Commodities Trading: Nick Leeson, Internal Controls and the Collapse of Barings Bank

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Table of Content

Introduction	3
Background and Overview	
Barings Bank	
Internal Controls at Barings Bank	
Lessons Learned and Steps Taken to Preclude Recurrences	
Conclusion	
References	

Introduction

Even in an era where "cooking the books" and "Enronised" have entered the vernacular, it seems unbelievable that a global institution with an unimpeachable reputation collapsed into bankruptcy as the result of the ethical improprieties of a single employee, Nicholas ("Nick") Leeson. Leeson was directly responsible for causing the collapse of Britain's Barings Bank by concealing \$1.4 billion in losses in 1995 (Lemke, 2002). This paper provides an overview of the events leading up to the collapse of Barings Bank in 1995, a discussion of Nick Leeson and commodities trading, and an assessment of the adequacy of internal controls at Barings Bank. An analysis of the lessons learned and steps taken to preclude recurrences of such events in the future is followed by a summary of the research in the conclusion.

Background and Overview

One meaning of globalization refers to "paper entrepreneurialism" and to the explosive growth of international financial markets: "Dwarfing the growth of trade in manufactured goods, these financial markets draw on the \$20 trillion of swaps, options, and other derivatives that circulate around the world." In these markets, investors speculate on minute spreads in global interest rates, as well as in foreign currency exchanges that currently trade \$2.5 trillion a day. According to Blau, technological innovations in banking have helped to fuel this growth in speculative capacity. For example, when Chemical Bank purchased Chase Manhattan, it also acquired the \$130 million centre in Bournemouth, England that Chase had built to process transactions from around the world. A satellite network connected this 323,000-square foot facility to offices in New York, Hong Kong, Luxembourg, and Tokyo; the telecommunications lines to London could transmit the equivalent of the city's telephone directory in 90 seconds. The total value of all transactions it handled reached trillions of dollars a year and the money naturally tended to go where more of it could be made in the fastest manner possible. "In essence, the financial markets are now so interlocked it is estimated that political and economic changes elsewhere account for 80 percent of the turbulence in a given market. As a result, a rise of interest rates in New York can easily spark a sell-off in Mexico."²

This relentless quest for the highest rate of profit frequently deprives some countries of funds. For example, in the last decade of the 20th century, Sweden, Canada, Italy, and Spain were deeply in debt and faced a capital shortage; however, U.S. investors were particularly uninterested in these investment opportunities. Rather than seek out these investment venues, from 1990 to the end of 1993, American investors absorbed a net total of \$127 billion in the

¹ Joel Blau, 1999, 24. ² Blau, 1999, 24.

then-robust Asian and Latin American markets. In 1993, the Philippine market increased 133 percent; at the same time, Hong Kong, Indonesia, Malaysia, Thailand, and Brazil roughly doubled. Poland experienced the sharpest increase (718 percent), but Turkey managed to gain 214 percent, and Zimbabwe also increased 123 percent. According to Blau, "Countries that were deeply in debt simply could not compete with speculative opportunities like these."

As the ability to speculate increased in the last years of the 20th century, though, so did the associated risks. Blau points out that some of the major financial downturns have affected the once-great, including Hedge fund manager George Soros, who lost \$600 million by betting against a strong Japanese yen; Procter & Gamble, which lost \$102 million on leveraged derivatives purchased from Bankers Trust Co.; and Nick Leeson, an unsupervised 28-year-old stock trader who wagered a total of \$27 billion, primarily on differences in futures contracts between Singapore and Osaka. "Leeson lost \$1.4 billion and bankrupted his employer, Barings P.L.C., a British investment firm that was 233 years old."

Barings Bank

Founded in 1762, Barings Bank (previously known as Baring Brothers & Co.) was the oldest merchant banking company in England. Barings collapsed on February 26, 1995 as the result of the activities of one of its traders, Nick Leeson, who lost \$1.4 billion by investing in the Singapore International Monetary Exchange (SIMEX) with primarily derivative securities. This was actually the second time the bank had been faced with bankruptcy. Following the collapse, Barings was purchased by the Dutch bank/insurance company ING (for the nominal

³ Ibid.

