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BCG Full Case Example

Summary

This is an example of a full Case example provided by BCG to an MBA Consulting Club. It is likely a Case that BCG used in interviews in the past, but which they have "retired." There, it is likely to be **very** representative of what you will see in a Case Interview with BCG. This full example is used to demonstrate how the quantitative component fits into the overall case and how having strong quantitative skills can help you structure an open cases.

Questions or statement from the interviewer begin with "[Q]". High quality responses are on the following page and begin with "[A]". Use a sheet of paper to write out your responses and any diagrams, and then review the responses on the following page. Other text which There will be other notes directed at the reader that discuss sample responses that are not part of the "ideal answer" and indicated with brackets such as "[Note]".

Question: Case Prompt

[Q] Our client is a large, multinational consumer products company. Today we will focus on its US business.

Our client has been following US demographic trends and has found that **Low Income** (LI) households have been growing twice as quickly as other segments. Low Income is defined as families with income at or below the poverty level.

Our client has always had a **premium** product strategy. It sells its products in grocery stores, convenience stores, mass retailers, etc. but its products are always priced at the high-end of their respective categories. It has never targeted the Low Income segment before and doesn't have a low income strategy, but given the growth of this segment, our client is considering entering the Low Income segment.

Our client has 3 questions for us:

- 1) Should it have a Low Income strategy?
- 2) If it should have a Low Income strategy, what are some of the tactics it should use?
- 3) What are some of the Risks the client may face?

What would you like to know to help the client answer its questions?



Response: Structure

The first thing you should examine, is what or Product Categories or **Products** is the client interested in? Most consumer product brands that account for the large majority of sales in the US are owned by 3–5 large companies like Proctor and Gamble, Clorox, and Colgate Palmolive. These companies have hundreds of brands across numerous product categories. If you didn't already know this, look on Wikipedia for a list of brands owned by these companies. The client need to decide what Product Categories they are most interested in examining. I'll refer to a Product Category as a Product for short.

From an analytical perspective, you want to determine what revenue and profit opportunity is in the Low Income segment, for each **Product**. That is, "how much are they leaving on the table" by not having a Low Income strategy — you'll want to quantify this for each Product. Once we find the products with the biggest opportunity, we can examine Tactics and Risks.

To do this analysis, we'll want information on the Market Size for each Product in both the Low Income Segment and non-LI Segment, the Competitors for each Product, and their Market Share in each segment (LI, and non-LI), as well as profits or profit margin by product, competitor and segment. In this analysis, there are two **Segments**: Low Income and non Low-Income (non LI).

[A]

Products

- Categories
- Revenue by product category & segment
- Profit margin by category & segment

Competitors

- Market share by product category & segment
- Price and profit margin by product and segment

Segments

- Size (revenue)Growth rates
- Price & profit margins
- Channels

Channels

- LI and non-LI sales by channel
- Pricing and profit by channel
- Examine our sales by product, segment and channel and

Risks

- Cannibalization
- Brand
- Financial

[Note]

Again, Products is really the most important category in this structure — we need to know what products the client is most interested in exploring. I'm also including your client in the list of "Competitors", we want the data for us as well as the largest players. In an ideal world, we would have a data-set which we can slice and analyze by any of the above parameters.

The ideal data-set would have the following information:

By Product → Revenue by Segment → By Competitor: Market Share, price, and profits → By Channel Type: Revenue, price and profits. We would also want projections for this dataset for each segment for the future.

As with many Cases, this is a Case where you would do an initial phase of research and analysis and then make decisions based on the information the interviewer revealed. At a minimum, a good answer should ask for information on Revenue by Product, Segment and Competitor, and mention potential Risks. At this point in the case, you don't have recommendations yet, so is difficult to discuss Risks in



detail. I would therefore suggest mentioning risks as an overall category of analysis or "bucket" and then list potential generic risks, and explore the risks of the particular strategy in detail once you have developed a strategy.

Question: Data Table Analysis

[Q] You asked about Products and Revenue/Market-Share by segments. The client shared some data for its key products.

Product/ Category	Total Category Sales (\$M) [1]	Client Category Sales (\$M) [2]	Total LI Spend on Category (\$M) [3]	LI Spend on Client (\$M) [4]	
Shampoo	400	100	90	30	
Cold Medicine	250	50	75	7.5	
Diapers	300	150	100	25	
Baby Food	300	100	100	30	

What do you make of this information?



