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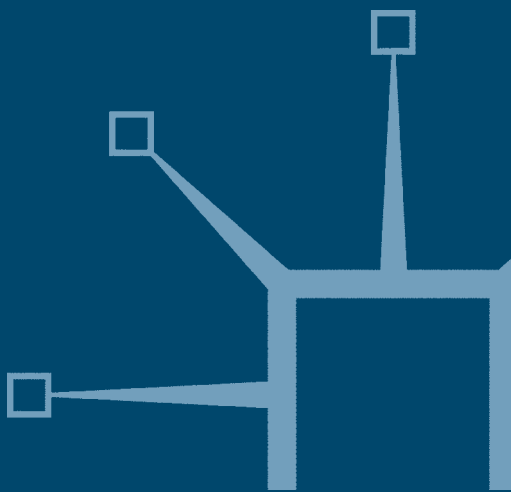
Corporate Accountability

With Case Studies in Pension Funds and in the Banking Industry

Dimitris N. Chorafas



Corporate Accountability

Also by Dimitris N. Chorafas

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Preface

Corporate accountability must be examined within the perspective of a company's business challenges. There is a synergy between shareholder value and the responsibilities of management. Therefore, personal accountability is the best policy at the level of the members of board, the CEO, his immediate assistants, and all levels of management. There is a mare's nest of risks associated with near-sighted governance, skills obsolescence and dubious deals, for which people at the helm are accountable.

This book is designed both for professionals and for the academic market, particularly senior level and graduate studies in Business Administration and Management. It is based on an extensive research project carried out by the author in the 2001 to 2003 timeframe in the United States, England and continental Europe. The text includes plenty of case studies in corporate accountability and governance – particularly among financial institutions. Significant attention is also paid to governance of pension funds, and the prevailing culture.

The issue of corporate culture, and the fact it can act as a catalyst but also as an inhibitor, has not been properly addressed in current literature. Yet corporate culture may discourage questioning of management decisions, even at board level, leading to serious breakdowns in corporate governance – and associated accountability – because of lack of questioning and challenging executive decisions. Such cases are compounded by weaknesses in identifying, monitoring, managing and reporting risks.

For instance, a combination of lack of a strong risk control culture and of weak risk management policies and systems leads to failures to identify breaches of limits, as well as to the use of accounting practices which are aggressive or of questionable legality. The end effect is that of making non-transparent the true financial condition of the company, until it is too late to exercise damage control.

The book is divided into two parts. Part One addresses issues of corporate governance and the responsibilities which result from senior management actions and inactions. It includes a major case study on pension funds. The theme of Part Two is case studies in corporate governance in the financial industry, with real-life examples from the United States, Japan and Europe.

To provide the readers with a background on notions and practices underpinning corporate accountability, Chapter 1 outlines the principles of corporate governance and the concept of business risk. As Robert E. Rubin used to say, it is necessary to take risks but it is also important to recognize our

fallibility. There is nothing that cannot go wrong or might not need corrective action at some future time.

Chapter 2 looks at corporate governance from the perspective of a market economy. It introduces the reader to the way the financial markets work, and outlines some of the prevailing distortions. It also puts in perspective existing dangers, quoting Warren Buffett on risks associated with derivative financial instruments – as well as senior management's responsibility to keep exposure under lock and key.

Chapter 3 is a case study on pension fund management, but also mismanagement. The primary focus is on British and American private pension funds which the French and Germans are now starting to imitate. Through practical examples, the text emphasizes accountability for safeguarding the safety net in the US and Europe, the fact that many pension funds became overexposed in derivatives and in alternative investments, and the growing wave of legal risk as governments, particularly the US, start taking legal action against pension fund managers.

Chapter 4 brings to readers' attention the fact that sound corporate governance and a top-tier system of internal control correlate. Creative accounting is not the only flaw. In some cases, substandard or non-existent internal control allows unscrupulous managers to manipulate financial statements and hide the true condition of the company. Superficially, some of these arrangements give the appearance of risk transfer, but in reality the entity becomes loaded with risk.

To make matters worse, external auditors are often slow to act in the face of evidence of accounting and financial problems. Chapter 5 gives evidence for this thesis by bringing to the reader's attention a list of scams that were discovered too late: for instance, Banco InterContinental in Latin America, Alpha Plus Fund in the UK, gold derivatives and the Bre-X gold scandal, copper bloodbath of Sumitomo Corporation, and diffused watchdog responsibilities in metal exchanges.

It is only normal that companies fail, but there is a difference between the bankruptcy of a financial institution, particularly a big one, and that of any other company. The failure of a highly leveraged major financial institution can lead to systemic risk. Therefore, regulators are not averse to using taxpayers' money to salvage big banks. In this respect legislators, regulators, depositors, bondholders and shareholders have different viewpoints – as Chapter 6 explains.

The theme of Chapter 7 is case studies with American financial institutions. Frauds can kill the goose that lays the golden eggs. Therefore, the Securities and Exchange Commission's penalty and disgorgement which hit ten major Wall Street banks in 2003 should not be taken lightly. Neither should the challenges faced by JP Morgan Chase and other big banks be put in the time closet. These are danger signals to be interpreted squarely, so that the free market economy survives the adversities which it is undergoing.

One of the more severe tests of the early years of the twenty-first century is the tsunami of US households' debt. This issue is addressed in Chapter 8. The case study is the ordeal of 'Freddie Mac'. In 2003, two CEOs and other senior executives of the Federal Home Mortgage Loan Corporation were fired in a matter of three months. Most often, in big and secretive companies, major financial troubles are not revealed in figures – but in the fall of the top people.

Chapter 9 focuses on Japan premium and the sorry state of Japanese banks. It explains how high leverage led to the collapse of the Japanse economy, the status of Japanese credit institutions in 2003, and the changing fortunes of some formerly big names in Japanese banking. In terms of good news, the text presents the fall and rebirth of the former Long-Term Credit Bank of Japan, which became the only profit-making Japanese credit institution in 2003.

Chapter 10 concludes this book with case studies centering on European financial institutions. It explains why the woes of German banks might well parallel those of the Japanese; brings attention to the drift of Crédit Suisse to the edge of the abyss and how a new management seems to have saved the day; and focuses the reader's attention on flaws in corporate accountability – as well as on runaway compensation and dirty tricks which can kill a firm.

There is plenty of bad news in these ten chapters, but as Dr Alan Greenspan once said, if bad news is accurate it can be as important and useful as good news, or even more so. In terms of management accountability and corporate governance the principle is that boards, CEOs, CFOs and other senior executives who do not learn from mistakes of the past are condemned to repeat them – and lose their job, their company or both.

I am indebted to a long list of knowledgeable people, and of organizations, for their contribution to the research which made this book feasible, and also to several senior executives and experts for constructive criticism during the preparation of the manuscript.

Let me take this opportunity to thank Jacky Kippenberger for suggesting this project, for the editing work, and for seeing it all the way to publication. To Eva-Maria Binder goes the credit for compiling the research results, typing the text, and preparing the artwork and index.

Dimitris N. Chorafas
Valmer and Vitznau
May 2004

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Part One

Corporate Governance and its Responsibilities

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1
Principles of Corporate Governance

1. Introduction

Poor corporate governance is the most widespread reason why a business gets into trouble. Substandard management manifests itself in many ways: for instance, by paying only lip service, or no attention at all, to forecasting and planning; failing to take account of changes in the marketplace and to position the company against market forces; falling behind advances in technology; and lacking sensitivity to product obsolescence. The consequence is top management turnover. 'The average tenure of a chief executive in America declined from nearly nine years in 1890 to just over seven in 2001,' *The Economist* suggests.[1]

The risks behind this statistic are business-related, and they are present in all companies all of the time (see section 4 on business risk). Other issues aggravated by poor corporate governance are the uncontrolled increases in the cost of production and distribution; an expansion policy which cannot be sustained through existing financial resources and therefore requires inordinate gearing; a major increase in the cost of debt; and growth or diversification of the business beyond available management skills.

Companies fail not only because their product loses its market appeal, but also as a result of reduced efficiency of their sales network, which often decouples itself from the market. Other management risks are those of developing location disadvantages, becoming subject to internal conflicts and musical chairs, paying only lip service to auditing, using creative accounting and having a CEO afraid to cut out dead wood.

Obsolescence in know-how; inadequate internal control systems; a tarnished image in the marketplace, for scandal or other reasons; non-compliance with the law; a rubber-stamp board and CEO malfeasance are still other business risks. As Figure 1.1 shows, business risk is a distinct family of exposures which has joined credit, market and operational risks – though operational risk and business-type exposures have in common management risk.[2]

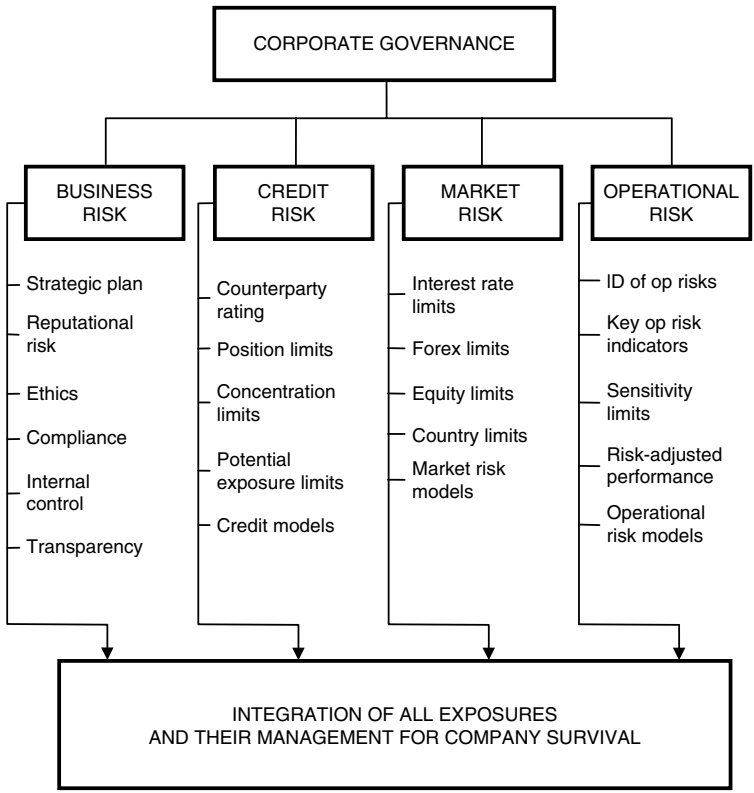

Figure 1.1 A global view of risk control and capital allocation in financial institutions

In the frame of reference shown in Figure 1.1, each industry has its own list of what constitutes good corporate governance – and its antithesis. For instance, the reasons for failing in the task of positioning *our* company against market forces varies from one sector of the economy to the next, and from one company to another. As an example, in the financial industry market risk can morph into credit risk, and vice versa, redefining the boundaries of business exposure. Moreover, the global financial system evolves from one dominated by banks to one with deep and liquid capital markets. With this transition, many credit risks become market-tied, with the result that price volatility and transborder financial flows significantly increase.

Both the deepening and the changing nature of risks can be costly in capital adequacy terms. For instance, in the aftermath of the new capital adequacy framework (Basle II) by the Basle Committee on Banking Supervision, many

experts think that loan-loss provisioning may become unstable because of market risk, greater emphasis on derivatives exposure (particularly the over-the-counter (OTC) trades), and global increase in credit risk. (More on this in the case studies on the financial industry in Part Two.)

The manufacturing industry, too, is faced with major challenges in positioning itself against market forces, as demonstrated by what has happened in the telecommunications and other industries. There are some common factors characterizing all industry sectors in regard to good or bad corporate governance. Several have been identified in the opening paragraphs. Another common element is that the company of the twenty-first century will be rich in professionals and thin in managers – which is turning on its head the old organizational structure.

In a way the company of the twenty-first century will resemble an orchestra with 300 professionals and one conductor, says Dr Peter Drucker. An orchestra does not have sub-conductors, the way industrial and financial organizations are built today. But it has a first violin, a top professional who distinguishes himself by being a virtuoso. It may not sound like it, but selecting, developing and controlling these virtuosi – and the risks they represent – will be one of the twenty-first Century's major challenges, in keeping credit, market and operational risks under lock and key.

2. Corporate governance and its challenges

The Introduction presented the reader with plenty of reasons why companies get into trouble, particularly when the violation of management principles goes unattended. Pinpointing flaws in corporate governance is no simple matter, particularly when transparency is low. It took extraordinary disclosures of debt, losses and mismanagement to find out that WorldCom, Enron, Global Crossing, Marconi, Vivendi and so many other companies were in really bad shape. Until these revelations, corporate governance of these companies was considered to be nearly admirable. This market misconception was fed through the complicity of investment banks and analysts who misled investors, as documented by the 28 April, 2003 settlement of ten Wall Street banks with the Securities and Exchange Commission (SEC, see Chapter 7). Members of the board, too, share a great deal of responsibility. Topmost among their obligations is independence of opinion, as well as the courage to challenge the chief executive's decisions and, when necessary, to change the CEO. However, removing the 'unchallenged' authority of the chief executive places important demands on company directors. Independent board members must now pay a great deal of attention to a growing list of issues connected to corporate governance – from innovation and efficiency to executive pay. Shareholders, governments and regulators are becoming increasingly interested in the issue of runaway executive compensation. 'Rewards for a small minority', says Patricia Hewitt, the UK's Secretary of

State for Trade and Industry, 'damage the image and reputation of the whole of British industry.'[3]

Moreover, to properly represent the interests of shareholders, outside board members must be immune from conflicts of interest. This is not always the case. The takeover of Mannesmann by Vodafone provides an example which is now making legal history. On 17 February 2003, after a two-year investigation, state prosecutors in Düsseldorf charged six senior executives associated with Mannesmann over the approval of payments to top managers when Mannesmann was acquired. (See also reference in Chapter 4 to new German legislation on personal liability.)

Those in the dock include Klaus Esser, then chief executive of Mannesmann, Josef Ackermann, CEO of Deutsche Bank, and Klaus Zwickel, head of IG Metall, the mighty German trade union. The accused were all members of Mannesmann's supervisory board, which under Germany's two-tier board structure, appoints the board of management and exercises strategic oversight. Mannesmann's board members have been charged with *Untreue*, which means breach of trust, or being an accessory to breach of trust. The reason is that before the takeover, they approved payments totaling DM 250 million ($125 million) to Esser and other managers of Mannesmann. Esser, who had originally opposed Vodafone's takeover, received DM 61 million, half of it as contractual severance pay. The rest was a discretionary *appreciation award* for his 11 months running Mannesmann – to the tune of nearly $1.5 million per month. Prosecutors thought the award was suspect.

- Mannesmann's CEO had fought hard against the Vodafone bid.
- But he gave up resistance against Vodafone's takeover quite unexpectedly.

On 19 September 2003 the State Court in Düsseldorf permitted the accusations against Dr Josef Ackermann, Klaus Zwickel and Klaus Esser to be brought before the court. In Frankfurt, analysts said this promises to be a long and interesting legal process, which will allow observers to discover many hidden aspects of legal risk at board level.[4]

In another case, that of Vivendi, many of the board members were CEOs of other French companies, and they supported Jean-Marie Messier when he came under fire from a minority of directors, mainly North American, for reasons of mismanagement and poor performance. This company had huge debts. It took a switch of some of the majority directors to empty the chair on which Messier was sitting.

What has happened with Vivendi's board is by no means a unique case. According to The Corporate Library, a lobby group for governance, directors of many companies, such as Verizon, Pfizer, Citigroup and Bank of America, have interlocking relationships. The chief executive of company X sits on company Y's board and vice versa. Moreover, chief executives have tended

to dominate the choice of board members, with search committees usually encouraged to look for consensual candidates who will not rock the boat.

It is not difficult to comprehend why chief executives tend to value what they call 'team players' on boards. Sound corporate governance, by contrast, requires challenge and dissent. The best-performing companies have boards that regard dissent as an *obligation*, even if contention and dissent do not necessarily foster a climate of constructive dialogue at board meetings.

An effective board must feature regular meetings of non-executive directors in sessions at which the company's senior management, including the CEO, is not present. This is now starting to happen in America. Moreover, compensation, nominating and audit committees must be composed entirely of independent directors, with the audit committee chaired by a director with accounting and financial expertise.

The exercise of control by the board, including its underlying notion of corporate accountability, is vital in keeping hold of the reins of an ongoing concern. In all cases, what counts most in the end is how directors, the CEO and his immediate assistants behave, and what directors ask in challenging senior management decisions – also, to what extent board members and the board's committees are in charge of the company's policies, including risks being assumed. The board's supervisory authority is often compromised because:

- the CEO is showering board members with fringe benefits and other goodies;
- directors are unwilling to investigate, let alone challenge, the 'obvious'; and
- interlocking board membership among CEOs of different firms leads to give-and-take deals.

The complexities of modern corporate governance, and of financial instruments supporting it, have changed the old rules of the game. For instance, the straightforward antithesis between a company and its creditors has been replaced by a wider range of often conflicting interests. Take the case of an investor who bought debt yesterday at 20 percent of face value. This investor might be happy to be repaid tomorrow at 25 percent. By contrast, a bondholder that paid the full price for the bonds as a long-term investor would prefer to recover 75 percent in three years' time. For his part, the holder of a credit–default swap might prefer the company to go into bankruptcy.

The business world today is a far cry from the simple model of lenders, shareholders and bondholders we have known since the post-World War II years – and the new model keeps changing all the time. Restructuring negotiations, for example, get more complex as some around the table may be trading in and out of their positions each day, with motives behind their decisions changing accordingly.

- The company executives and their bankers are not the only parties that sit around rescheduling loans.
- Others are investors who bought loans and bonds at a discount, and those who have bought credit–default swaps.

Appearances are often deceptive. A former chairman of Asea Brown Boveri, for instance, was considered the model of a successful executive who had turned the company around, until his self-gratification came to the public eye, and the company itself ran into trouble. If one facet of mismanagement is outright bankruptcy, another is the sequel of messy debt; still another is legal risk such as that resulting from asbestos litigation.[5] In the UK, Marconi's case is a good example of the growing complexity of corporate workouts.

3. Taking a leadership position

Good corporate governance requires that the chairman, board members, the CEO and senior executives excel in developing a *culture* of the organization commensurate with the demands of their time. They should be guiding the company through the process of change, and they should be in charge of the company's adaptation to market conditions, seeking partners and forging alliances. Rethinking, restructuring and steadily developing the product line is also a basic responsibility of the board and senior management.

Another sign of industrial and business leadership is assuring that the company is a high-quality, low-cost producer of products and services. Still another is guaranteeing that the company's technology is state of the art, is used in an effective manner, and is able to keep the firm at the cutting edge of competition.

Leaders of industry, business and finance able to reach these goals are usually remarkably open about their thoughts on their objectives, decisions and acts. This is the case not only because they talk from a position of strength, but also because by being ahead of the curve they realize that their corporate opponents have a long way to go before being able to counteract their moves.

True leaders behave a great deal like Socrates: they question everything, and train themselves all along using every experience as a lesson. Many senior executives, unable to steadily review and renew themselves and their know-how, do not last long at the steering wheel. When they manage to keep themselves at the helm, they destroy the organization that hired them.

Industry's leaders appreciate that no decisions are fail-proof and sometimes what seems to be 'the best' can be distorted by wrong assumptions or light-weight estimates. Therefore, true leaders surround their position of authority by personal accountability, as shown in Figure 1.2 Accountability for results is so important because market conditions change and major events can overtake even the most carefully laid-out plans. In consequence,

Figure 1.2 Accountability, responsibility and authority form an integrated reference frame

rather than simply classifying decisions into 'right' or 'wrong', it is better to know:

- the hypotheses that went into them;
- the level of analysis that preceded them;
- the contrarian opinions that were considered;
- how the logic of dissent has been handled in reaching a decision; and
- the responsibilities that have been assumed.

All these elements, along with *post mortems* permitting thorough study and evaluation of obtained results, are vital to a factual analysis of the consequences of decisions. *Post mortems* must be based on evidence and they should involve the accountability of the decision-maker – whether the object is products, markets, technology, financial staying power or human resources.

The power of a company is derived from the power of its leadership and of its products, and also from the position its products have in the customer's mind. In the 1960s and 1970s mainframe computers had market power. As a company, IBM was merely a reflection of that power. When by the mid- to late 1980s the power of the mainframe faded, so did the leadership position – if not altogether the *raison d'être* – of IBM. A new management, however, was able to engineer a turnaround by focusing on IT services.

Marketing arrogance is no substitute for product appeal. No past marketing clout can maintain the kind of trust that can be relied upon to deliver success after success. This is a classic mistake made by boards and CEOs, and

it has much to do with the illusion that market power and product power are an 'acquired right' of the organization. In reality, exactly the reverse is true.

Industrial history confirms that what dethrones a market leader is the mismanagement of change. The New York Central Railroad was not only the leading railroad of the 1920s; it was also a pure-bred, blue chip company. Five decades and several mergers later, New York Central was simply an anemic relic of its predecessors, unable to face the changed market. It is no surprise that it went bust.

From the old IBM to New York Central, most failures happen because bureaucracy takes over, and eventually the company caves in. Mismanagement looks at the new products and services the market requires as a sort of competitor rather than as a new business opportunity. Therefore it fights tooth and nail to keep the company in the old tracks – even if this leads it to the precipice.

What I have just stated does not mean that every change is for the better. Changes made in a hurry, or just to follow a trend, can be a disaster not only for the company itself and its management, but also for its other stakeholders. The steering of the old but solid British General Electric Company (GEC), and its lucrative defense contracts, to the hype that surrounded Marconi is an example.

Because it was an industry leader in its area of activity, GEC, Marconi's forerunner, used to enjoy an AAA credit rating. But after the company changed its name, sold its profitable defense divisions, and with that money went on an ill-conceived acquisition binge, it fell victim to the bursting of the telecommunications industry bubble.

- In July 2001 Marconi issued a profit warning.
- By September 2001 the price of its shares had fallen by 80 percent and that of its bonds by 65 percent.

Marconi's equity collapsed and debt has been downgraded as the market found out the company had about £4 billion ($6.4 billion) in debt. Half was in bank loans and the other half in bonds. Marconi began to renegotiate its bank loans. Then, without consulting the banks, Marconi decided in March 2002 to restructure all its debt, including loans and bonds.

The banks which had financed Marconi felt double-crossed, because of the failure to make their rescheduled loans senior to Marconi's bonds. Since Marconi had an AAA credit rating, they had not bothered to put in covenants. Basically, the bank's failure was that of not imagining a restructuring in which seniority of credit would matter. The rest is history in mismanagement by the banks and the borrower.

Both lack of due diligence and arrogance find themselves at the root of many business failures. A telling moment in the attitude of people towards business came in court proceedings in late April 2002, when Carly Fiorina,

CEO of Hewlett Packard, was being questioned. 'Sir,' she snapped indignantly, 'you are accusing the chief executive of a publicly traded company of lying.'[6] Her indignation seemed wholly out of place in the climate of hollow business confidence following the bust of the bubble with Enron, Global Crossing, Adelphia Communications, WorldCom and so many other former industry leaders and other horror stories.

One of the crucial things most analysts missed during the technology market boom of the 1990s was the willingness among executives to abandon ethical behavior. Disclosures of greed, corruption and conflict of interest undermined public confidence in stock markets. However, investors must share the blame for demanding earnings growth available only in fairy tales. This process contributed to killing the trust that is needed between

- a company and its employees,
- a company and its business partners, and
- a company and its investors.

Greed fostered an environment of CEO malfeasance. People in leadership positions did not bother to heed the advice of Confucius who, 25 centuries ago, said: 'Good government needs weapons, food and trust. If the ruler cannot hold onto all three, he should give up weapons first and food next. Trust should be guarded to the end because without trust, we cannot stand.'

4. Corporate governance and business risk

A great many senior management mistakes originate in strategic planning as well as in the lack of it. Boards and CEOs often fail to appreciate that one just cannot win by duplicating what is done by the leading company in a field. Managements get this wrong all the time, failing to understand that, in many industries, the followers may need to turn the leader's strategy upside down:

- finding the leader's weak points and capitalizing on them,
- but also always evaluating the consequences of their actions, and their own ability to face them.

The need to establish a very competitive strategy which gives *our* company the upper ground should always be a key concern of a management team. This requires expertise, but also information and experimentation on ways and means of taking the lead in a competitive environment – and those allowed to hold that lead.

For instance, there is much evidence that while it is necessary, a good product is not enough for market leadership if we don't have the high ground in marketing. Victory does not necessarily go to who controls

the territory – but that's the most weely outcome. Strategy should be confirmed by the daily results, which constitute the input from the marketplace. It should not be judged in the antiseptic environment of an ivory tower.

Many of the mistakes made by management translate themselves into business risk. The notion underpinning business risk has many components, some of which have financial impact, but others are much more general – and may be more damaging in the long run. An example is reputational risk. Typically, it takes a lifetime to build a reputation; one big mistake is enough to destroy it.

An often-cited example of business risk is its influence on the brand name. Companies like Sony, Coca-Cola, Microsoft, General Motors, Motorola and many others depend very much on their brand name and do everything to protect it. Other companies, however, take a different attitude and tend to abandon one or more of the brand names under their wing.

In April 2003 Salomon Smith Barney, Citigroup's investment arm, which operated in the UK under the brand name Schroder Salomon Smith Barney, became a plain Citigroup division. The Smith Barney name will live on as the group's independent research outfit, but the Salomon brand has faded. A short time before Citigroup's decision on change in nameplating, UBS (Swiss Bank Corporation) dispensed with the Warburg name for its European investment bank and PaineWebber for its American operations. Both will now operate under the brand name UBS.

The sudden disappearance of the Warburg and Salomon nameplates left the market curious about the reasons. In the 1970s Salomon was pre-eminent, with the best investment bankers as well as the best researchers and best traders. Its attitude to risk-taking was epoch-making, but in 1991 it was hit by a Treasury-bond scandal. Over long years, S.G. Warburg was the closest that a UK financial institution came to an international investment bank. But it fell on hard times and sold in pieces, with its Mercury Asset Management going to Merrill Lynch, while the parent firm was bought by Swiss Bank Corporation (now UBS).

Both the Citigroup and UBS decisions were deliberate, part of a strategy to concentrate on one brand name. Other re-nameplating, however, may be done to change the image that business partners and other market players have about a firm. An example is the 2003 renaming of WorldCom as MCI, one of the entities it had acquired in its heyday, after a torrent of financial scandals hit WorldCom in 2002 and led to its bankruptcy.

Another business risk, mentioned briefly in a different connection, is misjudging the evolution of the market environment. Misappreciating our competitors' strengths and weaknesses and miscalculating *our own* strengths and weaknesses is still another trap into which a surprising number of companies are falling. This is a challenge for every board member, CEO and senior executive.

Because business is built on confidence, the loss of market confidence is a major business risk. An example of how to act to re-establish confidence is provided by central bankers. In 1797, facing a drain on gold reserves, the Bank of England suspended convertibility. In 1817 a new coinage, the gold sovereign, was issued and convertibility was re-established in 1821.

The restriction served to demonstrate that ultimately the bank's credit did not depend on the convertibility of its notes into gold, but on confidence. In this particular connection, and in many other cases, business risk should not be confused with credit risk or market risk. It is a residual risk with cyclicality. If in the early nineteenth century the Bank of England had failed to re-establish market confidence, then the restriction would have turned into reputational risk.

Recently business risk has taken on another aspect related to the cost of doing business. This, too, is a measure of earnings risk, but contrary to other risks it relates to the impact on earnings from higher competitive pressure. The reasons may be decreasing market share, lower margins and lower volumes due to economic downturns which oblige a downsizing of personnel commensurate with loss of business.

Usually, business risk is calculated from earnings volatility when the impact from other risks taken by the enterprise has been deducted. In the financial industry, this particular business risk is often expressed by a fall in margin. Barclays Bank computes it using the algorithm:

$$\text{Business risk} = \text{Annual turnover} \cdot \text{Margin} - (\text{Fixed cost} + \text{Variable cost} \cdot \text{Revenue volume})$$

According to this algorithm, losses connected to business risk may come about because of costs that are too high, either in absolute terms or relative to those of competitors. At Barclays, experiments made to estimate past business risks include historic turnover volatility over a 20-year timeframe. The pattern is shown in Figure 1.3.

Studies based on historical information can be revealing in terms of business risk events. They can also be instrumental in helping to avoid past failures. After historical data are collected and analyzed, experiments can be done in making projections. A senior executive of Barclays Bank said during our meeting that, using a Monte Carlo simulation, the institution selects certain values from the lognormal distribution in Figure 1.4 and applies last year's margin.

In my experience, no two entities follow the same procedure in evaluating business risk and its consequences. To estimate business risk, the top management of another money center bank takes into account commission and fee forecast; then it examines the shortfall. This is done by business unit and product channel, because it varies between business units.

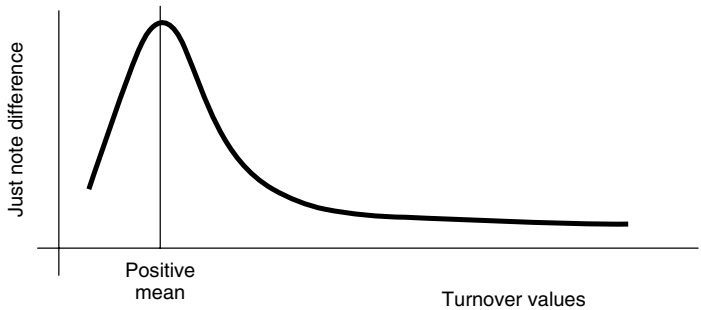

Figure 1.3 Historic turnover volatility over a 20-year timeframe at Barclays Bank

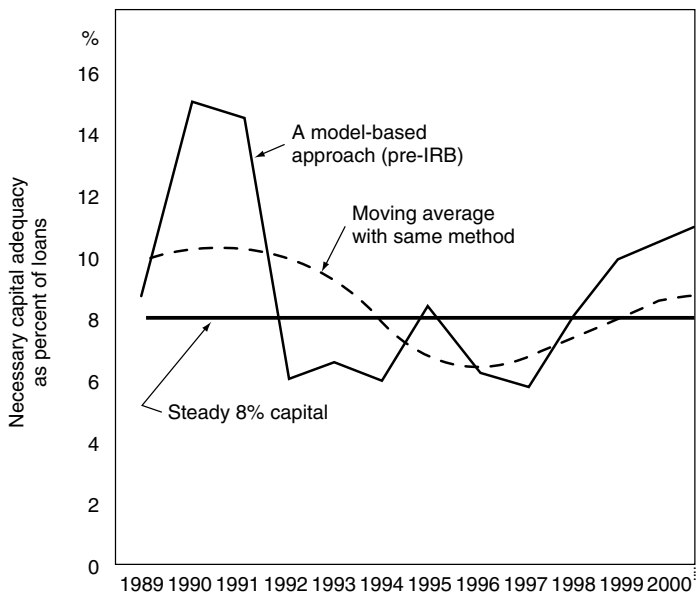

Figure 1.4 Required capital reserve over time, computed through an algorithmic approach
Source: Extract from a study by the European Central Bank.

For instance, a shortfall in mergers and acquisitions (M&A) activities has significant financial impact, due to the high fixed cost characterizing M&A. On the contrary, in private banking the after-effect of shortfall is much lower. Also, as a reserve able to compensate for business risk, some banks deduct 60 percent or more of goodwill from shareholder equity.

The sense of sharp reduction in goodwill rests on the fact that rebuilding market trust is no easy matter. Case after case has demonstrated that there is no room for complacency in the boardroom; neither should there be an easy-going attitude to compliance with legislation and with new, more rigorous corporate regulations.

Compliance is very important, and should be one of the top issues in terms of a board's attention. A survey by Gallup International for the World Economic Forum of 2003 showed that trust in domestic companies had fallen since December 2000 in 13 out of 17 countries surveyed. The sharpest falls were in Argentina, the Netherlands and the United States.

This is a business risk challenge. Rebuilding trust in industrial organizations and credit institutions takes time, and it can be done only brick by brick. Small steps help, but big steps go much further – like those that politicians and government officials must take to:

- push through the necessary major reforms, and
- bring back business confidence.

For instance, taking care of tax shelters in Enron's aftermath has been one of the major US government actions aiming to restore public confidence and keep business risk in check. In February 2003, Charles Grassley, chairman of the US Senate's Finance Committee, published an exhaustive report on the tax affairs of Enron, which involved spending millions of dollars on accountants and bankers to produce a federal tax bill totaling only $63 million between 1996 and 2001 – all this despite huge *reported* profits.[7] The now defunct energy company did so by:

- setting-up complex tax avoidance structures, with names like 'Project Valhalla' and 'Project Renegade', and
- booking its tax savings as profits, while turning its tax department into a profit center with *annual revenue* targets.

These revelations have brought to the fore a new form of business risk based on massive tax evasion. They also coincided with curious goings-on at other companies which allegedly enabled their top executives to shield themselves from tax liabilities incurred through the exercise of stock options.[8]

5. Targeting a high grade by rating agencies

Let's start with the premise that independent rating agencies are part of the mechanism for market discipline. Targeting a high grade by rating agencies is a new development in corporate governance. As an indicator of good standing, it has come to life with the new capital adequacy framework (Basle II) of the Basle Committee on Banking Supervision.[9] To appreciate this reference,

it is necessary to give a brief introduction to the work independent rating agencies are doing.

The four most important independent rating agencies which are active in the global market are: Standard & Poor's (S&P), Moody's Investors Service, Fitch Ratings and A.M. Best (for insurance companies). Their job is to analyze credit risk associated with an issue, like a bond, or with an issuer. The rating agencies grade the creditworthiness of an entity in a scale of up to 20 thresholds – from AAA, the highest grade, to D, for default.

The best possible rating, AAA, is followed down the line by AA+, AA, AA–, A+ and so on. Up to and including BBB–, issues are called 'investment grade'. Below that, they are non-investment grade. To compensate for credit risk, they offer a higher interest rate.

Similar principles apply with the rating of entities. Because of accumulated bad loans, high exposure to derivatives and other negatives – with the exception of Rabobank and state-supported institutions – banks lost their AAA rating some years ago. Several have fallen to A or below A level, but with Basle II a new target has emerged: regaining and maintaining an AA rating by independent agencies.

Most evidently there are prerequisites in fulfilling this goal. Ample economic capital, beyond regulatory capital, is one of them. Simply stated, the observance of regulatory capital buys the bank its license. But the market wants to see much more evidence of financial staying power. To get from rating agencies an AA, and even more so an AAA rating, the bank must have significant economic capital resources – as well as fulfill other prerequisites, such as having a top-quality management. Notice that target rating:

- is global;
- is a mark of distinction; and
- can be a burden.

Establishing a rating goal is a good idea, but it is also a moving target since it is a lagged indicator, depending on economic capital and assumed credit risk, market risk and operational risk. Business risk, too, comes into the picture (see section 4).

Exposure is a dynamic notion that can vary significantly over time, as shown in Figure 1.4. A fixed level of capital adequacy, for instance at 8 percent as defined by the 1988 Capital Accord (Basle I), is in some years too little and in other years more than necessary. Only in 1995, 8 percent was – on average – the right amount, as documented by the findings of the European Central Bank (ECB).

Moreover, as the previous paragraphs have brought to the reader's attention, while capital adequacy is very important, it is not enough all by itself for AA or better rating. The other 'must' is first-class governance. Companies are composed of people, and people change. As a result, the grading of

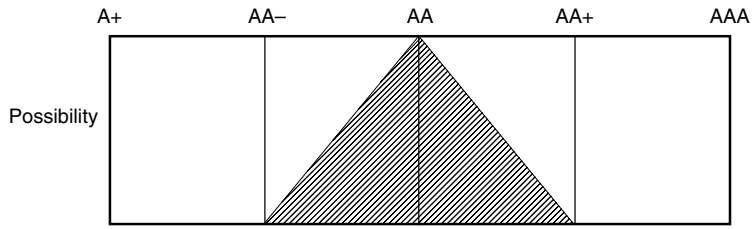

Figure 1.5 A bank should be more flexible than a single rating, the target AA has the highest likelihood, but there is spillover

management quality varies over time; therefore rating cannot remain fixed for long.

For this reason, it is better to put target rating limits rather than targeting a single grade. An example is a range AA+ to AA–, used in conjunction with fuzzy sets as suggested in Figure 1.5. Notice that the fuzzy engineering diagram in this figure has a certain similarity with the output of the model-based approach by ECB, in Figure 1.4, except that peaks and lows are inverted: a peak in capital requirements would correspond to a low rating for a steady 8 percent capital adequacy.

To better appreciate target rating by independent agencies, it is necessary to take a closer look at the banks' credit decisions, trading decisions and investment decisions – as well as their consequences. Credit decisions may concern:

- new loans
- new securitizations
- new participating interests
- revisions of participating interests
- restructurings
- loan increases and extensions
- permission for overdrafts
- changes in risk-relevant circumstances
- definition of borrower-specific limits, and so on.

Credit rating is not a one-off event but a perpetual business. Because counterparty risk is alive and well, borrowers must be re-rated at least once a year to capture their current risk situation. Also, ratings must be subject to regular stress tests. Moreover, internal and external auditors should audit quality of ratings and adequacy of their use.

While banks rate their loans clients, correspondent banks and trading partners, they are themselves rated by independent rating agencies and

correspondent banks in terms of their corporate governance and finances. Rating agencies said that when assessing A, AA or AAA they give high importance to Tier-1 capital, which is core capital (defined by the 1988 Capital Accord, Basle I). At Rabobank which, as mentioned, is the only non-state-owned bank to have AAA, most of the capital base is Tier-1 equity and retained earnings. Some rating agencies suggested that:

- if a credit institution has only regulatory capital to cover credit risk, then it may be a BB or BBB bank;
- a good question is: 'how much more capital for AAA over AA?' Should the different be 10 percent, 20 percent or more?

This query applies to upgrading, holding one's grade and downgrading. There is no definitive answer to be given because the response is conditioned by the amount of exposure that has been assumed. In the years to come both rating agencies and counterparties will be looking quite closely at risks in an entity's portfolio, and evaluate its economic capital to determine the corresponding financial staying power.

This is an issue which, without the least doubt, should attract a great deal of attention from members of the board, the CEO and senior management, because it is at the kernel of corporate governance in the twenty-first century. Moreover, because the time and attention of senior management are two of the scarcest commodities, well-run companies should prioritize their goals and the issues to which the board and CEO address themselves.

One of most important qualities of top management is how well it deals with crises, which are bound to come from time to time. Very few business leaders are able to cope with troubles on many fronts. The sophistication of financial instruments, the flood of information that now pours in, and the amount of risks being assumed left, right and center have changed the nature of crisis management. A sound allocation of top management's precious time is a 'must'. Moreover, much more powerful tools are needed to cope with several fights at once. One of the best tools is risk-based pricing.

6. Risk-based pricing as senior management tool

Section 5 made reference to Basle II regulatory capital and economic capital, as well as the importance of accounting for all assumed risks. These are position risks in the entity's portfolio, which are renewed practically every minute through new transactions and the risks these represent. This is where risk-based pricing of products and services comes in, leading to three major benefits from Basle II:

- better governance
- improved risk management
- factual economic capital allocation.

Keeping both position risk and transaction risk in perspective, risk-based pricing serves all product channels: loans, trades, including derivatives; investment decisions; portfolio management. As is to be expected, several challenges must be met.

The first challenge is that of being able to identify, qualify and quantify the risk associated with each type of transaction in each of the aforementioned domains. This should be done before the transaction is concluded. A real-time response is key to risk-based pricing. If we don't know the risks, we cannot price our product in a way that covers the associated exposure and leaves a profit.

The second challenge is to sell the risk-priced product to the counterparty. Risk-based pricing would be only a theoretical exercise if the product did not sell – and it may not sell because covering the embedded risk can mean that the price becomes too high. This poses a huge dilemma to top management which, *in extremis*, can be phrased in these terms:

- Will the company cut the price and risk bankruptcy? or
- Will it stick to risk-based pricing and lose business?

The answer will most likely fall between these two extremes: there will be a deviation from risk-based pricing but not to the level of risking bankruptcy. This is precisely what has happened to NatWest Markets (and a horde of other cases) where pricing of options was based on an overoptimistic estimate that future volatility will be low, with the result that in March 1997 NatWest Markets lost £300 million ($490 million). Such loss led to its downfall, and that of its parent company National Westminster Bank, which was acquired by the Royal Bank of Scotland.

Even when it is not fully observed, risk-based pricing serves as both benchmark and warning. Then, when deviations from it take place, the challenge becomes: how quickly can we turn the bank around? The turnaround would require that we use risk-based pricing as discovery mechanism to identify faults, and avoid their repetition. For instance, risk-based pricing might lead to exiting some markets, or to shifting of bad risks from banks applying the advanced internal ratings-based (A-IRB) method of Basle II, to others less sophisticated, and/or with poor knowledge of assumed risks.

The message conveyed by the preceding paragraphs is that risk-based pricing for discovery purposes is one way of improving corporate governance. In the last couple of years it has become a sort of widespread opinion that banks applying A-IRB may be able to shift their bad risks to those that are still with 8 percent capital adequacy of Basle I, or the standard method of Basle II. Indeed, smaller banks are worried about being considered second-tier institutions by:

- the market,
- Rating agencies,

- sophisticated customers, and
- trading partners.

The methodology of risk-based pricing means that not only the pricing of products and services accounts for risks being assumed; the pricing of risk reflects itself in internal capital requirements, as shown in Figure 1.6. Top-tier banks, which I met in my research, think that risk-based pricing will make it possible to conquer the high ground in the market.[10] The use of A-IRB models for risk management and capital allocation can also:

- serve as an early warning system, and
- provide the basis for flexible business policies.

A practical example is lending for five years, but adjusting the pricing of the loan every year in function of the counterparty's credit quality and changes in creditworthiness. It is wise to remember that policies and procedures targeting risk-based pricing must always be kept dynamic; if they become static they would degrade to a level of an average constant such as 8 percent capital requirements.

Interestingly enough, risk-based pricing protects both counterparties, because it makes them aware of assumed risks. Typically, with fixed ratios both the lender's and the borrower's dependability, which has always been part of the transactional equation, is underestimated. Basle II changes this by obliging banks to quantify risk. This was fully demonstrated by the results of the third quantitative impact study (QIS3) by the Basle Committee.

A risk-based approach to the pricing of financial instruments realistically reflects the fact that default rates vary enormously by rating. As an example, Table 1.1 presents statistics from Standard & Poor's (1-year and 3-year average rate). Creditworthiness and its inverse, expected default frequency,

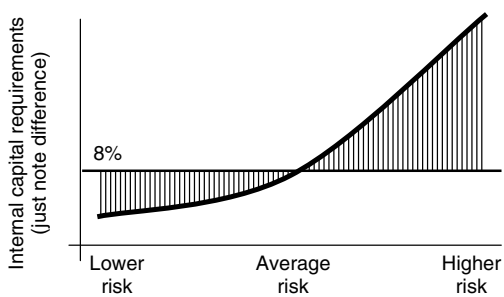

Figure 1.6 Risk-based capital allocation is dynamic while static approaches work on averages

Table 1.1 Default rates for pools of outstanding loans, 1981–2000, by Standard & Poor's

	AAA	*AA*	*A*	*BBB*	*BB*	*B*
1-year average rate	0.0	0.01	0.04	0.22	0.98	5.3
3-year average rate	0.0	0.08	0.19	0.77	5.27	14.9

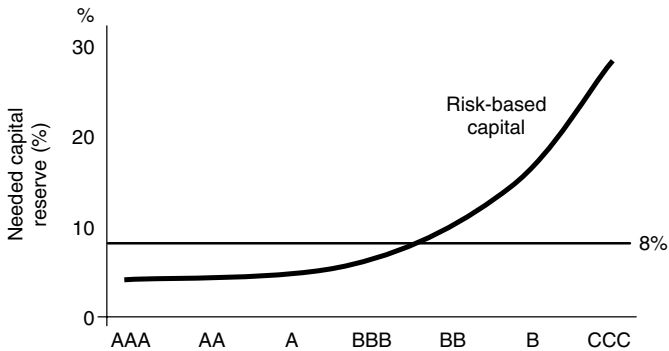

Figure 1.7 Risk-based Pricing

must reflect themselves both in the pricing of products and in needed capital reserves.

Figure 1.7 recasts the concept presented in Figure 1.6, but this time the abscissa is credit rating and the ordinate capital reserves corresponding to the counterparty risk being assumed. The patterns shown in this and plenty of other examples reveal that both risk monitoring and dealing in risk are evolutionary processes. Their able handling requires innovation – not only technological but organizational as well.

One of the reasons why risk-based pricing is the right tool at the right time is the credit risk crisis banks and their clients are going through. As a study by the Basle Committee shows, disclosure rates generally decrease as the sophistication, complexity and degree of proprietary information increase.[11] For instance, fewer than half of the banks participating in this study disclosed information on:

- securitization,
- credit derivatives, and
- credit risk modeling.

What this means in practice is that for reasons of better governance each bank has to depend more and more on its own statistics and estimates of

risk. Even with the Basle Committee, about 20 percent of banks did not disclose how they determine when their credits are impaired or past due. Moreover,

- only 11 percent of banks provided credit risk models information comparable to disclosure about market risk, and
- only 7 percent of credit institutions disclosed the replacement cost of non-performing derivatives.

By contrast, almost all banks disclosed their risk-based capital ratio, even if fewer than half provided information on credit and market risk against which capital serves as buffer. This is understandable in the sense that the latter is proprietary information. However, the fact that nearly all credit institutions participating to the Basle study disclosed risk-based capital ratios indicates that this practice is spreading widely and it might well become one of the pillars of market discipline in the years to come.

2

Corporate Governance in a Market Economy

1. Introduction

The first question relating to the title of this chapter is: what makes a market economy? In a nutshell, the answer is the six freedoms: freedom to enter the market, engage in competition, exit the market, set prices, make profits and, eventually, freedom to fail. There are, of course, other basic characteristics of a market economy, such as the need for market sensitivity, customer orientation, and rapid deliverables from research and development (R&D).

R&D is vital for product and service innovation, while market research helps in focusing the R&D effort. On the employment side, a market economy works better when the rule is hire and fire. This makes jobs unstable, but also spurs employment. At government level, too, a market economy has preconditions. One of the most vital is a legal system supportive of individual and corporate responsibility. A corrupt judiciary and ineffective law enforcement industry are anathema to a market economy.

A market economy is most weely to prosper in a culture of ethical practices and personal accountability because these foster trust. CEO malfeasance is poison to the capital market, and the same is true of the government's heavy hand. There is no easy transition from a state-run economy to a market economy without cultural change in both government and the business community. A corollary to this requirement is thorough revamping of regulatory rules and supervisory procedures (see section 5).

To a significant extent, a market economy is supported by the three interrelated financial structures shown in Figure 2.1. The capital market is exchange based and looks after longer-term investments, the money market is interbank and short term, and the over-the-counter market addresses bilateral agreements as well as the majority of derivative financial instruments. The economic role of commercial and investment banks is largely defined

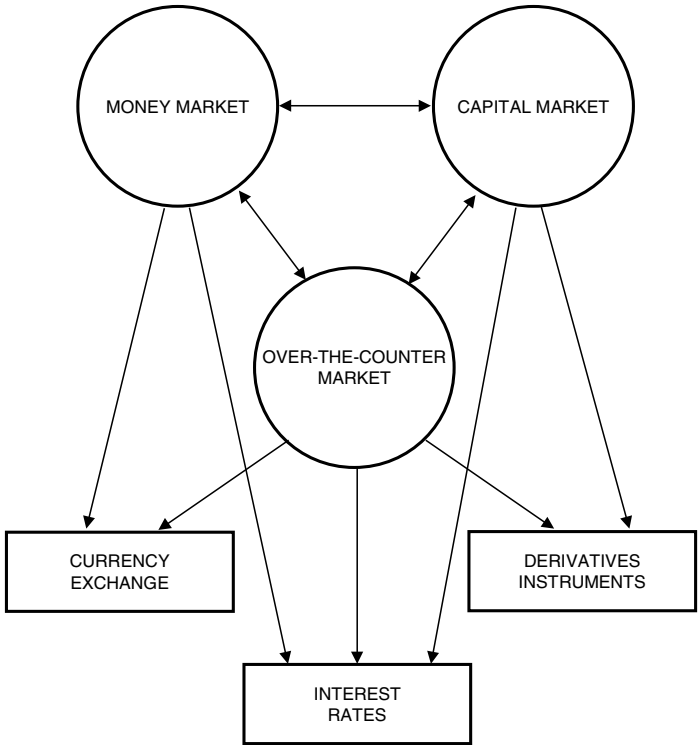

Figure 2.1 Three financial markets which work in unison and complement one another

within these three markets, which are the pillars of a free economy. A financial institution acts as an:

- agent of intermediation,
- knowledgeable adviser,
- trader of assets,
- manager of assets,
- fee generator, and
- information technology expert.

Only the first of these describes the classical banks. The other five characterize the modern financial institution but they also engender significant risks. Because a market economy is highly competitive and risky, financial

institutions cannot survive unless they are able to face and overcome two additional challenges:

- *risk management*, to keep their exposure under control, and
- *contribution to public welfare*, by enriching the economy.

Enrichment of the economy is not done only through loans. The lion's share goes to creation of wealth. Indeed, while loans to business and industry still play a major role, this role is not as important as it used to be. In the United States, for example, the share of total lending provided by banks has shrunk dramatically, because many industrial companies have a higher rating than banks (see Chapter 1) and prefer to tap directly into the capital markets.

Percentages on capital market financing versus loans vary by jurisdiction, but except for Germany where loans still represent about 90 percent of company financing, in the rest of the Group of Seven (G-7) company loans have been dropping significantly during the last dozen years. The statistics in Figure 2.2 come from the 2002 *Annual Report* of the Bank for International Settlements (BIS).

Experts suggest that the last couple of decades of the twentieth century have seen an accelerated disintermediation in the market economy, which evidently affects the banking sector. Companies that traditionally depended

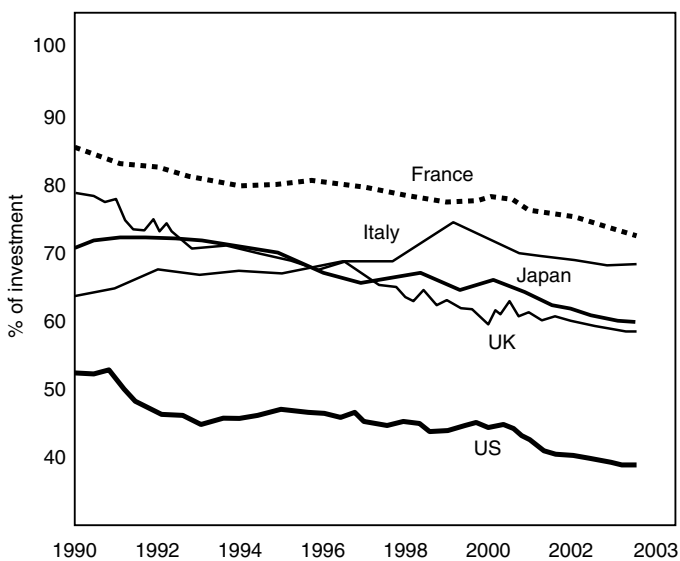

Figure 2.2 Company financing through bank loans. The alternative is capital market financing

on banks for loans and financial engineering support are now running their own show. Many of these companies:

- are rather well capitalized,
- are far less regulated than banks, and
- have a strong view of financial risk.

All three points are characteristic of sound corporate governance. In a market economy, entities with the aforementioned qualities are major players in the financing and investment game. They issue their own bonds, make markets in swaps, and feature a full set of services competitive with those of banks. Indeed, by running their treasury for profits several industrial firms have become known as *non-bank banks*.

2. The global sense of financial markets

Financial markets are assets markets. However, this term is misleading because the word 'assets' includes the notion of both assets and liabilities. In fact, if the characteristics of the 1980s, 1990s and first decade of the twenty-first century were to be condensed into just one sentence, this would be that nowadays financial markets deal more in liabilities than in assets, which imposes prerequisites in sound management and obligations in corporate governance.

Dealing in assets and liabilities is done by means of transactions which, once confirmed, result in streams of payments spread out over time. There is no standard time horizon. Physical goods and some services have an extended dimension over time. For many services, however, and a good deal of virtual goods, the time horizon is typically short, whereas their asset value – or more exactly *liability value* – is leveraged.

Financial markets allow traders, investors, and other players to place their bets on the future using to a large extent borrowed money. The downside is that because of gearing there is really no limit to what one can lose, since borrowed money acts as an amplifier, and people are less careful with it than with their own assets. Through derivatives, there are ways of building leverage on leverage, in more and more complex ways involving a mare's nest of risks.

Financial leverage is also a key reason why bubbles build up in the markets. When they burst, they usually have much bigger consequences than when a downturn takes place in connection with an economy's physical goods, which are finite. Interconnected financial markets mean that losses cascade down a series of leveraged positions in a global landscape. This is one of the negative aspects of *globalization*.

Usually, the bursting of a market economy's bubble has painful consequences. Typically, when it happens, investors and lenders discover that

they had not even realized they were exposed to the risks which land on their doorstep. If to this is added the ignorance characterizing some of the instruments traded in financial markets, because of derivatives and globalization, one can get a picture of the hurdles facing corporate governance.

This statement is in no way made against derivatives or globalization. It would be utterly foolish to claim that one can turn back the clock. But to survive in a highly leveraged, globalized economy where trading in complex instruments becomes commonplace, there must be a great leap in quality of management, and it is vital to enforce a process of personal responsibility. Positive changes to current culture must take place *before* a bubble grows and bursts. Examples are:

- much greater board, CEO and senior management accountability;
- a significant amount of management literacy in new financial instruments, IT, models and internal control; and
- a great deal of attention to both long-term and short-term deliverables – rather than current emphasis on only the short term.

Top management should appreciate that, quite often, the sheer complexity of positions assumed with derivative financial instruments outruns the ability of an institution to manage its exposure. Sophisticated derivatives also mean that banks become predisposed to take on more risk than they should (see also sections 3 and 7).

- Derivatives and leverage increase the likely gain and loss from an investment of a given size.
- They also bring a bewildering array of complexity in finance, which helps to create even more leverage.

At the same time, both business opportunities and king-size exposures are magnified by globalization. Investments in other countries, and therefore other jurisdictions, take place through significant transborder capital flows. This is a broad and, sometimes, ambiguous term. It includes different kinds of financial transactions:

- bank lending, short- and long-term;
- investments in public and private equities; and
- direct investments in all sorts of projects.

Each one of these examples has its own exposure characteristics, and even for similar projects values can vary widely between jurisdictions. The broad term *globalization* often hides the fact that locality has different

implications for growth, profits and risks, including legal risk. Gains and losses depend on:

- what kind of capital is flowing,
- into which type of investment, and
- how well this investment is managed.

Because money flows are never fail-safe, the consequences of mismanagement hit the banking system like a hammer. The evidence is that over the past three decades the world has suffered several crises. The International Monetary Fund (IMF) has counted 64 banking crises and 79 currency crises since 1970. Many of these were relatively small affairs, national rather than international – but there were also big ones, and over time the risk of international financial breakdown has been rising.

What about the benefits that have been obtained through globalization of financial markets? A study by economists of the IMF, which is in principle devoted to open financial markets, indicates no consensus that financial integration yields any net benefits in economic growth.[1] Of 14 papers on the economic after-effects of globalization reviewed in that study:

- three found that financial integration has a positive effect;
- four reached the conclusion that the effects are mixed; and
- seven identified no effect, one way or the other.

Other studies, however, have contradicted these findings. Their conclusion has been that, over the last twenty years, Third World countries, particularly in Asia, which adopted a policy of globalization, have grown faster than First World countries. In contrast, Third World countries which retired into themselves, which is often the case in Africa, stagnated or even retreated.

Clearly, there are costs and benefits with financial integration, as with any other enterprise. Access to global capital is likely to bring both advantages and drawbacks, particularly so because today's investors have a short time horizon, contrasted with banks, which have a longer time horizon in their lending. Seeking the benefits of financial integration while limiting the costs is a difficult task, and there are tradeoffs which make the choice fairly complex.

Readers should appreciate that in a globalized world transborder financial flows are an alternative to borrowing from banks. In the short run it sounds easier and safer, but in the long run it may well be more demanding and more expensive. It is also more volatile. In return for shouldering greater risk, transborder investors require high returns, and the transborder arrangements that they offer are not that straightforward.

International banks specializing in bridging the gap between investors and borrowers must not only do their homework in knowing about both of

them, no matter where they reside, but also put in place a solution which supports a closer, longer-term relationship between investor and counterparty. A case in point is foreign direct investment (FDI), which brings the recipient of capital inflow useful technical and managerial knowledge. In turn, this calls for a major contribution of time and effort on the investor's side.

There is also moral hazard, which becomes acute if the borrower of bank money, or the receiver of FDI, expects to lose the value of his investment anyway. When this happens, the beneficiary has nothing further to fear by taking a much bigger risk in the hope of turning his fortunes around. Moral hazard also means that some of the beneficiaries:

- will use political leverage,
- will be tempted to pocket some of the money, or
- will do things that make it less likely that the investor or lender will be repaid.

Moral hazard, nepotism and corruption correlate and, as we saw in the Introduction, contradict the very notion of a market economy. Whether at the political, judiciary, police, or any other level, corruption discourages inflows of FDI. When a fair system of risks and rewards cannot be assured, the likelihood is high that investors and bankers will be defrauded of their assets. Therefore, it is better to take the time initially to find out which financial markets, in which countries, aren't worth their salt.

3. Distortions in financial markets

Distortions in financial markets are the result of several factors, two of which are of particular concern: weak banking supervision in offshore financial centers (OFCs), and insufficient monitoring of risk positions of hedge funds. As Hans Eichel, the German Finance Minister, remarked,[2] offshore financial centers are potentially destabilizing because they often have poor supervisory regimes. These:

- make it a policy not to comply with international regulatory standards, and
- tend to conceal dubious financial transactions, as well as their risks.

For these very reasons, the six thousand or so hedge funds which exist today use offshore financial centers extensively, and even domesticate them. They are, so to speak, 'OFCs at home', and their significant leverage can lead to just as many distortions in the global financial market. To appreciate this statement, one must bear in mind the incredible financial power controlled by hedge funds.[3]

In the first quarter of 2003 money managed by hedge funds has grown to over $600 billion. This is a high multiple of the tiny secretive corner of the

financial world with net capital of less than $50 billion controlled by hedge funds in the early 1990s. Moreover, in just a couple of years, 2001 to 2003, over $100 billion was raised by private equity funds in the US and $35 billion in Europe, compared to less than $10 billion on both sides of the Atlantic ten years earlier.

The meaning of these big money numbers, and their likely impact, will be better understood if one accounts, as well, for the huge leverage characterizing hedge funds. Gearing has grown at least four-fold in the 1994 to 2003 time-frame, to a factor of over 50. In 1998, Long-Term Capital Management (LTCM) reached the high-water mark of leverage with a factor of 340. Then, for any practical purpose, it went bust.[4]

- With $600 billion and a leverage of 50, hedge funds control some $30 billion of virtual money.
- This is way in excess of all the capitalization in the world's stock markets, from New York to London, Tokyo and the other major centers.

