effectively blunted any meaningful exposure in state court.

The convergence of seemingly unrelated federal legislation that doesn't necessarily appear to target the securities industry has resulted in a litigation maze that almost always ends up in a blind alley. Hence, litigation at the federal level against the securities industry is very expensive, fraught with pitfalls, and time-consuming, consequently it does not get done nearly enough.



## Appendix K

**Richard Sauer** is a former ranking administrator in the enforcement division of the SEC. Investigation of improper trading by hedge funds would have fallen under Mr. Sauer's division. After putting in his time with the SEC, he entered private practice doing law work for David Rocker and other short hedge funds.

After his SEC career, Mr. Sauer authored an article that appeared in the Oct 6, 2006 *New York Times*. It provides insight into his mindset and presumably that of the division of the SEC he administered. Certainly the tepid prosecution of stock manipulation cases by the SEC would indicate that Mr. Sauer's view of the shorts was widely held by SEC enforcement.

He, not surprisingly, views shorts as the "good guys," who keep the bad corporate guys in check. He further claims that the good work of the shorts has unjustly been hobbled by recent additional regulation, i.e. Reg SHO, designed to stop abusive shorting. He goes on to say "as an enforcement lawyer at the SEC, I received from short sellers early warnings on certain companies that led to the capture and return to investors of hundreds of millions of dollars taken by stock fraud... But if the short sellers are friends to the SEC, the commission has been no friend to the short sellers. The agency has saddled them with trading restrictions and looked the other way when companies have taken potentially illegal actions to silence short seller's criticism." Based upon these comments, it appears that Mr. Sauer either condones or denies the existence of massive counterfeiting of stock that usually accompanies a short attack. Is the trading restriction he alludes to the lawful requirement that a real share be borrowed?

Mr. Sauer rails against "pump and dump" schemes as illegal stock manipulation -which they are. Yet no mention is made of flooding the ask side of the board with short and counterfeit shares to drive the price down. This is particularly destructive now that the SEC removed the up tick rule which prohibited short selling on a down tick.

His view that the stock manipulations that drive down stock prices are not the problem, it is bad companies, has been echoed by other SEC officials. In 2005, SEC commissioner Annette Nazareth said there isn't a problem with naked shorting – there are just bad companies. This attitude would explain why there is little meaningful enforcement against the short hedge funds and the broker dealers for stock manipulations.

The disturbing part is the SEC has the authority and the tools to determine whether shares have been counterfeited and markets manipulated. If the assertion by the SEC that there are only bad companies is correct, then why do they make the evidence completely unobtainable? Every company, whether poorly run or superbly managed, is entitled to not have their stock counterfeited and its price manipulated.

Patrick Byrne of Overstock, when a short suggested he spend less time being concerned about the massive counterfeiting of his company's stock and more time running the company, replied, "Are you telling me if I ran a better liquor store you would stop robbing it?"



## **Appendix L**

**The Enforcement Apparatus** for the securities industry is the classic foxes guarding the hen house. Regulatory agencies are a closed loop with no transparency and, therefore, very little outside oversight, be it from Congress, the public, lawyers for investors or the media. The lines between the regulators and those being regulated are blurred or nonexistent. The opportunity for conflicts of interest exist at almost all levels, so it is no surprise that enforcement actions rarely happen, and when they do, they are not very meaningful, criminally or economically.

The SEC is the top federal agency charged with enforcing the rules within the industry. They promulgate new rules, hold public hearings, and, in the final analysis, may have the appearance of advancing rules that will stop counterfeiting and other stock manipulations. But, by the time the industry waters the rules down and adds loopholes and exemptions, the reform intended is emasculated. Reg SHO, which was enacted to solve the problem of naked short (counterfeiting) abuse, is so fraught with loopholes, meaningless enforcement and safe havens for counterfeiting, that the law itself is a fraud perpetrated upon the American public, who believe their investments are being protected. The securities industry has little apparent difficulty staying one step ahead of the SEC.

Flooding the offer side of the board with counterfeit shares, thereby altering the price point at which the demand curve intersects the supply curve, is the most fundamental principal of economics, and an obvious and overt manipulation of the price of a stock. Short attack days regularly see over 90% of the sells being short and counterfeit shares, causing the price to plummet or on good news days, soaking up the demand thus keeping the stock price from going up.

The SEC almost never prosecutes shorts for “price manipulation.” Instead, on the rare occasions when they do investigate, they look at trades on a microscopic level. For example: Were short sales tickets mismarked as long sales? Was there short selling on down ticks? etc. If there is a finding it is for a minor infraction and the fine is minor as well. Almost all of the broker dealers have been fined for mismarking tickets, virtually none for manipulation with short sales. One case we know of resulted in a million-dollar fine, which was gladly paid. The broker reportedly made \$50 million on the manipulation. This process of microscopic rules enforcement and loophole compliance while ignoring the larger price manipulation question permeates the securities enforcement apparatus from top to bottom.

It is ironic that microscopic rules enforcement is the guideline when prosecuting short manipulations, yet when the manipulation involves long shares, the enforcement looks at the overall scheme vs. the individual trades. If one examines a classic pump and dump scheme in a mirror, you see a short down ladder. If one replaces long shares with short shares, pump with crash and dump with cover, the manipulations are the same with the same outcome: the fleecing of the public. Per the SEC, pump and dumps are illegal and occasionally prosecuted. Short down ladders are deemed legal so long as the trades fall into a loophole, and are rarely prosecuted.

Investigations of complaints alleging stock manipulation are handled in complete secrecy, so the victim rarely knows what the outcome was or if it was even investigated. After an investigation is closed, in theory, the documents should be available under the Freedom of Information Act. The SEC routinely obfuscates these requests, citing



proprietary trading strategies and other reasons for not providing the requested information. The lack of disclosure regarding investigations of the securities industry keeps the public and media spotlight off them. The industry cites this as evidence that there really isn't a problem with counterfeiting and stock manipulation.

Another way of deflecting the spotlight of public disclosure is for the SEC to investigate companies. Corporate malfeasance is certainly within the scope of responsibility of the SEC, and it is commendable when corporate officers who pillage tens of millions from the shareholders are prosecuted. But what about the short hedge funds and the broker dealers who pillage billions from the shareholders of victim companies? For every Kozlowski or Scrushy prosecuted, there are doubtlessly scores – maybe hundreds – of securities industry frauds involving exponentially larger sums of money that are not even investigated.

An emerging company that we know of was subject to massive counterfeiting and stock manipulation. On a daily basis, 50 to 90% of the sells were short and the stock had been crashed three times in a year. Detailed complaints were filed with the SEC and the SROs by the company and shareholders; they cited DTC share movements, known holdings and identified the suspected shorts. The company's reward for protecting the interest of their shareholders was an inquiry into the company for alleged insider information violations. Eventually, the SEC left with no findings because there never was any insider information. The investigation of the shorts and the stock manipulation was white-washed and the manipulation continues.

The reason for the apparent immunity the securities industry enjoys is that many upper level SEC staffers ultimately sign on with the securities industry in jobs that often have seven-figure compensation packages. In the recent past, every year saw about 1/6 of the lawyers with the SEC jump ship and sign on with Wall Street for considerably more money. The reluctance to prosecute a potential future employer is understandable. For more information see the segment about Frivolous Investigations and Richard Sauer, a former SEC administrator who went to work for David Rocker and other shorts.

The five-person Board of Governors that oversees the staff of the SEC are political appointees. The securities industry is one of the largest political contributors in the country, and they have been successful in insuring that their interests are well represented at the Board of Governors level, where the values and mission of the SEC are set. Christopher Cox, the current head of the SEC, while from the Congress, clearly is a close friend of the industry. As a congressman, he was actively involved in the passage of some of the most anti-small investor legislation. Since his chairmanship, he has grudgingly made rule changes that were allegedly designed to curb stock counterfeiting, but, in fact, the new rules are so fraught with loopholes and blind eye enforcement that little has changed except the hiding places for counterfeit shares.

The next line of enforcement is the Self Regulating Organizations or SRO's. What we are really talking about is the exchanges, i.e. the NYSE, NASDAQ, ARCA, etc. They are supposed to monitor trading to protect against illegal activities. Their enforcement focus is also on the microscopic level. Consequently they don't view trading days where, in the face of good news or no news, 90% of the sells are naked or disclosed short, as a manipulation. Rather they look at whether naked shorts fit into one of the many loop holes, i.e. market maker exemption, specialist exemption, options trader



exemption, etc. They also do little investigation to determine if locates (of borrowed shares) are valid; trading tickets are mismarked; shares are fails-to-deliver; etc. Should infractions be found, they are treated as minor transgressions, and the larger issue of whether the shorts are collusively attempting to manipulate the stock is never meaningfully examined and prosecuted.

The reasons for the SRO's lack of enthusiasm in protecting small investors is the same as the SEC's. Upper management of the SRO's, who are extremely well compensated, are from the industry or friends of the industry. It is the large Wall Street firms who provide the revenue necessary to pay the exorbitant salaries. The ARCA exchange was owned by Goldman and others prior to its acquisition by the NYSE Group. It is probably not an accident that the ARCA is among the most lax in their enforcement and allegedly contributes almost three-quarters of the NYSE Group's bottom line.

The last line of enforcement is the broker dealers, who are supposed to make sure their customers follow the rules. Unfortunately, it is the broker dealers who provide the majority of counterfeit shares for the shorts, be it their hedge fund customers or their own proprietary trading desk. This activity purportedly generates \$8 to 10 billion annually for the broker dealers, so it is probably safe to say that enforcement will be on the underside of zealous.

The enforcement apparatus, top to bottom, operates in secrecy, with little outside oversight; is systemically fraught with conflict; and has insignificant punitive consequences. Consequently, and not surprisingly, there is little meaningful enforcement of the securities industry.



## **Appendix M**

**Buying Political Influence** is just another line-item expense for Wall Street. Large amounts of money from the securities industry are targeted for key influential politicians who can favorably influence legislation that is good for the industry and frequently bad for the small investor.

The overall political strategy for the industry is to have all securities matters at the federal level. There are several reasons this strategy is effective: 1) The body of securities law at the federal level is so skewed against the small investor, meaningful litigation against Wall Street is virtually impossible. 2) The regulatory apparatus, which in descending order is the SEC, the exchanges and the prime brokers, is seriously compromised. Top to bottom, they regulate in secrecy and the informal financial incentive system tends to reward those who look the other way. 3) The federal courts and the regulatory apparatus have bought into the securities industry's proposition that crooked trading is proprietary trading strategy and should be kept secret. They use this excuse to deny FOIA requests, seal court records, which means it is not available for subsequent cases and generally keep some egregious behavior out of the public spotlight.

This political strategy works because the benefit to politicians (money) is concentrated and specific, and the opposition (small investors) is unaware, unorganized, dispersed, apathetic and unfinanced. Legislation and rules promulgation that is actually flagrantly pro-industry and anti-small investor is spun to make it look like Congress and the regulators are actually doing something constructive when they are really obfuscating. Witness Reg SHO, which hasn't changed much except the hiding places for the counterfeit shares.

Political contributions from Wall Street cross party lines and are rarely done for altruistic reasons. It is to help politicians who are in a position to help the industry. The securities and investment industry – which includes brokers, hedge funds and private equity firms - had the sharpest increase in political giving of any sector since 2004, up 91%. In 2007, at the presidential/congressional level, keeping with their policy of backing the winners, Democrats received 57% and Republicans 43%. Presidential candidates Barack Obama, Rudy Giuliani and Hillary Clinton were the three largest recipients of Wall Street money. Senator Christopher Dodd, while not a real presidential contender, does chair the Senate Banking Committee, was right behind Mitt Romney, himself a former Wall Street investment banker, and ahead of John McCain. As of October 29, 2007, the largest securities industry contributors included Goldman Sachs, Morgan Stanley, UBS, Merrill Lynch and others.

The magnitude of the giving was reflected in 2006, an off-year election, when the industry gave \$65 million. The reported giving is only a portion of the total, as federal election law, like federal securities law, is fraught with loopholes. Examples of unreported giving includes so called "soft money," such as paying for the \$4,000,000 Bush inaugural party.

The collapse of Bear Stearns, which was facilitated by the shorts, brought the short manipulation problem before the Senate Banking Committee. Televised hearings in April 2008 saw Chairman Christopher Dodd and ranking member Richard Shelby mercilessly grill Christopher Cox about the failure of the SEC to regulate the naked short abuse that triggered the collapse of Bear. Dodd and Shelby are among the largest congressional



benefactors of Wall Street generosity, and Bear Stearns is one of Wall Street's most prolific counterfeiters. The hypocrisy was so deep the participants needed snorkels.



## **Appendix N**

**The SEC Shelters the Securities Industry** in many ways, and perhaps the most graphic example involves the Eagletech case. Eagletech Communications was an emerging public company that developed patented wireless telephone technology. They traded on the over-the-counter market.

In order to raise capital, Eagletech entered into two PIPE (private investment, public exit) financings, not knowing that the loan transactions, one of which was arranged by Solomon Smith Barney, were a front for the Mafia. The company was shorted into a death spiral with a host of illegal activities that included counterfeiting stock, match trades, pump and dump, stock manipulation, money laundering, wire fraud and mail fraud. The scheme came to light as a result of a Department of Justice investigation into organized crime and the securities industry.

The D.O.J. “flipped” one of the mobsters, who told the whole story. An integral part of the scheme involved the active participation of Wall Street firms that included Citigroup, JP Morgan Chase, Solomon Smith Barney, Bank of New York (Pershing), Knight, Goldman, Prudential, Bear Stearns and others. The SEC was brought into the investigation to assist the D.O.J. The government contended the Wall Street firms knowingly and actively participated shoulder-to-shoulder with the mob. Not only did they profit from the death-spiral attack on Eagletech, they facilitated a tax evasion and money laundering scheme for the fraud participants.

At the end of the case, the mobsters went to jail and the Wall Street firms were not prosecuted by the D.O.J. or the SEC. On May 2, 2006, one of the participants, Knight Equities, made a blanket settlement with the SEC, without admitting or denying guilt for any and all stock manipulations from 1999 to 2004.

In addition to not prosecuting the Wall Street firms, the SEC did not notify the victim companies or their shareholders that they had been victimized. Eagletech only found out by happenstance a year later, and was able to file a civil suit against the Wall Street firms before the statute of limitations lapsed.

The fact that the SEC rarely takes a securities industry insider to judgment or criminal conviction means the deterrent value of being investigated by the SEC is that of a toothless tiger. This, coupled with laughable civil fines, actually serves to encourage bad behavior.

With great flair and media attention, the SEC in April 2008 announced the prosecution of a trader, Paul Berliner, for spreading untrue rumors about Alliance Data Systems (ADS). According to the SEC, Berliner was involved with a network of over 30 short traders, to whom he text-messed an unfounded rumor on November 29, 2007. This mass text message apparently triggered an onslaught of shorting of ADS. The volume on November 29, 2007 was eleven times the average daily volume of about three million shares. The attack dropped the price of ADS from \$78 to \$63.65 in 30 minutes.

The SEC and Berliner settled for less than \$150,000, with no admission of guilt. The SEC offered this case as proof positive they were actively prosecuting stock manipulation.

What wasn't in their press release was that  $\pm 30$  million shares were shorted, resulting in a (short-lived) paper profit in excess of \$200 million. The stock partially recovered that day, only to be crushed two months later.



## Appendix O

**Gradient Analytic** /Camelback Research is a so-called independent analyst, who provides financial research on companies for client investors. They evaluate companies and make recommendations regarding the stock. Frequently, Gradient would be quoted in the short friendly media and was actively critical of certain companies who were under attack by the shorts, including Overstock and Krispy Kreme. Gradient's so-called "independent analysis" was so factually distorted and openly adversarial that victim companies wondered if Gradient was a mouthpiece for the shorts.

That question was answered when two former employees of Gradient came forward with the truth. In sworn testimony before Congress, they explained how Gradient, for a fee, would write a negative report on a company under attack by the shorts. According to their testimony, David Rocker, manager of several large short hedge funds, would ghost-write or edit allegedly independent reports that maliciously attacked companies he was short in. He would dictate the timing of the release of the report to coordinate with other prongs of the attack, and was instrumental in getting the Gradient report excerpts published in media outlets whose reporters formerly worked for Rocker and Jim Cramer at TheStreet.com.

The San Francisco office of the SEC, which apparently relied on Rocker/Gradient information in their investigations of victim companies, was embarrassed enough in early 2006 to issue subpoenas for Gradient's records that involved David Rocker, Jim Cramer, the media and the shorts. The resulting furor was quickly extinguished when Christopher Cox, Chairman of the SEC, withdrew all subpoenas, pending an internal review of the SEC's policy regarding the First Amendment right to free speech. Jim Cramer ripped up his subpoena with theatrical disdain on his afternoon television show. Several months later, Christopher Cox gave Gradient a complete bye, reasoning that Gradient was protected by the First Amendment. This decision by Cox left most securities lawyers scratching their heads: Criminal activity is not protected by the First Amendment and there was sworn Congressional testimony about potential criminal activity.



## Appendix P

# Confessions of a Paid Stock Basher

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Today I want to come clean about something I feel very badly about. I cannot undo some of the things I have done, but hopefully this message will prevent other such occurrences in the future.

### **I am a paid basher.**

Yes, it is true. Today is my last day at this company; I'm moving on to a new job. I've realized that there are more dignifying jobs out there that can pay me equally as well. But before I go, I want to explain a few things because this just isn't right and I won't feel good about myself until I expose this sham. It's hurt too many people and I don't want it on my conscience anymore. I can no longer live with a lie.

I work for a company called Global Calumny Funds in Stamford, CT. Basically, it's a Boiler Room much like the one in the movie of the same name. The idea behind my group is to bash the price of a company's stock down low enough to where the group of investors who retained our company's services can buy the stock really cheap and perhaps even take it over all together.

There are approximately 70 people at the company divided into several groups. My group, consisting of 5 people, is responsible for IDWD. While I probably shouldn't give any names of anyone working here now, what the heck, I'm leaving here, so what can they do? sue me? Ha! I can tell you that laptoptrader and janice shell were part of my group until he left last week, as was ninaturtle. Others who have been part of this include early bashers like hard data and Investorman. You may be interested to know that some hypsters, such as MONEYMADE and even Datatech!!, have also been part of the scam (more on that later).

