DOES THE STOCK MARKET PUNISH CORPORATE MALFEASANCE? A CASE STUDY OF CITIGROUP

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Abstract

This paper examines how well the market anticipates regulatory sanction. We look at key dates of SEC, NASD, FTC, Congressional and foreign investigations and their subsequent resolution. Our event study confirms that the settlements provide little new information to the market. In six major case groupings, we find highly accurate predictions from market capitalization changes of settlements and associated private litigation.

Keywords: SEC; subpoena; probe; settlement; event study

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1. Introduction

There has been a growing interest in the question of corporate governance. Corporate frauds at Enron and Worldcom, trading abuses in the mutual fund industry, and conflicts of interest between analysts and investment bankers have fueled interest in civil and criminal remedies to better protect the interests of investors.

This paper is a case study of the actions of a major participant in each of the three areas mentioned: Citigroup. Citigroup is a global financial colossus with a December 2005 market capitalization of almost $250 billion, 2004 earnings of almost $17 billion, 287, 000 employees, and almost $1.5 trillion dollars in assets (see endnote 1). Citi's sheer size, business ties to Enron and Worldcom, major presence in the mutual fund business through Salomon Smith Barney, and $21.7 billion dollars in global investment banking revenues (see endnote 2) make it a prime candidate for our study. Enforcement actions have had a significant effect on the bottom line though. In 2004 alone, Citigroup paid $4.95 billion to settle litigation issues. This nearly equaled the $5.39 billion profit earned by the investment banking division.

This paper focuses only on cases in which the government or regulatory bodies played a leading role. We group Citigroup's corporate malfeasance during the 2001-2004 into six categories: (A) Global analyst settlement-Worldcom; (B) Enron-Dynegy; (C) FTC consumer lending; (D) Mutual fund trading abuses; (E) Asset management; (F) European bond trading. These cases are either fraud related, as in the research analyst case, or product liability related, as in Citigroup's role in masking accounting fraud at Enron. We provide further detail in Section 3 about the news flow and settlement of the cases. There were still 5 unsettled cases as of December 2005.

This paper seeks to determine whether and when government oversight effects the real bottom line: the company's stock price. Through this case study, we hope to determine if the stock price reacts when cases are announced or when they are settled. If the former, we also seek to answer the question of whether the market correctly anticipated the scale and scope of fines and civil penalties paid by the company.

2. Related Literature

The literature has typically found that the company stock reacts negatively to the announcement of private litigation. Prince and Rubin (2002) found that in the automobile and pharmaceutical industries, the firm suffered significant negative returns surrounding the announcement of lawsuits. Ferris and Pritchard (2001) found negative stock price reactions following the announcement of fraud litigations. Griffin, Grunfest and Perino (2003) also found that the stock reacted negatively to the notification of the security fraud litigation, with effects that persist for several weeks.

The date of settlement seems to provide little news to the market. Ferris and Pritchard (2001) found no statistically significant impact on stock returns once cases are settled. It is worth noting that none of the cases we examine went to trial. This seems consistent with Karpoff and Lott (1999) who note that pre-trial settlements are generally smaller than the damages awards by a jury.

Prince and Rubin also looked at the question of how well the stock market predicted the costs of litigation. They found that the losses on the firm value were approximately equal to the upper bound of the direct losses causes by the defective products.

3. Identifying News Events

We researched Citigroup's litigation troubles using Lexis-Nexis in the "Business News" category. Our sources were under the heading "Business and Finance. Our keywords were, under "headline, lead paragraph," "Citigroup" and either "probe" or "subpoena." Our focus period for possible regulatory action was from January 2001 to December 2004 with settlement all the way to December 2005.

There were 19 matches to these keywords in 2001, 409 matches in 2002, and 133 matches in 2003 and 2004. Many of these were multiple reports of the same event from different sources. We were able to identify 79 events in the four year period.

