**Chapter 2**

**Property Acquisition and Cost Recovery**

INSTRUCTOR’S MANUAL

### Learning Objectives

1. Explain the concept of basis and adjusted basis and describe the cost recovery methods used under the tax law to recover the cost of personal property, real property, intangible assets, and natural resources.
2. Determine the applicable cost recovery (depreciation) life, method, and convention for tangible personal and real property and calculate the deduction allowable under basic MACRS.
3. Explain the additional special cost recovery rules (§179, bonus, listed property) and calculate the deduction allowable under these rules.
4. Explain the rationale behind amortization, describe the four categories of amortizable intangible assets, and calculate amortization expense.
5. Explain cost recovery of natural resources and the allowable depletion methods.

### Teaching Suggestions

This chapter is organized around issues dealing with acquiring assets and cost recovery. There are many topics in this chapter. The instructor may not wish to cover all topics.

Depreciation is something accounting students have learned in introduction to financial and managerial accounting. So it is easy to build on that background. The section was written to cover the basics of method, recovery period and convention. Once these principles are understood, the application to any tax depreciation problem is relatively simple. There has been a significant amount of legislative activity providing preferences to specific assets which can be interesting to discuss (e.g. motorsports entertainment complexes, qualified leasehold, retail, and restaurant property, etc.). There are also a lot of provisions designed to prevent perceived abuses in the listed property area—one point of contention between taxpayers and the Internal Revenue Service has been with respect to cell phones. Recently, the IRS has removed cell phones from listed property requirements. Another development is the recent issuance of the repair regulations. Although the chapter does not provide great detail on the new regulations, it provides instructors with an opportunity to add a research component to this content.

During the recent tax stimulus provisions enacted during the past decade bonus depreciation and additional §179 expensing have been used substantially. These items can either be discussed in detail or from a theoretical perspective. The primary discussion of these provisions assumes they will be extended to the current year; however, there is also a discussion assuming they are not extended.

Amortization can be relatively straightforward. For those focusing on small business, the start-up expenditures and organizational cost provisions are important. All others may want to focus on the acquisition of §197 intangibles.

Depletion is a topic that is often not covered. The President’s budget proposes several changes to the oil and gas tax incentives if you want to discuss current legislative activity.

