Case #17

Company: NA

Topic: M&A, Valuation

Industry: Industrial Chemicals

About the Case

This is an M&A case and includes a piece on valuation. The frameworks used in this case include Porters Five Forces Analysis, Competitive Analysis and issues characteristic of M&A activity such as human capital and legal/financial considerations. Most of the case is qualitative in nature with the exception of valuation. Accordingly depth and flow of discussion is at the discretion of the interviewer.

Defining the Problem

Your client Chemical Brothers International (CHEMBRO), is a major chemical producer, has retained your firm's services to evaluate the feasibility of acquiring another major player in the industry, Plastics of America (POA). Both companies are bulk commodity chemical producers. Your task is to analyze the future prospects of POA's major product line, a chemical used in the production of plastics.

Should Chembro acquire POA?

Information Gathering
Read this information well before you administer the case.

Prompt 1: Hypothesis Testing - *The Interviewer should ask for initial thoughts on possible motivations for acquiring POA. This is an open-ended question; possible answers follow. Discuss briefly some of the concepts mentioned below and proceed to next prompt. What could be the purpose of this acquisition?*

Prompt 2: Strategic Issues – *The interviewer should question the candidate about the overall strategic issues that need to be addressed in evaluating an M&A proposal. The idea here is to get a sense of the candidates' business judgment and whether or not he/she is able to apply correct frameworks to diagnose the issue at hand.*

Author's Commentary/Notes: *A strong candidate will recognize that this case deals with internal factors (synergies and economies of scale) as well as some external factors (opportunity costs and industry attractiveness). The candidate should include some of the following elements in his framework:*

- Market Attractiveness / Industry Potential
- Operational Analysis (Synergies/Economies of Scale/ Network Externalities)
- Organizational and cultural compatibility
- Capability to enact acquisition: Financial, legal, and perceptual barriers

Market Analysis

- End-users come primarily from the automotive industry
- Market size has been slowly declining over the last five years
- Within the last couple of years, prices have declined rapidly

Competition / Industry Analysis

- There are 10 major producers; the largest one with a 35% share; number two has 25%, and POA is third with 20%; the remaining share is divided amongst others
- The two largest competitors earn a small return; POA is slightly above break-even; the rest are operating at break-even or at a loss
- Relative capacity utilization in the industry is 60 to 70 % and has been so for the last 3 years. POA is also currently working at 75% of capacity
- The two largest competitors are highly diversified with this particular product line representing no more than 20% of their revenues
- Highly regulated industry with expensive pollution control equipment
- High barriers to entry because of the low profits and high investments required

Product value proposition / brand portfolio

- The price has been driven by self-destructive cuts from the leaders to gain temporary share points
- We do not foresee the development of any significant byproducts.
- Other possible uses: None.
- Complementary Assets: 50% of POA's sales are to the automobile industry

Finance and Operations

- Cost is based on size/efficiency/age of plant, etc. Within the industry, POA is in an above-average position.
- There are several operational improvements that could be implemented, and management has not been aggressive in its pursuit of quality and cost controls.
- Great economies of scale exist in marketing and transportation. (Not quantifiable)
- Operational synergies could represent an additional $30 million in profits

Prompt 3: Valuation – *Discuss the above-mentioned qualitative aspects in some detail, and provide the candidate with Exhibit 1 when the conversation shifts to the topic of valuation. Ask candidate to compute the present value of acquisition. You may allow the candidate to use 10% rate of return and not 9% if requested. However ask him the effect on NPV of a higher vs. lower discount rate, to gauge his understanding of the concept.*

Answer:

- NPV analysis: Based on the information from Exhibit A, the net present value of the target company is = $90M / (10%) = $900 million (assume perpetuity), which is less than the purchase price tag of $950 million.
- Industry Attractiveness: not particularly attractive, unless the larger competitor can use economies of scale and dominant position for economic gain.

Author's Commentary/Notes: *The above answer meets the interviewer's expectation; however a superior answer would involve the following*

- A more comprehensive NPV would include the new cash flow from synergies, as well as the previously calculated NPV. Therefore the $900 million + [Synergies 30M/(12%-3%) = 333M] = $1,233M value of target > 950 price tag
- In addition to the cash flows expected from synergies, the potential economies of scale and tax advantages from funding the acquisition with debt could be seen as other sources of revenue. These considerations further improve the deal.
- Competitive and regulatory responses to block the merger are reasonable to assume due to concerns over industry concentration.
- Benchmarking the value of the POA acquisition to other similar M&A in the industry. Consider what multiple of operating profits other acquisitions been valued at?

Conclusion: *Ask the candidate to conclude the case with a recommendation. His wrap-up should clearly include a "go / no go" decision followed by quantitative (valuation) and qualitative (industry and compatibility analysis) facts.*

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Exhibit 1

Purchase Price	$950
Annual operating income before tax	$90
Cash	$30
No. of employees	2000
Return on capital	12%
Market risk premium	7%
Growth rate	3%
Tax rate	40%