ICN PHARMACEUTICALS: CORPORATE GOVERNANCE ANALYSIS

Hugh Grove*, Milan Čupić**

Abstract

ICN Pharmaceuticals, Inc. (today Valeant Pharmaceuticals International) was a drug developer and manufacturer, known in the medical field for its development of Ribavirin, an antiviral compound used to treat various viral infections. However, ICN will probably be remembered mostly as an example of problematic and inefficient corporate governance. Changes in the management structure of ICN occurred almost at the same time when corporations, like Enron, WorldCom, Tyco, were dealing with financial scandals caused by problems in corporate governance. Since ICN was not a powerful corporation and found a way to deal with its problems, it was not subject of any big financial scandal. Nevertheless, it is interesting how ICN managed to operate, in some years even successfully, with so many corporate governance problems and how Milan Panic managed to stay at the top of ICN for 42 years, in spite of his numerous expensive law suits, scandals and bad decisions.

Keywords: corporate governance, financial analysis, misleading financial statements, insider trading.

*University of Denver, the USA
**University of Kragujevac, Djure Pucara Starog 3, 34000 Kragujevac, Serbia
Tel. +381 34 303 517
Fax +381 34 303 516
mcupic@kg.ac.rs

ICN Background Information

ICN Pharmaceuticals, Inc. (ICN) was a prescription and nonprescription drug developer and manufacturer that distributed its products in more than 100 countries. ICN was known in the medical field for its development of Ribavirin, an antiviral compound used to fight various viral infections. The company has undergone major management, operational and strategic restructurings since the 1990s when shareholders of several group units approved the merger of ICN Pharmaceuticals, ICN Biomedicals, SPI Pharmaceuticals and Viratek into a single worldwide pharmaceutical company, ICN Pharmaceuticals, Inc. Although ICN has survived today, it will probably be remembered mostly as an example of problematic and inefficient corporate governance.

ICN's founder, CEO, and Chairman of the Board (COB), the controversial and the charismatic millionaire Milan Panic, left an indelible imprint on the ICN. In 1929, Milan Panic was born of poor parents in Serbian city of Belgrade. His childhood was shattered by the Nazi invasion. He joined the resistance movement and served as an officer fighting the German occupation. After World War II, he came to minor prominence as an alternate on Yugoslavia’s 1952 Olympic bicycle team. Soon he grew disenchanted with Yugoslavia’s Communist regime and in 1956 defected to the West. In the U.S., Panic studied biochemistry at the University of Southern California. In 1960, Panic co-founded International Chemical and Nuclear (ICN), using his garage in Los Angeles to house the company’s modest operations. During its first thirty years, ICN grew by acquiring niche pharmaceuticals, such as dermatological drugs, but the company scored its greatest success in the research field. However, even during these years of success and high growth rates, ICN was coping with many problems, mainly due to dubious top management decisions and actions. Panic’s tactics to promote ICN’s drugs and its stock had gotten him into trouble with the U.S. Food and Drug Administration (FDA) and with the Securities and Exchange Commission (SEC). He tangled with regulators, shareholders, auditors and scientists. Two things characterized ICN’s first thirty years, the development of the drug Ribavirin and Panic’s controversial management style. ICN’s recent financial statements, mainly under Panic’s leadership, are provided in the Appendix 1.

ICN Drugs, Stock Prices, and Lawsuits

By the early 1970s, ICN sales exceeded $100m and the company received its first FDA approval for L-dopa, the Parkinson’s disease “miracle drug.” However, this was also first Panic’s failure when L-
dopa’s severe side-effects became known. Consequently, ICN’s stock price, which had varied between $72 a share and $1.50, fell sharply. In 1977, the SEC filed a complaint against ICN and Milan Panic, alleging violations of the antifraud and reporting provisions of the securities laws. Panic and ICN agreed to refrain from violations of securities laws. They admitted no wrongdoing. Personally, Panic had been sued by federal regulators for defaulting on an $8.4m loan he took in buying two California motels in 1985. Those motels were operating at a loss. Richard J Carroll, from whom he purchased the motels (and to whom he leased them back), served a five-year term in California’s Lompoc penitentiary for bankruptcy fraud. Meanwhile, the Internal Revenue Service has accused Panic and his wife of failing to pay proper taxes.

In the early 1970s, with the help of Dr. Roland Robins, Dr. Weldon Jolley and Dr. Robert Smith, ICN developed an extensive collection of nucleoside analogs. Research in this area led to the discovery of Ribavirin, a compound that the company claimed would kill certain viruses by jamming their reproductive systems. ICN also believed the drug will be effective against a broad spectrum of viruses from AIDS to influenza. However, Ribavirin had to pass the rigorous testing required by the FDA.

Panic labored painstakingly to gain FDA approval. In 1985, Ribavirin, marketed under the name Virazole, gained FDA approval but only for the treatment of respiratory syncytial virus (RSV). In a press release, ICN claimed that Virazole was "so free of side effects that it could be used in premature infants" (Hanley, 1986). As a result, FDA ordered ICN to recall the press release because it contained "false or misleading claims" (Hanley, 1986) of the drug’s effectiveness against a range of viral illnesses and minimized potentially life-threatening side effects for its only approved use in the U.S.

That incident was only the beginning of controversy with Ribavirin. For many years, Panic has been unbending in his determination to win approval from the FDA to sell Ribavirin as a treatment for the AIDS virus. Panic claimed the drug had proved effective in clinical tests against the onset of AIDS (Mills, 1993). However, in 1987 the FDA said that it could find no evidence of Ribavirin’s effectiveness in combating AIDS (Mills, 1993). The following chronology of events was connected to these claims:

- January, 1986. ICN announced that tests indicated its drug Virazole may delay AIDS onset in people infected with HIV. AIDS researchers were skeptical.
- July, 1986. PaineWebber (PW), an investment banking firm, underwrote a $137m stock and bond offering for ICN. Soon thereafter, PW issued a report on Virazole’s potential against flu and as an AIDS treatment drug, setting off a three-day buying frenzy that increased ICN’s stock price 67% to $34 a share. However, the stock quickly plunged to $20 a share after medical skepticism was expressed.
- November, 1986. An investor who purchased shares on PW’s recommendation filed a lawsuit, accusing PW and ICN of inflating ICN’s stock through a false and fraudulent research report.
- February, 1987. SEC began investigating the previous trading in ICN’s shares. As a result, the shares fell 13% to close at $17. A class-action lawsuit was filed in Los Angeles against ICN, accusing it of fraudulently inflating the ICN stock price and misrepresenting Virazole potential as possible AIDS medication.

After three years of wrangling with the FDA and shareholder lawsuits, ICN abandoned efforts to win approval for the drug as an AIDS treatment. The company took a $71m write-off on its Ribavirin operations and, as a result, reported a $82m loss in 1989 on sales of $185m. Despite this loss, ICN gave top officers raises as high as 91% in 1989, and Panic received a 39.6% pay hike, bringing his salary to $574,050 plus $71,390 in personal legal, accounting, and insurance fees covered by the company. In addition, in 1991, ICN paid $600,000 in costs and penalties to settle FDA charges that it had misrepresented the medicinal properties of the drug and settled the SEC lawsuit by consent decree, without admitting or denying wrongdoing (Mills 1993). Finally, in 1996, ICN agreed to pay $10m in common stock and $4.5m in cash to an estimated 7,500 shareholders. Financial consequences for ICN were severe. ICN’s stock, which traded as high as $34 in 1986, dropped to $11.25 in 1993. Between 1985 and 1992, ICN operated with losses in five of these years.

Another controversy erupted during the battle to get FDA approval for Ribavirin as a treatment for hepatitis C. ICN expected that this approval could open up a worldwide multi-million dollar market but again, ICN and key company officers, including Panic, have been charged with fraudulently misleading investors about Ribavirin, as a treatment for hepatitis C (CNN Money 1999). The SEC filed a complaint alleging the company failed to immediately disclose that the FDA had rejected ICN’s application to market Ribavirin as a sole hepatitis C treatment in 1994. The FDA’s rejection letter was dated November 28, 1994. The day after he learned the FDA wouldn’t approve the sale of Ribavirin as a stand-alone treatment for hepatitis C, Panic sold of $1.24m of his ICN stock (Marsh, 1998).

