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The Risk & Regulatory Forum (TRRF)

BARINGS – A CASE STUDY IN RISK MANAGEMENT AND INTERNAL CONTROLS

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September 2004

In 1995 Britain's oldest merchant bank of two hundred years came to a dramatic and fatal halt. The bank was Barings. The demise of the bank was brought about as a result of the actions of a derivative trader, Nick Leeson, stationed in Singapore. Without a careful and considered review one may be tempted to conclude that the blame rests solely at his door step. The analytical mind, may however ask: how is it possible that this one man was able to cripple a financial giant? What was the role of senior management in this situation and did they contribute to the demise? How effective were the internal control systems and was the Singapore operations managed effectively?

The answer to these and similar questions would be indeed interesting and insightful in analyzing the debacle that Baring proved to be. Reported on very widely in the nineteen-nineties, this bank collapse still holds significant lessons for those involved in the management of financial institutions. The objective here is not to prove definitively the exact cause of the collapse but to show, by way of a very narrow discussion, how certain deficiencies in internal controls and risk management systems impacted the bank and ultimately led to its collapse.

When Barings collapsed it had a capital of approximately $600 million. Contrast this with notional futures position of Japanese equity and interest rates of $27 billion, Nikkei 225 equity contracts of $20 billion and put and call options with nominal values of over $6 billion that the bank held. Given the level of capital it is incomprehensible that the bank could have created this level of exposure. It is certainly worth asking where were the mechanism and limits that should ordinarily be in place to signal that its capital was at severe risk.

In an analysis (see http://newrisk.ifci.ch) on the incident the author stated: "Numerous reports have come out over the last three years (back in the nineties) with recommendations on best practices in risk management. *Barings violated almost every [such] recommendation*. Because its management singularly failed to institute a proper managerial, financial and operational control system, the firm did not catch on, in time, to what Leeson was up to. Since the foundations for effective controls were weak, it is not surprising that the firm's flimsy system of checks and balances failed at a number of operational and management levels and in more than one location".

Leeson engaged from the very beginning in dubious trading, accounting and reporting practices, designed to conceal losses he was incurring. His biggest downfall came after

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the 1995 Kobe earthquake in Japan, which left him holding a number of call options which were basically worthless coupled with put options he sold which were becoming very valuable to their holders. The instruments were transacted prior to the earthquake with strike *(agreed)* prices in the range of 18,000 to 20,000 points on the Nikkei 225 average. Subsequent to the earthquake the average fell to below 17,000 *points (the agreed sales price of 18,000 to 20,000 being more beneficial to the holders than the market level of below 17,000)* putting Barings in a disadvantageous position. To cover his tracks over the years he used an "error account" to hide the true nature of his contracts in addition to reporting erroneous profits to senior management in London (Barings head office). Between January 1993 and December 1995 the reported profit on trading activities was represented to be approximately GBP 54 million. However, results of the investigation which followed the collapse showed the same period actually produced a loss of over GBP 827 million. This is an important point because at stages over this same period the Singapore operations was reported as being responsible for as much as twenty percent of the bank's overall published profits.

The management of Barings, a substantial and well respected organization, committed an almost criminal blunder when it failed to ensure that there was adequate segregation between various functions of the Singapore operations thereby undermining the effectiveness of any controls that would have been put in place. Leeson was in charge of -the dealing desk and also had control over the back office operations. This provided him with ample opportunity to falsify the reporting aspect of the business and bypass critical regulatory and compliance requirements. Any useful internal control system must recognize and acknowledge the potential for fraud or errors should there be inadequate segregation of duties. Segregation of duties is also critical to ensuring the accuracy and integrity of information. The utility of an effectively designed system of controls and implemented control activities is significantly lessen where incompatible duties are vested in the same individual. While the controls within Barings systems may have been appropriately designed their operational effectiveness was always going to be defective. The lack of segregation actually amplified the exact risks that management would have intended to mitigate in the first place by creating the facility for significant override. The lesson here is that in the development of a risk management and internal control system one should always respect the time tested fundamentals necessary for effective internal controls. Failure to do so will put any institution at a heighten risk for irregularities. The implications are very profound especially in the case of financial institutions.

Having implemented an internal control system it is essential that there are mechanism in place for monitoring and assessing its effectiveness. It was reported that Barings internal audit team told senior management that the control of both the front and back offices was an excessive concentration of power, citing that there is a significant risk for override of controls. Management, however, despite indicating that the practice would cease with immediate effect, failed to follow through on that promise. Their failure to implement

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remedial measures only served to further exacerbate the identified weakness. Barings management's failure to put into operation the auditors' recommendation, which considering the facts were well founded, contributed significantly to the eventual collapse of the bank. Together with being in charge of the two offices, Leeson had cheque signing authority, authority to sign off on trading reconciliations and was responsible for vetting bank reconciliations. The fact that the Singapore trading operations precipitated the failure of the bank, given the foregoing is not surprising. While it could be argued successfully that it was the Kobe earthquake and its adverse impact on the Japanese capital markets which trigger the timing of the collapse the point can also be made that with sufficient time and with the continued laxness on the part of management the bank would very likely have suffered significant losses even if it did not ultimately collapse. The lack of discipline in the internal systems had provided very fertile soil in which the seeds of instability were already sown. The continued ineptness on senior management provided all the other essential elements which led to the germination of a financial disaster.

