

6. What would be the total equity value (as calculated for scenarios in Table 8-6 using abnormal earnings) if the sales growth in years 2021 and beyond is 8.5 percent and the company is able to generate abnormal returns at the same level as in fiscal 2020 forever (keeping all the other assumptions in the table unchanged)?
7. Calculate the proportion of terminal value to total estimated value of equity under the abnormal earnings method and the discounted cash flow method for the Scenario 2 results shown in Table 8-6. Why are these proportions different?
8. What will TJX's cost of equity be if the equity market risk premium is 5 percent?
9. Assume that TJX changes its capital structure so that its market value weight of debt to capital increases to 30 percent, and its after-tax interest rate on debt at this new leverage level is 3.5 percent. Assume that the equity market risk premium is 6.7 percent. What will be the cost of equity at the new debt level? What will be the new weighted average cost of capital?
10. Nancy Smith says she is uncomfortable making the assumption that TJX's dividend payout will vary from year to year. If she makes a constant dividend payout assumption, what changes does she have to make in her other valuation assumptions to make them internally consistent with each other?

NOTES

1. See T. Copeland, T. Koller, and J. Murrin, *Valuation: Measuring and Managing the Value of Companies*, 2nd edition (New York: John Wiley & Sons, 1994). Theory calls for the use of a short-term rate, but if that rate is used here, a difficult practical question rises: how does one reflect the premium required for expected inflation over long horizons? While the premium could, in principle, be treated as a portion of the term $[E(r_m) - r_f]$, it is probably easier to use an intermediate- or long-term riskless rate that presumably reflects expected inflation.
2. One way to estimate systematic risk is to regress the firm's stock returns over some recent time period against the returns on the market index. The slope coefficient represents an estimate of β . More fundamentally, systematic risk depends on how sensitive the firm's operating profits are to shifts in economy-wide activity, and the firm's degree of leverage. Financial analysis that assesses these operating and financial risks should be useful in arriving at reasonable estimates of β .
3. These betas are typically estimated by regressing five years of daily firm stock returns on the return on a market index, such as the Standard & Poor's 500. These estimates can be heavily influenced by extremely positive or negative firm-specific news (and stock returns) during the five-year estimation period, generating betas that are implausibly high or low. Since it uses a more complex estimation approach, Value Line betas are less likely to be subject to these biases and are used throughout this book.
4. The average return reported here is the arithmetic mean as opposed to the geometric mean. Ibbotson and Associates explain why this estimate is appropriate in this context (see *Stocks, Bonds, Bills, and Inflation, 2010 Yearbook*, Chicago).
5. See W. Gebhardt, C. Lee, and B. Swaminathan, "Toward an Implied Cost of Capital," *Journal of Accounting Research* 39, no. 1 (2001): 135–176; and J. Claus and J. Thomas, "The Equity Premium Is Much Lower Than You Think It Is: Empirical Estimates from a New Approach," *Journal of Finance* 56 (2001): 1,629–1,666.
6. For TJX, adjustments to bring the operating leases onto the balance sheet change the company's leverage and other capital structure ratios from those reported. However, we do not consider it necessary to re-estimate TJX's cost of debt and equity for these