THE CORPORATION TAX

Chapter 21

The ABC corporation bought a new computer system. The tax life of the asset is 5 years. The risk free rate is 8% and corporate tax rate is 35%. The purchase price is $5,000. What is the effective purchase price, taking savings from depreciation related tax deductions into account?

Question 1 - Key Points

(0.35)(1000)/(1 + 0.08) + (0.35)(1000)/(1 + 0.08)^2 + … + (0.35)(1000)/(1 + 0.08)^5 = $1,397.44

$5,000 - $1,397.44 = $3,602.56

Jimbo Corporation distributes its after-tax earnings to shareholders as dividends. Jimbo's before-tax earnings per share are $200 and the corporate tax rate is 50 percent. Roodly and Drey each own one share in Jimbo and they face marginal personal income tax rates of 20 percent and 40 percent, respectively. Give the total tax rates (corporate plus personal) faced by Roodly and Drey on the $200 per share of corporate earnings, if

a. The corporate and personal income tax systems are not integrated.

b. The corporate and personal income tax systems are fully integrated via the partnership method.

c. Show that full integration reduces the total tax rate faced by Roodly by more than it reduces it for Drey.

Question 2 - Key Points

a) Roodly: ($200)(0.5) = $100 in corporate tax, ($100)(0.2) = $20 in income tax
   - Effective tax rate: $120/$200 = 0.6, so Roodly's effective tax rate is 60%
- Drey: ($200)(0.5) = $100 in corporate tax, ($100)(0.4) = $40 in income tax
   - Effective tax rate: $140/$200 = 0.7, so Drey's effective tax rate is 70%

b) With a perfectly integrated corporate and personal taxes, the effective total tax rate is identical to the personal marginal tax rate for each individual
   - Roodly's effective tax rate: 20%, Drey's effective tax rate: 40%

c) With full integration, Roodly's tax rate falls from 60a% to 20%, while Drey's tax rate falls from 70% to 40%. Roodly's tax falls further