When the company finally announced the "not approvable" FDA letter in a February 17, 1995 press release, ICN’s stock price fell 23%, followed by another 15% drop on the next trading day. In the first six days of trading after the press release, the stock price dropped 41%. However, a special committee of independent directors of ICN exonerated Panic of allegations of improper insider trading. The committee found that Panic had made his decision to sell and informed others of that decision before the FDA announcement but that ruling didn’t change the fact that Panic and the company had to pay $15m to
settle a shareholder lawsuit over the stock sale. Although the SEC dropped a three-year inquiry into accusations of insider trading in 1998, it filed a civil complaint concerning misleading public statements. In 2001, ICN pleaded guilty to a single count of criminal securities fraud in connection with certain of the events alleged in the SEC civil complaint and paid $5.6m in criminal fines. In 2002, the SEC announced that it had settled its civil injunctive action against ICN and company officers. ICN had to pay another $1m fine and Panic had to pay $500,000 in civil penalties. Eventually, in 1998, FDA did approve Ribavirin for chronic hepatitis C treatment, but only in combination with Interferon α – 2b.

Management Style

Pierce O'Donnell, Panic's attorney once stated: "I never said Milan Panic is a saint. He's a human being, a sinner like the rest of us. But he is not the Saddam Hussein of corporate governance" (Lubove, 2002). Indeed, Panic's years at ICN, though turbulent and marked with controversial leadership, have had their share of success. After all, he built ICN into a $2.5 billion worth company that earned $64m on $621m in sales in 2001. Although there were a lot of problems in the process of getting approvals for different Ribavirin uses, sales of this drug topped $139m in 2001, up from $3.2m in 1997. All might have been well were it not for other troubles facing Panic, who had a long record of stockholder revolts and battles with the government, not to speak of his company's long-range debt, which required some $19m a year just to service.

His troubles started not long after he founded ICN, and suggested that Panic was stronger on salesmanship, acquisition, lobbying and political contacts than on research and development. Along the way he became a player in the Democratic Party with many political links. Panic became adept at making connections in the political and the medical arenas for himself and his company. He built an arsenal of influential friends, including:

- Jimmy Carter, former President of USA;
- Birch Bayh, former Senator of Indiana;
- Alan Cranston, former Senator of California;
- Edmund G. (Jerry) Brown Jr., former California Governor and current California Governor candidate;
- Charles T. Manatt, former Democratic National Committee Chairman;
- Robert H. Finch, former Health, Education and Welfare Secretary in the Nixon cabinet;
- Michael Dukakis, former Massachusetts Governor and ex-presidental candidate;
- John D. Scanlan, former US Ambassador to Yugoslavia.

Michael Connor, an analyst with the brokerage firm, Edward A. Viner in New York, described Panic as “a master at financial legerdemain,” (Gomez, 1992) and also noted that the configuration of the ICN corporate structure has often been confusing. Assets seemed to be mixed at will, making it difficult for analysts to follow the corporation accurately. "His greatest talent seems to be more in the ability to create and juggle all of these entities than actually coming up with real products and real earnings," Connor said. "He's much more adept at public relations" (Gomez, 1992).

Panic has been Chairman of the Board and CEO of the Company since its inception in 1960 and President until 1997, except for a leave of absence from July 14, 1992 to March 4, 1993 while he was serving as Prime Minister of Yugoslavia. In early 1990s expected prolific growth did not materialize until Panic decided to transform ICN into an international drug manufacturer and developer. To accomplish this, Panic returned home to Yugoslavia. In 1991, he acquired a 75% interest in Galenika Pharmaceutical, the major drug manufacturer and distributor in Yugoslavia. Renamed ICN Galenika, the acquisition gave ICN new product lines and substantially expanded the company's sales volume, making ICN one of the first Western pharmaceutical companies to establish a direct investment in Eastern Europe following the fall of Communism. At roughly the same time the investment in Galenika was made, Panic also added facilities in several other former communist nations and across the globe, etching a presence in Western Europe, Africa, Asia, and Australia. Between 1993 and 1994, Panic also acquired a 41% interest in Oktyabr, a Russian drug company. In 1995, Panic increased ICN's investment in Oktyabr to 90%, eventually developing ICN into the largest pharmaceutical concern in Russia.

Although the physical and financial growth achieved during the first half of the 1990s were of an unprecedented scale in ICN's history, and ICN stocks were listed on NYSE in November 1994, these achievements were overshadowed by the drama surrounding Panic. In July 1992, Panic decided to accept an invitation to serve as Prime Minister of Yugoslavia. Several months later he announced that he was going to challenge Slobodan Milosevic for the Serbian presidency elections and he launched his campaign. Panic lost a fraudulent presidential election against Milosevic on December 20, 1992. Before the end of the month, Panic was ousted as Prime Minister, and lost personal stature that had a reverberative effect on ICN's stature in Yugoslavia. Yugoslav government took its revenge, making ICN pay for Panic's actions. The Yugoslav government reneged on payment for pharmaceuticals purchased from ICN, leading to sizable losses for ICN.

The End of the Panic Era

In early 1993, not long after Panic was deposed as Prime Minister, a Beverly Hills stockbroker, Rafi M. Kahn, launched a first direct shareholder fight aimed to oust Panic. Kahn, who had invested $2m of his
own money, took exception to the considerable salary and bonuses awarded to Panic while ICN's stock got weaker. In 1992, ICN's stock dropped from $20.37 per share to $6.50 per share. Meanwhile, Panic had received $619,000 in salary, while he was serving as the Prime Minister of Yugoslavia. Further angering Kahn, Panic received a bonus in April 1992 worth an estimated $5.3m, a sum received while ICN suffered from weak financial performance and sharply declining stock value. ICN responded by filing a lawsuit against Kahn in April 1993, accusing Kahn of using insider information obtained while he was employed by his brokerage firm as the basis for his shareholder revolt. A week later, Kahn countered, filing a lawsuit against Panic for insult of character. After a bitterly fought battle, Kahn lost, but that was only the beginning of shareholder fight for ICN.

During the first half of the 1990s, Panic didn't have much time for managing ICN because of outbreak of sexual harassment accusations. Dating back to at least 1990, female employees began to question Panic's motives. When the concerns were made legally manifest, Panic faced the allegations of at least six ICN employees, between 1993 and 1998, charging Panic for sexual harassment. By 1998, five of the employees had filed discrimination charges with the Department of Fair Employment and Housing of California; four of the accusers sued ICN, costing the company millions of dollars in settlement fees. In 1998 ICN's general counsel David Watt stated: "The courts are being abused by these silly cases" (Horn, 1998). At the same time, Panic's stated: "The complaints are bull----. They loved me" (Horn 1998).

Finally, in 2001, court ordered Panic to pay $3.5m and child support to ICN's former director of employee relations, Debra Levy, after DNA tests confirmed he was the father of her 14-year-old son (White, 2002).

In 1994, as a result of the merger of ICN Pharmaceuticals, Inc., SPI Pharmaceuticals, Inc., Viratek, Inc. and ICN Biomedicals, Inc., ICN Pharmaceuticals, Inc. was formed. By the end of 1996, when annual sales exceeded the $500 million mark, ICN was distributing its prescription and nonprescription products in more than 60 countries. Ribavirin was approved for commercial sale in more than 40 countries. But, in 1998 ICN once again experienced problems with a subsidiary located in Yugoslavia. The Yugoslav government has seized control of ICN Galenika, which had accounted for 27% of the ICN's gross profit in 1997. Police and government officials forcibly entered the Belgrade plant and over protest of the workers took possession of the premises. Yugoslav Health Minister claimed that the move was the result of ICN paying only $50m of the $270m agreed upon for ICN to take control of 75% of the Belgrade plant from the Yugoslav Government (Wall Street Journal – Europe 1999).

Two days after, police in Serbia arrested six leading managers of ICN Pharmaceuticals Inc., along with ICN Belgrade's general counsel. As an answer, ICN Pharmaceuticals filled a suit against Yugoslav government and recorded write-offs and provisions for losses related to Yugoslav subsidy totaling $439m as other expenses. In 2004, ICC International Court of Arbitration rendered a decision that ICN is entitled to a return of the company's original cash contribution to a joint venture formed with the predecessor parties up to a maximum of $50m. With the same decision Yugoslav government became 100% owner of Galenika, former the ICN subsidy in Yugoslavia (Business Wire, 2004).

At the beginning of new century Panic continued to face a host of legal troubles, both in the form of sexual harassment charges and ongoing investigations undertaken by the SEC. The legal problems were costing ICN millions of dollars, exacerbating the animosity felt by a number of agitated shareholders. Proxy battles lodged by shareholders had become an almost annual event but Panic continued to thwart attempts for his removal. In 2000, royalties from Ribavirin, which had become increasingly popular in the treatment of hepatitis-C, were expected to reach $162m, a fourfold increase since 1998. Despite the exponential gain in Ribavirin sales, some shareholders were becoming increasingly frustrated by the company's lackluster stock performance.