Table 1. List of Citigroup events

Date	News	Excess Ret.	ΔMkt. Cap	Agent	Group
2-Mar-01	Senate probes money laundering	-0.84%	-2,054.11	Congress	NS
6-Mar-01	FTC sues First Associates	-0.36%	-889.70	FTC	C
11-Apr-02	Salomon subpoenaed by NY state in broker disclosure probe	-1.71%	-4,127.21	Spitzer	A
22-Apr-02	SEC Enron probe	-0.85%	-1,983.94	SEC	B
25-Apr-02	Spitzer on Salomon	-1.05%	-2,392.52	Spitzer	A
26-Apr-02	SEC probe into Citigroup on analysts	-1.15%	-2,546.95	SEC	A
31-May-02	SEC subpoenas Citigroup on Dynegy	-0.58%	-1,289.34	SEC	B
3-Jul-02	Manhattan District Attorney targets Citigroup on Enron	-1.61%	-3,076.28	Manhattan DA	B
22-Jul-02	NASD on Citigroup's Winstar recommendations	-7.79%	-12,843.92	NASD	A
23-Jul-02	Congress on Enron's Citigroup involvement	-12.77%	-17,750.30	Congress	B
13-Aug-02	Congress serves subpoena on Citigroup	-0.85%	-1,453.03	Congress	A
23-Aug-02	Spitzer on ATT recommendation	-1.20%	-2,090.88	Spitzer	A
30-Aug-02	Citigroup faces 2nd subpoena in IPO probe	0.02%	28.28	Congress	A
10-Sep-02	SEC's Wells notices on Enron	-1.29%	-2,011.79	SEC	B
13-Nov-02	NY probe unveils new Grubman e-mails	-3.79%	-6,714.77	Spitzer	A
9-Dec-02	Levin claims Citigroup helped Enron 'deceive' investors	-1.59%	-2,901.63	Congress	B
25-Nov-03	Federal prosecutors investigating Citigroup's asset management	0.02%	50.54	SEC	E
13-Jan-04	Parmalat probe	-0.04%	-108.65	Italy	NS
1-Mar-04	SEC subpoenaed Solomon mutual fund	-0.63%	-1,630.54	SEC	D
6-May-04	SEC probes Citigroup's Argentina accounting	-1.47%	-3,592.13	SEC	NS
20-Jul-04	Citigroup faced SEC probe in closed end fund/transfer Agency	-0.61%	-1,390.11	SEC	D
18-Aug-04	FSA probes Citigroup 'unusual' bond activity:	-0.22%	-527.63	U.K.	F
16-Sep-04	Citigroup faces SEC bond probe	0.01%	30.64	SEC	NS
19-Oct-04	NYAG Spitzer's widening probe into the insurance industry	-0.56%	-1,261.89	Spitzer	NS
	Averages	-1.70%	-3,021.99		

We filtered these results further to isolate the first mention of a government action and dropped cases against individuals rather than the company. There are 24 events that met our criteria after this final filtering which we grouped into 6 categories: (A)-(F). Our complete list is in Table 1.

3.1 Global research analyst case

On Dec. 10, 2001, New York State Attorney General (NYAG) Eliot Spitzer started an investigation into investment banking recommendations at Merrill Lynch. On April 11, 2002, Spitzer expanded his investigations into 6 more investment banks, including Citigroup. On April 25, 2002, Spitzer subpoenaed Citigroup's investment arm Salomon for its analyst Jack Grubman's research reports on Worldcom and other telecommunications companies. On April 26, 2002, the Securities and Exchange Commission (SEC) joined Spitzer's investigations. On July 22, 2002, the National Association of Security Dealers (NASD) entered the fray, citing Salomon's research on Winstar.

The Congress served a subpoena on Citigroup on August 13, 2002 and issued additional subpoenas on August 30, 2002. On August 23, 2002, Spitzer highlighted the now infamous case (see endnote 3) of ATT and turned the spotlight on CEO Sandy Weill. On

November 13, 2002, Spitzer found an e-mail containing the smoking gun.

