HHL LEIPZIG GRADUATE SCHOOL OF MANAGEMENT

HHL Passion for Finance Scholarship

Scholarship Task – The Current **Passion for Finance** Case Study

Puma, which currently views itself as operating in the sporting wear (shoes and clothes) segment, is considering an expansion into the fashion apparel business, producing high-priced casual clothing for teenagers and young adults. You have been asked to collect the data to make the assessment and have come back with the following information:

1. You estimate that it will cost Puma $ 2.5 billion to establish a presence in this business. Of this amount, $ 1 billion will have to be spent right now acquiring land, equipment and other assets needed for the business. There will be an additional $ 1 billion investment a year from now, and final investment of $ 0.5 billion at the end of 2 years. The business will be operational at the start of the third year.
2. The whole initial investment of $ 2.5 billion is fully depreciable over 10 years starting in the third year.
3. The total market for casual apparel is estimated to be $ 75 billion currently, growing at 5% a year. Puma is expected to gain a 2% market share in the first year that it enters the market (which is the third year), and to increase its market share by 0.5% a year to reach 5% of the market in the ninth year.[1] Beyond that point, Puma's revenues are expected to grow at the same rate as the overall market. Puma expects to generate 50% of the apparel revenues to come from the United States, 20% from China, 20% from India and 10% from Brazil.
4. The pre-tax gross profit margins (prior to depreciation, advertising expenses and allocations of corporate costs) are expected to be 23% of revenues.
5. Puma will allocate 5% of its existing general and administrative costs to the new division. These costs now total $ 2 billion for the entire firm and are expected to grow 5% a year for the next 12 years, irrespective of whether Puma enters the apparel business. In addition, it is expected that Puma will have an increase of $ 50 million in general and administrative costs in year 3 when the new division starts generating revenues, and that this amount will grow with the new division's revenues after that. The latter cost is directly related to the new divisions and will be charged to them in addition to the allocated corporate G&A costs.
6. While the new business will need distributional support, it is anticipated that Puma can use excess capacity in its existing distribution network. The shoe business is currently using 60% of the distribution capacity and is expected to stay at that level. The apparel business will use 10% of the capacity in year 3 (which is the first year of revenue generation) and its usage will track revenue growth beyond that point. When Puma runs out of distribution capacity, the apparel business is going to face approximately 3% of revenues every year in additional distribution costs.
7. Puma spent $ 1 billion in advertising expenses in the most recent year and expects these expenses to grow 4% a year for the next 12 years if the casual apparel division is not created. If the casual apparel division is added to the company, total advertising expenses are expected to be 7% higher than they would have been

[1] The market share in year 4 will be 2.50%, in year 5 will be 3% etc.

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without the apparel division each year from year 3 (the first year of sales for the division) to year 12.

8. The apparel division will create working capital needs, which you have estimated as follows:
    - The sale of apparel on credit to wholesalers and large retailers will create accounts receivable amounting to 5% of revenues each year.
    - Inventory (of both raw material and finished goods) will be approximately 10% of the cost of goods sold (not including depreciation, allocations or advertising expenses).
    - The credit offered by suppliers will be 7.5% of the cost of goods sold (not including depreciation, allocations or advertising expenses).

    All of these working capital investments will have to be made at the beginning of each year in which goods are sold. Thus, the working capital investment for the third year will have to be made at the beginning of the third year.
9. The Puma management has set the hurdle rate for such endeavors to 10% and would finance the new division with same mix of debt and equity like the company as a whole (debt-to-equity equals 0.5). The beta for Puma is 0.8, calculated using monthly returns over the last 5 years and against the S&P 500 Index. More details on betas of other apparel competitors are included in Exhibit 1.
10. The current risk-free interest rate is 1% and Puma's cost of debt stands at 2%. You estimate the market risk premium (difference of expected market return and risk-free rate) to be 7.5%.
11. Puma's marginal tax rate is 30%.

Exhibit 1

Apparel peers	**Equity beta**	**Tax rate**	**Debt-to-Equity**
Ralph Lauren	1.13	35%	x0.61
Phillips-Van Heusen	1.07	30%	x0.35
Levi Strauss & Co	1.25	19%	x0.52
American Eagle Outfitters	1.41	25%	x0.77