## Finance and discount rate essay

## ASSIGN BUSTER

For what type of project could Federates weighted-average cost of capital be the right discount rate? 2. Suppose Federated Junkyards decides to move to a more conservative debt policy. A year later its debt ratio Is down to 15 percent (DIVA =. 15 The Interest rate has dropped to 8.6 percent. Recalculate Federates WAC under these new assumptions. The company's business risk, opportunity cost of capital, and tax rate have not changed. Use the three-step procedure explained in Section 19. 3. 3. True or false? Use of the WAC formula assumes a. A project supports a fixed amount of debt over the project's economic life. The ratio of the debt supported by a project to project value is constant over the project's economic life. C. The firm rebalanced debt, each period, keeping the debt-to-value ratio constant. 4. What Is meant by the flow-to-equity valuation method? What discount rate Is used In this method? What assumptions are necessary for this method to give an accurate valuation? 5. True or false? The APP method a. Starts with a base-case value for the project. B. Calculates the base-case value by discounting project cash flows, forecasted assuming all-equity financing, at the WAC for the project. C.

Is especially useful when debt Is to be paid down on a fixed schedule. D. Can be used to calculate an adjusted discount rate for a company or a project. 6. Explain the difference between Financing Rules 1 (debt fixed) and 2 (debt rebalanced). 7. What Is meant by financing " side effects" in an APP valuation? Give at least three examples of side effects encountered in practice. 8. A project costs $\$ 1$ million and has a base-case NAP of exactly zero (NAP= O What is the project's APP In the following cases? A. If the firm
invests, it has to raise $\$ 500,000$ by stock issue. Issue costs are 15 percent of net proceeds. B. The firm has ample cash on hand.

But if it invests, it will have access to $\$ 500,000$ of debt financing at a subsidized interest rate. The present value of the subsidy is $\$ 175,000$. C. If the firm invests, its debt capacity increases by $\$ 500,000$. The present value of 9. Whispering Pines, Inc., is all-equity-financed. The expected rate of return on the company's shares is 12 percent. A. What is the opportunity cost of capital for an average-risk Whispering Pines investment? B. Suppose the company issues debt, repurchases shares, and moves to a 30 percent debt-to-value ratio (DNA= 30 ). What will the company's weighted-average cost of capital be at the new capital structure?

The borrowing rate is 7.5 percent and the tax rate is 35 percent. 10. Consider the APP of the solar heater project, as calculated in Table 19. 1 . How would the APP change if the net tax shield per dollar of interest were not Etc $=.35$, but 11. Consider a project lasting one year only. The initial outlay is $\$ 1,000$ and the expected inflow is $\$ 1,200$. The opportunity cost of capital is $r=20$. The borrowing rate is $r d ? .10$, and the net tax shield per dollar of interest is $\mathrm{T}^{*}$ _ Etc _ $.35 . \mathrm{A}$. What is the project's base-case NEAR b. What is its APP if the firm borrows 30 percent of the project's required investment? . The WAC formula seems to imply that debt is " cheaper" than equity? that is, that a firm with more debt could use a lower discount rate. Does this make sense? Explain briefly. 13. What discount rate should be used to value safe, nominal cash flows? Explain briefly. 14. The U. S. Government has settled a dispute with your company for $\$ 16$ million. It is committed to pay this amount in exactly 12 months. However, your company
will have to pay tax on the award at a marginal tax rate of 35 percent. What is the award worth?