The NASD settled the Winstar case first on September 24, 2002 with a civil fine of $5 million. The SEC, NASD, New York Stock Exchange (NYSE) and NYAG Spitzer reached an official settlement

with 10 firms on April 28, 2003 of $1.4 billion. Citigroup received the largest fine, $400 million for fraudulent research reports and preferential grants (see endnote 4) of initial public offerings (IPO). The settlement called for more physical separation between research and investment banking, restitution to stockholders, and funding for independent research and investor education. Jack Grubman, Salomon's star telecommunications analyst, was also punished individually as part of the settlement, but we do not include his personal fine of $15 million along with Citigroup's. The far bigger cost to Citigroup came from private lawsuits involving the Worldcom case. On May 10, 2004, Citigroup agreed to pay Worldcom stock and bond holders $2.65 billion.

3.2 Enron-Dynegy

Although Enron filed for Chapter 11 bankruptcy protection on Dec. 2, 2001, the SEC did not extended its' investigation to Citigroup until April 22, 2002. It then issued a subpoena against Citigroup on May 31, 2002 for evidence relating to Dynegy, a rival and later suitor of Enron. On July 23, 2002, Citigroup stock plummeted −16% when it was forced to defend its' investment banking dealings with Enron during a Senate hearing.

On Sept. 10, 2002, the SEC sent a Wells notice to Citigroup, to inform them of possible civil actions relating to Enron. When Michigan Senator Carl Levin said on December 9, 2002 that Citigroup helped "deceive" Enron investors, Citigroup stock lost another −3.75%. On July 28, 2003, the SEC settled an enforcement proceeding with Citigroup, Inc. for $120 million, $101 million of which was related to Enron, and $19 million for Dynegy. Although the actual transactions themselves were complicated, fundamentally Citigroup was charged with helping Enron: "(1) inflate reported cash flow from operating activities; (2) underreport cash flow from financing activities; and (3) underreport debt." Subsequent private litigation ultimately cost Citigroup much more. On June 10, 2005, Citi settled a class action lawsuit for their role in the Enron case for $2 billion.

3.3 Smaller cases

On March 7, 2001, the Federal Trade Commission sued Citigroup division Associates First Capital for predatory lending on loans. The case was settled on September 20, 2002 with Citi paying a $215 million fine. Citigroup also was investigated for its' role in mutual fund trading abuses. On March 1, 2004, their Salomon Smith Barney unit was subpoenaed by the SEC, and a Wells notice advisory was issued on July 20, 2004. The firm settled the case on May 31, 2005 agreeing to pay a $201 million fine.

Citigroup's asset management arm came under scrutiny on November 25, 2003 by the U.S. attorney in New York. This case was settled on March 23, 2005 with Citi paying a fine of $27.5 million.

Our last case is the probe by London's Financial Services Authority (FSA). The FSA announced

a pro forma inquiry into Citigroup's "unusual trading activity" on August 18, 2004. The case was

settled on June 28, 2005 with Citigroup being assessed a 13.96 million pound ($25.44 million) fine.

3.4 Open cases

As of late December 2005, there were four open investigations against Citigroup, all initiated in 2004. On January 13, 2004, a probe was begun by Italian authorities into Citigroup's role in the Parmalat case. On May 6, 2004, the SEC began an investigation into Citigroup's activities in Argentina. Citigroup and several other large banks became the subject of an SEC investigation on September 16, 2004 into bond trading irregularities in an offering by Eaton Vance. Finally, Citigroup is not yet clear of Eliot Spitzer. He launched a probe into insurance business practices at Travelers on October 19, 2004. We look at the cases next from the perspective of the agency conducting the investigation.

4. Enforcement Agents

The lead actor in a U.S. enforcement action is typically the Securities and Exchange Commission (SEC). This period was unusual because of the lead role played by state authorities, in this case the New York State Attorney General Eliot Spitzer. The SEC does not undertake criminal actions, leaving this to the Justice Department and on occasion to state prosecutors. The SEC imposes civil penalties both as a deterrent, and to make restitution to victims. The NYSE and NASD are self-regulatory organizations (SROs) that have the ability to impose fines and conduct remedies.

4.1 SEC

The SEC undertakes many informal and routine inquiries which result in company specific requests for information. Since 1990, it has not needed court permission (see endnote 5) to pursue a probe. It may also file a Wells Notice (see endnote 6) to formally indicate that an enforcement action will follow. The National Association of Securities Dealers (NASD) also uses a similar procedure.

