In this chapter you learn the fundamentals of income tax and how to prepare an income tax projection. Income taxes are a significant expense to the company and need to be included in the company’s annual cash flow projection. Having an unexpected income tax bill can reduce the funds available for use on construction projects to a dangerously low level.

The text that follows covers the basic principles of corporate and personal income tax. The purpose of this chapter is to give the reader a basic understanding of principles of income tax, not turn the reader into a tax professional. Because income tax law is constantly changing, the general principles of income tax as they apply to construction companies are discussed. Also, there are many exceptions to these rules that are beyond the scope of this chapter. For these reasons, the reader is advised to consult with a tax professional for the current regulations when dealing with income taxes.

**CORPORATE VERSUS PERSONAL INCOME TAX**

Income taxes can be separated into two distant classes: corporate income tax and personal income tax. Each class has its own set of rules. Traditional corporations—also known as C corporations—and some partnerships pay income taxes at the corporate level. When these companies pay dividends or distribute funds to their shareholders, the shareholders pay personal income taxes on the dividends and distributed funds. In this chapter, the term *corporation* is used to refer to C corporations and partnerships that pay corporate income tax. Limited liability companies (LLCs), S corporations, most partnerships, and sole proprietorships pass their taxable income through to their shareholders, which in turn pay personal income taxes on this income. As well, the term *individual* is used to refer to the shareholders who pay personal income tax on gains for limited liability companies, S corporations, partnerships, and sole proprietorships that pass their income through to their shareholders. Because the type of the company’s structure affects how taxable
income is taxed, it is important to seek the advice of a tax professional when setting up a company to insure that the tax implications resulting from the company’s structure are clearly understood and the most advantageous company structure is used.

**TAXABLE INCOME**

Income taxes let the government share in the gains and losses of business. In essence the federal, state, and local governments may be viewed as partners in a business. In general, when a company receives revenue, its income tax liability is increased, and it owes more income taxes. And when a company incurs costs, its income tax liability is decreased, and it owes less income tax. The amount of income tax a company owes is based in part on the company’s taxable income. Taxable income is equal to the company’s income minus tax deductions and is written as follows:

\[
\text{Taxable Income} = \text{Income} - \text{Tax Deductions} \quad (13-1)
\]

When a company’s taxable income is positive, the company is said to have a net income for the year. When a company’s taxable income is negative, the company is said to have a net loss for the year.

In general, it is financially advantageous to take tax deductions—thereby reducing taxable income and tax liability—as soon as possible and postpone the payment of taxes as long as possible. This is not always the case, particularly for companies or individuals who are subject to the alternate minimum tax or whose taxable income varies greatly from year to year.

A company with a net loss for the tax year must use the loss in another tax year. In general, both corporations and individuals are required to carry their losses back, and if the losses are not used they may then carry their losses forward. In general the losses may be carried back five years and then carried forward up to 20 years.\(^{37}\) When carrying back net losses to previous years, the tax for those years is recalculated. The company can apply for a refund if the recalculated tax is less than the tax paid.

**Example 13-1:** A construction company is set up as a C corporation. The net income/loss for the first five years of the company’s existence—before carrying back or forward any losses—are as follows: year 1, −$10,000; year 2, −$25,000; year 3, $20,000; year 4, $30,000; and year 5, $35,000. What is the taxable income for the corporation after carrying back or carrying forward any losses for the years?

**Solution:** Because the losses occur in the first two years of the company’s existence, the losses cannot be carried back and must be carried forward.

until there is a net income to offset the losses. During the first two years of
the company’s existence the company’s taxable income is zero as well as its
tax liability. The $10,000 loss that occurs in the first year must be carried
forward to the second year. Because a loss occurs in the second year, the
losses from the first and second years must be carried forward to the third
year. In the third year, the entire $10,000 loss from the first and $10,000 of
the loss from the second year are used to offset the $20,000 net income
from the third year, leaving $15,000 ($25,000 – $10,000) of the loss from
the second year to be carried forward into the fourth year. In the fourth
year, the net income of $30,000 is reduced by the unused $15,000 loss from
the second year, leaving a net income of $15,000 in the fourth year. There
are no losses to carry forward from the fourth year so the net income in the
fifth year is $35,000.