There are several companies engaged in the bashing business, ours is not the only one. However, I can tell you that not every basher in here is a paid basher. Having done this for a year, I can usually tell who is a paid basher and who is merely someone having a little fun. While unpaid bashers have a different motive than someone like me, they can be unwilling accomplices to helping me achieve my ultimate goal and they also spread rumor and confusion throughout a room, which also helps me.

What is that goal? Well, I am merely a cog in a much larger machine, so my bosses never



really explained the big picture to me, but I'd say essentially, Shaddowwatch2003 was right. There are several companies who are quite familiar with Jim Bishop and Janice Shell and who are deathly afraid of them.

There are three types of bashers here at Global Calumny Funds: Advanced, Intermediate and Beginner. An Advanced-level basher (also known as a Silver Tongued Devil) would spread false or misleading information about the company.

They would deal in facts, countering every longs post with articles, news reports and opinion surveys that gave a negative impression about the company.

An Intermediate-level basher (also known as a Serpent) would try to weasel their way into the confidence of longs and create doubt using rumor or innuendo.

Finally, a Beginner-level basher (also known as a Pitchfork) would attempt to create confusion in the room by distracting other posters with satire, name calling and pointless arguments. The idea was to make sure no serious discussion of the stock could take place. A Pitchfork was usually a basher, but not always. Sometimes, we would throw in a hypster Pitchfork such as MONEymADE and laptop and a pumper like Datatech to create the illusion of an argument going on. What was really funny (in a perverse way, I guess) was that Datatech and I sat next to each other, laughing the whole time.

I was a Serpent basher, because I am known for effective bashing based on solid facts and truth. I was paid a base wage of \$18 an hour for my services. I was given a \$1.25 bonus for every decent quality post over 100 per day as well as a monthly bonus of \$100 for every penny the stock had dropped from the previous month. I was also paid a bonus for bashing on weekends. While this may not sound like much, I made a decent, though dishonorable, paycheck plus a nice Laptop with free wireless internet connection.

Each of us sat in a small half-cubicle in a cluster with our teammates. Each group (usually five people) was made of three beginners (two who would bash and one who would hype), one intermediate and one advanced level basher. Occasionally for some of the hotter stocks, one of the beginners would be replaced by an intermediate depending on how much the stock was rising. IDWD was a low-level stock, meaning it got the 3-1-1 configuration.

Honestly though, somehow, I get the feeling that WV Hillbilly may have worked for a basher company or knows someone who does because the fund websites he occasionally posts is eerily similar to our employer's websites. While not exact, I'd say it is about 90 percent the same. We do have certain rules that we follow.

First, we have to develop a character and stay within that character in order to build a "following." My character, "FogOfWar," was a humorous, sarcastic, obnoxious supporter of free speech and loved to portray himself as a truth-telling superhero, but only when it came to bashers.

Next, we had to follow certain guidelines on what we could say. We were urged to have an "answer" to every long's question, but we were to frame that answer in a way that ridiculed the questioner for asking such a question. However, we were never to use profanity or vulgarity because that would cause people to ignore us. We were to make fun of people, but in a civil way. The idea was to get "play," i.e. reaction from other posters. The more



play we got, the more the room would be disrupted. Ignored posters get no play. One exception would be the hypsters since they were "defending" the stock against our onslaught, they got a little more leeway. People would side with the hypster because they thought he was real since he appeared to be on their side, but was really on ours, setting us up to disrupt the room. MoneyMade was quite good at this and gets paid very well.

I've worked on IDWD, VLO, AGII, QBID, BKMP for a few months now. In addition to the FogOfWar alias, I've used a few others on several other boards as well. I've used so many aliases that I can not remember the monikers or the passwords. I honestly lost track of everything. I stuck with FogOfWar because it was the one that got the most play from other posters.

In closing, I feel absolutely terrible about this. It's just awful how I've been part of a scam designed to cheat honest, hard-working people out of their investments all for the benefit of a few wealthy people who already have enough money to last a lifetime.

These greedy people MUST be stopped. That's why I'm posting this before I leave. I want to make up for some of the damage I've done. I can't live with this lie anymore. You can't imagine how hard it is to look at myself in the mirror each morning knowing my job is to cheat and lie.

I have to go now, I'm too broken up to continue. I hope this confession can make up for my sordid deeds; I would urge everyone who reads this to inform as many people as you can. Only by shining the light of truth can we drive these rats back into the darkness from whence they came. Believe me, they don't want publicity.

Good luck and I hope all of you the best in your investment endeavors.

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## Illegal Naked Short Selling Appears to Lie at the Heart of an Extensive Stock Manipulation Scheme

Posted by Larry Smith on Jun 16, 2015 • (14)

### Investment Consequences of Naked Shorting

Only a motivated enforcement agency with subpoena power and an accompanying powerful enforcement infrastructure can prove that naked shorting is at the heart of an extensive stock manipulation scheme. However, I believe that the observational evidence is overwhelming that naked shorting practices are widely used to manipulate the stock prices of emerging biotechnology companies as well as many other small and large companies. Unfortunately, naked shorting is an investment variable that investors must understand if they are going to make investments in the emerging biotechnology space in particular and the equity markets in general.

Investors may decide that they just won't invest in companies that are most subject to naked shorting, but this would eliminate many small emerging growth stocks with exciting potential. For those like me who are attracted by potentially breakthrough technologies, you will inevitably get caught up in a manipulation that leads to a suddenly plunging stock price of a company in which you are invested. Invariably the scheme starts with and is perpetuated by a flurry of blogs, tweets and message board comments which proclaim that the technology is worthless; management is a band of liars and thieves; and people with a positive view on the Company are being paid by the Company. Then come the lawsuits against the Company and management by the usual group of class action law firms. Each year this scenario is played out hundreds of times.

This carefully scripted and long used manipulation scheme by short selling hedge funds is all meant to shake and then break investors' confidence. The result is usually a painful, steady, day by day erosion of the stock price due to naked shorting practices. Stocks can be cut in half by naked shorting on the basis of little or no change in fundamentals. If you are going to invest in this area, you must decide when this occurs whether you believe strongly in the Company and can ride out the storm or want to cut and run. However, sometimes it happens so rapidly that the latter is not an option. On the positive side, these manipulations can often lead to some excellent investment opportunities if the fundamentals remain intact, investor confidence returns and the shorts are forced to cover.

### The Rationale for Investing in Small Emerging Biotechnology Companies; Is It Worth It?

I worked for many years on Wall Street as an analyst covering large pharmaceutical and biotechnology companies and rarely dealt with small companies which I arbitrarily define as having market capitalizations under \$1 billion. From my experience with these large companies, I came to believe that they were excellent at drug development and commercialization and sometimes innovation, but depended extensively on small entrepreneurial companies for their pipelines. Many, indeed most, of the paradigm changing technologies are initially pursued by small companies. The big companies generally wait for proof of concept and then swoop in to either license the technology and/or the drugs stemming from it or to purchase the companies outright. This can lead to some incredible homeruns for investors in small companies so much so that one success can offset several failures.

The behavior of the big companies is understandable as the number of intriguing and promising new technology approaches in drug development seems endless. I personally have done some tracking of over 300 biotechnology companies and this is not an exhaustive list. Moreover, exciting new technologies are evolving like lava flowing over the rim of a volcano. Even big companies lack the infrastructure and financial resources needed to aggressively pursue more than a small fraction of drug development opportunities. Once committed, the development costs for a new drug can run into the hundreds of millions and even over \$1 billion of costs. And of course, the failure rate in new drugs is astronomically high. I have seen estimates that for drugs that begin human phase 1 trials, perhaps only 1 in 10 will reach phase 3 and in phase 3 a significant percentage will fail. And even of those that succeed only a few become blockbusters.

With this high rate of failure, drug development is not for sissies. Research people at large companies get rewarded for successes and fired for failures. Hence there is a tendency to focus on evolutionary (me too) drug development in which there is less risk and leave the paradigm shifting efforts to entrepreneurs willing to accept the very high risk of failure for the extraordinary rewards in those few cases in which success is reached. What are those odds for success? I have no data to back this up, but the chance for moderate success is less than 1 in 10 and for home runs is in excess of 1 in 25 or 1 in 50. Take these numbers as being representative of the risk as opposed to a well-researched estimate.

Wall Street analysts have risk profiles that aren't that different from research people at big pharma. They gain fame for being correct on a stock and can lose their jobs if they take a risk on an unproven drug or technology and get "blown up". As a result, many early stage companies are ignored by analysts or primarily covered by analysts working for investment banks who specialize in bringing such companies public; naturally analysts employed by investment banks are always positive on the stocks their firms underwrite.



As I looked at this situation, about five years ago, I sensed an opportunity to try to bring quality research to some of the companies in this vast universe of poorly followed companies. Obviously, it is not possible to cover all possible companies so I focused on just a few in which I tried to do exhaustive research that could give me an edge. My strategy was primarily although not entirely to focus on stocks that could be homeruns. (Please refer to my earlier comments on the risks involved). Recognizing the high potential for failure, I tried to find as many opportunities as possible and never put all my eggs in one basket. In my own portfolio, I invest in a large number of early stage biotechnology stocks as I fully recognize that I am going to be wrong in a significant percentage of the stocks I deal with. I call my strategy asymmetric investing and this is explained in more depth on my website at this link.

### Finding Out About Naked Shorting

I started developing my website and its content about four years ago. As I gained more experience, I was startled to find that there was another very important force at work on these companies that was apart from the fundamentals that I was focused on. One would expect a high level of volatility in the stocks in which I specialize. However, this could not always explain the demoralizing collapse of a meaningful number of stocks that I am involved with following some news event. Suddenly and without a major change in the fundamental outlook, I would see stock prices cut in half in a short period of time. During this time there was invariably a steady day by day price erosion (naked shorting at work) accompanied by an unending stream of contrived negative news flow that was demoralizing to me and other investors.

In order to give more insight into what a naked shorting attack might look like, I have put the predictable elements of a typical attack based on my experience in living through a number of them on separate companies.

- Shorts like to target emerging biotechnology stocks that are engaged in high risk drug development and are not widely covered by quality research analysts.
- The initial and subsequent attacks are almost always triggered by some news event. Obviously, the shorts seek out negative news or an event that creates uncertainty. However, sometimes an attack can be based on a positive news event which the shorts spin to make it appear negative.
- Using the ready platform afforded by the internet and social media, a blogger associated with the shorts goes to work with a negative interpretation of an event. These are usually not sophisticated analyses and are usually limited to one or two pages of text which is invariably one-sided and unbalanced. These are meant to provide "intellectual" reasons and cover for the short attack.
- The most prominent of these bloggers usually have no backgrounds in biotechnology analysis or expertise in the science. I believe that in many cases, hedge fund employees actually write the articles which are cut and pasted into the comments of these bloggers.
- The heart of the naked shorting scheme involves a group of hedge fund traders conspiring to steadily knock out offers for the stock and to trigger stop loss orders (This is explained later in this report). This is called walking the stock down. The power of these conspiracies is striking and in many cases allows the shorts can largely determine the price that they want the stock to trade at.
- The stock weakness gives legitimacy to the contrived negative blogs. The idea is to create fear and uncertainty among investors by making all news events appear to be negatives and to fabricate new issues that the shorts hope will demoralize investors.
- The first time I came up against this, my thought was that the blogger was someone who was just more cynical about the chances for success and had an opposite point of view from mine. This is understandable and common in research analysis. I wrote a respectful rebuttal to their argument.
- I thought that after their rebuttal to my rebuttal, this would end the discussion. We had expressed our opposite points of view, would respectively disagree and move on. This had mainly been my experience in my Wall Street days as an analyst when I disagreed with another analyst. I was wrong.
- The situation quickly escalated. In the rebuttal, the blogger accused me of being stupid, deceitful and being paid by the Company to write positive comments.
- In this case, over 20 articles were then written in a period of a year. Usually, they were timed to a press release and regardless of the news and without exception each was interpreted as a major negative. A major strategy was to argue that management was lying to investors and manipulating the stock.
- The stock would go down on good news, bad news and uncertain news. One of the pillars of stock manipulation is to make good news appear to be bad.
- The blogger was indifferent to truth and actually would make up information that was factually incorrect. When made aware that the information was wrong, he/she would ignore it and even repeat it in later blogs.
- There are a number of bloggers who participate in these attacks. Many of these bloggers appear to work together and coordinate their negative attacks. It is striking that many of these people have connections to one another. Many of them were trained at a well-known blogging site that was founded by hedge fund people.
- Sophisticated use is made of the Internet and social media. Twitter is used to signal that an attack has begun.
- Shorts are well connected to mainstream media and are adept at getting them to unwittingly participate in the scheme.
- Vicious attacks are launched on writers who might have an opposite but hopefully more well-reasoned and balanced view. The usual line is that they are being paid by management to write positive articles.
- Seeking Alpha has become very friendly to articles supporting short selling and is used extensively by the hedge funds. The site actually promotes as one of its favorite authors a person who writes only negative attack article on companies in which he claims that managements are lying and paying authors who have a positive view on the Company. In his disclosure, he states that he shorts stocks, then publishes a negative article on Seeking Alpha and states that he may cover immediately after the article is published. This seems to meet the definition of a pump and dump scheme. He also acknowledges that he is collaborating with other short sellers. I think they contribute the information for most of his articles
- Seeking Alpha allows articles to be published by anonymous authors. These articles are often extremely bearish and are almost certainly written by people at hedge funds.
- Hedge fund create pseudonyms and publish on a daily basis negative comments on message boards like Yahoo and Ihub.



- Law suits appear after articles and allege misconduct on the part of managements and urge investors to participate in a class action lawsuit.

Initially, I attributed these actions to people who were just more cynical than me and honestly came to their bearish views. I am also very cognizant that there is not an insignificant amount of stock manipulation that warrants shorting some stocks. There are some bad actors who pump stocks up and then dump them and this is every bit as egregious as naked shorting attacks. Interestingly, I believe that the hedge funds who short can be enthusiastic participants in these manipulation schemes as well. I also understand that managements can and usually are over enthusiastic in presenting the outlook for their companies. They have so much personal wealth and intellectual effort invested in a Company that objectivity can be difficult. I also have to admit that I have a bias toward optimism largely stemming from the belief that we are in a scientific renaissance in biotechnology that will lead to a meaningful number of breakthrough drugs and accompanying home run stocks. I recognize this personal bias and try to adjust for it, but I am only human.

The above paragraph shows that not all of the investment land mines can be attributed to naked shorting. However, it seems to me that many are. Initially I thought that what I now believe to be naked shorting stock manipulation was attributable to market forces. The catalyst for my changing my view was coming across a shocking You Tube commentary by Jim Cramer of CNBC fame. He explained in detail how as a hedge fund manager, he participated in schemes to manipulate stocks. If you haven't seen this it is a must watch.

This was a wakeup call for me and for the last few years, I have been doing a great deal of work on naked shorting. As I talked to companies, I heard the same stories over and over about techniques used to drive down their stock prices and I came to believe that there was manipulation going on and that it was extensive. The names of hedge funds leading the attack kept coming up in situation after situation. It has been my intent to write an article on naked shorting, but this is an enormous project and while I think I understand the effect that naked shorting can have on stocks, I lack the understanding of the trading techniques used to implement what is essentially an illegal stock manipulations scheme.

### Counterfeiting Stock; An Eye Opening Article

Recently, one of my subscribers sent me an article that covers the ground that I wanted to cover in an eloquent way and is much better than what I could have done, especially on the esoteric trading techniques used to cover up this illegal activity. It largely expresses what I would like to have written. He sent me a link to a website called Citizens for Securities Reform. On this website there was a link to an article called Counterfeiting Stock and a number of other articles on stock manipulation. This article was essentially the one I would like to have written. I have decided to reproduce the article on my website in its entirety. I certainly don't have the information needed to prove the hypotheses presented in the Counterfeiting Stocks article. Only an organization with subpoena power and huge investigative resource can really determine if this article is correct. The author of this article has the following disclaimer and I would make his disclaimer mine.

*Disclaimer — In compiling the information contained in this website, the author relied on sources — both public and private — and, for the most part, accepted the information from the source as reliable. As explained herein, considerable secrecy surrounds the activities being alleged in this report, which may result in conclusions that are speculative, inaccurate, or the opinion of the author. To the extent a source was inaccurate or provided incomplete information, the author takes no responsibility for the same and does not intend that anyone rely on any such information in order to make decisions to believe or disbelieve a particular person, point of view or alleged fact or circumstance. Under no circumstances does the author intend to cause harm to any person or entity as a result of conclusions made or information provided. Each reader is cautioned to draw his own conclusions about the provided information, and before relying on same, to perform his own due diligence and research.*

*Sources — Information used was obtained from public records; the SEC; the Leslie Boni Report to the SEC on shorting; evidence and testimony in court proceedings; conversations with attorneys who are involved in securities litigation; former SEC employees; conversations with management of victim companies; and first hand experience as investors in companies that have suffered short attacks. This web site is sponsored by Citizens for Securities Reform.*

The sponsors of the Citizens for Securities Reform website have kept their identities anonymous or at least they have not chosen to identify themselves on their website. Hence I have not received explicit permission to reproduce their article. However, they urge all investors to pass the information on as I show in the next paragraph and I take this as permission to reproduce the article. They say:

*What to Do? — Many of our elected officials at the federal and state level do not understand most of what is contained in this paper. They must come to understand this fraud, and, more importantly, understand that their constituents are angry. Pass this information to everyone you know — put it in the public conscience. Then the citizenry needs to engage in a massive letter-writing campaign. Feel free to attach this report. Make sure your elected officials, at the federal level and state level know how you feel. Ultimately, votes in the home district will trump money from the outside.*

The next part of this report is the complete reproduction of the article Counterfeiting Stock which appears on the Citizens for Securities Reform website. Some of the details on trading schemes used by hedge funds to execute and cover up naked shorting are a little difficult to wade through. However, the effort is well worth it; even if you don't understand all of the technical points, you can get the gist.

### Counterfeiting Stock



Illegal naked shorting and stock manipulation are two of Wall Street's deep, dark secrets. These practices have been around for decades and have resulted in trillions of dollars being fleeced from the American public by Wall Street. In the process, many emerging companies have been put out of business. This report will explain the magnitude of this problem, how it happens, why it has been covered up and how short sellers attack a company. It will also show how all of the participants; the short hedge funds, the prime brokers and the Depository Trust Clearing Corp. (DTCC) — make unconscionable profits while the fleecing of the small American investor continues unabated.

