Exercise Set: Mergers and Acquisitions

Vertical integration

Imagine that you are managing a company in each of the sectors described below. For each sector identify examples of (1) one target for upstream vertical integration and (2) one target for downstream vertical integration:

a. Car manufacturer
b. Glass bottles manufacturer
c. Chocolate factory
d. Surf shop
e. Telecommunication company
f. Energy producer

Horizontal integration

Imagine that you are managing a company in each of the sectors described below. For each sector identify the potential and rationale of one horizontal integration acquisition by highlighting two examples of each of the following: (1) revenue synergies; (2) cost synergies (note: try to be as specific as possible, and avoid using the same generic examples for all sectors).

a. Groceries supermarket
b. Surf school
c. Restaurants
d. Transportation company
e. Recycling company

Calculating synergies value

Company A is expected to have sales of 3M€ over the next year. The gross margin is 40%, whereas the fixed costs are worth 0.6M€. Depreciation is 0.2M€, and the tax rate is 30%. Every year the company needs to have maintenance CAPEX and match that investment to depreciation. No additional net working capital investments are needed.

Company B is expected to have sales of 1.2M€, the gross margin is 25%, fixed costs are 0.1M€. Depreciation is 0.1M€, and the tax rate is 30%. Every year the company needs to match CAPEX to depreciation to maintain its assets. No additional net working capital investments are needed.

Company A wants to acquire company B. It is expecting to fulfill some synergies with the acquisition: (1) due to the management of distribution channels, company A is able to implement a 10% growth in sales of company B; (2) the gross margin of company B will match the gross margin of company A due to the transferal of best practices on processes and (3) 40% of company's B fixed costs can be saved since they are redundant.

Both companies are fully financed by equity, the appropriate discount rate is 10%, the expected cash-flow for the next year are expected to remain constant forever in both companies without the acquisition and with the acquisition the incremental cash-flows would take place immediately and would last every year and forever.

1) What is the stand-alone value of each company?
2) What is the total value of synergies in the acquisition? Show the percentage breakdown across the three different levers
3) What is the ZOPA of this agreement? If the deal set a price midway in the ZOPA, what is the NPV for the acquirer company? What is the sellers premium as a percentage of company B current value?