⁴ Business Week, "The Lesson from Barings' Straits," March 13, 1995, 30.

⁵ The first being in 1890 when a significant amount of investment was lost in South America following the Argentinean revolution; however, at that time, they had been bailed out by the Bank of England and other London banks. In Barings Bank, 2004, 1.

sum of one pound) and today no longer exists as a corporate entity; however, the Baring family's name lives on in Baring Asset Management. An autobiography of Leeson and the events leading up to the collapse of Barings were dramatized in the movie "Rogue Trader." According to Wolfgang H. Reinicke (1998), in view of recent developments in the derivatives markets, the Basle Committee recognized that its existing formula focused too much on credit risk and too little on market and operational risks. As a result, a series of intense discussions took place within the committee, as well as between regulators and the private sector over the next few years.

This initiative resulted in what represented a dramatic shift in the global public policy framework developed in the late 1980s. In an effort to accommodate the changes that had taken place in the markets, the Basle Committee issued for comment a proposal on a capital standard based on market risk in April 1993; however, the private sector responded with sharp criticisms that the proposed reforms were too complex for smaller institutions to manage, and too difficult for the public to understand, and still too primitive for banks that had already been active in the derivatives market by using much more sophisticated risk management techniques.⁹

In the controversy that ensued, the future of global regulatory arrangements was determined by regulators who soon came to realize that there was only one way they could hope to control what, by 1994, had become a rapidly evolving and ever more complex industry: "They would have to not only engage the private sector to a much larger degree in the agenda setting and formulation of global public policy, but also make extensive use of public-private

⁶ Barings Bank, 2004.

⁷ Ibid.

⁸ Wolfgang H. Reinicke, 1998, Global Public Policy: Governing without Government?

⁹ Reinicke, 1998.

partnerships during implementation." This served as the catalyst for embracing a new approach, a process that significantly accelerated following the collapse of the Barings Group, a major U.K. bank, in February 1995.

According to Reincke, the collapse occurred with almost no warning and happened quickly. The collapse itself involved the extensive proprietary use of derivatives to establish large, highly leveraged positions in Nikkei 225 (Japanese equities) futures on the futures exchanges in Singapore and Osaka. Reincke writes, "Barings' collapse came on the heels of other financial crises involving derivatives, such as those of the government of Orange County, California, and the German firm Metallgesellschaft."¹¹

The collapse of the Barings Bank identified three fundamental shortcomings that had to be addressed in order to establish a revised framework for global public policy:

- 1. As late as the end of 1993 Barings had a capital ratio well in excess of the Basle Agreement's 8 percent requirement, and in January 1995 it was still considered a safe bank; the fact that Barings found itself in receivership only two months later could not but raise serious doubts about the adequacy of the regulatory system for capital requirements;
- 2. The collapse showed that internal controls at Barings were totally inadequate to support the activities of its traders; and
- 3. It was evidence that regulators in different countries had failed to communicate with each other to a degree sufficient to reduce at least in part the information asymmetry that globalization had created. 12

Against the background of these events and the shortcomings they revealed, the Basle Committee accelerated its efforts and in April 1995 issued for comment a proposal for an

¹⁰ Ibid., 119. ¹¹ Ibid.

¹² Reincke, 1998.

entirely new approach toward the regulation and calculation of banks' capital requirements. For the first time in their history, banks would be allowed to use their own internal risk management models, which they use for their routine day-to-day trading and risk management, to determine their capital requirements. ¹³

Regulators would no longer impose or enforce strict, uniform, quantitative limits on the activities of banks. Rather, in recognition of the growing complexity and innovative dynamism of the global financial services industry, the Basle Committee acknowledged that, provided certain qualitative and quantitative safeguards were present, the banks' own control and risk management mechanisms would prove superior to any that regulators could impose. The committee proposed to allow banks to use their own in-house risk models, also called value-at-risk (VAR) models, which are designed to assess and monitor market risk (the form of risk perceived to be the greatest threat arising from the emergence of the derivatives markets) and, on the basis of these models, to calculate their own capital charges. At the same time, however, banks would be required to use a common approach to measure risk, the so-called "value-at-risk" approach. Reincke notes that value-at-risk is an estimate, to a certain level of confidence, of the maximum possible loss in value of a portfolio or financial position over a given period of time; the Group of Thirty had recommended such an approach in the past. 15

Nick Leeson and Commodities Trading.