The Barings incident clearly provides an insight into the importance of effectively managing the risk posed by the operations of a bank or some unit thereof. In hindsight Barings management seems to have had total disregard or just did not understand the concept of to the allocation of resources commensurate with the risk posed by the business activities being undertaken. For example it was noted that senior management's response to the recommendation of placing a suitable experience person to run the back office was that there was not sufficient work for a fulltime treasury and risk manager even if compliance duties were incorporated in the function. The response reeks of juvenile innocence or reckless and arrogant irresponsibility. Even if the reason cited was accurate, given the high profitability of the Singapore unit together with the nature of the products being traded, derivatives, senior management's approach should have been guided by the principle of implementing controls sufficient to mitigate and manage the risk consistent with the bank's risk appetite. They should have been guided to some extent by the fact that very high profits are generally generated by risky activities. The blatant lack of action though makes one consider whether the bank did not in fact have an unlimited appetite for the type of risk they were exposed to through the Singapore operations and therefore doing nothing was highly consistent with their outlook. Failure to implement effective risk management systems can and does have catastrophic implications for an organization.

The persons with direct responsible for oversight of the trading activities categorically failed to honor their responsibilities by ensuring that they fully understood the activities Leeson was engaged in and thereby be in a position to intelligently implement the requisite control mechanism to manage the risks posed. Interestingly the approved strategy which Leeson should have been guided by was simple arbitrage between futures contracts. This was clearly defined as a low risk strategy. The stated risk level was however, clearly incompatible with high level the reported profitability being enjoyed by

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the Singapore unit. Anyone in a management and oversight position has an explicit duty and is obligated to ensure that they fully understand exactly what they are responsible for. Without a high level of understanding management and by extension the board was impotent in effectively discharging their fiduciary duty and their responsibility to the shareholders of the institution. One pointed observation which was made asked the question, if this supposedly low risk strategy employed by Leeson was so lucrative why is it that there weren't other better capitalized banks taking the same approach. One of connections it appears that the management failed to make was the relationship between risk and return. A low risk strategy ought not to have provided the high level of profits reported. Profits should have been more moderate. Not only did they fail to understand the business, it also appears that they were ignorant to certain basic risk management principles. Because management did not understand what was happening they were unable to assess, rationally and objectively the pro and the cons the information presented to them. They were unable to effectively challenge reported result or probe in a manner sufficient to elicit the answers which, all things being equal, would provide information to assess the efficacy of what was being represented to them. Or, management was plain negligent, satisfied by the high level of reported profits they may have resolved no to "disturb" the goose laying golden eggs. Whichever position is correct ought not to have been. Any management group which operates in a similar manner does not deserve the privilege of leading an organization.

Within any organization, especially a bank or other financial institution, it is critical that all the significant risks of any business activity being undertaken are identified and assessed in a proactive and consistent manner. It is said that hindsight is twenty-twenty and therefore just about anyone can comment after the fact. The question, however, is what the prudent, knowledgeable person would have done or ought to have done in the same situation. Had senior management implemented the recommendations made by the auditors, the bank would have had in place a risk manager who would ordinarily ensure that the appropriate mechanisms are put in place to safeguard the viability of the bank. An effective and experience risk manager would likely have identified the critical risks involved in the management of the derivative trading activities. Very importantly also there would have been the creation of a clear line of demarcation between the trading activities carried out by the front office and the check and balance created by the back office. This would arguable lead to the correct or at least more accurate positions being reported. With accurate information senior management would then have been in a position to assess the various exposures against its capital. An assessment, for example, of their risk weighted capital, using this information, would have undoubtedly indicated that the bank was undercapitalize and heading for trouble. Accurate information would have provided the correct signal to management indicating that the requisite limits have been breached and that restrictions are immediately needed to be imposed on its Singapore trading activities to protect the adequacy of its capital and by extension the bank's solvency.

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Interestingly of all the problems that Barings had as a result of the activities in Singapore, ultimately it was its ability to fund the cash requirement for the positions that plunged it under. Prudent management of liquidity risk dictates that management should have in place adequate contingency plans to meet unforeseen liquidity requirements. Even if Barings had such arrangements, and it is reasonable to assume had some plans in place, they would have incurred significant losses in settling these transactions. The end result would likely have been the same. What is the point here? In the process of effecting risk management systems, especially for financial institutions, their should be a clear recognition that while failure to manage all other risks are likely to trigger the demise it is usually the inability to access liquidity in a manner which does not impose significant burden or losses to the institution which will cause it to fail. This is one of the reasons it is generally recommended that an integrated approach is taken to risk management. There is an implicit domino effect which is triggered with a breakdown in the management of specific risks. Certainly Barings management, if they did not understand this before were well educated after the collapse.

All things being equal, one person should not be able to take down an institution. As seen above the popular perception that one person was responsible for Barings demise maybe a fallacy and a rather myopic view. To marry oneself to this position would be to lose very important lessons which the incident bears out. The preceding paragraphs only reflect on a minute aspect of the whole incident. Readers so inclined may find it useful to acquaint or reacquaint themselves with the broader facts with a view of seeing how it provides useful insight into the operations or risk management and internal control systems. We take the position that it is best to learn from other persons experience especially when the result of that experience is as calamitous as in the case of Barings.

What happened at Barings was plain and simply a breakdown in fundamental systems which should have protected the bank. These are effective compliance; robust internal controls; proactive risk management; sound oversight; timely remedial actions; knowledgeable management; and by extension good corporate governance. These factors all represent costs for any organization but, implemented properly, they are necessary and important utilization of resources. Having them properly embedded in the organizational culture, influencing how business is done is very important to the long term viability of an entity. They not intended to retard profitability or restrict returns but in fact are geared at enhancing the longevity and sustainability thereof while providing a framework within which business objectives can be achieved without endangering the interest of shareholders and other stakeholders. To manage an organization devoid of these elements could result in an occurrence not unlike that experienced by Barings bank.

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