In the previous example we saw that the tax savings from the losses that
occurred in the first and second years were not available until the third and
fourth years. In general, it is financially advantageous to take advantage of the
tax savings as soon as possible.

If the company in Example 13-1 were a limited liability corporation owned
by an individual with a net income greater than $10,000 for the first year, the in-
dividual may be able to use the first year’s loss to offset the net income and incur
the tax savings in the same year that the loss occurs. In some cases, the tax law
creates different classes of taxable cash flows and only allows the losses in one
class to offset taxable income in the same class. One such class is passive income.
Generally, passive activities include all business activities in which the taxpayer
did not materially participate in during the tax year and most rental activities.38
For corporations the passive activity rules only apply to personal service corpora-
tions and closely held C corporations.39 Losses from a passive activity may be used
only to offset net income from other passive activities. However, there is a special
allowance that may allow a taxpayer to deduct passive losses in excess of passive
income—in other words, offset nonpassive income—during the current year for
losses from the rental of real estate where the taxpayer actively participated.
Should the losses from passive activities exceed the net income from passive activ-
ities during the year, the unused losses may be carried forward to future tax years
and may be used to offset future gains from passive activities. The IRS refers to
these unused losses as unallowed losses. When a passive investment is sold to an
unrelated party, the passive losses may be used to offset other types of income.40

---

PAYMENT OF INCOME TAXES

Corporations are required to make installment payments on their estimated tax liability if the tax liability is expected to be more than $500 for the year. The estimated payments are due the fifteenth day of the fourth, sixth, ninth, and twelfth months of the corporate tax year. In the case of a corporation with a tax year ending December 31, their estimated tax payments would be due April 15, June 15, September 15, and December 15. 41 In general, individuals who expect to owe more than $1,000 of income tax and who expect their withholdings and credits to be less than the smaller of 90% of this year's tax liability or 100% of last year's tax liability are required to make installment payments on their estimated tax liability. The estimated payments for individuals are due on the fifteenth day of the fourth, sixth, and ninth month of the current year and the first month of the following year. For most taxpayers the tax year ends on December 31; therefore, their tax due dates are April 15, June 15, September 15, and January 15 of the following year. 42

INCOME TAX RATES

All income tax rates are stepped such that the tax rate changes based on the amount of taxable income. Each of these steps is referred to as a tax bracket. The federal income tax rates for corporations for the year 2006 are found in Table 13-1.

The tax rates shown in Table 13-1 are the rates that are applied to the taxable income within each of the tax brackets. The effective tax rate is the average tax rate paid on the taxable income.

<table>
<thead>
<tr>
<th>TAXABLE INCOME ($)</th>
<th>OF THE AMOUNT OVER</th>
</tr>
</thead>
<tbody>
<tr>
<td>OVER BUT NOT OVER</td>
<td>TAX IS ($)</td>
</tr>
<tr>
<td>0</td>
<td>50,000</td>
</tr>
<tr>
<td>50,000</td>
<td>75,000</td>
</tr>
<tr>
<td>75,000</td>
<td>100,000</td>
</tr>
<tr>
<td>100,000</td>
<td>335,000</td>
</tr>
<tr>
<td>335,000</td>
<td>10,000,000</td>
</tr>
<tr>
<td>10,000,000</td>
<td>15,000,000</td>
</tr>
<tr>
<td>15,000,000</td>
<td>18,333,333</td>
</tr>
<tr>
<td>18,333,333</td>
<td></td>
</tr>
</tbody>
</table>

42See IRS, Tax Withholding and Estimated Tax, Publication 505, 2007, pp. 18 and 22.
Example 13-2: Using the tax rates for the year 2006, determine the amount of federal income tax that is due for a C corporation that has a taxable income of $115,000.