### Why is This Important?

This problem affects the investing public. Whether invested directly in the stock market or in mutual funds, IRAs, retirement or pension plans that hold stock — it touches the majority of Americans. The participants in this fraud, which, when fully exposed, will make Enron look like child's play, have been very successful in maintaining a veil of secrecy and impenetrability. Congress and the SEC have unknowingly (?) helped keep the closet door closed. The public rarely knows when its pocket is being picked as unexplained drops in stock price get chalked up to "market forces" when they are often market manipulations.

The stocks most frequently targeted are those of emerging companies who went to the stock market to raise start-up capital. Small business brings the vast majority of innovative new ideas and products to market and creates the majority of new jobs in the United States. Over 1000 of these emerging companies have been put into bankruptcy or had their stock driven to pennies by predatory short sellers.

It is important to understand that selling a stock short is not an investment in American enterprise. A short seller makes money when the stock price goes down and that money comes solely from investors who have purchased the company's stock. A successful short manipulation takes money from investment in American enterprise and diverts it to feed Wall Street's insatiable greed — the company that was attacked is worse off and the investing public has lost money. Frequently this profit is diverted to off-shore tax havens and no taxes are paid. This national disgrace is a parasite on the greatest capital market in the world.

### A Glossary of Illogical Terms

The securities industry has its own jargon, laws and practices that may require explaining. Most of these concepts are the creation of the industry, and, while they are promoted as practices that ensure an orderly market, they are also exploited as manipulative tools. This glossary is limited to naked short abuse, or counterfeiting stock as it is more correctly referred to.

1. **Broker Dealer or Prime Broker** — The big stockbrokers who clear their own transactions, which is to say they move transacted shares between their customers directly, or with the DTC. Small brokers will clear through a clearing house — also known as a broker's broker.
2. **Hedge Funds** — Hedge funds are really unregulated investment pools for rich investors. They have grown exponentially in the past decade and now number over 10,000 and manage over one trillion dollars. They don't register with the SEC, are virtually unregulated and frequently foreign domiciled, yet they are allowed to be market makers with access to all of the naked shorting loopholes. Frequently they operate secretly and collusively. The prime brokers cater to the hedge funds and allegedly receive eight to ten billion dollars annually in fees and charges relating to stock lent to the short hedge funds.
3. **Market Maker** — A broker, broker dealer or hedge fund who makes a market in a stock. In order to be a market maker, they must always have shares available to buy and sell. Market makers get certain sweeping exemptions from SEC rules involving naked shorting.
4. **Short Seller** — An individual, hedge fund, broker or institution who sells stock short. The group of short sellers is referred to as "the shorts."
5. **The Securities and Exchange Commission** — The SEC is the federal enforcement agency that oversees the securities markets. The top-level management is a five-person Board of Governors who are Presidential appointees. Three of the governors are usually from the securities industry, including the chairman. The SEC adopted Regulation SHO in January 2005 in an attempt to curb naked short abuse.
6. **Depository Trust Clearing Corp** — Usually known as the DTCC, this privately held company is owned by the prime brokers and it clears, transacts and holds most stock in this country. It has four subsidiaries, which include the DTC and the NCSS. The operation of this company is described in detail later.
7. **Short Sale** — Selling a stock short is a way to make a profit while the stock price declines. For example: If investor S wishes to sell short, he borrows a share from the account of investor L. Investor S immediately sells that share on the open market, so investor S now has the cash from the sale in his account, and investor L has an IOU for the share from investor S. When the stock price drops, investor S takes some of the money from his account and buys a share, called "covering", which he returns to investor L's account. Investor S books a profit and investor L has his share back. This relatively simple process is perfectly legal — so far. The investor lending the share most likely doesn't even know the share left his account, since it is all electronic and occurs at the prime broker or DTC level. If shares are in a margin account, they may be loaned to a short without the consent or knowledge of the account owner. If the shares are in a cash account, IRA account or are restricted shares they are not supposed to be borrowed unless there is express consent by the account owner.
8. **Disclosed Short** — When the share has been borrowed or a suitable share has been located that can be borrowed, it is a disclosed short. Shorts are either naked or disclosed, but, in reality, some disclosed shorts are really naked shorts as a result of fraudulent stock borrowing.
9. **Naked Short** — This is an invention of the securities industry that is a license to create counterfeit shares. In the context of this document, a share created that has the effect of increasing the number of shares that are in the market place beyond the number issued by the company, is considered counterfeit. This is not a legal conclusion, since some shares we consider counterfeit are legal based upon today's rules. The alleged justification for naked shorting is to insure an orderly and smooth market, but all too often it is used to create a virtually unlimited supply of counterfeit shares, which leads to widespread stock manipulation — the lynchpin of this massive fraud.



Returning to our example, everything is the same except the part about borrowing the share from someone else's account: There is no borrowed share — instead a new one is created by either the broker dealer or the DTC. Without a borrowed share behind the short sale, a naked short is really a counterfeit share.

10. **Fails-to-Deliver** — The process of creating shares via naked shorting creates an obvious imbalance in the market as the sell side is artificially increased with naked short shares or more accurately, counterfeit shares. Time limits are imposed that dictate how long the sold share can be naked. For a stock market investor or trader, that time limit is three days. According to SEC rules, if the broker dealer has not located a share to borrow, they are supposed to take cash in the short account and purchase a share in the open market. This is called a "buy-in," and it is supposed to maintain the total number of shares in the market place equal to the number of shares the company has issued.

Market makers have special exemptions from the rules: they are allowed to carry a naked short for up to twenty-one trading days before they have to borrow a share. When the share is not borrowed in the allotted time and a buy-in does not occur, and they rarely do, the naked short becomes a fail-to-deliver (of the borrowed share).

11. **Options** — The stock market also has separate, but related markets that sell options to purchase shares (a "call") and options to sell shares (a "put"). This report is only going to deal with calls; they are an integral part of short manipulations. A call works as follows: Assume investor L has a share in his account that is worth \$25. He may sell an option to purchase that share to a third party. That option will be at a specific price, say \$30, and expires at a specific future date. Investor L will get some cash from selling this option. If at the expiration date, the market value of the stock is below \$30 (the "strike price"), the option expires as worthless and investor L keeps the option payment. This is called "out of the money." If the market value of the stock is above the strike price, then the buyer of the option "calls" the stock. Assume the stock has risen to \$40. The option buyer tenders \$30 to investor L and demands delivery of the share, which he may keep or immediately sell for a \$10 profit.
12. **Naked call** — The same as above except that investor L, who sells the call, has no shares in his account. In other words, he is selling an option on something he does not own. The SEC allows this. SEC rules also allow the seller of a naked short to treat the purchase of a naked call as a borrowed share, thereby keeping their naked short off the SEC's fails-to-deliver list.

**How The System Transacts Stocks** — This explanation has been greatly simplified in the interest of brevity.

1. **Customers** — These can be individuals, institutions, hedge funds and prime broker's house accounts.
2. **Prime Brokers** — They both transact and clear stocks for their customers. Examples of prime brokers include Goldman Sachs; Merrill Lynch; Citigroup; Morgan Stanley; Bear Stearns, etc.
3. **The DTCC** — This is the holding company that owns four companies that clear and keep track of all stock transactions. This is where brokerage accounts are actually lodged. The DTC division clears over a billion shares daily. The DTCC is owned by the prime brokers, and, as a closely held private enterprise, it is impenetrable. It actively and aggressively fights all efforts to obtain information regarding naked shorting, with or without a subpoena.

Stocks clear as follows:

If customer A-1 purchases ten shares of XYZ Corp and Customer A-2 sells ten shares, then the shares are transferred electronically, all within prime broker A. Record of the transaction is sent to the DTC. Likewise, if Investor A-1 shorts ten shares of XYZ Corp and Investor A-2 has ten shares in a margin account, prime broker A borrows the shares from account A-2 and for a fee lends them to A-1.

If Customer A-1 sells shares to Customer B-2, in order to get the shares to B-2 and the money to A-1, the transaction gets completed in the DTC. The same occurs for shares that are borrowed on a short sale between prime brokers.

As a practical matter, what happens is prime broker A, at the end of the day, totals all of his shares of XYZ owned and all of the XYZ shares bought and sold, and clears the difference through the DTC. In theory, at the end of each day when all of the prime brokers have put their net positions in XYZ stock through the system, they should all cancel out and the number of shares in the DTC should equal the number of shares that XYZ has sold into the market. This almost never happens, because of the DTC stock borrow program which is discussed later.

**Who are the Participants in the Fraud?** The participants subscribe to the theory that it is much easier to make money tearing companies down than making money building them up, and they fall into two general categories: 1) They participate in the process of producing the counterfeit shares that are the currency of the fraud and/or 2) they actively short and tear companies down.

The counterfeiting of shares is done by participating prime brokers or the DTC, which is owned by the prime brokers. A number of lawsuits that involve naked shorting have named about ten of the prime brokers as defendants, including Goldman Sachs, Bear Stearns, Citigroup, Merrill Lynch; UBS; Morgan Stanley and others. The DTCC has also been named in a number of lawsuits that allege stock counterfeiting.

The identity of the shorts is somewhat elusive as the shorts obscure their true identity by hiding behind the prime brokers and/or hiding behind layers of offshore domiciled shell corporations. Frequently the money is laundered through banks in a number of tax haven countries before it finally reaches its ultimate beneficiary in New York, New Jersey, San Francisco, etc. Some of the hedge fund managers who are notorious shorters, such as David Rocker and Marc Cohodes, are very public about their shorting, although they frequently utilize offshore holding companies to avoid taxes and scrutiny.

Most of the prime brokers have multiple offshore subsidiaries or captive companies that actively participate in shorting. The prime brokers also front the shorting of some pretty notorious investors. According to court documents or sworn testimony, if one follows one of the short money trails at Solomon, Smith Barney, it leads to an account owned by the Gambino crime family in New York. A similar



exercise with other prime brokers, who cannot be named at this time, leads to the Russian mafia, the Cali drug cartel, other New York crime families and the Hell's Angels.

One short hedge fund that was particularly destructive was a shell company domiciled in Bermuda. Subpoenas revealed the Bermuda company was wholly owned by another shell company that was domiciled in another tax haven country. This process was five layers deep, and at the end of the subterfuge was a very well known American insurance company that cannot be disclosed because of court-ordered sealing of testimony.

Most of the large securities firms, insurance companies and multi-national companies have layers of offshore captives that avoid taxes, engage in activities that the company would not want to be publicly associated with, like stock manipulation; avoid U.S. regulatory and legal scrutiny; and become the closet for deals gone sour, like Enron.

**The Creation of Counterfeit Shares** — There are a variety of names that the securities industry has dreamed up that are euphemisms for counterfeit shares. Don't be fooled : Unless the short seller has actually borrowed a real share from the account of a long investor, the short sale is counterfeit. It doesn't matter what you call it and it may become non-counterfeit if a share is later borrowed, but until then, there are more shares in the system than the company has sold.

The magnitude of the counterfeiting is hundreds of millions of shares every day, and it may be in the billions. The real answer is locked within the prime brokers and the DTC. Incidentally, counterfeiting of securities is as illegal as counterfeiting currency, but because it is all done electronically, has other identifiers and industry rules and practices, i.e. naked shorts, fails-to-deliver, SHO exempt, etc. the industry and the regulators pretend it isn't counterfeiting. Also, because of the regulations that govern the securities, certain counterfeiting falls within the letter of the rules. The rules, by design, are fraught with loopholes and decidedly short on allowing companies and investors access to information about manipulations of their stock.

The creation of counterfeit shares falls into three general categories. Each category has a plethora of devices that are used to create counterfeit shares.

1. **Fails-to-Deliver** — If a short seller cannot borrow a share and deliver that share to the person who purchased the (short) share within the three days allowed for settlement of the trade, it becomes a fail-to-deliver and hence a counterfeit share; however the share is transacted by the exchanges and the DTC as if it were real. Regulation SHO, implemented in January 2005 by the SEC, was supposed to end wholesale fails-to-deliver, but all it really did was cause the industry to exploit other loopholes, of which there are plenty (see 2 and 3 below).

Since forced buy-ins rarely occur, the other consequences of having a fail-to-deliver are inconsequential, so it is frequently ignored. Enough fails-to-deliver in a given stock will get that stock on the SHO list, (the SEC's list of stocks that have excessive fails-to-deliver) — which should (but rarely does) see increased enforcement. Penalties amount to a slap on the wrist, so large fails-to-deliver positions for victim companies have remained for months and years.

A major loophole that was intentionally left in Reg SHO was the grandfathering in of all pre-SHO naked shorting. This rule is akin to telling bank robbers, "If you make it to the front door of the bank before the cops arrive, the theft is okay."

Only the DTC knows for certain how many short shares are perpetual fails-to-deliver, but it is most likely in the billions. In 1998, REFCO, a large short hedge fund, filed bankruptcy and was unable to meet margin calls on their naked short shares. Under this scenario, the broker dealers are the next line of financial responsibility. The number of shares that allegedly should have been bought in was 400,000,000, but that probably never happened. The DTC — owned by the broker dealers — just buried 400,000,000 counterfeit shares in their system, where they allegedly remain — grandfathered into "legitimacy" by the SEC. Because they are grandfathered into "legitimacy", the SEC, DTC and prime brokers pretend they are no longer fails-to-deliver, even though the victim companies have permanently suffered a 400 million share dilution in their stock.

Three months prior to SHO, the aggregate fails-to-deliver on the NASDAQ and the NYSE averaged about 150 million shares a day. Three months after SHO it dropped by about 20 million, as counterfeit shares found new hiding places (see 2 and 3 below). It is noteworthy that aggregate fails-to-deliver are the only indices of counterfeit shares that the DTC and the prime brokers report to the SEC. The bulk of the counterfeiting remains undisclosed, so don't be deceived when the SEC and the industry minimize the fails-to-deliver information. It is akin to the lookout on the *Titanic* reporting an ice cube ahead.

2. **Ex-clearing counterfeiting** — The second tier of counterfeiting occurs at the broker dealer level. This is called ex-clearing. Multiple tricks are utilized for the purpose of disguising naked shorts that are fails-to-deliver as disclosed shorts, which means that a share has been borrowed. They also make naked shorts "invisible" to the system so they don't become fails-to-deliver, which is the only thing the SEC tracks.

Some of the tricks are as follows:

- Stock sales are either a long sale or a short sale. When a stock is transacted the broker checks the appropriate box. By mismarking the trading ticket — checking the long box when it is actually a short sale the short never shows up, unless they get caught, which doesn't happen often. The position usually gets reconciled when the short covers.
- Settlement of stock transactions is supposed to occur within three days, at which time a naked short should become a fail-to-deliver, however the SEC routinely and automatically grants a number of extensions before the naked short gets reported as a fail-to-deliver. Most of the short hedge funds and broker dealers have multiple entities, many offshore, so they sell large naked short positions from entity to entity. Position rolls, as they are called, are frequently done broker to broker, or hedge fund to hedge fund, in block trades that never appear on an exchange. Each movement resets the time clock for the naked position becoming a fail-to-deliver and is a means of quickly getting a company off of the SHO threshold list.



- The prime brokers may do a buy-in of a naked short position. If they tell the short hedge fund that we are going to buy-in at 3:59 EST on Friday, the hedge fund naked shorts into their own buy-in (or has a co-conspirator do it) and rolls their position, hence circumventing Reg SHO.
- Most of the large broker dealers operate internationally, so when regulators come in (they almost always "call ahead") or compliance people come in (ditto), large naked positions are moved out of the country and returned at a later date.
- The stock lend is enormously profitable for the broker dealers who charge the short sellers large fees for the "borrowed" shares, whether they are real or counterfeit. When shares are loaned to a short, they are supposed to remain with the short until he covers his position by purchasing real shares. The broker dealers do one-day lends, which enables the short to identify to the SEC the account that shares were borrowed from. As soon as the report is sent in, the shares are returned to the broker dealer to be loaned to the next short. This allows eight to ten shorts to borrow the same shares, resetting the SHO-fail-to-deliver clock each time, which makes all of the counterfeit shares look like legitimate shares. The broker dealers charge each short for the stock lend.
- Margin account buyers, because of loopholes in the rules, inadvertently aid the shorts. If short A sells a naked short he has three days to deliver a borrowed share. If the counterfeit share is purchased in a margin account, it is *immediately* put into the stock lend and, for a fee, is available as a borrowed share to the short who counterfeited it in the first place. This process is perpetually fluid with multiple parties, but it serves to create more counterfeit shares and is an example of how a counterfeit share gets "laundered" into a legitimate borrowed share.
- Margin account agreements give the broker dealers the right to lend those shares without notifying the account owner. Shares held in cash accounts, IRA accounts and any restricted shares are not supposed to be loaned without express consent from the account owner. Broker dealers have been known to change cash accounts to margin accounts without telling the owner, take shares from IRA accounts, take shares from cash accounts and lend restricted shares. One of the prime brokers recently took a million shares from cash accounts of the company's founding investors without telling the owners or the stockbroker who represented ownership. The shares were put into the stock lend, which got the company off the SHO threshold list, and opened the door for more manipulative shorting.

This is a sample of tactics used. For a company that is under attack, the counterfeit shares that exist at this ex-clearing tier can be ten or twenty times the number of fails-to-deliver, which is the *only* category tracked and policed by the SEC.

3. Continuous Net Settlement — The third tier of counterfeiting occurs at the DTC level. The Depository Trust and Clearing Corporation (DTCC) is a holding company owned by the major broker dealers, and has four subsidiaries. The subsidiaries that are of interest are the Depository Trust Company (DTC) and the National Securities Clearing Corporation (NSCC). The DTC has an account for each broker dealer, which is further broken down to each customer of that broker dealer. These accounts are electronic entries. Ninety seven percent of the actual stock certificates are in the vault at the DTC with the DTC nominee's name on them. The NSCC processes transactions, provides the broker dealers with a central clearing source, and operates the stock borrow program.

