

“We are not a speculator but investor”

ECO 352 Finance
09/27/2018 in-class activity

1. The Cortland corporation had \$200,000 of taxable income from operations this year.
 - a. What is the company’s federal income tax bill for the year?
 - b. Assume that the firm receives an additional \$40,000 of interest income from the bond it owns. What is the tax on this interest income?
 - c. Assume that Cortland does not receive the interest income, but does receive an additional \$40,000 in dividends on some stock it owns. What is the tax on this dividend income?

Answer

a. $\text{Tax} = \$22,250 + (\$200,000 - \$100,000)(0.39) = \$61,250.$

b. $\text{Tax} = \$40,000(0.39) = \$15,600.$

d. $\text{Tax} = (\$40,000)(1 - 0.7)(0.39) = \$4,680.$

2. The red-dragon corporation has a taxable income of \$365,000 from operations after all operating costs but before (1) interest charges of \$50,000, (2) dividends received of \$15,000, (3) dividends paid of \$25,000, and (4) income taxes.
 - A. what is the firm’s income tax liability?
 - B. What is the company’s marginal tax rate?
 - C. What is the firm’s average tax rate on taxable income?

Answer:

A. Income	\$365,000
Less: Interest deduction(50,000)	
Plus: Dividends received	$\frac{4,500}{15,000} = \$15,000 \times (1 - 0.70) = \$4,500$
Taxable income	<u>\$319,500</u>

$\text{Tax} = \$22,250 + (\$319,500 - \$100,000)(0.39) = \$22,250 + \$85,605 = \$107,855.$

After-tax income:

Taxable income	\$319,500
Taxes	(107,855)
Plus: Non-taxable dividends received*	<u>10,500</u>
Net income	<u>\$222,145</u>

B. The company’s marginal tax rate is 39 percent.

C. The company’s average tax rate is $\$107,855/\$319,500 = 33.76\%$.