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MANAGEMENT STRATEGIES FOR DEPRECIATING ASSETS ACQUIRED AFTER 1981

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The Economic Recovery Tax Act of 1981 revised the law for recovering (depreciating) the cost of depreciable assets. Taxpayers must now use either the accelerated method of cost recovery or one of three straightline methods to compute the annual depreciation for property acquired after 1980. Also, additional first year depreciation was replaced with first year election to expense. This allows taxpayers to list part of the cost as an annual expense rather than depreciate it. Persons owning businesses, including farmers, will, as a result, need to reassess and alter their tax management practices in accordance with these revisions.

To maximize tax benefits, taxpayers expecting to be in higher tax brackets in the future should not elect to expense the cost of depreciable property. In addition, those anticipating large increases in their taxable income would maximize value of their tax savings by using straightline rather than the accelerated cost recovery method. Persons expecting to be in a lower tax bracket in future years, however, should use the accelerated cost method and maximum expense election.

Cost Recovery

All depreciable property is categorized into one of four classes of property; 3-year, 5-year, 10-year or 15-year. Except for multi-purpose buildings such as those used for both grain and machinery storage, nearly all depreciable farm assets are either 3- or 5-year property. Cars, pick-up trucks, and breeding hogs are 3-year properties; other breeding livestock, machinery, equipment and single purpose agricultural buildings (e.g. grain bins) are classified as 5-year properties. These classifications are used regardless how long the taxpayer intends to own and use the asset.

For each class of property, the law specifies two permissible methods (accelerated cost recovery and straightline) and three time periods for recovering the cost of an asset (Table 1). The various methods affect the timing of the depreciation deduction rather than the total amount deducted. Once a taxpayer has selected a method, that method must be used for the entire recovery period for that asset and applies to all other assets of the same class purchased that same year. For example, a taxpayer must use the same method of cost recovery on a tractor, a herd sire, an irrigation system and a grain bin if all are placed in service the same year.

First Year Election To Expense

Additional first year depreciation was replaced with first year election to expense. This revision allows taxpayers to deduct the cost of an asset in the first year as long as the total of such deductions for 1982 or 1983 does not exceed \$5,000¹. Election to expense may be used, up to the limit, as the taxpayer chooses, applying all to one asset or using some on each of several assets placed in service that year.

TABLE 1. Permissible Methods and Time Periods For Cost Recovery of 3-year and 5-year Property

Property	
3-year	5-year
Accelerated Cost Recovery, 3 years	Accelerated Cost Recovery, 5 years
Straightline, 3 years	Straightline, 5 years
Straightline, 5 years	Straightline, 12 years
Straightline, 12 years	Straightline, 25 years

Unlike additional first year depreciation, the amount deductible under expense election is not limited to 20 percent of the asset. The entire cost of a low priced asset may now be deducted the first year.

Another difference between these two elections is their effect on investment credit. Investment credit is an amount by which taxpayers can reduce their tax liability as a result of purchasing depreciable property. The amount of investment credit is 10 percent of the cost of 5-year property and 6 percent of the cost of 3-year property.

Although additional first year depreciation did not change the amount of investment credit, election to expense does decrease it because any amount deducted under the election is not eligible for investment credit. Taxpayers must choose either (1) an immediate tax deduction by electing to expense or (2) more investment credit and greater annual cost recovery deductions in subsequent years by choosing not to expense the property.

In the past, many taxpayers gave little thought to whether they should use additional first year depreciation. They usually chose to use it and were often right in doing so. Taxpayers will not, however, always maximize their tax benefits by electing to expense the maximum amount allowed by the Economic Recovery Tax Act.

Management Strategies

Persons who acquired depreciable property after 1981 will need to select both a method of cost recovery and an amount of expense election for each asset. Generally, the goal of the taxpayer is to select the method and amount which maximizes value of tax savings resulting from buying and owning depreciable assets. One of the two methods with the shortest recovery periods will maximize the value of tax savings for both 3- and 5-year properties depending on the taxpayers' situation; that is, their current and projected tax brackets. Specifically, these methods are accelerated method and straightline for three years for 3-year property and accelerated method and straightline for five years for 5-year property. In addition, taxpayers should use either the maximum expense election or none at all, even

¹The limit will be \$7,500 for 1984 and 1985, and \$10,000 for 1986 and thereafter.

though any amount up to \$5,000 can be used. The value of tax savings will not be maximized by electing to expense an amount less than the limit if the election is used.