When a broker dealer processes the sale of a short share, the broker dealer has three days to deliver a borrowed share to the purchaser and the purchaser has three days to deliver the money. In the old days, if the buyer did not receive his shares by settlement day, three days after the trade, he took his money back and undid the transaction. When the stock borrow program and electronic transfers were put in place in 1981, this all changed. At that point the NSCC guaranteed the performance of the buyers and sellers and would settle the transaction even though the seller was now a fail-to-deliver on the shares he sold. The buyer has a counterfeit share in his account, but the NSCC transacts it as if it were real.

At the end of each day, if a broker dealer has sold more shares of a given stock than he has in his account with the DTC, he borrows shares from the NSCC, who borrows them from the broker dealers who have a surplus of shares. So far it sounds like the whole system is in balance, and for any given stock the net number of shares in the DTC is equal to the number of shares issued by the company.

The short seller who has sold naked — he had no borrowed shares — can cure his fail-to-deliver position and avoid the required forced buy-in by borrowing the share through the NSCC stock borrow program.

*Here is the hocus pocus that creates millions of counterfeit shares.*

When a broker dealer has a net surplus of shares of any given company in his account with the DTC, only the *net amount* is deducted from his surplus position and put in the stock borrow program. However the broker dealer does *not* take a like number of shares from his customer's individual accounts. The net surplus position is loaned to a second broker dealer to cover his *net* deficit position.

Let's say a customer at the second broker dealer purchased shares from a naked short seller — counterfeit shares. His broker dealer "delivers" those shares to his account from the shares borrowed from the DTC. The lending broker dealer did not take the shares from any specific customers' account, but the borrowing broker dealer put the borrowed shares in specific customer's accounts. Now the customer at the second prime broker has "real" shares in his account. The problem is it's the same "real" shares that are in the customer's account at the first prime broker.

The customer account at the second prime broker now has a "real" share, which the prime broker can lend to a short who makes a short sale and delivers that share to a third party. *Now there are three investors with the same counterfeit shares in their accounts.*

Because the DTC stock borrow program, and the debits and credits that go back and forth between the broker dealers, only deals with the net difference, it never gets reconciled to the actual number of shares issued by the company. As long as the broker dealers don't repay the total stock borrowed and only settle their net differences, they can "grow" a company's issued stock.

This process is called Continuous Net Settlement (CNS) and it hides billions of counterfeit shares that never make it to the Reg. SHO radar screen, as the shares "borrowed" from the DTC are treated as a legitimate borrowed shares.



For companies that are under attack, the counterfeit shares that are created by the CNS program are thought to be ten or twenty times the disclosed fails-to-deliver, and the true CNS totals are only obtained by successfully serving the DTC with a subpoena. The SEC doesn't even get this information. The actual process is more complex and arcane than this, but the end result is accurately depicted.

Ex-clearing and CNS counterfeiting are used to create an enormous reserve of counterfeit shares. The industry refers to these as "strategic fails-to-deliver." Most people would refer to these as a stockpile of counterfeit shares that can be used for market manipulation. One emerging company for which we have been able to get or make reasonable estimates of the total short interest, the disclosed short interest, the available stock lend and the fails-to-deliver, has fifty "buried" counterfeit shares for every fail-to-deliver share, which is the only thing that the SEC tracks, consequently the SEC has not acted on shareholder complaints that the stock is being manipulated.

**The Anatomy of a Short Attack** — Abusive shorting are not random acts of a renegade hedge funds, but rather a coordinated business plan that is carried out by a collusive consortium of hedge funds and prime brokers, with help from their friends at the DTC and major clearinghouses. Potential target companies are identified, analyzed and prioritized. The attack is planned to its most minute detail.

The plan consists of taking a large short position, then crushing the stock price, and, if possible, putting the company into bankruptcy. Bankrupting the company is a short homerun because they never have to buy real shares to cover and they don't pay taxes on the ill-gotten gain.

When it is time to drive the stock price down, a blitzkrieg is unleashed against the company by a cabal of short hedge funds and prime brokers. The playbook is very similar from attack to attack, and the participating prime brokers and lead shorts are fairly consistent as well.

Typical tactics include the following:

1. Flooding the offer side of the board — Ultimately the price of a stock is found at the balance point where supply (offer) and demand (bid) for the shares find equilibrium. This equation happens every day for every stock traded. On days when more people want to buy than want to sell, the price goes up, and, conversely, when shares offered for sale exceed the demand, the price goes down.

The shorts manipulate the laws of supply and demand by flooding the offer side with counterfeit shares. They will do what has been called a short down ladder. It works as follows: Short A will sell a counterfeit share at \$10. Short B will purchase that counterfeit share covering a previously open position. Short B will then offer a short (counterfeit) share at \$9. Short A will hit that offer, or short B will come down and hit Short A's \$9 bid. Short A buys the share for \$9, covering his open \$10 short and booking a \$1 profit.

By repeating this process the shorts can put the stock price in a downward spiral. If there happens to be significant long buying, then the shorts draw from their reserve of "strategic fails-to-deliver" and flood the market with an avalanche of counterfeit shares that overwhelm the buy side demand. Attack days routinely see eighty percent or more of the shares offered for sale as counterfeit. Company news days are frequently attack days since the news will "mask" the extraordinary high volume. It doesn't matter whether it is good news or bad news.

Flooding the market with shares requires foot soldiers to swamp the market with counterfeit shares. An off-shore hedge fund devised a remarkably effective incentive program to motivate the traders at certain broker dealers. Each trader was given a debit card to a bank account that only he could access. The trader's performance was tallied, and, based upon the number of shares moved and the other "success" parameters, the hedge fund would wire money into the bank account daily. At the end of each day, the traders went to an ATM and drew out their bribe. Instant gratification.

Global Links Corporation is an example of how wholesale counterfeiting of shares will decimate a company's stock price. Global Links is a company that provides computer services to the real estate industry. By early 2005, their stock price had dropped to a fraction of a cent. At that point, an investor, Robert Simpson, purchased 100%+ of Global Links' 1,158,064 issued and outstanding shares. He immediately took delivery of his shares and filed the appropriate forms with the SEC, disclosing he owned all of the company's stock. His total investment was \$5205. The share price was \$.00434. The day after he acquired all of the company's shares, the volume on the over-the-counter market was 37 million shares. The following day saw 22 million shares change hands — all without Simpson trading a single share. It is possible that the SEC has been conducting a secret investigation, but that would be difficult without the company's involvement. It is more likely the SEC has not done anything about this fraud.

Massive counterfeiting can drive the stock price down in a matter of hours on extremely high volume. This is called "crashing" the stock and a successful "crash" is a one-day drop of twenty-percent or a thirty-five percent drop in a week. In order to make the crash "stick" or make it more effective, it is done concurrently with all or most of the following:

2. Media assault — The shorts, in order to realize their profit, must ultimately purchase real shares at a price much cheaper than what they shorted at. These real shares come from the investing public who panics and sells into the manipulation. Panic is induced with assistance from the financial media.

The shorts have "friendly" reporters with the Dow Jones News Agency, the Wall Street Journal, Barrons, the New York Times, Gannett Publications (USA Today and the Arizona Republic), CNBC and others. The common thread: A number of the "friendly" reporters worked for The Street.com, an Internet advisory service that hedge-fund managers David Rocker and Jim Cramer owned. This alumni association supported the short attack by producing slanted, libelous, innuendo laden stories that disparaged the company, as it was being crashed.



One of the more outrageous stories was a front-page story in USA Today during a short crash of TASER's stock price in June 2005. The story was almost a full page and the reporter concluded that TASER's electrical jolt was the same as an electric chair — proof positive that TASERs did indeed kill innocent people. To reach that conclusion the reporter over estimated the TASER's amperage by a factor of one million times. This "mistake" was made despite a detailed technical briefing by TASER to seven USA Today editors two weeks prior to the story. The explanation "Due to a mathematical error" appeared three days later — after the damage was done to the stock price.

Jim Cramer, in a video-taped interview with The Street.com, best described the media function: "When (shorting) ... The hedge fund mode is to not do anything remotely truthful, because the truth is so against your view, (so the hedge funds) create a new 'truth' that is development of the fiction — you hit the brokerage houses with a series of orders (a short down ladder that pushes the price down), then we go to the press. You have a vicious cycle down — it's a pretty good game."

This interview, which is more like a confession, was never supposed to get on the air, however, it somehow ended up on YouTube. Cramer and The Street.com have made repeated efforts, with some success, to get it taken off of YouTube.

3. Analyst Reports — Some alleged independent analysts were actually paid by the shorts to write slanted negative ratings reports. The reports, which were represented as being independent, were ghost written by the shorts and disseminated to coincide with a short attack. There is congressional testimony in the matter of Gradiant Analytic and Rocker Partners that expands upon this. These libelous reports would then become a story in the aforementioned "friendly" media. All were designed to panic small investors into selling their stock into the manipulation.
4. Planting moles in target companies — The shorts plant "moles" inside target companies. The moles can be as high as directors or as low as janitors. They steal confidential information, which is fed to the shorts who may feed it to the friendly media. The information may not be true, may be out of context, or the stolen documents may be altered. Things that are supposed to be confidential, like SEC preliminary inquiries, end up as front-page news with the short-friendly media.
5. Frivolous SEC investigations — The shorts "leak" tips to the SEC about "corporate malfeasance" by the target company. The SEC, which can take months processing Freedom of Information Act requests, swoops in as the supposed "confidential inquiry" is leaked to the short media.

The plethora of corporate rules means the SEC may ultimately find minor transgressions or there may be no findings. Occasionally they do uncover an Enron, but the initial leak can be counted on to drive the stock price down by twenty-five percent. The announcement of no or little findings comes months later, but by then the damage that has been done to the stock price is irreversible. The San Francisco office of the SEC appears to be particularly close to the short community.

6. Class Action lawsuits — Based upon leaked stories of SEC investigations or other media exposes, a handful of law firms immediately file class-action shareholder suits. Milberg Weiss, before they were disbanded as a result of a Justice Department investigation, could be counted on to file a class-action suit against a company that was under short attack. Allegations of accounting improprieties that were made in the complaint would be reported as being the truth by the short friendly media, again causing panic among small investors.
7. Interfering with target company's customers, financings, etc. — If the shorts became aware of clients, customers or financings that the target company was working on, they would call and tell lies or otherwise attempt to persuade the customer to abandon the transaction. Allegedly the shorts have gone so far as to bribe public officials to dissuade them from using a company's product.
8. Pulling margin from long customers — The clearinghouses and broker dealers who finance margin accounts will suddenly pull all long margin availability, citing very transparent reasons for the abrupt change in lending policy. This causes a flood of margin selling, which further drives the stock price down and gets the shorts the cheap long shares that they need to cover.
9. Paid bashers — The shorts will hire paid bashers who "invade" the message boards of the company. The bashers disguise themselves as legitimate investors and try to persuade or panic small investors into selling into the manipulation

This is not every dirty trick that the shorts use when they are crashing the stock. Almost every victim company experiences most or all of these tactics.

#### **How Pervasive Is This? —**

At any given point in time more than 100 emerging companies are under attack as described above. This is not to be confused with the day-to-day shorting that occurs in virtually every stock, which is purportedly about thirty percent of the daily volume.

The success rate for short attacks is over ninety percent - a success being defined as putting the company into bankruptcy or driving the stock price to pennies. It is estimated that 1000 small companies have been put out of business by the shorts. Admittedly, not every small company deserves to succeed, but they do deserve a level playing field.

The secrecy that surrounds the shorts, the prime brokers, the DTC and the regulatory agencies makes it impossible to accurately estimate how much money has been stolen from the investing public by these predators, but the total is measured in billions of dollars. The problem is also international in scope.

#### **Who Profits from this Illicit Activity? —** The short answer is everyone who participates. Specifically:

1. The shorts — They win over ninety percent of the time. Their return on investment is enormous because they don't put any capital up when they sell short — they get cash from the sale delivered to their account. As long as the stock price remains under their short sale price, it is all profit on no investment.
2. The prime brokers — The shorts need the prime brokers to aid in counterfeiting shares, which is the cornerstone of the fraud. Not only do the prime brokers get sales commissions and interest on margin accounts, they charge the shorts "interest" on borrowed shares. This can be as high as five percent per week. The prime brokers allegedly make eight to ten billion dollars a



year from their short stock lend program. The prime brokers also actively short the victim companies, making large trading profits.

3. The DTC — A significant amount of the counterfeiting occurs at the DTC level. They charge the shorts "interest" on borrowed shares, whether it is a legitimate stock borrow or counterfeit shares, as is the case in a vast majority of shares of a company under attack. The amount of profit that the DTC receives is unknown because it is a private company owned by the prime brokers.

**The Cover Up** — The securities industry, certain "respected" members of corporate America who like the profits from illegal shorting, certain criminal elements and our federal government do not want the public to become aware of this problem.

*The reason for the cover up is money.*

Everyone, including our elected officials, gets lots of money. Consequently there is an active campaign to keep a lid on information. The denial about these illegal practices comes from the industry, the DTC, the SEC and certain members of Congress. They are always delivered in blanket generalities. If indeed there is no problem, as they claim, then why don't they show us the evidence instead of actively and aggressively fighting or deflecting every attempt at obtaining information that is easily accessible for them and impossible for companies and investors? Accusers are counter attacked as being sour-grapes losers, lunatics or opportunistic lawyers trying to unjustly enrich themselves. Death threats are not an unheard of occurrence, although it doesn't appear that anyone has been "whacked" so far.

The securities industry counters with a campaign of misinformation. For example, they proudly pointed out that only one percent of the dollar volume of listed shares are fails-to-deliver. What they don't mention:

- that the fails-to-deliver are concentrated in companies being attacked
- for companies under attack, for every disclosed fail-to-deliver there may be ten to forty times that number of undisclosed counterfeit shares
- companies under attack have seen their stock price depressed to a small fraction of the price of an average share, therefore the fails-to-deliver as a percentage of number of shares is considerably higher than as a percentage of dollar volume
- the examples cited are limited to listed companies, but much of the abuse occurs in the over the counter market, regional exchanges and on unregulated foreign exchanges that allow naked shorting of American companies, who are not even aware they are traded on the foreign exchanges.

**Why does this continue to happen?** It is no accident that the most pervasive financial fraud in the history of this country continues unabated. The securities industry advances its agenda on multiple fronts:

1. The truth about counterfeiting remains locked away with the perpetrators of the fraud. The prime brokers, hedge funds, the SEC and the DTC are shrouded in secrecy. They actively and aggressively resist requests for the truth, be it with a subpoena or otherwise. Congressional subpoenas are treated with almost as much disdain as civil subpoenas.
2. The body of securities law at the federal level is so stacked in favor of the industry that it is almost impossible to successfully sue for securities fraud in federal court.

For example, in a normal fraud case, a complaint can be filed based upon "information and belief" that a fraud has been committed. The court then allows the plaintiff to subpoena evidence and depose witnesses, including the defendants. From this discovery, the plaintiff then attempts to prove his case.

Federal securities fraud cases can't be filed based upon "information and belief"; you must have evidence first in order to not have the complaint immediately dismissed for failure to state a cause of action. This information is not available from the defendants (see above) without subpoenas, but you can't issue a subpoena because the case gets dismissed before discovery is opened.

This is only one example of the terrible inequities that exist in federal securities law.

3. The SEC is supposed to protect the investing public from Wall Street predators. While the vast majority of SEC staffers are underpaid, overworked, honest civil servants, the top echelons of the SEC frequently end up in high-paying Wall Street jobs. The five-person Board of Governors, who oversee the SEC, is dominated by the industry. The governors are presidential appointees and the industry usually fills three slots, frequently including the chairmanship.
4. For those rare occasions when the SEC prosecutes an industry insider, the cases almost never go to a judgment or a criminal conviction. The securities company settles for a fine and no finding of guilt. The fine, which may seem like a large sum, is insignificant in the context of an industry that earned 35 billion dollars in 2006. Fines, settlements and legal expenses are just a cost of doing business for Wall Street.
5. The root cause of the impossibly skewed federal laws and the ineffectiveness of the SEC and other regulatory bodies rests squarely with our elected officials. The securities industry contributes heavily to both parties at the presidential and congressional levels. As long as the public is passive about securities reform, our elected officials are happy to take the money, which at the federal level was 65 million dollars in 2006.

The Democrats swept into power with a promise of ethics reform. Their majority in congress allowed Christopher Dodd (D-CT) to ascend to the chairmanship of the Senate Banking Committee, which regulates the securities industry. His largest single contributor (\$175,400) in the first quarter of 2007 was (employees of) SAC Capital, a very aggressive short hedge fund. Are we surprised that Dodd has opposed additional regulation of hedge funds. They are virtually unregulated.

6. Some states have their own securities laws and their own enforcement arm. Certain states including Connecticut, Illinois, Utah, Louisiana and others, have begun active enforcement of their own laws. The state laws are not nearly as pro industry as federal laws and plaintiffs are having success.



To thwart this, the industry with the support of the SEC, is attempting to have the federal court system and federal agencies, be the sole venue for securities matters. The SEC is working hand in hand with the industry to advance this theory of federal preemption, which would put all securities matters under federal law, all litigation in federal courts, and all enforcement with the SEC.

The following are recent examples of how the SEC is advancing the industry agenda:

- The San Francisco office of the SEC issued subpoenas to various short friendly media outlets after congressional hearings about David Rocker and Gradient Analytic. This investigation into the media involvement with the shorts was ended by the chairman of the SEC, Christopher Cox, who withdrew the subpoenas, apparently concluding that the First Amendment right to free speech protected participants in an alleged stock manipulation. Jim Cramer ripped up his subpoena on his television show, thumbing his nose at the SEC.
- In early 2007, the SEC completely exonerated Gradient, citing Gradient's First Amendment rights.
- The Nevada Supreme court heard a case captioned Nanopierce vs. DTCC. Nanopierce is an emerging company that was attacked by the shorts and subjected to massive counterfeiting of their stock by the DTCC. This state court case is close to opening discovery against the DTCC, so the industry is attempting to kill the lawsuit by arguing it should be in federal court — where it will be DOA. The SEC showed up as a friend of the defendant DTCC, and filed a brief in support of the DTCC efforts to remove the case to the federal court system.
- Both houses of the Utah legislature passed a bill that required daily disclosure of fails-to-deliver, including identifying specific companies and the specific broker dealer positions in that company. The bill also outlawed naked shorting of companies domiciled in Utah. The industry threatened litigation based upon federal preemption and backed the state down. The bill was not signed into law.
- A bill was introduced to the Arizona legislature that required disclosure similar to the Utah bill, but without the illegal naked shorting provision. This is the same information that the DTC confidentially provides to the SEC. Certain prime broker's lobbying effort allegedly managed to get the bill killed in committee. The industries efforts to curtail state authority, is an effort to draw all securities matters under the federal umbrella, where small investors don't have a chance of obtaining justice.
- In February 2007 the SEC determined that the hedge fund industry did not require any additional regulation — they are virtually unregulated. This may be the height of arrogance.

