

CASE 10

Banking Industry Meltdown: The Ethical and Financial Risks of Derivatives



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The 2008–2009 global recession was caused in part by a failure of the financial industry to take appropriate responsibility for its decision to utilize risky and complex financial instruments. Corporate cultures were built on rewards for taking risks rather than rewards for creating value for stakeholders. Unfortunately, most stakeholders, including the public, regulators, and the mass media, do not always understand the nature of the financial risks taken on by banks and other institutions to generate profits.

Problems in the subprime mortgage markets sounded the alarm in the 2008–2009 economic downturn. Very simply, the subprime market was created by making loans to people who normally would not qualify based on their credit ratings. The debt from these loans was often repackaged and sold to other financial institutions in order to take it off lenders' books and reduce their exposure. When the real estate market became overheated, many people were no longer able to make the payments on their variable rate mortgages. When consumers began to default on payments, prices in the housing market dropped and the values of credit default swaps (the repackaged mortgage debt, also known as CDSs) lost significant value. The opposite was supposed to happen. CDSs were sold as a method of insuring against loss. These derivatives, investors were told, would act as an insurance policy to reduce the risk of loss. Unfortunately, losses in the financial industry were so widespread that even the derivative contracts that had been written to cover losses from unpaid subprime mortgages could not be covered by the financial institutions that had written these derivatives contracts. The financial industry and managers at all levels had become focused on the rewards for these transactions without concerns about how their actions could potentially damage others.

In addition to providing a simplified definition of what derivatives are, this case allows for a review of questionable, often unethical or illegal, conduct associated with a number of respected banks in the 2008–2009 financial crisis. First, we review the financial terminology

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associated with derivatives, as they were an integral part of the downfall of these financial institutions. Derivatives were, and still are, considered a legal and ethical financial instrument when used properly, but they inherently hold a lot of potential for mishandling. When misused, they provide a ripe opportunity for misconduct. To illustrate the types of misconduct that can result, this case employs a number of examples. First, we examine Barings Bank, which ceased to exist because of a rogue trader using derivatives. Next, we look at United Bank of Switzerland (UBS) and its huge losses from bad mortgages and derivatives. Bear Stearns, an investment bank that suffered its demise through derivatives abuse, is the third example. Finally, Lehman Brothers is an investment bank that was involved with high-risk derivatives that also led to its bankruptcy. At the conclusion of this case, we examine the risk of derivatives and potential ethical risks associated with the use of these instruments in the financial industry.

DERIVATIVES DEFINED

Derivatives are financial instruments with values that change relative to underlying variables, such as assets, events, or prices. In other words, the value of derivatives is based on the change in value of something else, called the *underlying* trade or exchange. The main types of derivatives are futures, forwards, options, and swaps. A *futures* contract is an agreement to buy or sell a set quantity of something at a set rate at a predetermined point in the future. The date on which this exchange is scheduled to take place is called the delivery, or settlement, date. Futures contracts are often associated with buyers and sellers of commodities who are concerned about supply, demand, and changes in prices. They can be traded only on exchanges. Almost any commodity, such as oil, gold, corn, or soybeans, can have a futures contract defined for a specific trade. *Forwards* are similar to futures, except they can be traded between two individuals. A forward contract is a commitment to trade a specified item at a specific price in the future. The forward contract takes whatever form to which the parties agree.

An *option* is a less binding form of derivative. It conveys the right, but not the obligation, to buy or sell a particular asset in the future. A *call option* gives the investor the right to buy at a set price on delivery day. A *put option* gives the investor the option to sell a good or financial instrument at a set price on the settlement date. It is a financial contract with what is called a *long position*, giving the owner the right but not the obligation to sell an amount at a preset price and maturity date.

Finally, *swaps* live up to their name. A swap can occur when two parties agree to exchange one stream of cash flows against another one. Swaps can be used to hedge risks such as changes in interest rates, or to speculate on the changing prices of commodities or currencies. Swaps can be difficult to understand, so here is an example. JP Morgan developed CDSs that bundled together as many as 300 different assets, including subprime loans. Credit default swaps were meant as a form of insurance. In other words, securities were bundled into one financial package, and companies such as JP Morgan were essentially paying insurance premiums to the investors who purchased them, who were now on the hook if payments of any of the securities included in the CDSs did not come through. As mentioned before, the value of derivatives is based on different types of underlying values, including assets such as commodities, equities (stocks), bonds, interest rates, exchange rates, or indexes such as a stock market index, consumer price index (CPI), or

“The value of derivatives is based on different types of underlying values”

even an index of weather conditions. For example, a farmer and a grain storage business enter into a futures contract to exchange cash for grain at some future point. Both parties have reduced a future risk. For the farmer it is the uncertainty of the future grain price, and for the grain storage business it is the availability of the grain at a predetermined price.