When considering large market distortions a critical question is: 'What's next?' In early July 2003, Dawney Day Olympia, a London-based marketing and stockbrokerage firm, contended that by 2010 the global hedge funds industry will grow to $2 trillion.[5] If this materializes with an average leverage factor of 50, real and virtual money in the hands of hedge funds will stand at the level of $100 trillion – nearly ten times the current US gross national product. Such an amount will make any investment an outright gamble.

If this and similar projections materialize, and given that the hedge fund industry is not regulated, governments will find themselves obliged not only to throw good money after bad to salvage hedge funds when their bankruptcy endangers financial stability, but also become their partners in an effort to save the day. This would be a nightmare scenario, not just a worst case.

Another danger to global financial stability is the rapid spread of the so-called *carry trade*. This involves contracts by big banks, especially in the United States, through which financial institutions incur enormous levels of debt by capitalizing on 2002–2003 very low interest rates – as long as they last. Against these, they purchase higher-interest securities which, however, have a huge amount of credit risk and/or market risk associated with them.

The carry trade is not a sign of good management because, though lucrative up to a point, it can be deadly when financial conditions change suddenly. Then, it can easily become a disaster, similar to the collapse of the bond market in 1994, when the Federal Reserve raised interest rates on six consecutive occasions, and the bottom fell out of the bond market, taking with it a number of, until then mighty, hedge funds.

In today's foreign exchange carry trade, market participants from around the world have invested very heavily in the yen carry trade. They started doing so during the late 1990s, capitalizing on the fact that interest rates in

Japan were near zero, while at the same time the yen was tending to lose value. But when the yen suddenly and unexpectedly shot up, a global financial panic broke out – and rumor had it that the Fed had to step in to salvage Tiger Management, Julian Robertson's big hedge fund.

In 2003, with interest rates for short-term credit at their lowest level in the last four decades in Japan, the US and Europe, the new form of the carry trade lies in borrowing with short-term paper, to buy long-term investments. These are mainly government bonds and mortgage credit. The result has been a marked steepening of interest rate curves. Such massive gambles, however, are always subject to the law of unexpected consequences.

Currently, there are two outstanding risks. First, an extremely dangerous situation has developed, especially in America, with mortgage entities Fannie Mae and Freddie Mac (see Chapter 8). Second, should there be a sudden reversal of trends in interest rates, something like a steady rise in short-term interest rates on the 1994 model, this could have dramatic consequences for all financial institutions – particularly those heavily loaded with geared interest rate-sensitive instruments.

The goal of this book is to underline and explain corporate accountability, not to analyze the different gambles by hedge funds and credit institutions in their pursuit of the big buck. However, one of them – macro-markets and macro-opportunities – is worth mentioning because it underpins management risk associated with the carry trade. Currency exchange, stock index and bond futures, and all sorts of derivatives have been called *macro-markets*. These instruments are diverse, but they have in common their *macro* dimension.

With globalization, the macro-markets are large enough to accommodate many players and their risk appetite. There is, however, a significant difference between maintaining momentum and gaining momentum in the macro-markets, a fact which brings into perspective a so far little-known aspect of corporate governance: the effect of *size*.

A player's big size in the macro-markets is hindered from regaining momentum after a profitless period. Yet momentum must be gained, with profits commensurate with the risks being taken. When rewards bear no resemblance to assumed risks, there is a wall of credibility the different players have to climb. Their failure to do so keeps the financial markets in limbo, as the events of 2000 to 2004 demonstrate.

4. Leveraging, derivatives risks, and Warren Buffett's opinion

Reacting to financial meltdowns and a horde of scandals which surfaced after the market blues of 2000 to 2003, the US Congress passed a law known as the Sarbanes–Oxley Act. This is a milestone in pinpointing corporate governance responsibilities. Moreover, in the aftermath of 9/11 (the 11 September 2001 murderous terrorist attacks), Congress passed the US Patriot

Act. Both of these acts are complex. They also delegate significant new authority to regulatory agencies.

By a strange coincidence, because they happened at about the same time, the shocks from the financial scandals and the terrorist attacks changed the political climate in the United States. They did so by reducing opposition to heavier regulatory burdens on business, while increasing the energy and commitment of law enforcement agencies to investigating allegations of corporate wrongdoing and non-compliance with laws and rules.

Experts believe that more regulations and more investigations are still to come, enlarging the notion of senior management accountability, as well as the spectrum of opportunities for legal risk. The effect will also be to provide additional complexity for multinational companies in their effort to comply with diverse legal and regulatory requirements in different jurisdictions.

The spate of managerial and accounting scandals at Enron, WorldCom, Adelphia Communications, ImClone, Arthur Andersen and so many other entities did much more than dent public confidence.[6] It led to a surge of interest in what is now called *forensic accounting*. New rules ensure that examiners, auditors and public accountants must pore over company books in the search for buried bodies. They must also identify accessories which might have helped chief executives bury the evidence.

Just for the record, on 10 June 2003, Sam Waksal, founder and former chief executive of ImClone Systems, was sentenced to seven years in jail for insider dealing and was fined $4.3 million in fines and back taxes. Judge William Pauley imposed the maximum prison term within federal guidelines after prosecutors told how the once-celebrated scientist had refused to cooperate with investigators and 'told numerous, separate and distinct sets of lies'.[7]

According to some of the experts, the biggest impact of corporate collapses and CEO malfeasance at the beginning of the twenty-first century is the motivation to follow a more rigorous course of action by becoming thoroughly familiar with the accounts. At the same time, in the financial industry, where regulations and markets are constantly changing, training at senior management level is an increasingly important activity. After a series of business scandals, issues such as business ethics, performance and corporate governance have strong prominence.

One of the after-effects of recent scandals in the business world has been the advancement of better standards for governance. The US is not alone in ensuring that new rules and practices are being established to address what is perceived as conflicts of interest and self-dealing. Examples of better standards include:

- independence of accountants,
- independence of directors (see Chapter 4),
- independence of securities research, and
- requirements for financial statement certification by top executives.

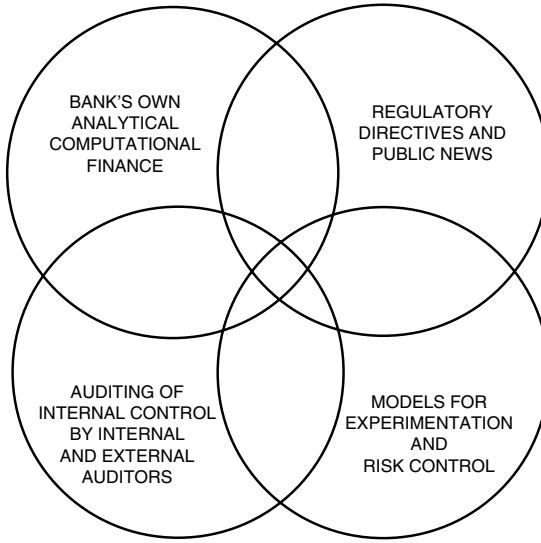

Figure 2.3 Rigorous evaluation of exposure, study of business opportunity, and analysis of business intelligence rest on four pillars

Clear-eyed CEOs now believe that their ability to develop and improve their risk management capability is *the* key limiting factor in their drive to grow a major part of their business. A holistic approach to rigorous evaluation of exposure is shown in Figure 2.3. It is a solution expected to expand, over the next few years, among well-managed companies. One of the evident challenges is how to manage compliance risk. A sound approach is that of applying techniques used with other types of risk, adapting them to compliance, and keeping in mind that every big failure in compliance can wreck a company's reputation.

Management risk is supreme because most failures in compliance have a strong senior management component. Compliance with rules and regulations is not just a matter of delegation by senior management to somebody else. Every executive's accountability is 100 percent at stake. To handle compliance risk properly, senior managers must be much more proactive than they used to be. They must strengthen both their risk management and their internal control (IC) systems (more on this in Chapter 4).

Such revamping of policies comes none too late because, beginning in 2003, in the US, management is required to report to regulators on its internal control systems and procedures. Since this is true of all companies, certified public accountants (CPAs) are required to investigate and confirm

that internal control is properly functioning. Beyond this, the range of institutions required to comply with new regulations is also growing.

But there is also a loophole. It concerns a domain where lawmakers, regulators and other industry supervisors have been slow in coming up with prescriptions about how exposure should be managed, let alone with holistic solutions which can keep risk in the global economy under lock and key. At the kernel of this reference are derivative financial instruments.

Only a few industry leaders have the courage to ring the alarm bell. 'In recent years some large scale frauds, and near frauds, have been facilitated by derivatives,' said Warren Buffett. 'We view them [derivatives] as time bombs, both for the parties dealing in them, and the economic system.'[8] As Buffett aptly points out,

> derivatives contracts are of varying duration, running sometimes to 20 or more years. Their value is often tied to several variables, and their ultimate value also depends on the creditworthiness of the counterparties to them. With derivative instruments, credit risk and market risk are present at the same time.
>
> True, there are methods by which the risk can be laid off with others. But most strategies of that kind leave you with residual liabilities – [while] derivatives generate earnings which are to a significant extent widely overstated. They are based on estimates whose inaccuracy may not be exposed for many years.

Yet:

- commissions are calculated on the basis of these uncertain guestimates on earning, and
- they are paid almost immediately, leaving the bank or treasury of an industrial company to face the consequences.

This last reference brings together two issues: the contribution of risk-based pricing (discussed in Chapter 1, section 6) and requirements on CEO and CFO accountability imposed by the Sarbanes–Oxley Act. Before Sarbanes–Oxley, senior management presented the excuse that it could not be at the oven and the mill at the same time.

- The CEO was looking after the big picture.
- Accounting and financial reporting details were left to the bean-counters.

The Sarbanes–Oxley Act changes the reference of personal accountability. The CEO must now certify the accuracy of the accounts. So much the better, then, if the company's internal management accounting system is

risk-based – allowing the board, the CEO and other senior executives to reconcile general accounting, which is regulatory, with management accounting – which should fully inform about the level of risk which has been assumed by the company, at any time, in any place, and for any reason. This must be done in a factual and documented manner, which fully reflects exposure due to leveraging. A critical query to be answered regards 'errors' involved in the computation of forecast earnings, and the commissions they generate. 'Errors will be usually honest,' Buffett says, 'but the parties to derivatives also have enormous incentives to cheat in accounting for them.' There are also correlations in exposure because derivatives create 'daisy-chain' risk and pile-on effect. In a daisy chain, one type of risk leads to another. The pile-on occurs because covenants attached to many contracts require that a company suffering credit downgrade immediately supplies collateral to counterparties. To make matters worse, pile-on and daisy chain can work in synergy, yet they are not included in the models written to track derivatives exposure or the after-effect of leverage.

Did senior bankers appreciate Warren Buffett's 2003 article? Here is how the director of asset management of one of the largest global investment banks responded: 'Buffett is right in some respects. Unless you are aware of pitfalls you can fall into a crevasse. The greatest risk is for people unaware of implications – rather than the instruments per se.' The point is that senior management illiteracy regarding the instruments per se makes the company unaware of implications.

Along similar lines, the reaction of a senior executive of one of London's commercial banks was: 'I agree 100% [with Buffett]. Banks don't know their risks.' Knowledge of the risks one has been assuming is what the new capital adequacy framework of the Basle Committee on Banking Supervision, known as Basle II, is all about: a deeper appreciation of the entity's exposure is a 'must' in corporate governance.

5. Regulatory action for better corporate governance: Basle II

The case study in this section is the financial industry, specifically, the contribution of Basle II to better corporate governance. Recall the discussion on Basle II in Chapter 1, in connection with risk-based pricing. This is made possible by the extraordinary amount of attention brought to the measurement of risk by the new capital adequacy framework.

To appreciate the references that will be made here, bear in mind what was said at the beginning of this chapter: that the source of financing corporations, particularly in the US, has significantly changed during the 1990s. The pattern is shown in Figure 2.4, based on statistics by Moody's Investors Service. This pattern, which is also reflected in Figure 1.2 for other western countries, through BIS statistics, points to the acceleration of disintermediation by the banking industry.

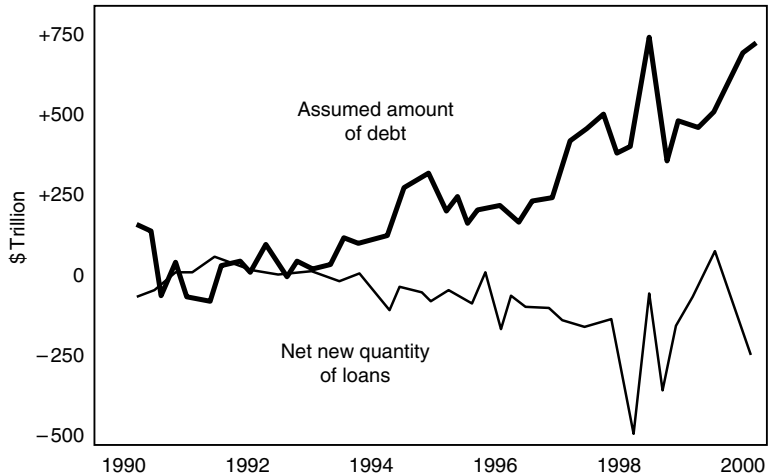

Figure 2.4 The source of financing US corporations has changed tremendously within one decade

- Credit institutions which no longer make the bulk of their money from loans need to find some other channels of activity.
- Derivatives is one of these, although it involves an extraordinary amount of risk, which is poorly managed by many financial institutions.

While credit risk is the top issue addressed by Basle II, and in the next position comes operational risk, the major legacy of the new capital adequacy regulations is the attention paid to *risk awareness* at senior management level. Along with it will also come a more rational and better-documented economic capital allocation.[9] As David Furlonger, of the Gartner Group, aptly suggests, taken together these new directives help in 'building a risk management architecture that provides a holistic view of enterprise risk' – therefore a basis of better governance involving, among other things:

- significant increase in capital adequacy
- greater accuracy in calculation of capital requirements
- better appreciation of the need to control exposure
- more meaningful differentiation of different risks
- the beginning of emphasis on *unexpected* losses, and
- awareness of the need to address *tail events* which always happen in a risk distribution.

Tail events are outliers – improbable but plausible happenings. There are also other areas where the current rules of Basle II will have little or no impact, for example: an effective longer-lasting diversification of risks (see section 6); across-the-board improvement in management quality; a 'scientific' definition of correlations and weights; and massive change from a Paleolithic information technology (IT) culture to the implementation of high technology – essentially the *real-time enterprise*.[10]

It is not accidental that a significant increase in capital adequacy finds itself at the top of the list of expected positive results from the new regulations. Before Basle I, most credit institutions were undercapitalized. Since 1988 capital ratios have improved, but not to an extent commensurate with assumed risk. Yet adequacy in capital reserves is the criterion of excellence of a bank's CEO, comparable to adequacy in military reserves to face unexpected but likely events in the battlefield.

Basle I prescribed a flat 8 percent ratio of capital adequacy. Today, analysts consider as *well-capitalized banks* those with capital equal to more than 10 percent of their assets, provided both capital and assets are weighted for risk. *Adequately capitalized banks* are usually those with capital of 8 percent to 10 percent of assets under the same conditions – which is still better than what Basle I prescribed. Below that, the risk of failure increases rapidly.

Regulatory action for better corporate governance is always welcome, but it is also wise to note that because people are inventive there are no 100 percent secure ways to avoid bypasses of standing regulations. Thorough tests, like the third quantitative impact study (QIS3) done by the Basle Committee in late 2002, in collaboration with about 350 banks in 40 different countries, show different levels of undercapitalization in function of assumed risks.

The pattern in Figure 2.5 suggests that under Basle II's standardized method of calculating capital adequacy, at least one of the banks would have needed more than 160 percent of the 8 percent ratio, while a couple of others in the small sample would have required 50 percent to 70 percent more than Basle I's 8 percent. Notice also that with the foundation internal ratings-based (F-IRB) method and the advanced IRB:

- several credit institutions would have required more than 8 percent,
- while for others, given the level of risks they had taken, less than 8 percent might have been acceptable.

Another interesting finding with QIS3 has been that universal banks in Europe passed the capital adequacy test on the strength of their retail books. On the contrary, the wholesale and investment banks had problems. Wholesale financial institutions were hurt because of non-performing loans. The challenge which faced investment banks was the loss of fees and commission because of market downturn.

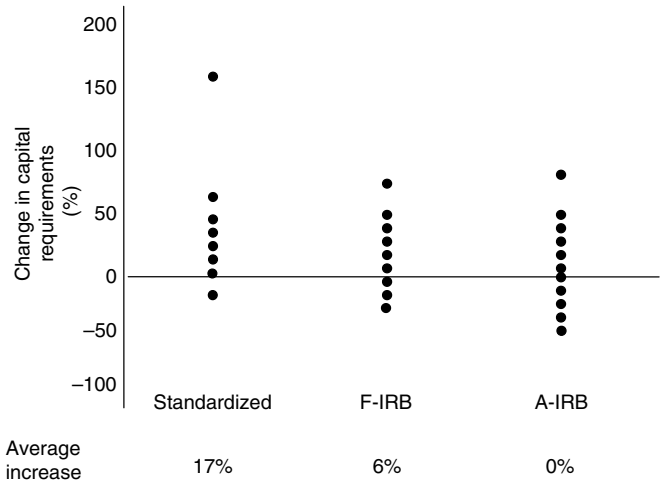

Figure 2.5 Sample results of the third quantitative impact study (QIS3) involving 46 banks

Such findings bring into perspective the fact that corporate strategy and capital adequacy correlate both between themselves and with other factors – an evident one the amount of risk assumed. Indeed, there are three pillars on which rests a factual and documented economic capital allocation.

1. *Corporate strategy* Capital allocation should not be done on the basis of a vague notion such as general income. It should be focused, and promote chosen business lines representing strategic products, by using income from channels with good cash flow but less future (cash cows).
2. *Risk management* The amount of current and future exposure is a vital input to capital allocation. Therefore, it should be computed in an accurate and forward-looking manner. Only when we measure our risks can regulatory and economic capital assure financial staying power.
3. *Advanced information technology* Top-tier IT provides the infrastructure which would allow factual and documented allocation of financial resources as well as follow-up on risk and return. Throwing money at the problem is no solution. Experimentation and simulation are 'musts'. They are also the keys to an effective diversification – therefore they are vital elements in sound corporate governance.

6. Is diversification a fact or an illusion?

Nobody would argue against the wisdom of risk diversification. Because it is unlikely that all bad news will come at the same time on all fronts,

diversification of exposure provides a way to better-balanced financial charges, provided that it is possible to focus management's attention where it is most needed. This permits using economic resources in a precise manner to stem adverse conditions. The question, however, is: is *real* diversification achievable?

To begin with, *diversification* will be an empty word if we don't have a policy to that end, documented by accurate estimates of both the expected risks confronting us and those unexpected tail events (outliers) which might lead to financial instability. It is therefore important to ascertain ahead of time the causes of financial instability.

- Is it simply a by-product of deregulation and liberalization of financial systems?
- Is it a consequence of the fact that the more efficient is economic capital allocation, the more procyclical it becomes, and more prone to crises?
- Is it a temporary by-product of the process of transition from 'this' to 'that' economic condition – for instance from high inflation to low inflation?

Every one of these queries has a rationale behind it. We need to know the answer, otherwise we cannot proceed with meaningful diversification; nor can we attain more stable growth and less variance in projected income streams.

A good way to address these issues is to return to basics. Let's take the transition from high inflation to low inflation as an example. As both nominal and real interest rates decline, bankers and investors might judge them inadequate and adopt more aggressive investment strategies by assuming great risks. The (irrational) rush towards *alternative investments*, which was promoted by banks to their clients starting in 2001, is a case in point.[11] 'Diversification' into alternative investments ends in assuming much more risk, not less.

Another example of diversification is that done through on-balance-sheet intermediation, widely believed as well suited to overcome informational and inventive obstacles through 'better-monitored' but multifaceted longer-term relationships. Here, the downside is that because intermediaries typically assume the resulting credit risk on their books, the scope for diversification is constrained by:

- inadequately identified risks,
- balance-sheet size, and
- the fixed costs of engaging in information-intensive relationships.

Some bankers say that, contrary to this statement, market-based intermediation allows for a more effective dispersion of risks across the system – so long as

the credit institution maintains portfolios which permit evaluating the risks and returns of various investments, as well as absorb transaction costs. They also add that in this way portfolios can be easily adjusted in the light of new information about firms and instruments.

These are often-heard commentaries, but those who make them typically fail to notice that all such conditions are rarely if ever satisfied at the same time. Even if they were satisfied at a given moment, market changes would turn some of them on their head. Thereafter, the institution which made these assumptions without thinking, or even in good faith, finds itself in trouble.

There is absolutely no question that the ability to switch smoothly between on-balance-sheet and market-based (that is, off-balance-sheet) channels of intermediation is, in theory, a desirable characteristic. The idea behind such a policy is that the two channels (on- and off-balance-sheet) can provide a form of diversification, because adversity or disruptions in one channel can be mitigated by increased reliance on the other. Practically, however, this type of balancing act has its own risks and unknowns, and it is very rarely, if ever, done so as to provide true diversification.

The concept underpinning this on-balance-sheet/off-balance-sheet diversification argument is that a bank which is engaged both in direct provision of credit and, for instance, in underwriting and market-making may have a more resilient revenue stream than more specialized firms. However, the apparent economic benefits provided by having alternative channels often face a lack of appropriate skills, and they may be eroded by market changes, while, at the same time, the institution itself has not developed a broader range of products, or these products do not provide opportunities for cross-marketing that could reduce risk. Moreover, losses in one activity could put pressure on the entire institution, affecting its activities in other areas, eventually disrupting the functioning of channels of intermediation. The risk of spillovers may indeed increase because of a substantial concentration of transactions between the bank and its largest clients – which is the antithesis of diversification. The case of the Abbey National Bank provides an example.

Right after his appointment as the new CEO of Abbey National, Lugman Arnold steered away from the ill-fated diversification plan initiated by Ian Harley, his predecessor. Abbey National is Britain's sixth-biggest bank. Given its building society origins it was a specialist mortgage lender, but no longer. Going after higher returns during the 1990s, Abbey's then senior management had directed its wholesale banking division into investing heavily in junk bonds. And it lost money on Enron.

On 26 February 2003, Abbey National Bank announced a pre-tax loss of £984 million ($1.47 billion) for 2002. This was Abbey's first full-year loss since the former thrift was demutualized in 1989. Abbey National's share price had already fallen by two-thirds in 2001–2002. 'It is deeply depressing to see how management wrecked the shareholders' investment,' said a money manager.[12]

The blame, financial analysts suggested, lay with the overgrown wholesale operations of the bank. The reason, they said, was not so much the total size of the off-balance-sheet positions that the bank had taken as their high *concentration*, which – it should be noted – was made in the name of diversification.

- The foray into wholesale banking was made as a means of diversifying away from heavy dependence on mortgages, the bank's traditional base.
- But this strategy backfired. By 2003 only five names made up £1.9 billion-worth of the bank's exposure to BBB-rated assets.

This is by no means an exceptional case. False diversification is quite frequent. As the Bank for International Settlements (BIS) points out, a related risk is that, as individual financial conglomerates become more diversified across business lines, the financial sector as a whole becomes less diversified. The reason is that the largest institutions develop similar patterns in their risk exposures.

- On the one hand, the greater diversificiation of institutions may increase the resilience of the financial system in the face of small or medium-sized shocks.
- On the other, the loss of systemic diversity means that a single large shock could adversely affect all of the major institutions in an economy simultaneously.

This is evidently leading to macroeconomic problems. The BIS also says that another economic cost associated with large conglomerate institutions, whose activities straddle the two channels of intermediation, is the potential for creation of conflicts of interest: 'The exploitation of synergies in the joint production of financial services can give rise to situations where the institution's actions could benefit some customers, or the institution itself, at the expenses of others.'[13]

There are, as well, other systemic risk concerns, of which it is wise to take note because they impact in a big way on corporate governance. An example is recent trends towards consolidation in certain financial markets, often done in the name of diversification but really having the opposite impact. With large financial institutions increasingly trading among themselves, perceived difficulties with one counterparty might very quickly involve others. Finally, large players can move markets in ways that could affect the cost and availability of instruments needed for prudential hedging – with the result that idiosyncratic shocks could become systemic.

7. Dangerous bank-to-bank trades are no sign of good governance

Section 6 made reference to the concentration of trades which, in the opinion of BIS, and of many financial experts, promote systemic risk rather than

diversification of exposure. The fact that large financial institutions are increasingly trading among themselves is no example of good corporate governance. Instead it is a sign of clear and present danger.

In its January 2003 *Monthly Report*, the Bundesbank, Germany's central bank, aptly noted that the vast majority of over-the-counter (OTC) derivatives transactions take place between internationally operating banks or other global institutions. This market is very concentrated, even on a worldwide scale.

- Over half of all OTC transactions are in interest rate derivatives, taking place among some 60 institutions, seven of which are in Germany.
- In some areas, there are only a handful of players with OTC derivatives transactions that account for the majority of turnover.

Just as disturbing is the statistic that less than 10 percent of OTC transactions in derivatives are conducted with end customers outside the financial sector. As the Bundesbank aptly remarks, derivatives have certain properties which may have a destabilizing impact (see also section 4, Warren Buffett's opinion). There is also the risk of a knock-on effect propagated among big banks. Moreover, the derivatives market is not sufficiently liquid, and as such, it does not necessarily allow the unwinding of sizeable positions without causing major dislocations.

More problematical than the collapse of 'this' or 'that' individual institution is a crisis that affects several financial entities at once. As the events of September 1998 with LTCM's bankruptcy show, under systemic risk circumstances the limits of the market's resilience are soon reached. If regulators don't intervene in time, as the Fed of New York did on that occasion, the end result will be global systemic risk.

Indeed, no less an authority than Alan Greenspan, the Fed chairman, said that the growth of OTC derivatives over the past 20 years has been spectacular and shows no obvious signs of abating.[14] The latest estimate by the Bank for International Settlements of the worldwide notional amount of OTC derivatives outstanding reached $128 trillion in June 2002, a figure more than 25 percent higher than that recorded a year earlier. This would mean that, at least officially, it stands at about $180 trillion at year-end 2003. Unofficially, it is estimated to be in the $300 to $400 trillion range.

In order to have an opinion about whether this notional principal amount of $180 trillion is big or small, one must be able to convert it into real money. A good method is to demodulate it into credit equivalence (or net asset value) under crisis conditions – where aftershocks from this sort of massive concentrated exposure really count.

My research reveals that under crisis conditions a demodulator of 5 is appropriate,[15] and this would mean $36 trillion in real money – more than three times the GDP of the United States. Even more scary is the fact that, as

the BIS *73rd Annual Report* states, a large part of this exposure is concentrated. Here are a couple of examples.

First on systemic risk. In February 2003, a warning on systemic danger of the derivatives market was issued by the US Office of Federal Housing Enterprise Oversight (OFHEO). The message was a warning that either the Federal National Mortgage Association (Fannie Mae), or the Federal Home Mortgage Loan Corporation (Freddie Mac) – both being huge derivatives contract holders – might lead themselves to default on debt (more on this subject in Chapter 8).

The second example is JP Morgan Chase, which features the largest derivatives portfolio of any bank in the world. At the end of 2003, Morgan Chase had $34.8 trillion in derivatives, which might well be beyond $40 trillion by the end of 2004. As shown in Figure 2.6, this sort of God-sized derivatives exposure is dwarfing the bank's asset base and equity capital. Another depressing statistic is that Morgan Chase's level of outstanding credit derivatives alone, at $366 billion, is nearly twice its $186 billion in net loans, and the bank has also been one of the main lenders to a whole series of failed companies, from Enron to WorldCom. Part of the reason for this exposure, unprecedented in the history of banking is that JP Morgan Chase is the result of the merger of four big banks: JP Morgan, Chase Manhattan, Chemical Banking and Manufacturers Hanover Trust Co., each with significant derivatives exposure. These big-bank acquisitions necessarily resulted in the merger of five derivatives portfolios.

Still another wave of big-bank mergers centered on North Carolina National Bank (NCNB), which bought Republic of Texas and other banks, renamed itself as Nations Bank, then took over BankAmerica. This last merger

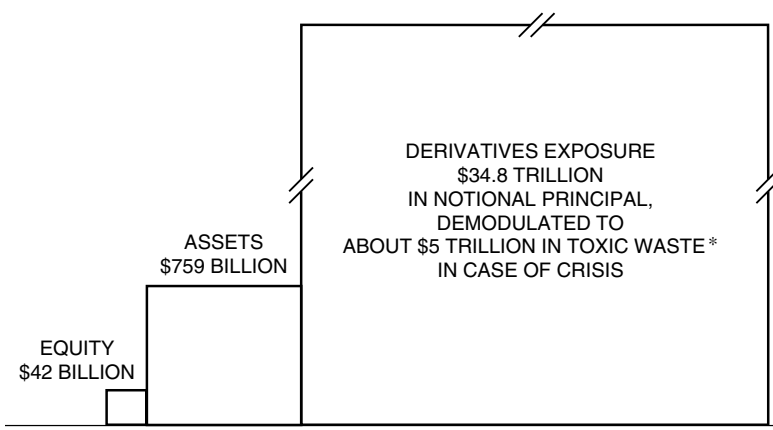

Figure 2.6 JP Morgan Chase: exposure to derivatives versus equity capital and assets
*Core derivatives losses in case of major crisis or panic.

led to the current Bank of America, which has quietly worked its way into second place in the derivatives heavyweights. It featured $12.5 trillion at year-end 2002.

Even before the acquisition of FleetBoston in October 2003, which added to the institution's derivatives portfolio, Bank of America had $248 in derivatives for every dollar of equity capital, compared to $116 at Citigroup and $682 at Morgan Chase. A loss equivalent to just 0.40 percent of Bank of America derivatives portfolio would have been sufficient to wipe out every single dollar of its capital. The same would happen to Morgan Chase, with a loss of just 0.15 of its derivatives holdings.

In all likelihood, these statistics have played a role in Dr Greenspan's testimony before the Senate Banking Committee on 26 February 2003, when he said that, were 'a very large institution' to get into trouble, it would be liquidated slowly. Greenspan added that there is no need to liquidate very rapidly, 'and indeed we probably would not want that to happen.' But at the end of the day, banks which fail will be liquidated.

The pattern of slow liquidation was set long ago. An example from the early 1990s is that of Bank of New England (BNE). When it failed, because of overexposure in real estate and in derivatives, the Fed of Boston took it over, changed its management, beefed up its balance sheet with taxpayer money, ran it for a year to unwind its loans portfolio and $36 billion of derivatives gambles, and then quietly let it sink into oblivion.

Something similar may happen again. Indeed, the daily press is wisely preparing public opinion for such an event. On 6 March 2003, *The Washington Post* made the issue rather explicit by publishing Warren Buffett's comments to Greenspan's. That carefully worded article cited derivatives' role in the failure of:

- Barings Bank in 1995,
- Long-Term Capital Management (LTCM) in 1998, and
- Enron in 2001.

None of these three is an ordinary failure. Together with the 1991 BNE bankruptcy, they are eye-openers, which took place with in about three years. For its part, London's *Financial Times* devoted a full page to derivatives and Buffett – while the *Wall Street Journal* had a contrarian article essentially saying 'every great investor makes an occasional mistake.'

In that article the *Wall Street Journal* declared that derivatives are little miracles of financial engineering which make the financial system 'less' vulnerable to a giant blowout, concluding that a $2 trillion derivatives market is a very good thing. Such a description of derivatives as a '$2 trillion market' is the understatement of the last 200 years. It is also in full contradiction with the Bank for International Settlements figure of $128 trillion for the notional value of derivatives at the end of 2002.

Indeed, $128 trillion is less than half the real figure since in their large majority (about 75 percent to 80 percent) derivatives are OTC bilateral contracts which expose *both* parties to market risk *and* credit risk. Even the party which wins on the market risk gamble can easily lose on the credit risk side, if the counterparty is unable or unwilling to face up to its obligations. JP Morgan found that out when, in 1997 after the collapse of South Korea, SK Securities refused to honor a $480 million derivatives deal. No one entrusted with corporate governance can forget about these risks.

New unprecedented scandals and fraud cases continue to add themselves to the long list which began in the United States with Enron in December 2001 and were followed by a score of others, including WorldCom in July 2002. In December 2003, surfaced Italy's Parmalat, the secretive hedge fund with a dairy products line on the side – Europe's largest scandal ever.

As of today, at least €14.8 billion ($18 billion) have disappeared in the Parmalat black hole, and this figure is provisory. It is highly unlikely that so few deceive so many, with so much money turning into ashes and running into pockets, or wherever, without the collaboration of major financial operators and without political muscle.

In Italy, the lenders of Parmalat have been Capitalia (owner of Banca di Roma, linked to the Sindona scandal of the mid-1970s), Banca Intesa-BCI, San Paolo IMI, Unicredito/UBM (the former Credito Italiano), Monte dei Paschi, Banca Nazionale di Lavoro, Banca AntoVeneta, Casa did Risparmio di Parma, Banca Popolare di Lodi, Banca Popolare di Emilia, and many more.

Global money center banks have also been Parmalat's financiers. Citigroup was one of the major American lenders to Parmalat, as well as advisor. Others are Bank of America, JP Morgan Chase, Morgan Stanley, Deutsche Bank, Banco Santander, ABN-Amro, and several other credit institutions who have been lenders to Parmalat, underwrote its bonds, and traded with the now defunct 'big company' in derivatives like collateralized debt obligations (CDOs).

3

Pension Fund Management. A Case Study

1. Introduction

In 1927, AT&T funded the first big corporate retirement plan, but it was much later that the large-scale pension fund business saw the day. Between this first step of the late 1920s and in the last four decades of the twentieth century came the government-sponsored national pension-and-health plans, of which the French Social Security of 1936 is one of the first holistic examples. Whether private or public, pension plans are a social safety net and their financing takes one of two forms:

- *Pay-as-you-go*, typically the national pension plan's solution, and
- *Reserves*, with the money pouring into the pension plan's coffers used for investments.

Because of their function as savings vehicles for old age, pension funds (as well as life insurance companies) should primarily invest in the safer financial assets of a longer-term nature, with bonds given preference over stocks because equities have higher volatility. This choice, however, is not the general case. According to European Central Bank (ECB) statistics, at the end of 2002,

- holdings of debt securities constituted 38 percent, and
- quoted shares constituted 35 percent of total financial assets of insurance firms and pension funds in euroland.

Although the overall share of securities in the total assets of euroland's pension funds and insurance firms remained largely unchanged at around 70 percent to 75 percent over the past five years, significant changes have occurred with respect to the importance of quoted shares relative to debt securities. Based on statistics from the European Central Bank, Figure 3.1 shows a late 2002 distribution of assets.

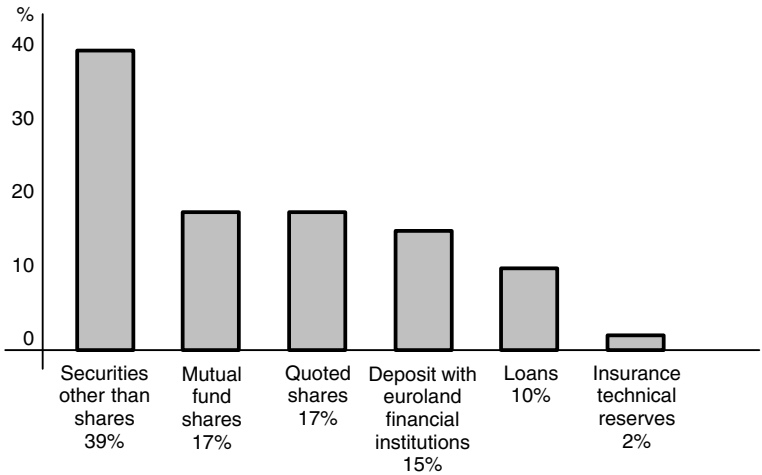

Figure 3.1 Financial investment of pension funds and insurance companies in euroland, 2002, Q3

Source: Statistics from European Central Bank.

During the stock-market boom of the late 1990s, the value of share holdings rocketed. By the end of 2000, the average European ratio of quoted shares to total assets peaked at 41 percent. Correspondingly, bonds constituted only 33 percent of total assets. The subsequent stock-market crash, in 2000 to 2003, reversed these ratios, causing the combined value of quoted shares and mutual fund shares on the pension funds' aggregated balance sheet to decrease notably. With this, by the end of 2002 the share of debt securities returned to its end-1998 level.[1]

In America, life insurance companies and other entities offering annuities have been investing in long-term debt securities much more than in quoted fund shares, in line with their long-term investment horizon. Pension funds, however, particularly those sponsored by companies, have followed the opposite investment strategy – being overexposed in the company's own shares.

Behind this lopsided distribution has been a conflict of interest. According to a late 2002 study by Crédit Suisse First Boston, about 69 percent of 2001 corporate profits in the United States were derived by manipulating the company's pension fund earnings. If actual pension fund gains or losses on investments in the stock market, rather than inflated *estimated gains*, were taken as the basis of profit and loss (P&L), overall earnings for the S&P 500 would have been $68.7 billion rather than $219 billion, and this $68.7 billion is just over 31 percent of what companies reported for 2001.[2]

A different way of reading these statistics is that some $150 billion in corporate profit did not really exist. It was invented. Ironically, this

particular creative accounting practice was even been illegal. By exploiting a loophole in reporting gains they had not made, companies did not violate standing rules. They were following accounting practices written by the Financial Accounting Standards Board in 1985, but with the collapse of the stock market, this turned to their disfavor, and because their equities are under water, companies must now replenish their pension funds treasury.

In the UK, the 2003 annual survey by the Center for the Study of Financial Innovation (CSFI), a British think tank, notes that the parlous state of many pension funds has been attracting anxious comments by financial institutions and experts who contributed to its 2003 research. The core of CSFI's findings is that:

- unfunded liabilities could send shock waves well beyond the savings sector, and
- as long as stock and bond yields remain low, the pension funds' plight gets worse.

A senior UK banker is quoted as having said: 'Insurance companies and pension funds cannot operate successfully in a low interest rate environment.' Martin Hall, of the Finance and Leasing Association, felt 'a lingering unease about the viability of pension providers due to past actuarial underestimates of longevity linked to stock market doldrums'.[3] In the opinion of a Swiss banker, the problem is more widespread: 'The asset management industry is about to disappear into a black hole.'

The annual survey by CSFI quotes Neil Record, of Record Currency Management, who argues that now people are starting to realize the scale of pension liabilities, there is also a *circularity risk*. In Record's opinion, this is due to the fact that

> UK/US business pension funds invest largely in other UK/US corporate securities, equities and bonds. Taken as a group these holdings net out, leaving the level of 'real', i.e. non-circular funding, very low indeed. Such practice presents a real risk if there were a serious squeeze on corporate profitability.

As readers will observe, what transpires from these references from the US, the UK and euroland is that something has radically changed during the last ten to fifteen years in corporate governance and its effect on pension funds. Not only is the misuse of the pensioners' money a worry which speaks volumes about personal accountability of pension fund executives, but also the switch to other types of securities, including alternative investments,[4] has accelerated since 2000 as equities have plummeted and returns on bonds have plummeted.

Because low interest rate yields and poor dividends have left pension funds with reduced earnings to pay the pensioners' benefits, their managers have turned to rather unorthodox ways to make ends meet. Moreover, corporate downsizing and lengthening life spans of the beneficiaries have left many companies with a rising ratio of retirees to active workers.

In America today pensions are underfunded by $300 billion – according to the US Treasury. This is an amount far exceeding the resources of the government-sponsored Pension Benefit Guaranty Corporation, which is supposed to be the safety net of safety nets. (See also the Appendix.)

Pension underfunding in Britain has reached £100 billion ($160 billion) and in continental Europe practically all government-sponsored pension funds are expected to be bankrupt by the middle of next decade. This is one reason why the French government raised the number of years a person must make contributions to qualify for a pension – and the German government timidly promotes private pension funds.

But as we have seen (and will examine in greater detail), private pension funds have other mega-worries. As Robert Kuttner writes in *Business Week*:

> For more than a decade, corporate sponsors of pension plans have been systematically looting them. The great pension raid is of a piece with the other accounting deceptions of the 1990s, and it had the same motivation – to boost reported earnings and stock prices.[5]

Beyond looting, of course, comes mismanagement.

2. Accountability for the safety net. A case study in the auto industry

Ten years ago pension funds were content to put their assets with good fund managers, whose returns stood in the top quartile. Even if the chosen fund managers lost money, the trustees consoled themselves with the thought that they had, at least, hired the 'best' available investment consultants to satisfy the pension fund's need to preserve the assets set aside to provide people's pensions.

However, when the stock market rocketed in 1995/96, many pension fund managers invested aggressively in equities, and after the bubble burst in 2000, even more risky investment schemes were chosen. For instance, in 2001, Calpers, the giant Californian public employees' pension fund, got together with hedge funds in an effort to gain higher returns. Its guideline was that it could pay a lot of 'benefits' with just $1 billion in hedge funds, a small fraction of its $150 billion of assets under management.[6] But:

- is this $1 billion at high risk, commensurate with the expected limit of 'benefits'? and
- where's the line dividing investing from gambling with other people's money?

Moreover, who is to say that $1 billion will be the limit? If some pension funds have cornered themselves through partnerships with hedge funds, other pension funds have a different set of worries.

America's carmakers are faced with a mountain of unfunded promises to workers, particularly those retired. According to some estimates, in 2002 the aggregate pension shortfall of US car companies topped $30 billion, most of it attributable to Ford and General Motors (GM). Things look worse when further post-employment benefits, like retiree health care, are added in. In 2001, health care and other post-employment benefits cost $857 for every vehicle GM built and sold.[7]

General Motors provides a good example of where company pension funds may be leading. In 1992, the largest company in the world was said to be within hours of going bust, with its directors staring at the fax machine as they waited for a credit-rating downgrade. Had it come, it would have pushed the company over the cliff. That downgrade did not materialize, GM recovered, but a decade later the 'over-the-edge' feeling was briefly back retrieved through a massive bond issue.

Not only at GM, and in Detroit at large, but also in other industries and other places, retirement plans – which were supposed to be an important social service and solution – have brought into the limelight major perils resulting from mismanagement and poor investments. Moreover, every new retiree adds to the companies' growing pension burden which, in many cases, has already become unsustainable.

General Motors is a case in point because it has a pension fund shortfall of an unheard-of $19 billion. This is as big as the company's market capitalization, and is growing by the day with the risk of making GM insolvent. Although by ingeniously capitalizing on very low interest rates, GM went ahead in 2003 with a massive bond issue to finance its pension fund, the facts remain that

- income from bonds is not manna from heaven;
- bonds have to be served and eventually repaid; hence the 2003 issue postpones the problem rather than solving it.

Indeed, to plug the hole of its huge pension fund deficit, in the last week of June 2003 General Motors sold $10 billion of debt in the unsecured and convertible bond markets, while its fully owned financing subsidiary General Motors Acceptance Corp. (GMAC) planned to sell an additional $3 billion. For GM the good news is that its bond issue, in spite of being the biggest corporate debt-raising exercise to date, has been oversubscribed, raising more than $16.5 billion in the bond market.

To attract investors, GM priced its new debt at a rather attractive level. Contrary to most companies that had issued bonds in 2003, and did so at market prices, GM offered more than about 100 basis points above the yield

on similar bonds, in multiple tranches of up to 30 years' paper denominated in dollars and euros. In the sterling market, GM raised £350 million through a 12-year bond that yielded almost 4 percentage points above the benchmark gilts.

Pricing several hundred basis points above government securities has been helped by the fact that interest rates have dropped to 45-year lows. Yet, while GM's bond sales seemed to satisfy several yield-hungry investors, others remained worried about the financial outlook for auto manufacturers. 'Do we in our heart of hearts want to lend to GM for 15 years? I don't think so. Pricing may affect that, but there are a lot of risks,' said Dennis Gould, head of UK fixed income at Axa Investment Managers in the UK.[8]

The pension funds' plight of other Detroit automakers is not too different from GM's. If one adds the health care liabilities of both employees and pensioners, plus the heavy hand of the United Auto Workers' (UAW) union, Detroit finds itself at a huge disadvantage compared to its Japanese competitors, with their younger, non-unionized workforce. The statistics are grim:

- GM has two and a half pensioners for every current employee.
- The company reckons that pensions and health care benefits add more than $1,000 to the cost of each car it makes.

One of the ironies of our time is that downsizing by cuts in the workforce makes this particular burden still greater. Analysts think it may be just a matter of years before a big carmaker considers using America's Chapter 11 bankruptcy law (see Chapter 6) to shed its pension liabilities. That's what several steel companies and airlines have already done – except that, as the examples of steel and airlines with their repeated bankruptcies suggest, an industry's fundamental problems are *not* solved through protection from creditors or government bailouts.

Ford provides another example of this kind of problem, and of the same magnitude. To turn the company around, William Clay Ford, the current CEO, started a back-to-basics campaign. He is reversing changes his predecessor made during his brief tenure, which were then considered to be the 'in' thing. But Ford, too, is saddled with more than one retired person for each active worker, which makes the financial burden nearly unbearable, and renders the company uncompetitive compared to its foreign peers.

As the foregoing examples demonstrate, a company's pension problems are not amenable to easy solutions; change for the sake of change leads nowhere. One of the biggest 'changes' W.C. Ford's predecessor made in his heyday was to turn a profit of $7.2 billion in 1999 into a loss of $5.4 billion in 2001. Another top management mistake, and one of the biggest weaknesses Ford has faced in recent years, was to divide product development into autonomous departments, each focusing on a different segment of the market.

When these unwise restructurings took place, a few years ago, they were hailed as 'change for the better'. At first, the twist in company fortunes surprised many, as by 2000 Ford seemed likely to overtake GM to become the world's biggest carmaker – a title Ford lost in the 1930s. But the negatives were many. For instance, Ford paid too much in buying Britain's Land Rover and Sweden's Volvo, as well as other outfits such as the Kwik-Fit repair chain, which is outside its core business.

Steering away from his predecessor's policies, Willliam Clay Ford has sold many of the previous acquisitions, but the core business of making cars is not yet fixed. At the same time, in a similar way to GM, Ford's underfunded pension liabilities and retirees' health care obligations have become the company's financial nightmare.

GM and Ford are by no means alone in this plight. In the first years of the new century alarm bells also rang at DaimlerChrysler. The latest were heard in early June 2003, when the company issued a profit warning for its Chrysler arm. With results coming in to contradict the projected turnaround, Chrysler lost about $1.2 billion in the second quarter of 2003, dashing hopes of a profit of $2 billion for the whole year.

Neither are the automakers the only parties in big pension fund trouble. Another example is Weyerhauser, the largest lumber company in the world, which relied on reported pension earnings for 66 percent, or $234 million, of its net income in 2001. It did so by assuming an 11 percent rate of return, while its pension fund actually *lost* 9.5 percent on its investments.

Some experts suggest that the best way to manage the torrent of pension fund liabilities is to be proactive. Woolworths provides an example. In June 2003, the retailer raised the retirement age for new workers to 65 as part of a restructuring of employee benefits designed to curb the costs of its final-salary pension scheme. Moreover, recruits to Woolworths will now have to wait a year before they qualify for membership of the $248 million pay-linked pension scheme, which presently shows a deficit of at least $146 million.

In conclusion, board members should fully appreciate that the problem of funding undercapitalized pension funds promises to be one of the top challenges in corporate governance during the next ten years. This is a social, financial and industrial issue at the same time, made worse by an aging population, stock-market doldrums, rising unemployment, and the fact that capital adequacy in the government's social security safety net is totally inadequate. A similar statement is valid in relation to the financing of health care.

3. Pension plan blues and the impact on households

Pension plan blues come at a bad time for pensioners and households, because of their own huge amount of accumulated debt. According to the

Federal Reserve, the ratio of household net worth to disposable income, a good measure of accumulated wealth, has fallen back to its 1994 level of 4.9 from a peak of 6.4 in 1999 and, at least in America, savings accounts are at an all-time low.

- During the last three or four decades, pensions have provided 24 percent of retirement income. This is, however, changing.
- With profits under pressure and legacy costs to current retirees relentlessly pounding bottom lines, companies shift as much responsibility for retirement savings to employees as they can.

That includes the cost, and associated responsibility, for health care, as post-employment health benefits are increasingly being axed. The percentage of large firms offering health benefits to retirees fell to 34 percent in 2002 from 66 percent in 1988.

Moreover, many companies have switched from traditional defined-benefit plans to defined-contribution plans, such as 401(k), which cap their liability and shift the risk to workers and retirees. At the same time, pension plan objectives are changing. Originally company-sponsored pension plans were intended to induce loyalty and long service in workers. Now, with downsizing, rank-and-file long-tenure employees are deemed liabilities.

This change in corporate governance thinking in connection with retirement plans has another consequence. As briefly mentioned in section 2, on Wall Street there is talk about some companies that might declare bankruptcy so as to do away with their huge pension plan liabilities. For instance, Bethlehem Steel filed for bankruptcy court protection, in part because it could not cope with rising retirement benefits.

These are by no means exceptions, or events which will fade away of their own accord. Not long ago an article in *Fortune* magazine pointed out that for more than 70 percent of the Fortune 500 companies pensions are a problem. These plans cover 23 million active workers and pay more than $111 billion each year to another 21 million people who are already retired.

- The challenge facing the beneficiaries is that such plans reflect the good times, but under current conditions they are unsustainable.
- By consequence, it is most likely that current benefits will be sharply curtailed.

The question is: how? One way is through a cash-balance conversion. Quite similarly to what has happened to the assets of life insurers, a combination of stock-market bust and plunging interest rates has played havoc with the finances of corporate pension plans. For the first time in years,

- US pension plans don't have enough money set aside to pay for the $1.2 trillion or so in benefits that they owe current and future retirees, and
- the size of the shortfall is estimated at more than half of what these plans' beneficiaries earned in 2002.

In Europe, things are not that much better, even if few European companies are as burdened by unfunded pension liabilities as some of their US counterparts. Continental European companies are less exposed to pension funding because, with some exceptions, they don't offer their employees retirement plans that promise specific payments upon retirement, the so-called defined-benefit plans. Instead, they top up the often-generous state-run pensions from current cash flow.

But there are exceptions. Siemens is one of them. In November 2002, Heinz-Joachim Neubürger, the company's chief financial officer (CFO), announced that he had pumped $800 million into various pension funds sponsored by Siemens to narrow a rapidly widening gap between their assets and their liabilities.

Neubürger had already bolstered the $12.8 billion in Siemens funds with a $1.8 billion infusion, in early 2002. But with stock markets plunging and pension payments rising, the CFO found himself obliged to add another $800 million later on that year, further squeezing his company's already lackluster profits. Neubürger also warned shareholders that he would have to transfer another bundle of money into future installments.

Experts say that 100 of euroland's 300 largest listed companies have a pension funding shortfall totaling more than $110 billion. This is equal to half of their 2002 profits, and it is widening. Such lopsided pension fund performance leaves many unanswered questions regarding the quality of corporate governance. Who are the persons most accountable for the fact that:

- there was no forecast of future troubles in the 1980 and 1990s?
- And all of the bad news hit at the same time both the companies and the pensioners in the first years of the twenty-first century?

In the UK, things are no better. An estimated 80 of the FTSE 100 companies have deficits totaling £50 billion ($89 billion), leaving investors increasingly worried that company retirement funds could swallow a bigger and bigger share of earnings. Indeed, quite similarly to what happens in the US, UK pension payouts account for an increasingly large share of employee costs, even if a company does not have a generous pension plan.

This estimated £50 billion shortfall in pension fund commitments by British firms sounds big, but it is contested as inadequate. Mercers, the actuarial firm, has calculated that British companies' pension commitments are not

£50 but £270 billion ($432 billion) greater than the assets to cover them.[9] If this were true, the result will be either that:

- companies default on their promises to pensioners, or
- the salaries of those still in work are sacrificed to make up for the shortfall.

Furthermore, the British government's figures (see section 5) understate its pension obligation by a large margin. Because the state pension is so low, governments have created layers of other, means-tested benefits for pensioners. These include the minimum income guarantee, housing benefit, council tax benefits, benefits for disabled people, and so on, which do not appear in official figures, but if they are added to the bill they make the public pension system's shortfall a high-risk business.

As these examples show, in the early years of the twenty-first century retirees worldwide have been facing increasing challenges. Not only has their pension fund(s) become unstable, but also the value of their own nest-egg has fallen because of falling stock markets, interest rates and bond yields. The income derived from a given level of savings has been slashed.

Here are some statistics. On average, between 1999 and 2002, a pensioner in the US with an equity fund saw his potential retirement income fall by 54 percent. While depressed markets are to blame, investors themselves are not free of responsibilities. In the late 1990s,

- many investors were caught up in the euphoria of the technology bubble, and
- they have been overexposed to equities at the expense of other savings vehicles, as well as the equity in their home.

Not surprisingly, the market's crash was followed by a pension crisis. Not only are some workers in struggling companies, with final-salary schemes, suddenly discovering that their pensions are insecure, but the whole western population at large faces a major retirement challenge. One of the rare events is indeed that practically all lines of investment values have been falling, as shown in Figure 3.2 (statistics from the European Investment Bank, *Monthly Bulletin*, June 2003).

4. Privately funded pensions have been damaged by the scandals

Section 2 provided a case study on pension fund troubles in the auto industry. Section 3 presented an overall picture of the difficult times faced by pensioners. The statistics and other references made were average figures. It does not take two heads to appreciate that for some pensioners real life is going to be worse than the average.

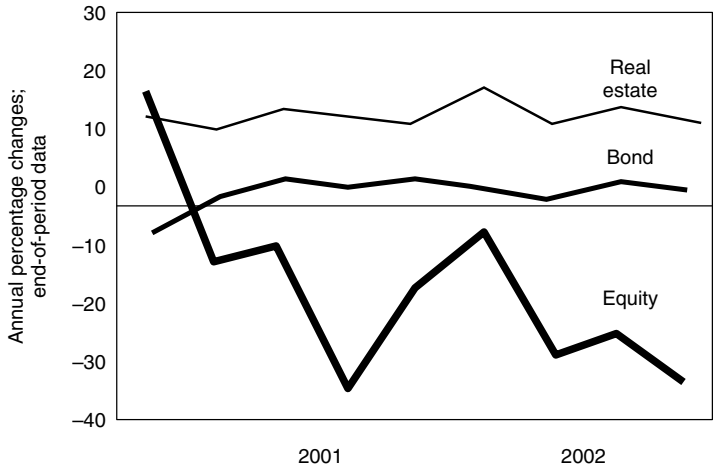

Figure 3.2 Annual growth in the value of total assets of investment funds in euroland, in three investment lines

Source: Statistics from European Central Bank.

For instance, according to a study by Goldman Sachs, the pension hole in pension funds of American carmakers could be more than twice as big as has been thought so far. The investment bank's opinion is that deficits have been understated by more than $40 billion because car companies' accounts assume there will be no future increase in pension benefits. In this respect, the labor unions themselves carry part of the blame.

Benefits at the US automobile manufacturers are negotiated with unions as part of four-yearly pay talks. Assuming a 3.5 percent annual rise in benefits would increase pension obligations by $22 billion at General Motors, $9 billion at Ford, $5.5 billion at Germany's DaimlerChrysler and $4 billion at Delphi, the car parts supplier. That's what Goldman Sachs says.[10] If it is true, it would be as though labor negotiators wanted to sink these companies faster than would otherwise be possible.

In other industries and in other countries the situation is not that much better. In the first three years of the new century, 2000 to 2002, an incredible $2.8 trillion was wiped off pension fund assets across the world. This huge value going down the drain says a great deal about the severity of bear markets in equities. Whether held directly or through pension funds, mutual funds and insurance companies, the nest-egg's size is dropping dramatically.

Moreover, there is more bad news in regard to pension fund governance, because the drain in assets comes just as America's and Europe's baby-boomers should be investing confidently for their retirement. Over and above the stock-market blues, and in a way part of them, are the corporate scandals

which set back public confidence and damaged the cause of privately funded pensions.

As if the drain in assets were not enough, there are also problems on the pension funds beneficiary side. These are problems in reverse due to the fact that benefits that used to be discretionary have become statutory, with the result that the one-off gains of the bull market have turned into major accounting obligations in the bear market.

Unwarranted statutory benefits, corporate scandals and the abuse of pension funds money by the very companies sponsoring them have a compound effect. They may also lead to new types of legal risk.[11]

Pension funds are legally separate from their sponsors. Yet in economic terms a pension fund is similar to an investment trust subsidiary of the company. Because of this, the pension fund's portfolio of equities is really a collection of cross-holdings in different companies, with the sponsoring firm investing the lion's share of the pension funds assets in its own shares, and using money which belongs to pensioners to support the market price of its equity.

Senior management's accountability comes several times into the picture: using money which belongs to the pensioners for share buybacks and other gimmicks, having left unattended for so long the financial hole in the company-sponsored pension fund and, through scandals, further damaging the fund's prospects.

Over and above that, there is inertia in taking corrective action. Even now, when these facts are known, in most cases senior management, which should have been proactive, stays still and just hopes a sharp rebound in the stock market during the next couple of years will blow away billions in pension deficit. This is not serious planning. Crédit Suisse First Boston estimates that even if big corporate pension plans generate an average return of 10 percent on their stock-market holdings in 2003, they will still have to pump some $29 billion into their pension plans, if not more, and this money will have to come from somewhere.

According to other estimates, in 2004, US companies will still have to shovel into their retirement plans another $44 billion, even under an optimistic scenario. Worse still, there is no evidence that salvage work is being done on the liability side of the equation. Therefore, benefits are going to be cut. New regulations proposed by the US Treasury Department will make it easier for companies to do so.

Governments, too, are looking around for solutions, even if these are politically difficult. Take as an example the French pension system, which relies on a pay-as-you-go basis for its first two pillars: basic general pensions and complementary compulsory schemes. One of the problems facing the French authorities is that over the years the first pillar has become a heterogeneous collection of more than a hundred peculiar retirement plans introduced since 1945. These feature different techniques to acquire pension

rights, various ways to compute pensions, and different contribution periods to the safety net. This complexity partly explains the recurrent difficulties in reforming the French pension system. The 2003 Raffarin government's reform essentially aimed to preserve the pay-as-you-go basis while promoting funding through increasing labor-force participation. In the process, it took measures to restore equality between public and private sectors, and to introduce some flexibility in retirement choice. The increase in labor-force participation is mainly through prolonged contributions, though it is also encouraged by measures such as a bonus for longer periods of contribution and a penalty for shorter periods.

Up to a point, the French reform is imposing constraints on redundancies of older workers, and limiting pre-retirement schemes to physically demanding jobs. One of its goals is to enable the labor force to continue working while drawing a pension: gradual retirement is encouraged through the possibility of pursuing part-time jobs, and a scheme enabling older workers to cumulate both a pension and new rights to a pension.

Still another target of the Raffarin reform has been the reduction of inequalities among contributors and pensioners, to be achieved progressively by the equal treatment of contributors through convergence of private and public pensions and by means of access to private pension schemes. This is the objective of the *plan d'épargne pour la retraite* (savings plan for retirement) subscribed to individually or on an occupational basis. It is promoted through fiscal incentives based on the deduction of contributions from disposable income up to a ceiling.