**Sources** — Information used was obtained from public records; the SEC; the Leslie Boni Report to the SEC on shorting; evidence and testimony in court proceedings; conversations with attorneys who are involved in securities litigation; former SEC employees; conversations with management of victim companies; and first hand experience as investors in companies that have suffered short attacks. This web site is sponsored by Citizens for Securities Reform.

**What to Do?** — Many of our elected officials at the federal and state level do not understand most of what is contained in this paper. They must come to understand this fraud, and, more importantly, understand that their constituents are angry.

Pass this information to everyone you know — put it in the public conscience. Then the citizenry needs to engage in a massive letter-writing campaign. Feel free to attach this report. Make sure your elected officials, at the federal level and state level know how you feel. Ultimately, votes in the home district will trump money from the outside.

Tagged as counterfeiting stocks, illegal naked shorting, naked shorting, Stock manipulation + Categorized as Smith On Stocks Blog

## 14 Comments



1. wmbryd says:

June 16th, 2015 at 7:50 pm

What a God damn shame! Why even invest. The big boys have the system so rigged, i wonder if it's even worth investing at all. The only potentially positive aspect of this whole sordid topic is that given enough time, these fraudulent financial wheelers-and-dealers will eventually go to far and get their butts crushed. In the meantime, many companies will go out of business and, in the case of biotechs, patients will suffer. SHAMEFUL!



2. mswyman says:

June 16th, 2015 at 8:58 pm



Astonishing, Larry. Thanks for posting this. It explains a lot about the volatility companies in the biotech sector often experience. It also makes clear that this big business: not just a couple of journalists publishing hit pieces while profiting on the side. Who knew?

It makes me wonder what the overall impact on the market will be. Could this kind of rip-off be a danger to the market at the same scale as securitized mortgages based on junk loans? Are we getting a foreshadowing of major trouble to come for the whole market, and not just a few companies?

Chilling.



3. **dpolson** says:

**June 16th, 2015 at 9:55 pm**

Excellent coverage of this odd racket. The irony is that I was able to average down nicely on NWBO last year due to this very racket (all straight cash account purchases), but it was scary to think that the potentially groundbreaking cancer treatment it is in trials for may have never gotten a chance to succeed because of several lying scoundrels allowed to publish on SA and elsewhere. Moreover, how on earth was the critic in the Washington post compelled to apologize for his similar critique? This remains a complicated and shroudy issue.



4. **bmatthews@realshortdata.com** says:

**June 18th, 2015 at 1:29 am**

I have been reporting on naked short selling for nearly a decade. I have been in 2 documentaries, and I can tell you with 100% certainty... Dendreon cured prostate cancer....they cured it, and Wall Street made sure no one would know about it. There's a third documentary I know of that details the plight of dendreon.

I have files from companies that the CEO's asked me to publish, that were driven under and out of business. Look at the decline in CZR last year....or SPDC recently....all have one thing in common....they begin with a debt payment coming due in 18-24 months, and the short sellers counterfeit the stock down to pennies so that when the time to pay off the debt arrives, the company no longer has the ability to seek capital through equity markets.

Usually under a threat at that point of delisting, the best a company can do is opt for a brutally unfair loan which results in a change of control, for pennies on the dollar to a billionaire shark or white knight stepping in, or they issue convertible debt which sets into motion convertible arbitrage as every single share represented is immediately shorted against the debt, guaranteeing that no loss is incurred by the convert holders, and sinking the stock at the expense of equity holders.

It is the reason I began looking into ways that reported daily short volume from the public exchanges that began being released in 09, and could be used to protect investors. Well I came up with the answer and the only protection investors have (The SEC and FINRA are not going to do it, and the Market Makers were given an exemption to continue the practice while countries like Germany outlawed it... The only ones that cannot naked short stocks to their death, is you and I.

Most people have no idea they can get daily short volume info and rely on two week delayed, bimonthly reports of what occurred on a single day of trading, two weeks before.

RealShortData.com is the only source in the world for daily, current short volume and dark pool volume data, complete with charts, which is programmed to trigger investor alerts as certain events combine like high volume accompanied by open short volume above 70% and total short volume above 50%, which would qualify as a Red Flag Alert.

I like what you're doing here Smithonstocks, and I hope we might team up down the road to help people not become victims of this scheme that has no end, and no punishment that would cause any firm to stop.

Also, I've interviewed Patrick Byrne from Overstock who was a leader in the field, and Mark Mitchell who is a reporter at DeepCapture.com. Not sure if I read it above, but its a good reference for anyone looking to establish just how rampant and NOT NEW this is....

Everyone is at risk, but thanks to efforts of those like you, and I, and a dozen others, no one ever has to be a victim again. Have a look at what I've done. I've brought visibility to the dark corners of Wall Street...No one ever has to lose their wealth, hopes, savings and goals to Wall Street greed and corruption...at least, that's the idea I had going into it. It's grown to much more but that is its core.



5. **Larry Smith** says:

**June 18th, 2015 at 6:50 am**

Thank you for your input. We all have to work to build awareness of this scheme which has massive reach and impact.





6. **bmatthews@realshortdata.com** says:  
**June 18th, 2015 at 1:31 am**

ps: You'll find a few articles of mine at SA... I was a top 3 author with 50,000 followers but I ruffled feathers with my market manipulation, blame Goldman And Merrill articles... so ... now they dont print them anymore,

7. **Larry Smith** says:  
**June 18th, 2015 at 6:55 am**

Seeking Alpha defended Adam Feuerstein when the Washington Post expose was published. As I commented, it will publish extremely bearish articles by anonymous authors and allows activist investors to operate what appears to be pump and dump schemes.

8. **hd** says:  
**June 22nd, 2015 at 5:14 pm**

Larry,  
Great, and long article. I have seen some of those short attacks on some bio companies I am invested in. Your article gives validation to what I had thought and what other posters at the yahoo message boards had hinted.

Now, the short attack is fine and I can have strong hands to get through those. What concerns me is that in all your analysis, you have not indicated what a long investor, who has fundamentals as the investment thesis, is supposed to do. You seem to be driving the point that when they pick a company to attack, THE COMPANY WILL FAIL, GET BANKRUPT, OR STOCK GO TO PENNIES, because the hedge funds initiating the short attack are very powerful and coordinated and no one is stopping them. You also say that 90% of the time, they are successful in their attack. You give an example of DNDN, which I have not researched but had a great product according to your article. And everyone knows about plight of DNDN.

So, is you point to say that if we see an organized short attack orchestrated on a biotech firm that we are invested in, that company MOST probably is going down and hence, we should cut the losses and get the hell out of there???????? Because the resistance if futile???

Or is there any way to fight it, if one believes the product IS very good with potential to get approval from FDA and final commercialization?

9. **CamelTrader** says:  
**August 19th, 2015 at 7:40 pm**

"Illegal Naked Short Selling Appears to Lie at the Heart of an Extensive Stock Manipulation Scheme"....

Wow....great attempt to explain 1 of the many ways that stocks are manipulated...BIO's are really in the kill zone for this type of well coordinated gaming/manipulation. I have been following stocks & reading tape checking short data following the noise via all forms of media since later 2009 early 2010. One point that was made in the comments(I believe) or I wanted to make very clear, is that manipulation & collusion are not anything new to our markets. What is, or rather has been made possible due to technology...i.e."the internet" has exponentially increased the speed, scope and amount of information manipulation that bombards people investing (or not)...And also aids to the labyrinth (or maybe gauntlet) of connections/directions one needs to get through to find who is at the other end of the Hedge Fund's rainbow & pot-o-gold. Your what might be considered more than "cursory" map of acronyms & how or who is connected, misdirected and hiding was a feat in it self... Good job!

And as to DNDN and also another post about a band-aid and/or something for dental health...BIO-techs that really work, safe, and cure that I know of personally is not what sadly survives...rarely make it to the public in need of such products. The most recent example of this is AMRN (ticker) Amarin corp. w/product VASCEPA®...is a Ω-3 highly purified EPA and works on inflammation...the story is unreal what FDA has done and what looks like a NSS candidate as I have watched this tape for >3years and the social media, & where the Adam Feuerstein name first showed up for me...what a travesty...I have no idea where this co. ends up but I own shares only because the product saved my arm and many other benefits...Ok, said enough... what will change? How can it change? Wait one other note, BATS exchange July 30, 2015 – BATS Global Markets (BATS) filed with the Securities and Exchange Commission the BATS Client Suspension Rule, which would enable the company to take swifter action to prohibit manipulative behavior, such as spoofing and layering, on the BATS Exchanges. Client Suspension Rule would allow BATS to stop ongoing manipulative conduct in a matter of weeks, instead of the lengthier, longstanding regulatory process that can take several years to reach a final resolution. The Rule distinguishes itself by specifically addressing the practices of layering and spoofing via an expedited process. [http://cdn.batstrading.com/resources/press\\_releases/BATS-Client-Suspension-Rule-FINAL.pdf](http://cdn.batstrading.com/resources/press_releases/BATS-Client-Suspension-Rule-FINAL.pdf) Intersting... say belives mostly day traders etc. Now I am done... Keep up good work...

R.K.

Ha ha, hey you get chance look up ConAgra Dupont venture DCV Story where scientists saved i26 a product that was getting shelved... worked to good, I use/used it too ha ha The end ☺



## Trackbacks & Pingbacks

1. **Cytokinetics: Comments on Sharp Price Decline After 2Q, 2015 Conference Call (CYTK, Buy, \$6.28) | Expert Financial Analysis and Reporting | Smith on Stocks**  
July 31, 2015 at **12:57 pm**

[...] For those of you who have followed my writing you will understand that I believe that there is widespread manipulation of stock prices by hedge funds using naked shorting practices. I have no objective evidence, but the observable evidence for manipulation is overwhelming. See my report *Illegal Naked Short Selling Appears to Lie at the Heart of an Extensive Stock Manipulation Scheme*. [...]

2. **Discovery Laboratories: What I Intend to Do in the Aftermath of a Disastrous Stock Offering (DSCO, Buy, \$0.54) | Expert Financial Analysis and Reporting | Smith on Stocks**  
August 11, 2015 at **10:44 am**

[...] a honey to companies with weak balance sheets who need to finance. Using techniques as described in my recent report in situations like this shorts can manipulate the stock price virtually to wherever they [...]

3. **Neuralstem: The 2015 Decline in the Stock is in Contrast to Encouraging ALS Data and an Impressive Pipeline (CUR, Buy, \$1.38) | Expert Financial Analysis and Reporting | Smith on Stocks**  
August 13, 2015 at **9:55 am**

[...] attack on the stock as so often happens with emerging biotechnology stocks. See my article "Illegal Naked Short Selling Appears to Lie at the Heart of an Extensive Stock Manipulation Scheme" to see how short sellers can blatantly manipulate [...]

4. **OCAT Nasdaq Daily PPS Movements - Page 208**  
September 9, 2015 at **10:20 pm**

[...] in the industry... this was put up by Gizmo on an other topics thread and how many have read it? *Illegal Naked Short Selling Appears to Lie at the Heart of an Extensive Stock Manipulation Scheme* | ... I believe that the observational evidence is overwhelming that naked shorting practices are widely [...]

5. **Naked Stocks | Best Stock Market Futures**  
October 9, 2015 at **2:34 am**

[...] *Illegal Naked Short Selling Appears to ... – Smith on Stocks – Investment Consequences of Naked Shorting Only a motivated enforcement agency with subpoena power and an accompanying powerful enforcement infrastructure can [...]*

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# **Failure is an Option: Impediments to Short Selling and Options Prices**

Richard B. Evans  
Christopher C. Geczy  
David K. Musto  
Adam V. Reed\*

This Version: May 25, 2006

## **Abstract**

Regulations allow market makers to short sell without borrowing stock, and the transactions of a major options market maker show that in most hard-to-borrow situations, it chooses not to borrow and instead fails to deliver stock to its buyers. Some of the value of failing passes through to option prices: when failing is cheaper than borrowing, the relation between borrowing costs and option prices is significantly weaker. The remaining value is profit to the market maker, and its ability to profit despite the usual competition between market makers appears to result from a cost advantage of larger market makers at failing.

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\* Evans is from the Carroll School of Management at Boston College. Geczy and Musto are from The Wharton School at the University of Pennsylvania. Reed is from the Kenan-Flagler Business School at the University of North Carolina. We gratefully acknowledge important input from an anonymous referee, Michael Brandt, Greg Brown, Jennifer Conrad, George Constantinides, Patrick Dennis, Darrell Duffie, Bin Gao, Eitan Goldman, Jonathan Karpoff, Richard Rendleman and seminar participants at Notre Dame, USC, UT, Wharton and the Western Finance Association Meetings. We thank Wes Gray for excellent research assistance. The Frank Russell Company generously provided constitution lists for their Russell 3000 index. Corresponding Author: Adam Reed; Campus Box 3490, McColl Building; Chapel Hill, NC 27514. Phone: (919) 962-9785. E-mail: adam\_reed@unc.edu.



The market for short exposure in the United States clears differently from the market for long exposure. This difference has attracted considerable recent interest from both the SEC and market participants who frequently short-sell or whose stock is sold short.<sup>1</sup> The interest is in both the economics of clearing and in the pricing of the affected assets, which could be high or inefficient. Our goal is to establish the role and economic significance of an unfamiliar but important clearing tactic: failing to deliver.

Short sales are usually accomplished through equity loans. The short-seller borrows shares from an equity lender which he delivers to the buyer. This debt of shares to the lender gives him short exposure going forward. But there is another way to create the same exposure: by failing to deliver the shares. If the short-seller delivers nothing to the buyer, thereby incurring a debt of shares to the buyer, this also gives him short exposure going forward. This alternative moves the risk that the short-seller does not repay his debt from the equity lender to the buyer, but just as equity lenders have a mechanism for ensuring performance, i.e. collateral, so does the buyer. The clearing corporation intermediating the trade takes margin and marks it to market, thereby defending buyers against their sellers' non-performance. If equity loans are expensive, unavailable, or unreliable, as research shows they can be (e.g. D'Avolio, 2002, Geczy, Musto and Reed, 2002, Jones and Lamont, 2002, Lamont 2004) then this alternative appears desirable, to short sellers if not to buyers. But considering the market rules that bind short sales to equity loans, how is it feasible?

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<sup>1</sup> In July of 2004 the SEC passed regulation SHO which limits the ability of certain market participants to sell stock short without borrowing to cover their position. The discussion period for regulation SHO attracted considerable attention from the business press.



The answer, we show, lies in the special access to delivery fails that option market-makers enjoy. Traders are generally obliged to locate shares to borrow before shorting, but those engaged in bona-fide hedging of market-making activity are exempt from this requirement. So unlike traders in general, a market maker can short sell without having located shares to borrow. If he does not locate shares to borrow then he fails to deliver, someone on the other side fails to receive, and therefore retains the purchase price, and the clearing corporation starts taking margin. While it lasts, this arrangement is effectively an equity loan from the buyer to the seller at a zero rebate. But whether it lasts depends on the reaction of the trader being failed to. If a buyer does not get his shares then he can demand them, in which case a short-seller who failed is bought in: he must go buy the shares and hand them over. If that short-seller wants to maintain his short exposure he must short again, so this demand increases his shorting cost by this roundtrip transactions cost. Thus, the cost of failing to deliver is the cost of a zero-rebate equity loan plus the expected incidence of buy-in costs. If this incidence is low enough, then failing is a valuable alternative to borrowing the harder-to-borrow stocks. We show that the alternative to fail is valuable and key to the pricing and trading of options.

First, we show that shorting costs move options out of parity. That is, synthetic shorts constructed from options trade below spot-market prices when shorting is costly, i.e. when interest rebates on equity loans are low, and this disparity grows as the rebate falls. However, this growth slows when the rebate falls below zero, consistent with option market-makers choosing failure over negative rebates, and sharing some of the savings. Furthermore, the short interest of a major option market maker grows, as a



fraction of marketwide short interest, as rebates fall, consistent with the market maker having and sharing an advantage getting short exposure to hard-to-borrow stocks.

We can see the advantage directly in the market maker's shorting experience. Half the time the market maker shorts a hard-to-borrow stock, it fails to deliver at least some of the shares. And it never accepts a negative rebate, always choosing to fail instead. This advantage could in principle be offset by frequent buy-ins, but we find a very low frequency of buy-ins, executed with small price concessions.

How much of this advantage does the market maker share? Estimating the market maker's trading profits, net of rebate reductions and buy-ins, we document a significant average profit. This profit seems at odds with the competitiveness of options markets, but we show that it corresponds to the way the clearing corporation handles buy-ins. The highest-volume option market makers, such as our data supplier, likely benefit from the clearing corporation's practice of assigning buy-ins to the oldest fails. That is, when a number of short-sellers' brokers are failing on the same stock and a buyer's broker demands shares, the clearing corporation passes this demand to the broker whose fail started first. This favors the few highest-volume traders because, since their portfolios turn over so much, their fails are rarely the oldest. Thus, we hypothesize that option-market competition tends to oligopoly as stocks grow hard to short.

To test our hypothesis that market-maker competition weakens as specialness grows, we test whether options' bid/ask spreads grow as specialness grows. We find that they do. We also find that our data provider, a large market maker, is bought in much less frequently than average, and that when it *is* bought in, this corresponds to when



option volume is lower, and therefore its advantage at avoiding buy-ins is smaller. We therefore conclude that at least some of the profits result from limits to competition.

The rest of this paper is organized as follows. Section I reviews the literature, Section II describes the database, Section III presents the results and Section IV concludes. An appendix provides background information and relevant details regarding short selling and delivery.