In 2000, while the SEC was seeking to bar Panic from ever again running a publicly traded company, the embattled chairman announced in mid-June a restructuring plan which would split ICN into three companies with Panic slated to control each business. The news caused ICN's stock value to fall further. At roughly the same time the reorganization was announced, several shareholders pitted forces and began a proxy battle with the goal to remove Panic from his chairmanship. The shareholder revolt persisted for two years, dragging on during Panic's plan to restructure the company. When the company's research and development arm, including the rights to its antiviral franchise, was spun off in April 2002 as a separate company, angry shareholders found another issue to fuel their revolt. The spinoff created Ribapharm, whose IPO raised nearly $300m for ICN and netted Panic a $33m bonus, infuriating already agitated shareholders (Lee, 2002).

Leading the charge against Panic were two shareholder groups, Franklin Mutual Advisers LLC and Iridian Asset Management LLC, who together owned 10% of ICN's stock. In their filing with the SEC, the two groups were frank with their assessment: “We believe (Panic's) presence at the helm of (ICN), his dismissive attitude toward shareholders, and his controversial reputation are among the chief reasons ICN's market valuation lags those of its peers and fails to adequately reflect (ICN's) fundamentals.” (Reed, 2002a) On June 12, 2002, the dissident shareholders prevailed, celebrating Panic's announcement that he was retiring as ICN's chairman and chief executive officer. ICN paid $12m in severance to Panic.
connections that had been instrumental to ICN’s development into an Eastern European powerhouse. Gone too was the stigma of Panic’s presence at the company’s helm. Into the void created by Panic’s departure stepped Robert W. O’Leary, appointed ICN’s chairman and chief executive officer on June 20, 2002. O’Leary took on the difficult task of leading ICN’s turnaround. He admitted that ICN’s condition was worse than the incoming team had expected. Looking ahead, O’Leary said: “All options are on the table with one exception—the sale of the company. The challenge for us as board members was - and still is - to instill investor confidence in what is basically a sound business.” (Reed, 2002 b) Investors reacted well to the management change news at ICN, sending the company’s shares to $12, up from single digits in September. ICN changed its name to Valeant Pharmaceuticals International (NYSE:VRX), signifying the core principles and values of the company and its new strategic focus.

Although he resigned as COB, CEO and employee of the ICN, Panic remained one of the ICN’s directors until 2003 when his term expired. On October 1, 2002, Panic, along with some other former and current directors, as well as ICN, as a nominal defendant, were named as defendants in a shareholder’s complaint in connection to bonuses paid for Ribapharm offering. ICN settled the litigation and entered into a settlement agreement with Panic. As a result of agreement, Panic paid ICN $20m. In July, 2003, Panic bought ICN Biomedicals, ICN’s biomedical research and diagnostic business, for about $15m and renamed it MP Biomedicals LLC. Panic purchased the division through his new private company, MP Global of Irvine, using the approximately 1m shares of ICN stock he owned.

Corporate Governance Weaknesses in ICN

Changes in the top management structure of ICN occurred almost at the same time as notorious corporations, like Enron, WorldCom, Tyco, were dealing with financial scandals caused by problems in corporate governance. Since ICN found ways to deal with (or ignore) its corporate governance problems and was not that large of a company, ICN was not the subject of a big financial scandal in the financial press. Nevertheless, it was interesting to see how ICN managed to operate, in some years even successfully, with so many management caused problems. Also, it was interesting to see how Milan Panic, founder of the company, managed to stay at the top of ICN for 42 years, in spite of many expensive lawsuits, scandals, and bad decisions. Major characteristics and weaknesses of ICN corporate governance, with particular focus on Panic’s management style, were listed as follows:

1. From 1960-1997 Panic was CEO, COB and President of ICN. In 1997 he resigned from the position of President. He was also COB and CEO for SPI Pharmaceuticals Inc., ICN Biomed Inc., and Viratek Inc. (ICN entities), from their respective inceptions. Panic controlled almost all of ICN’s operations and its subsidiaries. In a Fortune article (May 14, 2001), Matthew Boyle stated: “If Fox ever decides to do a TV show about a power-hungry CEO, ICN’s Milan Panic would be a great model. The show would have sex (Panic has settled half a dozen sexual harassment claims), political intrigue (he was Prime Minister of Yugoslavia in 1992-93), and courtroom battles (the feds are mulling civil and criminal charges against the company on offenses that include insider trading). Comic relief would be provided by ICN’s directors.”

2. The Board was formed by executive and non-executive members with the following committees: Audit, Science and Technology, Executive, Finance, Communications, Compensation and Benefits, and Corporate Governance. The nominating committee was formed in June, 2002, just before the election of dissident board members that led to Panic’s resignation. As described in the 1999 proxy statement, the Company's board included five (out of total 13 board members) directors who received consulting fees from the Company and the Audit, Compensation and Benefits, and Corporate Governance committees of the Board each included directors who served as consultants to the Company. For example, the 2000 audit committee consisted of four members: one was a senior executive officer and the other three were shareholders, also paid in stock options. Although some members of this committee had expertise in economics, finance and investment, no one had expertise in accounting and auditing. A Corporate Governance committee was formed but it never met. In the same Fortune article Boyle stated: “The board is an absolute joke, turning a blind eye to Panic’s shenanigans and even lending him $3.5m to pay off his sexual harassment settlements. Several of the so-called independent directors, including members of the compensation committee, have taken consulting fees from the company, a practice that ended only last year...There is no nominating committee; Panic handpicks all directors.”

3. During 1990s (and even today for Valeant), the ICN financial statements were audited by only one auditing firm, Coopers & Lybrand which became PriceWaterhouseCoopers (PwC) in 1998. In 2002, ICN shareholders filed a complaint that PwC prepared and certified false financial statements for ICN. Although judgment was in favor of PwC and ICN, PwC was often subject of shareholders complaints, among which the most notable, MiniScribe, Tyco and Satyam. Also, it is not recommended to develop long time relationship with only one auditing firm.

4. Executive managers, especially Panic, had very high annual salaries and almost yearly bonuses. In addition they were paid in stock options as a form of long-term compensation. The following table set forth the annual and long-term compensation awarded to Panic from 1992-2002. While Panic totaled the most in 1992, 1998 and 2002, his compensation in
these years were especially criticized. In 1992, he was out of the company. In 1998, the company reported large losses due to seizure of its Yugoslav subsidy. In 2002, he netted a $33m bonus connected to the IPO of Ribapharm and ICN also paid $12m in severance pay to Panic when he resigned from the positions of CEO and COB. Panic has been widely criticized on Wall Street for receiving stock options that diluted the value of ICN because he exercised his stock options almost every year to cash in his shares. In another Fortune article (May 3, 2001), Matthew Boyle was quoted: “Prospective board members looking to fatten their wallets might consider buddy ing up to ICN Pharmaceuticals...each member of ICN’s board receives 15,000 stock options every year.” Three directors on the compensation committee received cash bonuses and two of these committee members were close personal friends with Panic for decades. Both were in the process of negotiating with Panic about lucrative consulting deals to follow the completion of their board service.

Table 4. Structure and amount of Panic’s compensation

| Year | Annual salary | Bonus     | Stock options | Other compensations | Total       |
|------|---------------|-----------|---------------|---------------------|-------------|
| 2002 | 500,000       | 33,500,000| 225,000       | 22,539,394          | 56,764,394 |
| 2001 | 901,446       | 1,009,612 | 300,000       | 186,053             | 2,397,111  |
| 2000 | 750,366       | 478,700   | 0             | 235,053             | 1,464,119  |
| 1999 | 701,277       | 413,821   | 0             | 100,000             | 1,215,098  |
| 1998 | 701,277       | 1,336,000 | 4,013,966     | 253,542             | 6,304,785  |
| 1997 | 644,860       | 1,787,000 | 279,000       | 190,473             | 2,901,333  |
| 1996 | 612,500       | 750,000   | 100,000       | 13,500              | 1,476,000  |
| 1995 | 572,500       | 275,000   | 0             | 92,500              | 940,000    |
| 1994 | 535,000       | 195,600   | 702,600       | 70,600              | 1,503,800  |
| 1993 | 535,000       | 0         | 60,000        | 49,245              | 644,245    |
| 1992 | 535,000       | 5,675,000 | 900,000       | 49,041              | 7,159,041  |

5. Panic was very interested in politics. When he was trying to penetrate a new market or protect himself from regulators, Panic was making new or using old friendships. When he purchased shares in Galenika Pharmaceuticals, he decided to accept the position of Yugoslav Prime Minister. When he entered the Russian market, he invited former Russian Minister of Foreign Affairs, Andrei Kozyrev, to become a Board member of ICN. Panic had developed close friendships with many influential US politicians. He has generously donated his time and money to their political careers and when he was in trouble, they helped him. Panic has had some run-ins with the federal bureaucracy without severe consequences for him. In the late 1980s when he was trying to get the approval for Virazol as a treatment for AIDS, and to strengthen his position during SEC and FDA investigations, Panic secured a managerial position for Jerry Brown, former Governor of California. During the 1980s and 1990s ICN directors were, among others, Birch Bayh (former Senator of Indiana) and Robert Finch (onetime Health, Education and Welfare Secretary). During 2002, when he was trying to keep his managerial positions, he supported Gray Davis, the California Governor who became the second governor to be recalled in American history.

