Jaguar plc, 1984

This case is designed to be a vehicle for discussing operating exposure to real exchange rate changes and various alternatives for managing such exposure. The case setting is the privatization of Jaguar plc in 1984. Students are asked to value the shared being offered for sale as a function of expected exchange rates. Jaguar is a particularly interesting company to analyze because it has notable exposures to two different currencies, the US dollar and the German mark. Further, at the time of the equity offering, many analysts felt that the dollar was overvalued, and that the sharp rise in dollar-sterling exchange rate was likely in the near future. This precisely what happened, and there is a lot of information to share with students about how Jaguar and the industry responded.

Economics of the Luxury Automobile Business

Before addressing the problems of valuation and exposure estimation, it is helpful to ask students to identify the salient characteristics of Jaguar's business. Jaguar manufactures a high-priced luxury consumer durable. Customers presumably shop, but do not make purchase decisions solely on the basis of retail prices. Features and options, image, performance, engineering/design quality, and post-sale service are all dimensions on which manufactures compete. Manufactures in this segment would prefer not to compete on price, and customers, at least in the United States, are described in the case as somewhat price-insensitive. One would expect to see price cuts, rebates, and dealer incentives to raise unit volume only as a last resort. As such, retail process should be fairy stable, and changes are likely to be effected in an orderly fashion, with one firm playing the role of leader in periodically necessary price adjustments. In the US markets, Daimler-Benz appears to play this role among the competitors described in the case.

Exchange Rate Exposure

Jaguar's large volume of exports to the United States is an obvious source of exposure to the real dollar/sterling exchange rate. This part of Jaguar's exposure is a clear example of the classic type of operating exposure described in many international finance textbooks. Although some if its raw materials are sourced in global markets, Jaguar imports relatively new parts, and its labor pool is basically all U.K. Due to the stickiness of dollar product price in its major market, the United States, a large fraction of Jaguar's revenue behaves as if denominated in dollars. Thus, an increase in the sterling value of the dollar (a decline in the dollar/sterling exchange rate) results in higher sterling cash flow to Jaguar. Students need to understand this basic relationship before the discussion proceeds to various embellishments or to quantitative estimates of exposure. In particular, it should be emphasized that it is real exchange rate changes that give rise to this sort of exposure.

Valuation

A discounted cash flow analysis of Jaguar that is rich enough o highlight the exchange rate exposure is complex, and requires fairly large amounts of preparation and class time.

Students should be given enough notice of the difficulty to allocate their preparation time accordingly. It is very helpful to use a computer and spreadsheet software, although it is not usually helpful to provide students with case exhibits on a diskette. The instructor may also want to give student fairly detailed assignment questions, including certain common assumptions. However, it is not recommended that the students be given an actual spreadsheet template for the valuation. Much of their learning will occur through the exercise of designing the spreadsheet.

Estimating Exposure

Even after performing the comparative static analyses described above, we have not yet arrived at an estimate of Jaguar's exposure. Such an estimate is essential to a discussion of how exposure might be hedged. An important distinction to be made early in the discussion is between the exposure of firm value and the exposure of equity value. The analyses above suggests that these exposure have different magnitudes for a levered firm, and, depending on capital structure, may even have different signs.

Hedging

Even if Jaguar's exposure is much less than US$2.4 billion, it is still large, quite plausibly larger than equity value or asset value. Once students realize this, some of the difficulties of hedging the exposure becomes clear. Moreover, it is not obvious that Jaguar should hedge, even if it were possible and inexpensive. The main theoretical argument against hedging is that investors can hedge for themselves if they want. The practical arguments are that a hedging program may be expensive, difficult to control, set up potentially perverse incentives, and be ultimately ineffective. One of the standard arguments in favor of hedging is that the value may be created by reducing the volatility of firm value (e.g., by reducing contracting costs, or because of convexity in the tax system). Another is that firms can hedge more cheaply than investors because of lower transactions costs or better information