## **I. Related Literature**

This paper is not the first to document that shorting frictions associate with breakdowns of put call parity. Lamont and Thaler (2001) find that impediments to short selling prevent traders from exploiting seemingly profitable arbitrage strategies resulting from the misalignment of stock prices in equity carve-outs. Similarly, Ofek, Richardson and Whitelaw (2004) measure the relationship between increased borrowing costs and put-call disparity and find cumulative abnormal returns for arbitrage strategies involving put-call disparity exceed 65%. But, as in Jarrow and O'Hara (1989), market imperfections prevent most arbitrageurs from turning the misalignment into a profit. The put-call parity trades studied here can only be performed by market participants who can always borrow stock or short sell without borrowing stock. In other words, rebate rates are only valid if stocks are found and borrowed. Our study has the unique advantage of a coherent approach that combines actual borrowing costs and feasibility for one market participant: a large options market maker.

Furthermore, this paper is not the first to discuss settlement fails; there is a strand of literature which studies settlement and settlement failures in markets other than U.S.



equities. In the context of monetary policy, Johnson (1998) finds that technological improvements in the banking settlement system have affected monetary policy. In the context of foreign exchange, Kahn and Roberds (2001), show that settlement through a private intermediary bank can mitigate some of the unique risks associated with foreign exchange settlement. Fleming and Garbade (2002) find that settlement fails jumped following the September 11<sup>th</sup> attacks as a result of the destruction of communication facilities.<sup>2</sup>

In this paper, we identify the possibility of profiting from the misalignment, due to short-sale costs, of stock and options markets for market participants who have the option to fail to deliver shares, and we show how limited access to this option is a barrier to entry that prevents competition from realigning market prices. This work relates primarily to three topics in the finance literature: equity lending, the relation of observed prices to Black-Scholes, and deviations from put-call parity. We briefly review each.

#### *A. The Equity Lending Market.*

A number of recent papers have examined variation in the cost of borrowing stock in the equity lending market. Reed (2002) uses one year of daily equity loan data to measure the reduction in informational efficiency resulting from short-sale costs. Geczy, Musto and Reed (2002) measure the impact of equity-loan prices on a variety of trading strategies involving short selling. The paper finds prices in the equity lending market do not preclude short-sellers from getting negative exposure to effects on average, but in the

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<sup>2</sup> More recently, Boni (2005) explores market-wide failing data from the clearing corporation.



case of stock-specific merger arbitrage trades, short selling impediments reduce profits substantially. Christoffersen, Geczy, Musto and Reed (2005a, 2005b) use the same database to study stock loans that are not necessarily related to short selling. The paper finds an increase in both quantity and price of loans on dividend record dates when the transfer of legal ownership leads to tax benefits. Using another database of rebate rates, Ofek and Richardson (2003) demonstrate that short selling is generally more difficult for Internet stocks in early 2000, and D'Avolio (2002) uses 18 months of daily data to relate specialness to a variety of stock-specific characteristics. Jones and Lamont (2002) study borrowing around the crash of 1929; the paper finds that hard-to-borrow stocks had low future returns. Finally, Duffie, Gârleanu and Pedersen (2002) formulate a search model of the equity lending market.

#### *B. Predicted and Observed Options Prices.*

By relating short selling to option prices, this paper also contributes to the large literature on the difference between Black-Scholes (1973) options prices and observed option prices. MacBeth and Merville (1979) and Rubinstein (1985) show that, empirically, implied volatilities are not equal across option classes and that deviations are systematic. As in Derman and Kani (1994), these systematic deviations are commonly referred to as the volatility smile. Longstaff (1995) shows that the difference between Black-Scholes and actual option prices increase with option bid-ask spreads and decrease with market liquidity. While Longstaff's results are contested in later work (i.e. Strong and Xu (1999)), he provides a novel approach to testing the impact of market frictions on



option prices. Dumas, Flemming and Whaley (1998) test a range of time- and state-dependent models of volatility meant to account for observed deviations from Black-Scholes prices. The paper concludes that these models still leave a large mean-square error when explaining market prices. Using Spanish index options, Peña, Rubio and Serna (1999) find evidence consistent with U.S. markets; they find a positive and significant contribution of the bid-ask spread to the slope of the volatility smile. Dennis and Mayhew (2000) examine the contribution of various measures of market risk and sentiment on individual index options and find that both are correlated with the smile.

### *C. Tests of Put-Call Parity*

Some of the evidence on the impact of short-sale impediments on options prices is presented here in terms of put-call parity. Tests of put-call parity date back to Klemkosky and Resnick (1979) who find option market prices to be largely consistent with put-call parity. In a related paper that focuses on the speed of adjustment of option and stock markets, Manaster and Rendleman (1982) conclude that closing options prices contain information about equilibrium stock prices that is not contained in closing stock prices. While the implied stock price measure employed in our work differs substantially from that of Manaster and Rendleman (1982), the approach of comparing actual and implied stock prices is similar.

## **II. Data**



We combine several databases in this study. First, a prominent options market maker provided rebate rates, failing positions and a database of buy-ins and execution prices on those buy-ins. For equity options prices, implied volatilities, option volume and open interest, we use the OptionMetrics database. Finally, the interest rate term structure is estimated using commercial paper rates from the Federal Reserve (see Appendix B for details).

#### *A. Rebate Rates, Fails and Buy-Ins.*

A large options market-making firm has generously provided a database of their rebate rates, fails and buy-ins for 1998 and 1999. The rebate rates are the interest rates on cash collateral for stock loans quoted by the market maker's prime broker. Different borrowers are likely to face different rates; this database is a description of one large market maker's experience. As discussed in Geczy, Musto and Reed (2002), rebate rates allow us to measure the difficulty of borrowing shares, or specialness.

We construct a measure of specialness for each stock on each date. Specifically, specialness on any stock is the difference between the general collateral rate and the rebate rate on that stock. Following Geczy, Musto and Reed (2002), we estimate the general collateral rate as the Federal Funds Rate minus the equity lender's fixed commission. Specialness is zero for most stocks, and it is positive for specials, or hard-to-borrow stocks. In Panel B of Table IV, we augment our market maker's specialness database with specialness from a large custodian lender as described in Geczy, Musto and Reed (2002).



The rebate rates cover all stocks in the Russell 3000 index, and we have limited our other databases to that subset of U.S. equities using constitution lists from the Frank Russell Company. The Russell 3000 includes the 3000 largest stocks in the U.S based on May 31st market capitalization. In 1997, stocks larger than \$171.7M were included. The cutoff was \$221.9M in 1998 and \$171.2M in 1999.

The database also indicates when this market maker is failing to deliver shares on any of its short positions. Even though we do not have data on any of this market maker's specific trades, we do have information about this market maker's buy-ins. The buy-in database has purchase dates, settlement dates and execution prices for every buy-in in 1998 and 1999.

### *B. Options Data*

We use the Ivy DB OptionMetrics database for US Equity option prices, spreads and volume. We use the average of the lowest closing ask and the highest closing bid, or the midquote, as the options price. We apply three filters that are common elsewhere in the options literature (e.g. Dumas, Whaley and Fleming (1998) and Bakshi, Cao and Chen (1997)). First, we remove options with fewer than 6 calendar days to maturity to mitigate liquidity bias. Second, we remove options with prices less than \$0.375 to minimize price discreteness. Third, as described in Table I, no-arbitrage restrictions are applied to the option quotes.

Table I indicates that the intersection of the rebate and option databases contains 19,723,466 observations. After filtering, the database contains 11,437,401 observations.



This is daily price data for options with various strike prices and maturity dates on 449,721 unique stock/days. On average, there are 890 stocks per day on the 504 trading days in the sample.

### **III. Results**

The empirical results are ordered as follows. First, we address the significance to a market maker of its option to fail, both in the incidence of failing and in the relation of failing to high equity-loan costs. Next, we relate equity-loan costs to the price of a synthetic short position as determined by put-call parity, and we ask if this relation is sensitive to whether the option to fail is in the money, i.e. whether the rebate rate is less than zero. Then we gauge whether the mispricing of the synthetic short position is a result of expensive puts or cheap calls using implied volatility as a measure of price. We then calculate the expected cost of buy-ins, which is the product of the incidence of buy-ins and their execution quality. Using this actual incidence and price of buy-ins, we compute the market-maker's net profits from providing synthetic shorts in hard-to-borrow situations. Finally, in response to the positive profits we document, we address the possibility that option-market competition is limited when the underlying is hard to borrow.

#### *A. Specialness and Delivery Failure*



Our database shows the data supplier's short position, for each stock in the Russell 3000 and each day in 1998-99, and in particular it shows whether the position was achieved through borrowing, failing or both. It also tells us the rebate received on borrowed shares, whether failed shares were bought in, and if so, at what price. Thus, we can sort short positions into five major categories: *General Collateral*, *Reduced Rebate*, *Reduced Rebate and Fail*, *Fail Only* and *Buy-In*. *General Collateral* indicates that a stock has been loaned at the normal rebate rate; i.e. the stock is easy to borrow. *Reduced Rebate* indicates that the rebate rate is below the general collateral rate; i.e. the stock is on special. *Reduced Rebate and Fail* indicates that some shares have been borrowed at a reduced rebate, and that the market maker failed to deliver some shares that were sold short. *Fail Only* indicates that the market maker failed to deliver any of the shares in this short position. *Buy-In* indicates that the counterparty of the short-sale transaction is forcing delivery on some or all of the shares in the short position. Table II, Panel A, reports the incidence of each.

Consistent with earlier work, a large majority, 91.24%, of stocks are available for borrowing at general collateral rates. The remaining 8.76% are the specials. Breaking out this 8.76%, we find 4.19% where borrowing simply continues at lower rebates, but in the remaining 4.57% the market maker fails to deliver, partially or completely. Failing is thus an important part of the story; more than half of the time the option to fail is used when stocks are on special. Any analysis of the relationship between short-sale impediments and options prices is at least incomplete, and perhaps severely biased, without consideration of the option to fail.



We would expect options market makers to fail more often as rebate rates fall to zero. Our sample bears this out. Panel B of Table II shows 89.65% of the failing positions occurring when rebates are at the lowest rate in our sample, zero, and only 1.39% of the *non-failing* positions have rebates at zero. So failing predominates when rebates hit zero, and delivery predominates when rebates are positive. We also find, in unreported results, that the probability of at least some failure grows 15.66% for each 1% decrease in the rebate.<sup>3</sup> Thus we conclude that failure is tightly linked to low rebates.

### *B. Specialness and Option Prices.*

We expect option prices to reflect the costs of hedging, including the costs of short selling. We use our measure of short-sale costs, specialness, and two measures of options prices to characterize this relationship. First, we use put-call parity to measure misalignments of stock and options markets. Second, we refer to the options' implied volatilities, as calculated in Cox, Ross and Rubinstein (1979), to gauge whether puts or calls are more responsible for what we find.

#### *B.1. Put-Call Parity*

The effect of short-sale costs on option prices can be seen via the European put-call parity relation. Put-call parity states that the value of a European call option plus the discounted value of the option's strike price is equal to the value of the underlying asset plus the value of a European put with the same strike price and maturity:

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<sup>3</sup> Taking those observations for which specialness is positive and the rebate rate is positive, we run a logistic regression of failing on specialness with cross-sectional and time-series fixed effects. The dependent variable is 1 if there is any failing in a particular stock on a given day. The coefficient estimate on specialness is 0.1455 (p-value < 0.0001). The odds ratio point estimate is 1.1566.



$$C + e^{-r\tau}K = P + S$$

where  $C$  is the price of a European call option on stock  $S$  with strike price  $K$ ,  $e^{-r\tau}K$  is the present value of  $K$ , and  $P$  is a put option with strike price  $K$ .  $C$  and  $P$  are assumed to have the same time to maturity,  $\tau$ .

This relationship allows a trader to replicate the payoffs of any single instrument in the equation with a combination of the other three instruments. For example, the stock price implied by this put-call parity relationship, or the *implied* stock price, is

$$S^i = C - P + e^{-r\tau}K.$$

For stocks with dividends paid during the life of the option, the present value of dividends is added to the right hand side of the equation.

After computing the stock price implied by put-call parity, we compute the percentage deviation of the implied stock price from the actual stock price. This is computed by subtracting the implied stock price from the actual stock price and normalizing by the actual stock price:

$$\Delta_{j,t} = \frac{S_{j,t} - S_{j,t}^i}{S_{j,t}},$$

where  $S_{j,t}$  is the price of stock  $j$  on day  $t$  from the spot market and  $S_{j,t}^i$  is the price of stock  $j$  on day  $t$  implied by put-call parity. We refer to  $\Delta_{j,t}$  as put-call *disparity*. Table III shows the distribution of this measure, which shows some dispersion; the 5<sup>th</sup> percentile is  $-0.98\%$  and the 95<sup>th</sup> percentile is  $1.95\%$ .

Some of this dispersion does not relate to arbitrage opportunities. Dividend-related early exercise differentiates the European options of the parity relation from the



American options of the database; we address this below by excluding stocks that paid dividends in the past year. Early exercise also arises with deep-in-the-money puts, which we address by using only the option pair with moneyness (S/K) closest to one, and shortest time to expiration. Since near-the-money and close-to-maturity options tend to be more actively traded, this also mitigates the effects of stale prices, which we further address by removing options for which the volume or open interest is equal to zero.

Another source of dispersion is microstructure effects. As Battalio and Schultz (2005) document, end-of-day prices deliver noisy estimates of actual arbitrage opportunities, as they may not be prices that were simultaneously available for trade. And even if prices are simultaneous and midpoint prices are exactly in line with put-call parity, if the stock price were at either an ask or a bid while the options were both at their midpoints, put-call disparity for the average stock in our sample would be 0.53%<sup>4</sup>. But as long as these measurement errors do not correlate with rebates, they do not interfere with our tests. That is, they are as likely to subtract from our measured profits as add to them.

We test the null hypothesis that short selling is not associated with put-call disparity with the following regression:

$$\Delta_{j,t} = a + bSpecialness_{j,t} + cMoneyness_{j,t} + dTime-to-Maturity_{j,t} + e_{j,t}$$

where *Specialness<sub>j,t</sub>* is specialness in stock *j* on date *t*. *Moneyness* is defined as the stock price divided by the strike price and *Time-to-Maturity* is the number of calendar days to

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<sup>4</sup> The median bid-ask spread in stocks in our sample is \$0.23 (mean \$0.25). The median stock price in the sample is \$21.69 (mean \$27.04). If put and call prices are midpoints and the stock is at either the bid or the ask, then put call parity will be different from zero by  $0.23/(2*21.69) = 0.0053$ .



expiration of the option. We include fixed effects for both time series and cross-sectional effects. Panel A of Table IV reports the fitted model.

The significantly negative coefficient on *Specialness* confirms that as specialness increases, so does the shortfall of synthetic short from the spot. Thus, specialness passes through to option prices, consistent with findings elsewhere. The new question is whether the *option to fail* passes through to option prices. Since the option to fail can reduce a market maker's shorting costs when rebates are negative, but not when they are positive, its effect would be a *weakening* of the relation between specialness and option prices as rebates go negative. That is, reducing the rebate from 2% to 1% increases the market maker's shorting cost by exactly that much, as failing is not a cheaper alternative to borrowing in either case, but reducing it from -1% to -2% increases it *less*, to the extent that market maker is failing rather than borrowing. To test this hypothesis we need to use specialness data that shows when the market rebate is negative, so we use the 'custodial' data instead.

The test design is the same as before, only that now we focus on just the stocks that are currently on special, and we add a regressor *Negative Rebate Specialness* which is zero when the rebate is positive, and is equal to the specialness, i.e. has the same value as *Specialness*, when the rebate is negative. The null hypothesis is that the coefficient on *Negative Rebate Specialness* is not significantly negative. The result is in Table IV, Panel B.

The regression rejects the null; the relation between rebates and option prices is indeed significantly weaker – at the point estimate, about 50% less - for negative than for



positive rebates. This indicates that the option to fail plays a significant role in option pricing.

## *B.2. Distinguishing the Effect on Puts and Calls*

The relation between specialness and synthetic shorts indicates some combination of puts growing expensive and calls growing cheap. To gauge whether one is more important than the other, we need to separate puts from calls and relate their prices to model. The testable questions become, are the implied volatilities of the puts significantly high, and are the implied volatilities of the calls significantly low?

For each option, we use implied volatility from OptionMetrics, which uses the industry standard Cox, Ross and Rubinstein (1979) binomial tree method for calculating implied volatilities. Using a fixed effects regression, we examine the relationship of implied volatilities with the moneyness, time-to-maturity, and specialness as well as time-series and cross-sectional fixed effects. The estimation results from several parameterizations of the following regressions are presented in Table V.

$$\sigma_{j,t}^{implied} = \gamma_0 + \gamma_1 Money_{j,t} + \gamma_2 Time-to-Maturity_{j,t} + \gamma_3 Specialness_{j,t} + e_{j,t}$$

where moneyness is defined as  $S/K$ , and time to maturity is measured in calendar days. We include fixed effects for both time series and cross-sectional effects. Consistent with the results for index options from Derman and Kani (1994) and Longstaff (1985), we find that the implied volatility of put options increases with moneyness. The coefficient on



moneyiness for call options is statistically negative but the slope is almost flat. Consistent with Bakshi, Cao and Chen (1997), our regression results show that implied volatility decreases with time to maturity.

For puts, both the presence and the magnitude of specialness are statistically significant and positive. Thus, we conclude that specialness increases the prices of puts. Calls prices do not show this sensitivity; neither the presence or the magnitude of specialness has a statistically significant effect on call prices. Thus, when we separate the synthetic short into its components we detect a significant positive effect of specialness on the cost of buying puts, and no effect on the revenue from writing calls.

### *C. Abnormal Profits*

#### *C.1. Buy-in Costs.*

The other cost of failing, besides the foregone interest from the withheld purchase price, is the expected cost of being bought in. When the market maker is bought in, the clearing corporation executes the purchase, and the market maker must execute a new short sale to restore its position. Thus, the market maker's expected buy-in cost is the probability of a buy-in times this round-trip cost. Table II shows that 86 of the 69,063 failing positions, or 0.12%, were bought in over the 2-year period. Taking this realization as the expected incidence of buy-ins, the expected incidence of buy-in costs is this figure times the expected transactions cost, conditional on a buy-in.