One of the weaknesses of the Raffarin reform is the hypothesis that there will be enough work for everybody, so that everybody can be a contributor to social security rather than a subscriber to unemployment benefits. This is far from sure.

Another weakness of the French pension reform is the uncertainty about who is going to finance it. With three consecutive years (2001 to 2003) of 4 percent, the government can ill afford to come up with triple-digit billions. Organized in October 2003, the French government's Fonds des Réserves des Retraites (FRR) featured assets of €16 billion, though, as a guestimate had it, by the end of 2020, it will have some €130 billion of assets – with about two-thirds coming from government contributions. We shall see what happens.

5. State and private pensions in Britain

In Britain the state pension system is expected to collapse under the weight of huge costs, as millions flee crisis-hit company schemes. Experts say that, in line with the law of unexpected consequences, as it gains momentum, the 1997 stealth tax on pension funds could spark a crisis in the state pension system of unprecedented proportions.

Professor Peter Spencer of Birkbeck College, London, has warned that the UK's second pension scheme, formerly known as Serps, is completely unfunded. As with practically all other state-sponsored pay-as-you-go pension schemes, the British government taxes today's workers to pay yesterday's workers and today's pensioners. 'This has the power to bring about the collapse of the entire state second pension,' says Spencer.[12]

People who have been able to understand that this six- to seven-decades-old approach has reached its limits, because the demographics have radically changed, have been opting out of public plans for years (if and when they can) to join private plans. The downside is that with private pensions under stress, future beneficiaries are left in the lurch. There are, as well, the issues of inordinate risks taken with alternative investments, and mismanaged pension fund liabilities.

Alternative investments lack the practical ability to satisfy pension fund requirements. They are highly illiquid, and loaded with a mare's nest of risks. I know this is contrary to the prevailing opinion on British pension fund investments – but their managers should appreciate that opposition to the trend serves a purpose.

- Intellectual weapons can rust if the decision-maker remains unopposed for too long, and
- the legal risk is growing, with authorities bringing to court pension fund mismanagers (see section).

Moreover, with pension funds liabilities skyrocketing and new money sources not forthcoming, pension fund managers and their regulators should be looking for new and better tools to help them navigate in uncharted territory. According to recent UK regulations, pension obligations to future and current members have to be discounted using the yield on AA corporate bonds. In practice this means that

- pension assets have to be valued at market price at balance-sheet date;
- the large majority of alternative investments have no market price.

The Accounting Standards Board says this type of financial reporting is consistent with other items in the balance sheet, which also show the value of the business as a snapshot at a particular point in time. As is the case with corporate reporting, actuarial gains and losses connected to pension funds have to be included in the statement of recognized gains and losses (STRGL), which is a supplementary statement to the profit and loss (P&L) account.

The new pension fund regulations also pay attention to net funding position. The resulting surplus, or shortfall, created by the difference between gains and losses must appear as a separate item on the balance sheet. This helps

a great deal in terms of transparency, and it also assists in bringing to attention huge pension fund deficits such as those shown in Table 3.1.

Transparency is a good policy because it leads to market discipline. But legislation, too, must move in the right direction. Strengthening pension fund legislation is the most important, as these days several pension funds are not only closely linked to a hedge fund in terms of leveraged investments (see sections 7 to 9), but they also are becoming leveraged themselves – which is a very bad policy.

It will be recalled from the Introduction that, classically, pension funds have been investing in fixed-income assets and long equities. By contrast, if one compares pension funds and hedge funds today, one would be surprised to see that the economics are remarkably similar. Pension fund liabilities are a form of debt, and debt is leverage. Leverage is primarily what a hedge fund has.

- A hedge fund calls it *net asset value*, and manages its 'surplus position' using a strategy aimed to skew its return distribution towards profits, but there are also significant downside risks, as LTCM and other meltdowns have shown.
- A pension fund calls the differences between its assets and liabilities *its surplus* and uses some, though not all, of the techniques used by hedge funds, including an unreasonable amount of gearing.

One reason why pension fund managers take huge risks is that they want to show 'results'. This is wrongly interpreted to mean that the money they manage grows 'fast', while forgeting about the inordinate exposure that is being assumed. Such a policy consistently leaves out of the equation the major risks being taken by pension funds – which is extremely dangerous.

Table 3.1 British industry deficits connected to pension plans

British Telecom	£3 billion
BAE Systems	£776 million
Unilever	£647 million
HSBC	£620 million
AstraZeneca	£463 million
GlaxoSmithKline	£457 million
Imperial Chemical Industries	£453 million
Rolls-Royce	£392 million
Pearson	£148 million
Marks & Spencer	£134 million
Centrica	£117 million
Jardine Lloyd Thompson	£50 million

Source: *The Observer*, 7 April 2002.

Because adversity unavoidably hits, in the end such a high-risk policy proves counterproductive.

British pension fund managers investing in funds of funds and hedge funds don't always appreciate they are dealing with unregulated entities (which are running after a fast buck) and their non-transparent schemes.[13] The performance of hedge funds is usually linked to the outcome of a complex, leveraged derivatives strategy which is the antithesis of prudent investing. Yet prudent investing is supposedly the goal of pension funds.

Risks incurred through so-called structured strategies should not be permitted for pension funds. Some pension funds allow themselves to be taken for a ride with 'alternative investments' – in the hope of hitting the jackpot.

- Alternative investments illiteracy is rampant.[14]
- In a 2002 investment conference in London, 64 percent of pension fund managers believed that hedge funds could help *reduce* portfolio risks!

One of the misleading slogans of hedge funds and funds of funds is that 'your money is actively managed around the world'. Neither is the assumed huge exposure and associated illiquidity the only thing investors should be concerned about. Costs also are way too high, in the form of heavy charges levied by the merchandisers of risk, supposedly to reward investment skills. However,

- in the 2000 to 2002 timeframe investors have lost heavily;
- the typical UK company pension fund has suffered a cumulative negative return of about 25 percent.[15]

This money, which goes down the drain, does not belong to pension fund managers. It is the assets hard-working people have put aside for old age. Pension fund managers are the trustees of these assets who, perhaps unwittingly, are taking huge risks. But in that case they should be better informed (see also in section 7 the advice given by UBS).

It would probably be of very little comfort to British pensioners to know that other European pensioners find themselves in the same sinking boat. For instance, in 2003 more and more has been revealed about the deep crisis of public pension funds in Germany, where they faced a financial deficit of up to €9 billion in 2003 alone. As a result, the German government said that either,

- pension payments would have to be frozen, then cut by about 1 percent in 2004 to make up the shortfall, or
- there would be increased employee and employer pension contributions from 19.5 to 20.4 percent of gross income.

Under the German pension system, which was established in the nineteenth century by Otto von Bismarck, the working population finances current pensions, and money paid into the funds is immediately spent. Public pension funds are legally required to retain a reserve of only 50 percent of pension payments in any one month. The rest of the pension money leaves the coffer.

6. State and private pensions in the United States

Pension underfunding at troubled American companies doubled in 2003, with airlines accounting for nearly a third of the increase, as the US government stated on 4 September 2003. Washington is very concerned because the Pension Benefit Guaranty Corp. (PBGC), which backs corporate retirement plans. PBGC told Congress that its own deficit grew to a record $5.7 billion as of 31 July 2003, $2 billion more than the whole of fiscal 2002[16] – versus a $9.7 billion surplus in 2000.

To begin with, PBGC is essentially a higher layer of the American safety net for pensions. Its *single-employer* program takes over pension plans that bankrupt firms have defaulted on, but pays only a portion of the retirement benefits due to an estimated 34 million workers enrolled in private defined-benefit plans. In terms of financing, PBGC's challenge lies in the fact that, according to a 23 July 2003 report by the US General Accounting Office (GAO),

- American corporate pension plans are underfunded by about $300 billion, and
- as the main insurer of retirement plans, government-sponsored PBGC does not have enough assets to pay promised future benefits.

'Defined-benefit plans are under more pressure than at any time in a decade,' cautioned PBGC Executive Director Steven Kandarian, adding that the agency's program could require a general revenue transfer.[17] Practically, this means bailout through taxpayer money, and more budget deficits.

Since this has become a real possibility, in 2003, Treasury Secretary John Snow warned that US pension plans are in danger of financial meltdown, not unlike that of savings and loans institutions in the late 1980s. The GAO warned that, most likely, the Pension Benefit Guaranty Corporation faces additional severe losses, as the financial weakness of US firms increases.

In the last few years, the major cause of these growing PBGC deficits has been the massive increase in large, underfunded pension plans of bankrupt companies – like Enron and WorldCom – as well as in the steel and airline sectors, taken over by PBGC. The second major reason for alarm is that so many other pension plans which have not yet gone under water are not too far from doing so.

In mid-January 2003 Fitch Ratings warned that US domestic airlines had a funding gap for pension obligations of $18 billion, a steep change from 1999, when they were overfunded by about $1 billion. Shortly thereafter American Airlines, the largest US carrier, underlined the sorry state of the sector's underfunded pensions when it said it would take a $1.1 billion charge to equity to cover its pension liabilities.

The pension problems of American Airlines came alongside its worst annual loss of $3.5 billion, with losses of $529 million in the fourth quarter of 2002. Don Carty, the carrier's chief executive, admitted it remained a treacherous time for his company and emphasized the need for a quick reduction in labor costs to put the air carrier on a sustainable footing. The call for deep cuts, of 20 percent or more in wages and other benefits, came a couple of weeks later, on 4 February 2003.

The message from these references is that these huge pension deficits are a Damocles sword over the head of a growing number of industrial firms, putting in doubt their continuing survival. But even if US pension funds investments manage to escape negative returns in 2003, companies in Standard & Poor's 500-stock index will be more than $40 billion short of their projected pension obligations. This may well become worse in 2004.

- If pension plans lose just 5 percent of their worth through equity gambles, alternative investments or other reasons, they will be $150 billion short.
- That's a huge difference from 1999, when pension plans had a $292 billion surplus, and a 30 percent cushion over their commitments.

According to some estimates, if the United Technologies pension fund loses 5 percent, the company may have to contribute $1.4 billion in 2003, Ford $1.2 billion, Delphi $1 billion, US Airways $800 billion, and AMR $415 million – while General Motors, which has the biggest pension plan of all, with $80 billion in obligations, expects to put another $9 billion into its plans by 2007.[18]

Analysts worry that large shortfalls in pension funds could have wide-ranging economic consequences. In all likelihood, particularly hit will be the old-economy companies, as well as those with large unionized workforces, because they have large defined-benefit plans offering guaranteed payouts to pensioners. Some of the biggest obligations are among auto, steel, telephone, airline, chemical and pharmaceutical firms.

Too liberal pension fund and medical care commitments made in the 1970s, 1980s and 1990s, when such contributions were not costed in income statements, turn back to bite their makers. Down to the bottom line, such commitments have been an operational risk which managements failed to take into full account when it was still possible to keep such matters under control. This is yet more evidence of poor corporate governance.

Nor could it be maintained that the large pension fund organizations have managed their business in a way commensurate with rigorous management accountability. In the US, bad news hit the California Public Employees' Retirement System (Calpers), which has long had a good reputation in the securities business. This bad news was that the directors responsible for minding the retirement nest-eggs of 1.3 million people had been involved in potential conflicts of interest that threatened to erode the fund's sterling image.

For instance, according to the latest state records available, in 2001 five members of Calpers board owned stocks also held by the pension fund. Experts in business ethics said this should never happen, because it puts board members in the position of being able to profit from advance knowledge about the fund's investment decisions.

In addition, three board members have received thousands of dollars in political campaign contributions from companies Calpers invests in, raising questions about whether the board's decisions might be influenced. Calpers invested $760 million in one company after its founder arranged more than $100,000 in contributions to the pension fund's board members.[19] Calpers has also been involved with hedge funds – which runs contrary to the advice given by UBS.

7. UBS advises that 'pension funds should not invest in equities'

Sections 2 to 6 have shown that as far as occupational pensions are concerned, Europe and the US have safety nets of one sort or another. At the same time pension support, public and/or private, in all of Western Europe and North America is facing increased challenges in terms of financing and return on investment. Big questions are:

- How well are these pension funds managed?
- How sound are the investment decisions being made?
- How rigorous is the pension funds' system of risk control?

Are pension funds taking too many risks which are incompatible with their mission and with the survival of the social safety net? According to a controversial 2003 report, presented by a highly rated analysis at UBS, pension funds should consider not investing in equities *at all*. It needs no explaining that this advice contradicts the 'conventional wisdom' followed by most pension funds over the past 40 years, that:

- priority should be given to higher and higher returns, and
- the risks pension funds are assuming should not keep their managers sleepless at night.

'We believe that the case *against* equity investment by company-sponsored defined benefit pension funds is robust and worthy of serious consideration,' the UBS report says, adding, 'We recognize the controversial nature of the subject and the wide range of opinions held, including among our own colleagues.'[20] If equity investments are risky, think about the exposure assumed by pension funds with alternative investments.

This very sound advice by UBS on pension funds investments should be compared with current statistics, which show that about 60 percent of the average US and UK pension fund is invested in equities. This advice by investment bankers does not come as a surprise. What's surprising is to recognize the perils of exposure to equity risk.

Investing in equities brings better value than would come from bonds if the market were positive, but 'the resulting increase in risk negates this benefit and does not actually increase the value of the company,' UBS concluded in its 2003 report. This raises significant issues not only for pension funds but also for stock markets.

- If the management of pension funds finally comes to appreciate that equities investments in excess of 20 percent of assets are inappropriate,
- then will stock-market values be depressed, because institutional investors sell shares or simply refuse to buy more stock?

As the stock-market lows of three consecutive years – March 2000 to March 2003 – have demonstrated, for many investors, including pension funds, equity can be a high-risk class with doubtful returns. The usual adage, 'buy low, sell high', applies only to those who want to believe in miracles. Stock-market low after stock-market low has demonstrated that even the 'experts' are making monstrous mistakes.

Moreover, if equity investments in excess of a low ceiling are inappropriate for pension funds, the latter should have an absolute zero tolerance for 'investments' in derivative financial instruments, speculating *as if* they were hedge funds, and putting the pensioners' money at risk by going for illiquid instruments like 'alternative investments'.[21] Unfortunately for the pensioners, and their nest-eggs, all three *don'ts* have no resonance in the boiler rooms of the majority of pension funds in Europe and in America.

Whether because of lack of knowledge or lack of care in prudential management of the pensioners' money they have been entrusted with, many pension fund managers think of alternative investments only in one way: as a means of increasing returns and therefore commissions. Such a policy does not take into account the huge risk to which pension funds are exposed because their partners – the hedge funds and funds of funds – are characterized by:

- high leverage,
- lack of transparency, and
- illiquidity.

All three points are basic characteristics of instruments used with alternative investments. The unexpected consequences of embedded risks are not the only dangers facing institutional investors at large, and pension funds in particular. There is also another important variable – legal risk, because nobody ever said that pension fund managers have been given *carte blanche* and can do as they please (see section 8).

For instance, an uncomfortably large number of pension fund managers act as if they don't understand that collateralized mortgage obligations (CMOs), credit default swaps (CDS) and credit derivatives,[22] in general, are very risky. They have learned nothing from the bankruptcy of Orange County and so many other agencies sunk by betting on CMOs.

Neither should pension funds ever be *protection writers*. Credit default swaps transfer the pure credit risk of a reference asset such as a bond issue or loan:

- from a person or entity exposed to the credit risk, that is, the protection buyer,
- to a person or entity who wants to assume the said credit risk, the protection seller.

In return for this protection, the buyer pays the seller a premium. Banks tend to dominate the credit default swaps market as buyers of credit risk protection with a 47 percent share. Insurers are the main sellers of CDS cover, with a 33 percent share of the market. But (surprise, surprise) pension funds, too, are players – both as buyers and as sellers, as shown in Table 3.2. This is a lethal business, indeed, of which the pension funds beneficiaries are not aware.

Table 3.2 Global data on market share of credit default swaps[23]

	Credit risk protection		*Net item*	
	Buyer (market share) (%)	*Seller (market seller) (%)*	*%*	*USD billions*
Banks	47	32	15	178
Securities firms	17	15	2	24
Hedge funds	13	7	6	71
Industry	7	4	3	36
Investment funds	3	5	–2	–24
Pension funds	3	4	–1	71
Others	17	33		

Pension fund managers, and individual investors as well, are often taken to the cleaners not only by the sweet words of alternative investments salesmen, but also by those of other pushers of problematic assets. A case in point is the salesman's cry that 'there is now *private equity* as a real and proper asset class for inclusion in institutional portfolios' – a dirty sales gimmick.

Statements like 'The addition of private equity to a balanced portfolio increases the overall return for *the same* measure of risk,' are an absolute lie. Moreover, private equity investments generally have a ten-year cycle, which might not necessarily match the liabilities of a pension fund. The asymmetric risk and return of private equity is always in the investor's disfavor, and there are other problems as well. For instance, in many countries pension fund trustees do *not* have the authority to invest in certain asset classes, including private equity and hedge funds – but find ways to bypass this limitation.

Precisely because the risks involved are so high, and pension funds should be conservative entities in their investments, the European Union and its member countries are considering restricting company pension funds' exposure to high-risk assets. The Spanish government has proposed specific limits on pension funds' freedom to put money into unlisted investments, such as

- private equity,
- hedge funds,
- real estate, and
- derivative instruments.

Explicit rules and guidelines are needed because investment principles, like the prudent person principle, are easily forgotten. The 'prudent person' principle says that pension funds can invest in a diversified range of asset classes that ensures that they meet their pension promise to their members. The Spanish 'Plus' aims to put restrictions on investment in one's own company, as well as restrictions on investment in unlisted vehicles like those set out above.

Legislation is also necessary to assure pension funds managers are not decreaming the entity they work for, for their own benefit. An article in the *Financial Times*[24] made reference to Hermes Pensions Management, owned by the BT Group pension scheme. It emerged that three managers earned £5.1 million ($7.75 million) between them in 2001, after £7.8 ($12.1 million) in 2000. Investors in the fund had lost money in 2001, and they did not seem to have fared better in 2002.

8. The many aspects of mismanagement of pensions

In the last week of June 2003, US federal regulators sued Enron, its directors and some senior staff, trying to recover what could be more than $1 billion of its workers' retirement savings. In its filing in the US District Court in

Houston, the Labor Department accused the company and some of its senior managers of abandoning their duty to act in the best interests of their workers, whose pension plans were invested in company stock that became nearly worthless.

While in its original version the suit did not specify monetary damages, Labor Secretary Elaine Chao said the US government would seek to recoup as much as possible for Enron employees. A class action suit filed earlier by hundreds of Enron pension plan participants has been seeking more than $1 billion in lost retirement funds.

Kenneth Lay, the former Enron chairman, and former chief executive Jeffrey Skilling, who have yet to be charged with criminal wrongdoing, were charged in the Labor Department suit with failing to provide relevant information to the committee that oversaw the pension plan. To appreciate the disaster which faced Enron's pensioners, it should be noted that the drop in Enron shares from their January 2001 peak to its bankruptcy protection filing in early December 2001 erased an estimated $2.1 billion in assets from its two retirement plans.

The court will have to determine how much, if any, of those losses were caused by the defendants' mismanagement. As this and a myriad of other examples show, the downturn in pension fund assets takes time to show up. Whether due to event risk, as in the case of Enron, alternative investments, or other reasons, the decay tends to be gradual. Moreover, at least in the US, where the pension funds business is booming, current accounting rules allow companies to delay reporting big changes in pension earnings for several years, even if some firms decide it is safer to be transparent about the widening gap between income reality and management's projections.

Both asset depletion and shortfalls in projected earning estimates should be made transparent to both pensioners and pensioners-to-be. In most companies, each year company executives project a long-term rate of return for pension plan investments. Conflicts of interest play a role, and this has the consequence we examine in the next paragraphs.

From management's viewpoint, companies can get away with annual risk-and-return projections for years, by making 'adjustments' over a nearly 15-year period. Companies like this freedom to play with numbers, but critics say that senior management abuses that right by delaying the inevitable, which makes the revelation of underperformance or near bankruptcy more severe.

One of the problems facing both pension plans and company management is that poor pension plan returns may depress earnings for years. General Electric was one of the first to signal so in late 2001, when it warned in a Securities and Exchange Commission filing that in 2002 pension earnings would drop between 5¢ and 7¢ a share from 2001. Subsequently, General Motors stated that lower fund earnings were a factor in the quadrupling of pension expenses since 2000. Other companies making similar statements include US Steel, Exxon Mobil, Ford Motor, Dow Chemicals and DuPont.

Pension fund managers cannot be responsible for performance only in good times. A great many industrial and financial companies' pension plans did well during the bull market of the mid- to late 1990s, and this meant that the firm did not have to contribute extra money for years. But times changed and companies found themselves obliged to stop tapping pension plan surpluses to cover other retiree expenses, and to close the asset holes opened in the good years because of using these 'surpluses'.

The bottom line is that companies must now calculate higher future costs of providing for pensioners, and this is sure to hurt their earnings, particularly as pension fund losses start to kick in. Many pension funds which in the late 1990s invested not just in equities, but in the stock of high flyers, lost heavily with Enron, WorldCom, and the dot-coms. As a result, a touchy issue is the assumptions being made about how much the pension portfolio has to earn to face obligations, the best mix between fixed interest rates and equities, and the risks being assumed with every 'mix'.

The decision to downsize the pension fund's earnings estimates is not easy. In November 2001, General Electric trimmed the rate to 8.5 percent from 9.5 percent. The change sounds small, but the cost to GE was more than $550 million – or, roughly, 2 percent of pre-tax income. Even this 8.5 percent proved to be an overestimate, given the market's doldrums in 2002.

Other companies have been reportedly harder hit because their pension plan's rate of return was taken to be higher, and when it came down to reality they had to cash out more money. At IBM, GM, Delphi Automotive and Eaton, for example, the pension plans' estimated rate of return stood at 10 percent – very difficult to realize without taking an inordinate amount of risk (see section 9 on risk management).

Evidently, higher risks have consequences. Deere reported that its pension investments *lost* $1.3 billion for its fiscal year ended 31 October 2001, while its senior management had estimated it would appreciate by $600 million. Delphi's pension plan assets *contracted* by 6 percent in 2001. The company posted a pre-tax loss of $528 million for 2001, after restructuring charges.

On 21 March 2003, Shell revealed a $6.1 billion hole in its pension fund. The deficit was computed at the end of 2002, calculated under US GAAP accounting standards, and it compared very poorly with a surplus of $4.2 billion in 2001. As a result of this depressing figure, Shell 'would have to start topping up its fund by $300 million to $350 million a year,' said Judy Boynton, the company's finance director.[25] The sudden decline in pension fund assets was due to both:

- falling stock markets, and
- the number of acquisitions the group had made.

This is another aspect rarely considered by senior company management when it embarks on an M&A strategy. In 2002, Shell spent $16 million on

buying assets including Enterprise Oil, some of Texaco's refineries in the US, Pennzoil-Quaker and DEA in Germany. Acquisitions added 21,000 jobs to the group – which meant over a 20 percent increase in employment, and about $7 billion of *pension liabilities*.

In conclusion, one of the issues that worries most pension fund managers and company chief executives is that nobody today can say where pension funds returns are headed over the next 10, 20 or 30 years. Some executives are sticking with their 10 percent assumption, but they know that, if the market continues in its lows, such guestimates will have to be revised downwards in a most significant way.

9. Legal action against pension fund managers

Every pension fund manager's business activities expose him or her to different types of risks. Therefore, proper identification, assessment and management of these risks are essential to the success and financial soundness of operations under the manager's authority. The problem is that only a few pension funds have in place an appropriate risk control system.

Managing risk begins with the identification of the types of exposure being assumed by the entity, enriched by expertise and experience with limits and their control. In every entity, top management should take an active role in oversight of various risk categories, reviewing exposures, improving upon internal control practices, and analyzing risk-related developments due to market volatility, counterparty rating, changing regulations and other reasons.

Credit risk is the result of the counterparty not fulfilling its obligations. The term is also used in connection with the value of collateral, which is proving to be inadequate. The theoretical way of managing credit risk is by dealing with creditworthy counterparties. The practical approach is:

- to comply with established credit limits, on an intra-day basis, and
- to steadily monitor net exposure to individual counterparties.

Part and parcel of steady vigilance is periodic assessment of the validity of credit ratings, evaluation of the counterparty's management quality, and a credit control process conducted with risk in mind. Table 3.3 shows General Electric's criteria. Particular attention should be paid to concentrations of credit risk which exist with counterparties, or groups of counterparties, when they have comparable economic characteristics that would cause their ability to meet obligations to be similarly affected by economic, industry sector, or geographic factors.

Contrary to banks, which make more money by taking credit risks, pension fund managers tend to be more exposed to market risk, that is, the potential

Table 3.3 General Electric's counterparty credit critreria[26]

	Credit rating	
	Moody's	*Standard & Poor's*
Term of transaction		
Between one and five years	Aa3	AA–
Greater than five years	Aaa	AAA
Credit exposure limits		
Up to $50 million	Aa3	AA–
Up to $75 million	Aaa	AAA

change in value of the financial instruments in which they invest caused by unfavorable changes in interest rates, equity prices, foreign currency exchange, and other market factors. Reviewing traders' positions and their observance of limits is an integral part of market risk control.

Companies have a variety of methods to monitor their market risk profile, which invariably involve reviewing their positions, exposures, investments and trading strategies. Some firms use market risk modeling based on estimating loss exposure. The results are compared with established limits, and exceptions are subject to review and approval by senior management.

For instance, like all investors, pension funds are exposed to interest rate risk primarily from changes in interest rates which may hit assets in their portfolio. Interest rate risk management programs focus on controlling exposure to interest rate movements, by setting a mixture of floating- and fixed-rate debt, having a sound distribution of maturities, and minimizing liquidity risk.

Up to a point, counterparty risk and market risk correlate between themselves and are influenced by investment decisions which may have been taken years ago. The fact that time has passed by does not relieve an assets manager of his/her responsibilities.

Teddy Forstmann has been an asset manager for several decades, and with a rather good record. But in February 2000 the State of Connecticut followed through on a threat to sue Forstmann Little to recover $100 million of pension money that the state alleges was lost because the Forstmann firm made reckless investments.

Forstmann has been painting a bleak picture of some strategies, such as buyout investing, noting that now leverage no longer pays. Two of Forstmann Little telecommunications investments, McLeodUSA and XO Communications, have seen billions of dollars going under water.

Forstmann Little invested in technology and telecoms companies until they foundered. Having been badly burned in the process, it changed policy, focusing on traditional businesses and looking for firms that would grow regardless of what happens in the economy. This sort of company, however, is very difficult to locate, even more difficult than those which are inefficient and become buyout targets.

Not only asset managers but also pension fund trustees are now under scrutiny. The US Labor Department, for example, is becoming increasingly inclined to sue pensions trustees. On 29 August 2003, the Labor Department sued the trustees of seven union-supported pension and health plans, in Ohio and Minnesota, for investing pension assets in risky ventures. These lawsuits mirror others filed in 2002 against ten union plans.

In the aforementioned August 2003 legal case, all pension plans being sued worked with Capital Consultants, an Oregon investment management company, now defunct. In 2000, Capital Consultants was sued by the Securities and Exchange Commission for investing pension plan assets in self-dealing and in imprudent loans, and also for charging excessive fees. The Labor Department is seeking to restore losses and illegal gratuities to the plans. Capital Consultants had provided investment services to more than 60 union-sponsored pension, health and welfare plans governed by federal employee-benefits law. 'Hardworking men and women trusted these trustees to protect and preserve their union-sponsored pension and health benefits,' said Labor Secretary Elaine Chao. 'The trustees abused that trust and thousands of workers saw their retirement security in jeopardy.'[27]

Most of the seven pension funds sued in the August 2003 action covered various union local chapters with the International Brotherhood of Electrical Workers in the Midwest. Chao said the suits seek to recover 'as much as possible' for the plans and to establish new procedures and controls to prevent any further raiding of health and pension plans. The Labor Department also filed five separate lawsuits alleging that the trustees violated the Employee Retirement Income Security Act, known as ERISA. The seven plans had approximately $793 million in assets as of 30 April 2000, according to the Labor Department.

Capital Consultants collapsed in September 2000 amid charges by federal regulators that it was running a pyramiding scheme. The company allegedly invested the money of pension funds and other funds in high-risk private placements and then covered up losses from these investments with assets from new investment funds. Over three decades, hundreds of union pension plans, trusts and private investors handed over more than $500 million to Capital Consultants for 'investment' – and none of them seems to have had in place a risk control system able to uncover the alleged scam.

4

Management's Accountability for Corporate Governance

1. Introduction

Corporate governance has been defined in Chapter 1, which also mentioned that this term tends to mean different things to different people. Chapter 2 positioned corporate governance within the context of a market economy. Chapter 3 was a case study on pension management that is found wanting, and therefore both in the US and in Europe the social safety net is at risk.

The present chapter integrates these references within the context of personal accountability resulting from the way senior managers run a company. Personal accountability has come into the limelight for three reasons:

- increased shareholder activism;
- a growing amount of mismanagement; and
- ethical issues raised by a growing number of scams (see Chapter 5).

In many industries other issues are raised by overcapacity, examples being banking, electronics and automobiles, which go unattended until the whole sector is in trouble. These, too, raise questions about management's accountability. Another case is problems resulting from globalization, where divergent jurisdictions, cultures and governance rules have clashed.

Sometimes excess capacity is fed by nationalism, which blurs effective judgment. The lack of a level playing field, or universal standards, regarding ethical behavior is another case in point. The scams which took place in the late 1990s and early twenty-first century brought to the foreground the need for increased corporate scrutiny. People have been quick to exploit legal and regulatory loopholes around the world and – as cannot be repeated too often – companies are composed of people.

Management accountability is a 'must', but it is not so easy to pinpoint individual responsibilities because mismanagement has many aspects. These range from plain inability to run the company's business, relying on media effects rather than substance, to overpaying oneself for services rendered.

Mismanagement can take place both at the home office and abroad. But of the more than $400 billion in publicly declared losses, because of poor corporate governance, during the first three years of this century,

- most occurred away from head office, and
- in the majority of cases, those who were responsible run through the cracks of multiple, incompatible national regulations.

Whether in banking or in other industries, the class of legislation and overlapping of regulatory bodies have proved, time and again, to be the enemies of good governance. Either national regulators will not undertake thorough inspection, thinking that 'others' will do the job, or they are afraid to step on each other's toes. Therefore regulators may soft-pedal in execution of their duties, which lets the wrongdoers off the hook. Regulators who check on corporate governance now ask: does anyone in the organization check to see:

- if policies and procedures are sound?
- if they are observed by everybody?
- if compliance is closely monitored by internal control?

Internal control is an arm of corporate governance and it should answer queries such as: who has oversight on transactions? Who inspects the portfolio positions? Who is aware of how the P&L is affected by profit redimensioning? By the assumption of new risks? Who is in charge of resetting limits when risk increases? Who makes sure that the feedback is always on time and the arteries of the organization are not clogged?

2. Corporate governance and internal control

Internal control (IC) is a matter of organizational *referential integrity*. William McDonough, the former chairman of New York Fed, once said that corporate governance depends on more than a company's compliance with rules. This 'more' is the value differentiation provided by a timely, accurate and focused feedback, which should be assured through internal control.

To understand what should be expected from internal control, consider the notion of ancient Egyptian art stated by André Malraux. 'Egyptian art', Malraux said, 'does not try to fix what is *was*, like the Roman statutes are doing. [Instead] it opens… the gates to eternity… [by] *merging appearance to reality*.'[1]

A global survey on internal control which I did with the International Securities Markets Association (ISMA) in 1998 established the trend prevailing in the opinion of 76 talented people in the financial industry working for 46 different central banks, commercial banks, investment banks, brokers/dealers and trade associations.[2] The consensus of these meetings, which took place in eight countries, in two continents, is that IC is a most important

organizational process whose objectives and deliverables can best be described as follows:

- Internal control is a dynamic system covering all types of risk, addressing fraud, assuring transparency and making possible reliable financial reporting.
- The chairman of the board, the directors, chief executive officer and senior management are responsible and accountable for internal control.
- Beyond risks, internal control goals are the preservation of the entity's assets, account reconciliation and compliance. Laws and regulations impact on IC.
- The able management of IC requires policies, structure, technology, open communications, access to all transactions, real-time execution, quality control and corrective action.
- Internal control must be regularly audited by internal and external auditors to ensure its rank and condition, and to check that there is no cognitive dissonance at any level.

Internal control acts as a brake on excesses in corporate governance. Therefore, it is a process established by the board of directors and by top management to provide them with proactive feedback on the way the whole organization functions. As such, it is affected by and affects all levels of personnel, because it brings transparency.

Basically, internal control enables board members and senior executives to supervise and manage by tracking exposure from credit risk, market risk, operations risk, settlement risk, legal risk and other risks relating to transactions, and to the management of assets and liabilities – as well as to fraud and to security. The aims are to:

- safeguard the assets of the business;
- assist in compliance and account reconciliation;
- lead to immediate steps for corrective action; and
- promote personal accountability at all levels of management.

The feedback provided by internal control addresses all business areas, not only financial. The best way to describe the processes coming into play in IC is to use as a proxy business modeling, as presented in Figure 4.1. Modeling of a business is key to fast deliverables – and thus to the innovation necessary for survival in the face of competition. Like internal control, this is a never-ending process of inception, testing and transition to a new version or framework.

Internal control, too, follows successive phases of inception, development, testing and transition, like those outlined in Figure 4.1. Human nature being what it is, it is necessary to track and measure the forces that fuel

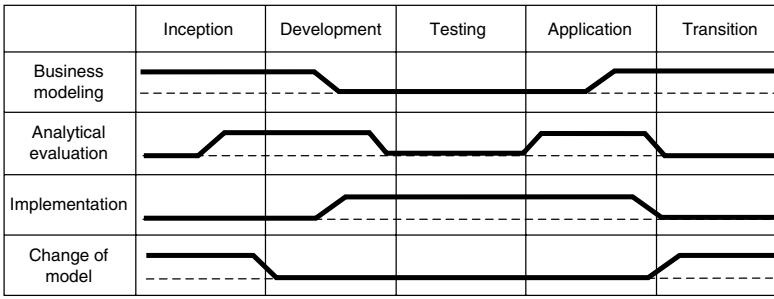

Figure 4.1 Business modeling is a never-ending process of inception, test and transition to a new version

speculation, lead to corporate failures, or create opportunities for scams. Internal control's deliverables must focus on the seven deadly sins that have the power to demolish any business, in any sector, at any time (in alphabetic order):

- Amorality
- Apathy
- Arrogance
- Deception
- Fear
- Greed
- Lying.

These seven sins lie behind the fact that since 1997 the number of civil cases in the US involving financial violations has more than doubled. It is also interesting to note that one contributor to this big increase has been technology, like the Internet, which has opened up new opportunities for fraud; and it has created an environment that does not sufficiently discourage or penalize dishonesty. People become fraudulent because of lack of appropriate punishment and the perception of an opportunity for easy gains.

At times, this 'opportunity' becomes widespread. To control it requires both a system of checks and balances and punishment of non-compliance or fraud. At corporate level, internal control must focus on limits, track derivatives trades, follow credit lines, assure observance of risk policies for clients and correspondent banks, and make sure that the management of assets and liabilities is on target.

For its development, implementation and proper functioning, an internal control system requires laws and regulations, rigorous supervision, clear corporate policies and objectives, and a structure of open communications channels. The executive responsible for proper functioning of internal control should follow Edward I. Koch's dictum: 'I am not the type who gets ulcers.

I give them.' He or she should also ensure that IC is fed with reliable information, and supported by advanced technology.

To enhance internal control, institutions must establish clear IC policies and objectives, as well as use a wide range of tools and techniques. Real-time computers and communications, sophisticated software, database mining, quality control charts, simulation models and interactive visualization of financial and other reports are 'musts'. Also, because all systems can malfunction and they decay with time, internal control must be regularly audited.

Who should be responsible for IC? Without the slightest doubt the proper organization and functioning of internal control is part of top management's accountability. This is not properly appreciated in all quarters. On Wall Street it is said that there is evidence that the senior management at Allied Irish Banks (AIB) and Allfirst (the institution's US subsidiary) knew what was going on with foreign operations, but took no corrective action. The showdown came when Goldman Sachs stopped trading with Allfirst, because they did not like what they saw in terms of control procedures.

Internal control must have clout, and this is achievable because, to a substantial extent, the organization, implementation and upkeep of IC is a matter of *management intent*. Management's *vigilance* and *virtue* make the difference between chemists and alchemists of organizational behavior. As Michael White says in his biography of Sir Isaac Newton:

> The intellectual as opposed to the motivational foundations of chemistry and alchemy overlapped . . . Chemists and alchemists dealt with the same compounds, even used the same apparatus and shared inherited knowledge; what lay between them was *approach* and *intent*.[3] (Emphasis added)

A legal process which took place in Paris in May 2003 yielded some startling insights into the thin red line which demarcates the right and wrong aspects of a certain issue. According to all evidence, Elf-Aquitaine, which was then the second-largest French oil company, operated for many years as the unofficial slush fund of the French state, paying for everything from greasing the hands of African dictators to election campaigns of the main right- and left-wing French parties.

When Loik Le Floch-Prigent, Elf's former CEO, was questioned about the use of company money to buy him a Paris house for €9 million, he admitted apologetically that 'things did get a bit out of hand.' As for the use of a further €4.5 million of Elf's assets to fund his divorce, the former CEO suggested that this had been done at the direct suggestion of François Mitterand, then president of France, to ensure Le Floch-Prigent's estranged wife did not reveal any embarrassing secrets about Elf.[4]

What these references teach is that when corruption reaches the top, it paralyzes any control action. Any system of internal checks and balances becomes irrelevant, and even at the highest echelons people behave *as if*

they have everything to gain and nothing to lose. Practically always the bottleneck is at the top of the bottle.[5]

3. Establishing a sound internal control environment

A good system of internal control can only be established by taking a longer view of how business should be conducted. This has been the majority opinion of the cognizant executives who contributed to the ISMA study, to which reference was made in section 2. Is a tough internal control system working against growth in business activities? Dr Lev Borodovski mentioned a principle he learned at Fidelity: 'If it is done properly, internal control does not suppress business. It helps it.'

In the course of the same research, Timothy Stier of the Office of Thrift Supervision (OTS), the US savings and loans regulator, suggested that 'If you have an accounting system like two-entry bookkeeping, you have to have internal control.' But in a broader definition of controlling exposure, Stier sees internal control under risk management, adding that 'Compliance, too, makes sense under risk management, because there is regulatory risk.' As Figure 4.2 shows, internal control and risk management overlap both each other and with accounting and auditing.

Different regulators tend to have a different view of the relationship between internal control and risk management. 'We view internal control as the process

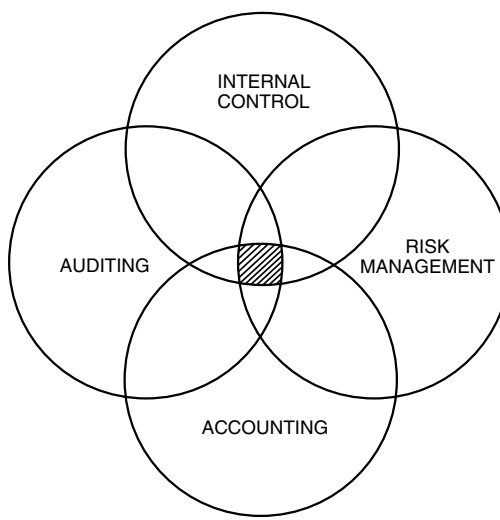

Figure 4.2 Internal control, internal auditing, risk management and accounting have a common core

that makes up for risk management by providing the nuts and bolts,' said Curtis Wong of the Federal Insurance Corporation (FDIC). For this reason FDIC today places greater emphasis than ever on internal and external reviews, which are part of internal control and contribute to better risk management.

'The role of bank managers is not only to assure the proper function of their institutions, but also see to it that auditors obtain a consistent and coherent image of status and results,' suggested Alain Coune of the International Monetary Fund (IMF), adding that, 'This is true of the quantifications side of internal control and of audit. The qualification aspects, particularly those concerning internal controls, have not been till now tightly coupled to audit – though this might change.'

Another senior auditing executive expressed his opinion on IC and risk management in these terms: 'A well-studied internal control puts a saddle on a horse that never had one.' He also added that it provides the necessary information to senior management to place, in timely fashion, a barrier to the torrent of red ink. How this barrier will be structured is risk management's responsibility.

Here is a practical example of what can happen when internal control is lacking. In May 2003, Westdeutsche Landesbank (WestLB) reported a pre-tax annual loss of €1.7 billion (£1.2 billion). The German state-(*Länder*-)owned bank – which has hugely benefited from state subsidies and guarantees – found itself obliged to start investigations of its project-financing team run by Robin Saunders, a London-based banker working for WestLB.

Much of the €1.7 billion loss relates to hefty write-downs from one operation with one client – the refinancing of Box Clever, a British TV rental company. This is a flagrant case of failure of internal control, as well as of management risk, which exists transborder. (More on WestLB in Chapter 10.)

There is a significant amount of accountability associated with executive directors when the internal control system breaks down. Both the law and supervisory authorities are getting tougher on management risk. On 26 June 2003, the Financial Services Authority said that senior directors of life insurance companies would be made more accountable to their policyholders under a shake-up of the management structure of the sector. FSA will force companies to disclose:

- how they invest policyholders' money, and
- how they use their discretion to set bonus rates.

Company directors will also be obliged to sign a public statement each year setting out their bonus policy, and outlining how they intend to reconcile shareholders' interests with those of policyholders. Moreover, an insurer's finances will have to be scrutinized by two internal actuaries and one external actuary.[6] Independent directors, too, are confronted with tightened rules and regulations, as we shall see in section 4.

The foregoing references show that under present conditions a financial institution's control environment may leave many things wanting, but regulators seem to be catching up, and internal control is a focal point in this effort. A more rigorous management control is necessary for the operating environment because this is the corporate atmosphere in which:

- internal processes exist,
- the accounting system operates, and
- financial statements are prepared.

A strong internal control environment reflects management's consciousness of, and commitment to, proper functioning of the corporate system. A strong control environment does not guarantee there are no financial losses, or fraudulent reporting is unheard of, but it reduces the chance that such things take place – or that management will override internal accounting principles.

By contrast, a weak control environment undermines the effectiveness of a company's accounting system and, by so doing, creates a predisposition toward misrepresentation and misinterpretations in financial statements. In this short sentence are embedded ethics and business risks, as well as the needed emphasis on meeting budget, profit, or other financial or operational goals, and also the extent to which one or a few individuals dominate management.

At the foundation of an internal control environment lies the fact that an effective organizational structure provides an overall framework for reporting relationships of business units, properly assigning authority and responsibility, and establishing constraints over day-to-day and longer-term functioning of the organization. Effective methods are necessary to:

- avoid conflicts of interest,
- establish acceptable business practices, and
- clarify the understanding of, and improve compliance with, the entity's policies and objectives.

While technology should be used to assist internal control, machines and models are no substitute for management's responsibility. Senior managers are directly accountable for establishing and maintaining a system of controls designed to provide reasonable assurance as to integrity and reliability of financial statements, protection of assets, and prevention and detection of fraudulent activities connected to financial reporting.

Still, the role of technology in a well-functioning internal control system should not be underestimated; it can be crucial. Therefore, the board, CEO and senior management should be always concerned about the extent of the contribution of technology to effective internal control:

- Are the feedback channels always open?
- Is the information system for risk management working in real time?
- What is the impact of new information technology on greater internal control focus?
- Are knowledge artifacts (agents) being used as personal assistants? For interactive reporting of exceptions?

Management's appreciation of the company's internal control solutions and practices should include the effectiveness of control action, as well as access to minutes of important meetings where internal control issues were discussed and decisions made on corrective action. The orderly operation and maintenance of such a system is an ongoing business. Nothing significant can be accomplished by implementing an IC solution, then forgetting about its deliverables.

4. Accountability of independent directors

The board of directors is typically composed of senior company executives, usually known as inside directors, and executives of other firms and consultants, who are considered to be *independent directors*. These two classes coexist in various ratios. There are many reasons why the mix of inside and outside directors varies from one company to the next. Some of the reasons are historical; others have to do with the chairman's and CEO's personality.

Usually, internal directors are more compliant with the CEO's wishes, which does not necessarily mean that independent directors will not go along with the CEO's whims. Still, the scandals of the late 1990s and early this century saw a rise in calls for an increase in the number of independent directors.

'Independence' of board members should not be interpreted to mean that they are not connected to the company on whose board they sit. Many outside directors are bankers from institutions which finance the entity. The deeper notion of this term is that outside directors should primarily have an *independent mind*, which is the opposite of rubber-stamping the chairman's or CEO's wishes. There are also other prerequisites, which include:

- Knowledge of the company's business, its products, and its markets.
- Fairly frequent contacts with shareholders and other non-executive directors.
- A good grasp of financial issues, including discounted cash flow, balance-sheet analysis and auditing procedures.
- Adherence to a code of ethical practice as company supervisors, including the ability to challenge the 'obvious' in policy issues.
- Doing research on important company matters, rather than just turning up once a month and having a good lunch.

The first, third and fifth of these points have common elements of both a qualitative and a quantitative nature. At their core is knowledge and skill beyond the old principle that 'a good manager is a good manager everywhere because he is a doer.' Being a doer is vital, but it is not enough; board members need good knowledge of the company's business to be able to make valid decisions.

One of the problems confronting many companies is that, as Dr Brandon Davies of Barclays Bank aptly suggests, a lot of people at the top do not understand the professionals working for them. Therefore they can neither guide them nor control them. This greatly diminishes the contribution of independent directors to the well-being and survivability of the company on whose board they sit.

Take the banking industry as an example. The board of financial institutions is very reliant on the expertise of a few people: the traders, financial analysts, investment managers, loans officers, and some other professionals. The traders' business has changed tremendously during the last ten years, with derivatives at the kernel of this statement (see Chapter 2). Typically, however, board members, and even senior managers make no effort to comprehend how the different professionals think and work. Therefore they have little clout in guiding them, and in exercising control over them. This limits the board's reach. Yet all companies, including those known to be well managed, need the board's skills in planning and control within their specific business line and market environment. Take the polyvalent Japanese manufacturers of electronic and electrical wares as an example. The year 2002 and the first quarter of 2003 have not been kind to electronics companies worldwide, but some entities were hit worse than others.

In April 2003, both Hitachi and Matsushita said that weak economic conditions in Japan and the US, as well as other reasons including Sars, negatively affected its business year (ending 31 March). As a result, Hitachi decided to extend restructuring, and assumed a further ¥30 billion ($250 million) charge for 2003. As it happened, the market took notice, and the stock lost 40 percent of its value during the year. The pattern is shown in Figure 4.3.

An integrated electronics group, Hitachi is involved in a range of sectors from data storage to electric power plants and washing machines. For good corporate governance reasons, board members need specific knowledge in each – or at least in most – of these product lines, in order to follow up with strategic moves, challenge management forecasts, and be able to decide whether sales would rise or fall, and net profits would rocket or slump. A crucial question in this connection, which should be subject to factual and documented discussion at board level, is why Hitachi, a global company, has been reasonably able to weather the worldwide electronic industry's slump in the 2000–2003 timeframe, then suddenly, in 2003, it faced the moment of truth. Were the sales and financial reports of previous years subject to window-dressing?

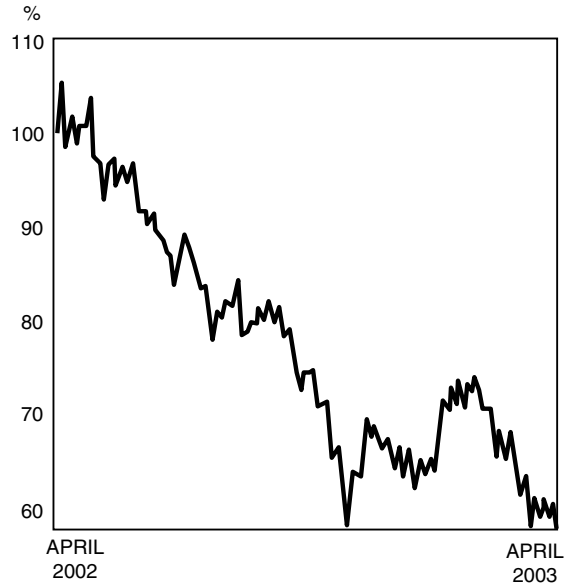

Figure 4.3 In 12 months, Hitachi lost 40% of its capitalization

While general management expertise in other industries such as chemicals and automobiles helps, specific knowledge of the company's business, and of its market as a whole, is even more necessary as Hitachi plans to get out of certain product lines that currently account for 20 percent of its net sales. To compensate, it hopes to increase its operating margin, but also admits that continuing sluggishness in Japanese consumer spending and private-sector plant and equipment investments is creating an uncertain environment.

This is the type of challenge where boards are expected to excel. Another corporate governance domain where board members must be particularly watchful is that of avoidance of different types of financial scams, from creative accounting to pyramiding, and the falsification of financial statements. For this purpose, apart from specific industry skills, board members must have significant accounting and auditing experience – and should be sure they can rely on the company's internal control.

Pyramiding schemes are by no means an unheard-of happening in publicly quoted companies, as the meltdown of the dot-coms in 2000 proves. Neither have the 2001–2003 bankruptcies of energy companies, telephone companies, and telecommunications equipment manufacturers a different root. Many of these entities, which have been skidding on thin ice, continued operating until

- investors' confidence in the company was shaken, and
- the influx of investments to their overvalued equity dried up.

Independent directors would do well to take note that in all these cases their personal accountability may be at stake. Shareholders, regulators and prosecutors are on the move. In the first years of the twenty-first century, the number of top-ranking executives who got prison sentences because of fraudulent corporate governance grew fast, though executive directors attracted most of the fire.

For instance, on 13 June 2003 two of South Korea's high-profile businessmen were handed prison terms for their part in a $1.2 billion accounting fraud at SK Group, the country's third-largest conglomerate. These were Chey Tae-won, chairman of SK Corporation, South Korea's biggest oil refiner, who was jailed for three years; and Son Kil-seung, chairman of the parent group, who got a three-year suspended sentence.

Political paternalism, which is endemic in South Korea, did not help. Chey, who got the firm prison sentence, is the grandson of former South Korean president Roh Tae-woo, and nephew of SK Group's founder. Son is chairman of the Federation of Korean Industries, the country's most powerful business lobby group. He was allegedly more responsible for the accounting manipulation than Chey but better able to bypass the filter of justice.

Both Chey and Son were charged in March 2003, after prosecutors found that the profits of SK Global, the group's trading arm, had been inflated by $1.2 billion. In addition to Chey and Son, eight other SK executives were handed suspended sentences for illegal stock trading and fraud. This court action marked a major step in South Korea's efforts to tackle corruption and mismanagement within family-run *chaebol* (conglomerates). The SK Group scandal also revived concern about standards of corporate governance in South Korea, nearly six years after the country's financial sector was thrown into crisis by the heavy leveraging of corporates, and creative accounting of groups such as Daewoo and Hanbo Steel, plus associated fraud.

One way to improve the sense of accountability of independent directors is to provide them with appropriate training. Several people knowledgeable in the skills needed to exercise the board's supervisory duties have called for financial training of non-executive directors, emphasizing how important it is that independent board members are able to challenge executive directors, their plans and their accounts. This requires:

- confidence in the analysis of statements, and
- a first-class understanding of financial accounts.

Examples of cases where such skills would have been vital include the 2002 WorldCom bankruptcy, 2001 Enron scandal, BCCI collapse in the early

1990s, the late 1980s junk bond fiasco and associated savings and loans crises in the US. Without doubt, training independent directors must include:

- learning from past mistakes,
- appreciating the challenges of globalization, and
- understanding the toxic waste embedded in some financial instruments.

For instance, one troubling aspect of the Freddie Mac fiasco (US government-sponsored mortgage company, see Chapter 8) is the apparent inaction by its outside directors before the deplorable events. As Bert Ely, an independent financial analyst, put it, 'The financially savvy, long-time Freddie directors should have uncovered the earnings manipulations long before… If there has ever been a set of directors who should have smelled a rat, these should have.'[7]

5. Responsibilities of the board go beyond solvency and liquidity

Board members have inherent responsibilities in connection with liability management. An example is the liabilities of the company's pension fund (see Chapter 3), matters related to workers' and managers' compensation, health care system disability insurance, and the like. Eventually, they will be accountable for what they do or fail to do in these domains.

Depending on decisions made by the board on issues mentioned in the preceding paragraph, a company may continue to be financially healthy, or it may be wrecked by liabilities it can no longer confront. An example of this type of risk is the obligation taken on by some pension plans in final-salary and/or inflation-linked pensions; or annuities designed to fund beneficiaries beyond the means the company can afford. These and other plans can also have a significant level of exposure to inflation levels, because of linkage of revenue to price inflation, or expenses to price inflation.

Industrial sectors with inflation indexation elements include utilities, health care and infrastructural projects. The board must be sensitive to the fact that providers of such services have revenue-side risks connected with servicing their liabilities, and these may be linked to changes in inflation. Such commitments interest corporate governance very much because they impact on solvency and liquidity.

Take the financial sector of the economy as an example. In the most general sense affecting survivability, both solvency and liquidity may become catastrophic risks to credit institutions and other entities. A bank is *solvent* when its assets exceed its liabilities. *Liquidity* crises happen when many counterparties ask for their money and the institution, though solvent, is short of cash and assets which can be easily liquidated.

These counterparties may be depositors, correspondent banks, or other lenders. When credit institutions became weak (see section 6), the counterparties come in droves to ask for their money, and such demands cannot

be met. There is a run on deposits. Sometimes insolvency can be masked if the confidence of depositors and lenders is maintained. Liquidity crises can be met if a bank can realize its readiest assets to cover withdrawals. Banks, however, deal in confidence, and eventually confidence runs out.

Readers will notice that while liquidity and solvency are different concepts, sometime they tend to merge. At the height of the October 1987 stock-market crisis, Gerald E. Corrigan, then president of New York Federal Reserve, argued that 'There was no way to tell the difference between just short-term liquidity problems and outright insolvency.'[8]

For its part, the Financial Services Authority (FSA) defines *liquidity risk* as the risk 'that a firm, though solvent, either does not have sufficient financial resources available to it to enable it to meet its obligations as they fall due, or can secure them only at excessive cost.' This, FSA says, is a basic business risk faced to some degree by most financial services firms.[9]

Liquidity and solvency crises can be precipitated by unexpected losses for which adequate reserves don't exist. It is the board's responsibility to see that this is not the case, and that there is in place a rigorous system for estimation of unexpected losses, so that adequate capital reserves are available when needed.[10] A framework for calculating the frequency and impact of events at the tail of the distribution of losses is shown in Figure 4.4 (PD stands for probability of default; UL for unexpected losses).

Independent directors and executive directors should appreciate that inadequate capital reserves and weak accounting systems correlate. To limit the amount of damage created by this correlation, in February 2003, the German government moved to correct the balances. The focal point of the new regulation is to prevent a German repeat of Enron-style accounting scandals by holding executives *personally liable* for misleading shareholders.

Company directors should take note that not only their personal reputation is at stake, but also there can be severe financial penalties not covered by insurance. Such measures are part of a plan to make companies more attractive to investors. In the case of Germany, the blueprint, which will be enforced by 2005,

- proposes a kind of *accounting police* able to check corporate accounts; and
- includes revised rules on financial analysts and rating agencies, to assure independent and unbiased research.

In the United States, too, management responsibility for the accuracy of a bank's financial report is present both under federal statute and common law. Apart from the new regulations following the 2001–2003 scandals which led to the Sarbanes–Oxley Act (see Chapter 2), precedence was established in 1938 in the *Atherton vs Andersen* case, when the Sixth Circuit Court of Appeals held a bank's directors liable because the CEO had falsified the institution's financial reports.

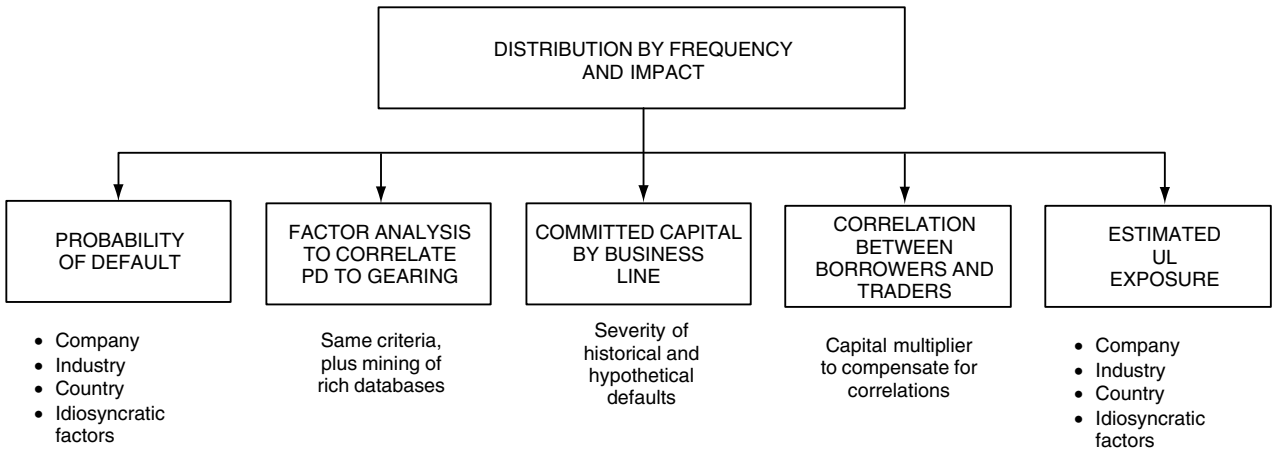

Figure 4.4 A model for stochastic calculation of unexpected losses

Furthermore, during the last 15 years the Federal Deposit Insurance Corporation (FDIC) brought to court a significant number of suits against bank directors, because of negligence in supervising the conditions and statements of banks that failed. Though not all court suits were successful, the jurisprudence has been reinforced. Neither should it escape the reader's attention that for more than two decades, there has existed in the US the Racketeer Influence and Corrupt Organization Act (RICO), which applies both to the underworld, and to the management of publicly quoted companies.

At the legal end of the spectrum, the US Congress has passed legislation which strengthens the control over illegal practices by bank management, including board members, CEOs and senior directors. Relatively recent examples are the Federal Deposit Insurance Corp. Improvement Act (FDICA) of 1991; the Foreign Corrupt Practices Act (FCPA); the Financial Institutions Reform, Recovery and Enforcement Act (FIRREA) of 1998 – beyond the dreaded RICO.

Each one of these Acts had an important effect on malpractices. With FDICA, for instance, external auditors have been directed to attest to management's assertions regarding the effectiveness of internal control, as well as compliance with safety and soundness laws. This is not limited to the US. In a growing number of countries today, external auditors are responsible for reporting instances of non-compliance and weaknesses in internal control.

Although external auditors may have no specific duty to regulators at the commissioning end of authority and responsibility (as is the case in Switzerland), their opinion on financial statements is heard by the supervisors and, increasingly, it is being controlled by regulatory authorities. At the same time, the legal infrastructure compels the external auditor to be inquisitive when studying the bank's financial reports.

