

# A Study Of The Impact Of Filing Of IPO Class-Action Lawsuits On Stockholder Wealth

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## **Abstract**

*Companies undertaking initial public offering, in order to heighten public interest, sometimes disclose overly optimistic details and/or fail to disclose adverse information, in violation of the Securities and Exchange Commission's Rule 10(b)-5. This study examines the stock market reaction to the 71 Initial Public Offerings (IPO)-related lawsuits, filed in the period 1991-98. We find that the filing of these lawsuits is associated with a significant loss of shareholder wealth. This study also reveals that firms that misrepresent their future prospects and fail to disclose bad news experience the most significant decline in equity value*

## **1.0 Introduction and Objectives**

### *1.1 Case History*

To heighten investor interest, it is not unusual for a company undertaking initial public offering to put itself in a positive light. Sometimes, however, it crosses the line of what is normally considered as promotion to fraud, when it discloses overly optimistic information that cannot be substantiated or when it fails to disclose adverse information. Investors who rely on this information are hurt, and a number of these shareholders bring class-action lawsuit under the Securities and Exchange Commission's Rule 10(b)-5.

On December 29, 1997, Oracle Corp., one of the largest software companies in the world, announced that it has been served with a securities class action lawsuit, filed against it and its chief operating officer and chief financial officer on December 18, 1997 in San Mateo County Superior Court. The complaint alleges that in its initial public offering (IPO) literature, the company provided misleading information, causing investors to overpay for the company's stock.

The case against Oracle, one of many filed against newly public companies each year in the United States, is brought under Rule 10(b)-5, adopted by the Securities and Exchange Commission (SEC) in 1942.<sup>2</sup> The rule makes it unlawful for any person "to make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading."

### *1.2 The Law*

The intent of Rule 10(b)-5 is to protect shareholders against corporations that, through misstating or omitting material information, cause significant losses in wealth because the market doesn't have the accurate information to properly value the stocks. The former Securities and Exchange Commission Chairman Richard C. Breeden echoes the beneficial effect of 10(b)-5 on corporate governance this way: "By penalizing those who deliberately lie, falsify financial information, and commit other intentional acts of fraud, private actions perform a critical role in preserving the integrity of our securities markets."

### *1.3 The Controversy*

Actually, the law is not as straightforward as it appears. As it is with many laws in this country, this one is subject to possible abuse. One of these abuses, charged by an increasingly vocal group of critics, is that it is used as an instrument to line the pockets of plaintiff attorneys. A significant drop in share price is often reason enough to launch a lawsuit, knowing that a majority of firms will opt for an out-of-court settlement to avoid being embroiled in a protracted court fight.

This view is shared by a number of academic researchers. Alexander (1991), for instance, claims that securities class-action system seems to be operating as “a sort of tax from companies that suffer large market losses” and a “no-fault insurance against market losses.” Dunbar (1992), in examining the recent trends in securities litigation, provides indirect support for the argument of abusive use of the rule when he concludes that the courts have become more active in dismissing spurious claims.

Not unexpectedly, many corporate executives are some of the most vocal of these critics. They argue that top management must be given considerable latitude to run the company, even to make mistakes sometimes, so that it can advance the interests of its constituent—the shareholders—without having the threat of lawsuits constraining its every decision. Beside the obvious costs of having to expend valuable resources<sup>3</sup>—in the form of money, time, and creative talents—to defend them, these lawsuits are costly in a number of other respects. Under the threat of lawsuits, executives become risk averse and more likely to forego risky, but promising, projects. They are also likely to be less open with the investing public, disseminating less information for fear that the message will come back to haunt them later. Excessive litigation also may reduce the willingness of able individuals to serve as corporate directors. [See Baruch (1995), Breeden (1991), Francis, Philbrick, and Schipper (1994)].

