Sample Case for ECON 696

Based on the Barings Bank case study from Chapter 1
This case study is found in Chapter 1 of the textbook, but the analysis I present here incorporates ideas from several chapters of the book. Included in the analysis here are the following concepts:
   Chapter 3: Contracting costs and the existence of firms
   Chapter 5: Economies of scale and scope
   Chapter 6: Perfect competition
   Chapter 10: Asymmetric information, monitoring and incentive conflicts
   Chapter 21: Information failures and regulation

Barings Bank Case Study: Chapter 1

Barings Bank was a very prominent and important British financial institution for hundreds of years until the mid 1990s when trader Nick Leeson lost $1.4 billion of the bank’s money by speculating on securities prices in the Osaka and Singapore exchanges. While there were certainly organizational problems that contributed to Leeson’s inappropriate (and criminal) actions, there were also economic factors that help to explain how one person could and did bring down an old and powerful bank. This analysis will focus on the economic explanations for this event.

As are most businesses, Barings was essentially a centrally planned operation that did business in markets. Managers at Barings, Nick Leeson among them, engaged in a variety of tasks rather than specializing in only one thing, as might be expected in a market. This is necessary within a large, planned organization, which does many things. Both Barings and Leeson traded for clients and for the bank, did trading and bookkeeping, and both bought and sold securities. Barings, and Leeson, did all of these jobs because, in part, organizing different firms to do them would probably have been too
difficult and costly. The contracting costs involved in coordinating different firms to buy for clients, sell for clients, buy for the bank, sell for the bank and do bookkeeping would have been prohibitively expensive. However, because these actions were concentrated in one organization, or in Leeson’s case one person, the potential existed for serious problems. High contracting costs were one reason for the trouble.

A second reason that Barings and Leeson engaged in a wide variety of trading is economies of scope. Once a financial trading office is set up, this office can be used for both buying and selling and for trading clients’ assets as well as the bank’s assets. Information gained by working with clients’ assets can be applied to allocation of bank assets and information gained by working with the banks’ assets can be applied to allocation of client assets. Similarly, information gained when selling securities can be used when buying securities. Because the trader that conducted the trades knows what he did, having him do the bookkeeping for those trades is a further efficiency gain. Economies of scope make it desirable to have one office engaging in a variety of types of trading as well as accounting for those trades.

The large volume of trades that Leeson conducted attracted little attention initially because it was expected that an office of the bank, even a small office such as the Singapore office, would engage in a large amount of activity. This is largely due to economies of scale in the financial industry. Once the Singapore office was established, the cost of making an additional trade or trading an additional dollar worth of securities was very small. International financial markets are very competitive and, as a result, the
profit ratios from arbitrage exchanges are very small. Because the profits made on a typical arbitrage trade are very small, Leeson had to use these economies of scale by executing a large number of trades and trading for large amounts to make the office profitable. Thus, the large quantity and value of trades that he made attracted no attention because this was expected as a result of economies of scale in financial services.

Perhaps the most obvious problem in the Barings case is asymmetric information and the lack of monitoring. Leeson basically oversaw himself for most of the year and it seems that as long as he was generating profits, no one was interested in examining what he was doing. Part of the explanation for this oversight may have been that proper monitoring, perhaps an external audit of the Singapore office’s operations, would have been very costly, especially given the large volume of trades Leeson made. However, if Barings had been able to devise a lower cost method of monitoring and, as a result, monitored the office more closely, disaster might have been averted.

One of the most interesting problems Barings faced was that it provided Leeson with incentives that were almost right, but which failed in an important way. Much of Leeson’s pay was from bonuses that were based on the profits that Barings made. As a result, he had an incentive to maximize profits for Barings and, to some extent, his behavior as an agent of Barings should have been exactly what the owners of Barings wanted. The problem was that Leeson’s liability was somewhat limited. Apart from criminal prosecution, Leeson could only lose his bonus (and his job) if he lost money. If he took large risks and they paid off, he could receive a large bonus and become very
wealthy. If he took large risks and lost money, he would lose his bonus and perhaps his job. On the other hand, if his large risks lost money, the owners of Barings could (and did) lose everything. Leeson had an incentive to take larger risks than the owners would have wanted him to take, and short of forcing him to invest all of his assets in Barings, there’s really no good way to give a manager in this situation the correct incentives.

It is interesting to ask whether a crisis of this sort might occur again and how this possibility might be avoided. Good monitoring of the remote Singapore office would have prevented the collapse of Barings. In a well-functioning market, people who are entrusting their savings to a bank would like to choose a bank that has good monitoring of all of its offices. However, it is difficult and expensive to thoroughly investigate large banks with international operations and markets are very bad at providing information such as this. As a result, people might not be able to determine whether a bank they would like to deposit money in is doing a good job of monitoring its offices. One approach to this problem might be regulation of banks. In particular, regulations for banks based in a country might include monitoring and auditing requirements for all offices that engage in trading. If the regulation is well written and enforced, this could assure potential customers that the banks they deal with are doing a good job of monitoring.

Nick Leeson’s risky trades destroyed Barings. There were a number of economic factors that contributed to this disaster, ranging from economies of scope in having traders also be bookkeepers to the incentives that Barings offered Leeson. While organizational
factors also contributed to the problems, some good insights can be gained from looking at the economics of the situation. Perhaps the most disturbing realization is that few if any of the economic factors listed above are unique to Barings. Numerous companies have employees with various tasks that they do a poor job of monitoring. These employees have incentives that differ from the incentives of the company in important ways. Indeed, the question might be not why the Barings disaster happened, but why such disasters aren’t much more common.