

The Enterprise Value and the Value per Share

At this point we have estimates for the firm's historical FCFs. In order to apply the methodology, we need to estimate three parameters:

- The short-term growth rate of ABC cash flows.
- The long-term growth rate of ABC cash flows.
- The weighted average cost of capital (WACC).

Some analysis, combined with seat-of-the-pants intuition, leads to the following parameter choices and valuation. The **Data Table** does sensitivity analysis on the long-term growth rate and the WACC.

	A	B	C	D	E	F	G	H	
1	ABC CORP. VALUATION								
2	Free cash flow (FCF) year ending 31 Dec. 2012	593,276	<-- ='ABC, CSCF to FCF'!F30						
3	Growth rate of FCF, years 1-5	8.00%	<-- Optimistic about short-term growth						
4	Long-term FCF growth rate	5.00%	<-- More pessimistic about long-term growth						
5	Weighted average cost of capital (WACC)	10.70%							
6									
7	Year	2012	2013	2014	2015	2016	2017		
8	FCF		640,738	691,997	747,357	807,145	871,717	<-- =F8*(1+\$B\$3)	
9	Terminal value						30,510,086	<-- =G8*(1+B4)/(B3-B4)	
10	Total		640,738	691,997	747,357	807,145	31,381,803	<-- =G8+G9	
11									
12	Enterprise value	22,209,831	<-- =NPV(B5,C10:G10)*(1+B5)^0.5						
13	Add back initial cash and marketable securities	73,697	<-- From current balance sheet						
14	Subtract out 2012 financial liabilities	1,379,106	<-- From current balance sheet						
15	Equity value	20,904,422	<-- =B12+B13-B14						
16	Per share (1 million shares outstanding)	20.90	<-- =B15/1000000						
17									
18	Data table: Share value vs LT growth and WACC								
19	data table header, =IF(B5>B4,B16,"nmf") -->		Long-term growth ↓						
20		20.90	0%	3%	6%	9%	12%		
21		6%	10.31	15.74	nmf	nmf	nmf		
22	WACC →	8%	9.48	14.48	34.45	nmf	nmf		
23		10%	8.74	13.33	31.73	-60.24	nmf		
24		12%	8.06	12.30	29.26	-55.55	nmf		
25		14%	7.44	11.35	27.02	-51.29	-12.14		
26		16%	6.87	10.49	24.98	-47.44	-11.23		
27		18%	6.36	9.71	23.12	-43.93	-10.40		

The data table header (our nomenclature for what the **Data Table** actually computes) includes an **If** statement. The reason is that, as shown above, the terminal value formula is valid only if the long-term growth rate is less than the WACC.

In the following sections we deal with a number of issues that arise in this valuation process.