### *1.4 Existing Research*

Given the controversy surrounding Rule 10(b)-5 and its effect on the corporate landscape, researchers have been poring over actual court cases to find empirical support for or against the rule. As expected, a significant portion of these studies has come from the legal scholars. One of the often-cited studies is by Janet Alexander (1991), who surveyed lawsuits involving computer and computer-related companies and discovered that defendants had “nearly overwhelming incentives to avoid trial,” and most of the cases settled for roughly 25 percent of the damage claimed. This tendency to settle is modeled by Bebchuk (1984), who finds that the likelihood of settlement is shaped by the amount at stake, the cost of litigation, and the nature of the parties’ information.

Accounting researchers have made considerable inroads into the investigation of class-action lawsuits in recent years. Their research projects, for the most part, have focused on the effect disclosure, or the lack thereof, has on the filing of lawsuits. Skinner (1994) found that the announcement of large earnings shortfalls increases the likelihood of securities litigation. Kellogg (1984) investigated 56 lawsuits stemming from failure to disclose material information in the financial statements. Francis, Philbrick, and Schipper (1994) provided descriptive evidence about companies’ disclosure strategies with respect to adverse earnings announcements and the filing of class-action lawsuits. Lev (1995) reported that targets of class-action lawsuits communicated more extensively with investors, issued more optimistic announcements, but released fewer warnings about upcoming earnings shortfalls than comparable companies.

### *1.5 Why This Project is Important?*

In finance, litigation-related research has focused on stock market reaction to the filing and settlement. Bhagat, Brickley, and Coles (1994) examine the effect of inter-firm lawsuits on the equity value of the parties involved. They find the filing of lawsuits results in a 1% decline in the combined equity value, about \$21 million. When firms settle the litigation, they experience a joint wealth gain. In a related paper, Bhagat, Brickley, and Coles (1998) examine legal disputes when at least one side, plaintiff or defendant, is a corporation. They find that

defendants experience significant declines in share prices upon the filing of the suit. They uncover no evidence to support plaintiff incentive to sue, given that the settlement wealth effect is much smaller.

With respect to IPOs, Drake and Vetsuypens (1993) find that underpricing, a well-documented phenomenon, is motivated in part by the desire to avoid shareholder lawsuit and to limit exposure when a lawsuit is filed. This paper contains two points relevant to our study: First, firms undergoing IPO are concerned about what they say to the public in their communications, such as registration statements, prospectus, press releases, and presentations at road shows. Second, when harmed, shareholders will and do file class-action lawsuits alleging disclosure related abuses.

While the Drake and Vetsuypens (1983) study relates IPO underpricing to a desire to avoid shareholder litigation, it does not, however, examine what happens to shareholder value when such litigation is filed. Our present paper also expands on the Bhagat, Brickley, and Coles (1998) study, which finds that in SEC-type litigation (i.e., lawsuits alleging violation against disclosure rules) the defendants experience significant wealth losses. They did not separate the sample according to IPO and non-IPO firms. We think this separation may provides further insight, given that firms undergoing IPO, more so than seasoned corporations, are in need to “sell” themselves. Furthermore, the price run-up, and therefore the subsequent price decline when the true picture is revealed, tends to be more pronounced in IPO cases.

The Bhagat, Brickley, and Coles (1998) study did not examine the nature of the shareholder complaints. In the present study, these complaints—failure to disclose adverse information, and exaggerating the positives—will be examined to see if they have any explanatory power on the litigation announcement effect.

### *1.6 Summary of Results*

We examine 71 class-action lawsuits filed in the 1991-98 period and find significant negative excess returns around the filing date. For day  $t = -1$  the abnormal return is -2.33%, which is significant at the 1% level, and for day=0, the abnormal return is -2.10%, which is also significant at the 1% level also.

Rule 10(b)-5 addresses two distinct aspects of corporate disclosure. The intent of the first is to discourage companies from making misleading information about the company’s prospects. It reasons that if companies are allowed to make exaggerated and unsubstantiated claims, stock prices would be artificially inflated. And when the companies are found to be unable to live up to these claims, which they invariably don't, stock prices collapse, causing significant losses to the shareholders.

