

SOCIETY OF ACTUARIES

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2003 study of the 30 largest corporate failures, frauds and accounting fiascoes yielded 13 attributes shared by various groups of companies that had landed in trouble:

- 70% Unusually high dependence on debt, or marginal ability to meet debt repayment requirements; acquisitions saddled the company with huge debts; or overpaid for acquisitions.
- 57% Falsified financial statements and/or nonfinancial operating metrics to boost stock price and/or keep financing costs low.
- 53% Unusually rapid growth and/or underpriced product for rapid growth, and/ or knowingly accepted more high-risk business than other firms.
- 47% Failed to stress-test assets and liabilities under a variety of assumptions about future economic and market conditions, to apply sophisticated valuation methods to embedded derivatives, to carefully study cash flow implications of proposed transaction(s), or to act on results of such analysis.
- 47% Lack of integrity in the company's internal processes, systems and controls.
- 43% Management failed to set appropriate standards of ethics, integrity, accounting, or corporate governance; inadequate oversight by the Board of Directors.
- 23% Top executives, and sometimes directors, used shareholders' funds as personal piggybank, often without informing all appropriate board members; insider trading.
- 17% Management's reluctance to admit problems led to higher-risk investment strategies or financial engineering.
- 17% Strategy was not focused, clear or consistent; or misunderstood market.

- 17% Company's nature was fragile, based on nontransparent leverage.
- 10% Significant financing arrangements were tied to the company's credit rating and, in some cases, stock price. Without the credit rating or stock price strength, all the structures imploded.
- 10% Not able to adapt and grow as deftly as competitors; not able to match competitors' price prowess; inferior product.
- 10% Rogue trader concealed mounting losses, or principal misrepresented product.

Exhibit 1 on pages 22-24 lists the companies included in the study and provides a brief summary of the reasons for their inclusion.

Exhibit 2 on pages 25-26 provides an example of each of the 13 attributes as manifested in one company, respectively, from the study.

In 2003, I took on a new role at Jefferson Pilot Financial (JP) as vice president, internal audit planning & development. My primary goal was to develop and implement risk-based audit planning. It was a great opportunity to apply the knowledge I had gained from studying about Enterprise Risk Management (ERM), by participating on the Society of Actuaries' Risk Management Task Force, as well as my understanding of JP gained through my work in its corporate actuarial department.

At the time, JP did not have a comprehensive ERM framework that could be used as the basis for such audit planning. In 2004 I created a JPspecific framework for risk-based auditplanning, but in 2003 I was asked to provide an audit prioritization in a shorter time than I would be able to complete one based on a study of JP's own risks.

The methodology I chose for the initial prioritization was to study the largest corporate failures that had occurred, determine the attributes they shared, and then identify the areas or activities within JP that could at least theoretically be exposed to analogous risks.

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Exhibit 1

Company	Country	Business Type	Loss (billions)	When	Cause
WorldCom	USA	tele- communications	\$104	2002	Inappropriately accounted for \$3.8 billion in expenses; inflated profits.
Enron	USA	energy	\$68	2001	D & O's created complex outside partnerships that kept billions of dollars in losses off Enron's balance sheet. Recorded equity without receiving the cash. Underestimated costs; booked all pro- jected profits on future sales. Arthur Anderson acted as Enron's outside auditor and also performed internal auditing services.
Adelphia Communications	USA	cable	\$60	2002	\$4.6 billion of undisclosed loans to founding Rigas family. Unconventional transactions, questionable accounting.
Global Crossing	Bermuda	tele- communications	\$31	2002	Bogus capacity swaps inflated revenue; insider trading
Case Studies of failed European Union insurers	15 EU countries	insurers	\$30	1996- 2001	From a population of 270 actual cases of actual failures and near-misses, 21 case studies were formulated. Each case study is an amalgam of more than one case, to preserve anonymity. Conference of Supervisory Services of the EU countries performed the study to identify risks that can lead to failure. Management problems appear to be the root cause of every failure or near-failure.
Penn Central	USA	railroad	\$30	1970	Diversification; problems from merger of Pennsylvania Railroad and New York Central Railroad in 1968; incompatible computer systems and signaling systems.
Mirant Corporation	USA	energy	\$19	2003	Liquidity strain; low power prices; slow economy.
Baldwin-United	USA	piano maker/insurer	\$17	1983	Acquisitions financed by debt, but the company portrayed them as cash deals.
Kmart	USA	discount retailer	\$15	2002	Cut back on promotions during economic downturn; tried to compete with Wal-Mart & Target on similar brand names.
FINOVA Group	USA	financial services	\$14	2001	Cash flow timing mismatch; imprudent lending practices; crisis of confidence on the part of its investors and lenders.
NTL, Inc.	USA	cable operator	\$13	2002	Debts spiraled due to tech-boom spending spree.
Reliance Group Holdings, Inc.	USA	insurer	\$13	2001	During an ill-fated aggressive expansion in the 1990s, the company wrote billions of dollars in high-risk policies at bargain prices, then found itself responsible for massive unexpected losses; divested itself of key business while retaining run-off exposure.
NRG	USA	energy	\$11	2003	Power industry's post-Enron credit crunch.

