Three Hundred Years of Stock Market Manipulations

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The stock of NEIP, an obscure nearly bankrupt company, barely has a pulse. The last trade was over a year ago, for a penny and a half. Suddenly it rockets up 106,600% in a matter of days. What happened? A miracle cure? A hit movie? Pokemon lunch boxes? No, none of these. NEIP's move was propelled purely by the power of Internet message boards. Two (now indicted) UCLA students dramatically demonstrated how the new technology of the Internet has dramatically transformed the old game of market manipulation.

The net raises market manipulation to a level only dreamed of by past shysters. It used to take a real effort, a public relations firm, or a major newspaper column to reach millions of potential traders. Now anyone can do it from his desktop.

The Internet era is defined by the unparalleled ability of the new manipulator to use the Internet to affect the perceptions of vast numbers of investors at lightning speed, all the while remaining as well as anonymous to the reader. This article looks at market manipulations—from early scams of the 1600s to the high tech frauds of today—and asks how the game has changed and what you can do to protect yourself.[1]

WHO CARES ABOUT THIS ANYWAY?

Aren't these just isolated instances of little concern to ordinary investors? Absolutely not. There are hundreds of well-documented cases involving message manipulation, and financial impacts run into the billions. And it's not just micro-cap stocks; recently multibillion dollar Lucent Technologies was the subject of a successful manipulation attempt.

When the people who get burned complain to the authorities, the Securities and Exchange Commission, the New York Stock Exchange, and the National Association of Securities Dealers all examine messages in their investigations. The SEC has set up a new office just to deal with Internet scammers.[2] These agencies are *reactive*—after someone complains that something suspicious has occurred in a stock, the investigators head for the message boards. Brokers, market makers, specialists, and traders care in a *proactive* sense. They want early warnings of potential trouble ahead, so they don't get left holding the proverbial bag.

The web has become the new prime venue for the old game of market manipulation. But it is not just the most obvious potential victims—specialists, dealers, and market makers—who care about manipulations. All good buy-side traders care. If you have an order to trade sized, say, at about one day's average daily volume, you may be planning to execute the trade in parcels over three days. Price distortions arising from manipulations may be short-lived, but they are real prices, and can dramatically affect the cost of trading and investment performance. The influence of the

rumor machine is overlaid on the influences of more fundamental (and benign) factors that move stock prices.

In an extreme case like NEIP, there are no other factors, but there are few if any stocks that are immune from these effects. Institutional brokers and other long-term market participants often comment that they see far more inexplicable price moves than they did in the pre-web era.

CLASSIC MARKET MANIPULATION

The ignoble history of stock market manipulations doubtless goes back to the most ancient markets. In one of the earliest accounts of manipulations, Joseph De La Vega wrote of the Amsterdam Stock Exchange over three hundred years ago:

> The greatest comedy is played at the Exchange. There,… the speculators excel in tricks, they do business and find excuses wherein hiding places, concealment of facts, quarrels, provocations, mockery, idle talk, violent desires, collusion, artful deceptions, betrayals, cheatings, and even tragic end are to be found (quoted in Fridson [1996, p. 169]).

In the Amsterdam market at the time, market manipulations were common. De La Vega provides a comprehensive model of the various manipulations used to trick unsuspecting investors including such perennial favorites as "painting the tape" (reporting false trades to convey the illusion of activity). De La Vega's book, *Confusion de Confusions,* was picked by *The Financial Times* as one of the ten best investment books ever written.

Pump and Dump—The Early Years

In the Amsterdam market of the late 1600s, there were two active stocks – Dutch East India Company and Dutch West India Company—and most of the activity revolved around speculation about the cargoes of the ships of these companies entering the port. One of the most successful stratagems was the spreading of false rumors in Amsterdam coffeehouses frequented by traders and brokers. As De La Vega describes it: "The bulls spread a thousand rumors about the stocks, of which one would be enough to force up the prices" (Fridson [1996, p. 203]).

Manipulators would falsely bid up the prices of stocks through a variety of artifices, including painting the tape and the spreading of overly optimistic news. Brokers would hint that ships soon to enter port carried rich cargoes ("No tea and spices; they've got furs and diamonds") and soon the rumors would get ever more extravagant ("Lots of furs and really big diamonds") leading to large price run-ups. Some things in life are fairly constant.