6. Without a strong and independent Board and Board committees, ICN’s shareholders had no effective system of internal control over Panic’s and other executive directors’ actions. There were several serious cases when ineffectiveness of ICN’s internal control was proven. In 1977, the SEC filed a complaint against ICN and Milan Panic, alleging violations of the antifraud and reporting provisions of the securities laws. In 1987, the SEC again filed a complaint for false reporting by ICN about the usefulness of Ribavirin in the treatment of AIDS. In 1994, the SEC filed a complaint against ICN and Panic concerning insider trading and misleading public statements. Because of these failures in internal control, the company lost a lot of money to settle lawsuits, pay criminal fines and civil penalties. In September 2006, ICN’s (at that point of time renamed Valeant) Board appointed a Special Committee to conduct a review of ICN historical stock option granting practices and related accounting during the period from 1982 through July 2006. The Special Committee identified a number of occasions on which the exercise prices for stock options granted to certain directors, officers and employees were set using
closing prices of common stock with dates different than the actual approval dates, resulting in additional compensation charges. In 2006, the SEC opened a formal inquiry into ICN historical stock option grant practices. The conduct and resolution of these matters are always time consuming, expensive and distracting from the conduct of business.

Financial Analysis

Many studies, conducted during the last 20 years, identified positive correlation between quality of accounting information and corporate governance quality (Dechow, Ge, Larson, and Sloan, 2007; Wang, 2008). These studies generally showed that quality of accounting information and financial forecasts increase with the independence of the board, decreases with board size, and decreases when the CEO also serves as chairman of the board. Some studies also showed that governance affects both the quality of firms’ public accounting disclosures (Dechow et al. 1996), and voluntary managerial forecasts (Ajinkya, Bhojraj and Sengupta 2005).

Further, some studies found that the probability of earnings restatement is significantly lower in companies whose boards or audit committees include an independent financial expert, and it is higher in companies whose CEO belongs to the founding family (Agrawal and Chadha 2005).

Many financial reporting scandals which occurred during last ten years have been attributed to poor corporate governance oversight of the financial reporting process. In response to these financial reporting scandals, regulators and major stock exchanges have implemented new rules designed to improve the quality of corporate governance, e.g., by requiring audit committees to be fully independent. Implicit in these regulatory changes is a belief that such measures will eventually improve the quality of information available to the users of financial reports.

Almost at the same time, financial analysts and theorists have developed some very useful indicators of problematic corporate governance and poor business performances. One approach for identifying fraudulent financial statements was called Six red flag models (Grove and Cook, 2007; Wells, 2001), as presented in the Appendix 2.

Keeping in mind all the corporate governance problems within ICN, it was reasonable to assume that its financial statements were of low quality, or even fraudulent. In this regard, financial analysis was conducted in order to determine if corporate governance problems reflected on quality of ICN’s financial statements. Subject to analysis were financial statements for period 1998-2005, which are presented in the Appendix 1. The first year of analysis was 1999. Information for 1998 was used only as input for calculating averages necessary for analysis in 1999. This analysis was based on the use of two broad groups of indicators:

1. Six red flag models, which included the Fraud Z-Score Model, Fraud F-Score Model, Sloan Accrual Measure, Quality of Earnings, Quality of Revenues, and the Altman Z-Score, and
2. Key financial ratios (Appendix 3), which included Valuation (Price/Book Ratio, Price/Earnings Ratio, Price/Sales Ratio, Price/Cash Flow Ratio), Profitability (Profit Margin, Top-Line Growth, Bottom-Line Growth), Management Effectiveness (Return on Assets, Return on Equity), and Financial Strength (Current Ratio, Debt/Equity Ratio).

Results of financial analysis are presented in Appendix 1. Quality of revenues and Altman Z score were indicating problems in all the years of this period, even after Panic’s resignation. Altman Z score has values that indicate high or very high possibility of bankruptcy, mostly because of relatively ineffective use of assets (measured with sales to total assets ratio) and negative retained earnings. Negative retained earnings values were especially bad sign since ICN wasn’t a young company, so this could indicate an uncertain future. However, this is logical consequence of negative net income in five of eight years, along with very high capital expenditures and dividend payments in all analyzed years, which is not a desirable combination. Quality of earnings, Fraud Z score and Fraud F score were indicating problems in many years of this period. Only the Sloan accrual was not indicating any problems. Fraud F score was under considerable influence of very intensive changes in inventories and receivables. Interestingly, in 2002, accruals were maximized; although net income was negative, and cash sales were considerably increased, while changes in revenues were not that intensive and operating cash flow was considerably decreased. Reason for these asynchronies can be found in the Sales, General and Administrative Expenses (SG&A). Namely, SG&A included non-recurring and other unusual charges of $241,543,000, which primarily included stock compensation costs related to the change of control of ICN under the ICN’s changed and restated 1998 Stock Option Plan ($61,400,000); severance costs related to cash severance payments to former executives of the ICN and Ribapharm, the termination of Panic and employee severance benefits ($54,216,000); executive and director bonuses paid in connection with the Ribapharm Offering ($47,839,000); professional fees related to the Ribapharm Offering ($13,000,000).

Financial ratio analyses, except the financial strength ratios, had values outside the benchmarks in almost all the years which should have given additional concerns as would the considerable variations in all these ratios. Explanation for high liquidity can be found in current assets, especially receivables and inventories, which were growing considerably from 1999-2001. Net working capital had very high values in all analyzed years, and very high percentage share in total assets. At the same time,
while receivables and inventories were growing, net income was decreasing. This problem was addressed in second half of 2002 and 2003 when new management decided to reduce sales to wholesalers in order to reduce inventories of the products at the wholesalers, which had accumulated over a period. Also, in order to ensure the creditworthiness of its customers in Russia, management decided to shorten credit periods, suspend sales to customers with past-due balances and discounts for cash sales. Profitability problems culminated in 2002 when top-line growth rate was 18.73%, while bottom-line growth was -310.30%. This again can be connected to increase in SG&A expenses.

Key reasons for decline in performance even after Panic left company included:

- In 2002, Ribapharm had sales of about $865m for ribavirin in the United States and about $387m in Europe. But in July 2003, a federal judge in U.S. District Court in Los Angeles ruled that a new generic formulation hepatitis C drug Ribavirin would not infringe on patents owned by ICN. The ruling allowed Teva Pharmaceuticals, Three Rivers Pharmaceuticals and Novartis to produce generic versions of Ribapharm’s top-selling drug. ICN, hurt by generic drug competition, reported a 54% drop in 2003 second-quarter profit. ICN posted net income of $14.9m, or 18 cents a share, down from $32.4m, or 38 cents a share, a year earlier.

- As a part of a plan to improve ICN’s operational performance, during 2002 new management conducted a strategic review of its operations and, as a result, decided to emphasize its specialty pharmaceuticals business, to divest itself of those businesses that did not fit ICN’s strategic growth plans, to reduce the number of manufacturing sites in ICN’s global manufacturing and supply chain network from 15 sites in 2003 to four sites by the end of 2006, and to exert efforts to bring its overall cost structure in line with industry averages. Key elements of the strategic repositioning included refocusing business in North America, Latin America, and Western and Central Europe, particularly Germany, Italy and Poland, with greater attention on selected therapeutic areas. ICN divested its Russian Pharmaceuticals segment, Biomedicals segment, Photonics business, raw materials business and manufacturing capability in Hungary and the Czech Republic and Circe unit. As of December 31, 2005, ICN had disposed of eight sites targeted as non-strategic.

- Although some changes to the management structure and the organization of Board of directors were introduced, the new CEO was at the same time the COB. In addition, in more than forty years of ICN’s history, Panic was the only CEO and COB. Although many shareholders demanded his resignation, this was a shock for ICN because Panic was key decision maker and personification of ICN.

