Advanced Corporate Finance
Prof. Mathias Kronlund
Case: Hansson Private Label
Due: Feb 13, 2018 (midnight)

Note: A few of the numbers in the case description are slightly different from those in the downloadable supplemental spreadsheet. I will use the numbers from the supplemental spreadsheet, so I recommend that you use those too!

1. How would you describe HPL and its position within the private label personal care industry? (e.g., size, profitability, growth; you can focus of items that will be of consequence for evaluating the expansion)
2. Approximately how large is the expansion as a percentage relative to Hansson's current operations?
3. Using assumptions made by EVP of Manufacturing, Robert Gates, predict the project's FCFs over 10 years. You can assume this expansion has a "terminal value" of $20 million after 10 years (*i.e.*, in 2018).[1]
4. What's Hansson's most recent interest coverage? What would the interest coverage be after the expansion (2009)? Would you describe Hansson's leverage as conservative or aggressive?
5. CFO Sheila Dowling's projected WACC schedule is not correct because the cost of debt r_d is clearly wrong (e.g. she seems to have picked the yield y instead of r_d). Re-calculate WACC for different levels of leverage using the correct cost of debt (*you may assume debt beta increases linearly from β_d=0 at zero-leverage to β_d=0.1 at 25% D/V*), *i.e.* create a table like the following:

Debt/ Value	Debt/ Equity	Asset Beta	*Unlevered Cost of Capital*	*Debt Beta*	*Equity Beta*	*Cost of Debt*	*Cost of Equity*	*WACC*
0.0%	0.0%	1.18						
5.0%	5.3%	1.18						
10.0%	11.1%	1.18						
15.0%	17.6%	1.18						
20.0%	25.0%	1.18						
25.0%	33.3%	1.18						

   Given the leverage HPL is planning to take on, what's the correct WACC for this project?
6. The WACC is based off an asset beta of 1.18 which Sheila Dowling takes from comps in the personal care industry. Given HPL's industry niche, would you expect HPL to have more or less systematic risk than the industry as a whole? If so, what would that do to the WACC? (no calculations required).
7. Estimate the project's NPV using Gate's FCFs and the WACC from (5). Perform sensitivity analyses with a) the discount rate, plus b) at least one other assumption that you think is the most critical.
8. "Nobody rejects a profitable investment opportunity because of high taxes—higher taxes just make profitable opportunities slightly less so." Do you agree with this statement? Do a sensitivity analysis with the corporate tax rate.
9. Would you recommend that Tucker Hansson proceed with the investment? What is the biggest risk with the expansion?

---

[1] Note: To calculate NWC, you'll need to use the "working capital assumptions" like *Days Sales Outstanding* (e.g., 47.6x means that 47.6/360 of total sales is in receivables). It's customary to model receivables off Revenues, and Inventory/Payables off Costs. You may not get exactly the same first-year working capital as the $12.8 million number in the Investment Proposal Table if you use these provided working capital assumptions; don't worry, that won't make too much of a difference (and I recommend using these, as you'll need to forecast NWC for every year and not just the first year).