The Very Model of a Modern Market Manipulator

There is no De La Vega for the 21st century, but there is Tel212, an anonymous poster on Yahoo!'s message boards. The remarkable message we reproduce includes much of the same material, updated for the Internet, 312 years later.

The URL is <http://messages.yahoo.com/bbs?action=m&board=18185330&tid=wgat&sid=18185330&mid=16909>. The title is "Goat...Here's the Short's Handbook."

Message Board Guidelines, used by shorters who short-sell stock.

1. Be anonymous, of course.
2. Use 10% fact and 90% suggestion in one's posts. Facts give credibility, while suggestion does the "sell."
3. Let others "help" you learn about a stock, thereby developing rapport and a support base.
4. Use multiple handles, but develop a unique style for each.
5. Use multiple ISPs.
6. Start each new handle slowly to build acceptance.
7. Occasionally, use two handles to "discuss" an issue.
8. Do not show all your cards at once when slamming a stock. It's a war—it's ok to lose a battle as long as you save enough ammo to win the war.
9. Know your enemies—they will end up being your best weapons.
10. Only slam until the tide starts to turn. Let doubt carry the stock back with the tide.
11. Maintain an appearance of being open-minded, but slant in either direction is acceptable.
12. Don't appear meek. No one follows the meek.
13. Strike just as your opponent starts to gather momentum but not before, or you lose your sting.
14. Don't worry if people peg you for a slammer. The doubt will remain, and that's what you are

after.

15. If pegged, put up a brief fight, then let them feel they've won. This makes them drop their guard within a few days, and your other handles can take over from there.
16. When slamming a stock, the intent is to minimize its rise, not to create an instant plunge.
17. To slam a stock requires you only to kill the dream not the company.
18. Use questions to invoke critical thinking, and use statements to reinforce.
19. You can be liberal in your questions, but be specific and precise in your statements.
20. Don't lie, but bend the truth.
21. When you are slamming, encourage research beyond calling the company. You know people are far too lazy, and it's only doubt you are after, not confirmation.
22. When you are slamming, discourage people from taking the company's word—encourage them to seek outside proof. If the company's history is bad, point them there.
23. When you are slamming, refer to missed deadlines and weak financials.
24. When you are slamming, if the price rises, blame it on a temporary mass reaction to a press release rather than real interest in the stock. Point out low volume and emphasize the selling.
25. Pretend to share the same concerns by learning what they want to hear.
26. And above all else, be unpredictable.

Large price run-ups attract trading interest by naive investors, at which point the insiders take their profits, selling at the top. When the bubble eventually bursts, as it always does, the insiders walk away with large profits. Such "pump and dump" strategies are still the mainstay of today's manipulator.

Bluffing

Another form of manipulation comes when a trader's intentions are deliberately misrepresented by, say, giving the impression that others are buying. Such bluffing can be very profitable. De La Vega again:

> When a bull enters a coffee-house during the exchange hours, he is asked the price of the shares by the people present. He adds one to two percent to the price of the day and he produces a notebook in which he pretends to write down orders. The desire to buy shares increases…. Therefore, purchase orders are given to the cunning broker…. he replies that he has so many other orders he cannot be at anyone else's disposal. The naïve questioner believes the sincerity of the statement…and he gives an unrestricted order to another broker (Fridson [1996, p. 199]).

The result of such gamesmanship is an unwarranted price increase that favors the rumormonger, who sells at the top.

The strategies described by De La Vega faced some limitations, however. Manipulations in the 17th century took *time*. Spreading rumors one coffeehouse at a time is a slow way to reach large numbers of traders. Further, it was not always clear that the spreading of rumors would have an impact, in the sense that wary traders might not always act on what they heard. Finally, it was virtually impossible for the manipulator to remain anonymous.

HOW COMMUNICATION CHANGES MARKET MANIPULATION

The world has changed a great deal since the late 1600s, but market manipulations do not go out of style. All that changes really is the details of how rumors are spread and bluffing is achieved. The key is communications technology, which allows more traders to be reached in less time.

The basic manipulations until now have been largely unchanged from De La Vega's time. The coffeehouse of 17th century Amsterdam was first replaced with Harry's Bar or the Fraunces Tavern on Wall Street. Once again, a manipulator had to go from place to place, repeating the rumors, to have an effect, as described in LeFevre's 1996 classic, *Reminiscences of a Stock Market Operator,* concerning the trading of Jesse Livermore in the early 20th century.

