

Case Study Questions: Antamina #1

There are 2 cases inside this one case. The first case is a risk and valuation case. The second case is a bidding and negotiation case. We will focus on the first and ignore the second. Assume for purposes of our discussion that the company is outright buying the property. As anywhere, it may pay royalties and taxes on what it produces, but there is no negotiation on these rates. The task is to decide what the company should be willing to pay today to purchase the mine.

1. Treat this first as a traditional capital budgeting problem. Set up and execute a discounted cash flow valuation of the mine. What is the DCF value?
2. Outline the key decisions down the road that will be shaped by new information after the initial bidding. For each decision, outline how the decision will be made—i.e., what are the tradeoffs and what is the rough ‘formula’ determining the right action.
3. Construct a range of scenarios for the underlying risk factors shaping the realized value. How does the realized value change as you vary the scenario?
4. How does the company’s risk evolve and change over time? Is it more or less risky before or after the decision to develop the property?
5. Outline at least one ‘option’ analogy for this valuation problem. Identify the underlying asset, the exercise price, the time to maturity, the payoff function and so on. Use to the Brealey/Myers/Allen textbook chapter on Real Options as a point of reference.