The receipt of a Wells Notice typically does not come as a surprise to the prospective respondent, as there is almost always an investigation and discussions with the SEC or NASD staff prior to a filing. We have record of only two Wells notices in our event groupings, September 10, 2002 in the Enron case, and the mutual fund case of July 20, 2004. The SEC is the lead authority in 9 our of 24 events. The NASD is responsible for one.

4.2 New York State authorities

During our sample period, there was an unexpected player in the investigation of Citigroup's illicit activities. New York Attorney General Eliot Spitzer made aggressive use of state fraud statutes to launch independent investigations into analysts, mutual fund fraud, and then the insurance business.

Spitzer is responsible for 5 of our news events. The Manhattan district attorney's office pursued a criminal case in the Enron investigation.

4.3 Other government investigations

The Enron case was so high profile that the Senate took the unusual step of launching an important investigation as well. On July 23, 2002, they began their probe. On August 13, 2002, they issued a subpoena to Citigroup and a second one at the end of the month. In total, the Congress is the actor in 5 events. The FTC also became involved in Citigroup's consumer lending practices. Foreign regulators have played the lead role in the U.K. bond trading scandal and the Parmalat investigation. We now turn to the question of when and if these announcements impacted Citigroup's stock price.

5. The Model

We look at the four year period from 2001-2004 and test the hypothesis that announcements and/or settlements effect the stock price. Prince and Rubin (2002) and Garber and Adams (1998) argue that investors may have already incorporated expected losses into the stock prices before the settlements, providing little "element of surprise."

A second reason for there to be little impact at settlement, Ferris and Pritchard (2001) note, is that companies anticipate the costs of litigation by setting up a litigation reserve. On December 23, 2002, Citigroup announced an after tax charge of about $1.3 billion or 25 cents per share (diluted) to establish a litigation reserve for Enron. On May 10, 2004, Citigroup also announced that it put aside additional $3.3 billion after tax into the litigation reserves to cover Enron and Worldcom lawsuits.

Alternatively, punitive damages could result in a negative stock return on the settlement day. Karpoff and Lott (1999) found that a current punitive damage award could induce the market to revise up their expected losses for ongoing litigation.

An argument for a positive effect could be due to the litigation reserve. A smaller than expected award could raise earnings by releasing the reserve into future earnings streams. We now test these alternative explanations in a simple event study model. $r_{i,t}$ is the return for Citigroup stock on the day t, $r_{m,t}$ is the market rate of return and, DNews and DSettle are dummy variables for the news release, and the settlement date,

$$r_{i,t} - r_{m,t} = a_0 + a_1 DNews_{i,t} + a_2 DSettle_{i,t} + \varepsilon_{i,t}. \quad (1)$$

Our data on returns is from the CRSP database. The market return is the value-weighted return for the entire market. Table 1 reports the excess returns on the 24 event dates. Our estimates confirmed a significantly negative reaction for our key event days on the abnormal stock returns. t-ratios are in parentheses.

$$r_{i,t} - r_{m,t} = 0.0631\ (1.50) - 1.7675\ (6.53) \times DNews_{i,t} - 0.2113\ (0.32) \times DSettle_{i,t} + \varepsilon_{i,t}. \quad (2)$$

These estimates indicate that Citigroup had an average −1.70% negative excess return on the days of our 24 announcements. We also found a smaller, negative, but statistically insignificant stock reaction on the event days of the settlements. It appears that Citigroup was fairly accurate in establishing its' litigation reserve. We now turn to see if the market was equally accurate.

6. Efficiency of Market Discipline

Economists have long argued that the market imposes the ultimate discipline on corporate malfeasance.

We ask in this section whether or not the market rationally anticipates the outcome of the six major event groups. A complete list of the market cap changes in the six case groupings is in Table 2 along with settlement dates and amounts.

