

Chapter 18 Case: Assessing a Direct Investment in Chile by U.S. Computer Corporation

David Smith is chief financial officer for U.S. Computer Corporation (USCC), a successful and rapidly growing manufacturer of personal computers. He has been asked to evaluate an investment project calling for USCC to build a factory in Chile to assemble the company's most popular computer for sale in the Chilean market. David knows that Chile has been a real business success story in recent years—having achieved economic growth rates averaging over 7% per year from 1990 through 2004, even as it made the transition from military dictatorship to democracy—and USCC is eager to invest in this developing economy if an attractive opportunity arises. David's job is to use the information below to see whether this particular proposal meets the company's investment standards.

On the basis of the current Chilean peso (Ps)-to-dollar exchange rate of Ps 700/US\$ (assumed value), David calculates that the factory would cost Ps 7 billion (\$10 million) to build (including working capital) and would generate sales of Ps 14 billion (\$20 million) per year for the first several years. Initially, the factory would import key components from the United States and assemble the computers in Chile using local labor. Smith estimates that half the company's costs will be dollar-denominated components and half will be local currency (peso) costs, but all USCC's revenues will be in pesos. As long as the peso/dollar exchange rate is stable, the company's operating cash flow is expected to equal 20% of sales. If, however, the peso were to depreciate relative to the dollar, the company's peso cost of acquiring dollar-denominated components would increase, and its profit margin would shrink because the peso sale prices of its computers would not change.

If USCC made this investment, it would set up a subsidiary in Chile and structure the factory investment so that the subsidiary's capital structure was 60% debt and 40% equity. Therefore, to finance the Ps 7 billion factory cost, USCC must obtain Ps 4.2 billion (\$6 million) in debt and Ps 2.8 billion (\$4 million) in equity. The debt can be obtained either by issuing \$6 million of dollar-denominated bonds in the Eurobond market at a 6% annual rate and then converting the proceeds into pesos or by borrowing the Ps 4.2 billion in the Chilean market at a 14% annual interest rate. If borrowing is done in dollars, however, the parent company must also service and repay the debt in dollars, even though all project revenues will be in pesos.

For simplicity, assume the parent company decides to contribute the equity capital for the project itself. USCC would do this by contributing \$4 million to the subsidiary from its existing resources or from the proceeds of newly issued stock. This equity financing would then be converted to pesos. (Alternatively, the subsidiary could sell Ps 2.8 billion of stock to Chilean investors by listing shares on the Santiago Stock Exchange.) USCC has a 12% required return on equity on its dollar-denominated investments.

TO DO

- Compute the *weighted average cost of capital* for this project, assuming that the long-term debt financing is in dollars.
- Assuming that the peso/dollar exchange rate remains unchanged, compute the present value of the first 5 years of the project's cash flows, using the

- weighted average cost of capital computed in part a. (Note: Round off your answer in part a to the nearest 1% prior to making this calculation.) What happens to the present value if the dollar appreciates against the peso?
- Identify the exchange rate risks involved in this project. Given that no forward, futures, or options market exists for the Chilean peso, how might USCC minimize the exchange rate risk of this project via changes in production, sourcing, and sales? (Hint: Exchange rate risk can be minimized by decreasing dollar-denominated costs, by increasing dollar-denominated revenue, or by doing both.)
 - What are the risks involved in financing this project as much as possible with local funds (pesos)? Which financing strategy—dollar versus peso—would minimize the project's exchange rate risk? Would your answer change if Chile began to experience political instability? What would happen to the attractiveness of the project if Chile joined NAFTA or signed a bilateral trade pact with the United States?

Spreadsheet Exercise



As the financial manager for a large multinational corporation (MNC), you have been asked to assess the firm's *economic exposure*. The two major currencies, other than the U.S. dollar, that affect the company are the Mexican peso (MP) and the British pound (£). You have been given the projected future cash flows for next year:

Currency	Total inflow	Total outflow
British pounds	£17,000,000	£11,000,000
Mexican pesos	MP 100,000,000	MP 25,000,000

The current expected exchange rate in U.S. dollars with respect to the two currencies is as follows:

Currency	Exchange rate
British pounds	\$1.66
Mexican pesos	\$0.10

TO DO

Assume that the movements in the Mexican peso and the British pound are highly correlated. Create a spreadsheet to answer the following questions.

- Determine the net cash flows for both the Mexican peso and the British pound.
- Determine the net cash flow as measured in U.S. dollars. It will represent the value of the *economic exposure*.
- Provide your assessment as to the company's degree of economic exposure. In other words, is it high or low based on your findings in part b?