

Credit Policy at Stetson Industries

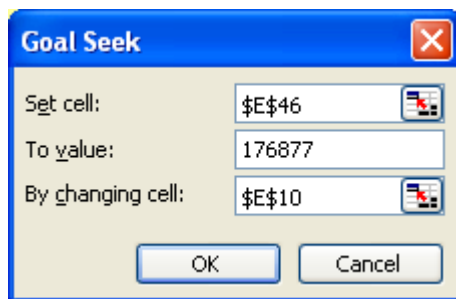
Tim Twitter, the CFO at Stetson Industries, has been exploring ways of improving the company's financial performance. Stetson Industries manufactures and sells office equipment to retailers. The company's growth has been relatively slow in recent years, but with an expansion in the economy, it appears that sales may increase more quickly in the future. Tim has asked, Arnold Angst, the company's treasurer, to examine Stetson's credit policy to see if a different credit policy can help increase profitability.

The company currently has a policy of cash only. In order to take advantage of additional sales, they are considering two new policies: (1) Net 30 and (2) 2/10 Net 30. Of course default rates and administrative costs will increase with the two new credit policies. The table below provides details on projected sales, default rates, administrative costs, and credit periods for each of the policies. Their variable costs will remain at 45% of sales in all cases and their cost of capital is 8%.

	B	C	D	E	F	G	H	I
6								
7				<i>Sales</i>	<i>Default</i>	<i>Administrative</i>	<i>Receivables</i>	
8					<i>rate</i>	<i>costs</i>	<i>period</i>	
9		Current policy	Cash Only	\$ 120,000,000	0.00%	1.20%	0	
10		Option 1	Net 30	\$ 135,000,000	2.40%	2.30%	38	
11		Option 2	2/10 Net 30	\$ 150,000,000	3.50%	3.40%	22	
12		Variable costs	45.00%					
13		Interest rate	8.00%					
14								

Since there is risk related to all 3 policies, you are asked to analyze the decision in four ways:

1. Perform an NPV analysis of the 3 policies as shown on the Output Area on the worksheet.
2. Perform a Scenario analysis using Excel's Scenario Manager (Under Data, What-If Analysis).
You will analyze 3 scenarios:
 - a. Base case, use sales: interest rate, and default rate numbers provided above.
 - b. Worst case: decrease sales by \$20,000,000 in all 3 policies, increase default rates by 2% (for Option 1 and Option 2 only), increase interest rate by 2%.
 - c. Best case: increase sales by \$20,000,000 in all 3 policies, decrease default rates by 2% (for Option 1 and Option 2 only), decrease interest rate by 2%.
3. Perform a Break Even analysis comparing Option 2 to the Current Policy. Use Excel's Goal Seek to vary Sales such that the NPV of the Current Policy is equal to NPV of Option 2. Before you start, make a second copy of the worksheet page so that you can save the Break Even results. Specifically, Data, What-If Analysis, Goal Seek, then fill in the dialog box as shown below:

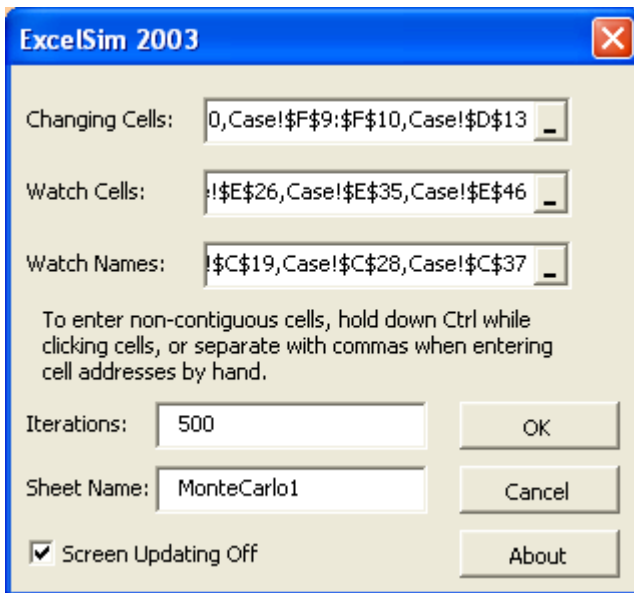


4. Perform a Monte Carlo analysis using ExcelSim. The first screen shot of the ExcelSim dialog box is shown below.
 - a. For the Changing Cells specify the 3 Sales cells, the two default rate cells, and the Interest rate cell.
 - b. For Watch Cells specify the 3 NPV result cells.
 - c. For Watch Names specify the cells that contain the titles Current Policy, Option 1, and Option 2.
 - d. For Iterations specify 500 and for Sheet Name specify MonteCarlo.
 - e. The next 6 dialog boxes will ask for the input information as described in the table below.

Variable	Distribution	Mean	Standard Deviation
Sales (\$120 M)	Normal	120,000,000	15,000,000
Sales (\$135 M)	Normal	135,000,000	20,000,000
Sales (\$150 M)	Normal	150,000,000	30,000,000

Variable	Distribution	Lower	Upper
Default rate (2.40%)	Uniform	0.004	0.044
Default rate (3.50%)	Uniform	0.015	0.055

Variable	Distribution	Left	Mode	Right
Interest rate (8.00%)	Triangular	0.05	0.08	0.11



The Monte Carlo simulation will result in a new worksheet page with the 500 iterations and the statistics. From this data, create a Histogram for each of the 3 policies (Tools, Data Analysis, Histogram).

When complete you will have a standard NPV analysis, a scenario analysis, a breakeven analysis, and a Monte Carlo analysis. Using this data, prepare a one-page report comparing the analyses and results. Then conclude with a recommendation of one of the three policies, with a justification based on your analysis.