One of three combinations of cost recovery method and expense election will most often maximize value of tax savings. These combinations are (1) accelerated method with maximum expense election, (2) accelerated method with no expense election, and (3) straightline method with the shortest permissible recovery period and no expense election. The first combination recovers the cost of the asset most rapidly; the third combination is the slowest. Straightline method with maximum expense election is seldom the best strategy.

Factors to Consider

Key factors in identifying the best cost recovery method and amount of expense election are (1) the discount (interest) rate, (2) the number of years the property is expected to be owned and (3) the relationship between the taxpayer's current and future tax brackets.

The purpose of a discount rate is to adjust the value of tax savings realized in later years; that is, a dollar of tax savings this year is worth more than a dollar of tax savings next year. Discounting future tax savings is the means of incorporating the concept that a dollar received today is worth more than a dollar received in the future.

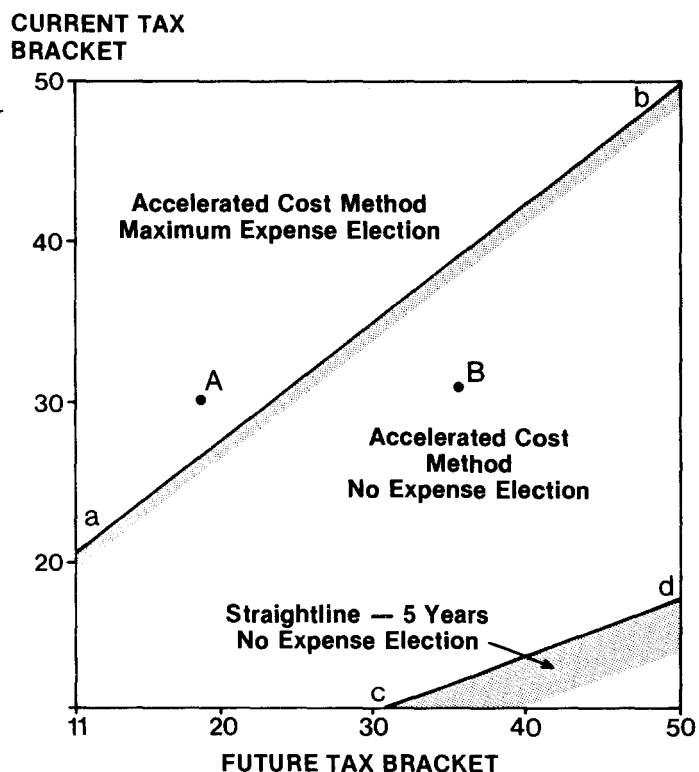
The second factor taxpayers must consider is whether they expect to dispose of the property early. Early disposition is trading or selling an asset within the period of time during which investment credit must be recaptured. Recapture of investment credit is having to pay (in the year the asset is disposed) some or all of the tax reduction due to investment credit taken the year the asset was acquired because the property was not owned for the period of time required by tax law. The required period of time is three years for 3-year property and five years for 5-year property. Early disposition by trading an asset for like-kind property, such as a tractor for a tractor or combine, will trigger recapture of investment credit; sale of the asset will trigger recapture of both investment credit and recovered cost (depreciation). Recapture of recovered cost requires some income that appears to qualify as long term capital gains be treated as ordinary income, increasing tax liability.

Taxpayers will need to estimate their current year's tax bracket as well as project their tax bracket for future years. These rates should reflect whether taxpayers anticipate their future bracket will be less than, equal to, or greater than their current bracket. A farm couple, for example, may estimate their current tax bracket to be 20 percent yet project a future tax bracket of 35 percent, which more closely represents their long term average. Projecting higher future tax brackets may be quite realistic in 1982 as a result of the depressed farm economy.

5-Year Property

Federal income tax rates range from 11 percent (12 percent in 1982) to 50 percent. Generally, taxpayers projecting a higher tax bracket for future years will maximize the value of tax savings by employing a combination of method and election which more slowly recovers the asset's cost. Figure 1 illustrates the appropriate management strategy for taxpayers who placed 5-year property in service during 1982 and anticipate owning it for at least five years. Using the example of a farm couple who are currently in the 30 percent tax bracket and project a future tax bracket of 20 percent (Point A — Figure 1), they should use the accelerated method but no expense election. However, should this couple expect their future marginal tax bracket to be 35 percent (Point B), they should use the accelerated method and the maximum expense election.