Some believe derivatives lead to market volatility because enormous amounts of money are controlled by relatively small amounts of margin or option premiums. The job of a derivatives trader is something like a bookie taking bets on how people will bet. *Arbitrage* is defined as attempting to profit by exploiting price differences of identical or similar financial instruments, on different markets, or in different forms. As a result, derivatives can suffer large losses or returns from small movements in the underlying asset's price. Investors are like gamblers in that they can bet for or against the price (going up or down) and can consequently lose or win large amounts.

BARINGS BANK

Barings Bank, which had been in operation in the United Kingdom for 233 years, ceased to exist in 1995 when a futures trader named Nick Leeson lost approximately \$1.4 billion in company assets. The extinction was due, in part, to a large holding position in the Japanese futures market. Leeson, chief trader for Barings Futures in Singapore, accumulated a large number of opening positions on the Nikkei Index. He then generated losses in the first two months of 1995 when the Nikkei dropped more than 15 percent. To try and recover these losses, Leeson placed what is called a short "straddle" on the Singapore and Tokyo stock markets. He was betting that the stock market would not move significantly in the short term. This strategy is risky but can be profitable in stable markets. However, when the Kobe earthquake hit and sent the Japanese stock market plummeting, Leeson lost a lot of money. He did not, however, change his approach. In fact, Leeson tried to cover his losses through a series of other risky investments that, instead, only increased the losses. When he finally quit his job, Leeson sent a fax to his manager, stating "sincere apologies for the predicament that I have left you in." Barings was purchased by ING, a Dutch bank for £1 (approximately \$1), which then sold it under the name Baring Asset Management (BAM) to MassMutual and Northern Trust in 2005.

Nick Leeson's life is a rags-to-riches tale. Son of a plasterer, he started his career in 1984 as a clerk with royal bank Coutts and later worked briefly for Morgan Stanley. He then got a position in operations at Barings, and later was transferred to Jakarta. Leeson worked in a back office solving clients' problems of wrongly denominated certificates and difficulties of delivery. Before long, Leeson was appointed manager of a new operation in the futures markets on the Singapore Monetary Exchange (SIMEX). Leeson had the authority to hire traders and staff and to sell six financial products, but his main business was doing inter-exchange arbitrage or "switching." Switching is betting on small differences between contracts by buying and selling futures simultaneously on two different stock exchanges. For example, if a contract was worth the equivalent of \$3 in London and \$2.75 in Singapore, Leeson would buy in Singapore and sell in London, making a 25-cent profit.

The key to Leeson's strategy in the 1980s was the knowledge that one stock market was slower in processing trades than the other. To hide any bad bets, Leeson created an error account (named 8888 for its auspiciousness in Chinese numerology) for his losses. Because no one could see the losses hidden by this account, Leeson was widely regarded as a brilliant trader. He had assured Barings that he was not trading with company money and that all the positions were perfectly hedged and virtually risk-free. Barings managers

had little knowledge in trading and did not suspect Leeson of deception. Based on their trust, Barings put a billion dollars into Leeson's account and made no attempt to check his statements. All it took to bring down this house of cards was one earthquake. When the Kobe earthquake hit in 1995, Leeson's luck finally ran out. He fled to Malaysia, Thailand, and then Germany, and was finally arrested for fraud in Frankfurt. He was extradited back to Singapore and sentenced to six-and-a-half years in Singapore's Changi prison where he was diagnosed with colon cancer and divorced by his wife. During that time, Leeson wrote *Rogue Trader: How I Brought Down Barings Bank and Shook the Financial World*, which was later made into a movie. He was released from prison in 1999. Since then he has become CEO of the Galway United Football Club. Although he has tried to atone for his actions, to many he is still considered to be the rogue trader who, through his misuse of derivatives, destroyed the United Kingdom's oldest bank.

UBS

United Bank of Switzerland (UBS) is a diversified global financial services company, headquartered in Switzerland. It is the world's largest manager of private wealth assets and the second-largest bank in Europe with overall invested assets of approximately \$3.167 trillion.

In 2000, UBS acquired PaineWebber Group Inc. to become the world's largest wealth management firm for private clients. Three years later, all UBS business groups rebranded under the UBS name as the company began operating as one large firm. As a result of the rebranding, UBS took a \$1 billion write-down for the loss of goodwill associated with the retirement of the PaineWebber brand. (Write-downs represent a reduction in an asset's book value.) UBS is no longer an acronym but is the company's brand name. Its logo of three keys stands for confidence, security, and discretion. UBS had offices in the world's financial centers in 50 countries, and employed approximately 82,000.