Shareholders’ confidence in ICN was restored after Panic resigned. Although ICN’s stock dropped from $25.85 to $7.81 per share (70%) between May and October 2002 from the above events, the situation on financial market stabilized soon after. Namely, the average standard deviation of ICN’s share prices in the period January, 1995 – December, 2005 was 7.88 but the standard deviation of monthly share prices decreased from 8.61 in the period January, 1995 - Jun, 2002, to 4.86 in the period November, 2002 – December, 2005 (after the destabilizing events of the May – October 2002 period). This change in riskiness of ICN’s shares was shown in the stock price chart in the Appendix 1. However, the standard deviation of monthly share price percentage changes stayed almost unchanged in the entire analyzed period (17%), i.e. ICN’s share prices were changing 17% on average every month.

**Conclusion**

After ten years, fight for control over ICN was finally finished, and company could focus to its operations. Milan Panic, the person that factually controlled everything in ICN and its subsidies for more than forty years, decided to resign from top management positions and eventually to leave the company. With the Panic resignation, the period of uncertainty filled with proxy battles, accusations of sexual harassment, a paternity lawsuit and legal scrapes with the Food & Drug Administration, the Department of Justice and the Securities & Exchange Commission ended. However, the eighty year old Panic did not easily give up the company he founded.

In March 2006 Panic, as a Valeant shareholder, filed a lawsuit alleging that Valeant directors intentionally drove down the company's shares with false claims about performance that allowed them to profit off stock options granted at low prices. Valeant's shares lost more than half their value in July 2002 after management warned of a quarterly loss instead of a profit expected by Wall Street. The shares rebounded by the end of 2004. The suit targeted Valeant Chairman Robert O'Leary and director Randy Thurman, who received options after Panic’s ouster. Panic contended he lost more than $20 million due to (defendants’) wrongful conduct in the ensuing years. He sought unspecified damages, restitution and a permanent injunction, among other things. This Panic lawsuit was dropped in August 2006 in exchange for dropping the Ribapharm IPO bonus lawsuit against Panic.

Although the situation in Valeant was without controversies during the last decade, there were often changes in company management (four CEOs) and multiple strategies. During 2008, Valeant was buying and selling products and businesses as a day-trader. Sales and divestitures took place in January, March, June, and September (certain business operations in
Europe sold for $392m), while acquisitions took place in October, November, and December (Dow Pharmaceutical Sciences, Inc., Dermatex, Coria laboratories, Ltd.). In addition, Valeant announced worldwide collaboration agreement with GlaxoSmithKline for Retigabine and a joint venture with Meda AB. Year 2009 was also marked with numerous acquisitions and management appointments. Future research could focus on the financial situation in Valeant after 2005. Namely, during 2009, ROA was 21.16%, while ROE was 91.8%, which is an incredible increase after negative values in 2008, even though 2008 was year of major economic downturn.

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Appendix 1

| Income statement ($ mil.) | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|--------------------------|------|------|------|------|------|------|------|------|
| Revenue                  | 576.8| 542.0| 596.7| 620.8| 737.1| 686.0| 682.5| 822.7|
| Cost of goods sold       | 204.8| 128.4| 143.3| 149.6| 157.0| 184.7| 200.3| 223.2|
| Gross Profit             | 372.0| 413.6| 453.4| 471.3| 580.1| 501.3| 582.2| 599.5|
| SG&A                     | 205.1| 183.3| 217.9| 219.0| 531.0| 278.2| 295.1| 339.9|
| R&D                      | 16.5 | 8.2  | 16.4 | 28.7 | 49.5 | 162.9| 92.5 | 113.8|
| Other expenses           | 447.0| 25.7 | 27.6 | 28.7 | 30.3 | 38.6 | 90.4 | 243.7|
| Operating Income         | -296.6| 196.4| 191.5| 194.8| 30.7 | 21.6 | 4.2  | -97.9|
| Net Interest Income & Other | 46.2 | 49.3 | 54.8 | 76.0 | 207.7| 35.3 | 56.6 | 35.3 |
| Earnings Before Taxes    | -342.8| 147.1| 136.3| 118.8| 176.9| 13.8 | 52.4 | 131.4|
| Income Taxes             | 5.4  | 26.7 | 34.4 | 42.1 | 75.0 | 39.5 | 83.6 | 54.2 |
| Minority interest        | 41.3 | -2.9 | -0.5 | 9.2 | 17.7 | 0.0 | 0.0 | 0.0 |
| Earnings After Taxes     | -306.9| 123.3| 102.8| 76.6 | 84.2 | 53.2 | 136.0| 185.6|
| Accounting charges       | 0.0  | 0.0  | 0.0  | 0.0  | 21.8 | 0.0  | 0.0  | 0.0  |
| Discontinued Operations  | -45.2| -4.7 | -12.6| -12.4| -197.3| 9.4  | 33.5 | -2.4 |
| Ext Items                | 0.0  | 0.0  | 0.0  | 0.0  | -21.8| 0.0  | 0.0  | 0.0  |
| Net Income               | -352.1| 118.6| 90.2 | 64.1 | -134.8| -55.6| -169.8| -188.3|
| EPS from continued operations | -4.17| 1.58 | 1.25 | 0.92 | 1.01 | -0.64| -1.64| -2.04|
| EPS from discontinued operations | -0.61| -0.06| -0.15| -0.15| -2.38| 0.11 | -0.40| -0.03|
| Basic EPS                | -4.78| 1.52 | 1.10 | 0.77 | -1.62| -0.67| -2.05| -2.07|
| Diluted EPS from continued operations | 4.17| 1.50 | 1.25 | 0.92 | 1.00 | -0.78 | -1.62| -2.03|
| Diluted EPS from discontinued operations | -0.61| -0.05| -0.15| -0.15| -2.35| 0.11 | -0.40| -0.02|
| Diluted EPS              | -4.78| 1.45 | 1.10 | 0.77 | -1.61| -0.67| -2.02| -2.05|
| Shares                   | 73.7 | 78.0 | 82.0 | 83.0 | 83.0 | 83.0 | 91.0 |
## Balance Sheet ($ mil.)

|             | 1998     | 1999     | 2000     | 2001     | 2002     | 2003     | 2004     | 2005     |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Cash and Equivalents | 104.9    | 177.6    | 155.2    | 325.3    | 245.2    | 872.1    | 222.6    | 224.9    |
| Receivables | 0.0      | 0.0      | 0.0      | 0.0      | 0.0      | 0.0      | 0.0      | 10.2     |
| Net PP&E    | 327.8    | 332.4    | 367.2    | 405.4    | 242.9    | 241.0    | 233.3    | 230.1    |
| Intangibles | 464.3    | 456.5    | 437.1    | 446.3    | 384.6    | 435.0    | 452.8    | 615.8    |
| Accounts Payable | 92.3     | 65.2     | 61.7     | 55.7     | 33.5     | 36.1     | 48.7     | 55.3     |
| Taxes Payable | 5.1      | 0.0      | 0.0      | 0.0      | 0.0      | 0.0      | 0.0      | 0.0      |
| Accrued Liabilities | 60.6     | 66.3     | 96.1     | 3.4      | 0.0      | 15.0     | 20.3     | 42.5     |
| Total Current Liabilities | 203.8    | 140.6    | 158.8    | 161.5    | 179.5    | 166.8    | 192.2    | 234.9    |
| Total Assets | 1,356.4  | 1,472.3  | 1,477.1  | 1,754.4  | 1,488.6  | 1,976.9  | 1,521.9  | 1,530.9  |
| Cash Flows ($ mil.) |          |          |          |          |          |          |          |          |

## Cash Flows ($ mil.)

|             | 1998     | 1999     | 2000     | 2001     | 2002     | 2003     | 2004     | 2005     |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Net Income  | -352.1   | 118.6    | 90.2     | 64.1     | -134.8   | -55.6    | -169.8   | -188.3   |
| Depreciation & Amortization | 51.1      | 65.5     | 64.5     | 71       | 56.2     | 64.8     | 87.1     | 97.4     |
| Deferred Taxes | -6.1     | -1.1     | 8.1      | 9.8      | 22.6     | 13.7     | 40       | -30.5    |
| Other       | -316.7   | -95.9    | 18.9     | -6.9     | 78.5     | 166.3    | 60.5     | 185.9    |
| Cash from Operations | 9.6      | 87.1     | 181.7    | 138.1    | 22.5     | 189.2    | 17.9     | 64.5     |
| Capital Expenditures | -110.3   | -68      | -49.3    | -68.8    | -19.4    | -17.6    | -26.6    | -45.5    |
| Purchase of Business | 1.1       | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| Other       | -185.8   | 17.6     | -41.5    | -50.3    | 241.5    | -87.1    | 165.8    | -172.8   |
| Cash from Investing | -295.0   | -50.4    | -90.8    | -119.1   | 222.1    | -104.7   | 139.2    | -218.4   |
| Cash Flows ($ mil.) |          |          |          |          |          |          |          |          |

