

LUFTHANSA: TO HEDGE OR NOT TO HEDGE . . . ¹

Professor Stephen Sapp prepared this case solely to provide material for class discussion. The author does not intend to illustrate either effective or ineffective handling of a managerial situation. The author may have disguised certain names and other identifying information to protect confidentiality.

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In January 1985, Heinz Ruhnau, chairman of the board of Lufthansa, the flagship German airline, had just finished a hard set of bargaining sessions with Boeing, at which he agreed to purchase 20 new Boeing 737 airplanes for US\$500 million. Since Lufthansa's revenues were mainly in deutsche marks and this amount was payable upon delivery of the airplanes in January 1986, he needed to determine how to deal with the resulting foreign exchange risk.

Based on the significant increase in demand and profitability of Lufthansa in the early 1980s, Lufthansa was undertaking an aggressive expansion program. Through this period its revenues had increased from US\$4.2 billion in 1983 to US\$4.5 billion in 1984, with net profits going from US\$23 million to US\$54 million. These increases provided Lufthansa with both the revenues to afford these new aircraft and the increase in volume to require new aircraft. For 1984, Lufthansa experienced an increase in passenger volume of over seven per cent and an increase in air freight volume of over 17 per cent from a year earlier.

In keeping with Lufthansa's policy of maintaining a fleet of both Boeing and Airbus aircraft, Ruhnau was ordering these aircraft from Boeing while he was in the process of negotiating a similar order for over 20 aircraft from Airbus Industries. Boeing was the U.S.-based largest manufacturer of commercial aircraft in the world. Airbus Industries was their principal competitor. It was a consortium of European aerospace firms supported by many European countries including the German government, Lufthansa's principal shareholder.

Since the value of the U.S. dollar had been steadily increasing since 1980, Ruhnau had to decide what to do about its current obligation to pay Boeing US\$500 million in one year. By January 1985, the U.S. dollar was at record levels against other currencies (see Exhibit 1) and many signs such as the current interest rate differential between the United States and Germany indicated that it might continue to rise (see Exhibit 2). It had gone from about 1.7 deutsche marks per U.S. dollar (DM/USD) in January 1980 to 3.17 DM/USD at the end of January 1985. At the current exchange rate, the planes would cost DM1,585

¹ *This case has been written on the basis of published sources only. Consequently, the interpretation and perspectives presented in this case are not necessarily those of Lufthansa or any of its employees.*

million and if the U.S. dollar continued to appreciate and reached 3.3DM/USD, for example, this cost could increase to DM1,650 million.

The continued strength of the dollar, coupled with the booming U.S. economy, led some people to believe that the dollar would continue to appreciate. However, it was also well-known that central bankers from all of the G-7 countries felt that the U.S. dollar was over-valued and a decrease would be beneficial to the world and, especially, the U.S. economy. Consistent with this, the U.S. Congress was becoming increasingly concerned with the high value of the dollar because it made U.S. exports uncompetitive in foreign markets. Less expensive foreign-made goods were flooding the U.S. market and they had already cost an estimated three million U.S. jobs. As a result, U.S. Congress was giving serious consideration to various trade protection measures and ways that it would be able to decrease the value of the U.S. dollar.

Because of the frequently discussed overvaluation of the U.S. dollar, Ruhnau was unsure of the best strategy to pursue with respect to this exposure to the U.S. dollar. Although he strongly believed the value of the dollar would decrease by January 1986, he could not be sure — exchange rates are notoriously hard to predict. He personally believed that the DM/USD exchange rate would fall from 3.17DM/USD to between 2.45 and 2.40 DM/USD by January 1986. Unfortunately, he was not sure when this depreciation would start. If it did not start before January 1986, he felt the U.S. dollar could be as high as 3.40 DM/USD in January 1986.

If the value of the dollar were to continue to rise, the cost of the aircraft would rise in DM-terms. On the other hand, if the dollar were to depreciate the cost of the aircraft would decrease. Ruhnau identified four possible alternatives to deal with these risks:

1. Do nothing and wait to see what the exchange rate is like in January 1986.
2. Cover some or the entire purchase price with forward contracts. This strategy would lock in the DM price and remove any uncertainty.
 - The one year forward rate Lufthansa's bank was willing to offer for such a large transaction to buy U.S. dollars in January 1985 was 3.20 DM/USD.
3. Cover some or all of the cost with foreign currency put options. This strategy would lock in a maximum price for the aircraft but also allow Lufthansa to pay a lower price if the U.S. dollar depreciated as he expected.
 - A put option (the right to sell DM at 3.20 DM/USD in one year) was being sold for a premium of six per cent of the number of DM being sold if the option is exercised.
4. Borrow DM to buy U.S. dollars today and invest them for one year. This strategy would lock in the price at today's spot exchange rate. The loan could be repaid using the funds to be made available for the purchase in one year.
 - In January 1985 the spot exchange rate was 3.17 DM/USD, the Eurocurrency U.S. dollar one year interest rate was 9.5625 per cent and the Eurocurrency one year deutsch mark interest rate was 6.3125 per cent.

Lufthansa's aircraft needs were becoming critical, and Ruhnau needed to make a decision quickly. Covenants restricting the ability of Lufthansa to take on new debt made it critical that Ruhnau be sure of the financing and risk exposure before finalizing the deal.

Exhibit 1

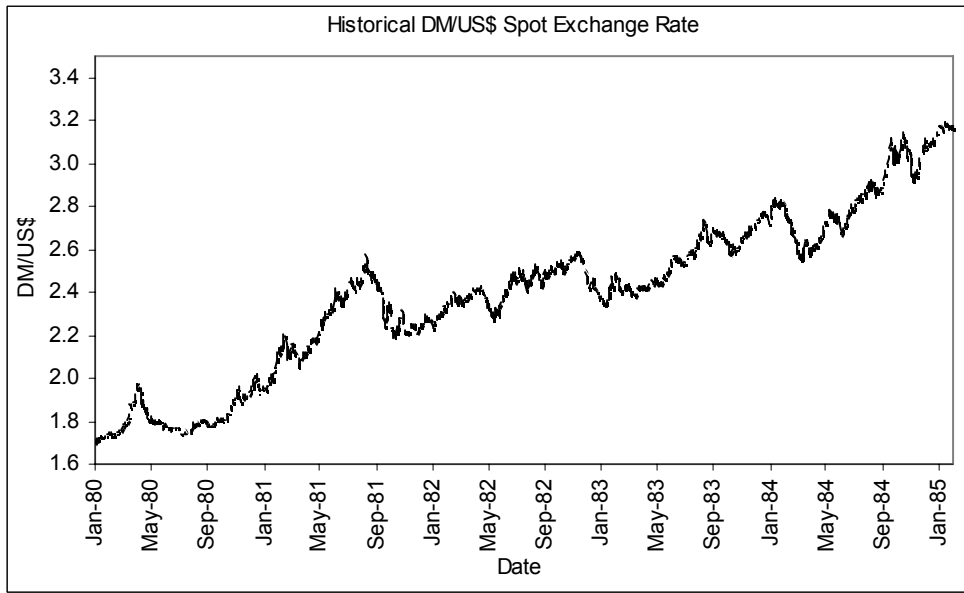


Exhibit 2

