

## Ralph's Income Taxes

Ralph is exploring income tax reporting. The following is the long-term liabilities section of Tempo Co.'s December 31, year x1, balance sheet:

### Long-term Liabilities:

Note payable—bank; 15 principal payments of \$5,000, plus 10% interest due annually on September 30	\$75,000	
Less current portion	<u>(5,000)</u>	\$ 70,000
Capital lease obligation—20 payments of \$9,000 due annually on January 1	\$76,600	
Less current portion	<u>(1,340)</u>	75,260
Deferred income tax liability		<u>15,750</u>
Total long-term liability		\$161,010

- Tempo's incremental borrowing rate on the date of lease was 11% and the lessor's implicit rate (known by Tempo) was 10%.
- For year x2, the only difference between Tempo's taxable income and pretax accounting income is depreciation on a machine acquired on January 1, year x1, for \$250,000. The machine's estimated useful life is five years, with no salvage value. Depreciation is computed using the straight-line method for financial reporting purposes and the MACRS (modified accelerated cost recovery system) method for tax purposes. Depreciation expense for tax and financial reporting purposes for year x2 through year x5 is as follows:

<b>Year</b>	<b>Tax depreciation</b>	<b>Financial depreciation</b>	<b>Tax Depreciation over (under) financial depreciation</b>
x2	\$80,000	\$50,000	\$30,000
x3	40,000	50,000	(10,000)
x4	35,000	50,000	(15,000)
x5	30,000	50,000	(20,000)

The income tax rates are 30% for years x1 and x2 and expected to be 35% for years x3 through x5.

- c. Tempo's December, year x1, balance sheet included a deferred tax asset of \$9,000.
- d. Tempo's income before income taxes for the year ended December 31, year x2, is \$430,000.
- e. On July 31, year x2, Tempo received proceeds of \$464,082 from a \$500,000 bond issuance. The bonds mature 30 years from July 1, x2 and interest at 11% is payable each January 1 and July 1. Tempo uses the effective interest method to amortize the bond discount.

Required:

1. Verify that the yield on the bond issue is 12% per year (6% semi-annually). (Hint: treat the bond issue as a 59 period annuity then add the first Jan. 1 payment to the mix.)
2. Prepare a partial income statement including interest expense, income before income taxes, current income tax expense, deferred income tax expense, and net income for year x2.
3. Prepare a partial balance sheet that includes the long-term liabilities section for December 31, year x2. (Hint: keep track of current liabilities where feasible.)

4. Prepare a directed graph based on the partial financial statements for year x2.

5. There are at least three (broadly-stated) approaches to accounting for income taxes (from a financial reporting, rather than income tax reporting, perspective): a distribution approach (treat income taxes as a distribution of wealth like dividends), an income statement approach (determine financial reporting income tax expense based on financial reporting accounting method choices), and a balance sheet approach (valuation of balance sheet timing effects, deferred tax assets and liabilities, determines the financial reporting provision for income taxes).

Which is most informative (keep in mind private information issues)?

Which is least costly to implement (including auditing)?