## Other Financial Information

|             | 1998     | 1999     | 2000     | 2001     | 2002     | 2003     | 2004     | 2005     |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Net Issuance of Stock | 11.1      | 11.3     | 14.6     | 12.3     | -18.5    | 1.7      | 13.5     | 192.8    |
| Net Issuance of Debt | 225.1     | 0        | 0        | 0        | 0        | 0        | 0        | 0        |
| Dividends   | -17.1    | -21      | -22.7    | -24      | -25.5    | -26      | -25.9    | -28      |
| Other       | -33.1    | 46.1     | -104.7   | 162.5    | -274.1   | 555.6    | -342.2   | 48.0     |
| Cash from Financing | 186.0     | 36.4     | -112.8   | 150.7    | -318.1   | 531.4    | -354.6   | 164.5    |
| Currency Adjustments | -5.6     | -0.5     | -0.5     | 0.3      | 1.9      | 3.5      | 9.2      | 8.5      |
| Change in Cash | -105.0   | 72.7     | -22.4    | 170.1    | -71.6    | 619.3    | -188.2   | 2.2      |
| Cash from Operations | 9.6      | 87.1     | 181.7    | 138.1    | 22.5     | 189.2    | 17.9     | 64.5     |
| Capital Expenditures | -110.3   | -68      | -49.3    | -68.8    | -19.4    | -17.6    | -26.6    | -45.5    |
| Free Cash Flow | 119.9    | 19.1     | 132.4    | 69.3     | 3.1      | 171.5    | -8.7     | 18.9     |

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### Financial Analysis

|                                | 1999   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Quality of earnings            | 0.73   | 2.01   | 2.15   | -0.17  | -3.40  | -0.11  | -0.34  |
| Quality of revenues            | 0.16   | 0.30   | 0.22   | 0.03   | 0.28   | 0.03   | 0.08   |
| Sloan accruals                 | 0.07   | -0.03  | 0.00   | -0.09  | -0.13  | -0.09  | -0.14  |
| Working capital                | 424.10 | 406.60 | 611.40 | 397.10 | 975.40 | 578.50 | 360.80 |
| Working capital/Total assets   | 0.29   | 0.28   | 0.35   | 0.27   | 0.49   | 0.38   | 0.24   |
| Retained earnings/Total assets | -0.18  | -0.14  | -0.09  | -0.22  | -0.21  | -0.40  | -0.53  |
| EBIT/Total assets              | 0.13   | 0.13   | 0.11   | -0.02  | 0.01   | 0.00   | -0.06  |
| Market value equity/total liabilities | 2.20 | 2.74   | 0.79   | 2.91   | 1.60   | 1.31   | 1.36   |
| Sales/Total assets             | 0.37   | 0.40   | 0.35   | 0.50   | 0.35   | 0.45   | 0.54   |
| Net income – dividend payments | 97.60  | 67.50  | 40.10  | -160.30| -81.60 | -195.70| -216.30|
| Retained earnings              | -271.54| -204.04| -163.94| -324.24| -405.84| -601.54| -817.84|
| Altman Z-Score                | 2.22   | 2.61   | 1.48   | 2.19   | 1.65   | 1.14   | 0.68   |
| DSRI                          | 1.37   | 0.88   | 1.14   | 0.68   | 0.81   | 1.06   | 0.91   |
| GMI                           | 0.85   | 1.00   | 1.00   | 0.96   | 1.08   | 1.03   | 0.97   |
| AQI                           | 0.90   | 0.94   | 0.89   | 1.37   | 0.67   | 1.13   | 1.35   |
| SG1                           | 0.94   | 1.10   | 1.04   | 1.19   | 0.93   | 0.99   | 1.21   |
| TATA                          | 0.07   | 0.00   | 0.02   | -0.08  | -0.03  | 0.15   | -0.15  |
| Δ WC                          | 187.11 | -17.50 | 204.80 | -214.30| 579.30 | -396.90| -217.70|
| Δ Cash                        | 72.68  | -22.40 | 170.10 | -80.10 | 626.90 | -649.50| 2.30   |
| Δ Current tax payable         | -5.14  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |
| Δ Depreciation and amortization| 14.40  | -1.00  | 6.50   | -14.80 | 8.60   | 22.30  | 10.30  |
| Fraud Z-Score                 | -1.60  | -2.11  | -1.90  | -2.47  | -2.56  | -1.26  | -2.58  |
| Accruals                      | 0.03   | 0.00   | 96.60  | 142.10 | 114.40 | 122.30 | 136.70 |
| Δ receivables                 | 51.90  | -6.30  | 41.30  | -51.10 | -53.40 | 9.50   | 16.10  |
| Δ inventories                 | 10.26  | 33.50  | -6.40  | -75.00 | 5.00   | 20.40  | 23.70  |
| Cash sales                    | 490.09 | 602.96 | 579.52 | 788.20 | 739.40 | 673.00 | 806.60 |
| Δ cash sales                  | N/A    | 112.87 | -23.43 | 208.68 | -48.80 | -66.40 | 133.60 |
| Earnings                      | 0.08   | 0.06   | 0.04   | -0.09  | -0.03  | -0.11  | -0.12  |
| Δ earnings                    | 0.34   | -0.02  | -0.02  | -0.13  | 0.06   | -0.08  | -0.01  |
| Issuance of stock             | 11.30  | 14.60  | 12.30  | -18.50 | 1.70   | 13.50  | 192.80 |
| Fraud F-Score                 | N/A    | 81.56  | 193.38 | -240.05| -85.60 | 174.06 | 404.16 |
| Profitability                 |        |        |        |        |        |        |        |
| Profit margin                 | 21.88% | 15.12% | 10.33% | -18.29%| -8.10% | -24.88%| -22.89%|
| Top-line growth               | -6.03% | 10.09% | 4.05%  | 18.73% | -6.93% | -0.51% | 20.54% |
| Bottom line growth            | -133.69%| -23.95%| -28.94%| -310.30%| -58.75%| 205.40%| 10.90% |
| Management Effectiveness      |        |        |        |        |        |        |        |
| ROA                           | 8.06%  | 6.11%  | 3.65%  | -9.00% | -2.81% | -11.16%| -12.30%|
| ROE                           | 17.35% | 11.91% | 7.91%  | -19.16%| -9.18% | -35.66%| -42.86%|
| Financial strength            |        |        |        |        |        |        |        |
| Current ratio                 | 4.02   | 3.56   | 4.79   | 3.21   | 6.85   | 4.01   | 2.54   |
| D/E ratio                     | 1.15   | 0.95   | 1.16   | 1.12   | 2.27   | 2.20   | 2.48   |
| Valuation ratios              |        |        |        |        |        |        |        |
| Price/Earnings                |        |        |        |        |        |        |        |
| Stock’s                       | 27.0   | 32.9   | 10.9   | 0.0    | 0.0    | 0.0    | 0.0    |
| S&P 500                       | 0.0    | 0.0    | 23.4   | 19.7   | 21.1   | 19.0   | 17.3   |
| Price/Book                    |        |        |        |        |        |        |        |
| Stock’s                       | 3.2    | 3.4    | 1.3    | 3.5    | 4.7    | 3.8    | 3.7    |
| S&P 500                       | 0.0    | 0.0    | 3.3    | 2.6    | 3.1    | 3.0    | 2.8    |
| Price/Sales                   |        |        |        |        |        |        |        |
| Stock’s                       | 3.2    | 3.3    | 1.2    | 3.1    | 3.2    | 2.9    | 1.8    |
| S&P 500                       | 0.0    | 0.0    | 1.5    | 1.3    | 1.6    | 1.6    | 1.5    |
| Price/Cash flow               |        |        |        |        |        |        |        |
| Stock’s                       | 13.9   | 20.2   | 40.7   | 11.1   | 123.5  | 25.1   | 12.8   |
| S&P 500                       | 0.0    | 0.0    | 12.2   | 9.6    | 11.9   | 11.4   | 10.8   |
Quarterly Share Price Changes (Dec., 1994 – Dec., 2005)