FIGURE 1. Management Strategies for 5-year Property and 12 Percent Discount Rate



A taxpayer whose situation lies within the shaded area should use the more rapid combination of cost recovery if a 14 percent discount rate is used rather than 12 percent.

Taxpayers can plot their own situations on Figure 1 by locating their current tax bracket on the vertical scale and then moving to the right to the point above their projected future tax bracket on the horizontal scale. The management strategy for the area in which the taxpayers' situation lies is their best

management strategy. For example, taxpayers whose situation lies above line ab should use the most rapid combination of cost recovery, that is, the accelerated method and maximum expense election. Taxpayers whose situation lies below line cd should use the slowest combination (straightline for five years and no expense election). Those whose situation lies between the two lines should use accelerated method but no expense election.

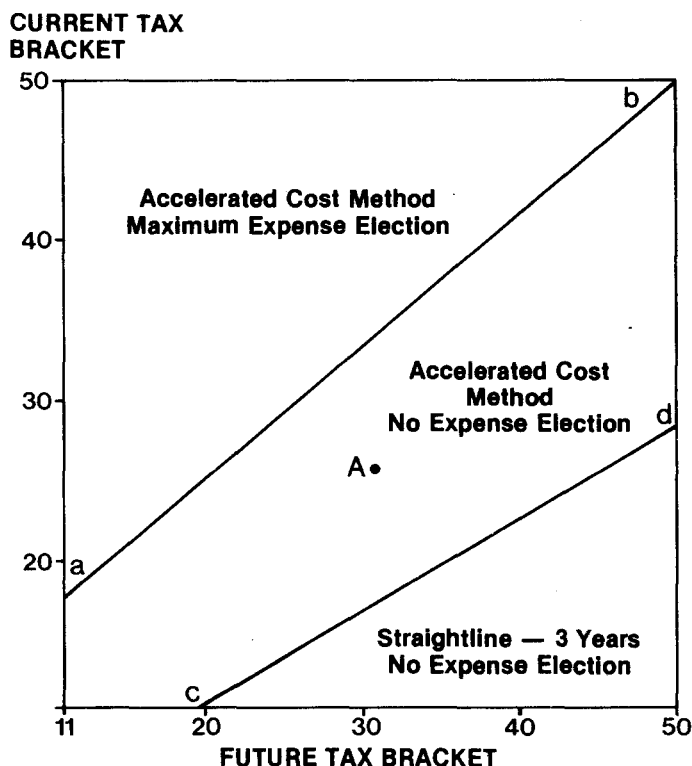
Although a 12 percent discount rate is used in these examples, the effect of using different discount rates must be considered. Higher discount rates shift the boundaries of the management areas down and to the right. For example, if a 14 percent discount rate is appropriate, taxpayers whose situation lies within the shaded areas (Figure 1) should use a more rapid combination of cost recovery. These taxpayers will use the accelerated method rather than straightline, or they will use maximum expense election rather than none depending on which shaded area they are in. On the other hand, a lower discount rate shifts the boundaries of the areas up and to the left. Taxpayers whose situations are immediately above the 12 percent line should use the slower combination of cost recovery if a discount rate of less than 12 percent is appropriate. The implication of varying the discount rate is similar for the remainder of this publication even though it is not illustrated.²

3-Year Property

Figure 2 illustrates the same combinations for 3-year property expected to be owned for more than three years. Again taxpayers can identify the appropriate strategy by plotting their current tax bracket on the vertical scale and the projected tax bracket on the horizontal scale. For example, taxpayers currently in the 25 percent bracket and expecting a future tax bracket of 30 percent would plot their situation as Point A between lines ab and cd on Figure 2. These taxpayers should use the accelerated method for 3-year property but no expense election.

These strategies are appropriate regardless of the number of assets of each class placed in service as long as none are expected to be disposed early. Taxpayers anticipating they will be in a lower tax bracket in future years and who acquired both 3- and 5-year properties may find that they should use the expense election on both classes of property. The best strategy in that case is to deduct the maximum amount from the 3-year property and only then, if some remains, apply it to the 5-year property. This is due primarily to the higher rate of investment credit

FIGURE 2. Management Strategies for 3-year Property and 12 Percent Discount Rate



for 5-year property; that is, electing to expense 5-year property reduces the amount of investment credit more than if the same expense election is applied to 3-year property.