Exhibit 1 (continued)

Company	Country	Business Type	Loss (billions)	When	Cause
Continental Illinois National Bank	USA	bank	\$10	1984	Faults in management, internal controls, loan pricing; overly aggressive; lending involvement with three of the largest corporate bankruptcies in 1982; turned increasingly to foreign markets to fund domestic operations; little retail banking business and therefore relatively small amounts of core deposits.
First Capital Holdings	USA	life insurance	\$10	1991	Irregular investment practices and manipulation of life insurance statements (First Capital Life Ins. Co. and Fidelity Bankers Life Ins. Co.).
Federated Department Stores	USA	retailer	\$8	1990	Saddled by debt from the highly leveraged Campeau Corporate takeover of Federated.
Conseco	USA	financial services	\$7	2002	Subprime lending; \$120 million D & O settlement.
Тусо	USA	conglomerate	\$6	2002	Tax evasion; CEO and CFO issued bonuses to themselves and other employees without the approval of the board; CEO, CFO & general counsel gave themselves interest-free loans for personal purchases of property, jewelry, and other frivolity. The loans were never approved or repaid.
Waste Management	USA	trash hauler	\$6	1998, 2001	SEC litigation; inflated company's earnings; restated 1992-1997 earnings by \$1.7 billion.
Long Term Capital Management	USA	hedge fund	\$5	1998	In 1997, concluding that the capital base was too high to earn the rate of return on capital for which they were aiming, LTCM returned \$2.7 billion of capital to shareholders, increasing its leverage to about 25 to 1. Made the firm riskier in the hope of bolstering returns to shareholders. Market conditions deteriorated sharply, leading to major losses. Russia devalued the ruble and declared a moratorium on future debt repayments; resulting losses on related bonds and other speculative positions caused LTCM's leverage ratio to climb to 45 to 1. The Federal Reserve worked out a rescue financed by private banks and brokerage houses.
Montgomery Ward Holding Corp.	USA	retailer	\$5	1997	Inadequate business strategy.
First Executive Corp. / Executive Life	USA	insurer	\$4	1991	Invested heavily in junk bonds; falsely advertised products, speculated with the premiums; adverse publicity fueled a bank run, forcing a \$4 billion portfolio liquidation before the market rose 50-60% in 1991-2.
Cendant Corporation	USA	travel, real estate, financial services	\$3	1998	\$500 million of revenue reported by CUC from 1995 to 1997 was simply invented. Sixty-one percent of CUC's 1997 net income was fake.

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Exhibit 1 (continued)

Company	Country	Business Type	Loss (billions)	When	Cause
нін	Australia	insurer	\$3	2001	Egregious under-reserving; inability to price risk properly; inadequate consideration of timing of cash flows. Rather than responding to the underly- ing causes of poor performance, HIH management used and relied on questionable transactions giv- ing rise to doubtful accounting entries. Poorly con- ceived & executed business decisions. Risks were not properly identified and managed. Board hardly analyzed company's future strategy. Inadequate policies and guidelines in essential areas.
HealthSouth Corporation	USA	health care services	\$2	2003	Overstating earnings to make it appear that the company was meeting Wall Street expectations.
Spiegel	USA	retailer	\$2	2003	Credit cards for higher-risk candidates; merchandising missteps; failure to publicly report improbability of continuing as a growing concern.
Allfirst Bank	USA	bank	\$1	2002	Complex and very determined, hidden trading losses; internal and external collusion; controls did not work; foreign exchange trading operations.
Barings Bank	UK	bank	\$1	1996	Rogue trader Nicholas Leeson hid massive losses; internal structure of Barings Futures Singapore was seriously flawed by the fact that Leeson had control of both front and back offices.
Drexel, Burnham Lambert	USA	investment bank	\$1	1998	180 different lawsuits; wide variety of wrongdoing.
General American	USA	insurer	\$1	1999	Liquidity strain from 7-day puts on its GICs.