Newspapers, telephone, telegraphy, and television then all allowed gullible players to be reached faster, and in greater numbers. There are numerous examples. The classic boiler room of Wall Street used the telephone to cold-call thousands of investors, much as the broker of De La Vega's time spread rumors in coffeehouses.

A good example is the story of the manipulation of Sea World stock when it was independently traded. Manipulators who were short the stock spread rumors using the telephone that Shamu—the Orca star of the

EXHIBIT 1

Market Manipulation Before and After the Internet Era

Attribute	Pre-Web	Post-Web
Access to media	Difficult to gain access to conventional media; often very expensive	Easy and cheap; manipulator can post messages or rumors
Anonymity	Very difficult to remain anonymous	Easy; anonymity is typical on the Internet
Scalability	Difficult to repeat a rumor often	Easy and cheap through message replication and postings on multiple boards
Time	Typically slow; rumors spread through word of mouth could be repeated. More difficult for print media	Extremely fast; reaction time is in seconds, facilitating "pump and dump" strategies
Impact	Depends	High, especially in stocks favored by day traders

theme park—had taken ill, sending the stock plunging for a quick profit.

Print and television allow portfolio managers to reach larger audiences, creating the incentives to pump up stocks that they hold. Such actions have often triggered sharp criticism since the identities of the boosters are known. In the 1980s, Winans wrote the "Heard on the Street" column for the *Wall Street Journal.* He and others noted that stocks that he recommended often rose in price the day after the newspaper hit the stands. Manipulators approached Winans and asked him to promote certain stocks in return for kickbacks. Winans was eventually caught and prosecuted for wire fraud.

Successful manipulation requires rumors to be spread widely and quickly. Communications technology allows the manipulator to reach ever-larger audiences. Still, there were two major problems. First, access to the most potent new technology (television and newspapers) was not easy. Journalists like Winans had to be bribed, or somehow the manipulator had to get on television, neither of which is easy to do. Second, it was still virtually impossible to remain anonymous. As the Winans case illustrates, there are some definite advantages to being anonymous.

ANATOMY OF A SUCCESSFUL MANIPULATION

The manipulations described above suggest five elements of a successful market manipulation. These are:

1. *Access* to large numbers of potential investors, ideally at low cost.
2. *Anonymity,* or market manipulators might otherwise be revealed.
3. *Scalability,* meaning the ability of the manipulator to duplicate rumors on a large scale.
4. *Time* to accomplish a manipulation quickly because the danger of exposure increases with the time a scheme takes.
5. *Impact,* meaning that the people who hear the rumor should be motivated to act by trading on the false information.

THE INTERNET ERA: A MANIPULATOR'S PARADISE

The world moves a lot faster today. There are over 250 million people on the net. There are more than a billion webpages, billions more if you count the ones below the surface. This is the "democratization of information." Information that used to be hard to find and expensive to procure is widely available for low cost or no cost. Entirely new information sources are appearing that millions of people can see and act on in a hurry. For the market manipulator, this means greater access and greater impact.