The other part of Rule 10(b)-5 is designed to prevent companies from not disclosing bad news as soon as it becomes available and thus allowing their stocks to be traded at the now inflated levels. Stock prices eventually plunge when the bad news is released to the general public, resulting in significant declines in shareholder wealth.

To examine if there are any valuation differences between the two causes of the lawsuit, we separate the total sample into two sub-samples and examine the wealth effects for each group. Our results indicate that there is a significant difference in the way the stock market reacts to the filing of class-action lawsuits. The false-statement sub-sample, which contains firms accused of making misleading and overly optimistic statements in their IPO literature, shows significant declines in stock prices over a 10-day period before the filing date. Similarly, the failure-to-disclose sub-sample that is comprised of firms charged with not publishing adverse information in their prospectus, register negative significant abnormal returns on day  $-1$ . The both sub-sample contains companies that have allegedly made in their going-public literature statements that are overly optimistic and neglecting to disclose negative information. The results indicate that the filing-day announcement effect is the most negative. Unfortunately, this sample contains just four firms, making the interpretation of the results difficult. The rest of the paper is organized as follows. Section II discusses the data collection procedure and research methodology. Section III contains a detailed results and discussion of the results. Section IV summarizes the central thesis of the paper and provides some concluding comments about the findings.

## 2.0 Project Description

### 2.1 Data Selection and Description

Firms that have been named as targets in the class-action lawsuits in the year 1991-1998 will form the sample for this investigation. The identities of these firms, the lawsuit filing date are provided by Investors Research Bureau, Inc., the publisher of *Securities Class Action Alert*. Information needed for sample statistics were retrieved from COMPUSTAT.

To be included in the sample, a candidate firm has to meet the following selection criteria: (1) the candidate firm's common stock has to be traded on the New York Stock Exchange or the American Stock Exchange, or the NASDAQ; (2) stock return data have to be available for the 270-day period preceding the earnings announcement date, the day of the announcement itself, and the twenty-day period following the announcement date; and (3) to eliminate the potential for confounding, there must have been no contemporaneous announcements that accompany the earnings announcement. The selection criteria yielded 71 lawsuits. The table indicates that, of the total of 71 lawsuits, 43, or 60.5 percent, are charged with misrepresenting company prospects and 33, or 46.5 percent, are accused of failure to disclose negative information. Panel B of Table 1 contains the summary statistics of the total sample and the two sub-samples. Statistics on the total sample indicate that the firms involved in Rule 10(b)-5 litigation are relatively large, with average total assets of \$1.18 billion, annual sales of \$1.42 billion, and average market capitalization in excess of \$0.88 billion.

**Table 1: Analysis of IPO-Related Rule 10(B)-5 Class-Action Lawsuits**

The following panels show the results of a study of the impact of 10(b)-5 lawsuits on the equity value of the target firms. These lawsuits allege that the target firms provide misleading information or fail to disclose adverse information in their IPO literature. The sample period is 1991-98.

*Panel A: Frequency Distribution: Number of Lawsuits*

Year	Total Sample	False-statement sub-sample	Failure-to-disclose sub-sample
1991	3	2	1
1992	5	2	3
1993	6	2	5
1994	21	10	12
1995	14	8	6
1996	7	5	4
1997	10	10	1
1998	5	4	1
Total:	71	43	33

*Panel B: Selected Data on the total sample and two sub-samples (\$ Millions)*

Total Sample (n=62)	Mean	Median	Maximum	Minimum
Total assets	118.1	51.5	1,551.8	1.9
Annual revenues	142.2	67.2	2,089.8	0.0
Market capitalization	87.8	47.4	1,230.4	1.4
Under pricing (%)				