### Sidebar 13-1

**Calculating Income Tax Using Excel**

Example 13-2 may be set up in a spreadsheet as shown in the following figure:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Taxable Income</td>
<td>115,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Income Tax</td>
<td>28,100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Tax Table</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Taxable Income ($)</td>
<td>Tax is ($)</td>
<td>Of The Amount Over</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Over</td>
<td>But Not Over</td>
<td>Tax is ($)</td>
<td>Over</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>-</td>
<td>50,000</td>
<td>-</td>
<td>+</td>
<td>15%</td>
</tr>
<tr>
<td>8</td>
<td>50,000</td>
<td>75,000</td>
<td>7,500</td>
<td>+</td>
<td>25%</td>
</tr>
<tr>
<td>9</td>
<td>75,000</td>
<td>100,000</td>
<td>13,750</td>
<td>+</td>
<td>34%</td>
</tr>
<tr>
<td>10</td>
<td>100,000</td>
<td>335,000</td>
<td>22,250</td>
<td>+</td>
<td>39%</td>
</tr>
<tr>
<td>11</td>
<td>335,000</td>
<td>10,000,000</td>
<td>113,900</td>
<td>+</td>
<td>34%</td>
</tr>
<tr>
<td>12</td>
<td>10,000,000</td>
<td>15,000,000</td>
<td>3,400,000</td>
<td>+</td>
<td>35%</td>
</tr>
<tr>
<td>13</td>
<td>15,000,000</td>
<td>18,333,333</td>
<td>5,150,000</td>
<td>+</td>
<td>38%</td>
</tr>
<tr>
<td>14</td>
<td>18,333,333</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To set up this spreadsheet, the formulas, text, and values shown on page 300 need to be entered into it.

For taxable income over $18,333,333, the tax rate is a flat 35%. If the taxable income is less than $18,333,333, the tax rate is determined by the table. The spreadsheet uses the IF function to determine if the taxable income is over $18,333,333, in which case the tax is calculated using the tax rate in Cell E14 (35% in this spreadsheet). For amounts less than $18,333,333, the spreadsheet uses the VLOOKUP function to look up the base tax from Column C (the third column in the lookup table), the Of The Amount Over from Column F (the sixth column in the lookup table), and the applicable tax rate from Column E (the fifth column in the lookup table). Personal income tax can be calculated in the same manner. These values are then used to calculate the tax rate. See Appendix B for more information on the IF and VLOOKUP function.
<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Taxable Income</td>
<td>115000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Income Tax</td>
<td>=IF(B1&gt;A14,B1<em>E14, VLOOKUP(B1,A7:F14,3)+ (B1-VLOOKUP(B1,A7:F14,6))</em> VLOOKUP(B1,A7:F14,5))</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Tax Table</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Taxable Income ($)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Over</td>
<td>But Not Over</td>
<td>Tax is ($)</td>
<td>Of The Amount Over</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>50000</td>
<td>0</td>
<td>+</td>
<td>0.15</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>50000</td>
<td>75000</td>
<td>7500</td>
<td>+</td>
<td>0.25</td>
<td>50000</td>
</tr>
<tr>
<td>9</td>
<td>75000</td>
<td>100000</td>
<td>13750</td>
<td>+</td>
<td>0.34</td>
<td>75000</td>
</tr>
<tr>
<td>10</td>
<td>100000</td>
<td>335000</td>
<td>22250</td>
<td>+</td>
<td>0.39</td>
<td>100000</td>
</tr>
<tr>
<td>11</td>
<td>335000</td>
<td>1000000</td>
<td>113900</td>
<td>+</td>
<td>0.34</td>
<td>335000</td>
</tr>
<tr>
<td>12</td>
<td>1000000</td>
<td>1500000</td>
<td>3400000</td>
<td>+</td>
<td>0.35</td>
<td>10000000</td>
</tr>
<tr>
<td>13</td>
<td>15000000</td>
<td>18333333</td>
<td>5150000</td>
<td>+</td>
<td>0.38</td>
<td>15000000</td>
</tr>
<tr>
<td>14</td>
<td>18333333</td>
<td></td>
<td>0.35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Solution: The corporation’s taxable income falls between $100,000 and $335,000 on Table 13-1; therefore, its tax is $22,250 plus 39% of the taxable income over $100,000. Its tax is calculated as follows:

\[
\begin{align*}
\text{Tax} &= 22,250 + (115,000 - 100,000)(0.39) \\
\text{Tax} &= 22,250 + 15,000(0.39) \\
\text{Tax} &= 28,100
\end{align*}
\]

The company’s tax liability for $115,000 of taxable income would be $28,100, which equates to an effective tax rate of 24.43% ($28,100/$115,000).