###### Assignment Matrix

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | Learning Objectives | | | | | Text Feature | | |
|  |  | Difficulty | LO1 | LO2 | LO3 | LO4 | LO5 | Research | Planning | Tax Forms |
| DQ2-1 | 10 min. | Easy | X |  |  |  |  |  |  |  |
| DQ2-2 | 10 min. | Easy | X |  |  |  |  |  |  |  |
| DQ2-3 | 15 min. | Easy | X |  |  |  |  |  |  |  |
| DQ2-4 | 10 min. | Easy | X |  |  |  |  |  |  |  |
| DQ2-5 | 15 min. | Easy | X |  |  |  |  |  |  |  |
| DQ2-6 | 10 min. | Easy | X |  |  |  |  |  |  |  |
| DQ2-7 | 10 min. | Easy | X |  |  |  |  |  |  |  |
| DQ2-8 | 10 min. | Easy |  | X |  |  |  |  |  |  |
| DQ2-9 | 10 min. | Easy |  | X |  |  |  |  |  |  |
| DQ2-10 | 10 min. | Easy |  | X |  |  |  |  | X |  |
| DQ2-11 | 15 min. | Easy |  | X |  |  |  |  |  |  |
| DQ2-12 | 10 min. | Easy |  | X |  |  |  |  |  |  |
| DQ2-13 | 10 min. | Easy |  | X |  |  |  | X |  |  |
| DQ2-14 | 10 min. | Easy |  | X |  |  |  |  |  |  |
| DQ2-15 | 10 min. | Easy |  | X |  |  |  |  |  |  |
| DQ2-16 | 10 min. | Easy |  | X |  |  |  |  |  |  |
| DQ2-17 | 10 min | Easy |  | X |  |  |  |  |  |  |
| DQ2-18 | 10 min. | Easy |  | X |  |  |  |  |  |  |
| DQ2-19 | 10 min | Easy |  | X |  |  |  | X |  |  |
| DQ2-20 | 15 min. | Easy |  | X |  |  |  |  |  |  |
| DQ2-21 | 15 min. | Easy |  |  | X |  |  |  |  |  |
| DQ2-22 | 15 min. | Easy |  |  | X |  |  |  |  |  |
| DQ2-23 | 15 min. | Easy |  |  | X |  |  |  |  |  |
| DQ2-24 | 15 min. | Easy |  |  | X |  |  |  |  |  |
| DQ2-25 | 15 min. | Easy |  |  | X |  |  |  |  |  |
| DQ2-26 | 15 min. | Easy |  |  | X |  |  |  |  |  |
| DQ2-27 | 15 min. | Easy |  |  | X |  |  |  |  |  |
| DQ2-28 | 15 min. | Easy |  |  | X |  |  |  |  |  |
| DQ2-29 | 15 min. | Medium |  |  | X |  |  |  |  |  |
| DQ2-30 | 15 min. | Easy |  |  |  | X |  |  |  |  |
| DQ2-31 | 15 min. | Easy |  |  |  | X |  |  |  |  |
| DQ2-32 | 15 min. | Easy |  |  |  | X |  |  |  |  |
| DQ2-33 | 15 min. | Easy |  |  |  | X |  |  |  |  |
| DQ2-34 | 15 min. | Easy |  |  |  | X |  |  |  |  |
| DQ2-35 | 15 min. | Easy |  |  |  | X |  |  |  |  |
| DQ2-36 | 15 min. | Easy |  |  |  |  | X |  |  |  |
| DQ2-37 | 15 min. | Easy |  |  |  |  | X |  |  |  |
| P2-38 | 20 min. | Easy | X |  |  |  |  |  |  |  |
| P2-39 | 20 min. | Medium | X |  |  |  |  | X |  |  |
| P2-40 | 20 min. | Medium | X |  |  |  |  | X |  |  |
| P2-41 | 20 min. | Easy | X |  |  |  |  |  |  |  |
| P2-42 | 10 min. | Easy | X |  |  |  |  |  |  |  |
| P2-43 | 10 min. | Easy | X |  |  |  |  |  |  |  |
| P2-44 | 15 min. | Easy | X |  |  |  |  |  |  |  |
| P2-45 | 25 min. | Medium | X |  |  |  |  |  |  |  |
| P2-46 | 30 min | Medium |  | X |  |  |  |  |  |  |
| P2-47 | 30 min | Medium |  | X |  |  |  |  |  |  |
| P2-48 | 30 min | Medium |  | X |  |  |  |  |  |  |
| P2-49 | 25 min. | Medium |  | X |  |  |  |  |  |  |
| P2-50 | 35 min | Medium |  | X |  |  |  |  |  |  |
| P2-51 | 35 min | Medium |  | X |  |  |  |  |  |  |
| P2-52 | 35 min | Medium |  | X |  |  |  |  | X |  |
| P2-53 | 40 min. | Medium |  | X |  |  |  |  |  |  |
| P2-54 | 35 min. | Medium |  | X |  |  |  |  |  |  |
| P2-55 | 20 min | Easy |  | X |  |  |  |  |  |  |
| P2-56 | 35 min. | Medium |  | X | X |  |  |  |  |  |
| P2-57 | 30 min. | Medium |  | X | X |  |  |  |  |  |
| P2-58 | 40 min. | Medium |  | X | X |  |  |  |  |  |
| P2-59 | 35 min | Medium |  | X | X |  |  |  | X |  |
| P2-60 | 45 min. | Hard |  | X | X |  |  | X |  |  |
| P2-61 | 40 min. | Hard |  | X | X |  |  |  |  |  |
| P2-62 | 60 min. | Hard |  | X | X |  |  | X | X |  |
| P2-63 | 60 min | Hard |  | X | X |  |  |  | X |  |
| P2-64 | 45 min. | Hard |  | X | X |  |  |  | X |  |
| P2-65 | 25 min. | Medium |  |  | X |  |  |  |  |  |
| P2-66 | 25 min. | Medium |  |  | X |  |  |  |  |  |
| P2-67 | 25 min. | Medium |  |  | X |  |  |  |  |  |
| P2-68 | 30 min. | Medium |  | X | X |  |  |  |  |  |
| P2-69 | 30 min. | Medium |  |  | X |  |  | X |  |  |
| P2-70 | 45 min. | Hard |  |  |  | X |  |  |  |  |
| P2-71 | 30 min. | Medium |  |  |  | X |  |  |  |  |
| P2-72 | 30 min. | Medium |  |  |  | X |  |  |  |  |
| P2-73 | 30 min. | Hard |  |  |  | X |  |  |  |  |
| P2-74 | 30 min. | Medium |  |  |  |  | X |  |  |  |
| CP2-75 | 75 min. | Hard |  |  |  |  |  |  |  | X |
| CP2-76 | 75 min. | Hard |  |  |  |  |  |  |  | X |
| CP2-77 | 75 min. | Hard |  |  |  |  |  |  |  |  |