Trading For Like-Kind Property

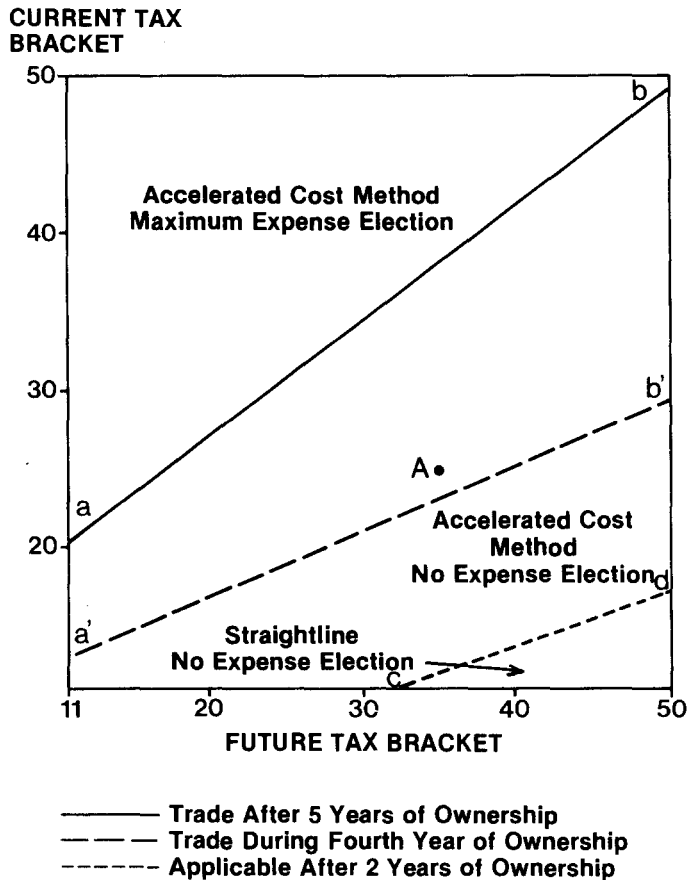
Taxpayers intending to trade an asset early will maximize value of tax savings by using a more rapid method of cost recovery. The position of the lines on the graph is different for each year the property is expected to be owned before it is traded. For example, 5-year property expected to be traded after five years of ownership will use the original line (line ab in Figure 3) to identify the appropriate management strategy. However, if the property is expected to be traded during the fourth year of ownership, the line is farther to the right and lower (line a'b' in Figure 3) increasing the use of the most rapid combination (that is, accelerated cost method with expense election).

A farmer acquiring a combine in 1982 and expecting to replace it in three or four years is an example of early disposition by trading. If this farmer has a current tax rate of 25 percent and anticipates a future tax rate of 35 percent (point A in Figure 3), the value of tax savings will be maximized by using the accelerated method plus the maximum expense election. However, should the farmer decide that the combine will be owned at least five years, the

²For more information on the implications of varying the discount rate, see Agricultural Economics Miscellaneous Report No. 62, "Tax Management Strategies for Depreciable Assets Acquired During 1982 and After."

original line (line ab in Figure 3) should be used to identify the appropriate management strategy and for this example, that would be the accelerated method but no expense election.

FIGURE 3. Tax Management Strategies for 5-year Property Expected to be Disposed Early by Trade with a 12 Percent Discount Rate