The federal income tax rates for personal income tax for the year 2007 for single persons are found in Table 13-2 and the tax rates for married persons filing jointly are found in Table 13-3. Additionally, the tax brackets are adjusted for inflation annually. Be sure to consult a tax advisor or IRS publications for the most current tax rates.

<table>
<thead>
<tr>
<th>TABLE 13-2</th>
<th>Personal Income Tax Rates for a Single Person for the Year 2007$^{44}$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TAXABLE INCOME ($)</strong></td>
<td><strong>OVER</strong></td>
</tr>
<tr>
<td>0</td>
<td>7,825</td>
</tr>
<tr>
<td>7,825</td>
<td>31,850</td>
</tr>
<tr>
<td>31,850</td>
<td>77,100</td>
</tr>
<tr>
<td>77,100</td>
<td>160,850</td>
</tr>
<tr>
<td>160,850</td>
<td>349,700</td>
</tr>
<tr>
<td>349,700</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 13-3</th>
<th>Personal Income Tax Rates for Married Persons Filing Jointly for the Year 2007$^{45}$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TAXABLE INCOME ($)</strong></td>
<td><strong>OVER</strong></td>
</tr>
<tr>
<td>0</td>
<td>15,650</td>
</tr>
<tr>
<td>15,650</td>
<td>63,700</td>
</tr>
<tr>
<td>63,700</td>
<td>128,500</td>
</tr>
<tr>
<td>128,500</td>
<td>195,850</td>
</tr>
<tr>
<td>195,850</td>
<td>349,700</td>
</tr>
<tr>
<td>349,700</td>
<td></td>
</tr>
</tbody>
</table>

$^{44}$See IRS, Tax Withholding and Estimated Tax, Publication 505, 2007, p. 41.
In addition to the federal government levying income tax most states levy income taxes. The federal government allows state income tax to be deducted from the taxable income when calculating the federal tax liability. A few local governments levy income taxes. Consult a tax advisor or state tax department to find out the state tax rates and regulations.

The stepped tax rates may favor companies that have a more consistent taxable income rather than a highly volatile taxable income, which is subject to a higher tax rate in the years the company produces a higher taxable income and a lower tax rate in the years the company produces a lower taxable income.

**Example 13-3:** Compare the tax paid by two C corporations. The first corporation has a taxable income of $10,000, $100,000, and $10,000 for the next three years. The second corporation has a taxable income of $35,000, $40,000, and $45,000 for the next three years. Determine the difference in federal income tax for these two corporations using the corporate tax rates for the year 2006.

**Solution:** The annual income taxes for the first corporation are calculated as follows:

\[
\begin{align*}
\text{Tax}_1 &= $10,000 \times 0.15 = $1,500 \\
\text{Tax}_2 &= $22,250 + ($100,000 - $100,000) \times 0.39 = $22,250 \\
\text{Tax}_3 &= $10,000 \times 0.15 = $1,500 \\
\text{Tax} &= $1,500 + $22,250 + $1,500 = $25,250
\end{align*}
\]

The annual income taxes for the second corporation are calculated as follows:

\[
\begin{align*}
\text{Tax}_1 &= $35,000 \times 0.15 = $5,250 \\
\text{Tax}_2 &= $40,000 \times 0.15 = $6,000 \\
\text{Tax}_3 &= $40,000 \times 0.15 = $6,750 \\
\text{Tax} &= $5,250 + $6,000 + $6,750 = $18,000
\end{align*}
\]

Although the total taxable income for the three years is the same for both corporations, the difference in federal income tax liability is $7,250 ($25,250 - $18,000). The company with a more consistent taxable income pays less federal taxes.

**Marginal or Incremental Tax Rate**

The marginal or incremental tax rate is the tax rate paid on the last dollar of taxable income. The marginal tax rate is used when comparing financial alternatives that change the company’s taxable income. When using the marginal tax rate, one must be careful that the cash flows do not change the tax bracket. In Example 13-2 the company’s marginal tax rate for federal income tax was 39% because they paid 39% of the last dollar earned. The marginal tax rate works well for
companies and persons who are well within the top tax bracket or where there is little chance that the cash flows from the alternative will change the income tax bracket.

The effect of state income tax—including their deductibility for the purpose of federal income tax—may be incorporated in the marginal tax rate by the following equation:

\[
\text{Marginal Tax Rate} = (\text{Marginal Federal Rate})(1 - \text{Marginal State Rate}) + \text{Marginal State Rate}
\]  
(13-2)

**Example 13-4:** Determine the marginal tax rate for a corporation whose federal tax rate is 35% and whose state tax rate is 8%.