**2.2 Empirical Methodology**

The stock price impact of the filing of class-action lawsuits is estimated using the event study methodology based on the market model. The stock return information is gathered from tapes obtained from the University of Chicago’s Center of Research on Security Prices (CRSP). The market model assumes that there is a linear relationship between a stock's return and the return on a market index. Based on this model, the daily abnormal return,  $AR_{it}$ , for each sample firm  $i$  on each event day  $t$  during the period of interest is estimated as

$$AR_{it} = R_{it} - (\alpha_i + \beta_i R_{mt})$$

Where,

- $R_{it}$  = Rate of return to security  $i$  on event day  $t$ ,
- $R_{mt}$  = Rate of return on Value Weighted NASDAQ Index on event day  $t$ , and
- $\alpha_i, \beta_i$  = Ordinary least-squares estimates of the market model parameters. The parameters are estimated over the 250-day period beginning  $t=-271$  through  $t=-21$ , where  $t=0$  is the short-selling day

The abnormal returns,  $AR_{it}$ , are averaged across  $N$  securities on each event day to form an average abnormal return over the interval  $t=-10$  to  $10$ ,

$$AAR_t = \frac{1}{N} \sum_{i=1}^N AR_{it}$$

The expected value of  $AAR_t$  is zero in the absence of abnormal stock price behavior. To test the significance of  $AAR_t$ , the following  $t$ -statistic will be used:

$$t = \frac{AAR_t}{S(AAR_t) / \sqrt{N}}$$

Where,

- $S(AAR_t)$  = the estimated standard deviation of the cross-sectional average abnormal returns for day  $t$ , and
- $N$  = the number of firms in the sample

To determine the cumulative effect, the  $AARs$  are accumulated over various sub periods of  $k$  days from  $t$  to  $t+k$  to form cumulative average abnormal returns ( $CAR$ ). The expected  $CAR$  should be zero unless firm-specific news influences the stock returns. The significance of  $CAR_{t,t+k}$  is estimated using the test statistic:

$$t = \frac{CAR_{t,t+k}}{S(CAR_{t,t+k}) / \sqrt{N}}$$

Where,

$$S(CAR_{t,t+k}) = \sqrt{\frac{1}{N} \sum_{i=1}^N (AR_{it} - \bar{AR}_t)^2 + \frac{1}{N} \sum_{i=1}^N (AR_{i,t+k} - \bar{AR}_{t+k})^2}$$

The t-statistic is distributed Student-t with 249 degrees of freedom if the average abnormal returns (AAR) are normally distributed and independent through time.

### 3.0 Results

#### 3.1 Wealth Effects of Class-Action Lawsuits Filing

The results of the event-study methodology for the filing date are summarized in

**Table 2: Market Reaction to the Filing of IPO-Related Rule 10 (b)-5 Class-Action Lawsuits**

The average abnormal returns (AARs) and cumulative average abnormal returns (CARs) for IPO firms that subsequently become the targets of Rule 10(b)-5 class-action lawsuits. The sample contains 71 companies and covers the period 1991-1998. Event day 0 is the day of the filing of lawsuit.

*Panel A*

Day	AAR	t-statistics
-5	-0.90%	-1.08
-4	0.31%	0.37
-3	0.21%	0.25
-2	-1.32%	-1.59
-1	-2.33%	-2.80**
0	-2.10%	-2.52**
+1	3.91%	4.69***
+2	1.24%	1.49
+3	-0.79%	-0.95
+4	-0.43%	-0.52
+5	0.28%	0.33

*Panel B*

Period	CAR	t-statistics
-10 to -1	-7.97%	-3.03**
-5 to -1	-4.03%	-2.17*
-1 to 0	-4.42%	-3.76***
+2 to +5	0.30%	0.18
+1 to +10	3.45%	1.31

\* Significant at the 0.1 level

\*\* Significant at the 0.05 level

\*\*\* Significant at the 0.01 level

Table 2, which reports average abnormal returns (AARs) and the cumulative average returns (CARs) cumulated over different windows surrounding the class-action filing date. The first part of the table Panel A, reports the AARs and the second part Panel B reports the CARs. The AAR for day=-1 is -2.33% significant at the 1% level, and the AAR for the day=0 announcement day is -2.10% significant at 1% level as well. Thus, filing of the class action lawsuit leads to significant wealth losses on the pre- and announcement day of the lawsuit. The CARs for the period prior to the filing announcement indicate significant negative abnormal returns with a loss of -7.97% for the window -10 to -1, significant at the 1% level, with the shorter windows of -5 to -1, and -1 to 0 showing losses of -4.03% and -4.42% respectively significant at the 1% level as well. The results from the total sample indicate that these firms experience significant negative returns for days before and on the day of class action lawsuit filing.