**Lecture Notes**

1. Cost Recovery and Basis for Cost Recovery
   1. For financial accounting and tax accounting purposes, businesses must capitalize the cost of assets with a useful life of more than one year rather than expense the cost immediately.
   2. Methods used to recover the cost of assets through cost recovery deductions:
      1. Depreciation
      2. Amortization
      3. Depletion
      4. Refer to Exhibit 2-1 for Assets and Cost Recovery and Exhibit 2-2 for Weyerhaeuser Assets.
   3. Basis for Cost Recovery
      1. Recouping the cost of assets starts when the business starts using the assets.
      2. The amount of an asset’s cost that has to be recovered through cost recovery deductions is called assets adjusted basis or tax basis.
         1. An Asset’s Adjusted Basis = Asset’s Initial Cost or Historical Cost minus Accumulated Depreciation (or Amortization or Depletion)
      3. Cost Basis is usually the same for book and tax purposes.
      4. An asset’s cost basis includes all expenses needed to purchase the asset, prepare it for use, and begin using it.
         1. Work through Example 2-1.
      5. New repair regulations provide guidance on whether costs incurred after acquisition should be capitalized or immediately deducted. Several safe harbors exist: de minimis and routine maintenance for example.
         1. Work through Example 2-2.
      6. Special basis rules apply when personal assets are converted to business use and when assets are acquired through nontaxable transactions, gifts, or inheritances.
2. Depreciation
   1. To depreciate an asset, a business must determine:
      1. Original basis
      2. Depreciation method
      3. Recovery period
      4. Depreciation convention
   2. Today businesses use MACRS – Modified Accelerated Cost Recovery System
   3. Personal Property Depreciation
      1. Includes all tangible property, such as computers, automobiles, furniture, machinery and equipment, other than real property.
      2. Personal property is relatively short-lived and subject to obsolescence when compared to real property.
      3. Depreciation method
         1. MACRS provide three acceptable methods for depreciating personal property:
            1. 200 percent (double) declining balance (default method);
            2. 150 percent declining balance; and
            3. Straight line.
         2. Work through Example 2-3.
      4. Depreciation recovery period
         1. For financial accounting purposes, an asset's recovery period (depreciable life) is based on its taxpayer- determined estimated useful life.
         2. For tax purposes, an asset’s recovery period is predetermined by IRS in the Rev. Proc. 87-56 which helps payers to categorize each of their assets based upon the property’s description.
            1. Refer to Exhibit 2-3 for Excerpt from Revenue Procedure 87-56.
            2. Refer to Exhibit 2-4 for Recovery Period for Most Common Business Assets.
            3. Refer to Exhibit 2-5 for Teton Personal Property Summary (Base Scenario).
      5. Depreciation conventions
         1. It specifies the portion of a full year’s depreciation the business can deduct for an asset in the year the asset is first placed in service and in the year the asset is sold.
         2. For personal property – taxpayers must either use the half-year convention or the mid- quarter convention.
            1. Half-year convention

One-half of a year’s depreciation is allowed in the first and the last year of an asset’s life.