**Solution:** Using Eq. (13-2) we get the following:

\[
\text{Marginal Tax Rate} = (0.35)(1 - 0.08) + 0.08 = 0.402
\]

The corporation’s marginal tax rate is 40.2%.

**CAPITAL GAINS AND LOSSES**

Capital gains and losses are gains and losses on the sale or disposition of capital assets.\(^{46}\) Capital gains and losses are divided into different classes. Short-term capital gains and losses are gains and losses on capital assets held for one year or less. Long-term capital gains and losses are gains and losses on capital assets held for more than one year.\(^{47}\)

The treatment of capital gains and losses has changed as the tax law has changed. Short-term capital gains are taxed as ordinary income or at the standard income tax rate. Long-term capital gains have been treated as follows: ordinary income and taxed at the standard income tax rate, taxed at a lower rate, or only part of the capital gain has been taxed as ordinary income.

In 2002, for capital gains not treated as ordinary income, the maximum capital gain rate could be 5, 15, 25, or 28%.\(^{48}\)

Like passive income, capital losses may only be used to offset capital gains. For corporate income tax, unused or unallowed capital losses may be carried back three years or carried forward five years as short-term capital losses.\(^{49}\) When carrying back capital losses to previous years, the tax for those years is recalculated. If the recalculated tax is less than the tax paid, the company can apply for a refund. For personal income tax purposes, up to $3,000 ($1,500 for married

\(^{46}\)See IRS, Sales and Other Dispositions of Assets, Publication 544, 2006, p. 19.


\(^{48}\)See IRS, Investment Income and Expenses, Publication 550, 2006, p. 66.

persons who file separate returns) in capital losses may be used to offset ordinary income. The remaining losses may be carried forward until they are completely used up.50

Because of the complexity of determining the tax consequences of capital gains and losses, one should seek the help of a tax professional when dealing with these issues.

**TAX CONSEQUENCES OF DEPRECIATION**

Most assets—with a life of one year or more—purchased for use in business must be depreciated. The most notable exception to this is assets that are deducted under the Section 179 exception (see Chapter 5). Depreciation takes the cost of the asset and spreads the cost over the assumed life of the asset. The Internal Revenue Service specifies the assumed life of the asset, as well as the allowable depreciation methods. These costs are then used to offset income—reducing taxable income and thereby reducing income taxes—over the life of the asset rather than at the time of its purchase. By depreciating assets, the tax savings that accompany the purchase of the assets are moved from the time the asset is purchased to future years.

**Example 13-5:** Calculate the annual difference between the cash flow and the deductibility for tax purposes of the purchase of a $10,000 computer system. The computer system is depreciated using the half-year convention and the 200% declining-balance method. The computer system is purchased outright.

**Solution:** The standard recovery period mandated by the IRS for computer systems is five years (see Chapter 5). Using the depreciation rates for a five-year recovery period and the 200% declining-balance depreciation method found in Table 5-6, the depreciation for the computer system is calculated as follows:

\[
\begin{align*}
D_1 &= (10,000)0.2000 = $2,000 \\
D_2 &= (10,000)0.3200 = $3,200 \\
D_3 &= (10,000)0.1920 = $1,920 \\
D_4 &= (10,000)0.1152 = $1,152 \\
D_5 &= (10,000)0.1152 = $1,152 \\
D_6 &= (10,000)0.0576 = $576 \\
\end{align*}
\]

Because the depreciation may be taken during the year the asset was purchased, the $10,000 spent on the outright purchase of the computer system occurs during the same period the $2,000 depreciation is taken. The

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difference between the cash flow and its deductibility for tax purposes for the first year is $8,000 ($10,000 − $2,000). For the second year it is −$3,200. The remaining differences are shown in Figure 13-1. Because we are allowed to depreciate the entire cost of the asset, the sum of the differences is zero.

Depreciation does not reduce the amount we may deduct from the taxable income; it only defers the tax savings to future years.