Beyond their usefulness in risk management or hedging applications, derivatives are also powerful tools for cross-border speculation. According to Reicke, as an example, currency options allow large investors to place large bets on the movement of a currency for a fraction of

¹³ Ibid.

¹⁴ Reincke, 1998.

¹⁵ Ibid.

the cost of holding a comparable position in dollars or yen. Likewise, stock index derivatives enable speculators to take positions on the movement of foreign equity markets without acquiring any foreign stock. Although all of these parallel markets are linked to a stock market in some country, or to a national currency, their geographic location is simply a function of where a demand emerges, or where a conciliatory regulatory environment can be found, irrespective of national borders. As a result, the largest market for options on German government bonds was in London, as the activities of Barings' trader Nick Leeson demonstrated. ¹⁶

A significant amount of speculation also takes place on the Nikkei 225 (an index of Japanese equities), as well as in Singapore; trading in Japanese bond futures takes place in Chicago. According to Reincke, "Ultimately, the proliferation of these instruments and markets has had a powerful arbitraging effect, bringing both prices and regulations across borders closer together.¹⁷

While there were a number of other factors that contributed to the \$1.4-billion trading fraud, business journalist John Plender reports that a number of those who were involved in investigating and picking up the pieces after the Barings fiasco ". . . believe that the competitive nature of the relationship between the Osaka Stock Exchange in Japan and the SIMEX exchange in Singapore prevented a sharing of information about Barings' exposures that would have led to earlier curbs on Leeson's activities." Leeson's superiors in London maintained that he was most likely involved in some type of scheme that was designed to profit from Barings' collapse. An increasing amount of evidence, however, suggests a different series of events contributed to the bank's demise. For example, Reincke reports that investigators sent to Singapore by the

¹⁶ Ibid.

¹⁷ Ibid., 38.

¹⁸ John Dalla Costa, 1998.

Bank of England discovered no evidence of anyone building a single, large short position against the bank. "In fact, it was discovered that the former Barings' employee had traded with a number of parties. A more reasonable explanation was that Leeson might have been selling call and put options on the Nikkei, betting that the Japanese equities market would fluctuate within a stable range."

Following the January 1995 Kobe earthquake, however, the Nikkei moved out of its ordinary trading range, compelling Leeson to buy contracts to support the market. As a result, his exposure increased from less than 5,000 contracts on January 13 to 20,000 by February 17, 1995. "When Leeson's scheme collapsed, Barings accounted for nearly 20 percent of the open interest in the contract on the exchange and exceeded the level of holdings of the next largest market participant by almost eightfold."

Leeson's manipulations took place during a period in time when such practices were largely recognized for what they were: product marketers intentionally or intuitively apply framing principles to successfully manipulate consumers' preferences, including those for risk. Studies have shown that using framing techniques, traders such as Leeson could fool a majority of auditors. In a technique that anyone who has purchased a used car from a high-pressure salesmen would recognize, "By convincing investors, even intelligent and educated ones, that they are losing the opportunity for wealth that others are enjoying, industry professionals can induce excessive risk-taking by investors." These are certainly powerful emotional forces at play, but equally compelling are other primal human forces that seem to make people act in a certain way: "What in hindsight appears to be greed is simply the natural human tendency to

¹⁹ Reincke, 1998.