It is a sound policy for both internal and external auditors to focus on differences between reported values and underlying facts and figures, including circumstances under which these exist. The target must be to establish, in a factual and documented manner, whether the findings constitute a material difference in the bank's financial statements.

Apart from informing the regulators, irregularities involving senior management and material differences established at any level in the organization should be reported directly to the Audit Committee. An evident problem lies in the fact that because internal auditors are employed by the bank and external auditors are remunerated directly by the bank, this relationship can raise questions about the independence of judgment. A well-known case of the early twenty-first century is that of Arthur Andersen.[11]

6. Mizuho: woes of the world's largest bank

It needs no explaining that in real life there are no entities in which balance sheets cannot go bust. On 28 April 2003, Mizuho – the world's biggest bank

and Japan's leading credit institution – said it would report a loss of ¥2.38 trillion ($19.8 billion) for the year to 31 March 2003. This has been, so far at least, the largest loss reported in Japanese corporate history. Moreover, Mizuho was one of several Japanese banks that signaled further write-downs on equity holdings.

Readers will notice a curious similarity between the red ink at General Motors, the world's largest industrial enterprise (because of pension vows), and the world's largest bank, because of bad loans and derivatives trades. In the first semester of 2003 General Motors faced a deficit of $19 billion in its pension fund obligations; at the same time Mizuho was struck by a torrent of red ink of slightly larger dimensions.

Even if the financial news doesn't say so explicitly, it is likely that Mizuho has been saddled not only with huge non-performing loans but also by a derivatives portfolio which has grown by leaps and bounds, because of mergers which led to the mega-bank. All three credit institutions which merged into Mizuho: Dai-Ichi Kangyo Bank (DKB), Fuji Bank and Industrial Bank of Japan (IBJ), were big and mighty each with its own merits and demerits, and each quite active in derivative financial instruments.

Dai-Ichi and Fuji were the first to merge. Thereafter, Mizuho Trust & Banking was formed (on 1 October 2000) through the merger of Dai-Ichi Kangyo Fuji Trust & Banking Co. (DKFTB) and IBJ Trust Banking, an arm of the defunct Industrial Bank of Japan (IBJ). A year before this, in October 1999, DKFTB had acquired the pension, asset management and other divisions from the defunct Yasuda Trust & Banking.

In April 2003, the group reorganized its three former core component banks: DKB, Fuji and IBJ, into Mizuho Corporate Bank. Many restructurings, however, are so only in name. The same old, tired hands continue on the steering wheel. Nothing changes in terms of a tradition in (mis)management – proof being the torrent of red ink which continues to flow out of the resulting entity. In Mizuho's case, DKB was a relatively well-run entity, but the management of the other two institutions left much to be desired.

Seen in a different perspective, the quality of corporate governance has not been helped by the fact that the biggest Japanese bank's 31 March 2003 revision – to the tune of $19.8 billion in losses – compares very poorly with the forecast it made in January of that same year, when it said that it would report a group net loss of 'only' ¥1.95 trillion. New losses and the decline of the stock market to 20-year lows contributed to the wave of Mizuho's bad news, and added to the existing burden of bad-loan charges.

In the aftermath, Mizuho's share price fell to an all-time low of ¥58,300. Moreover, its operational and market decline compounded existing fears over its core financial strength, particularly after it sold ¥1.1 trillion in preferred shares to clients before announcing results at its financial year-end on 31 March 2003. The new money was needed to raise additional capital, and stave off the threat of government takeover.

Mizuho's end of year (31 March 2003) revision closely follows an announcement by the Financial Services Agency, Japan's banking regulator, that its special inspections of the country's largest banks had unveiled an additional ¥1.3 trillion in bad loans. This, and similar negative news, led the benchmark Nikkei 225 stock-market index to close, in late April 2003, at another 20-year low (although it did recover in the subsequent months May to October 2003, see Chapter 9).

As equity prices of financial institutions fell, the combined market value of Japan's four largest banks more than halved compared to 2002 prices, to less than ¥6.0 trillion. This decline in share prices of Japan's major financial institutions had a knock-on effect across the Japanese economy, which is not surprising given the special links that still exist between the country's major lenders and their most important borrowers.

In terms of both liquidity and solvency, the end of the financial year on 31 March 2003 brought an avalanche of bad financial news. As Table 4.1 shows, in terms of mega-losses which can bring institutions to their knees, five of the seven biggest banks had red numbers in three-digit billions of yen. Year to year, Mizuho somehow managed to stay at No. 1 or No. 2 position, outstripping, on the negative side, its rivals. In both years it has been followed by Resona, the No. 5 among Japanese city banks which found itself in deep trouble.

To say that this situation borders on the financial precipice may well be the understatement of the year. Created only in March 2003 by the merger of Asahi Bank and Daiwa Bank, on 17 May 2003 Resona admitted that its capital adequacy ratio had fallen to around 2 percent, half the required minimum for domestic banks, and a quarter of what is needed for international banks. The curious thing was that, just a few weeks earlier, Resona had reported a capital adequacy ratio of 6 percent. Creative accounting seems to have made the difference. We will see how.

To pre-empt market panic, without delay the Japanese government agreed to throw good money after bad, by injecting public finances into the wounded

Table 4.1 Consolidated net losses of Japanese big banks 31 March 2003 and 2002 (in billions)

	31 March 2003	*31 March 2002*
Mizuho	2380	976
Resona	838	931
UFJ	650	1230
SMFG	470	464
MTFG	185	152
Sumitomo Trust	73	42
Mitsui Trust	50	278

credit institution. This, it was hoped, would prevent its collapse. By early July 2003, Resona was at the receiving end of some ¥2 trillion ($17 billion) in return for new shares. In effect, the bank was nationalized, with the government owning more than half of its equity.

This case study shows, among other important things, that the merger of weak financial entities is a very poor solution. Both Asahi Bank and Daiwa Bank were troubled credit institutions and, between them, the recipients of ¥1 trillion of public cash a few years before their merger. When they combined their deficits, they were known to be in bad shape – and this even by Japanese standards. Resona's case provides evidence that:

- two poorly managed institutions don't make one good performer; nor do
- two nearly bankrupt entities turn by magic into a prosperous one.

Most interesting in the Resona story is what really went wrong in just a month, turning a 6 percent capital ratio (itself inadequate by Basle I standards) into a mere 2 percent. The answer is that, like many other Japanese banks that try to pull themselves out of deep red ink by their shoestrings, Resona counted a large lump of *deferred tax assets* (DTAs) in its capital base. DTAs have all the characteristics of a curse of financial entities in the early twenty-first century.

7. Resona and the oracle of deferred tax assets (DTAs)

To begin with, the so-called deferred tax assets are a good example of the newest method of creative accounting which permits banks to cook their books better than ever before. Deferred tax assets is a euphemism for pseudo-assets created when a bank makes losses, for example by writing off bad loans, but counts on recovering the money gone down the drain through future profits. Because of past losses, no taxes will be due for such theoretical 'future profits'. The red ink registered in the preceding years takes care of taxation, but:

- DTAs materialize only if a bank makes enough taxable profits within the next five years to recoup the losses.
- By contrast, if these losses continue to mount, the DTAs are nothing more than a fiction – another dangerous and fake financial statement.

Depending on the law of the land and on whether or not there is a strong stream of profits, deferred tax assets can mean at the same time one thing and its opposite. The big *if* is profit ability *now*, not at some unspecified time in the future – which means revenues are both unpredictable and uncontrollable. Board members and senior managers must understand that DTAs are a highly unreliable practice, because:

- their origins are fear and greed, and
- they deceives all of the stakeholders at the same time.

Abraham Lincoln once said, 'Men are greedy to publish the success of their efforts, but reluctant to publish their failures. Men are ruined by this one-sided practice of concealment of blunders and failures.'[12] Honest people admit their failures. They don't use creative accounting to deceive themselves and everybody else.

To change the tone of this discussion for a moment, let me give a positive example of legally recovering tax money. In the early 1950s Kayser Motors, a money-losing automaker, used as collateral some of the profitable assets of the Henry Kayser empire, got a loan from Bank of America, and with that money bought Willys Overland. Willys, the manufacturer of the famous World War II jeep, was a very profitable company which had paid lots of taxes.

After the merger, Kayser Motors recovered the taxes paid over the years by Willys to the US government, used it to return the loan money to Bank-America, and kept Willys Overland as a prize. Remember, however, that Willys was a well-to-do company with plenty of taxes paid in the past – not in the 'future'. By contrast, today in Japan there is no longer a profitable big bank left to make the Kayser *coup*. The DTAs are worthless.

The fact the DTAs reported by Resona were worthless explains why a full 4 percent of its fiction of capital adequacy evaporated. That 4 percent was calculated on the basis of DTAs which lacked any substance. Worse still, Resona is not the only Japanese bank whose deferred tax assets account for a large proportion of its capital base, and which continues making big losses.

- As long as the outlook for banking profits remains bleak, there is a risk that reliance by other Japanese institutions on deferred tax assets will be called into question.
- With the whole economy in recession, and with deflation showing no signs of abating, more and more banks are getting into trouble, as their borrowers sink.

People prone to find excuses say the need for DTAs arises because Japanese banks are forbidden from booking loan-loss provisions as an expense deductible from taxable income at the time the provisions are made. This is, evidently, a silly argument. It would have been a hundred times better to change the tax law than to create a huge loophole in the banks' core capital, like the DTAs.

Beyond the creative accounting question, the Resona episode has also raised questions about Japan's regulator, the Financial Services Agency, which has been promising reforms but so far delivered nothing. Indeed, it is not Japan's FSA but one of Resona's two auditors, Asahi & Co., which disputed the bank's rosy profit forecasts and quit its assignment.

- These fake forecasts would have enabled Resona to include ¥700 billion of deferred tax assets in its Tier-1 capital, which is core equity.
- That amount of fake money would have made up to 70 percent of total core capital, in Resona's accounts, for the year to 31 March 2003. That's not what core capital is supposed to be.

After Asahi quit, the other auditor, Shin Nihon, Japan's largest accounting firm, got cold feet and refused to put its name to the accounts unless Resona cut its deferred tax assets by 40 percent. According to reports, subsequent to these events the Financial Services Agency insisted that no other big bank has had similar trouble with its accountants and its accounts.

As is to be expected, the Resona Bank story has a sequel. On 10 June 2003, the Japanese government confirmed that it would pour ¥2 trillion ($17 billion) of public funds into Resona. It does not take a great economist to appreciate that the $17 billion of Resona losses, $19.8 billion of Mizuho red ink, $19 billion of General Motors pensions shortfall, and so on, ensure that pretty soon we will be talking of big money lost because of widespread mismanagement.

All this is evidence that in the early years of the new century corporate governance finds itself at an all-time low. Neither are the politicians immune from blame. Just two days after the 10 June 2003 announcement, the lower house of the Japanese parliament passed a new law allowing the country's ailing life insurers to

- cut the rates of return they guaranteed to policyholders, and
- fee free to break unprofitable contracts at the insured people's expense.

Theoretically, this will slash future payouts to consumers, as shares of life insurers tend to become worthless. But it is a government-approved swindle, which also demonstrates the interdependence between Japan's struggling banks and sinking life insurers. The woes of the two correlate. The main beneficiaries of Resona's bailout are its shareholders, which include several big, troubled life insurers. The general public pays the bill, one way or the other.

The correlation which exists in terms of survival of banks and insurers is further shown by the fact that keeping weak life insurers alive helps the country's banks, which have lent large sums, often in the form of subordinated debt, to these insurers. Theoretically, the magic instrument in all that is downsizing and restructuring. Resona's restructuring plan, for example, includes:

- pay cuts,
- lay-offs and
- branch closures.

In practical terms, however, analysts remain skeptical about the Japanese bank's future profit forecasts and their promise to repay the government by around 2010 or thereafter (!). Nor is there any sign that, in exchange for the cuts in guaranteed returns, life insurers will make their executives accountable for their very poor management.

Analysts have also pointed out that to make matters worse, even the Japanese government's lavish salvage plan, with taxpayers' money, was not sure to save Resona Bank. By 14 June 2002, according to parliamentary testimony, the credit institution was close to being declared insolvent by Asahi.

In Tokyo, Shigeru Iwamoto, president of Asahi, told the upper house financial affairs committee that Resona would have become insolvent if deferred tax assets had been entirely excluded from its capital – as Asahi wanted in order to improve the reliability of Resona's books. That would almost have forced the government to nationalize the bank, instead of bailing it out as a going concern. During that same testimony, it was further revealed that to clean up the bank's books, all DTAs should be struck from its capital.

As a final note, the Japanese government's decision not to carry out due diligence before it injected public funds into Resona added significantly to public concerns. Critics say the government should have carefully examined the sick bank's real assets. 'You want to know the true state of the bank. It's the duty of the regulator to do a more rigorous assessment of the assets,' said Jason Rogers, credit analyst at Barclays Capital in Tokyo.[13] And what is the duty of board directors, under these conditions?

The December 2003 Monthly Report by the Deutsche Bundesbank had this to say on the wide use of DTAs by Japanese credit institutions:

> The tense situation at Japanese banks can also be seen from the unfavorable composition of their capital. For example, external auditors now have to assess whether the volume of deferred tax assets (DTA) in the balance sheet is appropriate. Given the difficult earnings situation of the banks, the fact that at the end of March 2003 DTA accounted for half the core capital of the big Japanese banks also put pressure on the banks' creditworthiness.

5

Scams can Turn Governance into Malfeasance

1. Introduction

In July 2003 the market carried the news that fraud and other kinds of economic crime have struck more than a third of US companies. At the origin of this information has been a survey by PricewaterhouseCoopers, the CPA, and Wilmer Cutler & Pickering, a law firm. Of 91 companies whose executives completed the survey, some 35 percent responded that in the previous two years they had been victims of:

- asset misappropriation, usually theft or embezzlement, or
- other kinds of economic crime which inflict financial and industrial organizations.

The way it is usually defined, economic crime encompasses a range of illegal activities, including cybercrimes. A good question is who pays for it. While three out of four of US respondents to the aforementioned survey had insurance coverage, less than half obtained from their insurers recoveries for the crimes to which they were subjected. Hence, in the last analysis, the shareholders paid the bill.

It is interesting to note that the US results differed from those Pricewaterhouse Coopers obtained from companies registered in foreign countries. One of the differences is that few of the foreign firms participating in that study had some sort of insurance coverage. Also, executives in the United States were more worried about economic crimes relating to misrepresentation of corporate finances than their counterparts overseas.

No doubt, changes in American laws and regulations following the Enron, WorldCom and similar scandals accounted for a major part of the aforementioned difference. Another likely reason is greater shareholder activism in the US, particularly by pension funds, as well as a new-found vigilance by regulatory and judicial authorities.

This vigilance has so far been more pronounced in the US than in Europe. Here is an interesting example of what a European discovery process can bring to light. In September 2002, a fraud squad led by Jean-Claude Van Espen, a Belgian magistrate, raided the headquarters of Airbus, the airplane maker, in Toulouse, France. The raid's objective was to check whether there was possible falsification of documents, bribery or other infractions as part of the sale of Airbus aircraft to Sabena, the Belgian flag airline.

The team of 20 Belgian and French investigators interviewed several Airbus employees during its three-day stay in Toulouse, and carted away boxes of documents. In the background of the investigation was the fact that in November 1997 Sabena had approved an order for 17 Airbus A320s which, by all evidence, the financially wounded airline did not need. Then, at the last minute, Sabena had doubled the order to 34 aircraft. This move, as is widely believed, helped to trigger Sabena's collapse in 2001.

This particular scandal is a reminder that many aircraft are bought and sold in non-conventional ways. While nominally controlled by the Belgian government, Sabena was run by the parent company of Swissair, SAirGroup, which had owned a stake of 49.5 percent since 1995 and which also went bust in 2001.

Commission payments on big-budget aircraft deals increase the capital cost of the carrier, since the aircraft is subject to higher depreciation and/or operating-lease charges. Big commissions, licit and illicit, are a key reason why aircraft purchases have long been associated with controversy – with accusations ranging from mismanagement to fraud.

As will be recalled, in the 1970s, when Lockheed was still making civil jets, it was caught bribing Japanese officials to buy its L1011 wide-bodied airliner. A Japanese prime minister was later charged, and in 1983 convicted, for taking a bribe. This was neither the first nor the last case of greasing the hand of politicians to gain leverage in major sales orders.

It should also be remembered that Prince Bernard of the Netherlands was disgraced for his involvement with Lockheed. In 1977, this scandal led to Congress passing the Foreign Corrupt Practices Act (FCPA), which forbids American companies, their officers, or their representatives from bribing foreign officials. Critics, however, suggest that US firms side-step FCPA by using foreign subsidiaries and nationals to pay bribes – just like other firms from other countries are doing.

These references give a flavour of the case studies included in this chapter. These case studies have been selected to range widely in their nature and after-effect. While mismanagement and lack of internal control can be found at the root of practically all corporate scams, both the intent and impact are different in the case of malfeasance than is encountered with the plain bad management characterizing the case studies in Part Two.

2. Scams: from Banco InterContinental to IPOs of the dot-coms

Banco InterContinental (Baninter) was the Dominican Republic's second-largest, and presumably most business-like, commercial bank. It is therefore understandable that its collapse in the second quarter of 2003 has undermined one of the Caribbean's successful economies, damaged business confidence, and left local taxpayers burdened with a large financial bill.

In April 2003, when Baninter was taken over by the Dominican government, it was reported to have losses of $2.2 billion, which represents 13 percent of the Dominican Republic's gross domestic product (GDP). A month later, Ramon Baez Figueroa, the bank's main owner, was arrested on charges of having operated a secret *bank within the bank* for more than a decade.

Allegedly, Baez Figueroa and his associates had siphoned off a chunk of the bank's deposits for their own use. How was it possible that this went undetected over the years? For anyone who wants to believe fake reasons and different sorts of excuses, the Dominican Republic's bank regulators and PricewaterhouseCoopers, the external auditor, were deceived by one of the bank's software programs. It's 'the software's fault', not that of conflicts of interest and weak supervision which kept the diverted deposits off the books. Where has the money gone? Baninter's former CEO was known as one of the Dominican Republic's richest and most influential businessmen, with plenty of personal hardware, including four private planes and a similar number of yachts and helicopters. Baez Figueroa denied the accusations, claiming that the government was persecuting him in order to take over his media empire. But just to pay off deposit insurance, the Dominican Republic's central bank has been shopping for a loan of $1 billion.

One of the reasons why inside malfeasance targets banks is that that's where the money can be found. On 28 May 2003, a day before its shareholders' meeting, the Bank of China in Hong Kong announced that its chief executive, Liu Jinbao, had resigned and moved to Beijing as part of a routine transfer. Ten days later, the bank formally admitted that Liu had in fact been detained in Beijing and was under investigation for corrupt lending to a Shanghai property tycoon.

The Bank of China in Hong Kong is a subsidiary of one of China's four huge and troubled state institutions. In 2002, the parent company itself was tainted. The case of the Bank of China made headlines when it came to light that nearly half a billion dollars had been embezzled at one of its branches in southern China.

Neither was this the only incident hitting this major Chinese credit institution. Years earlier, Wang Xuebing, its former CEO, was jailed for corrupt loans he had made during the 1990s from the bank's New York branch, which he ran with some flamboyance. It is said that Wang is now aiding the investigations against Liu, giving advice to the examiners from his prison cell.[1]

Illicit loans are not the only means of siphoning off money for one's own gratification and that of local friends or political cronies. Another, more modern, practice is that of initial public offerings (IPOs), which during the late 1990s have been taking investors to the cleaners. Sometimes, however, the victims were able to bite back.

In the last week of June 2003 investors who were seduced into buying shares in Internet companies during the dot-coms boom reached a landmark settlement of at least $1 billion against the companies and investment banks that made them public. This settlement came shortly after the record $1.4 billion fine levied by the SEC against ten New York investment banks, in late April 2003, for allegedly issuing biased recommendations of stocks during the Internet's boom and bust years.

The June 2003 dot-coms settlement concerned 55 banks and more than 300 US firms that joined the stock market between 1998 and 2000. Experts considered it a first step towards recovering billions of dollars from investment houses responsible for arranging the equity offerings that brought hundreds of Internet ventures to the listed market, and from there to the market precipice of 2000.

Milberg Weiss Bershad Hynes & Lerach, the New York-based law firm, which led this class action, said it was looking for more than $5 billion to compensate investors for the losses that they incurred when the dot-com bubble burst, and Internet shares collapsed. According to the law firm's statement, 'The proposed settlement does not resolve the claims against the underwriter defendants. Plaintiffs will continue to prosecute those claims.'[2]

That first settlement has been in response to 309 class actions in the US, where individual litigants joined forces in a coordinated lawsuit. Among the banks involved are some big names: Citigroup, Merrill Lynch, Goldman Sachs, Morgan Stanley, JP Morgan Chase, Crédit Suisse First Boston and Deutsche Bank. Readers will recall that the roster is a subset of the investment banks which paid the $1.4 billion penalty for biased stock picks.

Let this be a lesson. Banks and industrial companies that come under the hammer of the attorney-general should not believe that they can get away with a penalty or two, even if it is in the billions. Tyco International knows what a long brawl can bring, and therefore its case provides an example.

The woes of Tyco did not end in 2002 with the prosecution of its CEO and some of his immediate assistants. They continued well into 2003. In mid-May 2003, the Bermuda-based company said that it found $1.1 billion of additional accounting errors, after receiving an apparently clean bill of accounting health at the end of the previous year.

After taking charge, Ed Breen, Tyco's new CEO, tried to clean up the company's corporate governance. It is precisely this effort that reopened his predecessor's (Kozlowski's) books. As the clean-up operations proceeded, the pattern that emerged was that of a hyperkinetic mergers and acquisitions (M&A) engine without adequate management control. Focal points in this

M&A spree were medical equipment, plastics, fire and security systems, and electronics firms.

Within such uncontrolled M&A activity, senior managers seem to have abused the executive-loan scheme, leading to actions that have since become the basis for criminal complaints. At the same time, some salaries were outrageous, and Tyco's accounting was found to be particularly deceitful. What Ed Breen described as an 'aggressive' internal audit of all Tyco's 2,150 operating businesses seems to have ended in April 2003 with a $1.5 billion charge to earnings. This is the usual pattern of how the citadel's stones crumble away when management is no longer able (or willing) to hide everything.

3. The Alpha Plus Fund in the UK

At the end of March 2003, some three thousand individuals, mainly British, who ploughed £200 million ($320 million) worth of savings into the Alpha Plus Fund, faced a long fight, as it became clear that their investment fell outside the scope of any UK regulator. This incident has added thousands of people to the long list of other savers and investors who have put money into funds that were sold as 'safety-first' schemes, but later on proved to be empty bags.

The Alpha Plus case illustrates the pitfalls of investing in offshore vehicles where the unknowns are many and scams legion. The fund was operated by Imperial Consolidated, a group based in the UK but with companies in the British Virgin Islands and Grenada. As the first quarter of 2003 came to a close, Alpha Plus was in administration and under investigation by the UK Serious Fraud Office.[3]

Investors who put their money into the Alpha Plus Fund would not forget that it was sold to them by unscrupulous salesmen as a 'secure investment', with something like a guaranteed 15 percent return per year – in short, the kind of deal they could not resist. Investors seem not to have been informed that:

- their cash was left in the care of Imperial Consolidated, and
- this outfit was not regulated in the UK, and only lightly elsewhere.

Investors thought the Financial Services Authority would act as a watchdog, but the FSA was powerless to take action against Imperial Consolidated, because Alpha Plus Fund money was channeled via Grenada. This made it an unregulated offshore investment. Yet, at least in the opinion of some experts, in all likelihood money going into Alpha Plus via Grenada found its way back to Imperial's companies in the UK.

The people who sank between them £200 million into the Alpha Plus Fund were not alone in their sorrows. At the end of March 2003, it was also

revealed that thousands of Britons had been duped in a £40 million ($64 million) per year scam offering membership of bogus luxury holiday clubs. Typically, the victims were asked to pay from £2,000 to £25,000 for exclusive membership of clubs 'guaranteeing' them discounted holidays 'for life', in the world's most glamorous locations.

This was the bait. But instead of a dream holiday in exclusive islands in the Bahamas, the club members were offered accommodation at low-grade hotels and apartments on the Spanish coasts, or the Canary Islands; both could be bought for less than they paid, at any travel agent. There was also plenty of credit risk, as many of these clubs folded before members even had time to book a holiday.

It is a sign of the times that complaints to the UK Office of Fair Trading (OFT) about the sham holiday clubs have doubled in 2002 from the previous year.[4] In its research, the OFT has identified more than 100 unscrupulous club operators, many of whom were previously involved in other con games, like timeshare. The OFT has also launched a campaign to advise consumers to walk away from that fraudulent practice. But those who got burned were not listening.

From Banco InterContinental, Enron, Global Crossing, Aldephia Communications, WorldCom and so many others, to Alpha Plus, holiday clubs and the dot-coms, public deception has been globalized. The *laissez-faire* society is part of our time but, given human treachery, everybody should be very watchful rather than taking whatever he or she is told as the word of the Lord.

Governments, too, should be vigilant. In October 2003, Canada signaled a tough line against corporate crime, charging four former executives of bankrupt entertainment company Livent with defrauding investors and creditors of about C$500 million (US$315 million). These charges followed a four-year police investigation covering alleged accounting irregularities between 1989 and 1998.

Livent's case involved the first significant accounting fraud charges by Canadian authorities, since the series of US corporate scandals erupted in 2001. According to what the Royal Canadian Mounted Police stated, the company's two founders, along with two other executives, had set the mousetrap. They did so by: falsifying financial statements and misrepresenting the entity's financial health. It should be recalled in this connection that Livent was once the largest live theatre company in North America, with plenty of venues in Toronto, Vancouver, New York and Chicago. It collapsed in 1998, unleashing a number of lawsuits. The company's former chief executive and president have also been indicted in the US on charges of conspiracy and securities fraud relating to Livent's bankruptcy.

Governments are supposed to know better, but they too fall victim to swindlers and storytellers, whose favored game is to convince ministers and other politicians that they need grants to boost local employment. For

instance, in the third week of June 2003 it became known that more than a third of the largest UK government investment grants of the last decade had been a failure.

- People and companies that took these grants were promising 27,600 jobs for deprived British regions.
- However, all in all, given the number of abuses, the subsidies altogether delivered fewer than 5,000 jobs.

Statistics show that half the £750 million ($1.2 billion) in grants offered to 50 regional aid projects investigated by the *Financial Times* went to 16 companies that have since closed factories or are falling well short of job creation targets. Of the rest, only seven show evidence of creating or safeguarding all or some of the jobs that they originally promised when they took the grants.[5]

For instance, LG, a Korean electronics group, closed its South Wales television parts factory in May 2003 with the loss of 870 remaining jobs, despite receiving £100 million ($160 million) of public aid by promising 6,100 jobs in 1997. To save face, the government claimed that the LG project was simply a casualty of the technology downturn. This, however, is undermined by evidence from one senior official who says the unquestioning scramble to attract the Koreans set alarm bells ringing across Whitehall.

Another case took place in Scotland, where Chunghwa, a Taiwanese electronics company, was offered another £100 million ($160 million) to provide 3,300 jobs in 1995. By early 2003, there were only a few dozen staff left, hardly justifying even a fraction of that investment. Governments don't have a better time emerging from such fiascoes than do private people from their rotten investments. The key difference is that governments spend other people's money, while savers and investors lose their own.

4. Gambling with gold derivatives and the carry trade

In the 1990s the reversal of expectations of large central bank gold sales caught many major commercial banks, hedge funds and investment firms on the wrong side of their balance sheet. Losses were significant because a long list of well-known institutions speculated heavily in the *gold carry trade*, in the image of their earlier pitiful performance on the yen carry trade.

The rotten concept behind the gold carry trade was to reap huge profits by borrowing or leasing central bank gold. Without surrendering title to their gold in reserve, in recent years central banks have established a questionable policy of leasing the gold in their vault to selected international banks, which became known as *bullion banks*.

- Because gold in central bank vaults earns no interest, the leasing process gave them a small return on idle assets.
- This made the central banks partners to speculators, through leases which were typically for three-month periods.

The pros said this central bank/commercial bank bullion game was all right, because both for the central bankers and for the speculators the risk was small. As always, however, these are premeditated understatements. 'The risk is small' only until the market turns the other way.

The bullion banks did not act alone. They loaned the leased central bank gold largely for speculation higher up the chain – either to hedge funds or to goldmining companies faced with a falling gold price. Worldwide, goldmines increasingly sell the physical gold for dollars, not in the spot market but in the forward market. For many years, the trend has been to overdo it, to the extent that they could no longer fulfill their contractual obligations through newly mined gold.

How are the hedge funds profiting by selling the leased gold of central banks, which they got through the bullion banks' intermediation? The answer is that as long as interest rates were respectable, they used the proceeds from the sales of virtual gold to buy government bonds, often above 5 percent. Then they used these government bonds as collateral to buy speculative stocks, on margin.

A whole pyramid was built on the strength of the loaned central banks' bullion. Given this, it really comes as no surprise that the institutions that lent Long-Term Capital Management (LTCM) billions to leverage its speculative bets are the same banks behind the gold carry trade. The list is said to have included JP Morgan, Goldman Sachs, Chase Manhattan, Deutsche Bank, UBS, Crédit Suisse, and many others.

At the time this speculative pyramiding took place, on Wall Street some analysts commented that almost nobody was paying attention to the risks. For instance, if the price of gold were to rise above $350 per ounce, from the mid- to high $200s that it was at the time, this would trigger panic gold buying by the banks, hedge funds, and other speculators that had to come up with physical gold, or had to repay their leased, or borrowed, gold before the precious metal's price rose to the stars.

A different way of making this statement is that during the late 1990s, when gold kept a low profile, the speculators' one-track mind repeated the errors of other speculators made in 1992 to 1994 with low interest rates for dollar-denominated loans and bonds. As the price of gold had steadily fallen since 1995, from near $400 per ounce to the much lower level of the mid-$200s, the gold carry trade appeared to be one of the world's few money-making one-way bets.

Nor was this gamble self-standing. It was usually combined with exotic 'customized' derivatives sold by the bullion banks to hedge fund and goldmining clients. As long as the gold price fell or, at worst, did not rise,

the players of this lucrative trade could repay with gold bought in the market at a later date, often at a lower price. The banks scored on two fronts:

- the trend towards a fall in gold price; and
- the use of almost interest-free money from the sale of borrowed gold.

But as in the case of the yen carry trade, where bets were taken by hedge funds, banks and other investors speculating that the Japanese yen would never again rise against the dollar, when market events suddenly reversed, the gains translated into losses. Speculators who did not run out of the door fast enough got a bloody nose.

The turning point in the gold carry trade was a decision by the major European central banks on 26 September 1999. Its result was a minor earthquake as it proved to be quite difficult for hedge funds, goldmines and other speculators to come up with physical gold to repay the bullion banks – and ultimately, the central banks which leased them gold in the first place. The irony is that even the goldmines were caught in the swing of fortunes.

An interesting consequence of the September–October 1999 price spike is that it has destroyed the derivatives portfolio of many gold producers. This led to an M&A game. Lonmin, the successor of Lonrho, made a bid for Ghana's Ashanti Goldfields, which faced a reported $270 million in margin calls from its derivatives counterparties. Well-known banks, including Goldman Sachs, Chase Manhattan, Société Générale and Crédit Suisse First Boston, had a total exposure to Ashanti of some £500 million ($800 million).

There is a great deal of irony in the fact that once again in 2003 Ashanti has been brought to its knees by rising gold prices. This happened because of its use of gold derivatives, sold to it by European and American banks. Ashanti management learned no lesson from its 1999 misdeeds and erred for a second time by failing to control its exposure.

To appreciate this second case in mismanagement, it should be recalled that in 2003 the downward trend in gold prices reversed itself, and risks taken with derivatives ended up presenting the firm with a $500 million margin call. With Ashanti facing bankruptcy, the government of Ghana pushed the gold-producing company to give its banks warrants for shares, diluting existing shareholders.

- It also had to sell 50 percent of its new mine in Tanzania to AngloGold.
- That débâcle left Ashanti with a weak balance sheet.
- Its financial condition remained fragile despite steadily rising gold prices.

Ashanti is not the only example of wretched financial status following a derivatives débâcle. Canada's Cambior Mining, of Montreal, also allegedly faced devastating derivatives losses at the higher gold price. It has also been

reported that Australia's Acacia Mines faced insolvency, but was taken over by AngloGold, the world's largest mining company.

To appreciate what went on in the minds of speculators in connection with the gold carry trade, one has to remember its magnitude. A torrent of red ink was generated by the rise in the gold price from $255 in the week of 23 September to more than $323 by 14 October 1999. No wonder there were frantic efforts by goldmines and banks – which gambled on gold price stability or, even better, a weakening of the gold price – to cover their exposed short positions.

According to some Wall Street estimates, the total amount of gold loaned by central banks to hedge funds and other speculators during the period in question was as much as 10,000 tons, while certain other educated guesses brought it even higher, to 14,000 tons. That's the equivalent of four to five years of total world goldmine output, and it gives an idea of the amount of gearing which had been going on. As these estimates suggest,

- more than $100 billion worth of gold had been loaned by banks on the basis of fractional reserves lending,
- the leveraging which followed in the financial industry had other consequences, particularly in regard to the capital adequacy of credit institutions.

According to the 1988 Capital Accord, a bank is required to hold 8 percent of total loans in equity or other assets. Therefore, it can lend 12.5 times the initial value of the gold. Conservatively, that would imply a $1.2 trillion total credit pyramid constructed by international bullion banks on the back of their borrowed central bank gold. Somehow, in this particular connection, the supervisors did not seem to have done their homework.

Is this a scam? The answer is not clear-cut. Basically, it is not a scam similar to the case study in section 5, but neither is gambling in gold, or any other commodity, the business of a credit institution – let alone of a central bank. What went on with gold derivatives is highly ill advised, though not necessarily illegal. Hence the advice: *Never bet on big financial gambles having a happy ending.*

5. The Bre-X gold scam

In January 1848, James Marshall, a workman on a sawmill near Sacramento, discovered a few nuggets of gold. That was the start of the great Californian gold rush that lasted for more than a decade. Nearly half a million people migrated to California to work in the industry, whose highpoint was the discovery in 1859 of the 154 Willarz nugget in Magalia, Butte County.

Other gold rushes, too, caught the public's eye. In Australia, in February 1851, Edward Hammond Hargraves discovered gold in Lewis Ponds Creek, New South Wales. Within a year, hundreds of thousands of prospectors had descended upon the area, creating the first economic boom in what until

then had been a remote colony down under. At one point, an estimated 80 percent of the Australian police force had resigned to go gold digging.

In our time these nineteenth-century models of human-wave gold rush have been replaced by financial speculation. A case in point is the gold carry trade discussed in section 4. But speculation also takes other forms, such as the Bre-X 'great gold discovery' of 1990, which rode high in investors' minds, attracted plenty of money, then, when the game was done, crashed.

Indonesia-based Bre-X Minerals came to the public eye and faded away relatively quickly. In December 1996, when its stock had begun sliding from its high in September that same year, brokers still strongly recommended a *buy* on 'the gold discovery of the century'. Bre-X's Busang gold discovery 'is enormous', Lehman Brothers advised its clients, adding that it expected this 'growth story to continue in a major way for the rest of this decade.'[6]

By April 1997, however, the price of Bre-X stock was off nearly 90 percent from its peak, and by all evidence Busang, its famed site, did not contain any gold worth mining at all. Eventually, this sort of goldmining scandal extended far beyond Bre-X, and became the killing fields of 1999 as Canada emerged as a financial center of global mining exploration, and there has been a boom of exceptional gold fields extending from the former Soviet Union to the Peruvian Andes and the jungles of Indonesia.

What is particularly interesting about the Bre-X case study is that the pattern of the most notable gold scam of the 1990s has been that of a covert advertising blitz, amid news from tens of so-called junior mining companies. Advertising saw to it that Bre-X caught the investors' eye. Then, as the scam unfolded, its equity's crash sparked the biggest single-day plunge since the 1987 crash on the Vancouver and Alberta Stock Exchanges, home to many mining juniors.

When Bre-X shares fell from the stars to $2, they took the company's market value to $480 million, more than 90 percent down from its peak of over $5 billion. Figure 5.1 maps the pain felt by several investors, lured by hype and greed. Subsequently, several investors have claimed fraud, joining in a shareholder class action against Bre-X, its officers and Kilborn Pacific Engineering.

What Bre-X investors were essentially saying was that their rush into bad deals was engineered, and that the stock was talked up by big banks. Take as an example JP Morgan, which has been a Bre-X key financial adviser since September 1996. In February 1997 bankers involved Busang in a conference call in which Bre-X's top geologist predicted a huge deposit which might contain a staggering 200 million ounces of gold, worth over $70 billion at the then going price.

On Wall Street, analysts said that what was also startling was how many of the experts in the gold business placed their faith in drilling reports issued by a rather obscure company based in Calgary, Alberta. That company had never mined an ounce of gold. A further irony was that Placer Dome

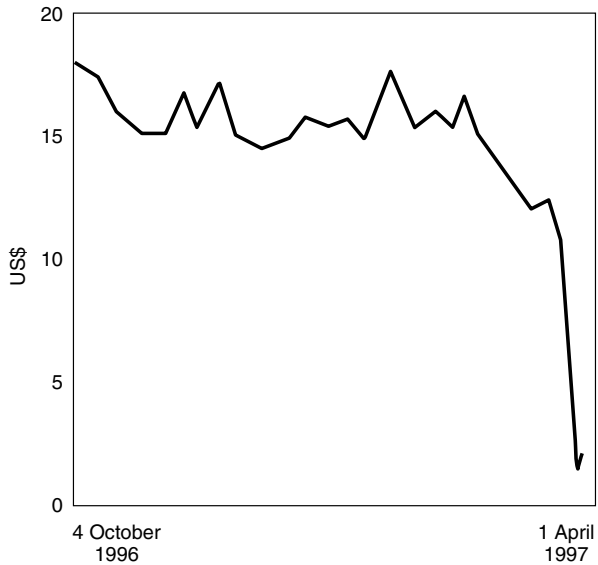

Figure 5.1 What a difference 6 months make! The equity of Bre-X Minerals tanks

and Barrick Gold were never allowed to do their own drilling in the area of Bre-X to validate the over-optimistic reports.

Bre-X has been a totally different story than the gold carry trade, discussed in section 4, one more focused on deceiving investors. Bre-X Minerals had clearer characteristic of a scam, was narrower in its appeal, and took to the cleaners many people and companies – but without creating systemic risk. On the other hand, it contributed to denting business confidence, which in March/April 2000 fell into the abyss. In retrospect, Bre-X was one of the needles which succeeded in puncturing the stock-market bubble.

6. Copper bloodbath of Sumitomo Corporation

Copper has long been a Sumitomo stronghold, as well as one of its major business concerns. As a company, Sumitomo traces its origins to Kyoto in the early seventeenth century, when Masamoto Sumitomo, a Samurai-turned-Buddhist priest coming from a family with merchant skills, created the world's largest copper exporter.

By the late seventeenth century, the house of Sumitomo prospered from a huge copper deposit on the island of Shikoku. Through able management, in a few decades the company became the most important refiner of copper, and the official purveyor to the Tokugawa shogunate which ruled Japan until 1868.

In modern times, Sumitomo Corporation was widely seen as the most conservatively managed and financially sound of Japan's powerful trading houses. It also provided the nucleus of a corporate family, which included one of Japan's top banks, a leading chemicals company, as well as mining, machinery and technology businesses.

The mid-1990s, however, held some surprises for Sumitomo. On 6 June 1996, the copper market was nervous, as the price of the world's most heavily traded metal plummeted by 15 percent in just two hours of hectic activity on the London Metal Exchange (LME). This followed an earlier 10 percent drop and led dealers to increase the spread between the prices at which they were willing to buy and sell copper to $50 per ton.

To begin with, this $50 per ton spread was a level previously unheard of. However, the big spread did not wreck the market even if there was nervous activity. For its part, the board of the London Metal Exchange took action to calm the market by doubling to $400 per ton the initial cash that would have to be provided by anyone buying or selling copper.

- This much higher downpayment helped the copper price to recover in late trading.
- But the speed and size of the price fall had already done serious financial damage to some market participants.

For the record, copper lost 25 percent of its value and came down $800 per ton in just six trading days. As the hectic selling died down, the price recovered, to close at $2,105 per ton. This stood at $610, or 22.5 percent, below the 1996 peak reached in May – just a month earlier.

On the other hand, while the price of the basic metal was battered, shares of leading copper producers were relatively unscathed, because the market feeling was that all this had been a huge speculation. Compared to the 25 percent drop in the price of physical copper,

- RTZ, the world's biggest mining group, was down 2.4 percent,
- Asarco shares were down just 0.5 percent, and
- Phelbs Dodge moved down just a slim 0.1 percent.

By contrast, banking stocks were battered. American banks affected by what became known as 'the Sumitomo copper scandal' included leading dealers in commodity derivatives such as Bankers Trust, Goldman Sachs, JP Morgan, Lehman Brothers and Merrill Lynch. On Wall Street, analysts speculated that JP Morgan and Merrill Lynch had lost $100 million, and Bankers Trust a further $30 million with copper derivatives.[7] All that was big money at the time.

It is one of the market's ironies that once the speculators take the burn, market response is relatively quiet as far as physical producers are concerned.

Derivative financial instruments, particularly copper options, forwards and futures, were blamed for the débâcle. Also, the copper producers themselves had hedged extensively against lower copper prices through options and this, too, contributed to the speed of the base metal's price fall.

After the event it was revealed that hedge funds played a leading role in the Sumitomo copper scandal (see section 7). Well-informed financial analysts suggested that in reality copper's rout started on 4 June 1996, led by two American hedge funds that sensed the time was ripe to force down the copper price: George Soros's Quantum Fund and Julian Robertson's Tiger Fund. Both had a policy to capitalize on large price movements. Their objective was to drive copper down to below $2,424 per ton, at which point the investment banks and market-makers that had written put options to the copper producers panic and start selling. Quantum and Tiger also seem to have had a partner, Herbie Black, president of American Iron & Metal, a Montreal scrap business, who went into the LME's copper market and sold short.[8]

By all accounts, the two hedge funds succeeded beautifully in reaching their goal since the copper price dropped to $2,105 per ton, way below their target. Quantum and Tiger were widely thought by copper traders to have profited handsomely from Sumitomo's copper plight, while the option writers and Sumitomo Corporation paid the bill. That's part of the risks of the trade.

By betting on a fall in market price, hedge funds established short positions ahead of the 15 percent collapse in copper futures on 6 June 1996. Sumitomo, which bled heavily with the 1996 copper scandal, had an opposite, long position. The net result was that hedge fund selling exacerbated the Japanese corporation's losses. One investment banker active in the copper market phrased as follows the main questions:

- Had Quantum and its allies any indication of what was to happen when they established their positions?
- Did they know of the hidden losses and the vulnerability of Sumitomo, and try to break the copper market – as Quantum had broken the British pound a few years earlier?

As will be remembered, in 1992 Quantum profited handsomely, to the tune of $800 million, at the expense of the British government, when sterling fell out of the European Exchange Rate Mechanism (ERM). And the Quantum Fund had also joined other hedge funds in driving Barings to the wall on the Nikkei futures market in February 1995.

On the other hand, the fact that the pattern is predatory is not necessarily a bad thing; it is Darwinian. In Barings case, Quantum and its allies sold Nikkei futures, linked to the Japanese stock index. They did so in the knowledge that the British merchant bank, or one of its clients, had a loss-making and vulnerable long position. They had guessed right; Barings' long position was unsustainable and the bank went bust.

7. Searching for a scapegoat for the copper scandal

Initial estimates of the massive derivatives trading losses of Sumitomo Corporation mentioned a minimum of $1.8 billion. This later rose to $2.6 billion, and then to a rumored $5 billion or more. Such escalation in red-ink estimates greatly increased anxiety in the interbank market. The Sumitomo Corporation paid all of its obligations, but experts questioned the reliability of Japanese banks and their financial staying power. The beginning of the 'Japan premium', the extra interest Japanese banks must pay to buy money in the interbank market, started around the middle of 1996 (see Chapter 9).

Evidence which has emerged after the event suggests that something was wrong with corporate governance at Sumitomo, because the reasons for its losses due to derivatives transactions with copper did not develop overnight. They had been building up for several years, and management did not seem to have been in charge. Since at least 1991 officials of the London Metal Exchange were reportedly aware of irregularities in the copper market and in copper derivatives, but nothing was done to correct the balances. Yet there were reasons to act, particularly in the copper derivatives domain. For instance, in 1995, a year before the copper scandal, Daiwa Bank was forced to report a $1.5 billion derivatives trading loss. Daiwa, a mismanaged bank, had also lost a comparable amount with open trading positions in New York, and had several other failures on its record. After Daiwa's merger with Asahi, Resona, the resulting bank, found itself undercapitalized to the tune of 2 percent capital adequacy, as we saw in Chapter 4.

Furthermore, the 1996 failure, in Japan, of the Shin Kyoto Shinpan credit institution with debts of almost $4 billion signaled that massive bad debt problems at smaller regional banks were only just emerging. Many of these losses were speculative, but regulators did not react to correct the balances. There has been no record of Japanese banking regulators ensuring that speculation by the banking industry stops before weakening further the credit institutions' position.

Why are these facts important in a discussion about risk management at Sumitomo Corporation? The answer is that the control of risk is an issue which should always be on the front burner, and the fact that the country's banking industry, and its regulators, fell behind in risk control is a big danger signal. Lack of internal control may be widespread, and as the copper scandal proves, this possibility did not preoccupy Sumitomo's board.

As if the money directly lost in the long copper positions was not enough, Sumitomo also faced penalties which brought with them reputational risk. In the US, the Commodity Futures Trading Commission (CFTC) announced that Sumitomo Corporation would pay a record $133 million to US and UK regulators. With it came a hint about how Yasuo Hamanaka, Sumitomo's senior copper trader, manipulated the international copper market.

Yasuo Hamanaka was the trader of Sumitomo Corporation whose copper deals cost the company the torrent of red ink in copper trades we have been talking about. Presumably, his illicit actions were the main reason for the huge trading losses, if not the only one. Some experts, however, said that that's the story of a scapegoat wrapped in a fairy tale – and I tend to agree with them.

According to the official version, the web of deception stretched back several years before to 1996. Just before Hamanaka was appointed as head of the copper team in 1987, Sumitomo had suffered large losses in speculative futures trading as well as actual copper losses. The new executive seems to have continued the old practice: he did not enter his trades in the normal book-keeping system; instead, he recorded them in personal notebooks, which he kept close to his chest. That this should not have been permitted by senior management in the first place is a matter which did not seem to bother the different investigators, who also credited Yasuo Hamanaka's with other failures. For instance, in October 1991 Hamanaka made a highly unusual special request to a London trader. In a handwritten note on company letterhead, he asked the dealer to issue a backdated invoice for a fictitious copper deal worth about $225 million, promising not to cause 'any trouble, any damage, any loss at all.'

That request was evidently illegal, but the question is: who covered Hamanaka? The trader who received that Sumitomo request seems to have voiced his concern to the London Metal Exchange, and a meeting took place with regulatory authorities to discuss the matter. Questioned about the note, Sumitomo said Yasuo Hamanaka had made the request because he needed an invoice for taxation reasons.[9] Who was going to benefit from the tax scam?

In the US, based on its investigation, CFTC stated that by 1993, Yasuo Hamanaka had agreed to buy copper from a newly formed New York copper merchant on a monthly basis for three years. Such agreements contained an unusual minimum price provision, which allowed both sides to profit from any rises in the market over the agreed minimum.

As copper prices rose above the minimum price, the US merchant firm and Sumitomo would share in the price appreciation, giving both of them a financial interest in higher prices. This is what CFTC suggested, but Sumitomo Corporation and the New York merchant bank answered that the copper purchases were made to satisfy customer demand.

Acting on behalf of Sumitomo, Yasuo Hamanaka and the merchant bank established several 'B accounts' which allowed the New York firm to trade in Sumitomo's name and use its credit in futures trades. Was there a conflict of interest behind these deals? Whose interest was in the balance? Reportedly, the plan was to push copper prices artificially high by purchasing both physical metal and futures contracts, and then make a hefty profit by liquidating these positions – which is largely speculation.

Traditionally, traders at Sumitomo, and many other Japanese companies, are forbidden to speculate, and Hamanaka was supposed to match his buy-and-sell orders for copper. He *might* instead have gambled on the copper price going in one direction or the other by option trading. That is what Sumitomo's risk management system *should* have brought to the attention of its board and CEO. Even with Sumitomo's powerful presence helping to push prices in the 'desired' direction, this was a high-risk strategy, and it could, and did in fact, result in big losses.

If such speculative practices did indeed take place, then it is only reasonable to think that Hamanaka was not the only party to blame for them. Such practices are evidence that in the whole corporation management accountability has taken a break, and internal controls are a sham.

Moreover, some of the evidence which became available after the event indicates that in his heyday Yasuo Hamanaka was not a man who stood out in any way other than because of his influence on the copper market. His powerful position in that market flowed from the fact that Sumitomo is one of the world's biggest traders of physical copper, handling about 750,000 tons per year, roughly 5 percent of the global total – and Hamanaka was known as 'Mister 5 percent'.

Other traders have complained that, before the scandal, Sumitomo had control of most of the copper stocks in London Metal Exchange warehouses and was refusing to release them, causing prices for metal for immediate delivery to rise. For his part, Hamanaka said that he was only making sure Sumitomo's clients would always have the copper they needed delivered on time. Ironically, this artificial limiting of supply led to his downfall.

It has also been revealed that Yasuo Hamanaka enjoyed a degree of freedom within Sumitomo that was not typical of the company. He was known to appear without notice in London, and there had been persistent rumors about what seemed to be extremely speculative trades. Yet, according to copper traders, Sumitomo was known as a company that does not take risks. Only when it came to Hamanaka was it felt that he was given liberties that were uncharacteristic of the Sumitomo Corporation. Perhaps it was the confidence the company had in Mister 5 percent that led to a lapse in the strict controls which the Osaka-based trading firm prided itself on. Was there something Sumitomo's board knew that the market didn't?

In retrospect, if one accepts there was no conflict of interest, then one must say this is precisely what happens when internal controls break down because an employee has been with the company a long time (Hamanaka was in the same Sumitomo division for 20 years), and there is overconfidence by senior management that 'nothing can go wrong'.

Yasuo Hamanaka did not emerge unscathed from *that* experience. In late March 1998, nearly two years after the copper scandal, he was sentenced to eight years in prison for fraud and forgery, capping a long trial that left many questions unanswered. This narrowly focused court case, in Tokyo, found that

the former star trader forged documents to deal off the books and hide massive losses.

Tokyo prosecutors also produced evidence that Hamanaka held a secret Swiss bank account in which he received millions of dollars for helping third-party dealers benefit from copper trades. But the trial did not answer two key questions:

- Whether, how and for how long the trader had manipulated global copper prices.
- Whether Sumitomo senior management was involved with, or had knowledge of, these trades.

The court decision seems to have implied that Hamanaka acted alone. But, to say the least, the prosecutors misplaced their trust. Hamanaka should not have been brought to trial alone. Losses as high as Mount Fuji proved that internal controls were at absolute zero. Therefore, Sumitomo's senior management should have been prosecuted along with the trader for total lack of risk controls and an absolute absence of accountability.

8. Diffused watchdog responsibilities at metals exchanges

Well-informed metals traders wondered just how it was possible for Yasuo Hamanaka to have concealed losses totaling billions of dollars over ten years, as Sumitomo Corporation has claimed. Experienced analysts concluded that it was almost impossible to hide such big losses for so long. Someone at Sumitomo's top management was presumably signing all the checks that had to be sent off to cover the losses, and he would have noticed sums of that size. Over time:

- Sumitomo worsened its position by carrying on trading 'as usual'.
- But by any rule of good governance, it is simply not possible to lose all that money undetected.

According to the official story the Sumitomo Corporation allegedly told the regulators, the only other company employee aware of the unauthorized trading had left eight years earlier. This claim, too, sounded like a fairly tale. It did nothing to convince the market that someone at Sumitomo was in charge; neither was it of any great help to the investigation.

As far as violation of management principles was concerned, there were two problems. One centered on deficient internal control by the Sumitomo Corporation – and that was the company's own mistake. The other problem was more complex and related to the metals market as a whole. Regulators and traders suggested that if the market was to remain stable, four important questions needed to be answered in a factual and documented manner:

1. How big was Sumitomo's remaining long position?
2. Were there any hidden copper stocks?
3. How big were the non-Sumitomo long positions that might influence the market?
4. In a globalized landscape, who should be the single watchdog at the metals exchanges?

Solving the problem in point 4 in a decisive manner would have taken care of the previous three queries, but the fourth was the toughest nut to crack. Yet the issues behind No. 4 were most urgent, because what has happened once with the copper scandal in the globalized market could happen time and again with the same or other metals. After all, wasn't it in the early 1980s that the Hunt brothers tried to corner the global silver market?

The disclosure of between $2.6 billion and $5 billion in losses at Sumitomo Corporation caused misery to the company but also an appreciation of the need for better controls elsewhere. Some analysts felt that metal trading might finally fall inside the regulatory remit of the UK Securities and Investments Board, on account of the fact that there has been so far a lack of adequate controls through an accountable watchdog supervision. Three points express the inherent contradictions surrounding this case:

1. Unlike Barings and Daiwa, Sumitomo was not a bank.
2. Therefore, no depositors' money was at risk, and the entity was not inviting public investments.
3. But money was in a way being diverted, and the likelihood of a more general major market upheaval could not be written off.

Within the framework described by these points, the regulators' primary concern with copper, and with any other traded metal, should be to assure that the price formation process for quotes on the LME is fair and *transparent*. Activities which distort the true level of demand for copper (or any other metal) could cause losses for investors as well as undermine confidence in the LME, the UK markets at large, and their supervisors.

At the time, the other key watchdog in Britain was the Securities and Futures Authority (now the Financial Services Authority, FSA), a self-regulatory body whose remit covered trade commodity futures. It would have been that authority's responsibility to make sure that participants were fit and proper, and that the financial resources of firms trading commodities futures were sufficient to cover the financial risks they took on. (More on the UK regulatory bodies later.)

Indeed, in connection with the 1996 copper scandal, the supervisory authorities had no reason to be pleased with themselves for not having followed carefully and controlled some of the goings-on in the copper market. This is

particularly true as this market was working less well than it should. The backwardation alone should have alerted the supervisory authorities.

Regulatory failures took place to the same extent in the UK as in Japan. As a matter of principle, sensible supervision starts a general investigation with the largest player in the market – and in copper that meant Sumitomo, by miles. Only after the event did Japanese regulators admit that at the root of the failure to detect the build-up of Sumitomo Corporation's multibillion loss over the past decade was the fact that no single Japanese authority is responsible for regulating trading companies, while Japanese government agencies are often criticized for being a patchwork of turf battles.

In the case of the Sumitomo Corporation, the turf battle was not for control action, but for avoidance of embarrassment. No one in the various Japanese regulatory agencies and branches of government with an interest in trading companies was prepared to admit to being in charge.

Technically, Sumitomo should have been governed by the different departments of the Ministry of International Trade and Industry (MITI), responsible for international trade, mining and commodities. MITI also supervised Japan's commodity exchanges, from aluminum to gold, an area where trade interests verge on the financial. Tokyo, however, had no copper market, despite the fact that Japan had the world's second-largest copper-smelting industry. According to MITI's opinion, Sumitomo had broken none of the laws and regulations; therefore, corrective action did not come under MITI's authority.

For its part, Japan's Ministry of Finance, which usually lets it be known that it is in charge of almost everything that happens in the country, pointed out that trading companies are not regulated by any single Japanese authority. According to that opinion, any illicit commodity dealings should have been policed by the UK authorities, since that is where the unauthorized trades occurred.

As for the Bank of Japan, it is rumored as having said that its responsibility was limited to assuring that any fall-out from the Sumitomo débâcle did not damage other financial institutions. Regulating metals was not Bank of Japan's domain. In this way, Sumitomo Corporation's case was passed round from ministry to ministry – with nobody being in charge.

The Sumitomo affair, however, did succeed in turning the spotlight on to the London Metal Exchange. Copper is the biggest element on the LME, yet the supervisory practices seem to have been inadequate. After the event, critics said that the LME board was dominated by ring-dealing members of the exchange, who made their money from volatility. Moreover, there is a concentration of responsibilities that would be unthinkable inside a modern securities firm, and, because of conflicts of interest, only the chief executive sees the trading records.

Following the Sumitomo affair, questions on regulation and accountabilities were raised as far away as Chile, the world's largest copper producer. These

questions concerned the suitability of the London Metal Exchange as key center for setting the world copper price. But little by little, such questions died out without any aftermath.

In London, called in by the Securities & Investment Board, the Serious Fraud Office started investigating dealings on the British copper market by Yasuo Hamanaka and Sumitomo. The Bank of England also seems to have been involved in the containment efforts of the LME, as some of its members are owned by banks. Moreover, all trades on the LME are guaranteed by the London Clearing House which, at the time, was owned by six big banks: Barclays, Lloyds, Midland, NatWest, Royal Bank of Scotland and Standard Chartered. Together the six provided financial backing of £150 million ($240 million) for counterparty risk.

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Part Two

Case Studies on Corporate Governance in the Finance Industry

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6

The Salvage of Financial Institutions and Other Entities by the Taxpayer

1. Introduction

A key notion underpinning the economy in which we live is that value is no longer built exclusively around the production of material goods. Increasingly, economic value depends on services and their utilization both within and outside the design, manufacturing, distribution and maintenance of a variety of goods and processes addressed to other companies and to consumers.

The net effect of this change from physical goods to service deliverables is that key economic concepts today are less and less those defined by the Industrial Revolution, its notion of price equilibrium, and its deterministic characteristics. Instead, the modern equivalent of equilibrium depends on estimates of *risk and return*, which are often tentative, approximate and stochastic.

As Part One has demonstrated, a cornerstone of risk-and-return calculations is *risk control*, with those responsible having to cope with factors implicit in the financial system, including its uncertainties and its vulnerabilities. Classical economics tends to equate *uncertainty* with processes which are inadequate in their definition, insufficiently described, or characterized by information streams which prove to be consistently asymmetric. As a result, a level of equilibrium is rarely attained. In modern economics and finance, this explanation is unsatisfactory, because one has to appreciate that equilibrium conditions are ephemeral.

Disequilibria characterize the transition from a certain level of stability to chaos and, from there, to another state of stability probably based on different concepts.[1] Such disequilibria have many forms which, among themselves, are much more representative of the modern economy than the old equilibrium conditions. The good news is that disequilibrium is a basic characteristic of

dynamic systems, where both performance and value have uncertainty embedded in them. For instance:

- Financial instruments are likely to develop future risks not necessarily foreseen when they were designed and marketed.
- Similarly, advanced manufactured goods and production processes will most probably face future costs and/or hurdles which were latent or even unknown at time of design.

Risk is a cost which can change non-linearly, and it can often increase exponentially. This can have dramatic effects on exposure, but it can also be viewed as an opportunity if there is in place a framework based on the three prudential pillars discussed in Chapter 2: corporate strategy, risk management and high technology.