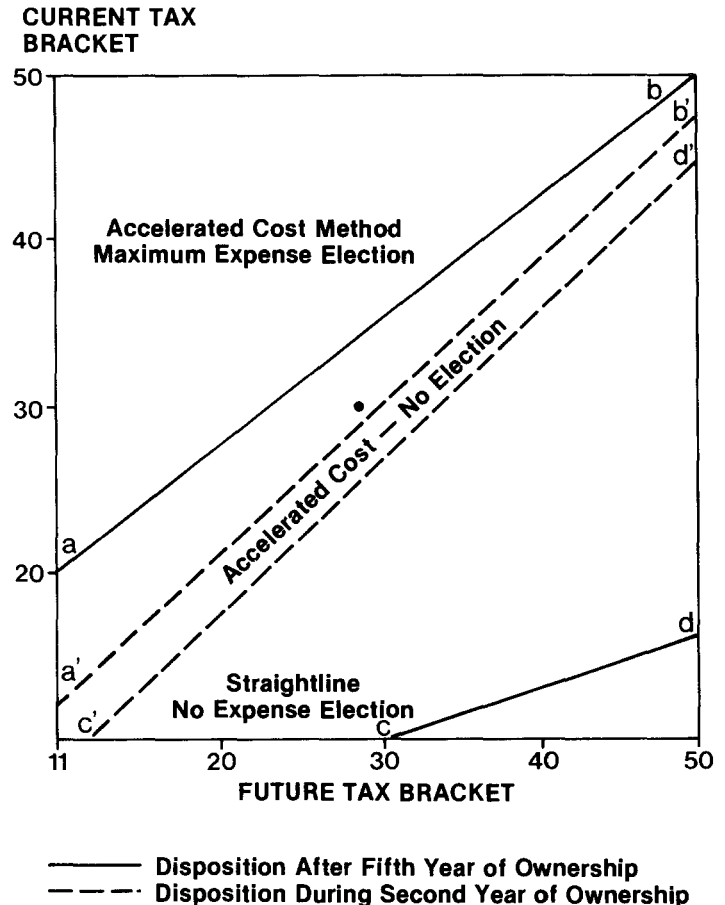


Sale of Asset

Expectation of an early sale of depreciable property, like early trading, shifts the line on the graph to a different position for each year the property is expected to be owned before it is sold (Figure 4 — line ab shifts to a'b' and line cd shifts to c'd'). Few taxpayers should use the accelerated method and no expense election if the asset is expected to be sold during the second year of ownership. Instead, most taxpayers will use either 1) the accelerated method and maximum expense election or 2) straightline method and no expense election, depending on their situation. For each additional year the asset will be owned, the lines (a'b' and c'd') shift towards the original positions (line ab and line cd) until the sixth year of ownership when there is no longer any difference.

For purposes of illustration, a herd sire will be used as an example of 5-year property that is com-

FIGURE 4. Management Strategies for 5-year Property; Full Term Ownership and Early Disposition Triggering Recapture of Investment Credit and Recovered Credit



monly disposed of by sale before it has been owned for five years. Farmer A (Figure 4) should use the maximum expense election and accelerated cost recovery method on a herd sire purchased during 1982 and expected to be sold within two years. However, he should use the accelerated cost method but no expense election if the sire is expected to be owned five years.

Table 2 summarizes for various tax brackets the strategies illustrated in figures 1 through 4.

The appropriate management strategy for a taxpayer's situation can be identified from one chart with a set of lines for each asset placed in service during the year. Some taxpayers will find two methods indicated for one property class when more than one asset of the same class is placed in service and one is expected to be sold early. Due to the law requiring the same method be used on all assets of the same class acquired that year, taxpayers should select the method that, when used on both assets, will maximize value of tax savings.

Information in this circular is based on Agricultural Economics Miscellaneous Report No. 62, "Tax Management

Table 2. Strategies for 3- and 5-year Properties for Various Ownership Periods and Tax Brackets.

		3-Year Property		5-Year Property					
		After 3 Years		After 5 Years		Trade During Fourth Year		Sale During Second Year	
Tax Rate		Method	Expense Election	Method	Expense Election	Method	Expense Election	Method	Expense Election
Current	Future								
50	50	AC3	0	AC5	5000	AC5	5000	AC5	5000
40	30	AC3	5000	AC5	5000	AC5	5000	AC5	5000
40	40	AC3	0	AC5	0	AC5	5000	AC5	5000
40	50	AC3	0	AC5	0	AC5	5000	AC5	0
30	30	AC3	0	AC5	0	AC5	5000	AC5	0
30	40	AC3	0	AC5	0	AC5	5000	SL5	0
30	50	AC3	0	AC5	0	AC5	5000	SL5*	0
20	11	AC3	5000	AC5	0	AC5	5000	AC5	5000
20	20	AC3	0	AC5	0	AC5	5000	AC5	0
20	30	AC3	0	AC5	0	AC5	0	SL5	0
20	40	SL3	0	AC5	0	AC5	0	SL5*	0

*Taxpayer could use 12 year straightline but if another 5-year property was placed in service, that same method would also have to be used on the second asset.

Key: Method

AC3 Accelerated cost method for 3 years
 SL3 Straightline method for 3 years
 AC5 Accelerated cost method for 5 years
 SL5 Straightline method for 5 years

Election

0 Do not use expense election
 5000 Use maximum expense election

Strategies For Depreciable Properties Acquired During 1982 And After," Agricultural Economics Department, North Dakota State University, Fargo, ND and COST-RECOVERY program on AGNET.

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