**Example 13-6:** Using a marginal tax rate of 34%, calculate the annual difference in tax savings between deducting the entire $10,000 from Example 13-5 during the first year versus depreciating the computer system over six years. Assume that there is sufficient income that these deductions do not result in a loss that must be carried to prior years or carried forward.

**Solution:** If we were to deduct the entire $10,000 in the first year, the company would reduce their income tax by $3,400 ($10,000 × 0.34).

If we were to depreciate the $10,000, we would see the following tax savings over the next six years:

- Tax Savings\(_1\) = $2,000(0.34) = $680
- Tax Savings\(_2\) = $3,200(0.34) = $1,088
- Tax Savings\(_3\) = $1,920(0.34) = $653
- Tax Savings\(_4\) = $1,152(0.34) = $392
- Tax Savings\(_5\) = $1,152(0.34) = $392
- Tax Savings\(_6\) = $576(0.34) = $196
Note that other than rounding errors, the tax savings are equal in both cases. The difference is that we have to wait for six years to get the entire tax savings when depreciating the asset.

We see from Example 13-6 that companies that can avoid depreciating equipment can get the tax savings sooner than those who depreciate equipment.

**Example 13-7:** How would Example 13-6 change if we could use a three-year recovery period rather than a five-year?

**Solution:** From Table 5-6 the depreciation for the computer system is calculated as follows:

\[
D_1 = ($10,000)0.333 = $3,333
\]
\[
D_2 = ($10,000)0.4445 = $4,445
\]
\[
D_3 = ($10,000)0.1481 = $1,481
\]
\[
D_4 = ($10,000)0.0741 = $741
\]

The tax savings over the four years are as follows:

\[
\text{Tax Savings}_1 = $3,333(0.34) = $1,133
\]
\[
\text{Tax Savings}_2 = $4,445(0.34) = $1,511
\]
\[
\text{Tax Savings}_3 = $1,481(0.34) = $504
\]
\[
\text{Tax Savings}_4 = $741(0.34) = $252
\]

Note that other than rounding errors, the tax savings are equal in both cases. In this example the difference is that we have to wait for four years rather than six years to get the tax savings.

We see from Examples 13-6 and 13-7 that companies that can depreciate equipment using a shorter recovery period gain the tax savings faster than companies that use longer recovery periods.

**Example 13-8:** How would Example 13-6 change if we were to use the 150% declining-balance depreciation method rather than the 200% declining-balance depreciation method?

**Solution:** From Table 5-11 the depreciation for the computer system is calculated as follows:

\[
D_1 = ($10,000)0.1500 = $1,500
\]
\[
D_2 = ($10,000)0.2550 = $2,550
\]
\[
D_3 = ($10,000)0.1785 = $1,785
\]
\[
D_4 = ($10,000)0.1666 = $1,666
\]
\[
D_5 = ($10,000)0.1666 = $1,666
\]
\[
D_6 = ($10,000)0.0833 = $833
\]
The tax savings over the six years are as follows:

\[
\begin{align*}
\text{Tax Savings}_1 &= 1,500(0.34) = 510 \\
\text{Tax Savings}_2 &= 2,550(0.34) = 867 \\
\text{Tax Savings}_3 &= 1,785(0.34) = 607 \\
\text{Tax Savings}_4 &= 1,666(0.34) = 566 \\
\text{Tax Savings}_5 &= 1,666(0.34) = 566 \\
\text{Tax Savings}_6 &= 833(0.34) = 283
\end{align*}
\]

Note that other than rounding errors the tax savings are equal in both cases. The difference is that using the 200% declining-balance depreciation method places larger tax savings in the earlier years.

From Figure 13-2 we can see that the 150% declining-balance depreciation method depreciates at a slower rate during the earlier years than the 200% declining-balance depreciation method and makes up for it in the later years. We see from Examples 13-6 and 13-8 that companies that can depreciate equipment
using the 200% declining-balance method can get the tax savings from purchasing the equipment faster than companies that depreciate equipment using the 150% declining-balance method.

The rules that apply to depreciation are determined by the tax law in effect at the time of acquisition. It is also important to note that when personal or real property is leased, the lessee—the person using the property—cannot deduct the depreciation of the property but can deduct the lease payment as an expense, whereas the lessor—the person giving up use of the property in return for the lease payment—may claim the depreciation on the property.