Fed by uncertainty, disequilibrium conditions develop within the three-dimensional space shown in Figure 6.1. Managing risks and their underlying factors, as well as understanding vulnerabilities, is at the core of modern economic action. Processes initiated and sustained by management planning and control must bring into perspective the economic role of science and technology; the appropriate methodology is instrumental in being in charge of business activities in the modern economy.

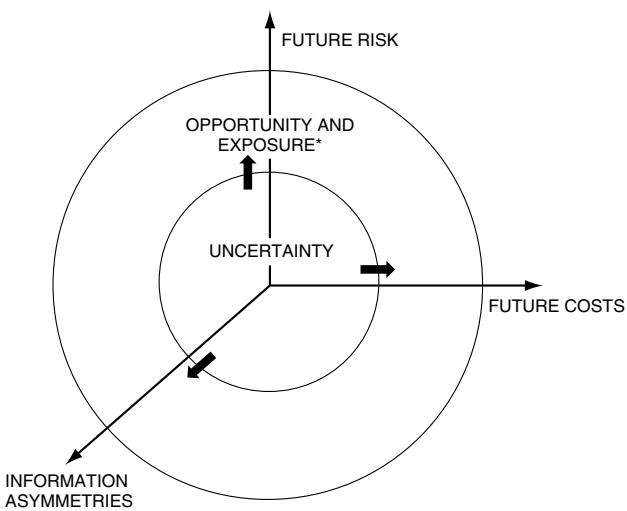

Figure 6.1 In the modern economy disequilibrium conditions for current products develop in a 3-dimensional space

* Including risks and costs which escape management control

Understanding today's economic environment, its uncertainties, opportunities and exposures, is fundamental to longer-term success in financial and industrial life, because it permits holding the high ground as competition intensifies and the bastions of the old industrial economy fall, while the old economic warlords lose their grip. One of the issues which must be fully appreciated is that the modern economy and its services, from banking and insurance to engineering and after-sales service, are characterized by limits to certainty which themselves are not fixed. The behavior of key factors, and of the players behind them, may be non-linear, and have their own vulnerabilities, often outside the financial domain. Business discontinuity as a result of 9/11 (11 September 2001) is an example of external risk.

2. Lender of last resort and salvage of bankrupt entities

There is evidence that the concept of lender of last resort (LOLR) dates back to 1797 when Francis Baring, the merchant banker, described in these terms some of the actions characterizing the Bank of England. A century later, the Bank of England, obliged by saving his institution from bankruptcy – but it did not repeat the gesture in 1995. As a result, the Barings Bank failed largely on account of unsuccessful bets placed at the Osaka exchange, and double books allegedly held at Barings' Singapore office (see section 7).

There is nothing unusual about the fate of Barings. Banks fail every day, even if not all of them go bankrupt. According to Fitch Ratings, there is a significant difference between bank failure and bank default. This is shown in a nutshell in Figure 6.2.

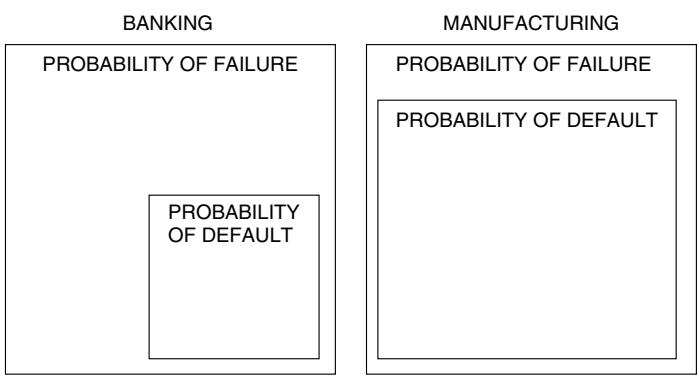

Figure 6.2 In the banking industry the probability of default is a subset of the probability of failure

- A bank has *failed* when it is kept going by state support, is acquired by another entity, through injection of new funds from shareholders, or when it has defaulted.
- A bank has *defaulted* when it files for bankruptcy or bankruptcy protection; fails to make timely payments of interest and principal; credit is written down, as 90 days past due; or carries out distressed restructuring, like offering diminished structural or economic terms.

In other words, as far as credit institutions are concerned, the difference between failure and default is made by a *Deus ex machina*, typically the supervisory authority, or government, which uses taxpayers' money for salvage. Therefore, the real risk faced by the economy is not the failure of 'this' or 'that' institution – even if it is a big and known one – but the consequences of several big banks failing at once, with the result that regulators don't have the time to intervene and save the day.

Central banks are always on the lookout for inordinate risks assumed by the financial industry, which may require their intervention. In a 19 November 2000 address to the Council of Foreign Relations (CFR) in Washington, Dr Alan Greenspan said that in the event of a financial implosion the Fed stood ready to use its 'unlimited power to create money' to 'provide what essentially amounts to catastrophic financial insurance coverage.'

A similar statement was delivered by Federal Reserve governor Ben Bernanke to a 21 November 2002 meeting of the National Economics Club, also in Washington. Bernanke promised the Fed would do whatever necessary to prevent an abrupt deflation of the economy as a result of bursting of the bubble, including producing 'as many US dollars as it wishes, at essentially no cost.'

This statement is, of course, inaccurate, as proven by the history of 1920s hyperinflation in Germany. Who would like to have been in the shoes of Rudolf Hilfering, the German finance minister in 1923, who presided over hyperinflation's explosion? In fact, on 26 November 2002, *New York Post* columnist John Crudele answered Bernanke by writing that the schools which he attended apparently did not teach the history of hyperinflation in the 1920s, which led to the political upheavals that brought Hitler to power.

That the central bank may create as many dollars, pounds, euro, yen, or any other money 'as it wishes', is evidently a way of talking. Hyperinflation is not the only ill. There are as well political and social costs associated with salvage operations, and these can be very high indeed. In the last analysis someone must pay the bill.

Table 6.1 presents the heavy per capita burden of some countries because of derivatives overexposure by its banks (those domiciled in that country). The data are from 1995 and 1999, when I made this study. Though I don't have 2003 statistics, it is not difficult to see from Table 6.1 that from 1995 to 1999 derivatives exposure has doubled. Using this as a proxy, it would not

Table 6.1 The heavy per capita burden of some countries because of derivatives overexposure by its banks

	1995 notional amount of derivatives holdings (billion $)	*1995 derivatives holdings per capita (thousand $)*	*1999 derivatives holdings per capita (thousand $)*	*1999 real money per capita[1] ($)*
Switzerland	6,321	877,7	1,755	70,200
France	9,374	161,7	323	12,920
Sweden	1,278	145,6	291	11,640
United Kingdom	7,367	126,5	253	10,120
Canada	3,321	112,7	225	9,000
Netherlands	1,596	102,9	206	8,240
Japan	11,532	92,2	184	7,360
United States	23,129	87,9	176	7,040
Belgium	689	68,1	136	5,440
Germany	4,258	52,2	104	4,160

[1] Demodulated to the level of credit equivalence by a factor of 25, which is conservative and prevails in very calm markets.

be unreasonable to consider doubling the 1999 figure as an approximate estimate for the end of 2003.

Experts suggested that since central bankers don't normally make public statements like those by Greenspan and Bernanke in November 2002, their words aroused the suspicion that what they said was intended to uplift spirits because of an economic crisis which might be deeper than the market generally thought. That suspicion was furthered by the shift in the Bush Administration's economics team, in late 2002, and by the information that blacklists on creditworthiness had been circulating in the global derivatives market, and these blacklists enumerated financial institutions considered too shaky to trade with.

Rumor had it that JP Morgan Chase, the world's largest trader and holder of financial derivatives, was at the top of that list. Some analysts suggested that it was likely that the aforementioned statements were intended as public confirmation of private promises, that the Fed stood behind Morgan Chase, and it was ready to provide protective cover for its derivatives exposure – supposed to be, at the time, nearly $30 trillion in notional principal amount, as 2002 came to an end.

On Wall Street, analysts said that the statements made by senior executives of the Federal Reserve over consecutive days suggest that the central bank is prepared to intervene if necessary to save the $300 trillion to $400 trillion global derivatives market from collapse. Some even say the Fed and certain European central banks have already done so, and that the November 2002 public statements were part of that effort. As evidence they quoted

- the $114 billion spike in money supply, a broad measure of monetary liquidity during the seven days ended November 2002; and
- the fact that JP Morgan Chase equity has been able to recover from its October 2002 lows of below $20 per share, with $20 seen as a critical default point (DP); more on this in section 3.

Unthinkable only a few years ago, the current huge derivatives exposure seems to fall within a region of criticality. *Criticality* is a term associated with vulnerability. The concept is well understood in engineering and physics, where it suggests that, in extreme circumstances, certain infrastructures or products may change their physical status and structure. In a similar manner, in the modern economy, significant illiquidity, excessive volatility and too many, too deep uncertainties disrupt the efficient operation of financial markets, because they significantly alter behavior. Hence the importance of defining what constitutes critical market infrastructures and services, and what can be done to protect them. This makes it mandatory to define their criticality, as well as to develop countermeasures to cover threats and vulnerabilities throughout the global economy.

Without making an explicit reference to the concept of criticality, and its impact on the twenty-first-century economic and financial environment, in his 19 November 2002, speech Dr Greenspan tried to be even-handed with derivative financial instruments. He stated: 'Derivatives, by construction, are highly leveraged, a condition that is both a large benefit and an Achilles' heel.' The chairman of the Fed first outlined the possibility of dispersion of risk to those willing and presumably able to bear it; then he added that the downside of derivatives is *excess speculation*, bringing the global financial system to criticality level. 'Too often in our financially checkered path, the access to such leverage has included speculative excesses that have led to financial grief,' Greenspan aptly stated. 'We are scarcely likely to reform the underlying human traits that lead to excess, but we do need to buttress our risk management capabilities as best we can to delimit such detours from the path of balanced growth . . . Leveraging always carries with it the remote possibility of a chain reaction, a cascading sequence of defaults . . . '[2]

3. Bank default and deposit insurance

Released in 1997, a survey of 22 British banks done by the Bank of England suggests that the top two reasons why they failed have been *mismanagement* of the bank's business and *poor asset quality*, basically in the loans book. Only two cases among the failed banks involved major *dealing losses*.

Mismanagement, poor asset quality and severe dealing losses correlate. Their common element is lack of appropriate planning and control. Another frequently encountered problem with trading losses is that much of market

risk is hidden and poor governance combines with some other reason(s) to bring disastrous results; for example:

- financial instruments are mispriced,
- profits are overstated, while losses are hidden, and
- the amount of exposure can change very fast in a dynamic market.

Table 6.2 presents the pattern of reasons underpinning the failure of the 22 British banks. The Bank of England is not known to have thrown good money after bad to save them from bankruptcy. Other central banks, however, have a different policy, which often leads to the support of failing credit institutions with taxpayers' money.

'In forecasting a bank's default probability, we take into account the degree of support by the regulator,' said a senior executive of one of the independent rating agencies. There are many institutional and other factors deciding what the central bank is going to do. Crédit Lyonnais was salvaged, but it was a big overstaffed bank with 65,000 employees. The Bank of France

Table 6.2 Why banks fail. Findings of a research project by the Bank of England

Identifier of institution	*Mismanagement*	*Poor assets*	*Liquidity problems*	*Secrecy and fraud*	*Faulty structure*	*Dealing losses*
I	X			X		X
II	X				X	
III	X	X		X	X	
IV	X	X		X		
V	X			X		X
VI	X	X				
VII	X	X	X	X		
VIII			X		X	
IX	X	X	X			
X	X	X	X			
XI	X	X	X	X		
XII			X			
XIII	X	X	X			
XIV	X	X	X			
XV	X	X				
XVI	X	X				
XVII	X	X				
XVIII		X	X			
XIX	X	X				
XX	X	X				
XXI				X	X	
XXII	X	X				

Source: Bank of England.

let smaller banks fail. In the UK, Barings folded. If it had not been Barings but Barclays, would the Bank of England have reached the same decision?

Generally, a *default* occurs when the obligor has exhausted his financial resources. As a result, he is unlikely to pay his debt obligations in full: principal, interest, fees. Charge-offs, distressed restructuring, partial forgiveness or postponement of debt are temporary measures which constitute the crust of the cake. Nothing would change on the inside if poor management continued.

Distressed restructuring can affect all stakeholders. The aftermath of a failure is even more severe. Before the institution of *deposit insurance* in the early 1930s, by the Roosevelt Administration, depositors were losing most or all of their money when the institution they entrusted with their savings went bankrupt. Created after the Great Depression, the Federal Deposit Insurance Corporation (FDIC) has provided a safety net.

Today about ninety countries around the world have some sort of deposit insurance. An America, FDIC pays depositors up to $100,000 per client of a failed credit institution. In the UK, the ceiling per client is £19,000, in Switzerland it is CHF 30,000, and in euroland it is €20,000. With the exception of the European Union (EU), there is no general or regional solution for deposit insurance.

The guarantee deposit system has been adopted in a more or less uniform manner in the EU, following a European Community Directive to that effect. The highest limit of €20,000 per person is independent of the number of accounts this person has with the failed financial institution. It is also independent of currency, but for deposits it includes the interest until bankruptcy date.

It may be asked where the deposit insurance money comes from. Since the assets of a bank which fails are impaired, it is likely that financial resources from liquidations of the remains would be insufficient. There are several schemes providing a source of funds. In my opinion, the most serious is *ex ante*. For instance, in the US every bank contributes to the FDIC treasury a small percentage of its yearly business. In Switzerland, the solution is *ex post*. The Swiss Bankers' Association pays and then bills, proportionally, the surviving financial institutions.

An interesting question is whether deposit insurance creates *moral hazard*. In principle, the answer is 'yes!'. Any safety net can contribute to moral hazard, not because it is wrong in the first place, or ill conceived, but because of the certainty that it will be abused (see in section 4 the discussion on Chapter 11). To a significant extent, whether there might be moral hazard depends, among other things, on the deposit insurance payout. On this ground, in early 2003 (correctly) Dr Alan Greenspan objected to raising the $100,000 guaranteed amount.

A similar argument about moral hazard has been raised, on several occasions, about the salvage of bankrupt nations by the International Monetary Fund (IMF). The moment an entity (state, bank, or person) knows in advance

Table 6.3 Likelihood of failure for companies rated AAA to BB

	1 year	*5 years*	*10 years*	*15 years*
AAA	0.00	0.24	1.40	1.40
AA	0.00	0.43	1.25	1.48
A	0.06	0.65	2.17	3.11
BBB	0.18	1.79	4.34	4.70
BB	1.06	10.07	17.73	19.91

that a helping hand will pull it out of trouble, no matter what its blunders, it will become a big spender and take risks that otherwise would not have assumed. In banking, major risks are taken through overleveraging, trading in exotic derivatives, and making loans with scant attention to the counterparty's creditworthiness.

If, at least according to the statistics, the most prevalent reasons for default are mismanagement and poor assets, then both the bank's management and the rating agencies should be watching carefully every party that has assumed credit risk and market risk beyond its means. This must be done in a steady manner and over a long time horizon. As Table 6.3 suggests, even an AAA-rated company has a 1.4 percent probability of default after ten years – but this rises to 17.73 percent for a BB-rated company, just below investment grade.

What was said in earlier paragraphs about the characteristics of a bank's default clearly applies to the case of its clients. After default of the debtor, the loan is placed by the bank on an internal non-accrual list, and the credit is written down. By contrast, *impaired loans* are those where losses are probable and estimable. Impaired loans are characterized by the book value of the claim exceeding the book value of cash flows in future periods – accounting for interest, principal payments and collateral.

Banks which apply the new capital adequacy framework by the Basle Committee on Banking Supervision (Basle II)[3] are required to derive a one-year *probability of default* (PD) for each grade in the credit rating scale. The rating scale of international rating agencies, to which several banks are adapting, has 20 thresholds. A good rule for credit risk control is that no more than 7 percent should fall in each of the lower-quality grades (BB+, BB, BB–, B+, B, B–). Attention should also be paid to:

- migration across grades
- quantification of loss estimates per grade, and
- comparison of realized default rates against expectations.

The probability of default is very important both in absolute numbers and as a trend. The average American company, says Tim Kasta of Moody's KMV,

now has a 4.4 percent chance of default, more than four times the average in the 1990s. A major concern is that even as the market value of their businesses falls, companies continue to add debt.[4]

Another important metric which should be used to judge creditworthiness is the *distance to default* (DD). The European Central Bank (ECB) says that its distance to default model has more predictive power for banks likely to benefit from government support. The *default point* (DP) is the equality of market value of assets (MVA) and the institution's total liabilities. As a proxy for MVA is taken equity capitalization of the company, using option pricing. Volatility matters. Contrary to assets, which are marked to market through equity pricing, total liabilities are taken at book value. The ECB considers current and long-term liabilities on an equal footing. The algorithm which it uses with the option pricing model starts with:

$$\frac{\text{Assets}}{\text{liabilities}} = \frac{\text{Equity capitalization}}{\text{Liabilities at book value}}$$

The European Central Bank computes the standard deviation as the moving average of six-month volatility. This algorithm is generally applicable; there is, however, a caveat. As explained in section 2, a credit institution may not fail at default point because the central bank comes to its rescue. This, however, often means that shareholders are losing all or most of their equity. Nobody said that salvage operations are a free lunch.

4. Protection from creditors under Chapter 11

The first law on record which permitted a conditional discharge of a debtor from his debts, and called for subsequent reorganization of the failing entity, was introduced to the British parliament three centuries ago, in 1705. It took a couple of centuries for the US to move in the same direction. In the US, until the 1930s, bankruptcy generally meant liquidation, and bankruptcy courts dealt primarily with liquidation of assets for the benefit of creditors. But there were also courts of equity, which provided for reorganizations, for the benefit of both debtor and creditor. Until the years immediately after the Great Depression, what became known as 'Chapter 11 reorganization' was a federal equity receivership. It operated in contrast to and outside plain bankruptcy.

Behind Chapter 11 lie some historical reasons. The number of bankruptcies was rising through the boom years of the 1920s, but it reached a peak in 1932 – just as the Depression, which started in 1929, was losing steam. Because bankruptcies are like earthquakes of the economy, on 29 July 1930 President Herbert Hoover authorized a comprehensive investigation into bankruptcy law and practice. The environment in which that study was done can be described in two short points:

- bankruptcy-based losses to the US economy over the 1925–30 period were more than $3 billion, and
- through bankruptcy procedures, creditors were only recovering an average of about 8 percent. This was judged to be too low.

The report submitted to Hoover in the aftermath of this study indicated that the English law, which made it a public duty to investigate the causes of bankruptcy, was better than American law, which left it to the creditors alone to be concerned with the administration of assets of a bankrupt entity, and its discharge. The implication was that something is wrong with the system when

- only 8 percent is returned to creditors after the debtor's liquidation, and
- $600 million a year is taken out of trade and industry because of the inability of bankrupts to pay their debts.

Subsequently, a report to the US Congress, in 1931, included proposals for *reorganization* – which was contrasted to liquidation. The idea was to amend the existing Bankruptcy Act of 1898, and permit debtors other than corporates to make adjustments, or extensions, of their debts. In a way, debtors could have the protection of the courts while reorganizing their liabilities, without being judged bankrupt.

While there was a Hoover – Roosevelt collaboration for the passage of such a bankruptcy reorganization bill by the US Congress, both 1931 and 1932 were transition years in the White House. There were as well too many vested interests in the old bankruptcy law, hence a long list of negative reaction which delayed any radical change to the law.

Moreover, the Senate and House of Representatives were not in accord on all of the new bill's provisions. This meant that another bill had to go through a House–Senate conference committee. Finally, the bill was signed by president Franklin Roosevelt on 7 June 1934, making corporate financial reorganization part of the US Bankruptcy Code.

On 8 June 1934, the *New York Times* described the passage of the bankruptcy bill as a major achievement of that Congressional session. In a nutshell, as noted in the statement of purpose of the Corporate Reorganization Act, while the bill was designed to deal with current economic conditions, its proponents pressed the point that its value would be longer term, by permitting indebted companies to continue operating.

Over time, however, some of the bill's provisions have been altered. For instance, the initial intention was to give the Securities and Exchange Commission (SEC) an oversight role in the reorganization of publicly held companies. The SEC's role was confined to what was then known as Chapter 10 of the Bankruptcy Act. This did away with SEC's oversight

because a loophole in the law allowed large public stock companies to avoid the trustee requirement by filing under Chapter 11.

Under the 1938 amendments to the bankruptcy law, Chapter 11 had been intended for use by smaller companies, allowing management to retain control during a reorganization. But the loophole meant that, by the 1970s, the use of Chapter 10 had fallen by the wayside. In 1978 a new comprehensive bankruptcy reform law combined the two chapters into one single Chapter 11, which is in force today.

What happens upon the filing of a petition for bankruptcy under Chapter 11 is that all other legal proceedings involving debts of the corporation are frozen, bringing to an immediate automatic halt all collection efforts, as well as court proceedings, including seizing bank accounts or other property. Also utilities cannot cut off power, water or other services to a business because of non-payment of bad debt.

The difference provided by Chapter 11 over the old Chapter 10 – which is also a difference with European bankruptcy laws – is that current management of the company is allowed to continue to operate. By contrast, in cases where fraud is suspected, a trustee can be appointed by the court to run the business while the old management is eased out.

Quite critical, with Chapter 11, is the fact that the company can obtain *new* credit necessary for ongoing operations, with repayment of this new credit taking priority over the old debt. Thus, for credit purposes, an entity under Chapter 11 is a new company. As the firm continues to operate, it can work out, together with its creditors, a plan for partial payment of bad debts over time. All this is good news. The bad news is that

- there are many abuses at company level, and at individual levels of Chapter 11 implementation, and
- abuses underline the need for reforming the bankruptcy code, as well as globalizing it to bring it into line with the realities of present-day economy.

For instance, the *fresh start* principle of the US Bankruptcy Code – which is fine on paper – has encouraged excessive risk-taking, and led to many ill-studied mergers, acquisitions and forays into foreign markets. True enough, it also led to innovations and to success stories, including the heading off of what could otherwise develop into reduced creditor willingness to lend to riskier borrowers.

The problem is how to curb the excesses that are the result of abuse of the US Bankruptcy Code, as it became an easy way to run for cover or even to escape accountability. For this reason, in 1999, when the debt-fueled engine of US economic growth was still running in high gear, with all other pistons and cylinders helping to drive the then-ongoing, record-setting expansion, the case was made that there is a need to tune the Bankruptcy Code. Vested interests saw to it that this is still planned.

5. US-style personal bankruptcy and credit risk

In a 1 May 1999 report, the US Senate Judiciary Committee observed that there were 1,442,182 bankruptcy filings in 1998, of which 1,398,182 – more than 96 percent of the total – were consumer bankruptcies (today it is past 2 million). This was five times the level recorded amid the 1980s recession, and it followed three consecutive years of increases in such filings at a time of unprecedented prosperity, with relatively high wages, and unemployment at its lowest point since 1970.

Meanwhile, as the Department of Justice was to observe, creditors were losing $3.22 billion annually as a result of this sort of irresponsible bankruptcies, filed by individuals who *could* repay their debt. While the stigma once attached to personal bankruptcy seemed almost quaint in the litigious but also 'shop til you drop' society in which we are living,

- the bill-paying majority was becoming incensed when reminded that they were paying more because others were playing the system, and
- there has been a strong feeling of moral imperative to inject responsibility, and fear of consequences, back into companies' and consumers' decisions about taking on and paying off debt.

To a significant extent, personal bankruptcy is promoted by overuse of credit that makes people more vulnerable to other financial shocks caused by layoffs, divorce and medical problems. Therefore, experts today suggest that we will never solve a bankruptcy crisis if we do not look way beyond the current Bankruptcy Code.

The free use of credit through credit cards has accentuated the spend-and-spend which leads to inability to pay back debts. Senator Diane Feinstein was right when she said that 'any meaningful bankruptcy reform must address the irresponsible actions of certain segments of the credit-card industry.' Voters are well on board with this concept, and Feinstein cited an April 1999 survey by Opinion Research International that found that 74 percent of the US public believes credit-card companies share responsibility for the increase in personal bankruptcies.

Now that bankruptcy has lost its stigma, bankruptcy convenience filings have become a tool to avoid financial obligations rather than a measure of last resort. More than one study revealed that one in four individuals filed for complete debt relief despite the fact they still had the financial means to repay part of their debt. Basically, the large majority of people are making consistent efforts to avoid bankruptcy, but those who exploit the system in practice pass their debts on to the shoulders of those who recognize their responsibilities. When individuals file for bankruptcy, they transfer their debt to other hard-working people, through much higher interest rates for the card issuer's insurance protection as well as hidden taxes. By some estimates,

it takes 33 responsible consumers to pay for just one bankruptcy of convenience. The rise in hidden costs to the average household is estimated to be more than $600 per year.

Known as Chapter 7 bankruptcy, because of the chapter under which individuals seek protection, personal liquidations mean that creditors lose big money to individuals who cannot or will not repay their debts. A law, known as the Chandler Act of 1938, permitted an individual to retain non-exempt assets by proposing a plan to pay his or her existing debts from future income, after which the wage-earner would receive a discharge of any unpaid balances of this debt. Before this 1938 Act, the main deterrent to personal bankruptcy was the personal disgrace attached to it. Today this social stigma has taken a holiday, and the no-bill-paying minority leaves it to the bill-paying majority to pay *more* than its due.

Proponents of a new bill aimed to inject a greater sense of responsibility into personal finances range all the way from some sectors of the banking industry to auto manufacturers and department stores, who sell their wares on credit with small downpayment and finance the purchasers' credit. Because the matter is so important to all sectors of society, proposals on personal bankruptcy reform reflect a consensus to *means-testing* consumers' ability to file for Chapter 7 protection.

A few years ago, the American Bankruptcy Institute suggested determining *means* by subtracting secured- and priority-debt payments plus living expenses, as established by the Internal Revenue Service (IRS), from the debtor's average monthly income. Strengthening the code in deterring borrowers from abandoning their debts would boost investor confidence in people's and companies' ability to limit credit loss, build up loss reserves, and improve the terms of borrowing in debt markets. On the other hand, such legislation could have an impact on credit-card issuers. Vested interests aside, the difficulty lies in striking a balance between punishing wrongdoers and preserving the *fresh start* principle of the US Bankruptcy Code which has encouraged investment and innovation.

The proposed new law, which has been in discussion in both the House and Senate since the late 1990s, must not kill the goose that laid the golden eggs: two-thirds of the US economy is driven by consumption. But there are diverging opinions about the extent of the proposed revision. Some Congressmen find fault with the use of IRS standards for estimating minimum and other necessary living expenses, including housing, food and transportation. They also criticize:

- the income-related formula that the new bill would force upon bankruptcy judges considering whether to grant or disallow consumer petitions for relief under Chapter 7;
- the proposed restrictions against class action lawsuits, where lenders are alleged to have systematically pressured debt-burdened consumers into reaffirmation of unsecured debt obligations; and

- the 'cramdown' provisions that seek to strengthen lenders' hands in asking for full payment on cars and other property, whose value often dips below the value of an associated defaulted loan.

Another critical issue is child support. The proposed law actually adds several protections not embodied in current law: child support is given first priority; the use of bankruptcy to evade child support and marital dissolution obligations is stopped; and, unlike today, debtors must continue to pay child support when they file for bankruptcy.

Also under debate are proposed measures that would force plaintiff's attorneys to bear the costs of unsuccessful lawsuits. According to the current draft, tolerance for generous homestead exemptions would be capped at $250,000, though states would be allowed to opt out of it individually.

While it is evident that something has to be done to correct the inbalances in Chapter 7, new solutions will not come easily because the issues associated with bankruptcy protection are highly complex. This complexity is increased by the fact that behind the more classical banking loans, and equally traditional (by now) credit cards, looms a whole wave of possible bankruptcies which may hit bondholders. The risk is created by the fact that formerly classical mortgages, and other receipts, have been securitized.

6. Legislators, regulators, depositors, bondholders and shareholders

Under the pressure of events, rather than because of foresight, legislators pass laws which (up to a point) protect consumers and companies from the aftermath of adverse conditions. Chapter 11 of the Bankruptcy Act (see sections 4 and 5) is one example; deposit insurance is another (see section 3). When, however, the safety nets multiply, they tend to collide because behind each of them accumulate embedded interests.

Legislators enable regulators to do a neater job by increasing the reach in their charter, and by allocating the money necessary to make a deeper and broader examination of entities under their jurisdiction. But this, too, has its limits because behind every new legislatory action are forces for and against it – while at the same time there exist contradictory goals, because of differences in personal interests and political viewpoints. Differences in viewpoints are most relevant in corporate governance and management accountability. For instance, regulators, bondholders and shareholders don't have the same perspective in regard to proactive prudential action, even if for their guidance they typically look at future performance. Basically, *regulators*

- try to keep capital requirements at par with evolution of the banking system and its risks;
- would like to see credit institutions having an AA rating, or better;[5] and

- want to avoid systemic risk, or pouring taxpayers' money into hopeless situations.

This is not the viewpoint of bondholders, who are after a good credit rating for the instrument they buy, and want assurances regarding

- principal protection
- regular interest payments
- strong capitalization
- relatively low risk.

Shareholders don't share the bondholders' and regulators' objectives, because they buy equities for capital gain. Hence, they look for

- quality and amount of profits
- dividends declared by the board
- increase in capitalization
- sound risk-and-reward tradeoffs.

Bondholders often benefit from a real or virtual safety net. For instance, until the bankruptcy of Argentina in December 2001, investors who bought sovereign debt where protected by the 'fire brigade' of the IMF. The latter, typically at the twelfth hour, came up with loans when a nation was about to default.

Because there is nothing comparable to deposit insurance for shareholders, the investors themselves have to be most vigilant about prices, risks and bubbles. They should also avoid running after the latest fad which hits the stock market. In the late 1990s, for example, the US stock-market bubble was inflated through a mountain of hype which hid the rapid rise in corporate debt. So onerous was this superleveraging that many American companies went belly up, and investors lost plenty of money.

Bubbles can also build in the bonds market. In the autumn of 2002, fears about the sustainability of debts sent corporate bond prices tumbling. By 2003, however, investors have been bidding up bond prices, to levels that are in danger of becoming as inflated as share prices were a few years earlier. The price of bonds has been rising as fears of deflation in the Group of Ten countries mount. Deflation increases the value of an instrument that pays a fixed rate of interest, and gives investors back their money at maturity, if there is no credit risk.

During the stock-market bubble of the mid- to late 1990s, the need to earn a big return to offset high liabilities lured many institutional investors into the equities market, leading to widespread overvaluations. After the stock-market crash exposed the risks of hedging fixed liabilities with floating assets in the

form of shares, institutional investors have been speeding up sales of equities in favor of corporate bonds.

Bonds and shares compete for the top position in investments. While, as we saw at the beginning of this section, bondholders and shareholders have different viewpoints, they also share some common elements – because they both depend on management quality to earn an income and get their money back. Two basic criteria for judging management quality and accountability are economic capital allocation and risk management. As the introduction to this chapter suggested, both these issues will dominate the next ten years in terms of corporate governance and investors' choice. There is a significant synergy between:

- Basle II regulatory capital requirements,
- rigorous risk management, and
- economic capital and its ingenious allocation.

These three subjects must be considered together. Their synergy means that they cannot be seen as distinct from one another and still reach valid, longer-lasting solutions. A key challenge for the members of the board is that of embedding the concepts and metrics identified by these three points into business processes. This is an integral part of corporate strategy.

Chapter 2 also made the point that corporate strategy, capital allocation and risk management correlate both among themselves and with the implementation and use of advanced information technology. Therefore, well-managed companies don't treat the job of capitalizing on synergy of risk management and capital allocation as a future problem, or compliance-only challenge. Rules behind economic capital allocation impact on the strategic upgrading of management structure and skills, risk control methods and systems, and the sophistication of products and services.

Not only the members of the board, but also shareholders and bondholders must appreciate that economic capital is *risk capital*. Therefore, its management must be proactive, with money allocated to potential risks for solvency purposes. By contrast, accounting for incurred profits and losses is a *post-mortem* activity. Solvency-related risk capital defines potential loss in economic terms, and addresses many events that are not relevant from an accounting perspective. An example is mismatch risk between loans and deposits. A further fundamental notion, which should condition investors' behavior, is that risk is multidimensional and economic capital is only one of the dimensions. To manage risk we need a polyvalent approach, including liquidity at our own treasury, and in the market at large.

While no solution is fool-proof, high technology can help. An important dimension of the real-time enterprise is interactive reporting to top management on risk exposure. The chief risk officer (CRO) should regularly check with the CEO – on methods and tools being used, which should come under

rigorous examination. The more dynamic is the economy in which we live, the more we need to assure that nothing that is important in corporate management falls into the cracks of the system.

7. The law of unexpected consequences applies to both engineering and banking

One of the most basic responsibilities of management is to foresee the consequences of current decisions and actions. This is very rarely well done, yet the failure of even a small component of a system may lead to unexpected consequences a long way beyond what this particular component has represented in terms of value or security.

Let's start with an engineering example of unexpected consequences to make the point. Practically everybody remembers the 1 February 2003 failure of the shuttle *Columbia* in its re-entry into the earth's atmosphere. The quality control test, at the Southwest Research Institute, whose results were announced on 8 July 2003, was the second of its kind using actual shuttle material in an effort to establish the reasons for *Columbia*'s disintegration.

- The first test produced small cracks on the shuttle's skin,
- but the result of the second test was a $40 \times 40\,\text{cm}^2$ gaping hole.

This hole was caused, of all things, by the insulating foam, and the result was 'completely unexpected,' said the investigators. Both tests intended to replicate damage created to the shuttle by insulating foam, which broke loose on lift-off from an external fuel tank, but the first test was not really made under extreme conditions. The unexpected result of the second test showed, through experimental evidence, that even foam could punch a gaping hole in the shuttle's wing panel.

Before the accident the agency's investigation board had already recommended that the shuttle carry a patch kit. But whatever the possibility of patching a slit or a crack, a hole of about $1{,}600\,\text{cm}^2$ is tough to repair in space. Experts were of the opinion that in all likelihood, test 1 and test 2 set the two extremes of damage that foam could have caused: from a small crack to a big, gaping hole. A hole of $40 \times 40\,\text{cm}^2$ sounds technically unreasonable, if not outright impossible. High speed, however, made the difference. This is a lesson which applies hand-in-glove in finance, with the crucial variable being not high speed but *high leverage*.

Columbia's disintegration was a dramatic event costing plenty of young people's lives, and the results of test 2 added a great deal to our store of knowledge. They provided proof that unexpected consequences exist always, and they can be catastrophic. This is true not just in engineering but also in finance. Take the bankruptcy of Barings, in February 1995, as an example. The (correct) refusal by the Bank of England to come to Barings' rescue with

taxpayer money brought the venerable bank to its knees after a leveraged derivatives speculation which

- involved $27 billion in derivatives contracts, in one of its offices (Singapore), and
- ended in a $1.5 billion loss, wiping out Barings' $900 million in capital.

Note that the loss which brought Barings to bankruptcy was just 5.5 percent of the capital on the gambling table. A nearly 2,000 percent leverage played the role of high speed in *Columbia*'s case, and Barings came down in flames. The pattern of the gamble which created the gaping hole is shown in Figure 6.3.

After the event some analysts said the original mistake was to purchase in a couple of weeks' time 20,000 index contracts, an error compound when the trader sold *puts* and *calls*, to cover margin calls. Other analysts, however, suggested that the real reason behind the bankruptcy was Barings' scant risk management and non-existent internal control. Lack of management oversight opened the door to the unexpected result, which today has become

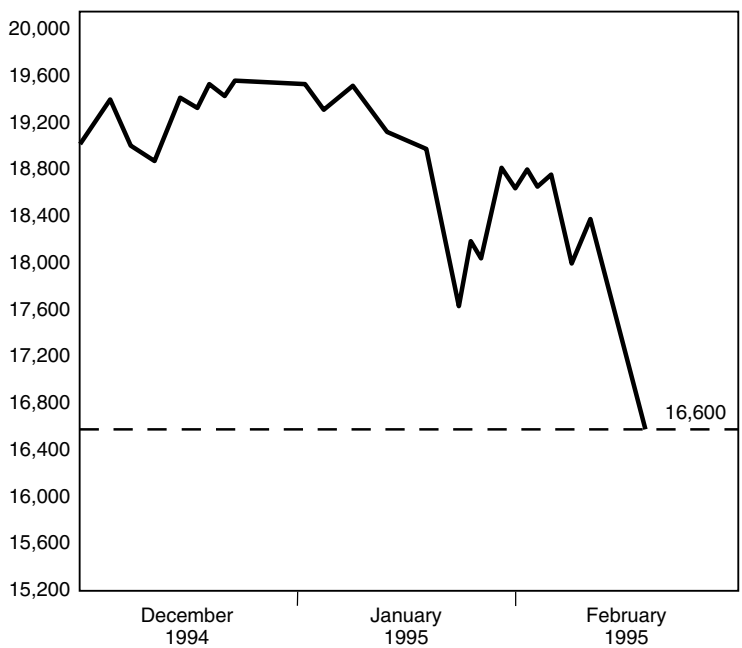

Figure 6.3 More than 1.5 billion lost in betting the Nikkel 225 would go up, while it went down

a classic in risk control. In short, two weeks of derivatives trades while risk management had taken a holiday destroyed two centuries of banking tradition, and Barings fell off the financial radar screen.

After the Barings bankruptcy, a Barclays executive was quoted by *Business Week* as saying, 'You cannot stop someone from going berserk. But you can have a system to catch it in 24 hours.' It is even better to do so in real time, and we have today the technology that can identify exposure tick by tick at seconds level. The problem is that very few banks use high technology to their advantage; yet delays of 24 hours are a invitation to major disasters.

Barings had only itself to blame for its losses. This is also a familiar case with investors who, being unaware of assumed risks, set the stage for their deception. Take Commerce One, the software company, as an example. From late 1990s until March 2000, during the gold rush of the Internet, Commerce One was one of the high fliers, featuring a market capitalization of $21.5 billion at its high-water mark. But by January 2003, the company's market capitalization had shrunk to $85 million, and annual revenues had evaporated by 88 percent, down to a level of $90 million from a peak of $800 million in the boom times.

Wall Street saw the plight of Commerce One as emblematic of a lost generation of technology firms, created in the 1990s. Some of these companies did not completely disintegrate, but found themselves in the twilight: not quite dead but with no longer-term prospects of revival. In the roaring mid- to late 1990s, with its unprecedented frenzy of equity market euphoria boosted by easy cash, plenty of hype and some breakthroughs in new technology, nearly 6,000 technology start-ups came to life. They were fueled by some $100 billion in venture capital, but only a handful, like Amazon.com, Yahoo and eBay, have emerged as survivors, and nearly 4,000 remain between life and death. With this, more than 100,000 high-tech jobs have been lost in Silicon Valley alone, leading to a new job market – the *equity-only* type of employment. This, too, was one of the unexpected consequences of what has been happening in the financial market.

7

Case Studies with American Financial Institutions

1. Introduction

If the case of Citibank's salvage from the edge of the abyss was the most significant financial event of 1990, and that of Long-Term Capital Management of 1998, from 2003 financial history books will retain two case studies: that of the Federal Home Mortgage Association (see Chapter 8), and the 28 April 2003 settlement of the ten best-known banks on Wall Street with the Securities and Exchange Commission (SEC)–to the tune of $1.4 billion (see section 4).

The penalty and disgorgement which hit the New York banks is a sign of the lower moral standards of our time. It is only reasonable that regulatory and supervisory practices were influenced by a number of factors which have to do with the way financial institutions and other companies conduct their business. Lust and greed have led to legislative initiatives such as the Sarbanes–Oxley Act in the United States, as well as the emergence of polyvalent supervisory bodies that cover banking securities, insurance and other sectors. Examples are the Financial Services Authority in the United Kingdom, and capital adequacy directives like Basle II by the Basle Committee, as well as Solvency 2.

The Sarbanes–Oxley Act was passed in July 2002, in the US Congress, establishing rigorous corporate governance rules, setting specific expectations on the reliability of financial statements of firms whose shares are traded on US stock exchanges. Section 302 of the Act requires chief executive officers and chief financial officers to certify the dependability of such statements, including the fact their entities have effective systems of internal control related to external financial disclosures, and procedures able to notify both external auditors and their audit committee when significant control deficiencies are detected in these systems.

Section 404 of the Sarbanes–Oxley Act requires a firm's external auditor to report on the reliability of management's assessment of internal controls. Both sections 302 and 404 raise important questions. For instance, how many

and what type of control deficiencies can the CEO and CFO not report to external auditors and the company's audit committee without violating the Act? What is the threshold above which the Securities and Exchange Commission, and civil courts, will act?

Only jurisprudence, which will take years to develop, will be able to establish tolerance levels for violations, helping to answer questions regarding assertions about internal control effectiveness. Until then, lawyers will use other, but similar, cases that have been decided by the SEC and the courts, as well as their knowledge of the general legal standards of *duty of care*.

No doubt, there will also be complex technical issues involved, which must be understood to provide a defensible legal course. Certified public accountants (CPAs), too, must exercise great care in deciding on the need to qualify statements. Lack of qualification will essentially be tantamount to agreeing with the opinion reached by the CEO and CFO when forming the CPA's opinion on control effectiveness.

Similarly, the SEC and the courts will have to decide on thresholds for penalties regarding undocumented or fake CEO and CFO assertion, as well as on the related opinion by the external auditor. To a significant extent, every party's opinion will make reference to the more detailed guidelines to be established by new Public Company Accounting Oversight Board (PCAOB), and its policies on auditing standards to be used in forming external audit opinions in compliance with section 404.

In all likelihood, significant help in shaping the jurisprudence for section 302 assertions by CEOs and CFOs will be provided by *post mortems*. For instance, in 2003 executives at HealthSouth, a recent massive US corporate governance disaster, asserted in their filings that they had an effective system of internal control, despite accounting disclosures which have since been proven wrong by billions of dollars.[1]

2. New laws do not change human nature

Mismanagement and fraud are the two sides of a process of wealth destruction. Mismanagement wastes the resources that should have been preserved and used to create new wealth. Fraud transfers part or all of these resources from their lawful owners, for instance shareholders or depositors, to the pockets of those who manipulate the authority given to them because of their position, to enrich themselves and their buddies.

The theme of this and other case studies in this chapter is what happens to individual entities whose assets are deteriorating. Poor management and doubtful assets have much to do with each other. Of course, this does not mean that there is no conflict of interest or self-gratification in mismanagement. Even labor bosses have joined the conflict-of-interest bandwagon.

For instance, the CEO of Ullico Inc., Robert A. Georgine, has been under criminal investigation by a Washington grand jury as well as civil inquiries

by the Labor Department and other agencies. The reason is the millions of dollars he and other labor leaders allegedly made from a secret deal to buy stock in Ullico, a union-owned company, just before shares were repriced to reflect the soaring value of an early investment in Global Crossing.[2]

As this Ullico reference shows, high-technology companies and banking institutions are not the only ones attracting crooks, because that's where the money is, as 'Two-Gun' Dillinger, the known bandit, used to say. Rite Aid was no high-tech outfit; it's a drug retailer, an old-economy company. Yet in June 2002 four of its former top executives: CEO Martin L. Grass, chief counsel and vice-president Franklin C. Brown, executive vice-president and chief financial officer Franklin M. Bergonzi, and executive vice-president for pharmacy services Eric S. Sorkin, faced various combinations of legal charges.

The 37-count criminal indictment against the top brass of Rite Aid ranged from conspiracy to defraud, to conspiracy to obstruct justice. Though all four accused persons pleaded not guilty, each faces as many as ten years in prison for allegedly operating an illegal accounting scheme that triggered a $1.6 billion restatement of net income.[3] This is precisely the sort of thing that became endemic in the go-go 1990s and right after the bubble burst.

Readers might rightly comment that these examples are small fry compared to an embezzlement of 3 percent of the gross national product (GNP) – a case which is incredible but true. If it were in the US, embezzling 3 percent of GNP would mean stealing single-handed $330 billion. In Turkey, the money is less than that, but the 3 percent of GNP ratio holds.

According to the Banking Regulation and Supervision Agency (BDDK), the Turkish banking watchdog, the Uzan family embezzled about $6 billion from a bank that they owned, using a specially designed computer program. This money, equivalent to 3 percent of Turkey's gross national product, was taken out of Imarbank's deposits.[4]

The stolen $6 billion automatically became the liability of the country's heavily indebted Treasury, because all deposits in the Turkish banking system have been insured by the state since 1994. This embezzled money is nearly three-quarters the $8.5 billion given to Turkey by the American government, up to 2003, to beef up the country's economy, which is chronically teetering at the edge of chaos.

How such fraud could go on for so long is a mystery. Trying to untangle it, BDDK sent a 54-page report to an Istanbul prosecutor, with a request that 22 people allegedly involved in the embezzlement be brought to justice. This was the biggest embezzlement in Turkish history, but it is not the only one. Since 1997 the Turkish government has seized 22 private banks whose owners and senior officials are on trial for embezzlement. In the aftermath, it had to put more than $42 billion into the banking sector, because of outright theft which filtered through the system, and politically inspired corruption in state banks, which has been flourishing for many years.

From Ullico and Rite Aid to the Turkish $6 billion, these real-life cases suggest that human nature is the party at fault. Ethical values have taken a holiday, and with them have left personal dignity and corporate accountability. That's why a simple change in the law is not going to make people behave ethically.

The frequency of embezzlements has most significantly increased since the boom-and-bust years which started in the mid-1990s. In the first few days of October 2003 in the US, a financier was indicted on charges of stealing $182 million from 15 investment funds run by Omega Advisors, a New York-based hedge fund consultancy. Manhattan's district attorney Robert Morgenthau charged Viktor Kozeny, who lived in Lyford Cay, the Bahamas, with:

- 15 counts of first-degree grand larceny, and
- 2 counts of first-degree criminal possession of stolen property.

According to the district attorney's office, the thefts took place between March and June 1998. Investors hurt by Kozeny's activities included Columbia University, which lost $15 million, and The Common Fund, a fund for universities and other non-for-profits, which lost $4.5 million, Morgenthau said.[5]

Moreover, on 2 October 2003, Steve Markovitz, a former trader at hedge fund Millennium Partners, pleaded guilty to a felony charge for securities fraud related to after-market trading in mutual fund shares. The criminal case stems from an investigation by New York attorney-general Eliot Spitzer. In a separate civil action, the Securities and Exchange Commission is expected to demand that Markovitz forfeit profits made from the alleged trades. Based in New York, Millennium has about $4 billion under management, and is one of several dozen hedge funds and mutual funds to receive subpoenas from Spitzer's office in 2003.

The probe of Millennium has focused on a trading strategy known as *statistical timing*. This is an arbitrage technique in which traders can take advantage of time differences between continents to reap profits. The revelation came as Spitzer intensified a probe of Millennium Partners, which is part of a broader probe of whether hedge funds violate laws while trading shares in mutual funds. At issue are:

- illegal trading after the stock market closes, and
- an arbitrage strategy involving rapid selling in and out of mutual funds, which can be a fiduciary violation.

According to people knowledgeable about what is happening on Wall Street, the office of New York State's attorney-general has evidence of widespread illegal trading schemes that potentially cost mutual fund shareholders billions of dollars annually. This adds to the corporate accounting scandals which, since 2001, have rocked the confidence of investors.

As we shall see in section 3, mutual funds' manipulations are more devastating than other past scandals. Mutual funds are fiduciaries: their mission is to manage and safeguard clients' money. As is now being revealed, they are breaching their fiduciary duty. While this lack of dependability is most regrettable, equally disturbing is the fact that Spitzer's charges were leveled at four big fund companies that until now were:

- fairly well regarded and
- trusted by millions of investors.

Evidence which has accumulated during 2003 suggests that investors' trust has been misplaced. Here are, in a nutshell, some of the scams which have come up following investigations by the authorities at New York state, Securities and Exchange Commission, as well as findings through internal audits:

- New York State and SEC: Alliance Capital, market timing; Federated Investors, market timing; Fred Alger & Company, market timing and late trading; Morgan Stanley, directed brokerage; Prudential Securities, market timing; Putnam Investments, market timing.
- New York State and internal audit: Charles Schwab, questionable trades.
- Revealed through internal audits: Citigroup, market timing and late trading; Pilgrim, Baxter & Associates, market timing – while a client lawsuit was filed against Bear Sterns for market timing.

Spitzer cited Nations Funds, owned by Bank of America; Bank One's One Fund Group; Strong Capital Management; and Janus Capital Group.[6] Spitzer's revelations are serious, and the existing evidence compelling. If the breach of fiduciary responsibility continues, let alone spreads, it may break the mutual funds industry, which has been around for about eight decades.

Neither is this the only problem now hitting mutual funds. In a 2003 book, Maggie Mahar suggests that the role mutual funds played in fueling share-price momentum during the mid- to late 1990s sheds new light on what a surprisingly large number of fund managers did in contributing to the stock market's bubble. As Mahar writes, 'Fund managers looking for momentum did not care so much about actual earnings as the rate of quarterly earnings growth, the percent by which earnings grew – or were projected to grow – every three months. Their focus was short-term, their object: speed.'[7]

3. Frauds which can kill the goose that lays the golden eggs

In mid-September 2003, a month before the events described in section 2, state and federal authorities in New York filed criminal and civil charges against a former Bank of America broker over illegal mutual fund trades. The authorities alleged these trades cost investors tens of millions of dollars.

Theodore Sihpol III was arraigned on felony charges of grand larceny and violations of securities law, said New York attorney-general Eliot Spitzer at a joint news conference with the Securities and Exchange Commission.

Spitzer added that these charges were the first of several expected in the ongoing mutual fund probe. The charges stemmed from an investigation by the New York Attorney-General's Office that led to a $40 million settlement with New Jersey hedge fund Canary Capital Partners. Canary agreed to settle charges that it had improper trading arrangements with several mutual fund companies, including Bank of America. It admitted no wrongdoing, but cooperated with the investigation.

Also in September 2003, according to prosecutors, a young energy trader at Merrill Lynch embezzled $43 million from the company. For some time, Daniel Gordon was considered to be a sort of star performer. At the age of 23 he was running one of Wall Street's most successful trading desks at Merrill Lynch. Prosecutors say he was also concocting a sophisticated money-laundering scheme, replete with offshore accounts, dummy corporations and mysterious front men. As described in a letter by Jane Levine, an assistant attorney in the US Attorney's Office in Manhattan, Gordon set up a shell company into which he persuaded Merrill Lynch to wire a $43 million insurance payment as part of a sophisticated energy trade. Allegheny Energy bought Gordon's energy trading unit from Merrill Lynch in 2001. Prosecutors claim that Daniel Gordon, who moved to Allegheny after the transaction, funneled $2.5 million to a home oil supply company that he owned.[8]

These accounts are the tip of the iceberg, because most cases of fraud take years to bring to light. Others are quickly forgotten, and then repeated. In the early 1990s, Salomon Brothers – the investment bank which at the time led in Treasury sales – came down in flames having manipulated the market in US government bonds. One would have thought this very expensive lesson would be remembered by financial institutions; but it was not.

About ten years down the line, on 4 February 2003, a former top economist at Goldman Sachs was indicted on seven counts of illegally trading on confidential information about the Treasury Department's plan to end sales of 30-year bonds. The defendant, John Youngdahl, was charged with conspiracy, wire fraud and securities fraud, among other charges. Youngdahl pleaded not guilty and was released on $800,000 bail pending a trial. He also faces a lawsuit by the Securities and Exchange Commission. Moreover, federal prosecutors in Manhattan charged a Wall Street consultant, Peter Davis, with illegally providing the information to Youngdahl so he could pass it on to Goldman traders.

Davis pleaded guilty to conspiracy and wire fraud, prosecutors said. In mid-September 2003 Goldman Sachs agreed to pay more than $9.3 million to settle charges by the Securities and Exchange Commission that it had failed to stop traders from buying on the news. The investment bank neither admitted nor denied any wrongdoing.[9]

Because people are ingenious, fraud has many hues. Some experts are of the opinion that behind what has happened with energy prices and blackouts in California lie fraudulent events. As of September 2003 the state of California has $43 billion committed in long-term energy contracts as a direct result of power problems during 2001. Red ink ran all over the place:

- Compared to paying $7 billion for electricity in 2000, California paid $28 billion in 2001 – fully $21 billion extra money going to the pirates.
- Huge costs aside, California was hit on six occasions by state-wide rolling blackouts, for the first time since World War II.

While wholesale electricity prices rose from $90 per megawatt-hour (MWh) to more than $2,500 per MWh, Pacific Gas & Electric (PG&E), one of the two main California utility companies, went into bankruptcy. The state itself saw a budget surplus of $12 billion in summer 2000 turn to a deficit in 2001; then this grew to $38 billion.[10]

The fact that elsewhere in the US prices for energy of all kinds also rose throughout 2000 and 2001 – from natural gas to gasoline – is of no consolation to Californians. During the winter months of 2000/2001, the spot price for natural gas hit $950 per million Btu (British thermal units), from under $2.50 one year earlier. By May 2001, 4.6 million US households faced power cutoffs for non-payment of bills, mainly because of energy-price hyperinflation.

The California power scam is biting because it is another milestone in ethical decay which, in the 1990s, saw conflicts of interest like those of stock analysts who, to provide investment banking business, received CEO-approved money for promoting stocks of corporations no matter how low their worth might have been.

According to some, in the 1950s, 1960s and 1970s there were few big scandals because most conflicts of interest were precluded by government rules. There could not have been a California electricity scandal before the 1990s, since electricity was closely regulated. Just the same, the rules governing the activities of thrifts were tightly controlled:

- in their way, structural regulatory barriers reinforced norms of professionalism;
- bankers viewed their role as scrutinizers of company loans, not as derivatives traders; and
- certified public accountants saw themselves as agents of law and order, not accomplices in cover-ups of dubious bookkeeping.

There is a strong likelihood that what hit the American consumer, as well as the agricultural industry, manufacturing, merchandising and transportation, on the energy front was no different from Ponzi games in reverse. Named after a Bostonian swindler Charles Ponzi, these pyramiding schemes build

on the abuse of public confidence, and they can be found in all industries, and all walks of life.

FundAmerica offers an example. In September 1990, US government investigators in four states were calling FundAmerica one of the biggest pyramid schemes in recent memory. What also intrigued them was that its founder may have spirited millions of dollars into bank accounts in the Netherlands and Hong Kong, bypassing government regulations and taking consumers for a ride.

It all started with a simple idea. For a mere $140, membership in a special buying club entitled one to discounts of up to 20 percent on practically everything, from flowers and sporting goods to long-distance phone calls. The members of this presumably exclusive club could even get a break on their mortgage – which speaks volumes about how silly people can be.

By early 1990, within four years after the scheme started, 100,000 people had bought into this appealing but fake opportunity. For many, more alluring than the discounts was FundAmerica's promise that members could earn easily $100,000 a year simply by selling new memberships to friends and neighbors – a typical Ponzi scheme.

FundAmerica's fortunes began to unravel in July 1990 when the Florida state prosecutor ordered the company to stop doing business there and to repay members more than $8 million. Then a federal judge in San Francisco ordered the Irvine (CA) company to halt operations, and California's attorney-general lent his support to a class action filed on behalf of FundAmerica members seeking $150 million in damages. A month down the line FundAmerica's luck run out and its remains filed for Chapter 11 bankruptcy protection (see Chapter 6).

An example of more recent events which may kill investor confidence, and hence the goose that lays the golden eggs, is the massive securitization of doubtful loans. While the process of securitization has played a useful role in the economy, the securitization and selling of $34 billion in loans to Enron and WorldCom by Morgan Chase and Citigroup raises a long list of questions.

Some of the experts saw nothing wrong with these securitizations. 'This has been a wise move by the banks. They cleaned their loans book of bad loans,' said a banker whose institution is a competitor to JP Morgan Chase and Citigroup. He then added that the insurance companies and pension funds that bought the toxic waste embedded in these securitized products have not done their homework – and therefore they have only themselves to blame: if they had analyzed *a priori* these investments,

- then they would have found out that they should not buy these securitized corporates (see also section 6).

Regulators do not seem to agree on this interpretation of responsibilities. By late 2002 and in 2003, central bankers have become most worried about

in-transit credit risk. They know that billions of dollars in bad loans are hidden somewhere, but they don't know 'where' and 'how much' – because pension funds (see Chapter 3), mutual funds, insurance companies and other institutional investors are not subject to the same rigorous supervision that applies to the banking industry.

4. Penalty and disgorgement hitting ten Wall Street banks

From the second trimester of 2002 to 28 April 2003 – it took nearly a year until the sentence fell. The heavy penalties and disgorgements hitting ten of the best-known banks on Wall Street were announced in a packed press conference at the Securities and Exchange Commission, in Washington DC. It was an event waiting to happen. Someone had to be held accountable for

- hundreds of stocks which had collapsed, while heavily promoted by brokers, and
- trillions of dollars investors lost in overpriced equities, which led to the stock-market bubble.

In a way, the penalties were expected because almost everybody already knew who had done what and, more or less, what the 'punishment' would be. Opinions were even expressed, mainly in academia, that the big Wall Street banks welcomed these penalties as a means of getting over the bigger criticisms about disregard of shareholder value or even malfeasance.

Without acknowledging any guilt, the ten Wall Street firms in Table 7.1 agreed to pay a total of $1.4 billion in fines, payback of ill-gotten profits, as

Table 7.1 The 28 April 2003 settlement with Wall Street firms (in $ millions, in order of importance)

	Penalty	*Disgorge-ment*	*Independent research*	*Investor education*	*Total*
Citigroup	150	150	75	25	400
Crédit Suisse First Boston	75	75	50	0	200
Merrill Lynch	100[1]	0	75	25	200
Morgan Stanley	25	25	75	0	125
Goldman Sachs	25	25	50	10	110
Bear Stearns	25	25	25	5	80
JP Morgan	25	25	25	5	80
Lehman Brothers	25	25	25	5	80
UBS Warburg	25	25	25	5	80
Piper Jaffray	12.5	12.5	7.5	0	32.5
Total	**487.5**	**387.5**	**432.5**	**80**	**1,387.5**

[1] Payment made before April 2003 settlement.

well as payments to support independent research and investor education. Two more banks were still arguing with regulators, and a third, Deutsche Bank, was expected to settle later, while a fourth bank, Thomas Weisel, dropped out of the settlement.

A draft settlement was first announced in December 2002 by its main architects, a coalition of state prosecutors and federal securities, regulators led by Eliot Spitzer, the New York attorney-general, the SEC and the National Association of Securities Dealers (NASD). The final settlement included findings of fraud against Citigroup's Salomon Smith Barney, Crédit Suisse First Boston and Merrill Lynch. The regulators also released new evidence showing alleged conflicts of interest at other leading investment banks, such as Goldman Sachs and Morgan Stanley.

The ten institutions in the final roster were among Wall Street's largest and best-known investment banks. By signing the settlement with US securities regulators, they hoped to draw a line under the worst financial scandal in a generation. This, however, may well prove to be a pipe dream, because it doesn't take into account the class actions that will probably follow – even if the banks themselves do not admit guilt.