We accumulate the change in market cap following each news event, and use it to explain the size of the eventual settlement,

$$\$Settle_j = b_0 + b_1 \sum_{i=1}^{n_j} DNews_{i,t} \times \Delta MktCap_{j,t} + \varepsilon_{j,t}, \ j = A, ..., F \quad (3)$$

nj is the number of information events about case j. In our six major cases groupings, we estimate

$$\$Settle_j = \underset{(0.76)}{29.7775} - \underset{(1.89)}{0.0834} \times \Sigma^{n_j} \Delta MktCap_{j,t} + \varepsilon_{j,t}. \quad (4)$$

This model fits the data reasonably well with an $\overline{R}^2$ of 34% although the market cap change is only marginally significant. This equation says the market punishes the company almost $160.41 for every dollar that the government recovers.

We tried to see if we could improve the fit of this equation by including the private settlements in the Worldcom and Enron cases,

$$\$Settle_j = \underset{(1.64)}{97.5573} - \underset{(38.85)}{0.0062} \times \Sigma^{n_j} \Delta MktCap_t + \varepsilon_{j,t}. \quad (5)$$

The fit is now remarkably good with an $\overline{R}^2$ of 99%, and the market cap is overwhelmingly significant.

(5) implies the market predicted a $3.073 billion settlement for Worldcom (actual $3.055 billion) and $2.085 billion for Enron (actual $2.120 billion).

Table 2. Litigation Settlements Against Citigroup 2001-2004

Case Group	Initial Action	Settlement	Amounts ($mn) Govt.	Private	ΔMkt.Cap
Global analyst settlement-Worldcom	11-Apr-02	23-Apr-03	405	2,650	-36,506.63
Enron-Dynegy	20-Feb-02	28-Jul-03	120	2,000	-24,647.66
FTC consumer lending	07-Mar-01	20-Sep-02	215		-889.70
Mutual fund trading abuses	03-Mar-04	31-May-05	201		-3,020.65
Asset management	25-Nov-03	23-Mar-05	27.5		50.54
European bond trading	18-Aug-04	28-Jun-05	25.44		-527.63
Italian's Parmalat probe	13-Jan-04	Open			
SEC probes Citigroup in Argentina	06-May-04	Open			
SEC probe into Citigroup's bond trading	16-Sep-04	Open			
NYAG Traveler's probe	19-Oct-04	Open			

Government penalty is the civil or criminal penalty imposed by the government or regulatory authority. Private litigation refers to settled class actions as of December 2005. The change in market cap is based on the percentage excess return. All are in millions of U.S. dollars.

Each dollar change in market cap in (5) now predicts $11.99 in government and private litigation losses. This is close to Citigroup's December 2005 trailing price earnings ratio of 11.14.

7. Conclusion

In ongoing research, we are examining whether these results for Citigroup will generalize to the rest of the financial sector, and to other industries as well. Bajaj, Mazumdar and Sarin (2003) showed that the losses of firm value during the litigation period were much larger than the settlement amount. Prince and Rubin (2002) noted that it is common for negative stock returns to exceed expected damage payments. They argue that firms suffer reputation costs. They conjecture that private litigation is less harmful to a firm's reputation than government sanctions.

In the language of finance, this suggests that firms that are continually cited by the SEC and other enforcement agents may have lower price earnings ratios. We leave this interesting question to future research.

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Endnotes

1. All the numbers, except for the market cap are from the 2004 Citigroup Annual Report: http://www.citigroup. com/citigroup/fin/data/ar041c_en.pdf. Market capitalization was computed on December 7, 2005 based on aprice of $48.60 per share.

2. This is from theMay 12, 2005 presentation of the Citigroup Investmen Banking Divison: http://www.citigroup. com/citigroup/fin/data/p050526.pdf

3.Grubman reportedly changed his ATT recommendation in return for Weill's help in getting his children admitted to an exclusive Manhattan nursery school.

4. This practice is known as spinning.

5. The Securities Enforcement and Penny Stock Reform Act of 1990 gave them this flexibility.

6.http://www.seclaw.com/docs/wellsnotice.htm
"Receiving a Wells Notice signifies that you are the subject of an investigation and that enforcement proceedings are going to be commenced against you. There is no legal requirement for a regulator to provide a Wells Notice to you, however it is the practice of the SEC and the NASD to provide such notice."