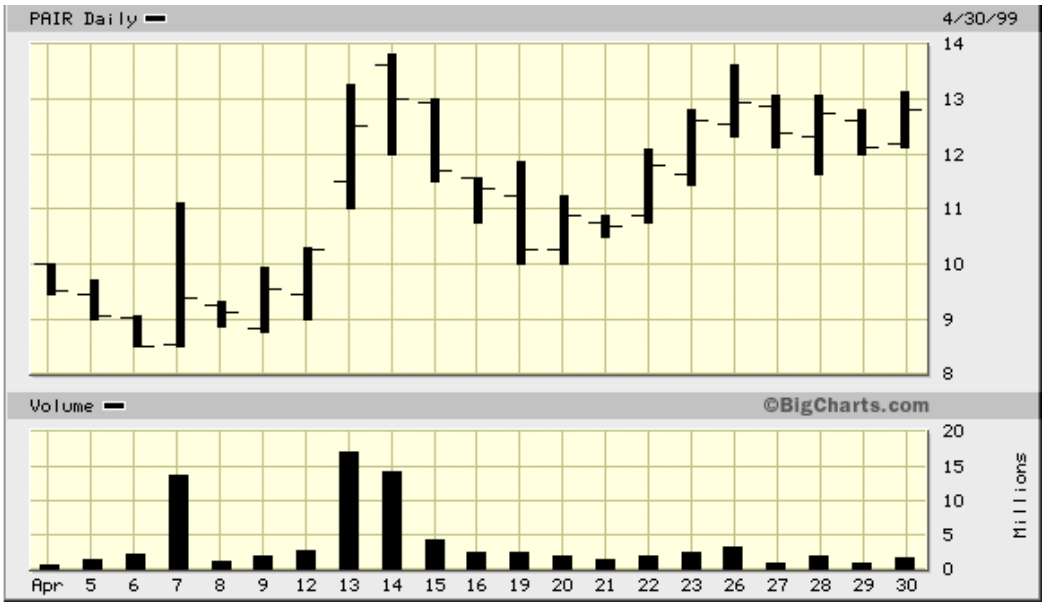
Can messages move a stock? Anecdotally, we see extraordinary events like the NEIP 106,000% jump. But is this evidence that far less malicious intent can move stock prices? Even unusual message traffic volumes have been shown to do this.

"Cheap Talk on the Web" is a formal academic analysis of message volume by Wysocki [1998]. It's based purely on traffic analysis, just the counting of messages. This is the earliest form of electronic intelligence gathering, dating back to World War II. Wysocki's key finding is that, after adjusting for earnings and dividend events, and market returns, the outlier events in message volume have statistically significant predictive value in forecasting subsequent excess return and subsequent volatility.

If messages can move markets, the modern rumormonger is going to be there. The task is made easier by the ability of the Internet manipulator to repeat or duplicate messages on multiple bulletin boards. The web has become the new prime venue for the old game of market manipulation. It's easy to see why. Consider Exhibit 1.

EXHIBIT 2

Daily Prices and Volume in PairGain Stock: April 1999



CYBER-MANIPULATIONS

Message board scams are entirely new—a pure Internet phenomenon. Scalability is much less of an issue, given the ability to post messages on multiple boards at one time only and to replicate those messages again and again. Hundreds of thousands of messages every day are posted on dozens of boards. Some of this is real information, and some are just scams, but they change the market.

There are hundreds of these cases: Raytheon, PairGain, Franklin, HealthSouth, COHO Energy, Ascend, and many others.

Fake News: PairGain Technologies and Aastorm Biosciences

A good example of message manipulation is PairGain Technologies, Inc., a telecommunications firm. In April 1999, an employee of PairGain posted a message on a Yahoo! bulletin board alleging that PairGain had agreed to be acquired. The message included a hyperlink to the supposed source of the rumor, a Bloomberg news announcement. Exhibit 2 shows what happened.

The announcement was a fake, as was the Bloomberg page, which was complete with phony advertisements. PairGain's stock price soared on the announcement. An investigation by the SEC led to a guilty plea by the employee, who received five years' probation.

In February 2000, hackers posted a fake message about a merger between Aastorm Biosciences Inc. (ASTM) and Gerno Corp that stated that the merger price would be $11.79 per share for ASTM. Shares of both companies soared on the phony news. Aastorm—which had traded at about $4—was bought in after-hours trading for up to $7.50 while Gerno jumped 26% to a 52-week high of $59.625 (see Exhibit 3). As the *Wall Street Journal* noted, "Securities regulators have expressed concern and frustration about the exploding use of the Internet to defraud investors" [2000, pp. C1, C20].

Pure Message Events

Pure message events are increasingly common. Consider the wild ride of Information Management Associates, an Internet shopping site. In August 1999, the stock was trading at about $4 when "Tokyo Joe" (since indicted) pushed the stock in a chat room.

One participant was quoted as saying: "Wait until the traders see IMA after lunch." Joe replied: "It will be $14 when you are back." IMA did in fact reach a high of $14 before falling significantly (Exhibit 4).

Note that this was a pure message event. No real news was announced by the company.

EXHIBIT 3

Daily Prices and Volume in Aastorm Stock: January 21–February 18, 2000

NEIP: A Heavy-Handed Example

NEI Webworld Inc. (NEIP) is another example. Three manipulators, recent graduates, ran up the price of the stock from 13 cents to more than $15 in *two* trading days. On Friday, November 12, the manipulators posted more than 500 fake messages using 50 different Web identities promoting shares of NEI Webworld, Inc., a bankrupt printing company. They alleged that NEI was an imminent takeover candidate (see Exhibit 5).