Legal experts have estimated that Wall Street could pay more than $5 billion to settle a pending single class action lawsuit that accuses 55 firms of manipulating initial public offerings (IPOs). If this happens, then the $1.4 billion in fines and other fees included in the global settlement are nothing more than a downpayment on the banks' liability. The way is also open for other individual and class actions by investors which may still be in store.

Announcing the settlement, William Donaldson, chairman of the US Securities and Exchange Commission, himself a former investment banker, said, 'I am profoundly saddened – and angry – about the conduct that's alleged in our complaints. There is absolutely no place for it in our markets, and it cannot be tolerated.'[11] In brief, the banks were accused of

- betraying investors by promising companies flattering stock research in exchange for investment banking work, and
- giving, for the same reason, preferential treatment in initial public offerings to some of their clients – the so-called *spinning*–as well as other wrongdoings.

As is to be expected, not everybody was happy with the settlement. On Wall Street, several analysts were quick to note that SEC's penalties and disgorgement charges amounted to only three-fifths of the cost of the settlement. Moreover, much of the money such penalties represent will essentially be paid by shareholders, not by those who committed the alleged malfeasance. The rest of the penalties may well be met by insurers; and some of them will be tax-deductible. Besides that,

- although $1.4 billion is big money, the bill is equivalent to just a few days' collective profits, and
- this amount is just a small percentage of what was earned from underwritings during the boom.

Critics commented bitterly on what they singled out as a notable fact: senior executives in the penalized Wall Street firms have been personally spared by the settlement, in spite of remarks by Eliot Spitzer that *malfeasance* went well up the corporate chain.

For instance, Crédit Suisse First Boston (CSFB) and Salomon were found to have issued 'fraudulent research reports' to investors, and to have awarded stock in hot initial public offerings to executives in a position to steer these companies' banking business back to them. Bear Stearns, CSFB, Goldman Sachs, Lehman Brothers, Merrill Lynch, Piper Jaffray, Salomon and UBS issued research reports that were 'not based on principles of fair dealing', regulators said.

Other parts of the SEC's indictment were also interesting. Two banks, UBS and Piper Jaffray, received payments for stock research from companies they covered that were not disclosed to investors. Regulators also said JP Morgan Chase, Bear Sterns and Morgan Stanley had engaged in dubious practices, such as making undisclosed payments to other firms for equity research.

The use by investment banks of underwriting fees to subsidize research by other investment banks, in an underwriting syndicate, is often done at the request of the company issuing shares. This has been seen as one of the more interesting allegations buried in the legal documents. The conflict of interest of investment banks comes from the facts that:

- investors view the initiation of research on a given company as an encouraging sign, and
- the initiation of analytical coverage of a given equity boosts the company's share price.

By law, payments leading to this sort of activity should be disclosed. According to regulators, they were not. Evidence of other types of misconduct, too, came up during the investigations and was released along with the settlement. For instance, one of Lehman's analysts had written in an email that 'the "little guy" who isn't smart about the nuances may get misled, such is the nature of my business.'

Among the analysts, the settlement singled out two star performers in investor misinformation. Nicknaming them 'Blodge & Grub,' some critics have focused attention on the twin case of Merrill Lynch's Henry Blodget, and Salomon Smith Barney's Jack Grubman. Henry Blodget was Merrill's former star technology analyst. He agreed to pay $4 million to settle charges of misconduct from US securities regulators – a drop in the pocket. Blodget

will also be barred from the securities industry for life, but experts have suggested there are ways to bypass this ban.

Even so, this case makes interesting reading. According to court documents filed by the SEC, from at least July 1999 through June 2001, research analysts at Merrill Lynch were subject to inappropriate influences by investment bankers at the firm. The complaint, filed in the US District Court for the Southern District of New York, alleged that the investment bank

- published false or misleading research,
- made exaggerated or unwarranted claims that lacked a reasonable basis, and
- failed to properly supervise the separation between equity research and investment banking.

For instance, in a March 1999 email, Blodget commented: 'We are now up to 11–12 internet banking transactions in the pipeline … The current schedule for this week … is 85 percent banking, 15 percent research.' The prosecution said that Merrill bankers used equity analysis as a bait for investment banking business. In an April 2000 email, one banker wrote: 'Do you think we should aggressively link coverage with banking – that is what we did with Go2Net [Henry Blodget was involved]'.

The documents also indicate that Merrill's draft research and proposed rating changes were sometimes shown to the companies being covered ahead of time. A similar procedure of prior approval seems to have been followed in connection with the investment banking department, despite internal rules banning this. In February 2001 a Merrill analyst sent an unpublished report to Tyco's chief financial officer with the following note: 'Please review asap. I will not send ID out until I hear from you first! Loyal Tyco employee!'

Grubman's case, and therefore Citigroup's, is more complex, because it reveals an organization compromising its integrity to gain lucrative fees by duping ordinary investors to woo and retain corporate clients.[12] Jack Grubman played fast and loose with his investment opinion of AT&T, in part as a result of desire to place his children in a prestigious Manhattan nursery. At the same time, Grubman had been slated by the company's own brokers, and had attacked, and was attacked by, the investment bankers; his department's output was characterized as 'basically worthless' by the bank's own head of research. In-house critics said Jack Grubman was the epitome of conspicuous conflicts of interest. One internal critic commented bluntly: 'Grubman has made a fortune for himself … his investment recommendations have impoverished the portfolio of my clients and I have had to spend endless hours with my clients discussing the losses Grubman has caused them.'[13]

Still, in spite of this, and despite clear concerns in some parts of the organization, Citigroup paid him almost $70 million between early 1999

and mid-2002 – which makes his $15 million penalty by the SEC small fry. This lack of proportion and, therefore, of materiality between gains and penalties has been one of the weaknesses regarding the 28 April 2003 settlements.

5. Is there a massive litigation pending on Wall Street?

These days, it is common talk on Wall Street that even if the ten banks admitted no guilt, plaintiffs' attorneys are homing in on the billions they can extract from big banks. They have been filing, and are planning to file, some 2,000 different arbitration cases against Citigroup's Salomon Smith Barney and Merrill Lynch, alleging that they failed to disclose that their analysts issued research reports to help win investment banking business, and that the banks themselves have had deep conflicts between financial analysis, initial public offerings and mergers. Beyond outright compensation, lawyers for the investors are demanding that regulators provide more of the documentation they obtained from the credit institutions during their recent supervisory action. Of particular interest are damning reports about the institution's internal conflicts and lack of compliance leading to fines and legal trouble.

One of the ongoing group actions is on behalf of 100 investors, each of whom lost less than $100,000. Theirs is a single arbitration claim with NASD, alleging their losses were caused by following Citigroup analyst Jack Grubman's stock ratings for WorldCom. The hinge is that relatively small individual losses entitle investors to a hearing based on documents rather than live testimony.

Bloomberg Professional suggested that Citigroup faced at least 62 lawsuits tied to its research practices, according to regulatory filings.[14] The $1.5 billion charge which it took in the fourth quarter of 2002 (see section 6) was expected to reduce its fourth-quarter 2002 earnings by 29 cents per share in that quarter. On the upside, it created a legal reserve which gave investors some confidence that the credit institution was taking care of its operational risks and other exposures.

The big banks' competitors did not miss the opportunity to gain market share from the ten institutions named in the settlement. Charles Schwab, the discount broker, quickly exploited this new vulnerability of the big investment banks, running a series of television advertisements in which a cynical sales manager of a brokerage firm urges his staff to 'put some lipstick on this turkey' in order to sell the firm's latest initial public offering to clients.

Another side of the litigation issue is that, as far as proceeds from legal action are concerned, huge and deep-pocketed investment banks make a much more attractive target than the companies themselves that benefited from the analysts' comments. Some of the latter, such as Enron, Global Crossing and WorldCom, have gone bankrupt anyway – and many of those that did not go bankrupt have burned their cash reserves.

Will the 28 April 2003 settlement lead to a more moral environment in investment banking? Its critics doubt it. They say that, overall, the outcome is less clean and much less satisfactory than the regulators seem to think and, to make matters muddier, it is still not clear what the investment banks have done wrong. Legally speaking, if the law was broken, then the ten banks, their management and their employees should have been prosecuted. On the other hand, if the law was not broken, then the fines and bans seem hard to justify. The puzzle is intensified by the fact that so far only one investment banker is facing criminal charges – and that in a separate investigation (see Chapter 10). These are among the main reasons why some of the experts on Wall Street think that

- the class actions have no punch and will dwindle, and
- there are too many legal uncertainties in the background to make a strong case.

Part of the problem confronting the class actions is that, when the events referred to took place, the law was not as biting as it is today. This has been instrumental in enabling banks and analysts to use dubious practices. Statistics presented to the US Congress during the hearings leading up to the Sarbanes–Oxley Act help to clarify how the analysts' behavior changed during the 1990s. As an example, the ratio of buy-to-sell recommendations by securities analysts employed by brokerage firms rose from 6:1 in 1991 to 100:1 in 2000 – a 16-fold increase.

During the 1990s, analysts appear to have moved from being skeptical or neutral in their stock recommendations to becoming cheerleaders for their bank's underwriting clients. Up to a point, the 28 April 2003 settlement responds to this conflict by seeking to insulate the securities analyst from the influence of underwriters. But it does not attempt a complete separation – which should have been the case.

This regrettable limitation contrasts with the Sarbanes–Oxley Act, which decrees a near-total divorce between auditing and consulting activities, in order to prevent the auditor from being bribed through lucrative consulting contracts. A very similar case exists between equities research and investment banking; hence the Sarbanes–Oxley separation principle should have been applied by the SEC.

Moreover, shareholders have not been truly convinced that the penalties and disgorgements changed the principles of corporate governance. They remember not just the cases of Jack Grubman and Henry Blodget, but also others – like that of a telecommunications analyst at Goldman Sachs who admitted that investment banking considerations meant he was unable to cut his investment rating on AT&T and WorldCom in August 2000. Yet share prices in this sector were falling steeply, and both entities performed

worse than the average. Another Goldman analyst, asked to list his three most important goals for 2000, had replied:

- Get more investment banking revenue.
- Get more investment banking revenue.
- Get more investment banking revenue.

There was also the case of a Morgan Stanley analyst's compensation for 2000, which rose by $8.7 million for reasons totally unrelated to an analyst's proper job. In the background of that sharp increase seem to have been deals he helped the bank obtain; such deals had more than doubled to $425 million. The huge snowfall of money came to him even though

- his performance as a sector analyst had deteriorated, and
- 2000 had been his 'worst stockpicking year in 15 years'.[15]

One of the findings in the aftermath of the scandals was that in August 2000, the head of European telecoms at Goldman told his US counterpart about an anomalous situation where most telecoms stocks were still on the bank's 'recommended list', its highest investment rating, while stock prices had been falling for 3–4 months. In the meantime shareholders were taken to the cleaners, as those with inside information unloaded their holdings; the average investor was left holding the bag.

Finally, critics of the fact that the SEC settlement was not that biting point out that, in the long run, it may even prove beneficial to the different firms. It would permit them to downsize their expensive and increasingly superfluous investment research arms, giving as a reason the separation of duties and responsibilities.

6. Challenges faced by JP Morgan Chase and other big banks

Overexposure in derivatives and a banking book with plenty of bad loans ensured that the two largest American banks, JP Morgan Chase and Citigroup, have been facing many challenges. In late September 2002, the rumor was that JP Morgan Chase was secretly taken over by the Federal Reserve to keep the risk of insolvency out of public view,[16] while the same rumor suggested that other big banks received a line of credit from the US Treasury, to calm some counterparties that were getting nervous.

This view of likelihood of insolvency among major institutions does not find general consent. Some analysts are of the opinion that US banks are generally solvent, their publicly disseminated balance sheets being the proof. Others, however, express the opinion that, for some of them, certain chapters in their balance sheets are smoke and mirrors, because in 2001/2002 big banks had posted billions of dollars of losses on companies like

Enron, WorldCom and others, and at the same time they also had huge hidden losses with derivatives, in terms of total recognized but not realized gains and losses.

JP Morgan Chase also had another particularity: that of overleveraging through derivative financial instruments. According to some estimates, as of the end of 2002, the credit institution had over $28.6 trillion in derivatives in notional principal while it featured just $207 billion in loans, nearly 1/139 the derivatives amount.

This ratio of huge exposure in derivatives for every dollar of loans, which has classically been a credit institution's main business, unsettled many experts. The more inquisitive also pointed out that JP Morgan Chase has more *credit derivatives* outstanding, to the tune of $278 billion, than it has loans. The figures quoted are widely in excess of Citigroup's $106 billion and Bank of America's $77 billion in credit derivatives.

What is more, towards the end of 2002, JP Morgan Chase was set to write off $1.4 billion in loans for the third quarter of 2002, while its overall trading revenue in July–August of that year was just $100 million, compared with $1.1 billion in the second quarter 2002. It therefore came as no surprise that its equity reflected this bad news, falling to $16.54 per share on 4 October well below the critical level of $20 – according to the acid test of dividing assets at market value, using capitalization as a proxy, by liabilities at book value.

Indeed, in early October 2002, JP Morgan Chase's market capitalization had fallen from a peak of $106.5 billion (in early 2001) to just $33 billion. This was a decline of 69 percent. Then, as if by the action of an invisible hand, between 5 October and 20 December the stock of JP Morgan Chase bounced back by nearly 50 percent.

This fed the theory of the *invisible hand*, which helped the equity of JP Morgan Chase. In a research meeting held in London in mid-November 2002, an executive of an independent rating agency commented that in what regards JP Morgan Chase stock price, 'Theoretically, the Fed might have found this the least expensive method to save the company from bankruptcy.' But nobody was really sure.

One of the reasons which was inconsistent with a rapid stock price rebound was the inordinate level of derivatives exposure of JP Morgan Chase. Because the amount is so huge in notional principal amount, a loss equivalent to just 0.16 percent of its derivatives portfolio would be enough to wipe out its $43 billion in stockholders' equity, making it insolvent by any standards – even if this notional principal is demodulated to the level of credit equivalent.[17] To begin with, the demodulator in a reasonably calm market is about 20, and might even go to 25. Counted in hard core derivatives losses terms, with a demodulator of 20 the aforementioned 0.16 percent change would become 3.2 percent – which is still very dangerous. But in the case of a market panic, the demodulator would drop to 5. This has been

the case with the South Korean banks in the crash of late 1997. At the time of its failure, the Bank of New England had a demodulator of 6. If the market is nervous and the divisor is 5, then this would leave Morgan Chase's threshold of insolvency due to derivatives losses at the level of a 0.8 percent change in the portfolio's value – which can be easily attained.

Compared to JP Morgan Chase, Citigroup and Bank of America, the next two US institutions in derivatives exposure have better ratios – though these, too, are too high. At the end of 2002, Citigroup had about $12 trillion in notional principal in derivatives, backed by stockholders' equity of $86 billion (double that of Morgan's). Bank of America had $12.5 trillion in derivatives. For the one as for the other, year to year the increase was of the order of 25 to 30 percent.

That Citigroup's management has been more proactive than that of Morgan Chase can also be seen by the fact that Citi was the first of several banks taking action in expectation of $1.4 billion settlement over research conflicts. In December 2002, it put aside $1.5 billion, including provisions to settle regulatory probes. Bank of America also announced setting aside $1.2 billion in reserves for the fourth quarter of 2002, but mainly for loans losses.

Still, some analysts commented that all these extra reserves may not ultimately be enough to cover the entire cost of settling private litigation – which is part of the financial industry's operational risk. In the 1990s, for instance, Prudential Securities ended up paying 300 percent over its originally estimated liability to settle regulatory charges and investor lawsuits – to the tune of $8 billion.

To appreciate this reference to operational risk exposure, it is appropriate to recall that banks collect fees from both sides when they underwrite bonds, equities and loans – and then sell them to institutional investors and their million retail clients. 'Conflicts of interest seem to permeate the bank from top to bottom,' says D. Quinn Mills, professor of Business at Harvard University.[18] Operational risk thrives under these conditions.

Clear-eyed managements try to rein in conflicts of interest by distancing the credit institution from scandals and by revamping its practices. At Citigroup, for example, in late 2002 Sanford I. Weill, then chairman and CEO, saw to it that the bank's structured-finance group, implicated in Enron's fall, no longer worked with companies that conceal off-balance-sheet deals. He also separated its research arm from the investment bank, and decided to expense options.

But the bank is not out of the woods, in spite of the delayed clean-up. Experts say that Citigroup has years ahead of it in court battles with investors over its dealings with Enron and WorldCom. And Citi is named in dozens of suits involving Jack Grubman's stock picks.

On Wall Street, some analysts suggest that in the worst case, the price tag could be as high as $10 billion, or about $1.30 per share, after taxes. Beyond that risk, Citigroup has huge exposure in Latin America and, through a policy

of subprime lending, it is one of the largest banks in lending to people with poor credit. Therefore, it would be hard hit if consumers started to default in big numbers, in case financial conditions in the US worsened.

7. Corporate governance and payouts at NYSE

In July 2003, the Council of Institutional Investors (CII), which represents 130 pension funds holding $3 trillion in assets, issued a critical report on the NYSE's corporate governance. The report noted that while the exchange has three constituencies – broker–dealers (its members), companies and investors – only the members can vote and choose board directors.

'As long as broker–dealers elect the board and pay the bills, how can there *not* be big conflicts in self-regulation?' asked Sarah Teslik, executive director of CII.[19] Implicit in this statement is that the other two NYSE constituencies are side-lined. They don't have clout in the management of the exchange, though without them the NYSE members would have no business.

As if to rub salt into the wound, a month after Teslik's query it was revealed that NYSE's chief, Richard A. Grasso, was paid a most extraordinary salary of $1.4 million and bonus of $1 million. To put Grasso's $1.4 million base salary in perspective: Federal Reserve Chairman Alan Greenspan makes about $172,000 per year, while William Donaldson, the chairman of SEC, earns $142,500 per year.

Grasso first found himself in a firestorm in May 2003 when reports surfaced that somehow he had earned up to $10 million in 2002. Critics said that while that may seem to be in line with the $11 million the average CEO running a Standard & Poor's 500 company earns annually, Richard Grasso is not the CEO of a big industry. He is an administrator.

The size of Grasso's payout stunned many. 'It's a big Tiger Woodsian number,' said John Challenger, CEO of outplacement firm Challenger Gray & Christmas. 'These kinds of outsized numbers seemed almost ordinary in the go-go 1990s. But in light of the bursting of the stock bubble and loss of shareholder wealth, they seem egregious.'[20]

In September 2003, the battle over Richard Grasso's princely pay package escalated, as Securities and Exchange Commission Chairman William Donaldson demanded to know why the NYSE board of directors extended Grasso's contract before an internal review of the Big Board's corporate governance procedures was completed. Other questions concerned the alleged earnings by Grasso of more than $12 million in each, in the past two years, and a statement by NYSE he was owed $140 million in deferred compensation. In particular, Donaldson wanted to know whether any money for Grasso's pay package came from funds that could have been used for the NYSE's regulatory program. 'It's a public service position,' says Charles Elson of the University of Delaware. 'It's like the head of the Fed

saying that "the economy did great this year because I cut interest rates, so I think I'll take a cut in the recovery".'

'This is the tipping point for the NYSE,' said shareholder activist Nell Minow, who, as editor of *The Corporate Library*, has been a frequent critic of Grasso and the NYSE. On 8 October 2003 the New York Stock Exchange rolled into yet another embarrassing row over the vast sums of money paid to other executives. Not only Grasso but also two operating officers were granted pay deals worth about $30 million each.

Robert Britz and Catherine Kinney, joint presidents and chief operating officers of the exchange, were forced to reveal their pay deals by angry stock-exchange members who believe that efforts to improve governance and openness at the NYSE were still lacking. The revelation follows the embarrassing public resignation of the exchange's chairman.

Another curiosity about these overgenerous gratifications was that Britz and Kinney were only appointed to the joint top jobs in January 2003, which has led NYSE members and board directors to demand to know how they accumulated such big pay and bonus packages in such a short time. The revelation has been doubly embarrassing for NYSE, as Robert Britz and Catherine Kinney were put in charge of running the exchange after Grasso's resignation – leading some people to suggest that at NYSE self-gratification in double-digit millions of dollars must be indeed high speed.

Outrageous pay and self-gratification have added to the string of scandals which hit business and industry in recent years – from Enron, to Global Crossing, Adelphia Communications, Tyco and WorldCom. As *The Economist* aptly noted, outrageous paychecks 'have revealed senior executives apparently plundering their companies with little regard to the interest of shareholders or other employees.'

In *The Economist*'s words, 'not only does it seem that bosses are being fed bigger carrots, but also if the stick is finally applied to their backside they walk away with yet another sack full of carrots to cushion the blow.' In this feature article NYSE's former boss Richard Grasso is taken as an example of a CEO who went from folk hero to a symbol of excess almost overnight, when it was revealed that he was due to receive $188 million in 'accumulative benefits'.[21]

Are the lack of management control and unwarranted management pay connected? After some of its big listed companies ran into deep trouble, the NYSE was disgraced as a weak regulator. The charge that it is also a big spender of money to gratify its own executives came over and above those regarding half-baked performance of regulatory duties. Richard Grasso's outrageous compensation is a telling anomaly.

8

US Household Debt, Freddie Mac and Fannie Mae

1. Introduction

The case studies we have followed in the preceding seven chapters have provided plenty of evidence that companies fail for not one, but several reasons. This evidence has made the point that the most frequent, and most basic, reason is mismanagement. In competition for No. 1 position is doubtful assets. Poor management is instrumental in damaging an institution's assets because of

- loans commitments made with non-creditworthy counterparties,
- overexposure assumed with derivative financial instruments, and
- other acts which are a combination of blurred objectives, gambling, overleveraging, low technology, and lack of risk control.

The main case study in this chapter concerns the Federal Home Mortgage Loan Corporation, better known as 'Freddie Mac'. It was established by the US Federal Government in 1970 (more on this in sections 3 and 4). In the 1990s, like so many other institutions which were supposed to be prudent, Freddie Mac overleveraged itself – and in the first years of the new century it went overboard with derivatives.

In 2003 the Federal Home Mortgage Loan Corporation came under fire for using, among other things, falsely valued derivatives. As a result, Freddie's share price plunged, two CEOs were fired within three months, and the Securities and Exchange Commission initiated investigations. Admitting that something went astray with its accounting, Freddie said it would restate its 2000 to 2002 financial statements.

The bad news about the financial health of the Federal Home Mortgage Loan Corporation broke out in June 2003, at a time when over 60 percent of US banks with less than $100 million in assets had invested more than 50 percent of their capital in Fannie Mae and Freddie Mac mortgage-backed securities (MBS). For banks with assets over $1 billion, this share stood at

20 percent. Counterparty rating is tricky; thanks to an implicit, but not explicit, government guarantee, the securities Freddie Mac issues have AAA rating. But scandals and huge derivatives exposure have rocked the agency's reputation, and a drop in the value of MBS could cause difficulties for banks, triggering a credit crunch.

Retail banks and other institutions investing in Freddie Mac MBS do not seem to have taken notice of the problem embedded in these instruments because of the woes through which their issuer had gone. Yet in 1936, the Office of the Controller of the Currency issued a rule prohibiting banks from buying bonds that were 'Distinctly or predominantly speculative'.

Banks and other investors who went for Freddie Mac MBS face both credit risk and market risk. At the origin of credit risk is the fact that the US government made it known that its guarantee of Freddie's securities was implicit, not explicit. An implicit guarantee would not have justified AAA rating. The market has also been upset by the fact that the firm has been fined $125 million for the accounting scandal, and admonished by its regulator.

At the junction of credit risk and market risk is a possible bust of the US housing market. Historical evidence suggests that as mortgage rates rise, real estate prices go into decline. As a result, homeowners who bought or refinanced in the early years of the twenty-first century may find themselves with mortgages that exceed the market values of their homes. As a result, experts project a wave of defaults and further declines in prices, which has the potential to wipe out some banks, mortgage companies and mortgage-backed securities.

To appreciate this type of overexposure to market volatility, it is appropriate to keep in mind that in the US, the UK and continental Europe disposable income does not grow as fast as private consumption, causing the household saving ratio to fall while the leverage of families and individuals is increased. Today, households' debt service stands at a high level, and this is likely to strain the market of securitized instruments – from mortgages to auto loans and credit-card receivables.

2. Appreciating household debt and its consequences

The growth of household debt and its consequences is a lesson in personal and family financial management. At the end of 2002, Americans had accumulated, instead of savings, an estimated $8.38 trillion in personal debt. A little less than three-quarters of this amount, to the tune of $6.04 trillion, is mortgage debt, while the balance is different types of consumer credit and other debits. Nationwide, these different types of liabilities correspond to $22,800 for every American household, whose servicing and repayment weigh heavily on the family's budget.

A similar statement is valid in connection with national debt, which is booming in all countries, and its consequences. Take France as an example.

Experts say that every euro the French Treasury collects in *personal* (not company) taxes goes to the servicing of the national debt. Most evidently, this is over and above personal and household debt. (Taken together, national debt and household debt make up the domestic debt exposure.)

It does not take two heads to appreciate the impact of household debt in servicing mortgage-backed securities. Credits given for house mortgages are relatively long term, and their servicing weighs a great deal. All counted, an estimated 20 million US households, mostly in the lower quartile by income, pay between 35 percent and half of their wages for debt service payment of home mortgage, car debt, credit-card debt, and other personal debt items.

- This debt keeps on piling up, with mortgages and credit-card debt rising fast, as Figure 8.1 shows in two successive patterns.
- Once personal debt crosses the threshold of being bearable, it can be serviced only by greater issuance of credit, thereby growing the bubble.

Indeed, in several Group of Ten countries household debt has become one of the major exposures facing our society in the first half of the twenty-first century. Should the persistent unemployment crisis trigger simultaneously a large number of company and personal bankruptcies, it may well detonate the highly leveraged $8.38 trillion household debt market, including its mortgages. In turn, this risks imploding the total US domestic debt exposure of an estimated $33.2 trillion, of which household debt amounts for about a quarter.

The impact of household debt is less pronounced when prices in the housing market rise, as has been the case in the last few years in America. Indeed, debtors often use the wealth effect of rising property prices to compensate for the *negative wealth* effect resulting from payments of auto loans and credit-card debt, or money lost on the stock market.

By contrast, when housing prices are falling, they aggravate the debtor's financial situation. Particularly in the UK and the US, where the downpayment represents a relatively small fraction of the real estate's price, there are many cases where what is still to be paid in mortgages exceeds the market value of the asset – and house-owners are left with plain negative net worth.

Interest rates, too, should attract attention. When interest rates drop, people tend to refinance their houses and keep some of the money aside for consumption. Refinancing has a positive effect on the housing market. One of the after-effects of the 2000–2003 period, when the equity markets crashed but interest rates were rock-bottom, is that the real estate market remained strong. The fast growth in mortgage debt performed a double function: financing the housing boom and providing cash for consumer spending, from cash-out refinancing. Like any other 'boom', that of housing can lead to a bubble, because a common characteristic of a bubble is excess leverage. That is precisely what the foregoing references intended to show. With the

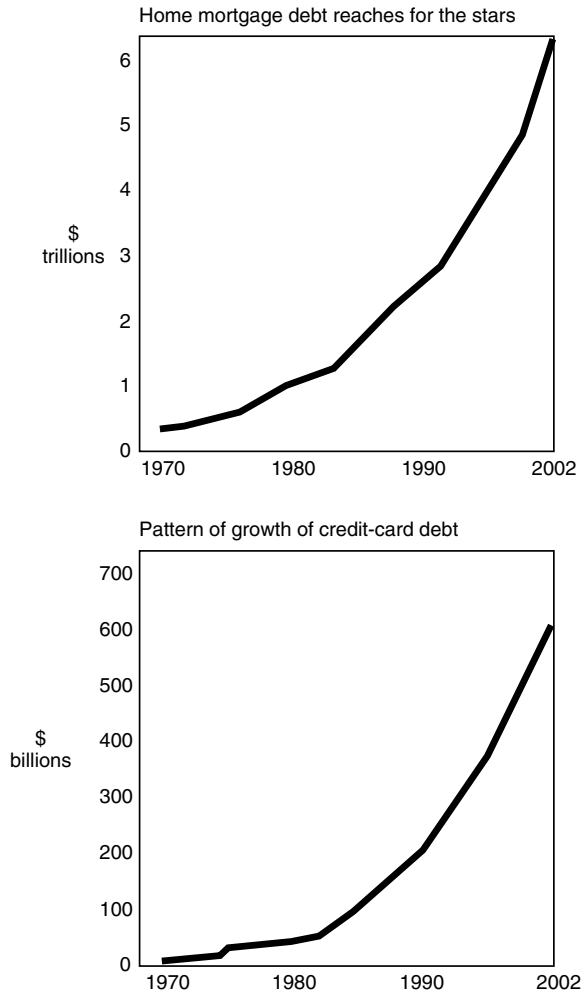

Figure 8.1 The two exponential curves of rising debt in the American economy

housing market substituting for stock-market jubilance, the dual question is: who has been helping the house mortgage bubble to flourish for so long? And, how well can this 'Who' afford to do so in the future?

Which assets provide a counterweight to the liabilities identified in the preceding paragraphs? Around the stock market's peak in 1999 to 2000, US households owned $10.9 trillion in real estate and over $17 trillion of

equities. On a historical basis, stocks were clearly overowned. More than three years later, in mid-2003, US households own almost $14 trillion of real estate and less than $10 trillion of equities.[1]

On paper, assets versus liabilities do not look so bad. The problem with such comparisons is, however, that part of the $14 trillion in real estate assets is the huge exposure in mortgages. Moreover, book value (accruals) is the basis for estimating the liabilities.[2] The non-productive strata in the population are greatly exposed to the consequences of debt. A case in point is American college students. Figure 8.2 shows the per head debt of freshmen, sophomore, junior and senior college students as 2002 came to a close. This is a negative dowry, mortgaging their future.

At the same time, the debt of elderly US households is climbing dramatically. In 1992, just 34.5 percent of households of 65-year-old people or older had debt obligations. In 2001, 58.8 percent were indebted.[3] Beyond this, during the decade of the 1990s up to year 2001,

- the average amount of debt owed nearly tripled from $8,000 to $23,000, and
- bankruptcies among the elderly increased, from 23,890 in 1991 to 82,200 in 2001.

All told, during the first three years of the twenty-first Century in America, domestic debt has been soaring. Household debt topped $8 trillion for the first time, while the net worth of households plunged by $1.4 trillion, mainly due to stock-market downturn. Not to be outdone, the credit-market debt rose $600 billion in the second quarter of 2002 to $29.8 trillion.

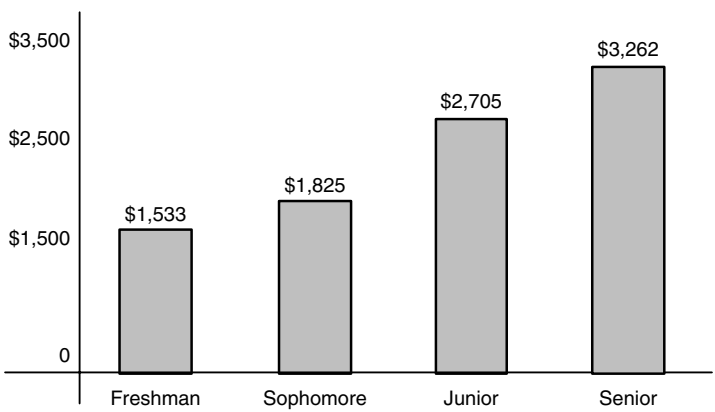

*Figure 8.2 The growing amount of college debt in 2002**
* Statistics by *USA Today*

By January 2002 net debt for American firms became twice as high as gross domestic product (GDP). Analysts noted that at the end of the last recession in 1992, debt was only 1.4 times as high as GDP. The same applies to private households, which contributed largely to the economic growth of the 1990s with debt-financed consumption.

In summary, the rise in private borrowing in recent years is shown in Figure 8.3. One cause for concern is that this structural imbalance has not yet been sufficiently corrected. And there is the possibility that a reduction in real wages might trigger a deep correction. The fact that real wages have fallen at the end of every previous recession, and at the time of writing we are not yet out of the tunnel, supports this hypothesis.

The synergy of rising debt and falling net worth is a very significant worry for regulators and for the market. Home mortgage foreclosures also hit a record in the second quarter of 2002, with nearly 640,000 homes affected. The good news is that this represents only 1.2 percent of total home mortgages outstanding. The bad news is that it was the highest foreclosure rate in the 30 years the Mortgage Bankers' Association has been keeping records.

3. Freddie Mac and Fannie Mae

Since 1995, the Federal Home Mortgage Loan Corporation and Federal National Mortgage Association ('Fannie Mae'), its big sister, have built a huge market for housing mortgages, now valued at $12 trillion. For some time, however, experts have been saying that this cannot be sustained, let alone continue to increase – super-leveraging the real estate market.

Are these experts right or wrong? It is not easy to obtain all the statistics one needs for an analytical approach to breeding risk, because there is a veil of secrecy behind which government-sponsored entities, like Freddie Mac, conduct much of their operations. This veil was pierced on 9 June 2003, when America's second-largest mortgage finance provider abruptly dismissed three of its top executives. Leland Brendsel, its chairman and chief executive, David Glenn, president and chief operating officer, and Vaughn Clarke, chief financial officer.

The dismissals took the market by surprise, if for no other reason than because they uncovered part of the secrecy in the entity's operations. Until then, Freddie Mac was supposed to be doing well. But if it was doing well, why did three executives have to go? The stated reason was apparent accounting irregularities. On Wall Street, analysts were of the opinion that such 'irregularities' had deeper roots, particularly as

- on 9 June 2003, the Securities and Exchange Commission announced that it had opened up an investigation of Freddie Mac, and
- on 11 June 2003, the US Attorney's Office of the Eastern District of Virginia, in Alexandria, announced it had initiated a criminal investigation involving the mortgage company.

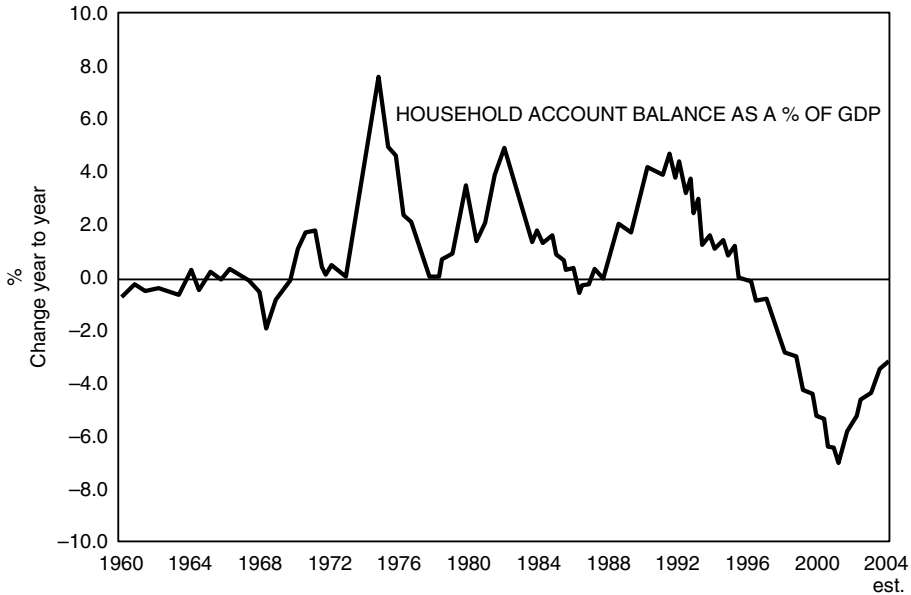

Figure 8.3 Rise and fall in US consumption from 1990 to 2004. The growth has been largely debt-financed

According to expert opinion, both investigations have the same root: the fear that a failure of Freddie Mac, in connection with mortgage derivatives and other speculative transactions involving mortgage refinancing, may trigger shock waves throughout the interconnected global financial system. The two investigations were interpreted as proactive action.

Since 9 June 2003, the bonds of both Freddie Mac and those of its big sister Fannie Mae have come under great pressure. Selling by European and Asian investors accelerated after rumors spread on markets in the second half of July 2003, that the European Central Bank (ECB) was liquidating its holdings of US agency debt, which lacks an explicit guarantee by the US government.

According to this information, or rather a rumor which spread like brushfire, the ECB has recommended the same sort of policy to all the eurozone national central banks. On 30 July 2003, Franklin Raines, Fannie Mae chairman and chief executive, described the ongoing events on the bond and mortgage market, in particular the rise of long-term interest rates, as a 100-year storm for the financial sector.

In the background of the market's worries lies the fact that Fannie Mae and Freddie Mac have bought up 44 percent of the entire mortgage debt of America from commercial banks. Most of it they have sold in the form of mortgage-backed securities to other banks (particularly the smaller ones), insurance companies, pensions funds and investment funds. Both Fannie and Freddie issue bonds in order to refinance their operations, and have engaged in multi-trillion-dollar high-risk derivatives contracts. Although Freddie Mac and Fannie Mae have sold their mortgage-backed securities to the banking industry and institutional investors for many years, and nobody complained, overloading and overleveraging seem to have reached the risk tolerance point, distinctly or predominantly speculative.

The Introduction drew attention to the fact that it is essentially the smaller banks that are particularly exposed to Freddie's and Fannie's mortgage-backed securities, and to the débâcle which might follow. This reference is most pertinent because, apart from the reasons exposed in the preceding paragraphs, in June 2003 Freddie Mac came under fire for using falsely valued derivatives to report too low profits in its 2000 to 2002 financial statements, keeping from public view a hefty amount of money – probably to cover foreseeable future shortfalls.

The result of all this has been significant market uncertainty. The fallout is widespread, because both Freddie and Fannie issue MBS on a large scale, and these now constitute half the treasury of smaller banks which are afraid that the AAA rating of such securities might topple overnight. If such event takes place, the after-effect would be a financial tsunami because MBS of Freddie and Fannie origin stand at an estimated $1.5 trillion. It is feared that a drop in the value of these securitized products could cause difficulties for

the banks holding them, and trigger a global credit crunch, as the financial sector runs for cover.

Astute analysts suggested that Freddie Mac's dismissal of three top managers went, by all evidence, well beyond managerial ineptitude. They said that the mortgage finance company had been, for some time, unable to value its increasingly complex portfolio of securities, which was growing by leaps and bounds. Besides mortgages, which were in Freddie Mac's charter, this portfolio included more than $1 trillion in derivatives and a very significant amount of specially structured notes.

According to people knowledgeable about the way the government-sponsored institution worked, many of these instruments were highly leveraged. Besides that, the 2003 sharp drop in interest rates also brought a wave of mortgage refinancing, which strained the mortgage finance company's overstretched resources. On all evidence, the stress which followed was greater than Freddie Mac had prepared for. The maturity structures of Freddie's assets and liabilities were misaligned.

A game of musical chairs has added to the market's nervousness because it has been interpreted to mean that the regulators know something the market does not. On Friday, 22 August 2003, Freddie Mac announced that it would comply with an order from its supervisory authority and remove CEO Gregory Parseghian and general counsel Maud Mater as a result of an ongoing accounting investigation by the Office of Federal Housing Enterprise Oversight (OFHEO).

Gregory Parseghian joined Freddie Mac in 1996, and he was promoted to CEO in June 2003, after the board forced CEO Leland Brendsel to retire while, at the same time, the company's president was fired and its chief financial officer resigned. Since then, Freddie Mac has admitted that it understated earnings by as much as $4.5 billion over three years, partly the result of a plan to sustain an image of steady growth for investors.

Furthermore, according to a more recent decision by the US federal regulator, former Freddie Mac CEO Leland Brendsel should forfeit some, and perhaps all, of his $53.7 million severance package. This reverses an earlier decision reached in June 2003, when Freddie Mac directors permitted Brendsel to retire in a management purge that followed the company's false earnings statements of the previous three years.

4. Financial troubles don't go away by denying them

In early June 2003, the market was full of rumors about Freddie, Fannie and their travails. As if to confirm the worries of financial experts, on 25 June 2003, Freddie Mac admitted that it would restate three years of earnings, 2000 to 2002, by as much as $4.5 billion. This announcement came in the aftermath of an investigation into its accounts, and it reflected poorly on Freddie Mac's

- past accounting,
- internal control, and
- financial disclosure practices.

'Management is aggressively addressing these issues,' said Gregory Parseghian, who at that time was the mortgage firm's new president and chief executive.[4] Analysts, however, noted that Freddie Mac was still under investigation by the Securities and Exchange Commission, and therefore new disclosures of creative accounting practices could not be excluded – particularly as it emerged that Freddie Mac's previous accountants were the defunct and infamous Arthur Andersen, and it had wrongly accounted for some hedging transactions.

Another surprise has been that government-sponsored organizations are not immune to creative accounting. Freddie Mac's woes came after so many tales of scandal in corporate America, which started in a big way with Enron and continued with some of the best-known corporate names: these sad stories of 2001 to 2003 had many common features:

- lavish executive pay;
- missing documents;
- uncooperative directors;
- evidence that internal controls were in chaos; and
- indications that financial figures reported by top management were wrong.

Freddie Mac's crisis raised concerns not only about the stability of the No. 2 US mortgage lender, but of the housing market as a whole. Derivative financial instruments, too, were looked at with some suspicion as Freddie Mac's derivatives holdings were improperly stated, according to what the institution itself said.

Practically nobody accepted the huge mortgage finance company's official version of the troubles: that all this was just an accounting error to be corrected by restatement; or that the replacement of its top brass would take care of future scams. Certainly the market did not like the excuse, as documented by the facts that:

- Freddie Mac's stock plunged 20 percent, wiping out almost $8 billion of the institution's market capitalization, and
- the company itself took the extraordinary step of buying back $10 billion of its financial paper on the open market, to give a message of financial staying power.

In New York, knowledgeable observers have been looking for far more serious problems hidden at Freddie Mac. An unnamed bank chairman told the 12 June 2003 *New York Post* that the Freddie Mac crisis 'sounds like the derivatives disaster that nearly wiped out everyone back in 1998.' That was

the time when the Long-Term Capital Management (LTCM) hedge fund collapsed.[5] Had it not been for the twelfth-hour salvage by the Fed of New York, it would have torn apart the global financial fabric.

Neither were the actions by SEC and the US Attorney's Office of the Eastern District of Virginia the only ones hitting the Federal Home Mortgage Loan Corp. Congress, too, announced that it would hold hearings on Freddie Mac's accounting. Not unexpectedly, the replacement of a major government-sponsored institution's three most senior executives, amid a probe into alleged accounting errors, has thrown the spotlight on the huge US mortgage securities market.

To appreciate what this means in the longer term, it is sufficient to recall that this is the world's largest credit market, with trillions of nominal securities. It is therefore understandable that the global market became nervous when, on 23 June 2003, the *New York Times* revealed that Freddie Mac was not alone in the bad news. Fannie Mae – which was established in the mid-1930s by the Roosevelt Administration, and is bigger than Freddie Mac – made no money in 2002 despite a reported $6.4 billion in 'core earnings', and $4.6 billion in earnings as measured by standard accounting rules. By all evidence, Fannie Mae underestimated how fast interest rates would decline and homeowners would refinance their mortgages. Therefore, it did not protect itself against the risk that some of its higher-yielding mortgages would be replaced by lower-yielding ones. Resulting losses evidently found their way into Fannie's income statements, and they will continue doing so over the next several years until that mistake is rectified. It is in fact a show of plain bad management that over the 2000 to 2003 timeframe, the shortfall is counted in several billion dollars between what Fannie Mae has reported as earnings and the actual change in the value of its net assets.

Analysts suggest that in Fannie Mae's case, the matter is not really one of breaking the accounting rules. It is plain failure of standard measures to capture the underlying economic reality embedded in the derivatives business, and effectively protect the company's bottom line. That applies to many other institutions as well, who lie about using derivatives for hedging while in reality they gamble.

Derivatives are a relatively easy way to create leverage and hide losses, but eventually comes the day of truth – as both Fannie Mae and Freddie Mac are now finding out. Other sectors of the US economy also fell into the same trap.

5. Government-sponsored entities need rigorous supervision

On Wall Street, analysts characterized as an unacceptable quirk of financial history the fact that government-sponsored organizations, which operate with *de facto* public guarantees and therefore lower borrowing costs, are also covered by government-sanctioned secrecy. The two together – public guarantees and a blanket of secrecy – are unwarranted advantages which

carry with them the seeds of a financial crises, and are compounded by an ultra-light regulatory structure.

Today, reporting requirements for government-sponsored entities are generous, to say the least, and although both Fannie Mae and Freddie Mac promised, in 2002, to file quarterly reports with the SEC, only Fannie Mae did so. The two agencies' special regulator, the Office of Federal Housing Enterprise Oversight, seems to lack the resources to do the examiner's job, and even when it moves it is being silenced (more on this later). As a result, Fannie and Freddie now represent a regulatory black hole in the US financial system. They are government-backed but publicly held, and operating without appropriate oversight. These two points also help to explain why rivals want government-sponsored institutions to meet the same capital standards as banks, to level the playing field in terms of risk and reward. For instance, by law, Fannie and Freddie must hold in reserve at least 2.5 percent of their on-balance-sheet assets, versus the 4 percent banks must hold against their home loans. This gives the government-sponsored entities a distinct advantage. Freddie and Fannie answer that banks engage in a broad array of loans, some of which are riskier than mortgages. This is hypothetical, however, because with derivatives the two agencies themselves assume an inordinate amount of exposure.

Fannie and Freddie also try to deflect efforts to limit their investment portfolios. Critics say their combined $1.6 trillion of investments makes them more like hedge funds with an implicit 'government safety net'. Fannie and Freddie, which get the majority of their profits from such extracurricular activities, insist their risk is well managed by hedging. But if it is so well managed, how does it happen that Freddie Mac has now to restate three years' worth of earnings?

One can better appreciate the escalation of the troubles which led to Freddie Mac's public disclosure by taking a look at what took place at the beginning of 2003. At the behest of its new certified public accountant, PricewaterhouseCoopers, which replaced Arthur Andersen, the previous accountants, Freddie Mac launched a review of its financial statements dating back to 2000. At issue has been the manner by which the entity had stated its derivatives portfolio, reportedly understating derivatives profits during good years, and overstating derivatives profits during bad years. According to unofficial reports, David Glenn, then president and CEO of Freddie Mac, kept a diary/journal. The institution's audit committee had asked to see it, but Glenn allegedly ripped out some pages and altered others, before handing the diaries over to an independent counsel hired by the company's audit committee.[6] Experts suggest that the reason for this curious sort of double bookkeeping is that, over the last few years, Freddie Mac has been aggressively using derivatives to beef up its earnings and prevent the US housing bubble from bursting. *Post mortem*, on Wall Street, this is seen as a main reason for Freddie's current troubles. Existing evidence also suggests that, with some delay, the

supervisory authority became aware of brewing financial troubles, but being understaffed, and a lightweight among US regulators, it could not take action.

As mentioned in section 4, the government agency responsible for Freddie Mac and Fannie Mae is the Office of Federal Housing Enterprise Oversight, of the Department of Housing and Urban Development. On about 4 June 2003, OFHEO seems to have known of the pending management shake-up at Freddie Mac. A few days later, on 7 June, Armando Falcon, OFHEO's director, released a most interesting statement.

Falcon essentially said that he had become increasingly concerned about evidence that had come to light of weakness in controls and personnel expertise in accounting areas, also about disclosure of misconduct on the part of Freddie Mac employees. The statement further implied that removal of members of the management team went only part of the way toward correcting serious problems – while concerns surrounding management practices and control remained. OFHEO deployed a special team to investigate different aspects of the issues surrounding the re-audit that revealed deficiencies in accounting practices and internal controls. Published information also indicated that on 4 February 2003, four full months before the troubles broke out, Falcon and OFHEO released a 115-page report, entitled 'Systemic Risk: Fannie Mae, Freddie Mac and the Role of OFHEO.' In this, the supervisors stated that a severe crisis could cause Fannie Mae and Freddie Mac to default on debt, and such a default 'could lead to contagious illiquidity in the market for those (debt) securities, causing or worsening liquidity problems at other financial institutions . . . (and) potentially leading to a systemic event.'[7]

The size of Freddie Mac's exposure, discussed in the previous sections, reveals why a wave of liquidity problems hitting other institutions is a distinct possibility in the case of Freddie's failure. The mortgage institution's troubles also brought to light that in all likelihood this is one of the most indebted companies in the world. Such exposure is a long way from its original objectives, particularly those which characterized Fannie Mae. But Fannie also seems to have its own problems to worry about.

A brief historical review would help to demonstrate where extracurricular activities can lead. The Federal National Mortgage Association was established in 1938 based on the 1934 housing legislation sponsored by the Roosevelt Administration. Its purpose was to give the market confidence about mortgage loans, at a time when housing was depressed and many home mortgage lending institutions were still nervous about financing new mortgages. The process put in motion can be briefly summarized:

- A mortgage lender who had just issued a new mortgage to a homeowner could sell that mortgage to Fannie Mae for cash.
- The lender would then use that cash to make another new mortgage, which could be sold to Fannie Mae, and so on.

The institution of Federal Home Mortgage Loan Corporation is more recent, but it follows the same operational logic. Since 1970, its goal, too, has been to provide liquidity to the housing market. However, beginning in the early 1980s, and at an accelerating pace since 1995, Fannie and Freddie have been used to allow mortgage lending institutions to make mortgages to finance home purchases priced up to the conventional loan limit, which is now $310,000 – enlarging by so much their market.

It was stated in section 2 that millions of American families now spend 35 to 50 percent of their annual income on mortgage payments and other debits. But there is a limit on their ability to pay, even if until the day of reckoning comes, few people truly realize that debts have to be repaid. Neither do people really appreciate that the more debt lingers on, the worse it becomes.

- When it is rolled over, debt deteriorates the financial standing of those who take loans.
- It also contributes to exposure of financial institutions because bad loans can accumulate very fast.

All this means that strains are created in the banking system and, as far as mortgages are concerned, these strains land on Freddie Mac's and Fannie Mae's doorstep. The two government-sponsored institutions contribute to the process by seeing to it that the booming mortgage debt is getting recycled, and heads back to the market through corporate bonds issued by Freddie Mac and Fannie Mae, and mortgage-backed securities, in which Freddie and Fannie put a guarantee, repackaging them for sale.

When these operations get highly leveraged, or there are problems in the housing market, the way is open to systemic risk. Moreover, the buyers of these debt securities are typically institutional investors: insurance companies, pension funds, retail banks and so on. MBS are derivatives instruments. Entities buying them are adding them to other derivatives in their institutional investors' portfolio.

Finally, it is advisable to take note that there are other institutions that perform similar functions. An example is the Federal Home Loan Bank Board, which possesses $900 billion in mortgage exposure, in addition to the estimated $4.80 trillion Fannie and Freddie already have, bringing the estimated total of housing-related bubble to $5.70 trillion. To this amount should be added non-recycled home mortgages in the United States, whose total represents another $6.22 trillion. The grand sum of $12 trillion is more than the US gross domestic product (GDP).

6. Who might be the lender of last resort?

The troubles which hit the Federal Home Loan Mortgage Association are not novel; and neither should they have been totally unexpected. Financial

history teaches that institutions behave wisely only after they have exhausted all other alternatives. Freddie Mac most likely thought it still had the alternative of ample and explicit government support.

In the climate of the early twenty-first century, other financial institutions, too, which thought they were unsinkable found themselves in deep trouble. For instance, Capital One was America's sixth-largest credit-card company, with $9.2 billion in revenues in 2002, and 20 percent or more annual profit growth since 1994.

- Using models and sophisticated datamining, Capital One experimented on rates, fees and conditions for each customer, and,
- based on advanced information technology, for many years it managed to have one of the industry's lowest levels of bad loans.

Capital One's charge-off rate, a key indicator of credit-card company performance, was only 4.36 percent in the second quarter of 2002 versus a weighted averaged of 6.25 percent for the top ten US card issuers. But then came the drift. Bad news hit the industry and rivals in the high-risk, subprime credit-card market, like Providian Financial, Metris and NextCard, ran into trouble.

At first, this was good news for Capital One, which took over many of its rivals' customers. The downside was that charge-offs, too, were on the rise: they hit 4.96 percent in the third quarter of 2002, with a forecast they may reach the high 6 percent range before receding. Another piece of bad news was that the Federal Financial Institutions Examination Council (FFIEC), a coalition of banking regulators, started to crack down on late fees and over-the-limit charges.

In the aftermath, on subprime accounts, balances rose even when customers made the minimum payment – and in 2002 card rates for subprime borrowers were 15.9 percent versus 8.9 percent for better-credit people. All these pieces of the mosaic turned Capital One's modeling, and the company's fortune on its head, in a way not unlike what went on with Freddie Mac after the government-sponsored institution overleveraged itself with mortgage handling obligations and derivative financial instruments.

It is by no means impossible for companies which act as the new financial intermediaries to fail. The National Century Financial Enterprises (NCFE) was a factoring service. Its business was that of advancing cash to hospitals, physicians and other healthcare people or facilities in exchange for their receivables. The latter essentially amounted to the delayed payments made by insurance companies and government agencies for patients' treatment.

Similarly to the intermediary's work done by Freddie Mac and Fannie Mae, NCFE would integrate these receivables into pools to be securitized. The *asset-backed securities* (ABS) were sold to institutional investors and the public. By the end of 2002, there were more than $1.5 trillion in asset-backed securities outstanding, according to the Bond Market Association.

NCFE was the largest entity of its type in the US, acting both as a factoring service and as a securitizer. In factoring, NCFE was a discounter of assets and at the same time a channel loaning money to hospitals, nursing homes and other medical facilities, helping them get through the period between when they provide and bill a service, and when they get reimbursed for that service by an insurance company or government agency. The downside is that the more slowly health services receive their payments, the weaker becomes their financial condition. This can have serious consequences, because health maintenance organizations are notorious for delaying reimbursements. In essence, it was the health management organizations (HMOs) which created the opening for NCFE and other similar entities to step in and fill the time gap. More than 100 clients had signed up for NCFE's services, with the company buying $15 billion in receivables and issuing $6 billion in asset-backed securities since its founding in 1991.

Among the major clients for its bonds were PIMCO, the largest global bond fund, a subsidiary of Germany's Allianz; Alliance Capital Management, a subsidiary of French insurance company AXA; and ING, the Dutch insurance/banking entity. Other institutional investors, too, were willing buyers of NCFE's securitized products. The company's troubles were not due to lack of clients.

Neither are there reasons to believe that NCFE faced liquidity problems, as it was partly owned by big banks. JP Morgan Chase controlled 16 percent of the company through its Beacon Group III private equity fund. Moreover, Morgan Chase and Bank One were trustees for NCFE's bond trusts, the bonds themselves being underwritten by Crédit Suisse First Boston.

The conclusion is therefore inescapable that, as in the case of Freddie Mac, the reasons for NCFE's descent into the abyss would be found in corporate governance. In all likelihood, the problems accumulated over a number of years – and lack of supervision made them worse.

As a private company, NCFE was not required to make public filings with the Securities and Exchange Commission. This is a problem which confronts many companies characterized by lack of regulation. Eventually life catches up with them. When NCFE went bankrupt, its collapse put in peril medical providers and healthcare institutions which lost their channel of discounting receivables, though other factoring companies did move in to fill the gap.

Let's hypothesize that Freddie Mac finds itself in NCFE's shoes. What would be the options of the government in trying to handle such a hot potato? Different scenarios come to mind, but not to close Freddie down; this does not seem feasible. The more likely scenario is salvage through taxpayers' money.

One possibility is a modified version of the solution applied with the savings and loans scandal in the late 1980s/early 1990s. This would mean another Resolution Trust Corporation (RTC) with the mission of damage control. There is also the Long-Term Capital Management (LTCM) scenario of September 1998, when the Federal Reserve of New York practically forced

the big lenders and shareholders of LTCM to put in more money in order to salvage the institution (and their own investments). In Freddie's case this, too, would amount to pouring in taxpayers' money since the entity's owner is the federal government.

Another alternative is the Bank of New England (BNE) model. The Fed of Boston took it over, changed the BNE's management, put in taxpayers' money, ran it for a year (1990), and then, when the bank's $36 billion in derivatives was reduced to their toxic waste of $6 billion, quietly closed the BNE down. Similar to this example was the nationalization and subsequent sale to the Bank of America of Continental Illinois.

If taxpayers' money is not on the table, then the government may look for foreign institutions eager to enter the American financial market, or to improve their position in America. Some foreign entities look positively on wounded US institutions. For instance, in mid-November 2002 HSBC consolidated its position in the US by purchasing a lender that had been fined $484 million for aggressive practices a month earlier. That deal valued Household International at $14 billion, and it came as the American firm was facing large increases in the costs of raising money because of an investigation into its sales techniques.

The purchase of Household International gave HSBC a firmer base in the US market, nearly balancing its revenue from Asia, Europe and North America. Note that Household International specialized in lending to people with a poor credit history, the so-called subprime credit. But though this was a good-size company, it was not Freddie Mac level – which if it is too big to fail, is also too big to be swallowed in one gulp.

Let's examine another scenario, after providing some background. One of the tough problems the Federal Reserve faced at the start of the decade of the 1990s was that many of the US banks were in big trouble. Bad loans, especially those made in Latin America and in real estate, were at the origin of the woes, with the result that some of the large commercial banks were on the verge of default.

Citibank, which in the mid-1980s was the biggest and most powerful bank in the world, was not far from collapse.[8] Regulators were evidently uneasy. The Federal Deposit Insurance Corporation (FDIC) examined Citibank and on its grading scale gave it a 4. This was just one notch above 5, which in FDIC jargon indicates complete insolvency.

At the end of November 1990, Gerald Corrigan, then president of the New York Fed, met with John Reed, then relatively new Citibank CEO, to discuss the commercial bank's losses. Reed spoke of a loss on the $2 billion to $3 billion level, but according to Corrigan's opinion the Figure was rather $5 billion to $6 billion. This meant that Citi had to get busy to raise $5 billion in capital within a short time and in a tight market.

The *Deus ex machina* was Prince Alwaleed bin Talal of Saudi Arabia, who already owned Citibank stock. He was willing to invest another $1.2 billion,

which would give him about 14 percent of Citibank equity and make him the largest single stockholder. All hinged on conditions, and to clear this matter Corrigan went to Saudi Arabia for a secret meeting with bin Talal, where he laid out the rules.

From what has emerged, Rule No. 1 was that the rich Saudi prince had to understand that he was a passive investor and, as such, had to agree to a list of restrictions. He was to make no attempt to influence the bank's management, must not try to take over the bank, or change the dividend, loan or credit decisions of the board. Corrigan made it clear that he would not look kindly on any infringement, and in his role as president of the New York Fed, he would learn if there were any such attempts.

One might think that both in the Citibank/1990 and Freddie Mac/2003 cases, finding ready cash is a milestone. In Citibank's case, the other milestone was up to the Federal Reserve to reach: bringing down the short-term Fed funds rate and keeping it low. As we know today with certainty, this policy on interest rates of the early 1990s enabled many US banks which had brought themselves to the edge of the abyss to borrow at low rates and capitalize on a larger spread between short-term rates and the long-term rates at which they had already made loans to customers.