²⁰ Ibid, 268.

avoid a loss, especially relative to others. What appears in hindsight to be gullibility is simply the strong human need to trust."²¹

As a result, Leeson was simply playing off human nature, both of his investors and his own, wherein potential investors could be convinced to invest in a risky new venture to attempt to recoup the losses from the first venture, just as gamblers who have lost more than they expected can be induced to "double up" in an attempt to recoup their losses. "Even corporate executives and sophisticated investors are subject to this tendency. Nick Leeson sank Barings' Bank by losing money and then doubling up in an attempt to make back the bank's money." Securities professionals (and savvy investors) are well aware of this tendency of investors and manage to take advantage of it. For instance, citing Procter & Gamble, Dell Computer, Mead Corporation, and other firms' announcement of large losses from trading derivatives, Frank Partnoy, a former employee of Morgan Stanley, reported:

Soon after the first losses were announced [Morgan Stanley's President John] Mack told a group of managing directors, 'There's blood in the water. Let's go kill someone.' The idea was that if our derivatives customers were in trouble, and we could convince them that they needed us--perhaps to "double-down" on their losses--we could make even more money off their hardship. Management salivated at these potential victims, known euphemistically as distressed buyers. As my bosses told me repeatedly during this period, 'We love distressed buyers.' 23

²¹ Robert Prentice, 2002, 1398.

²² Ibid.

²³ Prentice, 2002, 1399.

There were plenty of distressed buyers to go around during the last decade of the 20th century in the United Kingdom as well. According to Taylor, the following represent just some of the major reported frauds in the British market during this period:

Table 1. Some major reported frauds in market Britain, 1988-1998.

	Individual case	Loss (to company/investors)	Summary
1986	Guinness affair		Four senior executives eventually found guilty in 1992 of complex and fraudulent 'share-support' arrangement facilitating £2.35 billion take-over of Distillers
1988	Barlow Clowes	£190 million	17,000 elderly small investors defrauded by Peter Clowes
1989	Blue Arrow affair	£65 million (1987 only)	Eleven executives charged with 'deliberate deception' of investors with respect to progress of sale of a £837 million shares offer: County Natwest failed to disclose its own share in Blue Arrow shares
1991	Bank of Credit and Commerce International	£760 million (£100 million lost by UK local authorities)	Monies laundered out of BCCI HQ bank in London through subsidiaries in fifteen countries by eight senior executives; BCCI shut down by Bank of England
1991	Polly Peck	£450 million	Asil Nadir 'jumped bail' May 1993 to Northern Cyprus, charged with misappropriation of money belonging to creditors of Polly Peck International
1991	Maxwell pensions affair	£450 million	Fraudulent investment of occupational pension funds belonging to 32,000 <i>Daily Mirror</i> employees
1995	Barings	£800 million	Revelations that trading by Nick Leeson in the futures market had led to collapse of Barings, Britain's oldest bank
1996	Morgan Grenfell	£438 million	Monies belonging to Deutsche Bank and three investment funds defrauded by Peter Young and five senior managers within Morgan Grenfell
1997	Natwest	£89 million	Natwest invests £89 million in vastly overrated options on advice of own trader, Kyriacos Papouris, with a view to personal gain

Source: Ian Taylor, 1999, 144.

Internal Controls at Barings Bank

The Barings collapse confirmed that internal controls at Barings were clearly insufficient

to detect what was taking place with Leeson's derivatives trades. "Look at what happened to

Baring Brothers Bank when they turned loose that idiot, Nick Leeson, to do his own thing in the

Far East financial markets. He lost so much money speculating in yen that he brought down the

whole bank before the top command even knew what was happening."²⁴ While initial accounts

cantered on the fraudulent activities of Leeson, and evidence suggests that Leeson was in fact

engaged in highly speculative transactions and deliberately tried to deceive his superiors, his

actions were not the only reason for the group's failure. Totally inadequate internal

communications, controls, and channels of accountability, as well as insufficient regulatory

oversight, compounded these findings by UK regulators as did a lack of communication between

regulators in the United Kingdom, Japan, and Singapore. 25

The most glaring aspect of the lack of internal communication is that it was common

knowledge on the futures markets that Barings was building an increasingly risky position. As

one U.S. fund manager put it, "The futures community [had] known of this mega-position for

about the last three months." ²⁶ In New York the manager of one of the biggest hedge funds said

that "news of Barings' purchase of contracts had been the subject of 'intense discussion' in the

financial markets for at least two weeks," and short of completely inadequate in-house

²⁴ William Mcdonald Wallace, 1998, 56.

²⁵ Reincke, 1998.

²⁶ Ibid., 269.