Because the clearing corporation executes the buy-in, execution quality may not be optimized, and may therefore be costly to the market maker. To gauge this other leg of



buy-in cost we relate the transaction prices of the 86 buy-ins to prevailing market prices. Table VI, Panel A shows that the buy-in trades are executed at prices 0.53% worse than the volume weighted average price (VWAP) for the given stock on the buy-in day. The departure from VWAP is statistically significant but even so, if we assume that the market maker pays the same 0.53% to put the short back on, the overall expected buy-in cost is  $(0.12\%)(2)(0.53\%)$ , or 0.1bp. So the expected buy-in cost is, for our market maker at least, vanishingly small.

### *C.2 Abnormal Profit Strategies*

In this section we combine the data on rebate rates and buy-in costs to calculate the profitability, to the market maker who provided our data, of providing synthetic shorts on hard-to-borrow stocks. In the section following we consider why the profits we document could be available in equilibrium.

Our profitability measure follows a simple trading strategy, designed to avoid the attribution issues documented by Battalio and Schultz (2005). In particular, we decide whether to put on the trade based on whether the stock is on special, *not* on whether our database shows disparity, and then we hold the trade to expiration. If instead we went in and out of the trade depending on the apparent disparity in the data, we would mistake some measurement error for profitability.

We focus on liquid options and reduce the influence of known biases by selecting the option pair with maturity as short as possible and moneyness closest to one. We also



reduce the incidence of early exercise bias, without risking any look-ahead bias, by using only stocks that didn't pay dividends in the past year.

Our database allows us to calculate profits net of the exact shorting costs. If our market maker got a rebate we use that rebate but if they failed we use a rebate of zero. Assuming the market maker's opportunity cost of capital at time  $t$  is the risk-free rate  $r(t)$ , and denoting his concurrent rebate for a given stock  $q(t)$ , the short sale cost paid by the borrower on day  $t$  can be written  $r(t)-q(t)$ . If our data show that a stock was bought in, we subtract the cost of the buy-in by subtracting the buy-in price from the stock's VWAP that day. The assumption is that the market maker keeps the position going by shorting anew at VWAP on the same day. The profits from this strategy can be written as

$$\underbrace{[S(0) - S(T)]}_{\text{Short Stock Position}} + \underbrace{[S^i(T) - S^i(0)]}_{\text{Synthetic Long Position}} - \underbrace{\left[ \sum_{t=0}^T S(t)(r(t) - q(t)) \right]}_{\text{Reduced Rebate Costs}} - \underbrace{1_{\text{Buy In Indicator}} \left[ \sum_{t=0}^T (S_{\text{Buyin}}(t) - S_{\text{VWAP}}(t)) e^{r(T-t)} \right]}_{\text{Buy-In Round Trip Transaction Cost}}$$

where the position is opened at  $t=0$  and closed at  $t=T$ .

We look at the profits to short-selling actual stock and buying synthetic stock whenever that stock goes on special. We see in Table VII that such a strategy would involve 6086 option pairs and yield an average profit of \$0.1346 per trade. The profit is statistically significant with a p-value of less than 0.001, and corresponds to \$13.46 per option contract. Thus, the market maker profits, in equilibrium, by providing these synthetic shorts. In our final section we propose and test a hypothesis for why this happens.

#### *D. Why Aren't Abnormal Profits Competed Away?*



What accounts for the equilibrium profitability we document? Why aren't more market makers buying these cheap synthetic long positions, bidding them up to zero profitability? We hypothesize that the clearing corporation handles fails in a way that favors higher-volume market makers, resulting in weaker competition when stocks grow special. We test this hypothesis on the relation between specialness and quoted spreads.

The hypothesis follows from how the clearing corporation assigns buy-ins. If a fail must be bought-in, this buy-in is assigned to the oldest fail (see Appendix A). Assuming a higher-volume market maker is more likely to move from a short position to flat (or positive) and back again, it is *less* likely to have the oldest fail and therefore less likely to be bought in. Thus, we hypothesize that higher-volume market makers, such as our data provider, enjoy a cost advantage with hard-to-borrow stocks, and that this advantage limits competition to make markets in the affected options.

If our market maker faces lower competition when specialness is higher then its market share of short exposure, i.e. its total short position as a fraction of economy-wide short interest, should grow as specialness grows. This would suggest that shorting via this option market maker, rather than some other way, becomes more attractive as shorting constraints tighten. Regressing the market share  $(Market\ Maker's\ SI)/(Market\ SI)$  on *Specialness*, we find (p-values in parentheses):

$$(Market\ Maker's\ SI) / (Market\ SI) = -0.06902 + 0.04037 * Specialness$$

$$(0.2795) \quad (0.0197)$$

Market share increases significantly with specialness, indicating that shorting frictions encourage shorting via this option market maker, and therefore that shorting frictions impose less cost on this option market maker than on traders in general.



So this market maker gains short-interest market share as specialness grows, but in principle *all* option market makers could be gaining short-interest market share. To address the competitiveness *between* option market makers we need a measure of the current competition to make a market in a stock's options, and the natural candidate is the price charged, the current bid/ask spread.

Option spreads are subject to limits which often bind.<sup>5</sup> The SEC, which sets these limits, finds that quoted spreads are at their maxima between 21% and 57% of the time (SEC, 2000). This is consistent with our sample; we find 36% of put options and 32% of call options at their maximum spreads. Thus, the relevant measure of spread width is whether it is at the maximum.

Accordingly, to relate spreads to specialness, we fit a probit model where the dependent variable indicates maximum width, and specialness is an explanatory variable. To control for demand-side circumstances that could affect spreads, we also include trading volume and open interest in the option, time to expiration and distance from at-the money (i.e. absolute value of  $1-S/K$ ). The result is in Table VIII.

The probit strongly rejects the null; trading at the maximum spread increases significantly with specialness. Thus, the evidence supports the hypothesis that specialness weakens option-market competition.

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<sup>5</sup> The Securities and Exchange Rule 1014(c)(i)(A) and Advice F-6 prescribe maximum quote spreads for equity options. The rule establishes maximum widths as follows: \$0.25 for options priced between \$0.50 and \$2, \$0.375 for options priced between \$2 and \$5, \$0.5 for options priced between \$5 and \$10, \$0.75 for options priced between \$10 and \$20, and \$1 for options priced above \$20.



Another way to test the hypothesis that turnover gives large market makers a cost advantage by protecting them from buy-ins is to test whether this advantage dissipates when volume drops. That is, we can test whether our data provider's success at avoiding buy-ins declines when option turnover declines. We do this by fitting a probit to all fails, where the dependent variable is whether (1) or not (0) the position is bought in, and the explanatory variables are option turnover (volume over open interest) along with other circumstances associated with buy-ins. What we find, in Table IX, is that turnover is significantly negative, as predicted: the less options turn over, the more the position is bought in.

Finally, we can see directly that our data supplier experiences an abnormally low incidence of buy-ins on its fails. On the average day, across the 502 sample trading days, this large market maker is failing on 4.4M shares. This is about 1.75% of the ~250M fails on all NYSE/AMEX/NASDAQ stocks on the average day, in Boni (2005) (see Figure 1 of that paper). In Table II we see that our market maker experienced 86 buy-ins across the 502 days, or about 1/6 buy-in per day. If this is about 1.75% of buy-ins, we should see about 10 buy-ins per day. But the DTCC reports more than 4,300 buy-in notices per day,<sup>6</sup> and the fraction of notices that result in buy-ins is presumably greater than 1/430. Thus, our data provider's fails appear relatively unlikely, compared to other traders' fails, to beget buy-ins.

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<sup>6</sup> This figure represents only the notices transmitted via the DTC's Participant Exchange service; see "DTCC Will Automate and Streamline Buy-In Notification for Securities," a DTCC press release at <http://www.dtcc.com/PressRoom/2005/buyin.html>



#### **IV. Conclusion**

We show that the option to fail is significant to both the trading and pricing of equity options. We show that it is often in-the-money, and that when it is, market makers profit and so do their customers. The profit to market makers is puzzling, considering their competitiveness, but we resolve this puzzle by documenting limits to competition in options on hard-to-borrow stocks, and tracing these limits to the clearing corporation's rules for assigning buy-ins.

A delivery fail is nearly a single-stock futures contract, the only difference being the uncertainty about expiration. Thus, the popularity of failing may help explain why single-stock futures attract so little interest. The futures can improve on the spot when the spot is hard to borrow – this was the major selling point of the futures when they were introduced – but in that situation, fails provide the same improvement. Futures can provide other improvements, such as efficiencies with dividends and votes, but these are sparse in the fiscal year, unlikely to sustain trading.

The popularity of failing and the price improvements it provides short sellers encourage us to step back and consider the economic case for delivery. Delivery provides 100% insurance to both sides of a trade; by exchanging cash for securities, traders eliminate 100% of their mutual exposure. 100% insurance is unambiguously optimal when it is free, but not when it is costly, so the search for efficiency should bring traders to a mechanism for buying less insurance at a lower price when delivery is costly. This appears to be what they get by failing and margining through the clearing



corporation. So while failing may sound mischievous or abusive, both our results here and basic economic reasoning indicate that its role is positive.

The SEC has taken a cautious approach by introducing its new Regulation SHO, which strengthens delivery requirements for “threshold securities,” those with substantial current fails. Its effect on large market makers such as our data provider is likely small, since their hedging trades are still exempt from the locate requirement, and their fails do not age much (see Boni, 2005, for a complete description of the regulation), but it has the potential to alter the cost of short exposure, so its impact is an important new empirical question. Fortunately the lists of threshold securities are public, so proprietary data may not be necessary to answer it.



## **Appendix A. The Details of Short Selling and Delivery**

Short sellers sell stock they do not own. In the United States, exchange procedure generally requires short-sellers to deliver shares to buyers on the third day after the transaction ( $t+3$ )<sup>7</sup>. Short sellers typically borrow stock and use the proceeds from the sale as collateral for the loan. Additionally, regulators and brokerages impose varying margin requirements on short positions. To close, or cover, the position, the short-seller buys shares and returns the shares to the lender.

### *A. Borrowing and Rebate Rates*

Typically, a short-seller borrows shares from her broker. The proceeds from the short sale are used as collateral for the stock loan. The collateral earns interest, and the broker returns some of the interest to the short seller. The interest rate the short seller earns is known as the rebate rate. Rebate rates are generally lower for smaller investors, but for a given investor, lower rebate rates indicate more expensive loans. The majority of loans are cheap, but there are a few expensive loans in stock specials<sup>8</sup>.

Specials tend to be driven by episodic corporate events resulting in arbitrage opportunities for short-sellers. (See Geczy, Musto and Reed (2002) or D'Avolio (2002) for examples). Well placed investors, such as hedge funds, will be able to borrow stock specials and will earn the reduced rebate.

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<sup>7</sup> See Bris, Goetzmann and Zhu (2004) for a description of short selling in other countries.

<sup>8</sup> Fitch IBCA's publicly available report: "Securities Lending and Managed Funds" estimates that the industry average spread from the fed funds rate to the general collateral rate on U.S. Equities is 21bps.



### *B. Short-Selling When Borrowing is Difficult*

Exchange rules require most market participants to demonstrate that they can obtain hard to borrow shares before they short sell<sup>9</sup>. Market makers require an affirmative determination of borrowable or otherwise attainable shares. In market parlance, the short-seller needs a “locate” before short selling. However, there is an exception to the rule. An example is NASD’s rule 3370(b), which exempts the following transactions from the affirmative determination requirement: “...bona fide market making transactions by a member in securities in which it is registered as a Nasdaq market maker, to bona fide market maker transactions in non-Nasdaq securities in which the market maker publishes a two-sided quotation in an independent quotation medium, or to transactions which result in fully hedged or arbitrated positions.”

### *C. Fails and Buy-Ins*

If the short sale is made on day  $t$ , the short seller’s clearing firm generally delivers shares on day  $t+3$ . However, the National Securities Clearing Corporation (NSCC) procedures state: “each member has the ability to elect to deliver all or part of any short

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<sup>9</sup> During our sample period, NYSE Rule 440C and NYSE Information Memorandum 91-41 require affirmative determination (a “locate”) of borrowable or otherwise attainable shares for members who are not market makers, specialists or odd lot brokers in fulfilling their market-making responsibilities. Similarly, NASD Rule 3370 and NASD Rules of Fair Practice, Article III, Section 1, Interpretation 04 Paragraph (b)(2)(a) (See Ketchum, 1995, and SEC Release No. 34-35207), and Securities Exchange Act Release No. 27542 (AMEX) require affirmative determination of borrowable shares during the period treated in the paper (SEC Release No. 34-37773).



position.”<sup>10</sup> If a clearing firm decides to deliver less than the full amount of shares to its buyers, the firm is failing to deliver shares.

If the clearing firm fails, the best-case scenario for the short seller is for the buyer’s broker to allow the fail to continue as long as the short position is open. In this case, the short seller’s cost of short exposure is the lost interest on the transaction amount. When borrowing shares, the short-seller would also lose the full interest income on his collateral in the case of a zero rebate rate. Economically, a failed delivery is the same as delivery of borrowed stock at a zero rebate rate as long as the buyer’s broker allows the fail to continue.

In the worst-case scenario, the buyer’s broker insists on delivery by filing a notice of intention to buy in with the NSCC at  $t+4$  in accordance with NSCC’s Rule 10<sup>11</sup>. The notice is retransmitted from the NSCC to the seller’s broker on  $t+5$ , and the seller has until the end of day  $t+6$  to resolve the buy-in liability. If the seller does not resolve the liability, a “buy-in” occurs: the buyer purchases shares on the seller’s account to force delivery<sup>12</sup>. If her position is bought in, the seller may then short sell again to re-establish the short position. In this case, the short seller will pay the execution costs of the buy-in and the following short sale every six days<sup>13</sup>. Figure A1 shows the sequence of events in each scenario.

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<sup>10</sup> NSCC Procedures, VII.D.2.

<sup>11</sup> The Securities and Exchange Commission’s Customer Protection Rule requires clearing firms to possess shares in fully paid accounts. Clearing firms may attempt to acquire shares to be in compliance with the SEC’s rule.

<sup>12</sup> The seller’s clearing firm buys shares in a buy-in for NYSE and AMEX stocks, the buyer’s clearing firm buys-in shares of NASDAQ stocks.

<sup>13</sup> NASD Rule 11810(c)(1)(B) gives buyers the option to buy guaranteed delivery shares, and there have been complaints regarding the purchase price of guaranteed shares. A limited supply of guaranteed delivery



The NSCC allocates buy-ins across clearing firms and clearing firms allocate buy-ins across clients. Failing clients can protect themselves against buy-ins at both levels. Figure A2 shows the institutional structure. In the first stage, the NSCC ranks clearing firms according to the date of failed deliveries, and the NSCC allocates buy-ins to the clearing firms with the oldest failed delivery first<sup>14</sup>. As a result, clearing firms that frequently change from short to long net positions are less likely to be bought in.

Once the NSCC allocates buy-ins to a clearing firm, that clearing firm must allocate buy-ins among its clients. Clearing firms have discretion over this second-stage of the selection decision, and, unlike the first stage, there are no market-wide rules. Anecdotal evidence suggests that clearing firms use their discretion; they allocate a disproportionately small number of buy-ins to protected clients.

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shares, combined with the transparency of the underlying purpose for the purchase may inflate prices. Second, according to NASD Regulation's general counsel Alden Adkins in Weiss (1998), "there are no hard and fast rules dictating the prices at which buy-ins can take place. But [Adkins] says the prices must be 'fair' – and that the person who sets the price must be prepared to defend it."

<sup>14</sup> This description provided here is a slight simplification of the actual procedure. For a more specific example of what really happens, assume that N+0 represents the date the Buy-In Notice is filed. Filing such a notice will give the firm higher priority in settlement on the first business day after filing, N+1 and on the second business day after filing, N+2, if the long position remains unfilled. On date N+1, if the position remains unfilled, NSCC submits "retransmittal notices" to the firm(s) with the oldest short position in the Buy-In stock. These notices specify the Buy-In liability for the short firm and the name of the long firm instigating the Buy-In. "If several firms have short Positions with the same age, all such Members are issued Retransmittal Notices, even if the total of their Short Positions exceeds the Buy-In position."<sup>14</sup> Once they receive the retransmittal notice, other settling trades may move them to a flat or even a long position in the stock but do not exempt them from their Buy-In liability. The short firm has until the end of day N+2 to resolve their Buy-In liability. Before the retransmittal notice is received, a buy-in liability is removed once a net long position of sufficient size is established.



## Appendix B. Risk-Free Interest Rates

We construct a database of daily risk-free interest rates using Federal Reserve 1, 7, 15, 30, 60 and 90-day AA financial commercial paper discount rates which we convert to bond equivalent yields.<sup>15</sup> The risk-free rate corresponding to option maturity is calculated by linearly interpolating between the two closest interest rates. For example, the risk-free rate for an option with maturity of 6 days would be calculated by linearly interpolating between the 1-day and the 7-day discount rates.

The method of linear interpolation is an approximation to the true term structure, and the error inherent in the approximation is greatest for near-term maturities. By using the rates on commercial paper, the error is minimized relative to rates on T-bills or other fixed income instruments that are only reported for greater maturities. As a check on our procedure, we also calculate the risk-free rate with daily GOVPX data on T-bills using a procedure similar to Bakshi, Cao and Chen (1997). The correlation coefficient between the 3-month AA financial commercial paper rate and the 3-month T-bill rate reported by the Federal Reserve is 0.98. As a further check, we regress our 3-month commercial paper rate on the Federal Reserve's 3-month T-bill rate from September 1997 to August 2001. The intercept is not significantly different from zero, the slope is statistically significant (the coefficient is 0.90), and the  $R^2$  is

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<sup>15</sup> Bond Equivalent Yield =  $(\text{Discount}/100)(365/360)/(1 - (\text{Discount}/100)(\text{Time to Maturity}/360))$   
This is equivalent to the yield formula reported in the Wall Street Journal and is commonly used in option markets and for debt instruments with maturities of less than one year.