It is one of Freddie Mac's misfortunes that in 2003, in an effort to jump-start the US economy, the Fed implemented a policy of very low interest rates – way below the 3 percent which prevailed in the early 1990s. Just for the record, this low interest rates policy by the Fed at the 3 percent level, lasted until early 1994. By then the US commercial banks had been recovering, credit was easing, confidence had returned and businesses could get loans. The system had been *liquefied*, as Dr Alan Greenspan liked to say, and there were discussions of the possibility that the Fed could take some pre-emptive action to increase interest rates months before the fear of inflation turned into market fever. It was felt that a pre-emptive action could engineer a soft landing, which would take the top off the coming burst of activity, thus preventing inflation and a subsequent recession.

This hypothesis proved to be correct, but six successive interest rate hikes in 1994 amounted to an earthquake in the overleveraged bond market – and some big hedge funds went to the wall. The rest is history.

9

Japan Premium: A Case Study on the Rout of Japanese Banks

1. Introduction

In a way that parallels the rebirth of West Germany from the ruins of World War II, the hard-working Japanese saw to it that their economy had a spectacular recovery which spanned the better part of two decades: 1945 to 1965. Then started a new phase, which has lasted roughly a quarter of a century: 1965 to 1989, characterized by world expansion of Japanese entities, in finance as well as in manufacturing and trading.

What is curious about this global expansion, which has been rapid and far-reaching, is that nobody, including the mighty Japanese Ministry of Finance (MOF) and Ministry of International Trade (MITI), foresaw the bending of the curve which is unavoidable after a long period of unsustainable high leverage. It was as if the Japanese financial institutions were deliberately repeating the mistake made by the Japanese Army and Navy in World War II through rapid expansion over Southeast Asia and the Pacific, by overplaying available resources and failing to keep appropriate reserves to face adversity.

In 1989, at the high-water mark of the Japanese banks' brief rise to world power, at least in terms of loans and capitalization, they had some $400 billion in paper profits. Fourteen years later, several big Japanese banks had failed, while practically all the others were on the sick list, suffering severe asset quality problems and trying through mergers to find a way out. The M&A trick did not work, in spite of overt and covert huge financial aid by successive Japanese governments.

In fact, Japan's whole economy is in a mess – not just its banking and insurance sectors. With some minor exceptions, quarter after quarter Japan's economy has contracted, compared with the previous quarter. In just one year, 2001, its gross domestic product (GDP) shrank by 3.2 percent. In the end, nothing was really gained from the global industrial and financial expansion; nor has the successive government stimulus, financed through deficit spending, been able to resurrect business confidence.

In the aftermath of overleveraging on a global scale, the Japanese economy does not seem to be waking from a decade-and-a-half-long coma. If anything, the worsening situation has led to threats from independent rating agencies to downgrade Japan's debt rating because of worries that the country's leaders, who proved unable to turn the situation around, would continue on the same track.

The world's second-largest economy, and the only member of the Group of Seven (G-7) in East Asia, remains mired in a relentless downward spiral. This is sucking in the rest of the regional economies, because Japan is the largest or second-largest trading partner of most other Asian nations. The critical problems are that:

- Japan is enmeshed in a poorly managed, ever-growing trap of bad debt, and
- its overleveraged banking sector is on a rout, while mergers worsen the banking book and trading book of the resulting entities.

Analysts have been saying since the late 1990s that bad loans of Japanese banks total more than $1 trillion. This figure tends to grow year after year. Only at the end of the first quarter of 2001 did Tokyo officially admit that it was burdened with approximately $1.3 trillion in unpayable bad debt, which represented 22 percent of total lending in Japan. Even if this figure were true, and there are reasons to believe the sum of bad loans is much higher, it was four times the size of earlier official admissions.

The result of more than a decade of unsuccessful government stimulus programs and bank bailouts, which already cost the taxpayers many hundreds of trillions of yen, has been an uncontrollable increase in public debt, which will burden future generations for several decades. Japan's public-sector debt is by now well in excess of 160 percent of its annual GDP of about $5 trillion, and it is still growing. This is an unheard-of level for a major industrial nation.

The case studies in this chapter are so interesting because Japan's meltdown is an example of what happens to old-economy companies that espouse the leverage of the new economy without establishing *a priori* a rigorous system of limits and controls. Propelled by hard work and free spending but devoid of rigorous risk management, Japan's economy, its industries and its financial institutions nearly conquered the world. The bill of overexpansion in the 1970s and 1980s, however, had to be paid, and this led to the decade-and-a-half-long crisis as well as to the downgrading of credit.

In short, the Japanese repeated Pearl Harbor but this time they bombed themselves. They also emulated all the mistakes they have made in World War II in terms of overexpansion and lack of reserves. That's why the study of the rise and fall of Japan Inc. makes sad but interesting reading. It is a predictor of things to come with hedge funds, funds of funds and alternative investments in other parts of the world.

2. High leveraging led to collapse of the Japanese economy

If one needs proof about the lasting evils of overleverage, Japan provides it. The same is also valid regarding the results of an uncertain boast at senior management level. For instance, in mid-August 2001, the then Bank of Japan governor Masaru Hayami delivered a powerful blow against his own policy by stating in a press conference: 'Funds will be eased . . . but whether it will lead to prices rising, I do not know . . . we have done everything we could do at this point.'

This is not the sort of statement anybody managing money, and most particularly with the nation's whole capital at risk, should make public in these troubled times. Its wording suggested not only deep-rooted policy mishandling, but also possibly something much more dangerous: the second most powerful central banker on earth seriously doubts that his action is effective. Indirectly this is like admitting that regulatory activity is futile and, in consequence, it cannot be trusted.

Unfortunately for Japan, two full years of events which followed this 2001 statement proved that Hayami was right in his judgment of ineffective measures. Since current policies cannot be trusted in salvaging the Japanese banking system from the precipice to which it led itself, Japan's banks are struggling with low ratios of assets to liabilities – which means at the edge of chaos (see in Chapter 4 the case study on Mizuho and Resona).

It is not difficult to appreciate that this situation has many consequences, one of them being that Japanese banks are less willing to make loans than they have been in the past. The Japanese banking system is no longer working as it should. Despite legislative action intended to help the different banks, their loan activity is actually still declining: because no turnaround has occurred as yet, the country remains in a credit crunch, and nothing has happened so far that would significantly improve liquidity, which is Japan's ultimate problem.

All this is in huge contrast to practices in the past. Back in the 1980s, Japan's banks lent recklessly, with the result that they needed a $65 billion bailout in the 1990s, and more bailouts in the twenty-first century. But even this huge amount of handouts did not cleanup their books and bring back confidence. The problem of the Japanese banking system is disintermediation, and there is proof that *disintermediation feeds on itself*. How did a great industrial and trading nation reach that level?

Characteristically, even the better ones of the different government stimulus programs have only worked for a very short period of time. Having learned little or nothing from the 1989–91 crash and their early failures, Japanese governments passed on bills in trillions of yen, which allowed them to nationalize bankrupt or insolvent banks and up to a point reorganize them. In addition, the country's parliament authorized more and more trillions of yen in fiscal stimulus, but this desperate effort to jump-start the

Japanese economy in its worst depression since the late 1920s ended in nothing.

By the end of 1998, the failure to turn around the Japanese economy made the independent rating agencies nervous. As that year came to a close, Moody's Investors Service announced that it had downgraded the credit standing of Japan, the world's No. 2 industrial nation, from AAA (the highest possible), to AA level. The years that followed proved that Moody's, and the other independent rating agencies, were justified in their skepticism about a Japanese recovery.

The 1998 downgrading of sovereign debt led to the now classical *Japan premium* paid by Japanese financial institutions for their loans contracted in the global financial market. Credit risk has a price, and sometimes it has a higher price than seems to be the case at first sight. It is, however, highly unusual for a major G-7 country to see its credit risk slide, let alone for a country which is the world's largest net creditor, and holds the world's largest foreign currency reserves.

Justifying its now-seminal 1998 decision on downgrading, Moody's said that it acted because of the uncertainties and heightened risks over the long term arising from economic and policy weaknesses. These have led to significant deterioration in the Japanese government's fiscal position. Measures which the rating agencies considered to be half-baked have been unable to avert the collapse of the country's financial system.

As stated in the Introduction, including some large untuned state pension and other public liabilities, Japan's public debt level now stands above 160 percent of gross domestic product. This is indeed a huge amount for a rich country of 120 million people; it is also a long way from a deficit of 60 percent or so, which characterized the Japanese economy before the country's bubble burst. Wasting 100 percent of GDP in a dozen years, since the beginning of the 'stimulus program', means wasting 8 percent of GDP per year for no results. Even a blind person with sunglasses can see that such a policy is a total waste, and those pursuing it are guilty of *economic treason*.

There are of course contrary opinions about this. Defenders of the Japanese government's policy point out that the country's bond market has been quite strong, with the state able to sell its debt despite the meager return it offers on ten-year Japanese government bonds (JGBs). However, according to informed sources,

- more than 60 percent of Japan's government bonds issued are being bought by the government itself through proxies.
- This is reminiscent of the covert support to the Japanese stock market given by the government, with the MOF inciting insurance companies and other institutions to buy equities – a policy which led to the bubble.

The Ministry of Finance's Trust Fund Bureau and the government's Postal Savings Bank (KAMPO) are among the entities taking the lion's share of new

government bonds in this replay of the stock-market bubble, with bonds rather than equities. KAMPO is using its more than $2 trillion in deposits to pump up the state's borrowing. Totally forgotten is the fact that in the past this policy by Japanese insurance companies, in support of the crumbling stock market, backfired and brought the Japanese insurance industry to its knees.

When in 1998 the Japanese government started pouring depositors, money entrusted to the postal system into its own coffers, financial analysts estimated that the Postal Savings Bank would lose up to 45 percent of its $2 trillion in deposits in the coming couple of years when special ten-year high-interest deposit accounts were by law due to expire. This has indeed been the case, and it is a sort of covert taxation hitting the Japanese public at large and, most particularly, KAMPO's depositors.

Not to be left behind in bad decisions, another buyer of generally unexciting Japanese government bonds has been the insurance companies, which themselves are in trouble because of their past unwise investments – but also as a result of *mismatch risk*. Let's remember that, fraud aside, mismatch risk brought down the American Savings and Loans in the late 1980s. Most Japanese life insurers have sold insurance policies or life annuities which guaranteed policyholders returns of 4 percent. But with the chronically depressed stock market and the extremely low interest rates paid to hold government bonds, the Japanese insurers have earned less than 2 percent on their investments. Since late 1998 there have been rumors that the solvency crisis in Japan's $10 trillion life insurance sector was the next financial bubble to burst.

Moreover, as one catastrophe never comes alone, many Japanese municipal governments, too, have been on the verge of bankruptcy. Tax revenue shortfalls for Japanese municipalities are estimated to stand in the $230 to $260 billion range, which is deep red for them. The pending meltdown is compound by the fact that, by law, Japanese cities are prevented from paying out annually, in debt service costs, more than 20 percent of their budget, and local governments have floated many trillions of yen in municipal bonds after 1989–91.

The long list of woes because of poor financial management does not end there. With roadworks propelled by taxpayers' money, in the name of refloating the economy, Japan's four big state-road corporations now feature some ¥40 trillion ($360 billion) of debts between them. To make matters worse, there is a scandal involving the Japan Highway Public Corporation (JH), the biggest of the road construction firms.

- In June 2003, JH stated that it had a capital surplus of ¥5.7 trillion ($50.1 billion).
- Shortly afterwards, it revealed a separate set of unofficial accounts, which showed a ¥617 billion ($5.55 billion) capital *deficit*.

Haruho Fukui, the president of JH, quickly denied such a deep black hole in his company's finances. But several weeks earlier, JH 'found' secret liabilities accounts in a computer file in its accounting division, though these, it insisted, were drawn up by a handful of rank-and-file members and were not seen by senior executives(!).

Another interesting revelation was that JH curiously counted interest payments on loans used to build new roads as assets, while its president claimed the corporation did not have a full set of records to show how much it paid for earlier projects. Subsequently, these lost records, too, seem to have turned up.

The company also has among the skeletons in its closet a long list of unprofitable projects, such as a tunnel underneath Tokyo Bay, which loses some ¥100 million per day. According to Kozo Ogata, head of the Japan Toll Road Research Center, who worked at JH for 30 years, the company has built highways which see so little traffic that they do not get enough tolls to cover the cost of collection.[1] This, indeed, breaks all records in mismanagement.

3. A bird's-eye view of the status of Japanese banks in 2003

The pessimistic view expressed in section 2 is based on the fact the financial hurdles which have in the 1990s, and the first years of the twenty-first century, hit Japanese credit institutions as well as the economy as a whole, are far from over. Japan's banks, particularly the mega-banks formed by an irrational wave of recent mergers, hold colossal portfolios of increasingly questionable government bonds and highly risky derivative financial instruments.

Analysts are giving warning that a steep rise in bond prices could deliver a damaging blow. One of the analysts' key concerns is that if the rise in Japanese government bond yields continues beyond the 0.75 percent level, Japan's banks, along with other investors, will have to absorb substantial losses on their holdings. Financial results released after the end of fiscal 2002 (on 31 March 2003) revealed that, between them, Japanese financial institutions in the private sector owned more than 180 trillion yen ($1.62 trillion) in JGBs.

- With a bonds bust, regional banks like Daishi, Nishi-Nippon, Chiba Bank and about twenty others, with less operational strength, could be left in very bad shape indeed.
- This possibility is over and above the fact that banks such as Mizuho, UFJ and Sumitomo Mitsui Financial Group (MTFG), three of the five largest, have already taken huge hits from the plunge of the Japanese stock market.

Contrarians would say that things have changed for the better during 2003. They might point to the fact that shares of Mizuho jumped by a third in late September/early October 2003 to a level five times their record low of

April 2003. The equity price of the other big Japanese city banks also rose. Even Resona, the smallest of the top five, which received ¥2 trillion ($18 billion) from the government in May – and still lost ¥1 trillion from May to September – has seen its price triple since the bailout.

The doubt of a real recovery of the Japanese banking sector rests precisely on the two words: 'even Resona'. The big Japanese banks say that the mild economic upturn has helped them to stem the flow of bad loans, and the improved economy helps their finances, but

- as of the end of 2003, Japan's economic environment remains weak,
- land prices are still falling, bankruptcies remain high, banking books are full of bad loans, and
- the country's banks have merely moved back from deep crisis in March 2003 to a simpler crisis.

Because the Japanese small and medium enterprises, which account for 70 percent of the banks, loans, are still in the long recession tunnel and competition is fierce, Japanese banks are charging too little interest to cover the risk they are assuming. Moreover, much of the Japanese banks' recent reduction in bad debts is accounted for either by forgiving some loans to big firms, or by extending to them another unwarranted line of credit so that they can pay the interest on bad loans.

There are also issues of a criminal nature haunting some Japanese banks – precisely those that have been the subject of police investigations. When prosecutors raided Ishikawa Bank, a regional bank in central Japan, after it collapsed in December 2001, they uncovered a trail of illegal loans and cover-ups. Two former presidents, one manager and a former customer have since been indicted, and three trials are under way. With the trial of Shigeru Takagi, Ishikawa Bank's president for more than 20 years, prosecutors have been painting a picture of a desperate credit institution, whose efforts to hide illegal lending practices and a growing pile of bad loans stretched back more than a decade.

Ishikawa Bank allegedly propped up three of its biggest borrowers by funneling fresh loans through their subsidiaries to help them meet interest payments. Loans to the three groups accounted for 20 percent of the bank's total. But other client companies went bust, leaving Ishikawa with collateral worth a fraction of its original value.

Most curious has been the lack of proactive measures by Japan's financial regulator, the Financial Services Agency (FSA). In January 2001, the FSA did discover that Ishikawa had made dud loans and that the extra provisioning required would leave the bank with a capital deficit, but, to avoid being shut down, Ishikawa was able to raise ¥22 billion ($188 million) of fresh equity, mainly by transferring funds from unsuspecting depositors. Illegally booked

funds helped Ishikawa raise its capital adequacy ratio to 4 percent – until it collapsed.

Experts suggest that this was not the first time the regulator had failed to stop blatant fiddling. The collapse of Long-Term Credit Bank (see section 7) and Nippon Credit Bank, two big banks nationalized in 1998, revealed that both had manipulated their books while regulators were probably looking the other way. Some experts suggest that since these illegal and counter-productive practices are rather widespread, it is not unreasonable to think that they continue to play a role in the woes of Japanese banks.

Because the Japanese public can understand this highly uncertain situation, consumers keep their money, rather than coming forward with spending programs which could get the economy moving again. Even worse, afraid that banks may collapse, consumers have withdrawn their savings. The notorious post-World War II wave of Japanese savings has lost its force. If customers take their deposits out of banks, then banks must go to the wholesale markets for their funds. Such funds are generally expensive, and are becoming even more so as independent credit agencies cut the banks' ratings. Because the Japanese manufacturing sector is in better shape than the financial sector, many of the companies to which banks used to lend have better ratings than the banks themselves (which also happens in the US). As a result, they find it cheaper to borrow directly in the capital market.

One can understand that governments everywhere have been loath to let banks fold, but as the Japanese example shows, by acting as lenders of last resort they have encouraged them to take inordinate risks and base lending decisions on political criteria rather than credit standards.

As these cases show, mismanagement happens at many levels, and it raises the obvious question of how all these catastrophes be fell Japan. The answer is through policies that have been a forerunner of what hedge funds, funds of funds and other risk aggregators are doing today in Europe and in America with *alternative investments*, namely through[2]

- overleveraging,
- lack of transparency,
- disregard for illiquidity, and
- the assumption of an inordinate amount of risk.

The reason why in the 1991 to 2003 timeframe the Japanese government has failed to restart the economy through zero interest rates and lavish spending of money can be found in the damage created by the processes behind these four points. It is surprising that it took that long for the bureaucracy of the different ministries, as well as the theoretical economists, to realize that short-term interest rates cannot drop below zero. Zero interest rates and a flood of money supply did not revive the economy and did nor break the back of deflation.

The plight of the Japanese economy at large, and of the Bank of Japan in particular, teaches another valuable lesson. While central banks normally cannot run out of money, because they own their currency's printing press, they can be badly hurt when engaged in an enormous spending spree by pumping liquidity into the system, with scant consideration of the consequences.

4. The Bank of Japan takes inordinate risks

Since 1997 outright purchases of Japanese government bonds, as opposed to repurchase agreements, have risen to a cumulative total of $471 billion. To keep the money markets flush with cash, by January 2003 the Bank of Japan has been devouring $10 billion in bonds a month on the secondary market. At that rate, the bank has positioned itself to absorb about 40 percent of all new Japanese government bond issuance in 2003, but it also took the risk of burning a huge hole in its own balance sheet, with big shortfall during the coming years.

On top of that, in 2002 the central bank announced plans to buy as much as $17 billion worth of stocks from commercial banks. These needed to sell off their corporate shares to raise cash, and the alternative was to unload high-cost equities in a depressed market. Equity buying by the central bank led insiders to worry about the rapid growth in liabilities of the Bank of Japan – by overpurchasing risky assets.

Part of the irony in all this is that, after having criticized the government for its failure to get the economy moving again, by 2003 many economists let the politicians off the hook and turned their attention to the Bank of Japan. After analyzing the central bank's intentions in monetary policy, they found faults in:

- seeking to relieve the debt burden of banks and corporations by means of adding more stocks, corporate bonds, and real estate to its portfolio, and
- failing to pay attention to the fact that these newly bought assets plunge in value as the country's deflationary spiral continues, hurting the central bank itself.

Based on a dozen years of poor results in reflecting the Japanese economy, skeptics said that more massive Bank of Japan bond purchases could set the stage for a bubble that would drive prices skyward – until investors, worried that the central bank had lost all discipline, panicked and hit the sell button, sending prices crashing. Economists have also been pointing out that by early 2003 the Bank of Japan's holdings, including government securities, cash, overseas currencies and foreign bonds, added up to $1.05 trillion – or 60 percent more than the assets of the US Federal Reserve.

The boom-and-bust scenario in the preceding paragraph is fed by the following sobering figures. One of the current estimates says that if things really spin out of control, just a 10 percent fall in the value of the central bank's bond portfolio would wipe out close to $42 billion in reserve capital. Other economists regret the fact that gradually the governance of Bank of Japan has come to emulate what has been happening for years in the country's commercial banking sector. Yet the Japanese central bankers have been aware of the failure with which these policies have been met.

There is, so to speak, a sort of 'added value' to the downside which inevitably comes when government policies and efforts to jump-start the economy are ineffective for so long. As the market's patience wanes, some of the factors manipulated by government tend to escape control, and they turn from *friend* to *foe*. Interest rates are a case in point, with possible global repercussions.

In 2003, the rise in yields in government ten-year bonds (JGB) changes their relative attractiveness in comparison to yields offered by US Treasury bonds. Experts think the 2003 revival of Japanese interest rates will shake the foundations of the global bond market. Because of Japan's great appetite for borrowing, JGBs are the world's biggest government bond market, dominated by domestic investors. But as Figure 9.1 demonstrates, the ongoing change in yields is significant and the impact may well be felt by the world's financial markets.

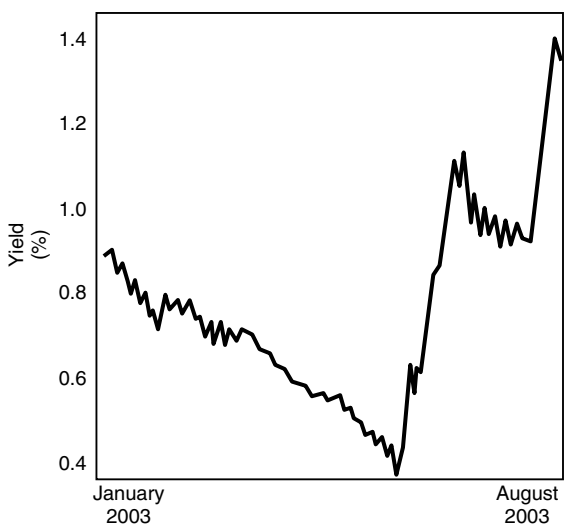

Figure 9.1 Changing interest rate in the Japanese government bond (JGB) ten-year bond market

Since the Bank of Japan adopted a zero interest rate policy in 2001, many large Japanese investors have been ploughing money into overseas markets, mainly into US Treasury bonds. However, if yields on the domestic market continue to rise, this tide may turn and add to volatility on the already shaky US debt market.

Both the US and the Japanese economy may pay the bill for such a reversal, because the change in interest rate yields and money flow tide will also alter the P&L of Japanese institutions' portfolio. Jason Rogers, of Barclays, estimates that Japan's city banks have roughly ¥750 billion ($6.75 billion) of unrealized losses on their JGB portfolios, based on end-March 2003 figures.[3]

5. Assets on paper are not the same as those in real life

As 2002 came to a close the consolidated group assets of Japan's big four banking conglomerates were, on paper, impressive: Mizuho Holdings ($1.3 trillion), Bank of Tokyo/Mitsubishi ($900 billion), UFJ Holding ($700 billion), and Sumitomo/Mitsui Bank (700 billion). And if Japan's eight largest banking groups were considered, rather than four, they had an estimated total of $5.5 trillion in assets, but also over $600 billion in non-performing loans, which stood well above shareholder capital.

Because of this, in spite of massive government handouts discussed in preceding sections, the big Japanese banks faced plenty of financial troubles. To get out of some of them, they tried to reduce their exposure through 'creative' approaches, not-so-reliable financial statements, and derivative financial instruments – which can make a bad situation even worse.

One of the notions few investors really appreciate in an age when virtual assets hold the upper ground compared to real assets is that contrary to manufacturing companies which are allowed to fail, and smaller banks which are left to their own devices, mammoth financial institutions are not really operating in a market economy (see Chapter 2), and they are very closely watched by regulators, because they can tear apart the world's financial fabric when they fail.

The best American example from the crisis of the early 1980s the salvage of Continental Illinois, and from the early 1990s the decision by the Fed of Boston to take control of the Bank of New England when it drove itself to bankruptcy. Both decisions to nationalize failing institutions were taken by the Federal Reserve. As the supervisors cut the Gordian knot of liquidity, the banks' debts in effect became sovereign.

Just for the record, Continental Illinois was refloated after all of its equity was written off. The FBI's pension fund and other institutional investors lost lots of money in this write-off. The restructured Continental was eventually sold, but it did not revive under new ownership. By contrast, the Bank of New England was operated by the Fed of Boston, under new management,

its derivatives portfolio was slimmed down from $36 billion (big money in 1990) to $6 billion, and then quietly closed down.

Will a similar situation develop with some of the big banks of Japan? It did happen with LTCB, as we shall see in section 7, and it might happen with Resona (see Chapter 4). Could it be repeated with Mizuho? In late 2002 Mizuho Bank reduced its loan assets by $11 billion through credit derivatives,[4] and Sumitomo/Mitsui Bank also used credit derivatives to slice off $5 billion in loans. But creative accounting helps only up to a point. In the end, the market catches up with its tricks.

The strength of the banks has declined and the market's trust has been damaged, Bank of Japan governor Masaru Hayami told a news conference on 11 October 2002 – adding that if there is a crisis, the BOJ will serve as lender of last resort. This was a shocking statement from previously conservative Hayami, after his surprise proposal on 18 September 2002 that the central bank should buy up as much as $100 billion in industrial company stocks held by major banks.

Like some of the analysts, Hayami had found to his dismay that no measure seemed good enough to permit Japanese banks to emerge from the fiasco of overleveraging and widespread mismanagement. The commercial bankers must have reached a similar conclusion. In early 2003, as fiscal year 2002 was coming to an end, big Japanese banks had issued new equity to offset the pressure of Financial Services Agency inspections obliging them to make a more realistic assessment of the quality of their loans, and to increase loan provisions and loan-loss charges, thereby weakening their capital ratios.

Mizuho, which as we have already seen resulted from the merger of what used to be three major Japanese city banks – Dai Ichi Kangyo, Fuji and Industrial Bank of Japan – had become on paper the world's largest bank in terms of assets. But its management had found itself obliged to be in a constant drive to strengthen its capital base.

As a late February 2003 issue of Mizuho equity, $1.3 billion underwritten by Merrill Lynch, demonstrated, the US broker had a hard time in persuading international investors to put their money in what they regarded as Japan's weakest mega-bank. The terms of Mizuho's issue also presented underwriters with another challenge.

The shares offered a guaranteed annual dividend which compared unfavorably with the mid-February 2003 issue of $2.6 billion in preference shares by rival Sumitomo/Mitsui. The latter carried a dividend of 2.25 percent as well as 50 percent downside protection should the share price fall ahead of conversion. The Mizuho issue also suffered in comparison with a new issue of common shares by Tokyo Mitsubishi, on both internal and domestic markets.

As far as the Japanese banking industry is concerned, the tough question is: What if one of Tokyo's $1 trillion money-center banks keels over, triggering a cascade of other failures among Japanese companies and lenders? Even

worse, what if this snowballs among American, British, German, French and other banks which lend them big money? Who will be the lender of last resort?

This risk is real, though not likely in the immediate future. Partly on account of it, Japanese credit institutions, investment banks, life insurers and other companies are now trying to shore up their balance sheets by cashing out their US Treasury bonds and stocks. This poses other problems. Experts say it might eventually cause the US dollar to cave in and US interest rates to rise, in repetition of events of 1994. Moreover, big Japanese lenders may default on their end of complex derivatives transactions, exposing US and European banks to horrendous losses. A stress test[5] should take historical statistics from the go-go 1980s when the share of the Japanese market represented 30 percent of global equity and, through successive events in a compressed time scale, bring it rapidly to the current share of a meager 10 percent.

This stress scenario, and every other which examines the implications of a snowball effect among big banks, should pay great attention to reasons behind crashes and their spillovers. In a world in which ten standard deviation events occur every few years, traditional approaches to risk control, like value at risk (VAR), are utterly inadequate.[6] A rational approach to extreme market risk must

- incorporate the role of traders, market-makers and investors, and
- test for tail events (outliers) including information asymmetries, behavioral biases, and uncertainty in price inference.

A rigorous stress test should focus on *how* and *why*, after having spent trillions of yen bailing out their country's ailing banks, the government is still unable to turn the situation around. But Japan's citizens have been defrauded time and again in the name of financial reform, both as taxpayers and as consumers. The good news is that even a half-baked clean-up, falling share prices and other financial pressures prompted many firms to sell assets, cut costs and shed excess workers.

On the other hand, as larger companies have weeded out suppliers, the smaller firms that they were supporting have felt the pinch, with their operating profits falling by 12 percent. As a consequence they, too, have tried to be leaner and meaner. On the other hand, since profit margins are still low, much depends on rising sales, but higher sales are hard to achieve as long as the Japanese economy's deflation persists and confidence does not return.

6. Changed fortunes of Nomura Securities

How did all these disasters happen in the first place? The reasons should be sought among the results of leveraging – which is something to crow about

when all goes well, but brings with it lots of toxic waste when the market turns against the investor, the banker, or the regulator. This statement is valid for all financial institutions that

- overplay their hand,
- lack a rigorous risk management system, and
- continue placing unwise bets over some time.

Take the changing fortunes of Nomura Securities as an example. There was a time when Nomura thought that it had conquered California by buying practically every financial entity it could get hold of, at any price. After the débâcle of the Japanese economy, the American operations of Nomura Securities largely abandoned the quest to be a force in US banking and securities, and concentrated on dealing in Japanese securities or on behalf of some Asian markets.

Nomura management also said it would focus on niches such as mortgage-backed securities (MBS),[7] and on distressed securities. This is a curious decision indeed. Betting on distressed securities at a time when distress has been the keyword of the day is most evidently a big-headed *and* risky policy. The following paragraphs explain the aftermath of ill-conceived bets.

From 1985 to 1989, the years of the high-water mark of Japanese financial industry, Nomura had caught a lion's share of the Eurobonds market, and the company's top management was not inclined to let it go. Therefore, in 1990 and 1991, in Europe, Nomura still aspired to be in the first rank, while at the same time admitting that its profits outside Japan were still insignificant. In fact, Nomura's revenues were not unreasonable, but the company's costs were way too high, compared to those of competitors. This does not mean that Nomura's costs in Japan were really under control. They had remained stubbornly high, too, while reliance on commissions from selling securities turned out to be one of the great weaknesses of the brokerage house. When in 1989–91 Japanese shares collapsed, the broker's turnover withered.

- In 1988 one billion shares were traded daily on the Tokyo Stock Exchange (TSE).
- Five years later, by 1993, volumes were a quarter of that, and Nomura's profits evaporated.

To revamp its fortunes, Nomura Securities gave its sales force incentives to behave more like financial advisers, guiding clients rather than simply pushing hot products at them. Management also tried to inject greater objectivity into the company's financial research, in the hope of improving its appeal to customers. This policy had an effect on the sort of products sold by the firm, but it did not really affect market share, which melted even further; nor did it improve Nomura's profits picture.

Figure 9.2 dramatizes the rise and fall of Nomura Securities in the Eurobonds market, as a percentage of the top 25 brokers worldwide. As this histogram shows, the hopes senior management had for Nomura's market share were ill founded: the broker's market share did not rebound. This is not surprising because it is very difficult to regain a leadership position once lost, and in some cases it might even be impossible.

Lost market share has not been Nomura's only woe. Lost money was just as bad. The fact that more than a dozen years after the Japanese stock-market and real estate bubble Japanese banks are still on the floor impacts on all financial intermediaries – including brokers. Worse still were bleak projections about recovery. As 2002 came to an end, the experts have been forecasting that the biggest Japanese institutions will again lose money in 2003,[8] and, even excluding the cost of provisioning for bad debts, their return on equity will be dismal.

To improve the company's deteriorating profit picture, the management of Nomura Securities took some initiatives which have been far from delivering expected results. One of them is the ill-fated Méridien Hotels venture. In 2001, as cash-pressed Air France finally sought to unload its mismanaged global chain of Méridien Hotels, Nomura led an international group of banks which paid the hotel chain's owner a cool $3.5 billion for this particular asset. The chain had 137 hotels in the world, of which 40 were owned or leased. By June 2003, about two years down the line, the Méridien Hotels capitalization stood at $1.2 billion, while outstanding loans exceeded market value by $300 million, to the tune of $1.5 billion.

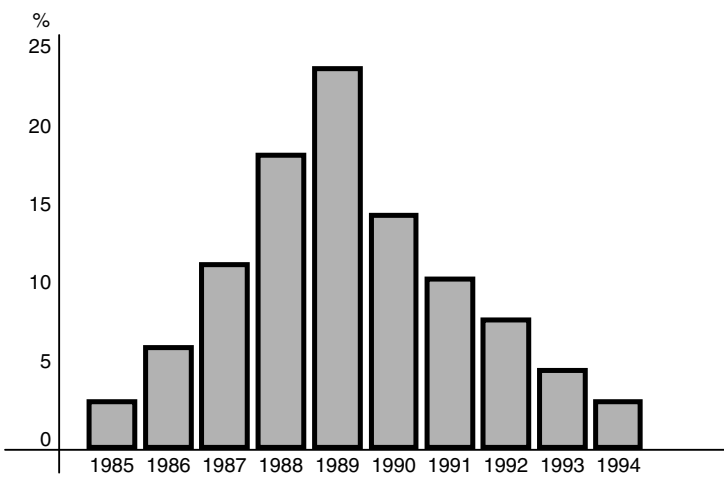

Figure 9.2 Eurobonds managed by Nomura as a percentage of the top 25 brokers worldwide

The threat of administration hanging over Méridien Hotels receded on 26 June 2003, amid indications that Lehman Brothers was ready to inject $245 million into the company as part of rescue refinancing. 'Most recognize that administration is the nuclear option,' said one of the interested parties.[9]

The loan and sale of assets kept the Méridien chain floating, but this did not improve Nomura's P&L. Under the original acquisition in 2001, the broker provided $370 million of equity, with a further $265 million coming from Royal Bank Private Equity, Alchemy Partners and Abbey National. But by June 2003, Nomura's original equity had become worthless and most of the other institutions involved in this deal were way off in off their investments.

Any investor who in the late 1980s had put his money in shares of the biggest Japanese city banks and the brokers would now feel the same way as the banks who invested in Méridien. By mid-2003 he would have lost, on average, more than 85 percent of his capital. Yet at the time of that investment Japanese investment banks were looking, to the untrained eye, more solid than the rock of Gibraltar. Even the experts, who are paid to know better, did not think that the rock would implode by its own doings.

With the background of the case studies we have seen so far in this chapter, from the big Japanese commercial banks to the biggest Japanese broker, Nomura, it is not difficult to understand why on 1 June 2001, Kenneth Courtis, vice chairman of Goldman Sachs Asia, called the Japanese financial institutions 'a threat to the global economy.' Curtis said that

- Japan's banking system would 'enter an unprecedented crisis, a financial implosion', and that
- this 'would have vast global economic, financial, and political implications.'[10]

In an interview with Agence France Presse on 3 June 2001, Courtis stated that according to Japanese figures the government bond market, now more than $3 trillion (see also section 2), is also set for a meltdown, adding that: 'It is the biggest bubble in the world, more important than the one that exploded on the NASDAQ.' Nor is this all that can be said about outstanding risks in Japan.

According to knowledgeable financial analysts, 65 percent of all taxes collected by the Japanese government go to service its public debt. Horst Kohler, Managing Director of the IMF, is said to be demanding a clean-up of the budget, saying this is Japan's 'second priority,' the first priority being disposal of banks' bad loans. Where all this leads us in terms of conclusion is that we are far from being out of the woods.

7. A lesson on good governance: rise, fall and rebirth of the Long-Term Credit Bank of Japan

The Long-Term Credit Bank (LTCB) of Japan was set up in 1952 to provide long-term finance to fledgling industries, such as Toyota and Honda were

then. It became active with long-term loans in 1953, after a brief but unsuccessful attempt by US occupation authorities to open up Japan's capital markets. In Tokyo, government bureaucrats preferred banks to be the primary channel for funneling money to industry. At the time, stocks were viewed not as investment instruments but as a way of cementing ties among big companies and banks. Also, specialized lenders such as LTCB were to give preferential treatment to industries such as autos, shipping and textiles, key to the country's economic recovery.

During Japan's high growth of the 1960s and 1970s, this government-sponsored longer-term lending seemed to work brilliantly. But by the late 1980s, Japanese companies, backed by banks ready to put money on the table, overleveraged themselves. The banks, too, got short of capital adequacy – an event marked by the stock-market's bubble and the the investors' own gearing. In 1990, the bubble burst.

While the 'good days' lasted, market capitalization of Japanese banks dwarfed that of New York and London. In 1989, LTCB's market cap was several times Citibank's and, at least on paper, its assets were the ninth-largest in the world. But the Nikkei peaked in December 1989 and crashed in 1990, setting off a bear market. Right away, real estate prices collapsed, devastating almost every loan book in Japan.

LTCB prospered, or at least it seemed so, for 35 years. Its stock reached its peak of ¥2.820 ($22) in April 1987. After the Japanese equity crash, the long slide started. In September 1998, when the market knew LTCB was practically bankrupt, the stock sold for ¥19 (17 cents), less than 1 percent of its peak value. Briefly LTCB turned for help to its success stories in financing, like Toyota, but (wisely) these declined the bailout.

By contrast, the losers came back for more money. Harunori Takahashi, a real estate speculator, was one of LTCB's biggest borrowers. For years, Takahashi had seemed untouchable, but in the end LTCB was forced to cut its ties with him, after his company's illegal business practices came to light. But by then, Takahashi had nearly $2 billion in outstanding loans from LTCB. When the Long-Term Credit Bank crashed, it

- was carrying $50 billion in dud loans,
- had no viable business model for survival, and
- was too damaged to attract foreign partners with capital and managerial expertise.

The disappearance of LTCB was very little lamented by the financial industry. Hugely inefficient, it had outlived its original purpose to supply long-term credit to critical Japanese industries and, with its slow-moving bureaucracy, it had become an anachronism. Furthermore, it was made redundant by the growth of Japan's corporate bond market, which could provide credit more cheaply.

The decision the Japanese government took to nationalize and then liquidate LTCB was costly and difficult to reach. While it did ease for a while some of the complex problems faced by the Japanese banking industry, it did not take care of them in any effective way. Yet nothing seems to have been learned through this painful process, since the same mistakes have been repeated with other big banks.

LTCB's eventual failure was inevitable given the poor judgment of its management over the years, and political pressures to which the bank was subjected. At the time of LTCB's nationalization, there were significant fears that an uncontrolled bankruptcy could lead to the collapse of the whole Japanese financial system.

- The regulators were nervous about LTCB's extensive derivatives contracts, which were made with correspondent banks worldwide.
- Many bankers were concerned that counterparties which had lent to the LTCB could lose all their loans, or be left with collateral well below value.

Sounds familiar? Indeed, it is so. This is precisely the situation faced today worldwide by hedge funds and other financial institutions unwise enough to overleverage themselves. Although LTCM is the more classic case among hedge funds failures, there are rumors of other overleveraged entities which have brought themselves to the edge of chaos.

The Japanese government chose the Fed's policy with Continental Illinois as its guide to how to handle a nationalized LTCB. This time around, however, there was a happy ending (more on this later), which surprised many observers because of the complexities involved at the time of nationalization. For instance, many questions were left outstanding about how different operations would be wound up.

- How much would big LTCB shareholders, such as Dai-Ichi Mutual Life Insurance, Nippon Life and Asahi Mutual Life Insurance, receive?
- What would happen to LTCB's joint ventures with UBS of Switzerland? Of the planned merger of LTCB with Sumitomo Trust?

Neither was LTCB alone in its woes and in the sort of queries being put. In mid-September 1998, when the bank collapsed, Standard & Poor's had warned that problem loans in the Japanese banking system could be equivalent to as much as 30 percent of the country's gross domestic product, nearly twice official estimates. As readers will recall, even this 30 percent guestimate has been largely surpassed in the intervening years.

Rating agencies said that LTCB's bad debts could be higher than ¥151 trillion ($1.36 billion) compared with the Japanese government's figure of ¥87 trillion – an almost 2:1 ratio. This warning was not the first, yet when it

came to the public eye it underlined the severity of the debt crisis threatening to overwhelm Japan's financial system.

New statistics which were published at the time of the bottomless pit of bad loans, and big derivatives losses by major Japanese banks, strengthened the opinion of analysts that the country's economy might be beyond repair. They also added to pressure on the Japanese government to implement measures to solve the crisis – which proved to be more difficult to do politically than financially. A couple of days after the aforementioned events, on 18 September 1998, Japan's worried political parties came up with a compromise. Their agreement called for

- the nationalization of the troubled Long-Term Credit Bank of Japan, and
- the financing of a new independent body, the Financial Revival Committee (FRC), to oversee the takeover process.

When in October 1998 the Japanese government nationalized a clearly insolvent Long-Term Credit Bank, it also admitted that the bank's liabilities exceeded its assets by at least ¥340 billion ($3.06 billion). Other overleveraged and mismanaged Japanese financial institutions were in a similar plight. This was basically why the government established FRC, giving it the mission to stabilize the Japanese banking system.

One of the ironies of this whole affair is that it became the duty of the Financial Revival Committee to draw up rules about what is 'a good bank' and what is 'a bad bank' (these two terms were used in 1998 very loosely and this is still the case, but at least now there is a precedent). FRC was supposed to have the authority

- to act along the lines of that dichotomy: good bank/bad bank, and
- to see off the entrenched interest groups anxious to save particular institutions.

In a politically charged climate, this is not easily done. One of the examples of going around the letter of the law has been the concealment of company losses, widely suspected to be prevalent among Japanese financial institutions, by means of creative accounting. By 1999 this lamentable practice, which is largely based on derivatives, was apparently creeping into non-Japanese firms operating in the region.

For example, Crédit Suisse Financial Products (CSFP) came under investigation by Japan's Financial Services Agency (FSA) on suspicion of having concealed losses of client institutions, and stood to lose its operating license in Japan. Other investment banks, too, became involved in the alchemy of turning huge losses into profits. In an excellent book, which should be required reading by all bankers, Frank Partnoy describes his experience with Morgan Stanley in Tokyo.[11]

Readers may well say that what has been written in this section, so far, is nothing but a lesson on the risks of overgearing. Where is the lesson in good governance suggested in the subtitle? The answer is the good fortune which characterized the privatized and revitalized LTCB under new management, and a new brand name.

Shinsei is the reborn Long-Term Credit Bank of Japan which, as we saw, had collapsed in 1998 under a mountain of bad loans and a run on its stock. When the Japanese government seized LTCB, it absorbed $37 billion in bad loans from its books,[12] and sold the remains to a US consortium of financial firms.

Ripplewood Holdings, an American investment entity, and its backers (which included GE Capital and Mellon Bank) agreed to buy LTCB for about $1.2 billion. The government assumed $50 billion in non-performing loans, leaving the bank with $110 billion or so in supposedly healthy assets. If, during the three years following the bank's purchase, any remaining loans lost more than 20 percent of their value, Ripplewood insisted that the Japanese government must buy them, too.

The transition from a hugely mismanaged and unprofitable bank to a profitable one was not without pain. For instance, Sogo, the big retailer, had $19 billion in total debt to LTCB, and it wanted half of the $1.7 billion it still owed Shinsei forgiven. The answer given by the new management was 'No!', and Sogo went under. Politicians, and even the press, considered this 'No!' as un-Japanese, but Shinsei – the rebaptized LTCB after its books have been pruned – is now prospering.

The consortium appointed Masamoto Yashiro, formerly of Citibank, as president of the reborn Shinsei Bank. Yashiro and his international team of mostly ex-Citibank executives restructured the institution, changed its culture, overhauled its archaic information technology, rolled out a menu of financial products for retail customers, and started to transform the institution from a low-profile industrial lender to a top-flight commercial bank.

The new management also cleaned up the balance sheet, but when it started calling in loans to subprime borrowers, relations with the government grew tense, and the Japanese press attacked. Correctly, Yashiro could not care less: 'I don't like to fail,' he commented. 'They can call me anything they like.' The new, clean balance sheet policy paid dividends. Shinsei had $501 million in profits for the year ended in March 2002, while other Japanese money-center banks lost billions.

8. Why a system run on leverage and 'faith' cannot last

As the case of Shinsei demonstrates, turnarounds are possible; but they take guts. Well-managed turnarounds are necessary because the world's financial system is facing the likelihood of a systemic crisis, and with many economies in recession, 'waiting for better times' is *not* an option. There are also mixed

signals from governments about what they are or are not willing to do. In East Asia, for instance, what survived in recent years from the prosperity of the mid- to late 1990s is threatened by the political leaders' inability to make choices necessary to reform their economies, and put once again the growth engine in motion.

This is not going to happen without tough decisions, overcoming inertia and fielding conflicts of interest – including unwillingness to act and take stern measures. Fence-sitting and hoping the situation will take care of itself has had disastrous results in the past and it will continue to do so in the future. Back in 1997, fence-sitting turned a relatively small problem in Thailand into a major economic crisis for the entire East Asia/Pacific region, leading to

- competitive devaluations,
- joblessness,
- stagnation, and
- loss of business confidence.

All four factors had global repercussions. They have upset an apparently smooth-running regional economy, created an unstable economic environment, and brought nations which have been overleveraged and overextended to the edge of the abyss. The domino effect which started in Thailand hit Malaysia, Indonesia, the Philippines and South Korea – and made matters worse in Japan.

As it is so frequently the case, the precipice was more visible in the banking industry. One of the better examples verifying this statement is the fall of Yamaichi Securities, one of Japan's big four brokerage houses that went bankrupt owing more than $2.5 billion in 'off-the-books debts' (read: over-the-counter derivatives and money exchanged under the table). Yamaichi's bankruptcy has thrown 10,000 employees out of work.

Sanyo Securities (a Nomura subsidiary) went bust in early November 1997, before Yamaichi. Only days before Yamaichi's bankruptcy Hokkaido Takashoku, a major commercial bank on Japan's northernmost island, closed its doors. Meanwhile, at about that time, 32 executives of five big financial houses, including Dai-Ichi Kangyo Bank, one of the biggest in the world, went on trial for making allegedly illegal payments to the same mysterious financial racketeers involved in Yamaichi's case. The sums were at the level of $3.3 million to each of them.

Given that so much is at stake in terms of the survival of the world's financial system, these references to poor governance, fraudulent behavior and rotten dealings cannot and should not be taken lightly because they greatly impact on business confidence. After the event we know that the system that produced the so-called 'Japanese economic miracle' was run on leveraging and 'faith' – Faith that

- Japan really was a big harmonious family,
- the nation had a nearly divine mission to accomplish,
- all its members worked together for the good of all Japanese, and
- the huge leverage of the Japanese financial institutions would, by some miracle, remain hidden.

What has happened thereafter is a good lesson to keep in mind with highly geared nations, superleveraged institutions, inordinate derivatives exposure, hedge funds and alternative investments, because the 'Japanese miracle' and the 'solution made in heaven' of geared financial products pushed to end-investors have much in common. It will be even more so in the coming years, as the promised nirvana of alternative investments remains elusive, and many of the non-transparent, leveraged companies go bust.

Analysts say there might be real reasons for some spectacular future failures. Superficially, it appears far more prudent to continue accruing interest on a bad debt, or exposure in an unbalanced derivatives portfolio, rather than admit it is a hopeless case that should be written off. It does not take a genius to realize that such lack of prudence is misguided.

Moreover, the news concerning big failures will come suddenly and may overrun the regulators' ability to believe in it. Here again Japan provides a precedent. When in 1989–91 the Japanese economy entered a recession, the swing from good fortune to bad fortune took everybody by surprise. Government officials, regulators, all sorts of bankers, and economists, were puzzled. They had never seen this at a comparable scale in previous economic cycles characterizing developed nations – except of course the Great Depression of 1929–32.

The awakening was even more rude as big financial troubles hit other East Asian countries in 1997 and bankruptcies started to rock the 'Asian tigers'. Many economists suspected that these were a reverberation of Japan's financial problems which were finally feeding through to the real economy, as banks started to trigger more potential bankruptcies by cutting edges and reducing lending. Up to a point, the banks were right.

- It is only normal that as they come under pressure banks cut lending, taking a tougher attitude towards uncertain loans.
- Even if emergency action helped avert a deep financial crisis, it would not necessarily have solved the disintermediation problem.

This experience is so important because it pre-dates what might be happening to European and American credit institutions deeply involved with hedge funds in lending and trading; and to American creditors and investors in connection with the ongoing real estate bubble (see Chapter 8 on Freddie Mac and Fannie Mae):

- All the big Japanese banks held (and hold) enormous uncollectable debts secured through real estate and financial paper at inflated prices.
- They have also made huge loans to all sorts of companies deeply committed to a sagging stock market which does not seem able to reach bottom in a convincing sense.

Both points raise serious questions regarding the capital adequacy of Japanese banks (see Chapter 4 on Mizuho and Resona). 'If the banks' capital is inadequate, there are all sorts of self-help measures that they need to go through,' said Hakuo Yanagisawa, Japan's minister for financial services in an interview on 6 November 2001. He also warned investors not to assume that the government would put in more public money to recapitalize the country's troubled banks.[13] After the event, however, one finds that quite the opposite has happened in the two years which followed this statement.

9. All nations must learn a lesson from Japan's chronically ailing economy

There is no telling when Japan will break its cycle of near-zero economic growth, which is approaching one-and-a-half decades. Theoretically, governments can boost demand for goods and services by raising public spending. In practice, in Japan and elsewhere, this does not work out the way theory suggests. The evidence which has accumulated in Japan since the early 1990s, particularly with huge spending of public money by the government, indicates that in a developed economy stimulative spending of public money has lost its punch.

- Japan has put together a cascade of pump-priming packages since 1992, and still the economy is moribund.
- Either the economy is not taking a large enough dose, or the system of economic stimulus is insufficient to overrun other factors acting as a break.

Some financial analysts think that without the added spending, Japan's economy would have contracted by some additional percentage points. Others say that only about a third of the trillions of yen in government cash injections was real spending on goods and services; much of the rest was filler, mainly government lending. Yet the fact that red ink ran like a torrent shows in the budgetary deficits in the right part of Figure 9.3, which covers the 1986 to 1996 timeframe – the first phase of the big spending program.

The Bank of Japan has also come up with another gimmick, which has been met with an equal lack of success. On several occasions it has lowered the official discount rate over a certain time period, bringing it near to zero: as shown in Figure 9.4, this happened in the mid-1990s, and it has continued into the twenty-first century – with no discernible results.

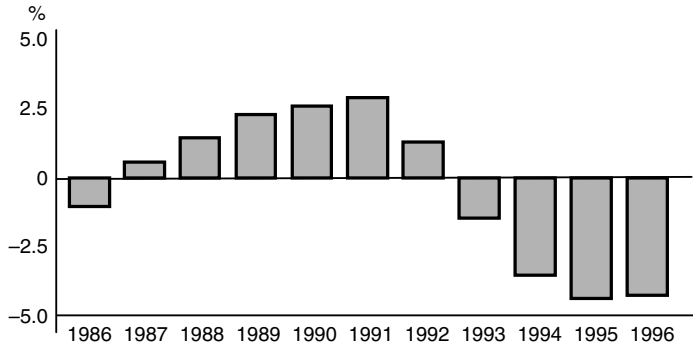

Figure 9.3 Japanese government budget surplus and deficit, as percentage of GDP

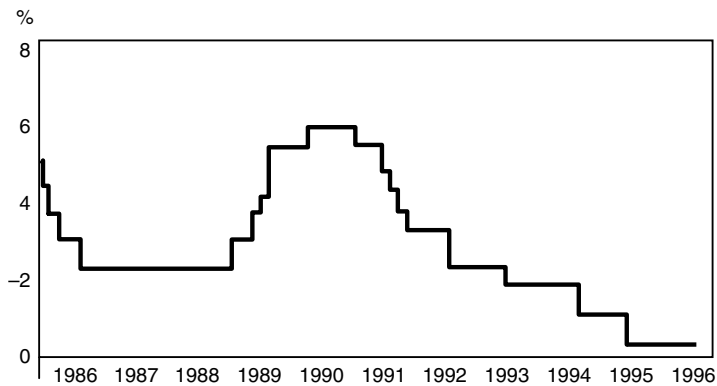

Figure 9.4 Official discount rate by the Bank of Japan

Readers will notice the parallel between the statistics presented in Figure 9.3 and in Figure 9.4. The histogram in the first of these figures and the interest rate curve in the second are rising and falling almost in unison. This leads some economists to suggest that zero interest rates are *irrelevant*, and they may even damage business confidence. The market simply does not buy them.

- Nothing short of wholesale and deep restructuring of economic and financial regulations can have results.
- But the bolder an idea, the lower the likelihood Japan's political leaders will adopt it, which is also true of other countries.

Lacking the will to take some bold steps, Japan is groping to find an economic strategy that will save the past while catering for the future. This is of course an oxymoron. Neither does it help that the country's currency is overpriced, its state bureaucrats have lost control of events, and the politicians are intruding unproductively into financial matters they don't understand. Altogether, the political climate is unstable.

- Japan has averaged almost one prime minister per year in the 1990–95 period and it continued changing prime ministers in the following years.
- On the employment front, where downsizing is in order, no major firm wants to be the first to expand and face the risk of bankruptcy.

One of the rare positive developments occurred in August 1995, when the government finally announced a long-awaited deregulation of finance and of foreign investments. The decision has been expected to have a fundamental impact, but real life has not been kind to the decision-makers. The reason is complexity. The Japanese financial crisis is yet another example of how negative factors combine to overwhelm the economy: on the one hand overleveraging, and on the other, the delaying action by bureaucrats who seriously undermine any effort to come up from below.

Central bankers, investment bankers and commercial bankers should take note of all this, because what has happened is a good lesson regarding leveraging by, and through, hedge funds. To start with, Japan's regulators themselves created the problem by encouraging financial institutions to lend wildly in the 1980s for high-risk real estate and other geared deals. Much of that money, incidentally, was funneled through politicians to their corrupt corporate cronies.

Then, after the bubble burst, politicians, bureaucrats and regulators opted for the *status quo*. Opportunities for corrective action which might have been possible in the first post-bubble years were lost. Even in the early to mid-1990s, bureaucrats at the powerful Finance Ministry and Bank of Japan denied there was a problem, ignoring all evidence to the contrary. Subsequently, successive Japanese governments threw money at the problem through spending policies which lacked a rigorous study in terms of cause and effect, and were ineffective in regard to their implementation and follow-up.

The evidence has been provided by the outcome of a lengthy and huge deficit financing. The failed bailout of the financial sector cost the Japanese taxpayer a very little amount of money, much more than the US spent on the Savings and Loans débâcle of the late 1980s. On behalf of the Japanese citizen, the government spent billions to save from bankruptcy credit unions, housing-loan and agricultural co-ops, and eventually the big commercial banks – with results that are questionable at best.

In parallel to spending taxpayers' money in the most ineffective way, the Japanese government allowed the country's banks to play the system by

faking the books. Readers will remember from Chapter 4 the discussion on deferred tax assets (DTAs) and how their overuse led to the virtual nationalization of Resona. In Japan, Tier-1 (core) capital is DTAs in over 50 percent of some big banks – therefore, ash rather than assets. As has been shown, in mid-2003, DTAs accounted for almost 90 percent of Mitsui Trust Tier-1 capital.[14] In other words, for any practical purpose, Mitsui Trust has been bankrupt.

One of the conclusions to which this case study on Japan leads us is that governments have to be proactive, not reactive. And they have to watch out. If being proactive is the better policy, then it is indeed high time to regulate the hedge funds as well as the funds of funds and special alternative investment vehicles (SAIVs) – in short, all the players in the field of alternative investments.[15] Through a well-orchestrated, relatively smooth transition, all financial institutions should become less leveraged, transparent, simpler in terms of structure, and should trade in instruments investors can understand and manage.

10

Case Studies with European Financial Institutions

1. Introduction

A case study on the accountability of senior management of financial institutions must consider at least three issues which correlate although, at the same time, each of them is self-standing and vital on its own merits: profitability, control of risks being assumed, and financial staying power. The profitability of European Union (EU) banks weakened in 2003 as it did in 2002 and 2001, mainly because of increased loan-loss provisions and reduction in non-interest income.

Both negatives reflect weaker economic and financial market conditions but also, for some banks, management quality played a role. In addition, trading losses have meant that the number and asset share of banks with a return on equity (ROE) of below 5 percent increased significantly, while the set of banks with ROE above 20 percent shrank.

In the European Union landscape, loan-loss provisions accelerated as non-performing loans continued to accumulate; a trend which started in 2002 has not been reversed. In banking companies with assets over €100 billion, the ratio of loan-loss provisions to profits (before provisions) increased, partly due to deterioration in the quality of some international assets, as market uncertainties have continued.

The European Central Bank (ECB) noted in its *Annual Report 2002* that the income of many large banks has been especially affected by a reduction in income from investment banking, because of the drying up of the primary and secondary capital market, as well as corporate restructuring activity. Although the ECB did not explicitly say so, some of the European banks have also sustained hefty derivatives losses, as they tried through derivative instruments to improve on their past results.

Take as an example the Suez Group. This is a French bank with major holdings in several industries, including water (Lyonnaise des Eaux). In March 2002, presenting the 2001 results to the shareholders, the CEO Gerald

Mestrallet promised that 2002 would be characterized by a 10 percent growth in business and profits.

- By the end of 2002, however, Suez stock lost 50 percent of its value.
- The 2001 profits of €2.1 billion had turned into losses of €900 million in 2002.

As for Suez Group liabilities, these have reached €27 billion, way ahead of those of Vivendi, another highly indebted French company. Suez Group liabilities represented 130 percent of its equity, which says a great deal about the bank's gearing.[1] According to unofficial reports, alarm bells rang all over. The Belgian investor Albert Frère, major shareholder of Suez, led a top management change with the appointment of a new chief operating officer, Jean-Pierre Hansen. The American and British holdings of Suez are said to be for sale, as well as some of the financial company's French jewels – such as TV station M6, cable operator Noos and satellite television TPS.

Other European credit institutions have been hurt by the unraveling of their holdings and investments abroad. For instance, in 2002 Spain's two leading banks kept on trying to hide their embarrassment in Latin America. First Argentina and then Brazil dealt severe blows to Spain's Banco Santander Central Hispano (BSCH) and Banco Bilbao Viscaya (BBVA) – respectively the country's first and second credit institutions.

The weakening inflicted very great damage on BSCH, which is much more heavily exposed to Brazil, through Banespa, than its main rival. But the Mexican peso did not prove helpful to BBVA. For several Spanish, Italian and other European banks, Latin America has gone beyond the stage at which it merely damages the next quarter's earnings. The region's financial crisis has been threatening the banks' capital strength.

Still other European credit institutions have faced severe problems because corporate governance has not been at its best. Section 2 justifies this statement through case studies. German banks have had major woes, reflected in the case studies in sections 3 and 4. The case study in sections 5 and 6 explains how the previous management of Crédit Suisse, which was fired by the board, ran the bank down – while the new management is trying to steer the institution on a more even course.

2. Violations of corporate accountability don't stay secret

In the 1930s, following the Great Depression, the Glass–Steagall Act separated commercial banking from investment banking in the US. Financial institutions could pursue the one or the other line of business, but not both. In post-World War II Japan, Article 56 made a similar division, but in Europe universal banking prevailed, with institutions free to engage in both lines of business, as well as in insurance.