Answer: Data Analysis

[A] A natural place to start is to see if there are Products where your Market Share in the LI segment is below the Market Share in the non-LI segment. Doing a calculation of the overall Market Share and Market Share in the LI segment gives the following numbers:

Product/ Category	Total Category Sales (\$M) [1]	Client Category Sales (\$M) [2]	Total LI Spend on Category (\$M) [3]	LI Spend on Client (\$M) [4]	Total Market Share $[5] = [2] \div [1]$	LI Market Share $[6] = [4] \div [3]$	
Shampoo	400	100	90	30	25%	33 1/3 %	
Cold Medicine	250	50	75	7.5	20%	10%	
Diapers	300	150	100	25	50%	25%	
Baby Food	300	100	100	30	33 1/3 %	30%	

In Diapers and Cold Medicine, our Market Share in the LI segment is well below the our Total Market Share. In the Baby Food segment, the LI Market Share is slightly below the Total Market Share, so this is likely a lower priority category. In the Shampoo category, our LI Market Share is above the Total Market Share, so we might not be able to boost Market Share but we could potentially research why we have higher Market Share in the LI Segment for Shampoo and see if we can apply any information to the other Product Categories. The Categories where the LI Market Share is below the Overall Market Share are identified with Red text in column 6.

[Note] This write-up skips over the mechanics of these calculations which are covered in detail in the *Fastmath Ace the Case* Online Course. If you aren't able to easily perform these calculations, then go through the section on **Multiplication & Division** in the full online course.



We also want estimate the revenue opportunity in the LI Segment for each Product Category which we would measure by calculating the increase in revenue if we increased the LI Market Share to the overall Market Share.

Product/ Category	Total Category Sales (\$M) [1]	Client Category Sales (\$M) [2]	Total LI Spend on Category (\$M) [3]	LI Spend on Client (\$M) [4]	Total Market Share $[5] = [2] \div [1]$	LI Market Share $[6] = [4] \div [3]$	LI Revenue Opportunity (\$M) [7]=([5]-[6])×[3]
Shampoo	400	100	90	30	25%	33 ½ %	NA
Cold Medicine	250	50	75	7.5	20%	10%	7.5
Diapers	300	150	100	25	50%	25%	25
Baby Food	300	100	100	30	33 1/3 %	30%	3 1/3

These are theoretical opportunities dependent on finding ways to increase the LI Market Share. The biggest overall opportunity is in Diapers with a \$25 M opportunity, followed by Cold Medicine with \$7.5 M and then by Baby Food with \$3.33 M.

In Total, these represent opportunities of \$38.83 M of incremental Revenue. Diapers is the largest opportunity and is more than 3x larger than other opportunities.

[Q] What else would you like to know about these categories to assess the opportunity?



[A] I think the most important data to have is to understand how we and the other competitors Price and Package our products in each category. That is, what is our Price, and our Competitors Price, and what sort of package size does each company offer? I'm also curious if there are any differences in the where LI Customers shop at compared to non–LI Customers. Are they shopping at discount markets?

[Q] This is a comparison of how we and our competitors Price and Package our products.

Product/ Category	Client Package Size	Avg Competitor Package Size	Client Price	Avg Price Top 5 Competitors	
Shampoo	10 oz	12 oz	\$4	\$3	
Cold Medicine	6 oz	6.5 oz	\$6	\$3	
Diapers	40-pack	32-pack	\$20	\$16	
Baby Food	6 oz	6 oz	\$2	\$1.50	

Exhibit 2: Price and Packaging information

What do you make of this information?

[Note] If you ask about where Low Income consumers purchase (Channels) the interviewer will tell you that Low Income consumers purchase largely in smaller, local shops.



[A] This is interesting. Low Income Consumers are likely price sensitive for many Products, so relevant metrics are Price-per-Unit for our products compared to our Competitors, as well as the overall Size and Price of our Products compared to Competitors (given in table).

[Note] Review the data and evaluate for each Product whether the Client has a higher or lower Price and Package Size than Competitors.

[A]

Analyzing at this information of in order of Products with largest opportunity to least opportunity:

Diapers: We sell a larger and more expensive package size (25% more diapers per package) than competitors but we have the same Price-per-Unit of \$0.50. Low Income Consumers will likely have limited cash, and so may decide to buy a less expensive Product, even if the per unit cost is the same as our Product. We could likely target the Low Income Segment by creating a smaller Package Size with a corresponding decrease in the Cost, and then distribute them in the types of stores that Low Income Consumers tend to visit. We could match competitors in Size with a 32–pack for \$16, or potentially create a smaller Package Size, such as a 20-pack for \$10.