| Share prices | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|--------------|------|------|------|------|------|------|------|------|------|------|------|
| January      | 8.88 | 10.90| 12.83| 29.60| 21.23| 22.51| 24.21| 29.46| 10.51| 22.59| 24.35|
| February     | 6.87 | 12.62| 14.26| 33.27| 19.25| 17.90| 24.17| 25.62| 9.06 | 21.09| 23.65|
| March        | 7.60 | 12.29| 12.56| 42.34| 22.11| 24.75| 23.33| 25.51| 8.32 | 22.29| 20.31|
| April        | 8.35 | 12.43| 12.09| 42.67| 29.36| 31.44| 27.60| 25.85| 14.26| 17.64| 20.
| May          | 8.74 | 14.63| 12.30| 37.31| 29.09| 24.54| 28.96| 22.33| 15.93| 19.30| 17.25|
| June         | 8.10 | 12.91| 16.32| 39.58| 28.48| 25.12| 23.14| 29.21| 8.39 | 22.96| 21.96|
| July         | 10.09| 11.68| 19.52| 24.65| 27.33| 21.57| 28.14| 9.71 | 14.91| 16.97| 19.31|
| August       | 10.75| 11.68| 20.74| 13.35| 18.44| 25.64| 26.95| 9.40 | 16.71| 22.73| 19.63|
| September    | 11.61| 11.40| 28.14| 15.20| 15.27| 30.23| 24.12| 8.39 | 16.39| 23.37| 19.73|
| October      | 10.88| 10.59| 27.62| 20.42| 20.60| 34.55| 22.22| 7.81 | 18.52| 23.33| 16.86|
| November     | 10.75| 10.87| 28.38| 22.11| 21.78| 30.57| 27.33| 10.99| 22.93| 23.54| 16.27|
| December     | 10.56| 11.01| 28.13| 19.81| 22.67| 27.85| 30.75| 10.21| 24.11| 25.62| 17.85|

**Appendix 2**

**SIX RED FLAG MODELS**

Six different FFR detection models and ratios were used to develop a more comprehensive red flag approach in screening for and identifying financial reporting problems in publicly held companies rather than just using traditional ratios.

1. **Fraud Z-Score Model**

Beneish (1999) developed a statistical model used to detect financial statement fraud and earnings management through a variety of metrics. There are five key ratios used in the model, which are the Sales Growth Index (SGI), Gross Margin Index (GMI), Asset Quality Index (AQI), Days Sales in Receivables Index (DSRI), and Total Assets to Total Accruals (TATA). Each of these measures with its model coefficient, based upon Beneish’s research, is outlined below. There is also a constant value in the model of \(-4.840\). The red flag benchmark is a Z-Score greater than a negative 1.49, i.e., a smaller negative number or a positive number indicates possible financial reporting problems (Beneish 1999). For example, Enron had a Z-Score of a positive 0.045 in its last year.

SGI – Sales Growth Index \(\times 0.892\)

This measure is current year sales divided by prior year sales. It is meant to detect abnormal increases in sales which may be the result of fraudulent revenue recognition. If a company experiences a very large increase in sales from one period to the next, it may be because they are shifting revenue to a later period or booking phony revenue.

GMI – Gross Margin Index \(\times 0.528\)

This measure is last year’s gross margin divided by this year’s gross margin. While not necessarily a direct measure for potential manipulation, companies that are experiencing declining gross margins may have increased pressure to improve financial performance. Such pressure may cause them to turn to fraud or questionable financial reporting to maintain net income margins.

AQI – Asset Quality Index \(\times 0.404\)

This measure is the percentage of total assets that are intangible assets this year divided by the same percentage calculation for last year. An increase in this index may represent additional expenses that are being capitalized to preserve profitability. Rather than expensing various costs, such as research and development or advertising, these costs are being capitalized as intangible assets. Capitalization increases assets while helping to maintain the profitability of the company.
DSRI – Days Sales in Receivables Index x 0.920

This measure is DSRI this year divided by DSRI last year. Companies that are trying to boost revenue and profit will often allow customers to have greatly extended credit terms so that they will buy earlier. This practice increases revenue in the current quarter but will hurt the company in the future. This metric is meant to detect companies which make significant changes in their collection policies or which recognize phony or early revenues. It could reflect a general economic slowdown which could impact most companies and, thus, not be an effective signal.

TATA – Total Accruals to Total Assets x 4.679

This measure represents total expense accruals to total assets. Such accruals represent non-cash earnings. Similar to Sloan’s accrual measure and the upcoming accrual measure in the New Fraud Model, an increase in expense accruals represents an increased probability of earnings manipulation and possible operating and free cash flow problems.

These five ratio indexes can also be used individually as red flags for FFR as shown at the end of the Case Appendix.

2. Fraud F-Score Model

The new F-Score fraud model (Dechow, Ge, Larson, and Sloan 2007) can be used as another initial test in determining the likelihood of financial reporting manipulation. Similar to the other models and ratios, a fraudulent score for this model does not necessarily imply such manipulation but it serves as a red flag for further analysis. The model contains measures to identify problems in accruals, receivables, inventory, cash sales, earnings and stock issuances as discussed below with their coefficients, based upon their research. There is also a constant value of -6.753 in the model. The red flag benchmark is an F-Score greater than 1.0 and is calculated using an exponential model. For example, the F-Score for Enron in its last year of operation was 1.85. Their research is the most extensive of the two fraud models (designated as the old and the new models) since it was based upon an examination of all AAERs issued between 1982 and 2005 while the prior, older Beneish study was based only on AAERs issued between 1982 and 1992.

Accruals x 0.773

Firms that engage in earnings manipulation typically have abnormally high accruals. A significant amount of non-cash earnings results in inflated earnings and is a warning sign for earnings manipulation. This measure is a complex calculation based upon numerous accrual measures and is scaled by average total assets. Essentially any business transactions other than common stock are reflected in accrual measures (Dechow et.al. 2007).

Change in receivables x 3.201

The change in receivables from last year to this year is scaled by average total assets. Large changes in accounts receivables may indicate revenue and earnings manipulation. Such manipulation can occur through the early or phony recognition of revenue and large swings in accounts receivable will distort cash flows from operating activities.

Change in inventory x 2.465

The change in inventories from last year to this year is scaled by average total assets. Large changes in inventory may indicate inventory surpluses, shortages, obsolescence, or liquidation. For example, if the company uses the last-in-first-out (LIFO) method of accounting for inventory in a period of rising prices, selling older inventory will result in lower cost of goods sold, i.e., LIFO liquidation of inventory units or layers. This practice leads to inflated earnings.

Change in cash sales x 0.108

This measure is the percentage change in cash sales from last year to this year. For a firm not engaged in earnings manipulation, the growth rate in cash sales could be compared to the growth rate in revenues but these researchers did not include such an analysis. They argued and modeled that just the change in cash sales is a key metric to monitor when evaluating the potential for earning manipulation.

Change in earnings x -0.995

This measure is a percentage calculated as earnings divided by total assets this year less the same measure last year. Volatile earnings may be indicative of earnings manipulation. According to Dechow, Ge, Larson, and Sloan (2007), a consistent theme among manipulating firms is that they have shown strong performance prior to manipulations. The cause for such manipulations may be a current decline in performance which the management team attempts to cover up by manipulating financial reporting.

Actual issuance of stock x 0.938

This measure is a dummy variable that is ON if additional securities are issued during the manipulation year and is OFF if no such securities are issued. Such issuances may indicate operating cash flow problems that need to be offset by additional financing. Also, issuance of stock may indicate management is exercising stock options. The exercise of stock options may signify that managers are attempting to sell at the top because they foresee future underperformance of the company. Such insider sales resulted in the criminal conviction of Qwest’s Chief Executive Officer and have been a financial red flag in many fraud cases, like Enron, Global Crossing, and WorldCom. For example, Qwest and Enron insiders made $2.1 billion and $1.1 billion, respectively, by exercising and selling their stock options before their firms’ financial reporting problems became public.

3. Sloan Accrual Measure

The Sloan accrual measure (1996 and updated as discussed by Robinson 2007) is based on the analysis of accrual components of earnings. It is calculated as follows: net income less free cash flows (operating cash flow minus capital expenditures) divided by average total assets. The red flag benchmark is a ratio of more than 0.10. For example, Sloan calculated that JetBlue had a ratio of 0.50 and his employer, Barclays Global Investors, shorted the stock and made over 12% in less than one year.

This ratio is used to help determine the quality of a company’s earnings based on the amount of accruals included in income. If a large portion of a company’s earnings are based on accruals, rather than operating and free cash flows, then, it is likely to have a negative impact on future stock price since the income is not coming from the company’s actual operations (Sloan 1996). Since many of the accrual components of net income are subjective, managers are able to
manipulate earnings to make the company appear more profitable. In essence, the Sloan accrual measure is used to help determine the sustainability of a company’s earnings.