## 3.2 Wealth Effects by False-Statement and Failure-to-Disclose Sub-Samples

When the entire sample is separated into two sub-samples according to the nature of the class-action complaint, our results show significant differences between the two sub-samples. These results appear in Table 3, with ARs in Panel A and CARs in

**Table 3: Market Reaction to the Filing of IPO-10(b)-5 Class Action Lawsuits, with Total Sample Segregated According to the Nature of the Complaint**

The average abnormal returns (AARs) and cumulative average abnormal returns (CARs) for firms that are the targets of Rule 10(b)-5 class-action lawsuits in the period 1991-1998. Event day 0 is the day of the filing of lawsuit.

*Panel A: Daily Average Abnormal Returns*

Day	False-statement sub-sample (n = 33)		Failure-to-disclose sub-sample (n = 26)		Both (n = 4)	
	AAR	t-statistics	AAR	t-statistics	AAR	t-statistics
-5	-1.37%	-1.138	-0.23%	-0.20	2.30%	0.78
-4	-1.41%	-1.42	1.78%	1.53	-0.73%	-0.25
-3	-0.10%	-0.10	-0.57%	-0.49	-1.03%	-0.35
-2	-3.15%	-3.18***	-1.10%	-0.94	-14.14%	-4.82***
-1	0.43%	.044	-3.86%	-3.31***	11.72%	3.99***
0	-3.47%	-3.50***	-0.14%	-0.12	-0.17%	-0.06
+1	5.64%	5.69***	0.15%	0.13	-2.44%	-0.83
+2	1.08%	1.09	0.48%	0.41	-2.22%	-0.76
+3	-0.43%	-0.43	-1.83%	-1.57	-1.81%	-0.62
+4	0.77%	0.77	-2.09%	-1.79*	-1.50%	-0.51
+5	-0.02%	-0.02	0.62%	0.53	0.05%	0.02

*Panel B: Cumulative Average Abnormal Returns*

Event day	False-statement sub-sample (n = 33)		Failure-to-disclose sub-sample (n = 26)		Both (n = 4)	
	CAR	t-statistic	CAR	t-statistic	CAR	t-statistic
-10 to -1	-12.80%	-4.09***	-5.79%	-1.57	-7.61%	-0.82
-5 to -1	-5.59%	-2.52**	-3.97%	-1.53	-1.88%	-0.29
-1 to 0	-3.03%	-2.16*	-4.00%	-2.43**	11.54%	2.78*
+2 to +5	1.39%	0.70	-2.82%	-1.21	-5.47%	-0.93
+1 to +10	5.30%	1.69*	-3.12%	-0.85	-5.68%	-0.61

\* Significant at the 0.1 level

\*\* Significant at the 0.05 level\*\*\* Significant at the 0.01 level

Panel B. For the sub-sample that contains firms charged with making exaggerated claims about company prospects, the false-statement sub-sample, the day =0 announcement day ARs is -3.47% significant at 1% level; surprisingly though, the day=1 ARs for that group is 5.64% significant at the 1% level as well. The CARs for the false-statement sub-sample for -10 to -1 is -12.80% significant at 1% level, and the CARs for -5 to -1 is -5.59% also significant at the 1% level.

