When Bear Stearns collapsed in March, some insiders argued it was wrong to blame the firm’s risky bets on mortgaged-backed securities. They had another culprit: malevolent traders working together in the upside-down world of short sales — making money by knocking down Bear’s stock.

No one openly admits to conducting a “bear raid,” since deliberately manipulating stock prices is illegal. But Wall Street has long believed bear raids can and do take place. There has, however, been little academic research to explain the forces at work. Now two finance experts have shed some light on the process. “We basically describe a theory of how bear raid manipulation works,” says Wharton finance professor Itay Goldstein. He and Alexander Guembel of the Saïd Business School and Lincoln College at the University of Oxford describe the procedure in their paper titled, “Manipulation and the Allocational Role of Prices.”

Their key finding illuminates the interplay between a firm’s real economic value and its stock price, showing how traders who deliberately drive the share price down can undermine the firm’s health, causing the share price to fall further in a vicious cycle.
“What we show here is that by selling [the stock], you have a real effect on the firm,” Goldstein notes. “The connection with real value is the new thing…. That is the crucial element.”

Goldstein and Guembel find that the process only works when the intent is to damage the firm; traders do not have the same power to create a feedback loop that drives the share price up.

The key to the process is the short sale, when a trader borrows shares from a broker, sells them and hopes to repay the loan with shares bought later for less. The short seller profits only if the stock price falls — selling high and then buying low. If the price goes up, he has to buy replacement shares for more than he made on the ones he sold.

Ganging up on the Share Price

The connection between a firm’s share price and its true value is not as tight as many people assume. Companies sell stock to the public to raise money. Once the shares are in circulation, the price tends to rise and fall to reflect the ups and downs of the firm’s earnings, but other forces are at play as well — the overall trend in the market or industry, the firm’s performance relative to its industry peers, and speculation about how the firm’s business strategy, products and competitiveness will affect future earnings.

At times, enthusiastic investors may push the share price up even though there is no hard evidence the earnings will grow. At other times, investor sentiment can turn negative, driving the share price down even though the firm appears perfectly healthy.

Because the relationship between a firm’s business performance and stock price can be so loose, it has long been felt that the fate of the stock does not necessarily have any direct impact on a firm’s real economic value, measured by things like assets and earnings.

Clearly, speculators can gang up to drive the share price down with a rush of short sales, but at some point other traders — impressed by the company’s health — would see the shares as a bargain and higher demand would cause the share price to stabilize and rise. A bear raid would
therefore have no lasting effect. But if the falling share price caused by a bear raid does real economic damage to the firm, other investors are likely to dump the stock as well, causing a vicious cycle of falling share prices and economic damage that would make the bear raid more profitable.

To test which scenario is more likely, Goldstein and Guembel consider a company that is about to spend money for a project with an ultimate value to the firm that cannot be exactly determined. At the same time, there is a speculator who knows something about the value of the project that the firm does not. He may, for example, have a special insight into the likely cost of capital.

If this insight suggests the firm’s spending plan will work out well, the speculator will buy the stock, and his demand will help push the share price up. If the insight suggests the spending plan will fail, he will sell the stock and the reduced demand will nudge the price down. Either way, the speculator’s insight is reflected in the share price.

Goldstein and Guembel then add a new element to this traditional view of the market: The firm considers the share-price change to be a sign of the market’s judgment about the wisdom of its spending plan. If the price falls, the judgment appears to be negative and the firm may abandon the plan.

Up to this point, the speculator is making a decision according to his assessment of the spending plan. But Goldstein and Guembel argue that a speculator who has no particular insight into the plan can exploit the process to deliberately drive down the share price.

**Reducing the Value of the Firm**

Big trades are executed through Wall Street market makers who, in many cases, buy and sell using their own inventories of stock. The market maker quotes a price based on its assessment of the market. The market maker who gets a buy or sell order from a speculator assumes the speculator has some insight about the firm; otherwise the speculator would do nothing. In
general, knowledgeable traders contribute to market efficiency, assuring that share prices properly reflect firms’ values. By inspiring confidence in the markets, this efficiency tends to hold prices up.

But in the authors’ example, the speculator who is selling shares to the market maker through a short sale has no such insight. Therefore, his sale actually reduces the market’s efficiency, enhancing the prospects for share prices to fall and make the short sale profitable.

In addition, the speculator can execute a series of short sales to drive down the share price. Seeing the falling price as a vote of no confidence, the firm will drop its spending plan, losing the benefit that plan would have brought and thus causing the stock price to fall further.

“On average, this is the wrong decision and will in itself reduce the value of the firm,” the authors write. “This enables the speculator to cover his short position at a lower cost and make a profit. Due to the nature of this strategy, we refer to it as manipulation.”

Of course, it’s important that no one know what the speculator is up to, Goldstein says. “If everyone in the market knows that this hedge fund is trying to manipulate [the stock], then it will have no effect.” It is essential, he adds, that the market’s other players think the manipulator bases his decisions on insight even if he does not.

For the manipulation to work, the stock’s price moves have to influence the firm’s decision whether to go ahead with its spending plan. This is likely if three conditions are met: The value of the spending plan is not expected to be too high, there is a good deal of uncertainty about how the plan will turn out, and the firm expects to get useful feedback from the financial markets about the wisdom of its plan.

“Finally, we show that manipulation is profitable only via sell orders,” Goldstein and Guembel write. “This is because the two sources of profit behind the manipulation strategy … cannot generate profits with buy orders.” The speculator who has no special insight into the firm will assume it is less valuable than the market price reflects, so he has an incentive to sell rather than buy, they note.
Similarly, a speculator operating without any special knowledge produces inefficiencies likely to cause the share price to fall later. To profit on falling prices, the speculator must use short sales; he will lose money if he buys the stock.

The key to market manipulation is the connection between share price and the firm’s real value, Goldstein says. “Traditionally, people think about the financial markets as not affecting the firm. But that’s not true.”