The *New York Times* noted:

> The case illustrates how easy it is to send stocks soaring by using the Internet…. Securities fraud has migrated to the Internet, regulators say, because stocks can be propelled there with little more than effusive talk and rosy predictions. Before the Web became stock-tip central, someone who wanted to manipulate a company's shares had to employ rooms full of stockbrokers flogging stocks to unsuspecting investors by telephone. Now an electronic message does the trick instantly **[Article, date, page reference]**.

Prosecutors lauded their ability to detect the fraud, despite its heavy-handed nature. Richard H. Walker, director of enforcement at the SEC, was quoted as saying:

> Let this serve as a warning to con men: if you use the Internet to manipulate our securities markets, we can and will find you. Though the perpetrators in the case went to great lengths to hide from us, we discovered them within a matter of days **[source?].**

It is far from clear, however, that the SEC or another agency could detect a more subtle manipulation in a more active stock.

Again, it's worth remembering that this is a pure message event. The enormous run-up in prices was driven solely by false items posted on various message boards by the manipulators.

Fast-trades.com

Fast-trades.com was a free site directed at day traders set up by a Georgetown University law student. The student took large positions in micro-cap stocks, and then promoted them as attractive buys on his site. Naive traders bid up the prices of the recommended stocks, and the student sold at the peak at a large profit, just before the inevitable collapse.

Although the site did reveal that its operators might trade stocks, the SEC found the disclaimer:

EXHIBIT 4

Daily Prices and Volume in Information Management Associates Stock: March 1999–March 2000

EXHIBIT 5

Daily Prices and Volume in NEI Webworld Stock: February 1999–January 2000

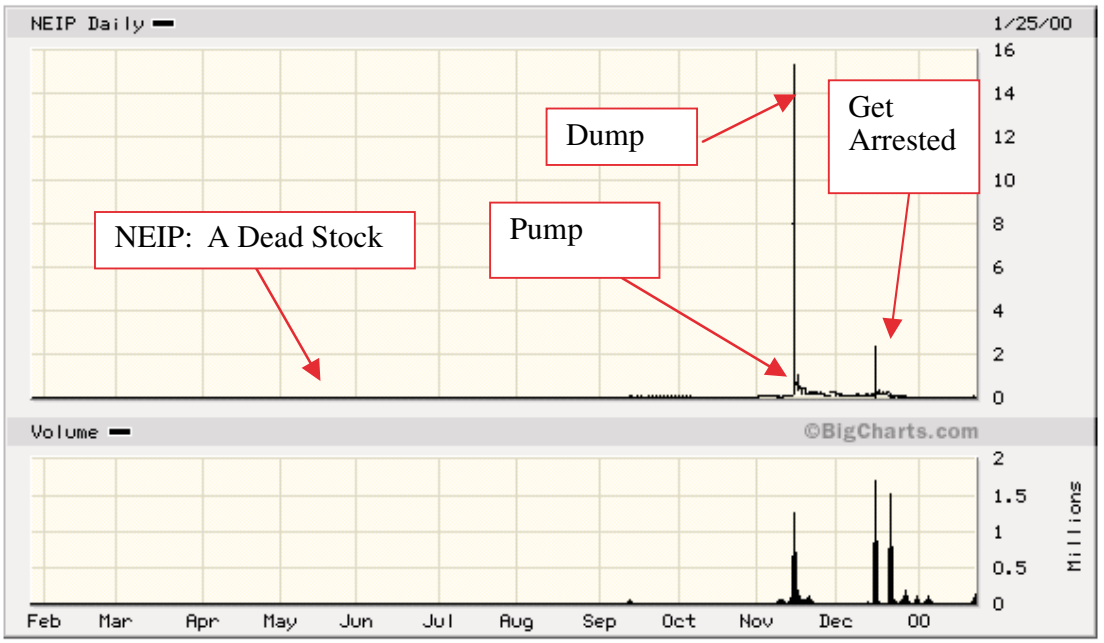


EXHIBIT 6

Fake Lucent Announcement

Subject: **LUCENT RELEASES EARNINGS WARNING!DAMN!**
Poster: **hot_like_wasabe**
Posted: 2000-03-22 18:57:00