These are now called financial conglomerates. The Basle Committee defines them as entities conducting within one financial institution, or group, at least two of the three business lines: commercial banking, securities and insurance. However, the Basle Committee also notes that this general definition could lead to different legal definitions depending on jurisdiction.

For example, a new EU Directive on financial conglomerates requires the presence of insurance to qualify as a conglomerate, since the capital regulation for commercial banks and investment firms is already laid down under a single framework by the second Capital Adequacy Directive (CAD 2). By contrast, in the United States the notion of financial conglomerates adopted by the Gramm–Leach–Bliley Act of 1999 is that of a financial holding company which can, but is not bound to, offer the full range of financial services.

Since the 1990s, European financial conglomerates, as well as monoliners, such as big commercial banks, have been characterized by an asymmetric globalization which particularly emphasizes an entry or increase of presence in the American market. During the last 10 to 15 years, the European banks with deep pockets have been spending a great deal of money on US investment banking.

Particularly during the last few years, from 1997 onwards, some of the largest and best-known European banks spent billions of dollars buying US banks to expand in the biggest market for mergers and acquisitions, securities underwriting and investment advice – but have little to show for it. Just five European institutions: Crédit Suisse Group; UBS, Deutsche Bank, Dresdner Bank and ABN Amro spent a combined $35 billion, but the results did not meet expectations.

- ABN Amro has pulled out of US equities and M&A.
- Crédit Suisse and Dresdner are losing market share in the US.
- UBS and Deutsche Bank fell short of their own market targets.

The consequences are even more deceptive as the big European banks acquired overvalued financial entities and they had to take on more risk to compete with established American securities firms. Goldman Sachs has been the No. 1 adviser on US mergers and acquisitions in 2000–2003, even if its $20 billion of capital is dwarfed by that of UBS, Deutsche Bank, Citigroup and JP Morgan Chase. In 2003, Goldman had a 29 percent market share in M&A, about twice that of its closest rival, Morgan Chase.

Crédit Suisse First Boston (CSFB) bought Donaldson Lufkin & Jenrette in 2000 for $11.8 billion, with the goal of being a leader in investment banking (see section 5). Among the European banks, CSFB is the American banks' closest rival in M&A, but its ranking has dropped to fifth in 2003 from third in 2002.

UBS spent $11.5 billion on Paine Webber in 2000. Moreover, to strengthen ties with major US companies, UBS hired high-cost bankers.

While with all this UBS almost doubled its share of American M&As since 2000, to 14 percent, it is still outside the top five securities firms for US mergers advice, as well as for underwriting US stocks and bonds.

Deutsche Bank, which bought Bankers Trust in 1998 for $9 billion, has about 5 percent of US M&A and underwriting fees, compared with its target of at least 8 percent. According to Wall Street analysts, to make up for the shortfall Deutsche Bank plans to take on 'a little bit more risk' in the American market. This way, it hopes to gain a bigger share of the billions in US investment banking fees. This, however, means moving away from prudent risk-based pricing.

Other big European banks have tried to enter the US market by assuming unwise exposure, playing the US banking system and its regulators. A now classical case is that of Crédit Lyonnais and its twisted way of acquiring Executive Life, a California insurer, and its $3.25 billion junk-bond portfolio. At the time, American state and federal laws restricted such acquisitions by banks.

On 27 August 2003, a federal grand jury in Los Angeles issued a criminal indictment against Crédit Lyonnais and others, related to the bank's acquisition of failed Executive Life Insurance. Crédit Lyonnais and five companies that prosecutors say acted as a front for the bank have been negotiating a settlement. On 2 September, it was announced that Crédit Lyonnais and Consortium de Réalisation, a French government agency, agreed to plead guilty to fraud charges in a settlement with the US Justice Department.[2] The guilty plea was supposed to put to rest, after payment of a major penalty, the federal investigation related to the former Executive Life Insurance.

In a deal announced in September 2003, the accused said it would pay $585 million to settle the charges. It seemed that only a few technicalities needed sorting out, but then the affair took a twist, involving the personal accountability of different people, including François Pinault, one of France's most powerful businessmen.[3]

On 8 October 2003, the French government said it would reject a US request for it to arrest and extradite four executives implicated in the alleged multibillion-dollar insurance fraud during the 1990s. The four men cited in the US extradiction order are Jean-Yves Haberer, former CEO of Crédit Lyonnais, François Gille, the bank's former managing director; Jean-François Hénin, a senior official at the bank; and Emmanuel Cueff, company secretary of a firm belonging to François Pinault.

A spokesman for France's Justice Ministry said Paris had received a request from Debra Yang, US Attorney in the central district of Columbia, to arrest the four executives with a view to sending them to face charges in the US. The spokesman said that France, 'as a matter of common practice,' does not send its citizens to face trial overseas.[4] On 27 October 2003, US prosecutors granted France a reprieve, postponing for a month the unsealing of criminal charges against Crédit Lyonnais and its associates in the scam.[5]

According to people familiar with this matter, even if the federal charges are settled, a primary concern of the two French entities involved in this case is pending civil litigation in California, and group action by former policyholders of Executive Life. Experts think that Consortium de Réalisation and Crédit Lyonnais will continue in related civil litigation to defend allegations that their actions harmed Executive Life policyholders, but both institutions and their managers will have to face legal risk.

It took much longer than originally expected to settle this long-running Executive Life affair, involving the fraudulent acquisition of an insolvent Californian insurance company. Only by mid-December 2003, the French government and François Pinault, the billionaire businessmen, appeared to have reached an agreement with American prosecutors.

Crédit Lyonnais and other implicated firms, agreed to pay a total of $770 million in fines and other payments. Much of the money will come from the French taxpayer. Also paying will be Pinault, while six other French businessmen were indicted.[6]

Transborder legal risk assumed by violating another country's laws and regulations is not the only misdemeanor these days. In early October 2003 in the UK, the Financial Services Authority (FSA) wrote to almost 300 banks and building societies after uncovering a series of failures in the way they manage their Treasury operations. The FSA conducted a review of more than 25 unnamed banks and building societies, and seems to have been disappointed because it found 'at least one material failing' in the systems and controls of 'most firms' it had visited.

In a letter to all chief executives of British credit institutions, the FSA said that 'firms are still failing to address, effectively, some fairly basic issues' in spite of 'numerous, well-publicized examples of material losses arising from inadequate controls within Treasury operations.' Rogue traders have exploited weak controls and lax scrutiny in Treasury operations to conceal fraud. Therefore, a good deal of the FSA's attention focused on whether the systems and controls that banks have put in place are robust enough to monitor, identify and manage risks arising in Treasury operations.

The results of the study also found that banks do not separate in a rigorous manner their front-desk activities from the back office. As the FSA put it, in most instances it was possible to identify potential ways of circumventing the controls and processes in place. Yet failure to separate front-desk from back-office responsibilities opens the door to conflicts of interest.

It is indeed a puzzle why senior, highly paid executives fail to appreciate that violations of corporate accountability have short legs. In mid-August 2003 the former chief executive of The Accident Group (TAG) accused the company of using an accounting policy which inflated profits and boosted payouts to shareholders, including the personal injury group's founder, Mark Langford. Michael Watson, dismissed by TAG in May 2002, claims he identified problems with the accounting policy which KPMG then

investigated and advised the company to slash profits and increase liabilities. Watson alleged that he recommended a change in TAG's accounting system to move it away from booking income from personal injury cases before such cases were formally taken on. He claims to have advised that, instead, TAG should only recognize profits from cases in its accounts when the corresponding contracts on these cases were entered into.

'The change in accounting policy was not welcomed by Langford, whose principal concern was to maximize the amounts available to shareholders,' Watson said.[7] KPMG was asked to investigate in January 2002 and in March of that same year it stated there were serious discrepancies in TAG's balance sheet. As a result of the investigation, TAG saw a £8.3 million ($13.7 million) profit wiped away, leaving it with a £400,000 loss as at 31 August 2001, while net assets of £4 million turned into liabilities of £4.4 million ($7.3 million).

For its part, in the third and fourth quarters of 2003, BAFIN, the supervisor of German financial institutions, stepped up its monitoring of the country's state-owned *Landesbanken*. This policy was adopted following the crisis at Westdeutsche Landesbank (WestLB), the sector's high-profile institution, which in 2002 suffered shock losses because of bad loan exposures. This is the theme of section 3.

3. Poor governance at German state banks could lead to 'German premium'

Chapter 9 has explained how and why, by overplaying their hand in loans, and through overleveraging over the years, Japanese banks prepared their own downfall. This is a case study in management incompetence, which reflects both on the bankers themselves and on the Japanese politicians who pushed them that way. Are German banks getting themselves ready for their own version of the 'Japan premium'?

The path to self-destruction was taken during the 1990s, as the big German credit institutions tried to imitate the business practices of British merchant banks and American investments banks. The result left no doubt that their corporate governance was not at its best. Then, in September 2002, the bad news concerning Germany's banking industry culminated in a massive downgrade by Moody's.

Bad news has a nasty habit of spreading fast in the global financial market. Moody's downgrade was followed by a report from Merrill Lynch making comparisons between the German banking élite and the ailing Japanese banking industry. The challenges facing Deutsche Bank, Hypo-Vereinsbank, Commerzbank and Dresdner Bank are well known:

- stubbornly high costs,
- falling returns, and
- high exposure.

Markets were also nervous of the fact that the ability of German credit institutions to restructure has long been limited not only because of German labor laws, but also because of senior management incompetence and indecision. Another major reason was the role played in the fragmented German banking market by publicly controlled institutions.

This may be changing. From 2005, – the *Landesbanken* (central treasury of savings banks) and *Sparkassen* (savings banks), which together control about 40 percent of retail and company deposits and loans, will be increasingly forced to compete on equal terms with the German private banks. Therefore, the *Landesbanken* and *Sparkassen* already face a rude regulatory awakening, as state governments must stop their guarantees of *Landesbanken* triple-A ratings, and cheap capital markets funding.

Germany's *Landesbanken* were set up in the nineteenth century to act as clearing houses for transactions by savings banks in their regions and to help fund public works. But the system has degenerated: costs are too high; the institutions are overstaffed, and years of misguided lending and ill-considered expansion have led to huge debts.

The better managed of the *Sparkassen* are not only aware that past privileges will fade away, but have also taken measures to significantly improve their governance. For example, they are in the lead in implementing the new capital adequacy framework (Basle II) of the Basle Committee on Banking Supervision, which significantly improves risk management and requires risk-based economic capital allocation.[8]

This is, of course, by no means the general case. Therefore, many analysts believe stand-alone ratings of a good many *Landesbanken* and *Sparkassen* will end up in single As – or lower. *Landesbanken* and savings banks which fall from grace in their rating will suffer a devastating impact on earnings. Some estimates indicate that at single-A levels, profits could fall by as much as 90 percent. To protect their ratings, the formerly state-supported institutions will have to hugely improve their profitability as well as

- cut costs,
- restructure business lines,
- shed non-core operations, and
- become results-oriented.

The prescriptions outlined in these four points will not be easy for the *Landesbanken* because, contrary to the better-managed *Sparkassen*, they are political entities and also lack the skills and the will to improve in these ways. Nearly six decades of easy life, in the post-World War II years, led to miserable financial results which will be impossible to improve on without painful and far-reaching decisions.

The challenge faced by the German *Landesbanken* can be described as follows. Under European Union rules and regulations, if companies pay less

than private investors would have paid, they can be found guilty of receiving illegal state aid. As a result, German state banks like WestdeutscheLB, Landesbank Kiel, HessischeLB, and BayernLB, could be forced to repay millions of euros to their regional authorities.

To cut costs, in early 2003, Hamburgische Landesbank and Landesbank Schleswig Holstein completed a merger to create HSH Nordbank. This is a signal to other *Landesbanken* that they should be teaming up and joining forces to build the capital-market-related business they will need if they are to successfully diversify their earnings after 2005.

The boards of some of the *Landesbanken*, too, seem to have taken notice, but overexposure is not corrected overnight. WestLB is the most sick of the species. Once heralded as a leader in German banking, it has become one of Germany's highly troubled financial institutions, having lost $1.9 billion in 2002, and $221.5 million in the first six months of 2003.

The clock is ticking for Düsseldorf-based WestLB which, as if its financial woes were not enough, is also the subject of fierce political wrangling in North Rhine-Westphalia, which is governed by a coalition of Social Democrats and Greens. Jürgen Rüttgers, leader of the opposition Christian Democrats, says: 'WestLB is the worst banking crisis in the country's history.'[9] BAFIN has also launched special investigations into at least three other *Landesbanken*, to examine levels of credit exposure and efficiency of their risk management processes. These other three banks are Norddeutsche Landesbank, Bayerische Landesbank and Helaba, which have also been the subject of probes by public auditors. Helaba, the *Landesbank* of Hesse-Thüringen, said it has asked BAFIN to test the bank's new risk management system. WestLB, too, plans to have a new risk management system 'that makes it easier to say no to bad deals'(!).

Experts suggest that the regulator's latest probes focus on unexpectedly high provisioning and losses resulting from the bank's lending businesses, in particular its London-based principal unit and a deal involving BoxClever, a UK television rental company. In late June 2003 pressure to quit mounted on Jürgen Sengera, WestLB chairman, and two other senior executives, Adolf Franke and Andreas Seibert. The three were named in a damning report on lack of risk management.

This report, ordered by BAFIN, led to the downfall of Sengera The evidence provided by the report indicated grave deficiencies within WestLB's internal control and risk management structure. The investigators also questioned the role of the bank's chairman and the other two executives in central credit control. Allegedly, the three top executives were also criticized for

- not keeping the credit committee of the bank's supervisory board properly informed, and
- failing to heed early warnings from staff about the risks involved in the BoxClever loan.

This BoxClever deal accounted for €430 million ($430 million) of the €1.9 billion of risk provisioning and write-downs that drove WestLB deep into the red in 2002. WestLB has also lost plenty of money on investments in WorldCom, RBG Resources (the metals trading company), and Enron, in addition to backing Martin Ebner, the Swiss financier who himself landed in trouble.

The similarities between lending by some German banks and by Japanese banks are inescapable. BAFIN, however, seems to have acted faster than Japanese bank supervisors. On 25 June 2003, a couple of days after the news about the damaging report broke out, the Düsseldorf prosecutor's office said it had been asked by Germany's chief financial regulator to examine whether the documents relating to its inquiry into activities at WestLB's principal finance unit contained evidence of criminal breach of trust.

This inquiry led analysts to comment that WestLB could face criminal charges, as regulators handed over to public prosecutors files of a probe into the troubled German bank. For its part, the Düsseldorf prosecutor's office stated that executives could face prosecution. A spokesman said, 'This is an aspect of law that is little known outside Germany.'[10]

In late November 2003, German state prosecutors have included Robin Saunders in their investigations into WestLB's financing of BoxClever. The object of the inquiry is whether Saunders and Andreas Seibert, to whom she reported before he resigned in June 2003, as well as up to 10 other current and former WestLB managers, should answer to allegations related to breaches of trust.[11] Meanwhile, bankers at WestLB estimate that risk provisioning for the BoxClever deal has risen to about Euro 700 million.

Among the *Landesbanken*, WestLB is not alone in having landed in trouble. Worst may be the case of the Berlin state bank, whose treasury was merged with that of Berliner Bank, the local *Sparkassen*, and another entity to form Bankgesellschaft Berlin. This happened in the early 1990s after German unification, and the justification was to refloat those banks whose treasury had gone under.

From the beginning, Bankgesellschaft Berlin was a financially weak bank holding, in which the city-state of Berlin controls a 56.6 percent share. Not only did the new institution start life with plenty of bad debts, but it had also been badly hurt by the collapse in the mid-1990s of the Schneider Group. At that time, Schneider was Germany's biggest real estate developer; it defaulted over unsecured loans.

Bankgesellschaft Berlin was the Schneider Group's third-largest creditor, after Deutsche Bank and Dresdner Bank. But bad loans were not the only woes. Much worse in terms of the financial institution's losses was the Bankgesellschaft's huge exposure in derivatives. All this hit like a hammer the city-state of Berlin, which itself was highly overleveraged and overindebted.

- Berlin's population is 3.5 million and the per capita debt is $10,000.
- Even the per capita debt of Turkey, the next-biggest financial problem case in Europe, is 'only' $1,500.

In October 1990, at the time of German reunification, Berlin had a public debt of DM 18 billion ($9 billion). At the end of 1995, the debt had risen to DM 43 billion, and in May 2001 to DM 66 billion. With hyperdebt setting in, by September 2001 this had became DM 78 billion ($39 billion). That's when Bankgesellschaft Berlin near-bankruptcy hit.

To overcome the crisis of Bankgesellschaft Berlin, the Land Government of Berlin, as majority shareholder, approved a supplementary budget for 2001. This included an increased authorization for €3 billion of new borrowing in order to facilitate the capital injection needed to ensure the bank's continued existence and to offset privatization proceeds foregone because of the crisis. But the same old, tired management remained in place, and the drag continues.

4. The crisis of German commercial banks is just as deep

Commerzbank is the fourth-largest German commercial bank; it is also a credit institution in financial trouble for several years. In October 2002, its stock fell from €44 in 2000 to €5.3, the lowest price in 20 years – a collapse of 88 percent. Over the same time period the market capitalization of Commerzbank sank from €24 billion to €3 billion.

Other financial companies in the DAX 30 also faced huge losses: MLP (Marschollek, Lautenschleger and Partner) had to live with a loss of 96 percent in its equity; BayerischeHypo Vereinsbank, –83 percent; Allianz/Dresdner Bank, –83 percent; Münchener Rück, the reinsurer, –75 percent; Deutsche Bank, –64 percent. In fact, the entire market capitalization of the above firms went from €330 billion in 2000 to €71 billion in early October 2002[12] – which was a bad year for equities, both in Western Europe and in the United States.

There have been, of course, deeper reasons for these bad years. In 2002, HypoVereinsbank (HVB), Germany's second largest bank, lost more than €800 million and set aside €3.8 billion against dud loans. It also scrapped its dividend to shore up its capital base. Allianz, the insurer, confirmed just how bad 2002 was for Dresdner Bank, the country's fourth-biggest bank which it bought in 2001.

At Deutsche Bank, Germany's largest credit institution, the outlook was a bit more optimistic, as it seemed at long last to be getting its underperforming retail banking and asset management divisions into shape. Deutsche was restructuring its assets by ditching much of its private-equity portfolio. Yet, the bank was far from fit because

- its cost-to-income ratio, a standard measure of efficiency, was 83 percent, way too high and comparing poorly with the 45.2 percent ratio of the UK's HBOS (Halifax Bank of Scotland), and

- it suffered a double management blow, as it emerged that its CEO, Josef Ackermann, had been charged in connection with Vodafone's takeover of Mannesmann (see Chapter 1), and its former CEO Rolf Breuer was liable to pay damages to Leo Kirch, the media mogul.

Mismanagement of the Kirch Group relationship had also hit other German banks. Kirch Group was a privately owned German media company. In mid-December 2001, Dresdner Bank was insisting on repayment of a €460 million ($460 million) loan by the end of that year, while Kirch was trying to restructure billions in debts – and the News Corporation was planning a hostile takeover.

The Kirch Group remained in limbo for several months, damaging in the process the institutions which had extended it credit. By February 2002, Bayerische Landesbank, a state-controlled bank and lender of $1.7 billion to Kirch, nudged other banks, such as HypoVereinsbank, to lend hundreds of millions more to the media company, whose total debt was said to top $5 billion.[13] In the end, the Kirch Group crashed.

There is a post-mortem to the Kirch-Deutsche bank story. In early December 2003, α German court ruled that the country's largest bank should pay compensation to Kirch. Before Kirch's collapse, Deutsche Bank's CEO had spoken disparagingly in public about its creditworthiness.[14] CEOs beware; your words can be held against you and your institution.

Like all other banks in America and Europe in the first years of the twenty-first century, German credit institutions have been counting the cost of their own past mistakes and those of their privileged customers. As capital markets boomed in the late 1990s, they were not as careful as they should have been with loans, and they had poured huge resources into investment banking. Subsequently, they suffered when the good times ended and they had to scale back their ambitions, while their loans losses boomed, their derivatives exposure skyrocketed, and their costs went out of control.

The spike in corporate failures has also put public pressure on the publicly owned *Landesbanken* and savings banks, which, as we saw in section 3, hold a large chunk (some 50 percent) of Germany's corporate loans. While politicians and bank executives maintain there is no systemic threat to the German banking system, a consensus is emerging that structural reform is urgently required to correct the balance.

To re-establish viability, German banks started to dispose of some of their jewels, like the sale of 25 percent of Bank Austria by HypoVereinsbank. Bank Austria Creditanstalt is the Vienna unit of HVB Group and Austria's biggest bank by assets. In July 2003, the sale raised about €960 million in an initial public offering. Its goals were to

- plug a capital shortfall of €1.7 billion at HVB, and
- preserve the Munich-based bank's credit rating, after a third straight loss in the first quarter of 2003.

HVB also sold its Norisbank consumer finance unit. The bank's management said that proceeds from the sale would also be used to fund Bank Austria's expansion in Eastern Europe, where economists have forecast a faster rate of growth than in the 12 nations currently using the euro. (The European Commission expects economies in the Central European countries scheduled to join the European Union in 2004 to grow 3.5 percent in 2003, compared with 1 percent for countries already in the European Union. Both figures are inflated.)

Subsequently, on 6 October 2003, Hypo Real Estate was born as a spin-off of HypoVereinsbank. To a large extent, this spin-off represents the assets of the Bavarian Hypotheken Bank which, some years earlier, had merged with Vereinsbank. The market was receptive. The mortgage finance entity's stock debuted at €11.25, towards the lower end of the €9 to €15 range of expectations, but shares closed at €12.85 in Frankfurt. (HVB shareholders were allocated one share in Hypo Real Estate for every four they held.)

Analysts pointed out that HVB and Hypo Real Estate had a combined value of €12.4 billion compared with HVB's stand-alone €8.5 billion market capitalization at the end of the previous week. They also took heart from the fact that pressure on the real estate entity's shares had been relieved by the placement of Munich Re's 26 percent stake in the new entity, by Goldman Sachs, in a number of predominantly European financial institutions.

In the background of this flotation was the shifting €57 billion ($57 billion) of HVB's risk-weighted assets from its balance sheet. But the spin-off also demoted HVB from No. 2 to No. 3 by market value in Germany, behind Deutsche Bank and Commerzbank. This spin-off was the second of HVB's efforts to rebuild its balance sheet and restore its core capital ratio. The first came in July 2003, with the disposal of a 25 percent stake of HypoVereinsbank's equity in Bank Austria.

Ironically, what the sales of HVB assets – including its foreign subsidiaries – aims to recover is capital foolishly spent on ill-conceived acquisitions some years earlier. HypoVereinsbank bought Bank Austria in 2000 to accelerate its expansion in Central and Eastern Europe, and paid €7 billion for it. Then, in June 2003, three years later, came the partial flotation of its Bank Austria business for €1.1 billion – which means €4.4 billion for the whole institution, and a loss of €2.6 billion from the purchase price.

Senior management should appreciate that while the sale of assets might bring temporary relief, it is by no means a lasting solution. The rule is that companies run out of assets others may wish to buy, while financial weaknesses persist. For instance, in late February 2003, concerns were triggered by a meeting between Gerhard Schröder, the German chancellor, and top German bankers, held to discuss the possibility of state-sponsored bailouts.

According to information leaked to the press, Josef Ackermann, the CEO of Deutsche Bank, observed during that meeting that if the condition of the German banking system deteriorated further, then the government might

have to avert a crisis by setting up a *bad bank* to take over bad debts of German credit institutions. Securum is a Swedish example of such a bad bank, dating back to the early 1990s.

In Sweden's case, as the mountain of bad debts crippled the country's banks, the government issued a blanket guarantee that counterparties would not suffer unsustainable losses. Securum was endowed with about $10 billion to take over bad loans, real estate and other holdings of Nordbanken, the former PK Banken, partly owned by the government. Also an independent agency, the Banking Support Authority, was set up to manage the guarantee.

Securum has been a very well-managed financial enterprise and its success will not be easily replicated. In the end, through orderly sales it has been able to recover of its holdings some 75 cents to the kroner, versus 30 cents at best the Swedish government would have got in a fire sale. However, as more money went to save other bankrupt Swedish institutions, like Gota Bank, altogether the banking rescue is estimated to have cost the Swedish taxpayer about $7.7 billion.

5. Bringing Crédit Suisse all the way to the abyss

First and foremost there should be made a clear distinction between the bank's position under the chairmanship of Dr Lukas Mühlemann, which is a case study in poor corporate governance, and the damage control which took place after the board of Crédit Suisse fired Mühlemann. This section concentrates on the bad years.

Crédit Suisse Group is a global financial services company headquartered in Zurich. Its business unit, Crédit Suisse Financial Services, provides clients with private banking and financial advisory services, banking products, as well as pension and insurance solutions from Winterthur. Another major business unit, Crédit Suisse First Boston (CSFB), is an investment bank which serves global institutional, corporate, government and individual clients. Crédit Suisse Group employs around 80,000 staff worldwide. As of mid-2002, its reported assets were CHF 1.3 trillion (about $1 trillion).

New York-based Crédit Suisse First Boston is one of the world's largest investment banks. With 8.9 percent market share in global debt and equity, it ranks third after Merrill Lynch and Citigroup, but ahead of JP Morgan Chase, Morgan Stanley, Goldman Sachs, Lehman Brothers, UBS and Deutsche Bank. Size and might, however, is one thing; financial results due to poor corporate performance is another.

The statement that 'Crédit Suisse Group's performance in the third quarter of 2002 was clearly unsatisfactory,' as written in the Group's 2002 Annual Report, is too mild. The Group reported a net operating loss of CHF 1.8 billion ($1.38 billion), heavily weighted by a net loss of CHF 2.1 billion ($1.61 billion) for the third quarter 2002.

The reasons that brought Crédit Suisse to its knees ran for more than a year. Following just a couple of years of mismanagement, on 9 October 2001, Lukas Mühlemann, then the CEO of Crédit Suisse, warned investors that the bank had lost $180 million in the third quarter, a huge difference from its $960 million profit in the same period of 2000. Behind this were not just losses at CSFB, but in other divisions, too.

For instance, Crédit Suisse took a $120 million loan-loss charge to the collapse of SAirGroup, Swissair's parent, while plunging world stock prices triggered a $240 million loss on the 5 percent plus stake Crédit Suisse had in insurer Swiss Life. The Group was also hurt by losses at Winterthur, its major insurance unit.

Another show of mismanagement was the throwing away of money for high-priced acquisitions, at the very moment the business of investment banking had buckled. In the opinion of financial analysts, the purchase by CSFB of America's Donaldson, Lufkin & Jenrette (DLJ) at the top of the market for $11.8 billion, was both bad timing and too high a price. Allen D. Wheat, the head of CSFB, had incorrectly expected the investment banking market to keep going strong.

Before buying DLJ, CSFB had 16,500 employees. By late 2001, even after laying off 2,000, it had 25,500. With the pay of investment bankers reaching for the stars, the resulting entity's investment-banking payroll alone was 34 percent higher than it was at the time of the merger. This was unsustainable.

Beyond that, there were too many people within CSFB who were on special deals, often negotiated directly with Allen D. Wheat, the then CEO. It is said that when an investment-grade fixed income team threatened to go to Barclays Capital, the CEO pulled them back with guarantees said to be worth more than $300 million. The CEO's 'generosity'

- alienated the remainder of CSFB's worldwide fixed income group, and
- made CSFB top heavy in fixed costs, which absorbed all profit margins and threatened to pull the bank under.

The torrent of red ink did not take long to gain momentum. This is shown in Table 10.1, whose figures come from the third quarter (3Q) 2002 financial report of Crédit Suisse – before the turnaround attempted by the new management. As readers will appreciate, these figures are dismal.

Financial losses seem to be everywhere and, as noted in the table, the figures do not even account for life insurance and for pensions. This was the result of poor governance combined with poor market conditions and led to the fact that several of the Group's business units were hurt at the same time. Readers will see this example as evidence that diversification has its limits.

At Winterthur Insurance, realized losses in the equity portfolio and growth in premium volumes in the third quarter of 2002 gave rise to

Table 10.1 Capital allocation in 3rd quarter 2002 by Crédit Suisse Group in CHF million[1]

	Operating income	*Net operating P&L*	*Average allocated capital*	*AAC to OI*	*AAC to profits*	*E.C. at 5%*[2]	*Difference from P&L*
Investment banking	1,440	NA	3,599	2.5		180	
Corporate and retail banking	615	NA	3,893	6.3		190	
Insurance	402	NA	4,669	11.6		230	
Total Crédit Suisse financial services[3]	2,457	(1,020)	12,161	4.9		600	(1,620)
Investment banking	3,114	NA	13,906	4.5		695	
CSFB financial services	742	NA	984	1.3		50	
Total CSFB	3,856	(426)	14,437	3.7		745	(1,170)
Group-level difference from 5% ROA							(2,790)

Notes:
[1] Credit Suisse Group, *Quarterly Report Q3 2002*.
[2] For 3Q 2002, therefore, 20% ROA per Year.
[3] Not accounting for Life and Pensions.

increased capital requirements. Top management responded with a CHF 2.0 billion ($1.54 billion) capital contribution to strengthen the insurance unit's capital base, a transaction largely financed through the Group's dwindling capital reserves.

At Crédit Suisse First Boston, a net operating loss of CHF 426 million ($327 million) was recorded, due mainly to trading exposure, reduced revenues from mergers and acquisitions, higher provision for several channels, and different legacy costs. The levels of trading exposure make interesting reading. The statistics in Table 10.2 are based on the Crédit Suisse *Quarterly Report*, Q3 2002.

Crédit Suisse's fourth-quarter 2002 financial figures were not really better. What they show in particular is the damage done by the excesses of CSFB's investment banking operations – before the change in leadership. Over and above other strains, the Crédit Suisse Group made a $600 million provision against regulatory action and civil litigation in America and Britain in the wake of 2003 scandals (see Chapter 7).

Other bad news was that the institutional investors cut the amounts they were prepared to entrust to CSFB's discretionary management. These were down to $200 billion at the end of 2002, from $260 billion at the end of 2001. But at least top management took some good decisions. On Wall Street, analysts were saying that Crédit Suisse was right to shrink its investment bank, restructure Winterthur, and cut costs.

Table 10.2 CSFB trading exposures at 99 percent one day VAR, in $ millions[1]

	3Q 2002	*2Q 2002*	*1Q 2002*	*4Q2001*
Total VAR				
At period end	38.9	59.3	52.5	42.7
Average	43.7	46.4	49.2	49.0
Maximum	57.4	59.3	61.2	55.5
Minimum	37.6	36.8	40.2	42.7
VAR by risk type (period end)				
Interest rate	59.3	54.7	59.7	56.7
Foreign exchange	7.6	18.7	7.5	11.1
Equity	12.1	16.5	17.2	21.7
Commodity	1.2	0.5	0.6	2.4
Subtotal	80.2	90.4	85.0	91.9
Diversification benefit between major trading lines[2]	(41.3)	(31.1)	(32.5)	(49.2)
Residue (as in 1st row)	38.9	59.3	52.5	42.7

Notes:
[1] Crédit Suisse Group, *Quarterly Report*, Q3 2002.
[2] Diversification benefit reflects the net difference between the sum of the 99 percentile loss for each risk type and for the total portfolio.

- CSFB's investment banking revenues were too dependent on activities that have been languishing and hardly covering costs.
- Winterthur has been hit, like many other European insurers, because of overexposure to equity markets, with little prospect of improving its investment returns from other sources.

The financial problems at Crédit Suisse Group, and management issues found at their origin, have led to a collapse in net new money inflows into Crédit Suisse Private Banking, the group's most profitable business. In late February 2003, Crédit Suisse reported a $2.1 billion net loss for 2002, and also stated that net inflows into its private banking unit fell to just $350 million in the final quarter of 2002, while in the second half of 2002 inflows fell 71 percent.

Crédit Suisse traditionally had much stronger net money inflows than UBS, its bigger rival in the offshore private banking market. In the aftermath of the bleak 2002 events, the bank's management said that the decline in net new assets was due mainly to the impact of increased attention surrounding Crédit Suisse Group's financial performance. In the opinion of analysts, this was the result of the old management's ineffectiveness in the course of 2002.

The effects of bad judgment by ousted Lukas Mühlemann, the bank's former chairman and chief executive, and his pals are shown in Table 10.3. The good news is that by early 2003, under new management, Crédit Suisse begun to deliver the promised restructuring of its cost base. Even before that, Group expenses in the October–December 2002 period were down 9 percent from the same quarter a year earlier.

Table 10.3 June 2000 to February 2003. A torrent of events starting with bad judgment by the top management of Crédit Suisse

June 2000	Donaldson Lufkin & Jenrette bought for $11.8 billion
May 2001	SEC starts looking at technology dealings of CSFB
June 2001	John Mack replaces Allen Wheat as CSFB chief
February 2002	Crédit Suisse issues profit warning, citing CSFB and Winterthur
September 2002	Lukas Mühlemann, chief executive, resigns; John Mack and Oswald Grübel take over
December 2002	Fined by Financial Services Agency over illegal Japanese operation
January 2003	Pays $200 million to settle conflict-of-interest inquiry on Wall Street
February 2003	Frank Quattrone, CSFB's technology banker, put on administrative leave, then prosecuted
February 2003	Announces biggest annual loss at CHF 3.3 billion ($2.48 billion)

At CSFB, John Mack, who has been the new CEO since mid-2001, was working to return the investment bank to profits through an aggressive cost-cutting campaign which led to the departure of more than 7,000 staff in investment banking worldwide. Those cost figures were expected to improve with the effect of cost savings feeding through 2003, and with the notorious DLJ guaranteed bonuses winding down. More job cuts took place in the group's Swiss banking and insurance divisions – while Oswald Grübel, co-chief executive of Crédit Suisse Group, warned of 25 to 30 percent excess capacity in Swiss banking.

6. Change in management is important, but it takes time to turn around a big company

On 19 September 2002, the board of directors of Crédit Suisse Group announced the appointment of Walter B. Kielholz, its new chairman, effective 1 January 2003. Walter Kielholz has been a board member as well as chief executive officer of Swiss Re. As of January 2003, Oswald J. Grübel, CEO of Crédit Suisse Financial Services, and John J. Mack, CEO of Crédit Suisse First Boston, became co-chief executive officers of the group, in addition to their roles as CEOs of the business units they headed.

Of the two co-CEOs, John Mack, a former chief operating officer of Morgan Stanley, will have the most challenging mission. The turnaround of a big unit like CSFB is by no means linear, particularly at a time when:

- M&A activity is low,
- investment banking is in the doldrums, and
- there are too many legacy problems from the previous administration.

Like many other investment banks, CSFB faces an array of challenges. The difference is that several of these problems call for tough answers at the same time. Crédit Suisse had to face criminal and civil action in the US, following allegations that it received kickbacks in return for allocating shares in newly floated technology companies at the height of the boom, and as we saw in Chapter 7, CSFB was part of the settlement reached on 28 April 2003 with SEC.

While CSFB had always denied any wrongdoing in the way it handled initial public offerings of shares in dot-coms, at the end of June 2001 it fired three brokers from its technology group with ties to its IPO business. More heat came from securities regulators investigating whether Wall Street firms sold new stocks to big investors who promised to buy more shares after the stock started trading, practically leveraging the IPO's equity.

True enough, in all these investigations CSFB was not alone. While all of the big firms on Wall Street are being scrutinized by the Justice Department and by the Securities and Exchange Commission, those that found

themselves under financial pressure for other reasons landed on the critical list.

The IPO allegations have been just part of a series of regulatory mishaps for CSFB under the deficient corporate governance of Lukas Mühlemann. In early 1999, the activities of the so-called 'Flaming Ferraris' (named after the potent cocktails traders used to celebrate their successes on Friday nights) had come to public attention.

- London-based CSFB traders who made more than £100 million ($160 million) for CSFB were rewarded handsomely.
- But their activities folded when OM, the Swedish stock exchange, fined the bank for manipulation of a share index by some of its traders.

Also in 1999, two months down the line from the aforementioned incident, CSFB was disciplined by the regulator in Japan after it admitted that its derivatives unit had helped customers hide trading losses. Seven staff from CSFB, including a compliance officer in London, were fired after these irregularities came to light.

Since one act of mismanagement never comes alone, another incident came to light when CSFB became the first investment bank to be banned from stockbroking in India. The move followed an inquiry by local authorities into alleged short selling by brokers which caused severe market turbulence. CSFB denied any wrongdoing; its top management should, however, have known that selling short is illegal in India, even if it is legal in other countries in which the bank operates.

Moreover, there have been internal problems, some of them the result of fast growth. Allen D. Wheat, CSFB's CEO until July 2001, grew the bank from a mid-tier securities firm into the world's third-largest debt-and-equity underwriter with quarterly $778 million in pre-tax profits on $4.3 billion in revenues. This was CSFB's high-water mark. During this process, however,

- the bank eagerly recruited top-dollar bankers at any price;
- its payroll soared to 28,000 in 2001, up from 5,000 in 1997, and
- it made a string of acquisitions culminating in the $11.8 billion purchase of DLJ in August 2000.

The Mühlemann–Wheat management should have known better. Such rapid growth in business activities and personnel brings with it a mare's nest not only in compensation but also, most importantly, in loss of internal control. The synergy of these two problems wrecked the financial institution, with aftershocks well beyond the time Mühlemann and Wheat were at the helm.

For instance, on 7 October 2003, it was revealed that Crédit Suisse First Boston failed to notify bankers of a government investigation until weeks after the bank had received subpoenas, but two days after Frank Quattrone

urged them to clean up their files. This testimony came from a former CSFB lawyer, David Brodsky, who also admitted that the notice CSFB's compliance department eventually sent referred only to a narrow part of the potential evidence being sought by investigators.

An SEC complaint, filed in the US District Court for the Southern District of New York, alleged that Quattrone's technology group used analysts to solicit and conduct investment banking business. Research analysts were paid up to 3 percent of the net revenue generated by an investment banking deal, with a maximum bonus of $250,000 per deal. Some were also guaranteed a bonus.

Investigators learned a great deal by studying the analysts' emails. One email from Quattrone to his staff said, 'Please submit your revenue sheets if you want the highest bonus possible.' Investment bankers also used their own evaluation techniques to determine analysts' compensation, calling on their colleagues to rank the analyst from 1 to 3.

Frank Quattrone has been a major headache for CSFB. He is the former head of CSFB's technology investment banking group, and a star performer, for that matter. But he also stood accused by prosecutors of obstructing justice and witness tampering after he sent the fatal 5 December 2000 email, urging colleagues to destroy files.[15] The complexity and depth of the Quattrone affair became the subject of a broad inquest by the US National Association of Securities Dealers (NASD) into a whole range of alleged rules violations, including making improper IPO share allocations and offering potential clients favorable analysts' coverage – charges Quattrone denies.

In a two-month investigation, *Business Week* delved into Quattrone's financial empire, turning up details on his web of dealings that underpinned the Internet economy. Quattrone alone made a profit of $200 million between 1998 and 2000, according to the NASD. But the day of truth eventually dawned in mid-2003. At a time when the public was railing against white-collar crime, Frank Quattrone stood before the jury as an investment banker who was paid more than $120 million in 2000 alone.[16]

Crédit Suisse is not yet out of the tunnel in the Quattrone affair. On Friday, 24 October 2003, in the jury room at the investment banker's criminal trial, the tide appeared to be turning against him. Three jurors switched their votes to guilty on two of three counts of obstruction of justice and witness tampering, raising the 8–3 tally in favor of conviction to 10–1. But the lone juror held firm, responding that unless the verdict was not guilty, it was not going to be unanimous. With that, the five days of deliberations in the landmark case were over, and Judge Richard Owen declared a mistrial.[17]

7. Runaway compensation and trading tricks can kill a firm

In his restructuring efforts, John Mack had to go well beyond re-establishing ethics in an entity which seems to have lost its sense of virtue and of direction.

He did so by cutting loans, reducing trading risks and slashing problem assets in real estate, distressed debt and private equity investment. Speaking at a parent Crédit Suisse's annual meeting, John Mack admitted that in the past CSFB had a cost structure that simply was not competitive with its peers. Furthermore, its excessive levels of compensation were completely out of line with industry standards.

There has also been the big issue of internal controls, which CSFB's new CEO was expected to restructure. Mack is quoted as having said:

> The organization has grown quite phenomenally over the past few years. But if you grow at that pace, you've got to tighten your management and compliance procedures. At Morgan Stanley [his former employer], the infrastructure had been in place for years. Here, there has been an explosion of growth, which stretches the culture; it takes time to pull it all together.[18]

This issue of compensation is so important that it deserves further focus. Most investment bankers on Wall Street, and to a lesser extent the City of London, receive an annual bonus which accounts for the bulk of their pay. Typically, this is based on the amount of business they generate, but there are no standard ratios.

Horse trading for top dealers is not unheard of; indeed, it is quite common yet it hurts badly when taken to extremes. Also, overpaying for acquisitions is never healthy. On Wall Street, some experts said that the $11.8 billion ticket for DLJ paid by Crédit Suisse was too big by at least 50 percent. Those spend billions for things they do not need miss the money when it is really necessary.

- While it was well known for its merger expertise, CSFB made the blunder of paying an inordinate amount of money for the purchase of rival DLJ.
- By 2002, two years down the line, fewer than half of DLJ's 2,000 bankers remained at CSFB. If the money that was paid was for skill, the skill had gone away.

The bonus policy followed by the old management of Crédit Suisse Group and CSFB was just as irrational. Staff in the technology trading group are said to have kept about 50 percent of the net fees they generated, while the bank was left with the potential for significant core derivatives losses. To appreciate how much capital was at stake, note that CSFB earned $358 million for underwriting $5.4 billion worth of technology IPOs in 2000.[19]

In the first quarter of 2001, CSFB's compensation rose to 59 percent of net revenue, far higher than its rivals, many of which have ratios closer to 50 percent. Moreover, under Mühlemann and Wheat, CSFB handed out a number of big guaranteed-pay packages to bankers and traders to keep them from jumping ship, particularly after some star performers began to flee

following the 2000 acquisition of Donaldson, Lufkin & Jenrette in 2000 by CSFB.

This is, in fact, an industry-wide problem. Bonuses and retention fees are so high, and so ill conceived or controlled, that they leave securities firms widely exposed when the market turns against signed-up deals and lucrative paper profits turn into high losses. Therefore, banks now prefer to give a number of their people contracts that partly guarantee them set pay. On the other hand, this increases their overheads quite significantly.

It takes a strong authority to keep costs under control, and such an authority is not always on hand. Crédit Suisse First Boston provides one of the best examples of how management risk can bring a company to ruin. By July 2001, before John Mack took over, lavish spending by its bankers, combined with the astronomical pay packages of traders, had gotten so out of control that the institution was facing a $1 billion loss. Neither were the market moves the company made very wise.

To bring CSFB back from the edge of the abyss, John Mack got many of his high-priced bankers to give up a quarter of their salaries. He threw in 25 percent of his own compensation, too. Mack also laid off some 3,000 bankers, 19 percent of the total, and took away some of what were traditionally considered to be basic perks, becoming known as 'Mack the Knife'. In two years, from mid-July 2001, when he took command, to mid-2003, John Mack cut $3 billion in costs by lowering the headcount, and trying to steer CSFB away from potential harm. This strategy enabled CSFB to post a modest $61 million net profit on $3.5 billion in revenues in the second quarter of 2002. This, however, unraveled with the $200 million CSFB was ordered to pay in the 28 April 2003 settlement with the Securities and Exchange Commission (see Chapter 7), and the 22 January 2002 payment of $100 million to settle regulatory charges that it allotted sought-after shares of initial public offerings in exchange for investor kickbacks in the form of higher commissions.

In documents detailing the settlement, the Securities and Exchange Commission and the National Association of Securities Dealers cited email messages between CSFB employees to support the contention that the firm broke the rules. *Bloomberg Markets* cites one example: 'Okay, we got another screaming deal and I weaseled you guys some stock,' a sales trader told a customer, according to the SEC. 'We've yet to see any leverage out of you guys for the free dough-re-me. Does it make sense for me to continue to feed you guys with deal stock? Or should I take the stock to someone who will pay us direct for the allocation?'[20]

Nor were greedy clients left waiting. CSFB's technology Private Client Services (PCS) team, established by Quattrone as part of his Technology Group, was accused of spinning activities relating to IPOs. From 1999 to April 2001, PCS improperly allocated hot IPO stocks to executives in investment banking clients and improperly 'managed the purchase and sale of that

stock through discretionary trading accounts,' according to the government's complaint.

As the complaint had it, 'By having CSFB brokers control trading in these accounts, some executives were able to realize profits in excess of $1 million in little more than a year, while others realized percentage gains of 240 percent to over 950 percent.' The complaint further revealed that analysts were allowed to provide executives of companies they were about to issue research on with copies of analyses and proposed ratings for editorial comment and beautification of research results.

In conclusion, trading and other scams, run-away compensation of personnel, bonuses that have no relation to business reality and to assumed risks, substandard internal controls, and money thrown down the drain for unnecessary big-name acquisitions, are wounds which can kill a company. These woes were inflicted upon CSFB by the old management. No wonder restructuring and turnaround are not easy.

Moreover, financial difficulties faced by parent company Crédit Suisse, and Winterthur, its insurance division, did not help. Between January and September 2002, the parent company's equity went down 52 percent. Some analysts on Wall Street have been saying that if the turnaround of CSFB is not highly visible, parent Crédit Suisse Group might well hang out a 'for-sale' sign.

8. Beware of mismanagement; it can become endemic

Switzerland was once Europe's most successful economy, with gross domestic product of more than $31,000 per capita, an unemployment rate of just 2.1 percent, and a massive balance-of-payments surplus. Swiss companies have also been admired for excellent management, but suddenly (and curiously) these characteristics of management quality changed in the first years of the twenty-first century.

Corporate misdemeanor tarnished the pristine image. Examples are the grounding of Swissair in the fall of 2001; the problems of Crédit Suisse discussed in sections 5, 6 and 7; a huge failure of corporate governance at Zurich Financial Services; the case of Swiss Life; the 11 July 2002 arrest of the Swiss ambassador to Luxembourg on charges of money-laundering; and the air-traffic failures that contributed to the Űberlingen crash, also in July 2002.

Zürich Financial is not just any company. It is Europe's fifth-largest insurer. The fact that it lost $3.4 billion in 2002 may have dramatic consequences for this overstretched firm, which is now trying to downsize and refocus (more on this later).

Not to be left behind, Swiss Re, another big insurer, faced a loss of CHF 100 million ($64.2 million) in 2002 after taking a charge of CHF 3.4 billion for the diving value of its share portfolio. In the aftermath, the big reinsurer cut its dividend for the first time since 1906.

Some analysts are worried that, in many companies, executive effectiveness and internal control have slipped, management accountability melted, and corporate problems, so far hidden from public eye, have come to the surface. For instance, past success encouraged management at Swissair, Zürich Financial Services and Crédit Suisse, to embark on ill-considered expansion programs, and press ahead with them, even when it became clear that they were not in shareholders' and other stakeholders' interests.

An example of stakeholders' interest put at high risk is gambling with pensioners' money, with the likelihood of depriving people who have worked hard all their life and put aside money for their retirement of the pension that have been counting on. Chapter 3 addressed this issue. The Swiss contribution to bad examples is a lecture at the 2nd Annual GAIM – Funds of Funds Forum 2003,[21] whose announcement reads as follows:

> The View from One of Switzerland's Largest Pension Funds, Heavily Invested in Funds of Funds
> CITY OF ZURICH PENSION FUND

Who has allowed the bureaucrats running the City of Zürich pension fund to put at high risk, through funds of funds venture investing, the money they manage on behalf of pensioners? Have these pensioners *themselves* been consulted? Has the amount of risk which they take with alternative investments been explained to them? Are they aware of the disastrous effects of leverage by the Orange County meltdown in the mid-1990s?

Lessons should always be learned from failures of the past; otherwise we are condemned to repeat them. Equitable Life, for instance, was left with an asset shortfall of £1 billion ($1.6 billion) after losing a court case. This disaster has reduced the retirement income expectations of about one million people.[22] Pension funds have no reason, and no right, to repeat that kind of experience with risky alternative investments.

- Leveraging and derivatives is the easy way found by mismanagers to expose those for whom they work to the worse of perils.
- Even well-known entities are (unwisely) lured by the promise of fast gains, and when the chips are down they lose their assets.

Zürich Financial is a case in point. Like Crédit Suisse, after the débâcles it has suffered with derivatives, Zürich Financial has dumped its old management in hopes of reassuring financial markets. But a change in CEO does not mean that a sick company will become healthy overnight. As we have seen in the previous three sections with Crédit Suisse Group and CSFB, red ink takes some time to dry.

Zürich Financial Services provides a good case study in terms of unsustainable losses. After the insurer, which tried to diversify into derivatives

and other novel financial instruments, posted a record $2 billion in losses in the first half of 2002, its president was dumped under pressure from shareholders. The heat was on the new CEO to

- replenish severely depleted reserves,
- cut costs with a sharp knife, and
- re-establish the Swiss insurance company's strategic focus.

Another Swiss insurance company, Zürich-based Swiss Life, was on its third CEO in 2002. The current boss, former Crédit Suisse Group executive Rolf Dörig, was hired to replace Roland Chlapowski, who lasted only nine months. The reason has been a mounting crisis over accounting errors and management perks.

The case of Winterthur, the insurance arm of Crédit Suisse briefly discussed in previous sections, is no different. Winterthur's CEO, who ran the company into the ground, was dumped and replaced by Lenny Fischer, a former German investment banker. Brought in in November 2002, Fischer was given the mission to turn round the insurance company.

To get badly needed cash, Fischer sold two of the most profitable subsidiaries of Winterthur in less than a fortnight – stressing that these disposals, combined with the sale for $127 million of part of Winterthur's US insurance business, would help the company to get over the cash crash. The first of the two European sales was that of Churchill, a British on-line non-life insurance company, to Royal Bank of Scotland for £1.1 billion ($1.76 billion). The Scottish bank is adding Churchill to Direct Line, its insurance subsidiary, to create Britain's third-biggest general insurer.

The second major European sale by Winterthur, which took place at the end of June 2003, concerned its highly profitable Italian insurance operations. For €1.46 billion it went to Bologna-based Unipol, an Italian insurance firm. Recently, Unipol was one of Italy's more acquisitive insurers. Wintherthur Italy had annual life and non-life premium volume of €2 billion, and 1,600 staff.

Winterthur also reduced its equity exposure in the third quarter of 2002. The new management focused on further adapting its premium structure, cost base and investment strategy – with the goal to achieve profitability in an environment in which investment income is expected to be significantly lower than in previous years.

Switzerland's financial sector is not the only one to face serious corporate governance problems. Clariant, too, the Swiss chemicals company, managed to land itself in trouble. In one morning, on 25 February 2003, it denied, then confirmed, then avoided confirming or denying, that it would tap shareholders for CHF 600 million ($430 million) in new funds. In the meantime, it produced a vague strategy to cut costs, and made public a decision to dispose of businesses.

Analysts said that Clariant's subsidiaries put on the block were too small in terms of amount to plug a hole of net debt of CHF 3.5 billion ($2.5 billion). Clariant shares were the largest percentage losers on the Zürich stock exchange on the day of these announcements, falling 13.3 percent to a 12-month low of CHF 11.75. In 2003, they have fallen 47.7 percent from 1 January to 4 March 2003 alone.

In the background of the equity's crash lies the fact that analysts did not think current management could revive the company. One of the comments most frequently heard in Zürich was that 'On the basis of the details provided so far, we are not convinced about the depth of the restructuring plan.' The market had little confidence in a turnaround.

- In early 2003, Clariant's capitalization stood at $1.3 billion, slightly higher than half its debts.
- Not only did the capitalization melt, but also the company had to take writedowns of $2.1 billion after the ill-advised acquisition of BTO, the British fine chemicals firm it bought for $2.0 billion in 1999.

Swiss, the downsized airline which replaced the defunct Swissair, was another case of mismanagement. Unable to decide whether it wanted to compete in local carrier lines or long-haul, its board and CEO reinvented Swissair in spite of its failure. They could not understand that local and long-haul air transport service are two different businesses, and a start-up cannot permit itself to try to kill two birds with one stone.

There have also been conflicts of policy and internal control weaknesses relating to the management of foreign subsidiaries of other well-known Swiss companies. For instance, Asea Brown Boveri (ABB) faced problems with Combustion Engineering, its US subsidiary, which has major asbestos litigation. ABB's hope is that a new American law would place a tap of $1.2 billion on its US financial vows.

This huge risk came at the wrong time for ABB, as the company reported a record annual loss of $787 million for 2002 after it took charges to settle asbestos-related liabilities. Without the $1.2 billion tap, ABB would have faced financial disaster, including class action lawsuits from asbestos victims, which sought billions of dollars in compensation. All this is a pity; the Swiss economy depends a great deal on the country's big firms, whose contribution is equal to almost 10 present of GDP.

There is, as well, the case of Adecco. Mid-January 2004 its shares plunged by more than 48 percent, then recovered somewhat to close over a third down, after the company admitted to 'material weaknesses in internal controls' at its North American operations, and delayed publication of its accounts for 2003.

Adecco assured investors that it did not face a Parmalat-style accounting scandal (see Chapter 2), but the precise nature of the problem remained

unclear. Adecco is not 'any' employment agency. It is global, itself employs 28,000 people, and nearly 640,000 people depend on it for finding temporary employment. Talking to the media after these events, John Bowmer, its chairman, was unable to answer 16 of the 22 questions posed. All queries about financial implications, possible fraud accounting investigations, or even personnel policy were left unanswered 'on legal grounds'.[23]

This chapter would have conveyed the wrong message if it left readers with the impression that all European credit institutions and other firms are mismanaged. Evidently there exist good examples, but it is more important to bring to readers' attention the bad cases because, when these are understood, they assist in avoiding repetition of the same mistakes.

Ed Coleman, my professor of mathematical statistics at UCLA, told his students that during World War II at the Manhattan Project, where he worked as assistant to Professor Uri of Columbia University, he learned a lesson which he never forgot in his professional life. Uri's assistants were essentially quality control analysts responsible for functionality and dependability of anything that entered into the atomic bomb. As such, they accompanied the top military brass on every industrial visit. Uri instructed his assistants to let the generals enter by the factory's front door, with the red carpet and the handshakes, but they had to go straight to the back alley and examine what had gone wrong with the factory rejects – because that's where they could establish the engineering processes' reliability.

Management works on the same quality control principle. Board members, CEOs and their immediate assistants – whatever their strengths and their faults might be – must always do their homework. If they are unwilling or unable not only to analyze facts and figures before making decisions, but also to do *post mortems*, then the result is the horror stories in corporate governance we have seen in this book.

Mismanagement is management based on obsolete calculations, hypotheses which turn out to be widely incorrect and doubtful ethics. After the tale has been told of what mismanagers have or have not achieved, as this text has done through case studies, then an even longer story would typically remain to be told of what highly paid but incompetent managers have never attempted.

The case studies in this book cover sides of this balance sheet of events and of non-events, those that should have taken place but did not. As readers will have discovered, many of the notions are contrarian, but this serves a purpose. Intellectual weapons can rust if they stay too long unopposed, and corporate accountability disappears if mediocrity is allowed to gain the high ground.

Appendix

Pensioners Beware

Chapter 4, which has been a case study on pension fund management, made reference to the Pension Benefit Guaranty Corporation (PBGC) and the financial problems which it faces. As will be recalled, this is a quasi-governmental agency that insures America's private, defined-benefit company pension plans. As 2003 came to a close, massive costs saw to it that the insurer fell $7.6 billion deeper into the red, to a new record. (The careful reader will notice the difference from the statistics on page 62, which were as of July 2003.)

The PBGC reckons that another $85 billion in pension deficits can be found in the books of the country's most shaky companies, while Corporate America, as a whole, has a pensions deficit of some $350 billion. This is worrisome because, technically, the US government does not stand behind PBGC with iron-glad guarantees. Yet, nobody believes that PBGC, which insures the pensions of 44 million voting Americans, would be allowed to collapse.

As evidence to substantiate this hypothesis, optimists note that on January 28, 2004, the US Senate passed an $80 billion pension-relief bill. This is legalized creative accounting, because it allows firms to use a higher interest rate in their pension calculations. Even if this is said to be a temporary measure, its effect is that it shrinks the size of pension liabilities and reduces the amount of cash that companies need to put in – until some further-out day of reckoning.

The US Senate also added $16 billion of special assistance for companies with severe pension shortfalls, by waiving the accelerated contributions normally required of pension plans deeply in the red. The bill's supporters argue that without such relief, financially shaky firms might go bust, and their huge pension deficits will hit an overstretched PBGC. Critics answer that weakening pension-funding requirements only delays the problem, or even makes it worse.

On April 10, 2004, George W. Bush signed into law the bill that lets companies reduce the required contributions to their defined-benefit pension plans by more than $80 billion till 2006. Airlines and steel companies got an additional $1.6 billion in extra pension relief. Central to these pension bail-outs is not only the handouts of taxpayer money but also the interest rate that is used to measure the present value of a pension plan's obligations.

The lower is the discount rate, the higher is the current value of pension liabilities, and the more cash a company must set aside. As a relief measure, the 2004 bill lets US companies use a much higher discount rate than the one they were employing. It is worth adding that in 2002 ballooning pension deficits and poor stock market performance had already prompted Congress to pass a bill that let firms use a higher discount rate for a while. The 2004 Bush bill reinstituted this allowance.

Critics of this practice of toying with fictitious pension fund discount rates, say that the resulting figures are unreliable. The correct discount rate is based on government bonds, because every corporate defined benefit plan in America is insured by the Pension Benefit Guaranty Corporation. Companies however claim that the current interest rate of government bonds is too conservative, and therefore they should use

corporate bonds instead. With creative accounting, companies are able to mask the true extent of pension underfunding. To make matters worse, there is as well a sloppy method of charging PBGC premiums, not tied to:

- a company's credit rating, and
- the riskiness of its investments.

The problem with higher discount rates is that while pension deficits on paper are downsized, the underlying risk of America's pension system will not shrink – and this would make the fate of pension funds worse. Moreover, the new law fails to address the root of the problem which is that corporate pension plans in America allocate some 60 percent of their assets to equities, a very bad match for annuity-like obligations.

Particularly worrisome is the fact that because pension accounting is complex, it is most difficult to determine whether or not a firm's pension fund is or is not solvent. 'Creative' practices, too, enter the picture, with incentives for firms to invest in assets that make their bottom lines look good at the expense of longer term stability.

Perhaps the most damaging and urgent problem, is a mismatch between corporate pension plans' heavy investment in equities, to the tune of almost 60 percent of plan assets in 2002, while their bond investments have been minor. To right the balances, on January 29, 2004, PBGC announced that it would shift more of its assets from equities to bonds – a very much delayed measure.[1]

This is the right approach, even if it comes late, and other pension funds should take notice. PBGC switches to bonds rather than running after the dangerous chimera of alternative investments, and losing the pensioners' money in the process. Chapter 3 has provided evidence of the perils of derivatives gambles by pension funds, which put the pensioners' lifeline in jeopardy.

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