

Discounted Cash flow Analysis

a. Match My Doll Clothing

Free Cash Flow		(3,020)	(557)	169	682	541	583	630	680	735	793	857
Terminal value	3.00%											16,345
Discount factor	8.40%	1.0000	0.9225	0.8510	0.7851	0.7242	0.6681	0.6163	0.5686	0.5245	0.4839	0.4464
Present value		(3,020)	(514)	144	536	392	390	388	387	385	384	7,678.79
Net Present Value		\$ 7,150										
NPV without Terminal Value		\$ (146)										

b. Design Your Own Doll

- Project A: NPV has lower reliance on the Terminal Value for the NPV to become positive as compared to Project B. This is important since we can see from the TV sensitivity analysis that the TV can move significantly if the assumptions change by small amounts. For Project B, in the worst case TV sensitivity table, the NPV can be negative also.
- The NPV and IRR for Project A are relatively higher and its payback period is lower which also makes it a better investment. Given the lower payback period and higher expected return, it provides more cushion against changing consumer tastes & preferences, changes in sales pattern over the product lifecycle and uncertainties in the business environment (boom or bust scenarios)
- The NPV to Initial Investment ratio is also significantly better for Project A
- The accounting ratio - operating profit to sales, SG&A expenses to sales and days outstanding ratio are also relatively (though small) better for Project..
- The capital expenditure growth rate is lower for Project B but its initial outlay is much higher than Project A

Hence **Project A should be chosen over Project B.**