CASE 1: ChemicalCo

1) Chemical_A is an important raw material in the production of Chemical_1. Since the Chemical_1 market is very segmented in Brazil, ChemicalCo executives came up with the idea of buying Player C and Player D in order to create a new market leader. Based on Graph 1 and assuming that the combined company can achieve the same EBITDA margin of Player A, what would be the increase on the combined company (Player C and Player D) annual EBITDA?

- (a) $2.1M
- (b) $2.7M
- (c) $3.0M
- (d) $5.1M

2) Based on Graph 2 and considering that the acquisition of Player C and Player D implies in:

1. Losing all other customers that produce Chemical_1
2. Exporting the exceeding production

What would be the impact in the annual EBITDA of the Chemical_A business, the original ChemicalCo business?
(Chemical_A local price = $1.0k/ton; export price = $0.5k/ton)

- (a) There will be no impact on Chemical_A business
- (b) $2.1M
- (c) $2.7M
- (d) $5.1M

3) Which of the following would most likely be the recommendation to ChemicalCo board about this opportunity?

- (a) ChemicalCo has a good opportunity to consolidate the Chemical_1 market and create a competitive vertical integrated company without negative impact

- (b) ChemicalCo should not enter in this business, as this will not have any positive impact to the group

- (c) ChemicalCo should stay focused on the core business instead of trying to enter in a new business and risking lose sales of Chemical_A

- (d) The best way to enter this business is to build a new plant and take advantage of the vertical integration

4) What is the expected annual margin of the plant presented in Graph 3, considering it operates with 100% of its capacity and all the production is sold locally for the import parity price (IPP)?

- (a) $ 15M
- (b) $ 18M
- (c) $ 23M
- (d) $ 29M

5) During the next year, the local market for Chemical_2 will be able to consume only 10kty.
There are two possible options for the plant in this scenario:
1. Produces only 10kty, operating with a very low capacity
2. Operates with 100% of its capacity and exports all exceeding production by the export parity price

Which one is the best option, what is the expected annual margin of the plant?

- (a) Option 1, but the EBITDA will be $1M negative
- (b) Option 1, but the EBITDA will be less than $0.5M positive
- (c) Option 2, and the EBITDA will be $1M positive
- (d) Option 2, but the EBITDA will be less than $0.5M positive

6) Chemical_3 is produced from the reaction between Chemical_A and RMaterial_4 in presence of RMaterial_5.

RMaterial_4 can be easily imported, but importing RMaterial_5 has very expensive shipping costs.

EveryChemCo, our only competitor in Chemical_A has an exclusivity sourcing agreement with PetroChemCo, the only local producer of RMaterial_5

After listening to a ChemicalCo's executive and a market specialist, the partner responsible for this project asked you what is your "answer first" on this theme. Which of the following would most likely be your answer?

- (a) ChemicalCo should buy EveryChemCo, this would give us access to RMaterial_5
- (b) ChemicalCo should try to negotiate the sourcing agreement with PetroChemCo to get access to RMaterial_5
- (c) ChemicalCo should investigate the possibility of buying the RMaterial_5 plant from PetroChemCo. This would be lethal to EveryChemCo
- (d) It is not possible to have an "answer first" without analyzing the numbers

7) If ChemicalCo could assume the entire production of Chemical_3 from EveryChemCo, what would be the total gain on ChemicalCo annual margin?

Important assumptions:

1. Volume of Chemical_A exported by ChemicalCo exceeds 8kty and it is sold for the export parity price ($0.5k/ton)
2. EveryChemCo total production of Chemical_3 is 10kty and it is entirely sold locally
3. There is no extra fixed costs to produce Chemical_3 in ChemicalCo current facilities

- (a) $9M
- (b) $12M
- (c) $15M
- (d) $18M

CASE 2: RetailCo

8) Based on graph 1, what was the increase in sales of the top 5 players between 2003 and 2009?

- (a) 100%
- (b) 150%
- (c) 200%
- (d) 300%

9) Based on the information in graph 2, which of the following statements would be incorrect?

