**Determining How Much to Pay for Net Operating Losses**

Acquiring Company is contemplating buying Target Company, which has a tax loss carryforward of $8 million. Acquiring Company has a 40% tax rate. Assume the tax-loss carryforward is within the limits of the Tax Reform Act of 1986 and that the firm’s cost of capital is 15%.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Valuing Net Operating Losses | | | | | | | |
| Years Remaining in Loss Carryforward | | Amount  ($000) |  | Years after Acquisition | |  | Earnings before Tax  ($000) |
| 1 |  | 2,000 |  | 1 | |  | 1,800 |
| 2 |  | 2,000 |  | 2 | |  | 2,000 |
| 3 |  | 800 |  | 3 | |  | 1,000 |
| 4 |  | 1,200 |  | 4 | |  | 1,000 |
| 5 |  | 800 |  | 5 | |  | 2,000 |
| Total |  | 6,800 |  | Total | |  | 7,800 |
| Calculate Acquiring Company’s tax payments without the acquisition. | | | | | | | |
| Years |  | Tax Benefit |  |  |  | |  |
| 1 |  | 720 |  |  |  | |  |
| 2 |  | 800 |  |  |  | |  |
| 3 |  | 400 |  |  |  | |  |
| 4 |  | 400 |  |  |  | |  |
| 5 |  | 800 |  |  |  | |  |
| Calculate Acquiring Company’s tax payment for each year with the proposed acquisition. | | | | | | | |
| Years | Earnings before Taxes  ($000) | Tax Loss  ($000) | Amount Carried Forward ($000) | Use of Tax Lossa  ($000) | Taxable Income  ($000) | | Tax Payment  ($000) |
| 1 | 1,800 | 2,000 |  | 1,800 | 0 | | 0 |
| 2 | 2,000 | 2,000 | 200 | 2,000 | 0 | | 0 |
| 3 | 1,000 | 800 | 0 | 1,000 | 0 | | 0 |
| 4 | 1,000 | 1,200 | 200 | 1,000 | 0 | | 0 |
| 5 | 2,000 | 800 | 0 | 1,000b | 1,000 | | 400 |
| What is the most the Acquiring Company should pay for the Target Company if its only value is its tax loss?  *Answer:* The Acquiring Company should not pay more than the present value of the net tax benefit: $720,000; $800,000; $400,000; $400,000; and $400,000. The present value of the cumulative tax benefits discounted at a 15% cost of capital is $1,921,580. | | | | | | | |
| *Notes:*  a. Tax benefits are equal to earnings before tax times the 40% marginal tax rate of the Acquiring Company. Therefore, the tax benefit in year 1 is $1,800,000 × 0.4 = $720,000.  b. The net tax benefit in the fifth year is equal to the $800,000 tax benefit less the $400,000 in tax payments required in the fifth year. | | | | | | | |