

Lessons from Barings

Tapen Sinha* analyses two aspects of the infamous Barings plc collapse which have received little attention to date — internal control failure and psychological aspects of consequent losses.

EVENTS surrounding the collapse of Barings have caught the imagination of the media and the public.

However, we have seen little in-depth analysis. Here I will comment on two aspects of the collapse:

- Failure of internal control mechanisms; and
- Psychological aspects of losses.

The first aspect has been alluded to in the media, while the second has been largely ignored. I conclude by drawing some lessons for managers.

How events unfolded

On 24 February 1995, Nicholas Leeson, a futures market trader for Barings plc, left Singapore.

The following day, the 233-year-old merchant bank was placed in the hands of administrators as it became clear that trading financial futures on the Nikkei 225 index by Mr Leeson had produced an estimated loss of \$US1 billion.

Over the next month, it emerged that Mr Leeson was betting heavily on a future rise in the Nikkei 225 during January and February.

So large were his trades that he outstripped the rest of the market.

These trades were concentrated mainly on the Singapore International Monetary Exchange (SIMEX). He also traded similar instruments in the Osaka market.

After the earthquake in Kobe on 17 January, it became clear that such a rise was unlikely. (Six months after the collapse of Barings Bank, the Nikkei 225 index is still falling.)

As the value of the contracts fell,

Barings was forced to put up at least £500 million in margin calls.

Following the collapse, management blamed Mr Leeson for all the losses sustained. They argued that he was acting alone, and that he created fictitious accounts to hide losses.

Why then did the London office of Barings put up the money for margin calls? It must have approved of Mr Leeson's previous activities.

It also emerged that Mr Leeson was in charge of both front offices and the back office of Barings in Singapore. This was an extraordinary situation — some market observers likened it to making a poacher the gamekeeper in a forest reserve.

What were the main causes of the spectacular failure of Barings? Can managers learn lessons from this disaster?

One predictable scapegoat exists for the collapse — derivatives. Two other problems arise once we go past the obvious — absence of internal control and "framing".

Barings versus Barings

Some confusion exists about Barings. There are two distinct entities — Barings plc (the bank) and Barings Asset Management Limited (the fund management company).

Nicholas Leeson was employed by the bank, and not by the fund management company. Barings Asset Management has about \$US45 billion under management.

Unless some of Barings Asset Management were invested in Barings plc, a "ring fence" will be erected around those funds. See Storie for a further explanation of this issue.



**Dr Tapen Sinha is Associate Professor of Finance at Bond University, Queensland, Australia. He acknowledges D Sinha, J Carmichael, R Bloore and R McNamara for their input. He says his employer is not responsible for any opinion expressed, remaining errors being his alone. See also "Barings' Silver Lining — The Bonanzas and the Burdens" by Peter Carty in the May 1995 issue of Accountancy (UK).*

However, the cash management part of the fund was indeed invested in the banking arm.

Therefore the new buyer of Barings plc, the ING group from Holland, had to pay \$US900 million to the asset management account to make good this loss.

One scapegoat, two culprits

Predictably, derivatives have been made a scapegoat in this matter. A typical report appeared in *Asiaweek*: "Derivatives have been likened to a monster — large, threatening, inscrutable and voracious."

"The derivatives dragon found another victim last week: the 233-year-old merchant bank Barings, one of the most prestigious British institutions in Asia. Will the monster strike again?"

Are derivatives really "monsters"? We have all read alarming headlines such as "Financial Derivatives are Tightening their Grip on the World Economy and Nobody Knows How to Control Them" (*Fortune*, 1994).

That publication produced an apocalyptic view of the world of bank crashes and financial collapses. However, it failed to mention that large companies use derivatives routinely for hedging, which is the main function of derivatives in the financial markets.

Only a handful of financial journalists have pointed out the usefulness of derivatives in the marketplace in the wake of the Barings affair — Levinson, for example.

Derivatives have played an important role in the financial markets over the past 10 years. Contrary to popular views from the media, derivatives have actually reduced risk for holders.

The value of underlying assets traded in the derivatives markets was \$US16 trillion in 1994 — equivalent to the gross national products of the US, Japan and Western Europe put together. This is the figure bandied about by journalists and lawmakers. However, it is really the *notional* value of assets underlying the derivatives, not the value of the derivatives themselves.

Nuts and bolts

Derivatives can be very simple. Those Mr Leeson traded were one of the simplest: futures contracts.

A futures contract specifies the price of an underlying asset today for a transaction at a future date (typically a few months away). For every seller of a futures contract, there is a buyer.

In futures markets, all transactions are settled every day. It is therefore unlikely that one party would be unable to fulfil obligations. Most derivatives transactions are zero sum "games". If there is a loser, there is also a winner at the other end of the table.

When Barings lost a billion, those who took the other side of the bet made the same amount. Thus, losses to Barings are not losses to the financial system overall.

The story is very different from the loss a shareholder suffers if a company loses money due to bad management. In that case there are no winners — only losers.