The IRS depreciation tables automatically account for the half-year convention

Refer to Table 1 (in chapter appendix) for MACRS-200 percent Declining Balance Using the Half-Year Convention.

Work through Example 2-4.

* + 1. Calculating Depreciation for Personal Property
       1. IRS provides depreciation percentage tables in Rev. Proc. 87-57
       2. Steps to determine the depreciation for the asset:
          1. Locate the applicable table provided in Rev. Proc. 87-57.
          2. Select the column that corresponds with the asset’s recovery period.
          3. Find the row identifying the year of the asset’s recovery period.
          4. Refer Table 1 for MACRS 200 percent Declining Balance Using the Half-Year Convention.
    2. Applying the Half-Year Convention
       1. Work through Example 2-5.
       2. Half-year convention for year of disposition
          1. Work through the Example 2-6.
       3. Mid-quarter convention
          1. The mid-quarter convention is required when more than 40 percent of a taxpayer’s personal property placed in service during the year was placed during the fourth quarter.
          2. Each quarter has its own depreciation table. Once you begin using a table, you must use the table over the asset’s whole life.
          3. If an asset is disposed of before it is fully depreciated, use the formula given to determine the allowable depreciation in the year of disposition.
          4. Steps to determine whether the mid-quarter convention applies are the following

Sum the total basis of the tangible personal property that was placed in service during the year.

Sum the total basis of the tangible personal property that was place in service in the fourth quarter.

Divide the outcome of Step 2 by the outcome of Step 1. If the quotient is greater than 40 percent, the business must use the mid-quarter convention to determine the depreciation for all personal property the business places in service during the year. Otherwise, the business uses the half-year convention for depreciating this property.

* + - * 1. Work through Examples 2-7 and 2-8.
    1. Applying the Mid-Quarter Convention
       1. Work through Examples 2-9 and 2-10.
       2. Refer to Table 2a-d (in the chapter appendix) for Mid-Quarter Convention Tables.
       3. Mid-quarter convention for year of disposition
          1. Work through Example 2-11.
    2. Real Property
       1. Real property is depreciated using the straight line method.
       2. Real property uses the mid-month convention.
       3. Residential property has a recovery period of 27.5 years.
       4. Nonresidential property placed in service after 1993 has a life of 39 years.
       5. Refer to Exhibit 2-7 for Recovery Period for Real Property.
          1. Applicable method

All depreciable real property is depreciated for tax purposes using the straight- line method.

* + - * 1. Applicable convention - All real property is depreciated using the mid-month convention.
        2. Depreciation tables

Work through Example 2-12.

Mid-month convention for the year of disposition

Process for calculating

Step 1: Determine the amount of depreciation expense for the asset as if the asset was held for the entire year.

Step 2: Subtract one-half of a month from the month in which the asset was sold (if sold in third month, subtract .5 from 3 to get 2.5). (Subtract half of a month because the business is treated as though the asset was disposed of in the middle of the third month—not the end.)

Step 3: Divide the amount determined in Step 2 by 12 months (2.5/12). This is the fraction of the full year’s depreciation the business is eligible to deduct.

Step 4: Multiply the Step 3 outcome by the full depreciation determined in Step 1.

Formula: Full year’s depreciation × (Month in which asset was disposed – 0.5)/12

Work through Example 2-13.

* + 1. Special Rules Relating to Cost Recovery
       1. Immediate expensing
       2. This incentive is commonly referred as §179 expense or immediate expensing election.
       3. It helps small businesses to purchase new or used tangible personal property.
          1. Work through Example 2-14.
       4. Limits on immediate expensing
          1. The maximum amount a business may elect to claim for the year is subject to a phase-out limitation.

Work through Examples 2-15 and 2-16.

