

The Better Biscuit Company (BBC) is considering a new product launch, "Healthy Biscuits." If they go forward, they project that they can earn \$40 million in the first year (before taxes and depreciation Rev - Cost), and that number will grow at 7.25% for about 10 years until they reach a plateau. After that, the growth will settle down to a long-term average 1.03%. Their tax rate is 34.25% and their cost of capital is 9.45%. The initial investment will be depreciated in a year straight-line with no expected salvage value, for the initial cost of the project is \$601, should they go ahead with the investment? Your calculation should be done through setp 1 if you change any of the Yellow cells, including n and d. That means using IF state cash flow table.

initial investment	\$600.75	
End of year 1 EBITDA	\$39.75	
near-term growth rate	7.25%	
long-term growth rate	1.03%	
years before growth settles down, <i>n</i>	10	named <i>n</i> (can be between 5 and 15)
tax rate	34.25%	named <i>t</i>
cost of capital	9.45%	
depreciable life of assets	6	named <i>d</i> , Straight-Line, No Sal Val, ...

**NOTE: All GOLD cells can be changed to reasonable numbers.**

- To help make the decision, compute the following:

NPV \$528.64

- What would the long-term growth rate need (New NPV)

to be in order to make the NPV =

\$1,000.00	<b>Goal Seek</b> (Enter what you would enter)
	Set Cell To Value
	By changing:

*g* 6.18% Paste as 'Value' from \$E\$13

- Make 2 One-way data tables. One will measure the impact on the Calculated NPV as you change the near-term growth rate between 0 and 3% in increments of 0.25%. The other will measure the impact on the Calculated NPV as you change the cost of capital between 4% and 10% in increments of 0.5%.

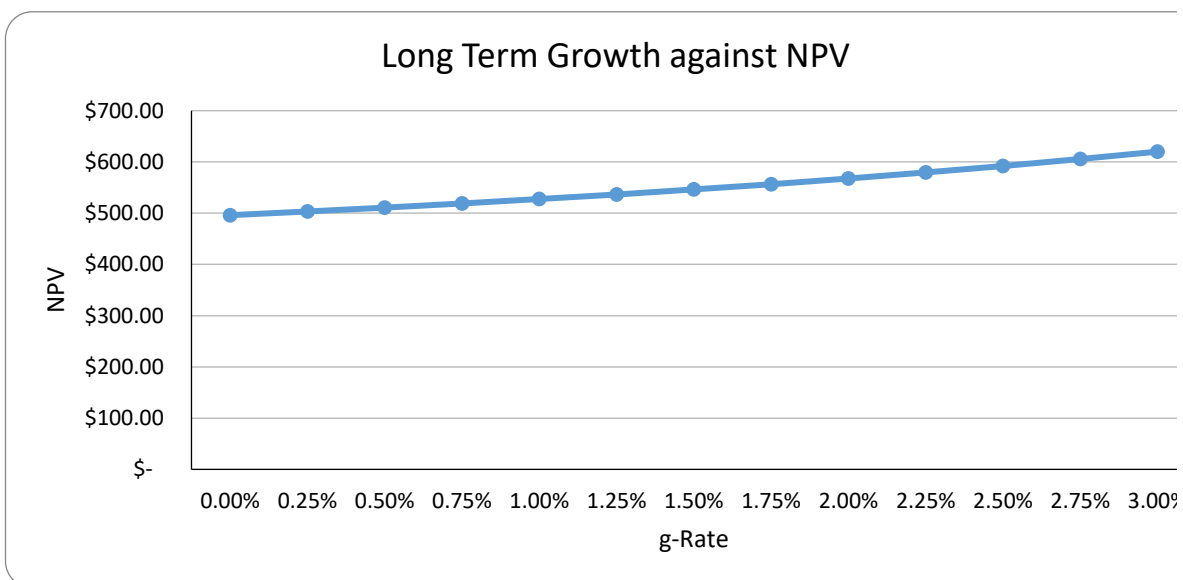
g-Rate	\$	NPV	Cost of Capital	\$	NPV
		528.64			528.64
0.00%	\$	496.04	4.00%	\$	1,639.68
0.25%	\$	503.28	4.50%	\$	1,390.34
0.50%	\$	510.93	5.00%	\$	1,204.20
0.75%	\$	519.02	5.50%	\$	1,060.05
1.00%	\$	527.58	6.00%	\$	945.19
1.25%	\$	536.67	6.50%	\$	851.59
1.50%	\$	546.32	7.00%	\$	773.89
1.75%	\$	556.61	7.50%	\$	708.40