My search was almost entirely Google-based, although I did have some helpful documents as a result of my participation on the Risk Management Task Force.

The first stage was to determine which companies were worthy of inclusion in this elite group. I was not sure at first how many companies I would include or what the minimum loss should be.

I decided that I was looking for failures, frauds and accounting fiascoes. Something very bad had to have happened, although the company might technically have survived it. I was also flexible with respect to quantifying the loss involved, because I was gathering information from many sources and the data were very heterogeneous.

I decided to use whatever I could find in the way of pre-event assets (if the result was a bankruptcy, for example), dollars of income-statement loss, drop in market capitalization, etc. Because I was trying to identify a group of companies for whom the financial repercussions were generally accepted to be very great, I considered this an acceptable methodology.

I ended up with 30 companies and a lossamount threshold of about \$1 billion.

Exhibit 2

Attribute	Company	Example
Unusually high dependence on debt or marginal ability to meet debt repayment requirements; acquisitions saddled the company with huge debts; or overpaid for acquisitions.	WorldCom	Amassed about \$32 billion in both bond and bank- loan debt during a two-decade spree of more than 70 acquisitions.
Falsified financial statements and/or nonfinancial operating metrics to boost stock price and/or keep financing costs low.	Enron	Used partnerships to create the illusion that assets had been sold, funneling cash into Enron at critical times, when the company was struggling to meet Wall Street's expectations. Used "parking" transactions – where true ownership of an asset is hidden through secret guarantees against loss.
Unusually rapid growth and/or underpriced product for rapid growth; and/or knowingly accepted more high-risk business than other firms.	Conseco	Failed to take advantage of opportunities to raise cash either by selling insurance companies or issuing new stock. Tried to grow its way out of its problems. Made loans for mobile homes and other purposes that turned out to be riskier than those it already had. The aggressive lending was accelerated rather than being reined in.
Failed to stress-test assets and liabilities under a variety of assumptions about future economic and market conditions, to apply sophisticated valuation methods to embedded derivatives, to carefully study cash flow implications of proposed transac- tion(s), or to act on results of such analysis.	LTCM	Failed to account for the fact that a substantial portion of its balance sheet was exposed to a general change in the "price" of liquidity. If liquidity became more valuable (as it did following the crisis) its short positions would increase in price relative to its long positions. This was essentially a massive, unhedged exposure to a single risk factor. According to the complex mathematical models used by LTCM, the positions were low risk. Stress-testing against this lower correlation might have led LTCM to assume less leverage in taking this bet.
Lack of integrity in the company's internal process- es, systems, and controls.	Allfirst	For five full financial years, Allfirst controls and treasury management apparently failed to spot any irregular or questionable trading.
Management failed to set appropriate standards of ethics, integrity, accounting, or corporate gover- nance; inadequate oversight by the Board of Directors.	Drexel Burnham Lambert	Brokers traded on and exchanged inside information obtained while assembling financial backing for corporate raiders. Milken was engaged in stock parking and colluded with Boesky and others to manipulate the stocks of takeover targets. He actively misled regulators.
Top executives, and sometimes directors, used shareholders' funds as personal piggybank, often without informing all appropriate Board members; insider trading.	Adelphia	\$4.6 billion of undisclosed loans to Rigas family.

Exhibit 2 (continued)

Attribute	Company	Example	
Management's reluctance to admit problems led to higher-risk investment strategies or financial engi- neering.	нін	Expansion into lines of business beyond the expertise of the underwriters. Strategic decisions based on limited information. Rather than responding to the underlying causes of poor performance, HIH relied on questionable accounting transactions which disguised the seriousnes of the situation.	
Strategy was not focused, clear, or consistent; or misunderstood market.	Kmart	Kmart's failure was a failure of marketing. Completely misunderstood market, guessed in the absolutely wrong direction, and was completely out of touch. Strategy was all over the place.	
Company's nature was fragile, based on non-transparent leverage.	Baldwin United	Acquisitions financed by debt, but the company portrayed them as cash deals.	
Significant financing arrangements were tied to the company's credit rating and, in some cases, stock price. Without the credit rating or stock price strength, all the structures imploded.	General American	Downgrade triggered investors calling in nearly \$6.5 billion in GICs.	
Not able to adapt and grow as deftly as competitors; not able to match competitors' price prowess; inferior product.	Penn Central	Penn and New York Central cultures clashed badly. There was confusion among the crews and Penn Central had problems with the unions even though it was forced to guarantee employment to all existing workers as a condition for the merger. Some trains were misplaced for days. Piggyback vans used by corporations like Eastman Kodak missed connections. Freight business began to go elsewhere. Major industrial customers abandoned Penn Central.	
Rogue trader concealed mounting losses, or principal misrepresented product.	Barings Bank	Rogue trader hid massive losses.	