* + - 1. Choosing the assets to immediately expense
         1. $500,000 of tangible personal property is expected to be immediately expensed in 2016.
         2. Businesses are eligible for the full amount of this expense when tangible personal property placed in service is less than $2,010,000 for 2016. Beginning at $2,010,000, the §179 expense is phased out, dollar-for dollar. When assets placed in service exceed $2,510,000, no §179 expense can be taken.
         3. §179 expenses are also limited to a business’s taxable income before the §179 expense. §179 expenses cannot create losses.

Work through Example 2-17.

* + - 1. Bonus depreciation
         1. To stimulate the economy, policy makers occasionally implement bonus depreciation. In 2016, taxpayers can expense 50 percent of qualified property under the bonus depreciation rules assuming bonus depreciation is extended to 2016.
         2. Work through the Example 2-18.
      2. Listed property
         1. When an asset is used for both personal and business use, calculate what percentage was used for business purposes.
         2. If the business-use percentage is above 50 percent, the allowable depreciation is limited to the business use percentage.
         3. If a listed property’s business-use percentage falls below 50 percent, depreciation for all previous years is retroactively restated using MACRS straight line method.
         4. Work through the Example 2-19.
         5. Businesses can use the following five steps to determine its current depreciation expense for the asset:

Compute depreciation for the year it drops to 50% or below using the straight-line method

Compute the amount of depreciation the taxpayer would have deducted if the taxpayer had used the straight-line method over the ADS recovery period for all prior years.

Compute the amount, taxpayer actually deducted on the assets for all prior years

Subtract amount of step 2 from step 3, which is prior year accelerated depreciation in excess of straight line depreciation

Subtract the excess accelerated depreciation from Step 4 from the current year straight-line depreciation in Step 1. This is the business’s allowable depreciation expense on the asset for the year. If the prior year excess depreciation from Step 4 exceeds the current year straight-line depreciation in Step 1, the business is not allowed to deduct any depreciation on the asset for the year and must actually recognize additional ordinary income for the amount of the excess.

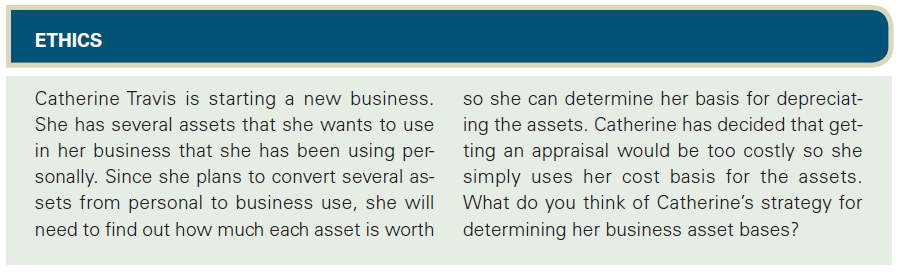
Work through the Example 2-20.

* + - 1. Luxury automobiles
         1. Depreciation on automobiles weighing less than 6,000 lbs. is subject to luxury auto provisions.
         2. Luxury automobiles have a maximum depreciation limit for each year.
         3. Listed property rules are also applicable to luxury automobiles.
         4. Refer Exhibit 2-8 for Automobile Depreciation Limits.
         5. Work through the Example 2-21.
    1. Depreciation for Alternative Minimum Tax
       1. For AMT purposes, the allowable recovery period and conventions are the same for all depreciable assets as they are for regular tax purposes.
       2. The difference between regular tax depreciation and AMT depreciation is an adjustment that is either added to or subtracted from regular taxable income in computing the alternative minimum tax base.
    2. Depreciation Summary
       1. Refer Exhibit 2-9 for Tax Depreciation Expense Summary and 2-10 for Teton’s Form 4562 Parts I – IV for Depreciation.