- (a) RetailCo had the lowest growth rate over the period 03-06
- (b) Player B is the only player that grew at a faster rate during the period 03-06 than during the period 06-09
- (c) Player A had the third fastest growth rate in the period 03-09
- (d) Player C had the fastest growth rate during the period 06-09

10) What was approximately RetailCo's RMS in 2009, considering the four states RetailCo serves (indicated in graph 3)

- RMS = Relative market share
- If company is market leader -> RMS = company's sales / 2 nd player's sales
- If company isn't market leader -> RMS = company's sales / leader's sales

- (a) 0,8
- (b) 1,1
- (c) 1,2
- (d) 1,5

11) What is the ratio of the number of stores operated by RetailCo to the number of stores operated by Player B?

- (a) 2:1
- (b) 3:1
- (c) 7:2
- (d) 8:2

12) Bain's team identified several opportunities to reduce RetailCo's operating expenses. If fully implemented, those initiatives could reduce the existing difference between RetailCo's operating expenses and those of Player D by half (as a percentage of sales).

Considering that all initiatives are successfully implemented, what would be the increase in RetailCo's annual EBITDA?

- (a) $36M
- (b) $48M
- (c) $60M
- (d) $72M

13) There are rumors that Player D is interested in acquiring RetailCo, in order to strengthen its market position through economies of scale and to consolidate its position in a fast growing market.

Considering that the 3 major players in the retail market (Players A, B and E) account for ~45% of the national market, what is the new company’s market share expected to be?

- (a) 5%
- (b) 6%
- (c) 10%
- (d) 14%

14) Bain's team expects that an acquisition of RetailCo by Player D would have two immediate effects on RetailCo's existing stores:

I. Sales/m 2 in RetailCo's existing stores would increase to the same level as that of Player's D stores, due to changes in product mix and more aggressive discount promotions;
II. 10 RetailCo stores would have to be closed, due to their proximity to Player D's stores.

What would the total impact of these effects on RetailCo's annual sales be?

- (a) +$40M
- (b) +$50M
- (c) +$60M
- (d) +$70M

15) Three specialists commented on the rumors that Player D is interested in acquiring RetailCo and the long term strategy that RetailCo should adopt:

Retail specialist 1: RetailCo holds a strong but vulnerable position in the markets it serves. Given its scale, RetailCo is not able to offer competitive prices. That disadvantage is clear when RetailCo's costs are compared to those of major national players. In order to maintain its competitiveness, RetailCo should take part in the consolidation occurring in the market, either through the acquisition of minor players or through a sale to a major player.

Retail specialist 2: Despite the consolidation trend in recent years, there is still room for RetailCo to buy some small players in the markets it serves. There are 5 small Players with ~20 stores each that could be bought for a relatively low price, due to operational and financial problems. RetailCo should focus on the acquisition of these 5 companies, before a major player does.

Retail specialist 3: The only possible way for RetailCo to remain competitive is through consolidation with a relevant player. There are rumors that Player D offered ~$250M for RetailCo, about 10 times RetailCo's current EBITDA and in line with recent transactions in this market. In this scenario, the best thing to do is accept the offer immediately.

RetailCo's founder and CEO listened to the three specialists. He agrees with the arguments presented by Specialist 1, but he is not sure whether the best strategy for consolidation is the one suggested by Specialist 2 or the one suggested by Specialist 3. Bain's team was asked to advise him on his decision.

After listening to the specialists and considering all the data presented on RetailCo, what would you advise the CEO to do?

(a) The arguments presented by specialist 1 are wrong, because the comparison between the results of the players show that there is no relationship between the costs of each company and its size.

(b) The strategy suggested by specialist 2 is the best one, because it is the only one that allows the founder of RetailCo to maintain control of the company while generating significant economies of scale.

(c) Specialist 2 underestimates the complexity of incorporating 5 new companies to RetailCo’s current operation. If RetailCo acquires those 5 companies, even in a very optimistic scenario, it will take several years until it can make the company profitable. The best option is to adopt the strategy suggested by specialist 3.

(d) The arguments presented by both specialists have flaws: the simultaneous acquisition of 5 small players would be operationally infeasible and Player D’s current offer underestimates the potential increase in RetailCo’s EBITDA margin. The best strategy for RetailCo is to implement operational improvement initiatives that would increase its EBITDA. This way, RetailCo would be able to negotiate a higher price than that of the current offer.

ANSWER KEY:

Question	Answer	Question	Answer
1	B	9	C
2	C	10	C
3	A	11	B
4	C	12	A
5	C	13	B
6	C	14	C
7	C	15	D
8	D		