Page 13 of 21

communications, it is inconceivable that senior management was unaware of these developments.²⁷

The failure of Barings' management to prevent the collapse of Barings also resulted from Barings' flawed internal controls and channels of accountability. "Leeson was responsible for both the trading and the settlement sides of the Singapore operations, which made it easier for him to conceal his contracts from his superiors." Nevertheless, senior management officials at Barings had been made aware of this situation as early as 1992. At that time the head of Barings' Securities operations in Singapore alerted the firm's management in London to the potential dangers of having Leeson manage both trading and settlement. In March 1992 he wrote to the head of equities in London, "My concern is that we are in danger of setting up a structure which will subsequently prove disastrous and with which we will succeed in losing either a lot of money or client goodwill or probably both." According to Nikki Tait, the fact that Leeson had no gross position limits on proprietary trading operations made the potentially dangerous management structure even worse. 30

From the evidence available to date, it appears that such concerns were not communicated to Barings' external auditors, who almost certainly would have included them in the annual report on management systems and controls, based on UK banking regulations that were submitted to the Bank of England. Senior executives at Barings conceded that they did not really understand the esoteric business of derivatives, so their guidance for Nick Leeson was not strategic in nature but was rather quantitative: "Rather than set long-term vision, with controls

²⁷ John Gapper, Nicholas Denton, and Peter Marsh, "The Barings Crisis: Chairman's Fraud Allegations Challenged," Financial Times, March 1, 1995, 2.

²⁸ Reincke, 1998

²⁹ Ibid.

³⁰ Nikki Tait, March 6, 1995, "The Barings Crisis: Failure Is Blamed on Management in London," Financial Times, 2.

and attention to relationships, they simply asked Leeson to deliver more of the profits to which they had become accustomed. Was Leeson wrong? Yes. But so was the strategy, or the lack of it.",31

Lessons Learned and Steps Taken to Preclude Recurrences

Barings has not been the only such financial institution so effected by insufficient internal controls, although every situation is unique. For example, in spite of the notoriety and infamy of the Leeson case, over a year later Sumitomo Bank faced an estimated \$1.8 billion loss also attributable to a single rogue trader. ³² Likewise, Tim Lemke of *The Washington Times*, reports that John Rusnak, a currency trader from Baltimore and seven-year veteran of the company, was accused of losing \$750 million through fraudulent transactions over the past year. Allfirst said Rusnak placed a large number of trades that bet on currency movements, and then created phoney contracts to offset those trades after they went sour. The \$750 million loss is the sixthlargest "rogue trader" loss since 1987. Already, comparisons are being made between Mr. Rusnak, 37, and Nick Leeson. 33 "From our initial investigation, it is clear that the foreign exchange deals were transacted in the normal manner. However, the offsetting currency option contracts were fictitious," Allied Irish Banks PLC, the parent company of Allfirst, reported in a statement. Allied Irish also noted that the contracts were entered artificially into Allfirst systems, and went undetected by internal controls that were specifically designed to prevent such activity. "The established control procedures in Allfirst Treasury should have identified these fictitious transactions," the company said.³⁴

John Dalla Costa, 1998.
 P. Christopher Earley, 1997, 185.

³³ Lemke, 2002, CO9.

³⁴ Ibid.

At a press briefing, Allfirst Chairman Frank Bramble said it is unlikely just one employee knew about the losses. "There was collusion here because it would have been impossible for this individual to have done these transactions without the operations area not doing its job," Mr. Bramble said. Analysts and the company cautioned against comparing the \$750 million loss to the Leeson case, because Allfirst generated a comparatively small amount as an investment house; by contrast, commercial and retail banking accounted for 90 percent of the company's profits at this point in time. "It's not like the Barings situation at all in terms of the magnitude of what went on apart from the fact there was a trader involved," added Nigel Bolton, chief of European Equities at Citigroup Asset Management told Bloomberg News.³⁵

In the wake of Leeson and the Barings Bank episode, the growth of global financial transactions, insider trading, executive remuneration, and misuse of pension funds, has been added to the list of corporate shenanigans that have fuelled changes in the regulatory environment. For example, Broadhurst and Ledgerwood report that in 1993, the Caux Round Table, based in Switzerland, adopted an international code for multinational firms in Europe, North America and Japan; this international code identifies five basic principles that go well beyond the earlier codes that focused on more restricted abuses. Those principles are:

- 1) Stakeholder responsibility;
- 2) Social justice;
- 3) Mutual support;
- 4) Environmental concern; and,
- 5) Avoidance of illicit operations and corrupt practices. ³⁶

³⁵ Ibid.