1. Amortization
   1. Businesses recover the cost of intangible assets through amortization rather than depreciation expense
   2. For tax purposes, an intangible asset can be placed into one of the following four general categories:
      1. Section197 Intangibles
         1. Purchased intangibles are amortized over a period of 180 months, regardless of their explicitly stated lifetimes.
         2. The full-month convention applies to amortizable assets which allows taxpayers to deduct an entire month’s worth of amortization for the month of purchase and all subsequent months in the year
         3. Work through the Example 2-22.
      2. Organizational Expenditures and Start-Up Costs
         1. Organizational expenditures include expenditures to form and organize a business in the form of a corporation or a partnership.
         2. Start-up costs are incurred when a business is started
         3. Taxpayers may immediately expense up to $5,000 of organizational expenditures and $5,000 of start-up costs.
         4. The $5,000 immediate expense rule has a dollar-for-dollar phase out that begins at $50,000, so that when expenses exceed $55,000, there is no immediate expensing.
            1. Work through the Examples 2-23 to 2-26.
   3. Research and Experimentation Expenditures
      1. Businesses often invest in activities which will generate innovative products or improve their current products or processes.
         1. Includes expenditures for research laboratories including salaries, materials, and other related expenses.
   4. Patents and Copyrights
      1. The manner in which a business amortizes a patent or copyright depends on whether the business directly purchases the patent or copyright or whether itself-creates the intangibles.
      2. Work through the Example 2-27.
      3. Refer Exhibit 2-12 for Summary of Amortizable Assets.
      4. Businesses amortize all intangible assets in these categories using the straight-line method for both book and tax purposes.
   5. Amortizable Intangible Asset Summary
      1. Refer Exhibit 2-13 for Teton Form 4562, Part VI Amortization of Organizational Expenditures and Patent.
2. Depletion
   1. A method taxpayers use to recover their capital investment in natural resources.
   2. It is particularly significant deduction for business in mining, oil and gas and forestry industries
   3. Cost depletion involves estimating resource reserves and allocating a pro-rata share of basis based on the number of units extracted.
   4. Percentage depletion is determined by a statutory percentage of gross income that is permitted to be expensed each year. Different resources have different statutory percentages (i.e., gold, tin, coal).
   5. Taxpayers may expense the larger of cost or percentage depletion.
      1. Work through the Examples 2-28, 2-29, and 2-30.
      2. Refer Exhibit 2-14 for Applicable Percentage Depletion Rates.
3. Appendix A- MACRS Tables

**Ethics**

From page 2-6:



Discussion points:

* When converting assets from personal use to business use, the basis for business use will be the lesser of (1) the cost basis of the asset or (2) the fair market value on the date of conversion.
* The business basis is used to compute depreciation, gain or loss upon sale of the asset, and the character of any resulting gain or loss on the sale.
* Catherine may be trying to convert a nondeductible personal loss into a deductible business loss by choosing the better of the two appraisals for the assets.

### Class Activities

* **Tax Research:** Have students search for Revenue Procedure 87-56 and find the recovery period for some obscure assets. You can create a discussion around what the actual recovery period of certain assets should be.
* An interesting provision related to bonus depreciation is Section 168(k)(4). The provision was designed as a stimulus measure for NOL companies that could not take advantage of the current deductions provided by bonus depreciation. The provision provides an ability to cash out historic R&D and AMT credits in lieu of bonus depreciation. An interesting exercise is to have students locate the off-code provision contained in the history of this section (see also P.L. 12-289, §3081(b)). This provision was designed to provide Chrysler LLC with the same benefits that GM and Ford were to receive as C corporations under Section 168(k)(4).
* **Legislative Activity:** Senate Bill 844 (S 844) sponsored by Senators Bingaman and Grassley would significantly extend the recovery period for Public Private Partnership (P3) tangible and intangible assets. These deals sell publicly owned infrastructure to private investors who reap tax benefits from cost recovery of these assets. Should the public care whether these assets or public or private? Are the purchased assets primarily tangible and intangible?
* **Comprehensive problems.** Have students work in groups (three to five students) to complete Comprehensive Problem 75. Make yourself available to students to answer questions but try to get them to work together to answer resolve their questions. If time is short, skip part C.