**Nondeductible Expenses/Costs**

Not all expenses are deductible when figuring the taxable income. For both corporations and individuals, generally only 50% of the cost of business-related meals and entertainment are deductible as an expense.\(^{51}\) Meals and entertainment that are not business related are not deducted.

**Example 13-9:** Your company spent $2,500 last year on business-related meals and entertainment. Calculate the difference between the cash flow and the deductibility of these expenses for tax purposes.

**Solution:** Only 50% of the costs of business-related meals and entertainment can be deducted from your taxable income. In this case it would be $1,250 ($2,500 \( \times 0.50 \)). The difference between the cash flow and the deductibility of these expenses for tax purposes is $1,250 ($2,500 \(-\) $1,250). This difference can never be recouped.

This rule must be taken into account when determining the taxable income while preparing an annual cash flow for the construction company.

For the purposes of corporate income tax, charitable contributions may be limited to 10% of the company’s taxable income. Unused charitable contributions may be carried forward for up to five tax years.\(^{52}\) This rule may come into play anytime a company disposes of an asset by giving it or selling it at a below market price to a charitable organization.\(^{53}\) This rule can have a significant impact on the tax savings associated with disposition of an asset to a charitable organization by delaying the tax savings associated with the donation or by eliminating the deduction altogether if the deduction cannot be used within the allotted time.


\(^{52}\)See IRS, Instructions for Forms 1120 and 1120-A, 2006, p. 10.

\(^{53}\)See IRS, Sales and Other Dispositions of Assets, Publication 544, 2006, p. 3 and 4.
TAX CREDITS

As an incentive to stimulate specific areas of the economy or to reward certain behaviors, the government gives tax credits for certain activities. Unlike deducting expenses that reduce a business’s taxable income—which in turn reduces a business’s tax liability—tax credits are used to directly reduce a business’s tax liability.

In 2006 the following were some of the credits available to businesses that could be used to reduce its federal income tax liability: work opportunity credit, welfare-to-work credit, credit for increasing research activities, disabled access credit, Indian employment credit, credit for small employer pension plan startup costs, energy efficient home credit, and energy efficient appliance credit. Limits may be placed on how large a credit may be taken during any tax year. Unused tax credits may be carried back or forward. The rules differ for each of these credits. For specific information on each of these credits, see the rules governing each credit or talk to your tax advisor.

Example 13-10: Your company paid employees eligible for work opportunity credit $10,000 last year. The credit is 40% of their wages. The company’s wages expense must be reduced by the amount of the credit. If the company’s marginal tax rate is 35%, how does this affect your company’s taxes?

Solution: The tax credit is $4,000 ($10,000 \times 0.40). The company must reduce its employee expenses by the $4,000 tax credit; therefore, it must pay income taxes on the tax credit. The taxes on the credit are $1,400 ($4,000 \times 0.35). The net tax savings is $2,600 ($4,000 – $1,400).

ALTERNATE MINIMUM TAX

The tax laws discussed in this chapter can allow companies and individuals with large incomes to pay little or no taxes, especially when using tax credits. To ensure that companies and individuals pay a minimum amount of tax, the tax code includes provisions that require many companies and individuals to calculate their Alternate Minimum Tax liability and pay the higher of the Alternate Minimum Tax or their regular income tax. The effect of the Alternate Minimum Tax is that it can negate the tax savings gained by many of these tax provisions. Some small companies and many individuals do not need to calculate their Alternate Minimum Tax liability. Consult your tax advisor to see how the Alternate Minimum Tax provision affects you or your company.

To prepare a cash flow projection for a company (Chapter 14), the company's taxable income and income tax liability must be projected. Previously in this chapter we covered calculation of income tax liability from the taxable income.

When projecting the taxable income from an income statement the nontax deductible expenses must be adjusted out of the income statement. When calculating the before-tax profit the entire cost of meals and entertainment may be deducted for financial purposes; however, when calculating the before-tax profit only 50% of the costs of meals and entertainment may be deducted for tax purposes. The taxable income is calculated by taking the before-tax profits and adding back in any nondeductible expenses, such as the nondeductible portion of meals and entertainment. In addition, if the depreciation method or recovery periods are different for financial purposes than are allowed for tax purposes, further adjustments for these differences must be made.

