

New footnote 14, page 554 of text.

14/ Some financial managers argue that the costs of debt and equity increase rapidly at high debt ratios because of the “costs of financial distress.” (Recall Section 18.3.) This in turn would cause the WACC curve in Figure 19.3 to flatten out, and finally increase, as the debt ratio climbs. There may be other costs to excessive debt in addition the risk of outright financial distress, e.g., a loss of financial flexibility. Formal modeling of the interactions between the costs of higher debt ratios and the expected rates of return on the company’s securities is not easy. No one knows just when the value of interest tax shields begins to be offset by the costs of too much debt. Nor are all of the costs of excessive debt reflected in the cost of capital; some should be used to reduce the expected cash flows. Personal taxes may offset the corporate tax advantage of debt, too. All of this suggests a shortcut used by some practitioners: instead of trying to model the precise cash flow and cost of capital impacts of more debt when considering a different financing structure, simply treat the industry WACC estimated from a sample of companies as constant regardless of capital structure, at least within the normal range of observed industry debt ratios. This is equivalent to substitution of the after-tax cost of debt for the pre-tax cost of debt in the above unlevering and relevering formulas. Note, however, that this simplification is incorrect at capital structures outside the normal range, in either direction.