

Bluface Mining & Oil Industries Inc. Capital Budgeting Problem

Situation: Bluface Mining and Oil Industries Inc. is considering undertaking a project in Pakistan after exploration yielded positive results for oil & mineral resources in Pakistan. Bluface Inc. has asked your company (i.e. your group) to consult on this impending project.

Task: You will first conduct the capital budgeting first from the parent's perspective based on the assumption that expected cash flows generated will ultimately be passed on to the parent each year.

Information: The Company's research team has provided you with the following relevant information and assumptions obtained from meetings with government officials and internal company experts.

- *Initial Investment:* An estimated PKR 28 million (i.e. Pakistani Rupees), which includes funds to support working capital, would be needed for the project. The current spot rate is USD 0.4464/PKR. The USD equivalent amount of the parent's initial investment is \$12,500,000.
- *Project life:* The project is expected to end in seven years. The host government of Pakistan has promised to purchase the plant from the parent & subsidiary after the seven years for 1% of the initial investment and the gains is taxed at a rate of 40%.
- *Price, Cost and Demand:* The estimated price and demand schedules during each of the next seven years for their refined products are shown here:

Year	Price Per Unit	VC per Unit	Demand in Pakistan
	Currency: PKR	Currency: PKR	
1	350	200	60,000
2	350	200	60,000
3	360	250	100,000
4	380	260	100,000
5	380	260	25,000
6	395	262	30,000
7	400	270	40,000

The expense of leasing land, and building office space is PKR 1,500,000 per year. Other annual overhead expenses are expected to be PKR 1,000,000 per year.

- *Exchange rates:* The spot exchange rate of the Pakistani Rupee is USD 0.4464/PKR. Bluface Mining and Oil Industries Inc. use the spot rate as its best forecast of the exchange rate that will exist in future periods. Therefore, the forecasted exchange rate for all future periods is USD 0.4464/PKR.
- *Host country's taxes on income earned by subsidiary:* The Pakistani government will allow Bluface Mining and Oil Industries Inc. to undertake the project and will

impose a 25% tax rate on income. In addition, it will impose a 10% withholding tax on any funds remitted by the subsidiary to the parent.

- *US gov't taxes on income earned by Subsidiary:* The US government will allow a tax credit on taxes paid in Pakistani. Therefore, earnings remitted will not be taxed by the US government.
- *Cash flows from subsidiary to parent:* Bluface Mining and Oil Industries Inc. receives all net cash flows from the project at the end of each year. The Pakistani government promises no restrictions on the cash flows to be sent back to the parent firm except the imposed 10% withholding tax as mentioned earlier.
- *Depreciation:* The Pakistani government will allow Bluface Mining and Oil Industries Inc. to depreciate plant, property and equipment (PPE) at a maximum rate of PKR 4,000,000 per year, which is the rate the subsidiary will use.
- *Salvage value:* The Pakistani government will pay the parent 1% of initial cost of project to assume ownership of the subsidiary at the end of seven years. The government will tax Bluface Mining and Oil Industries Inc. 40% on gains.
- *Required rate of return:* Bluface Mining and Oil Industries Inc. require a 12% rate, which is the domestic discount rate for the company in the US.

Scenario and Sensitivity Analyses:

How will your decision (from the parent's perspective) change for the following:

- *Exchange rates:*
 - Examine how exchange rates depreciation for the US investor of 1% each year versus an appreciation of 1% each year affects your decision.
- Determine how accounting for political risk will affect your analyses using both an adjustment in CF or discount rate:
 - The company takes OPIC insurance of 15% of the maximum payout of \$250,000 per year.
 - What if the sovereign yields spread between the US and Pakistan is at 2.5%?
- If the US government charges taxes on repatriated cash flows of 15%?
- Break-Even values: Determine what the exchange rate must be to get a financial breakeven point. Show and report this in your analyses.

New Capital Budgeting Perspective:

- Conduct analyses from the foreign country perspective (i.e. Pakistan). Assume the local discount rate is 18%.
 - If inflation rate in the US is 1.9%, inflation in Pakistan is 6% what is your analyses and conclusion about the discount rate used?