Msg: 88257 of 88478
Company Press Release
SOURCE: Lucent Technologies
Lucent Technologies Comments on Expectations for Second Fiscal Quarter 2000 Earnings

MURRAY HILL, N.J., March 22 /PRNewswire/ -- Lucent Technologies (NYSE: LU - news) said today that, based on preliminary estimates, it expects operating results for its second fiscal quarter of 2000 to be lower than analysts' estimates. The company expects to report revenues in the range of $9.4 to $9.5 billion for the quarter, which will end Mar. 31, 2000, flat with the prior year period(1).

EXHIBIT 7

Daily Prices and Volume in Lucent Technologies Stock: February 2000–April 2000

materially misleading as to the real trading intent of the participants…. If fast-trades had accurately disclosed their trading intentions, subscribers would have been able to deduce that the only reason Colt offered his "free" service was so he could further influence the market price movement initiated by his purchase of the recommended stock just before the announcement **[source, date].**

EXHIBIT 8
"Misdirected" E-Mail

From: brakrchi@att.net [mailto:brakrchi@att.net]
Sent: Saturday, February 19, 2000 9:56 PM
To: brakrchi@home.com
Subject: ISFB is Climbing !!!

James,
This is ISFB info and the projection, that you wanted. I think this is definitly the big one we wanted.
KEEP THIS UNDER YOUR HAT...for now...OK?
Call me well go over it all.
M.Hilton
http://moneycentral.msn.com/scripts/webquote.dll?iPage=lqd&Symbol=isfb

INTERNET SOLUTIONS FOR BUSINESS OTCBB:ISFB
INVESTMENT SUMMARY
Current price: $6.00
Shares outstanding: 14,729,000
Public Float: 1,100,000
NASD Symbol:ISFB
Short term target: $12-15

1. INTERNET SOLUTIONS COMPANY WITH ESTABLISHED REVENUE BASE
2. STRONG MANAGEMENT AND TECHNICAL TEAM
3. MAJOR BLUE CHIP CLIENTS
4. TECHNICAL LEADER WITH 60 MAN-YEARS OF PRODUCT DEVELOPMENT

It's Not Just Micro-Caps

In March 2000, a day trader posted a fake announcement regarding the earnings of Lucent Technologies, reproduced in Exhibit 6. The effect was dramatic. Over $7 billion of market capitalization evaporated within a few hours, all driven by a dozen messages repeating the false rumor. It did not matter that the perpetrator was eventually caught—the damage was done, as is clear in Exhibit 7.

WHERE ARE WE HEADED?

What's going on here is a profound change in the information food chain. Traders are blindsided and left vulnerable more often. The net disseminates information very rapidly, to millions of people who can act on it in a hurry. Any particular individual is concerned with only a few stocks. But collectively, they are interested in all of them, just like institutions.

These examples are just the ones that have been detected. At this very moment, there are undoubtedly other manipulations under way in even more creative ways to promulgate cyber-sleaze. One might imagine a manipulator systematically altering the whisper number forecasts for a stock with a view toward moving the stock price.

Another example of cyber-sleaze is the misdirected e-mail. An example is the sending of some apparently confidential e-mail to potential investors in the hopes they react. Consider the message in Exhibit 8, complete with typo, which actually came to one of us while we were writing this article.

While the stock exists, as does the URL, the author of the e-mail, despite the return address, remains fully anonymous, and it is highly unlikely that the message really was sent by accident. Indeed, a recent check of the stock showed it trading below the price listed on the e-mail and well below the "target" of $12-$15.

As history shows, there is nothing new about the

nature of manipulations. Pump and dump never seems to go out of style. What has changed now is the speed at which rumors can spread through the Internet and the fast response of stock prices with the presence of large numbers of day traders who respond to news on Internet message boards. Scalability is no longer a problem. The result is going to be more and more sophisticated market manipulation.

ENDNOTES

[1]Corners and short squeezes including various railroad manipulations by Cornelius Vanderbilt and others at the turn of the 20th century represent another form of manipulation through scarcity as opposed to redirecting people's beliefs. We focus on manipulations based on false information of one type or another.

[2]See Morgenson [1999].

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