Most derivative trades are hedges. For example, if I am a gold jewellery maker and I know I will need to buy gold three months from now, I might buy a gold futures contract to lock in a price in advance.

If the price rises over the next three months, I am protected from this. However, if prices fall, I cannot obtain the benefits. In this sense, it is an insurance policy or a "hedge".

Mr Leeson traded on futures which did not have an underlying physical asset such as gold; he traded on those based on the value of the Nikkei 225 index.

Some argue that stock index futures can influence the stockmarket. Even at the height of stockmarket volatility, no evidence of that kind exists for the Nikkei 225 (see my 1990 article — reference below).

Internal control

Standard textbook formulation of control procedures (see, for example, Arens) of an entity can be raised in the context of Barings:

- Adequate separation of duties — did enough separation exist between trading of derivatives and accounting for gains/losses at least once per day?
- Proper procedure for authorisation — who authorised Mr Leeson to carry out further (one-sided) trading in derivatives in the face of mounting losses?
- Adequate documents and records — were all the transactions (including all trades in Singapore and Osaka) recorded immediately?
- Physical control over assets and records — who controlled the paperwork?
- Independent check on performance — an independent audit was carried out in 1992, but was anything done about it?

Mr Leeson was trading for Barings as well as keeping account of all trades. Therefore, inadequate separation of duties existed. Such lack of separation creates temptation for the trader to "cook the books" if bonuses are associated with profit for the company.

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Effectively, Mr Leeson was authorised directly by management in London to carry out very large trades. He had control over all documents and records in Singapore. Moreover, no independent check was made on his performance.

How did management permit such an extraordinary lapse of routine procedure? The answer lies in Mr Leeson's past performance. In 1993, his trading returned a very significant portion of Barings' total profits.

Everyone likes to smooth out the path of a winning strategy, even when risks are large. Barings was no exception.

Framing effects

The second culprit in relation to the Barings debacle is of a psychological nature. In the literature, this is known as a "framing" problem, which can be explained by a simple example. Consider two situations:

- You have just won \$1000. Someone offers you a "double or nothing" gamble with an even chance (you win \$2000 with a 50% chance or you receive nothing with a 50% chance). Will you gamble? Most people will not.
- You have lost \$1000. You are now offered a double or nothing gamble with an even chance. Most people will take the gamble, which conflicts directly with risk-averse behaviour.

The implication for firms is startling: firms losing money will try to raise

their performance above average by taking big gambles, even if the chance of losing everything is high.

Does any evidence for such behaviour exist? The answer is an overwhelming "Yes" (see my 1994 article and others cited in it).

Large losses bound Mr Leeson (and the Barings board) to take even larger gambles. These actions are not the main functions for which derivatives are normally used.

Derivatives should be used for hedging against risk rather than for speculation. In this sense, the framing problem can be seen as part of the breakdown of internal control. Had controls been adhered to, psychological factors could not have come into play.

Conclusion

Blaming derivatives for all turbulence in the financial markets will not solve anything.

We need to understand deeper problems from the Barings situation. The first was internal controls. Breakdown of such controls can spell big problems.

More fundamentally, management at Barings must have known about the huge losses Mr Leeson sustained — they pledged money to meet the margin calls. However, they fell in to the classic framing trap. When they were losing a great deal, they decided to gamble

everything to ride out the problem. Had they cut their losses earlier, Barings would have had a bad year — but it would not have collapsed.

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Possible Amendments to Securities Act

THE New Zealand Securities Commission has published a paper flagging possible amendments to the Securities Act 1978. Submissions are due with the Commission by 21 August.

Companies Fail Governance Checks

by Ian Mitchell, UK Correspondent

OVER half of the UK's largest quoted companies failed to comply with all eight key corporate governance checks last year, according to a study on management of those companies prepared by the National Association of Pension Funds (NAPF).

The eight checks were set by the Cadbury Committee on the Financial Aspects of Corporate Governance and the Institutional Shareholders' Committee. The study found that for the largest 250 UK companies:

- 29% do not have a formal procedure for selecting non-executive directors, such as a nomination committee, as recommended in the guide to best practice.
- 13% had the same directors in the posts of chairperson and chief executive.
- 7% had fewer than three non-executive directors.
- 44% of directors still have three-year rolling contracts, while a further 20% have two-year contracts, despite advice that rolling contracts should be no longer than one year, and fixed-term contracts a maximum of three years.

- 26% of auditors of the largest companies earned more non-audit than audit fees.
- 30% of companies which introduced new share schemes last year did not specify to shareholders the level of financial performance which would need to be achieved for directors to be able to exercise their options.

The NAPF said that in 1993 only 20% of companies met best practice in relation to each of the eight criteria it assessed. It added: "Much encouragement can be drawn by shareholders and company managements from the developing picture."

In June 1993, the NAPF and the Association of British Insurers issued joint guidelines on share schemes which stipulated that exercising options should be linked to "significant and sustained improvement in underlying financial performance".

This includes earnings per share growth and performance related to peer companies or an index.