In the late 2000s, UBS came under scrutiny for questionable practices. In 2008, Internal Revenue Service investigators asked for the names of some 20,000 American clients suspected of hiding as much as \$20 billion in assets to avoid at least \$300 million in federal taxes on funds in offshore accounts. The issue is complicated because using offshore accounts is not illegal in the United States, but hiding income in undeclared accounts is. However, Switzerland does not consider tax evasion a crime, and using undeclared accounts is legal. In 2008, former UBS banker Bradley Birkenfeld and Liechtenstein banker Mario Staggi were indicted in Florida for helping an American property developer evade taxes by creating bogus trusts and corporations to hide the ownership and control of offshore assets. They also were accused of advising clients to destroy bank records and of helping them to file false tax returns. UBS had asked the bankers to sign papers saying that they, not the bank, would be responsible if they broke non-Swiss tax laws.

Indian authorities also are probing suspected violations of foreign exchange controls involving accounts held at UBS by two companies controlled by India's richest man. The accusations involve transactions that were allegedly arranged by unspecified parties by taking overdrafts on accounts held with UBS London.

However, tax evasion accusations are not the only problems UBS faces. Like other banks, it has suffered from the subprime crisis due to its heavy dependence on derivatives and mortgage-related securities. In fact, UBS has suffered more losses than any other lender in Europe. By the end of 2008, the bank had been forced to write-down over \$46 billion in losses

amounting to \$13.4 trillion at the end of 2007. These securities were backed by cash flow from the loans, but that only works when loan payments come in as they are supposed to. Since its failure, the Bear Stearns scheme has been exposed as a risky "house of cards." Executives have been charged with misleading investors by concealing that hedge funds were falling as the mortgage market crumbled. Investors lost \$1.6 billion in assets. Executives Ralph R. Cioffi and Matthew M. Tannin were arrested and face criminal charges. Yet this has done little to console investors or Bear Stearns' employees as they have watched the company's fall and acquisition by JP Morgan.

LEHMAN BROTHERS

Another firm that had been around for a long time, more than 150 years in this case, found that it could not survive the subprime mortgage crisis either. In 2008, Lehman Brothers, the fourth-largest investment bank in the United States, filed for chapter 11 bankruptcy. Lehman Brothers was founded by Henry, Emanuel, and Mayer Lehman, German immigrants who migrated to America in the mid-nineteenth century. It opened its first store in Montgomery, Alabama, in 1850. As cotton was the cash crop of the South, the brothers often accepted payment in cotton and began acting as brokers for those who were buying and selling the crop. The brothers' business expanded quickly, and they opened an office in New York in 1858. Soon they had transformed from a brokerage to merchant banking, and Lehman Brothers became a member of the New York Stock Exchange in 1887.

The company continued to thrive even through the stock market crash of 1929. It advised and financed several other businesses, including Halliburton, Digital Equipment, and Campbell Soup. The firm opened its first international office in Paris in 1960. After going public in 1994, Lehman Brothers joined the S&P 100 Index in 1998 and watched its stock rise to \$100 per share by the early 2000s. In 2007, the year the subprime crisis began, Lehman Brothers was ranked as number one in the "Most Admired Firms" list by *Fortune* magazine. CEO Richard Fuld was placed on the list of the world's thirty best CEOs. For its third quarter, Lehman Brothers possessed assets worth \$275 billion.

Then the subprime mortgage crisis came to a head. By late 2008, the company's shares had lost 73 percent of their value. Even as the company asked for government aid, its executives continued to pocket millions of dollars in bonuses, an action that caused public outrage. The company filed for bankruptcy that year, with \$613 billion in debt. Company shares rapidly fell 90 percent to 21 cents per share. The bank received some relief after Barclays PLC agreed to purchase much of Lehman Brothers for \$1.75 billion. The purchase of Lehman Brother was welcome news for some workers, as many of them thought they were going to lose their jobs. Yet this did little to help many shareholders, who had already seen their stocks reduced to nothing. Even CEO Fuld had lost \$600 million between 2007 and 2008. What caused such a well-established company like Lehman Brothers to go belly-up? Its dependence on subprime mortgages was the central factor. Additionally, some are accusing the firm of unethical behavior in its dealings with First Alliance Mortgage, a company accused of "predatory lending." Lehman Brothers helped bundle millions of dollars in mortgages into derivatives instruments for Wall Street. When the loans defaulted, these seem like appealing investment vehicles for Wall Street. When the loans defaulted, these investments contributed to the massive financial crisis.

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