2.00%	\$	567.59	8.00%	\$	652.48
2.25%	\$	579.32	8.50%	\$	604.20
2.50%	\$	591.91	9.00%	\$	562.13
2.75%	\$	605.43	9.50%	\$	525.15
3.00%	\$	620.00	10.00%	\$	492.41

4. Make a 2-way Data Table analyzing the Calculated NPV as you change the long-term grow the cost of capital down the side.

		Long-term			
		0.00%	0.2500%	0.5000%	0.7500%
<b>Cost of capital</b>	<b>\$528.64</b>				
	<b>4.00%</b>	1,293.90	1,360.37	1,436.34	1,523.99
	<b>4.500%</b>	1,138.38	1,188.31	1,244.48	1,308.14
	<b>5.000%</b>	1,014.33	1,052.85	1,095.65	1,143.48
	<b>5.500%</b>	913.16	943.52	976.91	1,013.81
	<b>6.000%</b>	829.14	853.48	880.04	909.13
	<b>6.500%</b>	758.29	778.11	799.58	822.92
	<b>7.000%</b>	697.79	714.12	731.72	750.72
	<b>7.500%</b>	645.55	659.16	673.75	689.41
	<b>8.000%</b>	600.02	611.47	623.69	636.74
	<b>8.500%</b>	560.01	569.72	580.04	591.03
	<b>9.000%</b>	524.60	532.89	541.68	551.00
<b>9.500%</b>	493.04	500.18	507.71	515.67	
<b>10.000%</b>	464.76	470.94	477.43	484.28	

5. Graph the two one-way Data Tables. Use proper formatting and graphing techniques.



6. State whether or not you recommend going ahead with the project. Explain why you are in

Recommendation: **Invest** (**Invest or DO NOT Invest**)

Reasoning:

The reason that I have for investing in this project is based on corporate managers should aim to take positive NPV projects engagement. That is to say the projected revenue that will be presently valued, are higher than the expected cost associated

they decide to go  
 = EBITDA =  
 ter that, the  
 upital is 9.45%.  
 or 6 years. If  
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 ements in your

Fill Orange cells first, then the instructions  
 will display correctly!

CF = (R -
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always <= n

# ScholarlyHelp

Excellence In Academic Writing

Term

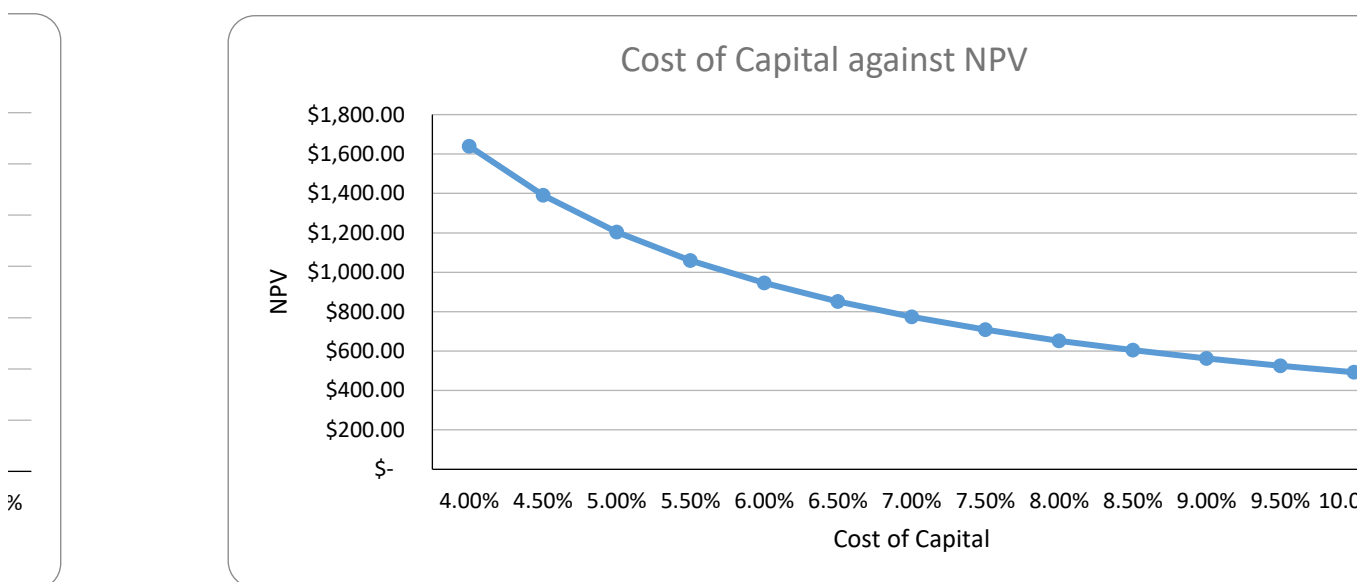
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er into Goal Seek)
\$528.64
\$1,000.00
1.10%