Example 13-11: A construction company has an estimated profit before taxes of $111,447 for the year. Included in the company's costs is $34,460 for meals and entertainment. Determine the taxable income for the company.

Solution: The profit before taxes included deducting $34,460 for meals and entertainment of which only $17,230 ($34,460 \times 0.50)$ is deductible for tax purposes. To arrive at the taxable income we must add the nondeductible portion of the meals and entertainment back into the before-tax profit. The non-deductible portion of the meals and entertainment is $17,230 ($34,460 - $17,230). The taxable income for the company is $128,677 ($111,447 + $17,230).

The tax rules for income taxes are divided into two distinct classes, corporate and personal. C corporations and some partnerships pay corporate income tax. Limited liability companies, S corporations, most partnerships, and sole proprietorships pass income through to the shareholders, who in turn pay personal income tax. Income tax is paid on a company's or individual's taxable income, which equals the income less allowable tax deductions. The cost of many assets may not be fully deducted during the year the assets are purchased but must be deducted over time by depreciating the asset.

When dealing with assets that must be depreciated, it is generally financially advantageous to depreciate the asset as fast as possible. Other items—such as meals and entertainment—may be partially or nondeductible for tax purposes. Any tax credits due to a company or individual are deducted from their tax liabil-
ity rather than their taxable income. To ensure that they pay a minimum amount of tax, many corporations and individuals must calculate their Alternate Minimum Tax, which may render some tax savings unusable. Due to the complexity of the tax code, it is advisable for companies to seek the help of a tax accountant or other professional when dealing with income tax issues.

**PROBLEMS**

1. Using the tax rates for the year 2006, determine the amount of federal income tax that is due for a C corporation that has a taxable income of $356,000.

2. Using the tax rates for the year 2007, determine the amount of federal income tax that is due for an individual who is married filing jointly and has a taxable income of $356,000.

3. Determine the marginal tax rate for a corporation whose federal tax rate is 39% and whose state tax rate is 7.25%.

4. Determine the marginal tax rate for a corporation whose federal tax rate is 15% and whose state tax rate is 5%.

5. Calculate the annual difference between the cash flow and the deductibility for tax purposes of the purchase of a $20,000 truck. The truck is depreciated using the half-year convention and the 200% declining-balance method. The truck is purchased outright.

6. Calculate the annual difference between the cash flow and the deductibility for tax purposes of the purchase of $10,000 of office furniture. The furniture is depreciated using the half-year convention and the 200% declining-balance method. The furniture is purchased outright.

7. Your company spent $5,000 last year on business related meals and entertainment. Calculate the difference between the cash flow and the deductibility of these expenses for tax purposes.

8. Your company is planning on spending $15,000 on a company Christmas party. Calculate the difference between the cash flow and the deductibility of this party for tax purposes.

9. Your company paid employees who were eligible for work opportunity credit $25,000 last year. Of these wages, $21,000 is eligible for a tax credit of 40% of the wages. The remaining wages are eligible for a tax credit of 25% of the wages. The company’s wages expense must be reduced by the amount of the credit. If the company’s marginal tax rate is 34%, how does this affect your company’s taxes?

10. Your company spent $5,000 for building modifications to provide access required by the Americans with Disabilities Act. These expenditures are eligible for a tax credit of 50% of the cost of the modifications. How does this affect your company’s taxes?
11. A construction company has an estimated profit, before taxes, of $256,452 for the year. Included in the company’s costs is $25,622 for meals and entertainment. Determine the taxable income for the company.

12. A construction company has an estimated profit, before taxes, of $547,852 for the year. Included in the company’s costs is $65,258 for meals and entertainment. Determine the taxable income for the company.

**REFERENCES**

IRS, 1040 Instruction, 2006.
IRS, 1040 Instruction for Schedule C—Profit or Loss from Business, 2006.
IRS, 3800—General Business Credit, 2006.
IRS, 5884 Work Opportunity Credit, 2006.
IRS, 8826 Disabled Access Credit, 2006.
IRS, Charitable Contributions, Publication 526, 2006.
IRS, Instruction for Form 8810—Corporate Passive Activity Loss and Credit Limitations, 2006.
IRS, Net Operating Losses (NOLs) for Individuals, Estates, and Trusts, Publication 536, 2006.
IRS, Sales and Other Dispositions of Assets, Publication 544, 2006.