When making changes we definitely want to think about mitigating risks. We can charge the same Price per unit, so gross margins would't be affected. With a smaller package, we will likely have slightly higher packaging costs per unit, but this would likely have a small effect on overall Profits. We could offset this by having a slight increase in Price per Unit for a smaller Package — for example, we could charge \$11 for a 20-pack, which is a lower Price than our competitors but higher Price-per-Unit to offset the packaging costs. I'd want to understand packaging costs better, and then we could test some sample Package Size and Price combinations in controlled markets to see which have the biggest increase on profits. Overall this strategy presents limited risks.

Cold Medicine: We sell at twice the Price and a slightly smaller bottle size than Competitors. If we cut Price to match competitors and boost Market Share in the LI segment, we would drastically reduce profit margins of existing sales, so this doesn't seem like a good idea.

One alternative is to create another brand of Cold Medicine targeting the LI segment that has a lower Price and is distributed in shops frequented by Low Income consumers. This mitigates the risk of cannibalizing our own business by having a separate brand distributed in specific locations try to win Low Income Market Share without affecting our existing brands. Cold Medicine is a smaller revenue opportunity (\$7.5 M) compared to Diapers (\$25 M), which is less than one-third) so Cold Medicine is a lower priority.

[Note] Interviewing will agree and tell you not to focus on Cold Medicine because there are existing generics that compete with the client's Cold Medicine and have much lower Prices.

Baby Food: We have the same package size while competitors charge 25% less than us. Our Low Income Market Share is close to the Overall Market Share. Lowering Prices to compete in this segment will likely reduce Profits. This Product has a low Revenue opportunity anyway \$3.33 M. We could likely pursue a similar strategy to Cold Medicine with a separate brand, distributed to the stores where Low Income consumers shop, but this is a much lower priority.

Shampoo: We sell at a higher Price, **and** lower Package Size than our competitors, so we have a significantly higher Price per unit (oz). We also have a higher market share in LI segment than Overall, so we're well positioned Shampoo. Any ideas on why we can charge more for Shampoo than competitors while maintaining higher Market Share in the Low Income Segment?



[Note] If you ask, the interviewer will tell you that Low Income customers can't afford salons, but they will include in shampoos, which explains why the client's LI Market Share for Shampoo is higher than their overall Market Share for Shampoo even though they have a higher Price-per-Unit (oz).

Summary of Analysis

Based on this, I think we should focus on **Diapers**. If we adopted the strategy outlined above, we could increase our Revenue by \$25. Given our Total Revenue of \$400 M in the US, this represents 6.25% of our US Revenue.

[Note] 6.25% is a significant amount for a mature consumer products company. Large, multinational companies may only see 5–7% annual revenue growth, so to see 6.25% growth of their North American business from a single product would be a very big win.

[Q] What else should the client think about as it develops a Low Income strategy? What are the Risks?

[Note] If you didn't explicitly discuss the Risks in each category, the interviewer will provide a cue to discuss Risks here. Exceptional responses to Case questions will identify and discuss the risks of potential actions proactively. You can still be successful in Case Interviews if you don't do this, but you can increase your odds of differentiating yourself by doing so.



[A] We should definitely consider the Risks of adopting a Low Income Strategy, and try to identify ways to minimize the Risk. With Diapers, there appears to be limited Risk, as we can maintain the same Price-per-Unit. We should look to create a smaller package size(with a lower Price, but same Price-per-Unit, and them distribute it in stores where Low Income Consumers shop. Ideally, we could distribute multiple sizes of our Diapers to address all segments of the market. This has minimal brand risk or cannibalization risk.

If we looked to target other Products like Cold Medicine or Baby Food, we would likely have to reduce Prices, which could reduce profits from our existing business, and this would also likely damage the value of our brands in each category. Therefore, it's likely that we'd want to launch separate brands with lower prices targeted towards Low Income consumers. This would require Product Development resources and investment in developing the brand which might not pay off, and so represents a financial risk with limited upside.

Question: Summary

[Q] Great, please summarize your findings.



Answer: Summary

[A] Our client is a multinational consumer products company that has historically had a premium product strategy. They have noticed that Low Income demographic in the US is growing at twice the rate of the overall market and they asked us asked us to help them develop a strategy for Low Income consumers in the US.

After looking at their key products, we determined that the biggest Revenue opportunity was in the Diapers category where the client's Market Share in the Low Income Segment (25%) was substantially lower than their Total Market Share for diapers (50%), and the Price-per-Unit was identical to competitor's Products. Competitors do provide a smaller package that is 20% smaller (32 vs. 40 units), with a correspondingly lower Price, which we believe accounts for their higher Market Share in the Low Income Segment. If the client can increase their Market Share for Diapers in the Low Income Segment to their Market Share for Diapers, that would increase Revenue by \$25 M which is 6.25% of their US revenue.