change the original long-  
 impact on the Calculated

with rate across the top and

WACC	1.0000%	1.2500%	1.5000%	1.7500%	2.0000%	2.2500%	2.5000%	2.7500%
NPV	1,626.25	1,747.11	1,892.13	2,069.39	2,290.95	2,575.83	2,955.65	3,487.42
NPV	1,380.90	1,464.85	1,562.79	1,678.54	1,817.44	1,987.20	2,199.41	2,472.25
NPV	1,197.29	1,258.27	1,327.97	1,408.39	1,502.21	1,613.09	1,746.15	1,908.78
NPV	1,054.82	1,100.65	1,152.20	1,210.64	1,277.42	1,354.47	1,444.37	1,550.61
NPV	941.13	976.50	1,015.80	1,059.72	1,109.13	1,165.13	1,229.12	1,302.97
NPV	848.38	876.26	906.93	940.83	978.50	1,020.60	1,067.96	1,121.63
NPV	771.30	793.68	818.08	844.82	874.22	906.72	942.84	983.20
NPV	706.28	724.50	744.24	765.70	789.10	814.74	842.93	874.10
NPV	650.73	665.76	681.94	699.41	718.34	738.92	761.37	785.95
NPV	602.74	615.27	628.69	643.10	658.62	675.38	693.54	713.28
NPV	560.90	571.44	582.68	594.69	607.57	621.40	636.29	652.37
NPV	524.10	533.04	542.54	552.66	563.44	574.98	587.33	600.60
NPV	491.51	499.15	507.25	515.83	524.95	534.65	545.01	556.08



favor or not and elaborate on any reservations on the recommendation.

in the NPV number calculated. As we learned in previous courses,  
s. As calculated above, this project is positive over the term of  
me by way of investing in this new healthy biscuits project,  
l with the project outlay.

$-C - D) * (1 - t) + D$ $-C - D) - (R - C - D) * t + D$ $-C) - (R - C - D) * t + D - D$ $-C) - (R - C - D) * t$ $-C) - (R - C) * t + D * t$ $-C) * (1 - t) + D * t$
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**\$28.19**

CF	PVCF	PerpVal	PV PerpVal
\$ 30.23	\$ 27.62		
\$ 32.43	\$ 27.07		
\$ 34.78	\$ 26.52		
\$ 37.30	\$ 25.99		
\$ 40.00	\$ 25.47		
\$ 42.90	\$ 24.96		
\$ 46.01	\$ 24.46		
\$ 49.35	\$ 23.96		
\$ 52.93	\$ 23.48		
\$ 56.76	\$ 23.01	\$ 681.11	\$ 276.09

**3.0000%**

4,285.06  
2,836.03  
2,112.06  
1,678.10  
1,389.12  
1,182.98  
1,028.60  
908.73  
813.00  
734.82  
669.80  
614.89  
567.94

