

Question

A financial institution pays a fixed interest rate of 6% per year on a notional principal of \$10,000,000 to a firm and, in return, receives the 6-month LIBOR. The financial institution and the firm exchange payments every 6 months on February 5 and August 5. According to the terms of the swap contract, the last payment due in the swap is February 5, 2007. However, the firm defaults and declares bankruptcy on February 5, 2005 before the exchange of swap payments. Given that the risk-free rate of interest was 6.2% per annum with continuous compounding both on August 2004 and on February 2005, estimate how much the bank has lost from the firm default.