Figure A1. Clearing, Failing and Buying-In

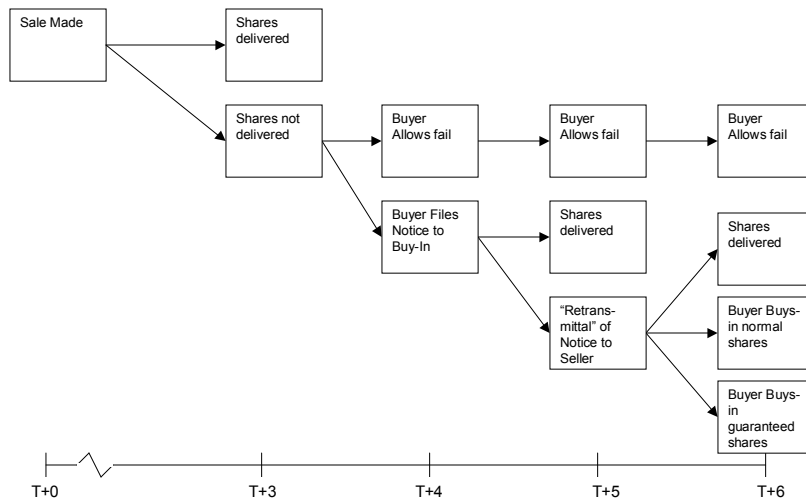
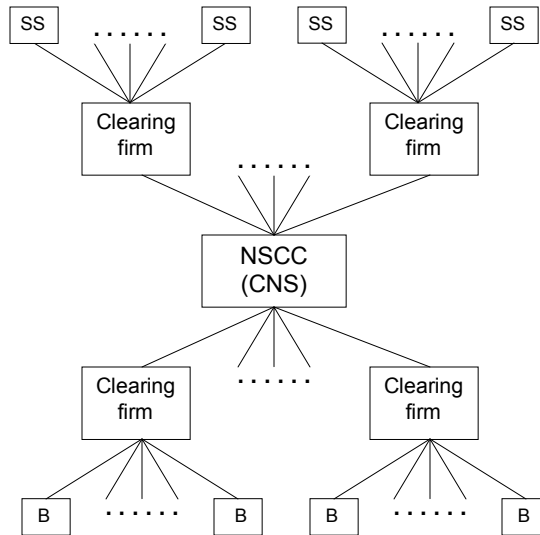


Figure A2. The Structure of Clearing Institutions





## GLOSSARY

**Buy-In** – A situation where shares are purchased in the stock market to insure delivery for a buyer to whom shares are owed.

**Clearing** – The delivery of shares from buyer to seller. A clearing firm provides clearing and settlement services for exchange members.

**Continuous Net Settlement (CNS) System** – An automated book-entry accounting system that centralizes the settlement of security transactions for the NSCC.

**Delivery Versus Payment (DVP) System** – A system allowing delivery and payment to be exchanged instantaneously. DVP is used by market participants for settlements that are not automatically handled by CNS.

**Failure to Deliver** – A situation where the seller does not give the buyer shares on the settlement date.

**General Collateral Rate** – The prevailing interest rate earned on borrowers' collateral for equity loans.

**Guaranteed Delivery** – A stock transaction where the seller commits to a settlement date and allows the buyer to cancel trade if delivery is not made. Delivery terms are negotiated on a trade-by-trade basis; trades often have non-standard clearing (e.g.  $t+1$ )

**Locate** – An affirmative determination that the short-seller will be able to borrow shares to deliver to the buyer. Affirmative determination may include assurances from a short-seller that the customer can borrow shares in time for settlement or that the security is found on "easy to borrow" lists. In some situations, market participants must provide a locate to the stock market maker before short-selling.

**Notice of Intention to Buy-In** – An indication to the NSCC that the buyer will force delivery of shares. After the notice is filed, the buyer's priority for delivery is increased. The notice of intention to buy-in can be filed four days after trading if securities are not delivered.

**National Securities Clearing Corporation (NSCC)** – Securities clearing organization providing centralized clearing and settlement for the NYSE, AMEX and NASDAQ.

**Hard To Borrow** – A situation where stock loans are difficult or expensive. Institutionally, certain restrictions apply unless a stock is *not* hard to borrow.

**Rebate Rate** – The interest rate earned by borrowers on collateral for equity loans. Rebate rates are reduced below prevailing rates when stocks are on special.



Retransmittal Notice – The NSCC’s indication to the seller that the buyer plans to buy-in shares. A notice of the buyer’s notice to buy-in from the NSCC to the seller. A retransmittal notice is sent one day after a notice of intention to buy-in has been sent if the buyer has not received shares.

Settlement – The exchange of shares for payment.

Settlement Date -- The date on which payment is made to settle a trade. For stocks traded on US exchanges, standard settlement is three days after the trade (t+3).

Short Sale – A transaction where the seller sells shares she does not own.

Specialness – The difference between the general collateral rebate rate and stock-specific rebate rate. Specialness is typically zero. A stock is said to be on special if specialness is positive.

Street Name – Brokerage or nominee registration as opposed to the direct account holder registration. Securities held in street name can be lent to short sellers with the permission of the owner.



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**Table I**  
**Option Database Filters**

This table presents the number of observations excluded by each filter applied to the options database. As in Bakshi, Cao and Chen (1997), we delete observations where call prices are higher than the underlying stock prices ( $C > S$ ). We delete observations where call prices are less than the present value of payoffs if exercised ( $C < S - PV(K) - PV(Div)$ ). We delete observations where put prices are less than the current value of exercise ( $P < K - S$ ). We delete observations where put prices are above their strike prices ( $P > K$ ). We also delete options with less than 6 calendar days to maturity or greater than 180 calendar days to maturity and options with a price less than \$0.375.

Filters	Filters in Isolation		Filters in Sequence			
	Obs. Excluded	% Original Excluded	Obs. Excluded	% Original Excluded	Obs. Remaining	% Original Remaining
					19,723,466	100%
$C, P < .375$	3,564,681	18.07%	3,564,681	18.07%	16,158,785	81.93%
$\tau > 180$	3,866,290	19.60%	3,744,692	18.99%	12,414,093	62.94%
$\tau < 6$	1,074,310	5.45%	533,918	2.71%	11,880,175	60.23%
$C > S$	0	0.00%	0	0.00%	11,880,175	60.23%
$C < S - PV(K)$	578,906	2.94%	442,774	2.24%	11,437,401	57.99%
$P < K - S$	0	0.00%	0	0.00%	11,437,401	57.99%
$P > K$	0	0.00%	0	0.00%	11,437,401	57.99%



**Table II**  
**Rebate Rates, Failure and Buy-In Frequency**

This table presents statistics on the 1998-99 rebate rate, fail and buy-in database from a large options market maker. Panel A. shows the overall incidence of five equity loan states in the database: General Collateral (GC), Reduced Rebate (RR), Reduced Rebate/Fail (RRF), Fail Only (F) and Buy-in (BUY) and the average rebate rate associated with each state. Panel B. shows the percentage of daily stock positions in each one of three categories: (i) No Failing, where there are no shares failing delivery, (ii) Partial Failing, where there is at least one share failing delivery, and (iii) Failing, where every share is failing delivery. Percentages are based on the total number of observations, 1,512,000.

Panel A. Incidence of Loan States in the Database

Loan State	Frequency	Percent	Cumulative Frequency	Cumulative Percent	Average Rebate Rate
GC	1,379,594	91.24	1,379,594	91.24	4.98
RR	63,343	4.19	1,442,937	95.43	1.72
RRF	59,322	3.92	1,502,259	99.36	1.50
F	9,655	0.64	1,511,914	99.99	0.34
BUY	86	0.01	1,512,000	100	0.00

Panel B. Rebate Rates for Failing and Non-Failing Positions

	Rebate > 0	Rebate = 0	Rebate < 0	Total
No Failing	98.61%	1.39%	0.00%	95.43%
Partial Failing	59.36%	40.64%	0.00%	3.92%
Failing	10.35%	89.65%	0.00%	0.64%
Total	96.50%	3.50%	0.00%	100%



**Table III****The Distribution of Put-Call Disparity and Specialness**

This table describes the distribution of put-call disparity, specialness and rebate rates in the sample of 4,560,217 strike price and maturity matched put-call pairs. *Put-Call Disparity* is the difference between the stock price and the options implied stock price normalized by the stock price, i.e.  $(S-S^i)/S$ . *Specialness* is the difference between the general rebate rate and the specific rebate rate for a stock. *Rebate Rate* is the interest rate on cash collateral in a stock loan.

	<b>Put-Call Disparity</b>	<b>Specialness (%)</b>	<b>Rebate Rate (%)</b>
Average	0.0036	0.48	4.47
Median	0.0028	0	4.85
Standard Deviation	0.0179	1.30	1.34
Minimum	-0.9988	-0.07	0
Maximum	0.5617	5.80	5.80
5 <sup>th</sup> Percentile	-0.0098	0	0
10 <sup>th</sup> Percentile	-0.0053	0	3.00
90 <sup>th</sup> Percentile	0.0140	1.92	5.33
95 <sup>th</sup> Percentile	0.0195	4.50	5.40



**Table IV****Implied Stock Prices and Short Sales Constraints**

This table presents estimates from a panel regression of the following form:

$$\Delta_{j,t} = a + b\text{Specialness}_{j,t} + c\text{Moneyiness}_{j,t} + d\text{Time-to-Maturity}_{j,t} + ID(j) + ID(t) + e_{j,t}.$$

$\Delta_{j,t}$  is the put call disparity of stock  $j$  on day  $t$ .  $\text{Specialness}_{j,t}$  is the difference between the general rebate rate on day  $t$  and the specific rebate rate for a stock  $j$  on day  $t$ .

$\text{Moneyiness}_{j,t}$  is the price of stock  $j$  on day  $t$  divided by the strike price of the option pair.

$\text{Time-to-Maturity}$  is the number of calendar days to expiration of the option. The ID functions represent a fixed effects treatment of both the cross sectional (by stock) and time series (by day) effects. The regression uses one put and one call on each stock every day; of the options with the shortest time to maturity, those with moneyiness closest to one are chosen. Only option pairs are used where the volume and open interest of both the put and the call are non-zero. Panel B uses borrowing rates from a custodian bank to examine the impact of specialness on put-call disparity in both borrowing and failing regimes when stocks are on special. An indicator that takes the value of one when rebate rates are negative, and zero otherwise, is interacted with specialness to create a second specialness variable: specialness when rebates are negative, or *Negative Specialness*. In Panel B, the sample is limited to stocks with positive specialness. For each regression the p-value of the Hausman cross-sectional fixed effects specification test is reported.

Panel A. Market Maker's Specialness

Variable	Estimate	Std.Dev.	t-Stat	p-Value
Intercept	-0.0071	0.00166	-4.27	<.0001
Specialness	0.060017	0.00302	19.86	<.0001
Moneyiness	0.006047	0.000782	7.74	<.0001
Time-to-Maturity	0.000017	3.292E-6	5.06	<.0001
R-Square	0.1548			
Number of Observations	84915			
Hausman Test p-Value	<.0001			

Panel B: Custodial Specialness and Negative Specialness

Variable	Estimate	Std.Dev.	t-Stat	p-Value
Intercept	-0.00278	0.002980	-0.93	0.3511
Specialness	0.088	0.000156	5.64	<.0001
Negative Rebate Specialness	-0.048	0.000171	-2.83	0.0046
Moneyiness	0.00242	0.002150	1.12	0.2613
Time-to-Maturity	0.00004	0.000008	5.00	<.0001
R-Square	0.2706			
Number of Observations	29387			
Hausman Test p-Value	<.0001			



**Table V**  
**Implied Volatilities and Short-Sale Constraints**

This table presents estimation results from a panel regression of the following form:

$$\sigma_{j,t}^{implied} - \sigma_{j,t}^{average\ implied} = \gamma_0 + \gamma_1 Money_{j,t} + \gamma_2 Time\text{-}to\text{-}Maturity_{j,t} + \gamma_3 Specialness_{j,t} + ID(j) + ID(t) + e_{j,t}.$$

$\sigma_{j,t}^{implied}$  is the implied volatility of a put or a call option for stock  $j$  on day  $t$ , and  $\sigma_{j,t}^{average\ implied}$  is the average implied volatility of the put *and* the call for stock  $j$  from day  $t$  through

expiration. Implied volatilities are calculated using the Cox, Ross and Rubinstein binomial tree method. One put and one call is selected on each stock every day; of the options with the shortest time to maturity, those with moneyness closest to one are chosen. This difference is then regressed on *Money*, *Time-to-Maturity* and two specifications of *Specialness*: the actual value of specialness and an indicator that takes the value of one if the stock has specialness greater than 100 bp, and zero otherwise. The ID functions represent a fixed effects treatment of both cross-sectional (by stock) and daily (by day) effects. The Hausman fixed effects specification test p-value is reported.

\*\*\*Indicates Statistical Significance at the 0.1% Level. \*\*Indicates Statistical Significance at the 1% Level. \*Indicates Statistical Significance at the 5% Level.

	Calls						Puts					
Intercept	1.05271	***	1.053132	***	1.052391	***	0.927512	***	0.917619	***	0.911268	*
Moneyness	-0.03807	**	-0.03803	**	-0.03808	**	0.092928	***	0.092066	***	0.092254	***
Time-to-Maturity	-0.00066	***	-0.00066	***	-0.00066	***	-0.00084	***	-0.00084	***	-0.00084	***
Specialness			-0.02581						0.605971	***		
100 bp Indicator					0.00033						0.01678	***
Observations	84915		84915		84915		84915		84915		84915	
R <sup>2</sup>	0.6640		0.6640		0.6640		0.6776		0.6782		0.6779	
Hausman	<0.001		<0.001		<0.001		<0.001		<0.001		<0.001	



**Table VI**  
**Buy-In Execution**

This table presents statistics on the execution of buy ins in 1998 and 1999 for a major market making firm. After merging the database with TAQ, there are 85 buy-in observations on 24 unique stocks. The execution quality of the buy-ins is examined by comparing the buy-in prices to the volume-weighted average price (VWAP) over the trading day,  $(S_{BUYIN} - S_{VWAP}) / S_{VWAP}$ . In Panel A, we report the mean, median and standard deviation of the execution costs. Additionally, we report a t-test of the null hypothesis that the difference is zero. If multiple buy-in events are recorded on a single day, the buy-in price used in the calculations is the quantity-weighted execution price. In Panel B, we report the quantity of shares bought-in and the number of trading days from buy-in to settlement.

Panel A: Execution Costs

Mean	0.0053
Median	0.0028
Std.Dev.	0.0178
t-stat	2.75
p-Value	0.01

Panel B: Buy-In Quantity and Timing

	Buy-In Quantity	Trading Days to Settlement
Mean	9,512	3.01
Median	3,915	3
Std.Dev.	14,450	0.24



**Table VII**  
**Put-Call Arbitrage Profits**

This table lists arbitrage profits from short selling stock and buying a strike and time to maturity matched combination of options to replicate the underlying stock. The short stock, long synthetic stock arbitrage trade is put on whenever the stock is on special, and closed at option expiration. Borrowing costs are included in the profit calculation. If the database indicates a buy-in occurs while the position is open, the short position is closed at the indicated buy-in price. The short-sale is then re-established that day using the volume-weighted average price. There are no positions where the underlying stock paid a dividend in the previous year. Trade duration is the number of days a particular position is open. Signed trade profit indicates the percentage of individual positions with positive and negative profits. The strategy uses one option-pair per stock (the pair that is closest to the money and nearest term in maturity).

	N	Mean	Std. Dev.	t-Stat	p-Value
Arbitrage Profit	6086	0.1346	0.4579	22.93	<0.001
	Median	Mean			
Trade Duration (in days)	35	47.66			
	Positive	Negative			
Signed Trade Profit	67.58%	32.42%			



**Table VIII**  
**Incidence of Maximum Spreads**

This table presents estimation results from a probit regression of the incidence of maximum option quote spreads on specialness and other control variables. To construct the dependent variable, call and put options are matched by underlying stock, time to maturity and strike price. The dependent variable is one if both the put and the call have quoted spreads at their maximums, and zero otherwise. AbsVal(1-Moneyness) is the absolute value of  $[1 - (\text{stock price})/(\text{strike price})]$ . Volume is the sum of the daily volume for the put and the call. Open interest is the sum of open interest for the put and the call. Time-to-maturity is the number of days to the expiration of the option. Fixed cross-sectional effects (by stock) are included in the regression.

Parameter	Estimate	P-Value	Average	Marg. Effect
Intercept	-2.5377	<0.0001		
Specialness	1.1680	<0.0001	0.00572	0.4637
AbsVal(1-Moneyness)	0.1881	<0.0001	0.12462	0.0747
Volume	-0.0001	< 0.0001	267.366	-0.00004
Open Interest	-0.0001	<0.0001	2237.01	-0.00002
Time to Maturity	0.0003	<0.0001	60.2556	0.0001



**Table IX**  
**Determinants of Buy-Ins**

This table presents estimation results from a probit regression of buy-ins on specialness, short interest and other potentially predictive variables. The regression is specified so the probability of being bought-in is estimated. Option turnover is the average ratio of the daily volume divided by the current open interest for the put/call pair that is trading closest to the money and nearest term in maturity on the underlying stock. Specialness is the cost of short-selling. Short interest is the monthly total short position in a stock reported by the exchanges. Shares outstanding is the CRSP reported number of total shares outstanding on the stock. Standard deviation is calculated from daily returns over the previous six months. *Price Indicator* takes the value of 1 for stocks with a closing midquotes less than or equal to \$5, and zero otherwise. The sample comprises 64 buy-in events and 33201 non-buy-in events. The reported marginal effect is calculated as the average marginal effect for a 1 unit change in all observations in the sample. \*Because the option turnover variable is used to test the hypothesis of refreshing the age of the market maker's failure to deliver and thereby lowering the position of the market maker on the list of buyin allocations, they hypothesis predicts a negative coefficient. Consequently, the p-value for option turnover is from a 1-sided test.

Parameter	Estimate	P-Value	Marg. Effect
Intercept	-3.367	< 0.001	
Option Turnover	-0.287	0.035*	-0.0016
Specialness (%)	0.330	< 0.001	0.0018
Log(Short Interest)	0.082	0.061	0.0005
Log(Shares Outstanding)	-0.353	< 0.001	-0.0020
Daily Std. Dev. (6 Months) (%)	-0.041	0.086	-0.0002
Price Indicator (<\$5)	4.240	< 0.001	0.0234