

1 **Volume 2: Cost of Capital: Expert Opinion of James Coyne- Capital Structure and Risk**
2 **Profile**

3
4 **Q. For the DCF equation on page 35 please explain how the constant growth formula**
5 **(equation 2) is derived from the general formula (equation 1). That is, what**
6 **assumptions are required to go from the general to the specific, or does C&T judge**
7 **all the assumptions on page 35 to be necessary? Is it C&T's judgment that the**
8 **equation 2 on page 35 is appropriate for all firms or just a subset of firms that**
9 **satisfy the mathematical assumptions for the DCF formula? Please provide any**
10 **references to graduate finance textbooks that justify C&T's answer.**

11
12 A. The assumptions of the Constant Growth DCF model are stated on page 35 of
13 Concentric's *Cost of Capital* report, Volume 2. They are: (1) a constant average growth
14 rate for earnings and dividends; (2) a stable dividend payout ratio; (3) a constant price-to-
15 earnings multiple; and (4) a discount rate greater than the expected growth rate.

16
17 The DCF formula on page 35 is appropriate for firms that pay dividends and that do
18 business in stable, mature industries. This is consistent with the corporate finance
19 textbook authored by Dr. Laurence Booth and Dr. Sean Cleary, which states:

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21 *What has to be remembered is that Professor Gordon developed this*
22 *model (the DDM) for use in public utility regulation where the*
23 *allowed ROEs should be reasonable and we do not get the problem*
24 *of rapid growth rates.¹*

25
26 And

27
28 *Although the DDM provides a great deal of insight into factors that*
29 *affect the valuation of common shares, it is based on several*
30 *assumptions that are not met by a large number of firms, especially*
31 *in Canada. In particular, it is best suited for companies that (1) pay*
32 *dividends based on a stable dividend payout history that they want*
33 *to maintain in the future; and (2) are growing at steady and*
34 *sustainable rates. As such, the DDM works reasonably well for*
35 *large corporations in mature industries with stable profits and an*
36 *established dividend policy. In Canada, the banks and utility*
37 *companies fit this profile, while in the United States, there are*
38 *numerous NYSE-listed companies of this nature.²*

39
40 The formula on page 35 is also appropriate to estimate the investor-required return for a
41 broad market index such as the TSX or the S&P 500, as determined by the FERC, which
42 explained its rationale at length for using a constant growth DCF analysis to calculate the
43 forward-looking market risk premium in Opinion No. 531-B.

¹ Laurence Booth and W. Sean Cleary, *Introduction to Corporate Finance, 1st Edition* (2008), at 785.

² *Ibid.*, at 269. [Emphasis added.]