³⁶ Arlene Idol Broadhurst & Grant Ledgerwood, 2000, 217.

Subsequent to the collapse of Barings, SIMEX also reviewed its regulatory rules, auditing, surveillance, and clearing practices, as well as exchange-wide systems to strengthen safeguards against settlement risks. According to Lall and Liu, SIMEX appointed an international advisory panel comprised of distinguished professionals and regulators from the international futures industry to seek advice on the best practices in global futures exchanges and to identify areas for cooperation with other futures exchanges. As Leeson had been based in Singapore, officials there attempted to improve supervisory coordination for futures trading in an increasingly global environment. As a result, SIMEX appointed Dr. Roger Rutz as its consultant on risk management.³⁷

The international advisory panel recommended:

- (1) The enhancement of customer protection rules;
- (2) An upgrading of the clearing system and procedures to incorporate real-time settlement and critical risk management systems;
 - (3) The promotion of information sharing among exchanges;
 - (4) The imposition of a requirement that clearing firms register senior officers with SIMEX;
 - (5) The strengthening of SIMEX's Market Surveillance Department; and,
 - (6) Enhancements to the large trade reporting system.

Dr. Rutz's recommendations addressed all areas of SIMEX's operations, with an emphasis on risk management, capital requirements, and the clearing system; his major suggestions included:

 Devising comprehensive internal risk analysis procedures to identify high risk accounts and members in need of closer monitoring. These procedures would include stress

³⁷ Ashish Lall & Ming-Hua Liu, 1997, 640.

testing of positions, analysis of daily settlements and margin calls, as well as analysis of position and market concentration.

- Enhancing SIMEX's monitoring ability, including notification by member firms when a
 margin call is issued for any account in excess of their adjusted net capital, reporting
 large positions, aggregation of accounts, and reconciliation of reported positions.
- Increasing SIMEX's power to control or direct the operations of member firms in highly vulnerable positions.
- Regulating higher position limits through explicit hedging, arbitrage, risk management,
 and other qualitative and financial exposure criteria.
- Establishing procedures to manage high risk situations including improved informationgathering to help evaluate challenging situations, and improved default procedures to transfer to other clearing members, in bulk, those positions carried by defaulting brokers who threaten the system's integrity.³⁸

According to Brennan, Figueira, Heskel, and Sternberg, the elder Cato (234-149 B.C.) wrote a treatise on agriculture that provides an early checklist of the qualities of the good "agent"; in essence, Cato said the overseer of an estate should be efficient, deferential, loyal, and capable of sticking to his authorized budget. "Imagine: If Barings Bank had taken a page from Cato, and limited self-confessed "rogue trader" Nick Leeson to financial dealings with two or three households, that once-venerable institution might still be with us today." 39

Conclusion

The research showed that the now-infamous Singapore-based derivatives trader, Nicholas Leeson, drove Britain's venerable Barings Bank to bankruptcy. Although the evidence to date

³⁸ Lall & Liu, 1997, 641.

³⁹ T. Corey Brennan, Thomas J. Figueira, Julia Heskel & Rachel Hall Sternberg, 2001, 192.

suggests that Leeson was in fact involved in shady deals, it appears that other factors were also involved in the bank's collapse. Leeson's superior knew, or should have known, what the trader was up to, and had been provided with advance notice concerning his activities. Furthermore, Leeson was not the only trader engaged in such activities, and the philosophy of many financial institutions of the day appeared to encourage the sorts of techniques employed by Leeson. In the final analysis, the Leeson case demonstrates what can happen when one individual is entrusted with too much power, and only time will tell if the remedial steps taken since then will preclude such recurrences in the future.

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