We recommend launching a smaller smaller package size with a lower Price to gain market share in the Low Income Segment, and distributing it in the stores where Low Income consumers shops (smaller, local markets). We believe this presents limited risk, as we won't be lowering Price or launching any new brands.

Our Market Share in the LI segment was also lower than the overall Market Share for Cold Medicine, but there are competitors selling at much lower Prices so we don't believe there is substantial opportunity here. Our Market Share for Baby Food the LI segment was slightly lower than our overall Market Share but we believe the largest opportunity is with Diapers.

Discussion

The answers represent what I believe are a high quality and complete response. Don't worry if you weren't able to provide these types of responses — the best way to learn how to solve cases is to study high quality solutions themselves. You can be successful in Case Interviews without providing all the detail of these answers — these are meant to be **high quality** and detailed answers.

After reviewing the Case and the solutions, what do you notice about the Case? I would say that the Case rests primarily on analyzing quantitative data. There is an initial phase where you need to provide Structure, and essentially ask for the appropriate Produce level data. Once you this, the Case is primarily analyzing the data and developing recommendations based on this data. The analysis required for this Case very representative of a Case Interview, and again was provided by BCG to an MBA Consulting Club.

Once you have the initial data table of Revenue by Product and Segment, the actual calculations required for this Case are relatively simple. The key is to identify what the relevant calculations are: Market Share in the LI segment compared to Total Market Share for each product.

Having a quantitative mind-set can also help you identify what information to request. For example, after the interviewing provides the initial information, a natural place to start is to try to find Products where your Market Share in the LI segment is below the Total Market Share. This gap, multiplied by the LI Market Size represents the Revenue opportunity.

After doing many Cases, you start to notice **patterns** in the Cases used in interviews. Given a situation like this, it is common for certain Products to be good candidates for targeting the Low Income segment, and certain Products not to be good candidates. It doesn't make a very interesting Case for



interviews if no product is suitable for targeting the Low Segment, or if all products are suitable. It's an interesting Case when certain products are suitable and the candidate has to ask the right questions and do the proper analysis to identify which products are suitable.

As a comparison, image you are watching a movie (or TV show) where somebody dies in mysterious circumstances. There is a murder investigation, and the police conclude it really was an accident. This wouldn't make a very interesting movie. Alternatively, if literally every character encountered in the move conspired to murder the victim, that doesn't make an interesting movie either. It's interesting when there are specific clues that help identify a particular person as the murderer. You will start to recognize these patterns once you do a large number of Cases.

Advance Quant Analysis

Astute readers will see that there is actually a oversight in the above quantitative analysis. The numbers as presented are what BCG provided as solutions, and was likely the "official" solution to the Case Interview, so that is the level of analysis that they want to see from candidates. The following is therefore above and beyond what is required in Case Interviews, and the interviewer might not even be aware of it. You will therefore need to explain your reasoning very carefully to make sure the interviewer follows your logic and doesn't mark you as providing an answer different from their answer key.

If you look carefully at the Data in Exhibit 1 (Revenue by Product and Segment), you'll see that the Total Revenue for each Product/Category **includes** the Revenue from Low Income Consumers for that category. This also applies to the clients Revenue: their overall Revenue in a Category includes the LI Revenue. Instead of comparing the LI Market Share to the Total Market Share for a Product, it's more relevant to compare the LI Market Share to the non-LI Market Share. That is, we need to remove the LI Sales from the Total Sales and from the Client Category Sales for each Product, and calculate the client's Market Share of for non-LI customers (not the overall market).

We'll only do this for Diapers, because that's the only Product we are interested in, which gives us the information below.

Product/ Category	Total Category Sales (\$M) [1]	Client Category Sales (\$M) [2]	Total LI Spend on Category (\$M) [3]	LI Spend on Client (\$M) [4]	Total Market Share $[5]=[2]\div[1]$	LI Market Share $[6]=[4]\div[3]$	Non-LI Category Sales [8] = [1]-[3]	Client non- LI Category Sales [9]=[2]-[4]	Client non- LI Market Share [10]=[9] ÷ [8]
Diapers	300	150	100	25	50%	25%	200	125	62.5%

The last column provides the client's Market Share in the non-LI segment which is the most relevant metric. This is a gap of 37.5% (62.5% - 25% = 37.5%) from the client's Low Income Market Share, instead of the 25% gap compared relative to the client's Total Market Share. Thus, the size of the potential revenue increase is actually 50% higher at \$37.5 M instead of \$25 M and this represents 9.375% ($6.25\% \times 1.5$) of the client's US Revenue.