The failure to disclose sub-sample shows an ARs of -3.86% on day=-1 significant at the 1% level. For firms that are accused of not releasing bad news—the failure-to-disclose sub-sample—cumulative excess returns are found to be different from those of the false-statement sub-sample. These firms experience significant negative CARs in the -1 to -0 period with a loss of -4.00 significant at the 1% level. Based on CARs results, it seems that making misleading and exaggerated statements about company prospects apparently is viewed as a more serious

problem, perhaps because they tend to inflate stock prices. What's more, there is a suggestion of stock price manipulation, an illegal practice that severely undermines the confidence of shareholders. Failure to disclose bad news in a timely manner, on the other hand, is viewed as a less serious problem by the market, because there is no attempt by company officials to inflate stock prices. The argument here is simply one of timing, and it is often difficult to ascertain what constitute timely release of information.

#### **4.0 Summary and Conclusions**

The number of securities class-action lawsuits filed against corporations alleging material misrepresentations and omissions of facts has increased dramatically. Just within the past few years, the total amount awarded has approached \$1.5 billion annually. Proponents of the law, known as Rule 10(b)-5, maintain that it protects shareholders against fraudulent activities, such as insider trading, artificial inflation of stock prices, by corporate officers and directors. But increasingly, critics, most notably those alarmed by the prevalence of the frivolous litigation, have charged that the law has been abused, serving as a convenient vehicle to enrich plaintiff lawyers. Corporations, not unexpectedly, have joined forces with these critics in decrying this practice, citing the many costs involved in defending merit-less lawsuits. Beside the obvious costs of having to expend valuable resources—in terms of money, time, and creative talents—to defend them, these lawsuits diminish the company's willingness to take risks.

Given these opposing views, the effectiveness of Rule 10(b)-5 has remained largely open question. Legal and accounting scholars have so far provided the bulk of the existing literature on this issue. A number of legal researchers survey past court cases to draw conclusions about the effectiveness of the law. Accounting scholars, for the most part, focus on the disclosure of financial information. Despite its importance, finance researchers have studied these lawsuits only tangentially, through its research on disclosure of corporate events, such as dividend policy, capital structure, and mergers and acquisitions. To date, none has taken a direct look at the issue of 10(b)-5 lawsuits. This project seeks to fill this gap, by examining the stock market response to the filing of lawsuits. Given the stock market is an accurate barometer of investor sentiments, how the stock price of the target company respond to the initiation of class-action litigation will help shed further light on this controversial issue.

To measure the stock market reaction to the filing of these class-action lawsuits, we collected 71 IPO class Action cases filed in the 1991-98 period. A study of the entire sample indicates that, on the filing date and over a 10-day window surrounding the filing date, there were significant negative abnormal returns.

When the total sample is segregated into two sub-samples according to the nature of the class-action complaint, we were able to find significant difference between the two. The false-statement sub-sample, consisting of firms accused of making misleading statements about company prospects, experienced significantly larger losses in share value than the failure-to-disclose sub-sample, which contains firms charged with not making public in a timely fashion adverse firm-specific information.

Given the proliferation of class-action lawsuits and the considerable damage claims they entail, attorneys, business commentators, corporate executives, and lawmakers have for many years debated passionately about whether the lawsuits advance or diminish the interests of the country and those of the various stakeholders. By examining this important issue from the finance perspective, we hope to provide some insights into this ongoing debate. Longer term, we hope that this project may pave the way for further research by other finance researchers, who may extent the study to other aspects of securities litigation.

#### **5.0 Endnotes**

1. This research was supported by a 2003 Summer Research Grant of the Miller College of Business, Ball State University, Muncie, IN 47306.
2. The present study is restricted to Rule 10(b)-5 lawsuits. Other types of lawsuits filed against corporations and their officers and directors include Section 11 of the Securities Act of 1933, involving public offering



- claims, and Section 10(b) of the Securities Exchange Act of 1934, which deals with fraud-on-the-market claims.
3. Cutler and Summers (1988) found that the Texaco-Pennzoil litigation resulted in a loss of over \$3 billion in combined value of both the companies.

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**Notes**