4. Quality of Earnings

The quality of earnings ratio is a quick and simple way to judge the quality of a company’s reported net income. The ratio is operating cash flow for the period divided by net income for the period. The red flag benchmark is a ratio of less than 1.0 (Schilit 2003). Also, large fluctuations in this ratio over time may be indicative of financial reporting problems, i.e., Enron’s quality of earnings ratios were 4.9, 1.4, and 2.3 over its last three years of operation. In its last year of operation, Enron forced its electricity customers to prepay in order to receive any electricity which dramatically increased its operating cash flows and quality of earnings ratio.

Quality of earnings is also meant to measure whether a company is artificially inflating earnings, possibly to cover up operating problems. This ratio may indicate that a company has earnings which are not actually being converted into operating cash. Methods for inflating earnings (but not operating cash flows) include early booking of revenue, recognizing phony revenues, or booking one-time gains on sales of assets.

5. Quality of Revenues

The quality of revenues ratio is similar to the quality of earnings, except that the emphasis is on cash relative to sales rather than cash relative to net income. It is the ratio of cash collected from customers (revenues plus or minus the change in accounts receivable) to the company’s revenue. Similar to the quality of earnings ratio, the red flag benchmark is a ratio of less than 1.0 (Schilit 2003). For example, Enron’s quality of revenues went down from 0.98 to 0.92 in its last year of operation. Since manipulation of revenue recognition is a common method for covering up poor results, this simple metric can help uncover schemes used to inflate revenues without the corresponding cash collection. Common methods include extending increased credit terms to spur revenues but with slow collections, shifting future revenues into the current period, or booking asset sales or swaps as revenue.

6. Altman Z-Score

The Altman (1968 and updated in 2005) Z-Score is a multivariate statistical formula used to forecast the probability a company will enter bankruptcy within the next two years. The model contains five ratios which are listed below with their coefficients, based on Altman’s research. The model was originally developed in 1968 for evaluating the bankruptcy risk of traditional public firms, such as manufacturing, energy, and retail, but it can also be applied to non-traditional and service public firms, such as software, consulting, and banking, as well as private firms. All three versions of the model are available on the Bloomberg software subscription package. The traditional red flag benchmark is a Z-Score of less than 1.8, with a score between 1.8 and 3.0 indicating possible bankruptcy problems (Altman 2005). For example, Altman recently observed that General Motors will “absolutely” seek bankruptcy protection and “they still come up very seriously in the Z-Score test into the bankrupt zone after a 30 to 60 day reorganization” (Del Giudice 2009).

(Working Capital / Total Assets) x 1.2

This ratio is a measure of a firm’s working capital (or net liquid assets) relative to capitalization. A company with higher working capital will have more short-term assets and, thus, will be able to meet its short-term obligations more easily. This ratio is one of the strongest indicators of a firm’s ultimate discontinuance because low or negative working capital signifies the firm may not be able to meet its short-term capital requirements.

(Retained Earnings / Total Assets) x 1.4

This ratio is a measure of a firm’s cumulative profits relative to size. The age of the firm is implicitly considered due to the fact that relatively young firms have a lower ratio and the incidence of business failures is much higher in a firm’s early years.

(EBIT / Total Assets) x 3.3

A healthy company will be able to generate income using its assets on hand. If this ratio is low, then, it demonstrates that profitability is poor, and that the company is in danger of bankruptcy because it is likely less vulnerable to market downsions which affect earnings. This analysis is true for both manufacturing and service companies as this ratio is included in both versions of the bankruptcy model, as well as a private company model (Altman and Hotchkiss, 2005). All three models are available in the Bloomberg subscription databases.

(Market Value of Equity / Book Value of Total Liabilities) x 0.6

This ratio adds a market emphasis to the bankruptcy model. The theory is that firms with high capitalizations would be less likely to go bankrupt because their equities have higher values. In addition, it will gauge the market expectations for the company which should take into account relevant future financial information. This market value of equity variable assumes the efficient market hypothesis is applicable which will be questioned in the following future research section.

(Sales / Total Assets) x 0.999

This ratio, also known as total asset turnover, demonstrates how effective the company is utilizing its assets to generate revenue. If this number is low, then, it indicates that the company is not being run efficiently which creates a higher bankruptcy risk. Altman’s service sector bankruptcy model drops this variable to avoid bias toward those types of companies (Altman and Hotchkiss, 2005).
**Fraud Z Score Model’s Individual Ratio Indexes**

1. **Days’ Sales in Receivable Index**
   \[ \text{Days’ Sales in Receivable Index} = \frac{(\text{Accounts Receivable}_t / \text{Sales}_t)}{(\text{Accounts Receivable}_{t-1} / \text{Sales}_{t-1})} \]

   **Benchmarks:**
   - Non-Manipulators Mean Index = 1.031
   - Manipulators’ Mean Index = 1.465

2. **Gross margin index**
   \[ \text{Gross margin index} = \frac{\text{Sales}_{t-1} - \text{Cost of Sales}_{t-1}}{\text{Sales}_t - \text{Cost of Sales}_t} \]

   **Benchmarks:**
   - Non-Manipulators Mean Index = 1.014
   - Manipulators’ Mean Index = 1.193

3. **Asset Quality Index**
   \[ \text{Asset Quality Index} = \frac{(1 - \text{Current Assets}_t + \text{Net Fixed Assets}_t / \text{Total Assets}_t)}{(1 - \text{Current Assets}_{t-1} + \text{Net Fixed Assets}_{t-1} / \text{Total Assets}_{t-1})} \]

   **Benchmarks:**
   - Non-Manipulators Mean Index = 1.039
   - Manipulators’ Mean Index = 1.254

4. **Sales Growth Index**
   \[ \text{Sales Growth Index} = \frac{\text{Sales}_t}{\text{Sales}_{t-1}} \]

   **Benchmarks:**
   - Non-Manipulators Mean Index = 1.134
   - Manipulators’ Mean Index = 1.607

5. **Total Accruals to Total Assets Index**
   \[ \text{Total Accruals to Total Assets Index} = \frac{\Delta \text{Working Capital} - \Delta \text{Cash} - \Delta \text{Current tax Payable} - \text{Depreciation and Amortization}}{\text{Total Assets}} \]

   **Benchmarks:**
   - Non-Manipulators Mean Index = 0.018
   - Manipulators’ Mean Index = 0.031

**Source:** Wells, J., “Irrational Ratios,” *Journal of Accountancy*, August 2001: 80-83.

**Appendix 3**

**FINANCIAL RATIOS**

**Valuation Ratios**

1. **Price to Book Ratio**
   \[ \text{Price to Book Ratio} = \frac{\text{Common Share Price}}{\text{Book Value per Share}} \]

   **Book Value per Share**
   \[ \text{Book Value per Share} = \frac{\text{Total Stockholders’ Equity}}{\text{Basic Common Shares Outstanding}} \]

2. **Price/Earnings Ratio**
   \[ \text{Price/Earnings Ratio} = \frac{\text{Common Share Price}}{\text{Diluted Earnings per Share}} \]
Diluted EPS = \[ \frac{\text{Net Income}}{\text{Common Shares Outstanding} + \text{Stock Options} + \text{Convertible Common Shares}} \]

3. Price/Sales Ratio = \[ \frac{\text{Common Share Price}}{\text{Sales Per Basic Common Share}} \]

4. Price/Cash Flow Ratio = \[ \frac{\text{Common Share Price}}{\text{Operating Cash Flows Per Basic Common Share}} \]

**Profitability**

1. Profit Margin = \[ \frac{\text{Net Income}}{\text{Sales}} \]

   Benchmark: 4% to 8%

2. Top-Line Growth = \[ \frac{\text{Sales Change}}{\text{Prior Year Sales}} \]

   Benchmark: 5% to 20%

3. Bottom-Line Growth = \[ \frac{\text{Net Income Change}}{\text{Net Income}_{t-1}} \]

   Benchmark: 5% to 15%

**Management Effectiveness**

1. Return on Assets = \[ \frac{\text{Net Income}}{\text{Total Assets}} \]

   Benchmark: 8% to 12%

2. Return on Equity = \[ \frac{\text{Net Income}}{\text{Total Stockholders’ Equity}} \]

   Benchmark: 9% to 16%

**Financial Strength**

1. Current Ratio = \[ \frac{\text{Current Assets}}{\text{Current Liabilities}} \]

   Benchmark: 2 or greater

2. Debt/Equity Ratio = \[ \frac{\text{Total Debt}}{\text{Total Stockholders’ Equity}} \]

   Benchmark: 0.5 or greater