I excluded companies for more reasons than just size.

Other reasons for exclusion:

- a) ongoing investigation—causes not yet clear;
- b insufficient information;
- c) Asian companies, whose situations were often not clear enough to me;
- d) too complicated;
- e) victim of litigation;
- f) problems were too industry-specific.

I excluded savings & loan companies because there were so many of them and their problems were generally similar and specific to the industry, and not relevant to my company, which was in the life insurance business as well as communications (radio & TV stations and sports programming). I also excluded banks lending to the energy industry, for much the same reasons.

I recorded attributes for each company, based on the assessments that I found in published articles. I only used conclusions that authors of the articles had drawn; none of the company-specific analyses were my own.

Here are some of my own observations, after studying the stories of so many companies:

Industry Specific Risks

There are different types of industry-specific risks. Some of these have to do with regulation, some with environmental issues and some with economic aspects of the industry. Looking back at some of the big scandals, though, I see that some of the company killers associated with entire industries are really industry-concentrated bad habits or socially acceptable deviant behavior. It was not necessary for these industries to have crashed and burned, either financially or reputationally. Some examples of these behaviors are fraud and aggressive lending by S&Ls, insider trading and stock manipulation by investment bankers, and conflicts of interest by auditors. Because these phenomena do not necessarily arise from the institutions themselves, they must be choices made by individuals who happen to work in those industries. My observation is that it should be a competitive advantage in the long run to not engage in such behaviors. It is convenient to categorize the S&L failures as having common characteristics, but it was not necessary for those behaviors to occur. Perhaps a certain type of person was attracted by an environment that allowed enough freedom for those behaviors, but it was still a matter of personal choice.

The Path to Ruin

For purposes of risk-based auditing it was relevant to look at the attributes of these companies and not just the causes of their failure. For one thing, the cause of failure is usually not that simple. But I am more aware now of the path to ruin and the different stages it might go through. Besides twists and turns, it might make a few circles or become a sort of spiral.

I saw during this research that there were different types of fatal errors that started companies down that path. But there were also different points at which corrections could have been made. There are different degrees of seriousness of the trouble that a company has gotten itself into, and different degrees of desperation in its response to that trouble.

The point at which the risk manager or auditor is going to make an observation might be in any of those stages. This is one reason for a holistic approach to risk management. Because you don't know whether the company might be in the bad strategy stage, the aggressive behavior stage, the loss control stage or the desperation stage, you have no idea which stage you might need to look for when making plans for what to observe.

Human Factors

I still have not seen any new-fangled business model that has convinced me that good management is anything other than maturity.

The LTCM case was about judgment and maturity in two ways: 1) the fund managers returned capital to investors and increased leverage, chasing high returns; and 2) they did not do enough stress testing of key assumptions in their complex mathematical model.

Even General American's situation, which some could say was a complex ALM matter, could be viewed as a case of relying too much on outside consultants in making decisions with great risk potential. Also, with 20/20 hindsight we can see that reading, and giving thoughtful consideration to, a key provision in a contract was all that was needed to see what a huge risk was involved. That did not require a complex mathematical model.

In most of these cases, basic human nature was a key driver, and basic business principles played a key role. I agree that it is very important to have good tools, and to apply controls at all levels. But this research showed me that lack of discipline, judgment, integrity, and a sense of responsibility by people in powerful positions was the undoing of many of these companies.

It is sad to see that it has taken a string of corporate disasters to raise awareness of the need for more accountability on the part of corporate executives and board members. It is hard to beat the sobering influence of significant jail sentences as the best deterrent for embezzlement or fraud.

To counter the next level of inadequacy, though, below intentional crime, the Risk Management (RM) culture has emerged as the best way to achieve the effectiveness and accountability of corporate executives and management. Risk management will not be effective if it is viewed merely as an exercise in filling out forms, reporting metrics, and establishing covariance matrices. It will not mean a change in corporate life until it is represented by respected executives who have a place at the table and whose voices are expected to be heard whenever important decisions are being made. The Board of Directors is assured that the voice representing RM is bringing up important considerations, asking appropriate questions, leveling the playing field within the enterprise on a risk-adjusted basis, providing an aggregate risk profile for the overall enterprise, and helping to ensure that the risks the enterprise takes on are "calculated" risks. +