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TAX MANAGEMENT STRATEGIES FOR DEPRECIABLE ASSETS ACQUIRED DURING 1982 AND AFTER

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FOREWORD

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Highlights

Recent tax legislations render ineffective management strategies used in the past for determining the best method of depreciating assets. Taxpayers must now answer three questions the year depreciable property is acquired. The first question is: what amount of first year expense election should be applied toward the property? Second, which method of cost recovery should be used? Third, which rate should be used to compute investment credit?

Factors to consider when answering these questions are: (1) expected future tax bracket relative to current tax bracket, (2) the discount rate, and (3) the number of years the property is expected to be owned. Expectations of being in a lower tax bracket in future years or use of a high discount rate induce taxpayers to use a more rapid combination of cost recovery. Likewise, taxpayers need to adjust their management strategies if the property is expected to be disposed by either trade or sale and the disposition will trigger recapture of investment credit.

One of three combinations most often maximizes the present value of tax savings. These are: (1) accelerated method and maximum expense election, (2) accelerated method but no expense election, and (3) the shortest straightline method of cost recovery and no expense election. Which one is appropriate depends on the taxpayer's situation. Taxpayers, generally, should use the highest rate to compute investment credit; that is, 10 percent for 5-year property and 6 percent for 3-year property.

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Owners of businesses will notice a change in Tax Form 4562--Depreciation and Amortization--as they complete their 1982 federal income taxes. An additional section has been included in Part 1 (depreciation schedule) that requires the taxpayer to list depreciable properties acquired and placed in service during 1982 and to indicate the amount that should be deducted as election to expense. This election is first available for depreciable property placed in service during 1982 and is an additional opportunity for taxpayers to reduce taxes through management or another pitfall for the unwary.

Election to expense is one of numerous changes included in the Economic Recovery Tax Act of 1981 (ERTA) and replaces additional first year depreciation. This change as well as changes in depreciation (cost recovery) rules renders ineffective many strategies used by taxpayers in the past to manage depreciation. The specific changes necessitating a review of management strategies are: (1) election to expense, which unlike additional first year depreciation is not limited to 20 percent of the cost of the asset; (2) less flexibility in selecting a time period for recovering the cost of depreciable property; and (3) taxpayers are no longer required to account for salvage value. . This last change allows (requires) taxpayers to depreciate 100 percent of the cost of an asset.

The goal of tax management is to maximize after-tax income or, stated another way, to maximize after-tax purchasing power. Similarly, tax management strategies aim to minimize tax liability given a taxpayer's income. A corollary is to maximize the value of deductions which reduce tax liabilities. Therefore, taxpayers, in managing their taxes, attempt to maximize the present

value of tax savings which result from acquisition and ownership of depreciable property.

Depreciable assets produce tax savings over a period of several years--investment credit, expense election, and a cost recovery deduction the first year followed by cost recovery deductions for several years. The amount of each year's tax savings varies depending on the method of cost recovery used by the taxpayer. One method may produce a large tax savings the first year with smaller savings in future years whereas a second method will produce a smaller initial savings but larger savings during subsequent years. It is necessary to express all tax savings in a common measure to decide which method to use. That common measure is usually present value and is calculated by discounting future cash flows. This follows from the understanding that a dollar received today is worth more than a dollar received at a future time. Alternative flows of tax savings must be discounted to determine which method yields the greater value of tax savings.

Incorrect use of expense election and cost recovery can reduce present value of tax savings by as much as 10 percent of the basis of the asset. This report presents guidelines taxpayers should consider when selecting a method of cost recovery and an amount to expense the first year. Recent changes in tax legislation are first reviewed and then strategies for managing cost recovery after ERTA are examined.

Recent Legislation

The Economic Recovery Tax Act of 1981 revised the method of computing depreciation deduction and replaced additional first year depreciation with first year election to expense. The Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) changed investment credit and provides taxpayers a choice in utilizing the provision. Even though these three provisions specify limits and

rules to be followed in their implementation, taypayers must still select (1) a method of depreciation, (2) the amount to be deducted by use of the expense election for assets placed in service after January 1, 1982, and (3) the rate of investment credit for assets placed in service after January 1, 1983.

Accelerated Cost Recovery System

Prior to 1981, taxpayers were permitted to use one of several methods to compute annual depreciation allowance. All of these methods involved estimating the useful life of an asset and its salvage value which were in turn, used to compute the annual deduction. Taxpayers could benefit themselves by estimating reasonable but advantageous values.

Estimates are no longer used. Instead, all tangible personal depreciable assets are classified as either 3-year or 5-year property. Cars, pick-up trucks, and breeding hogs are 3-year property whereas other breeding livestock, machinery, equipment, and single purpose agricultural buildings (e.g., grain bins) are classified as 5-year property. These classifications are used regardless how long the taxpayer intends to own and use the asset. Except for multi-purpose buildings, nearly all depreciable farm assets are either 3- or 5-year property.

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

TABLE 1. PERMISSIBLE METHODS AND TIME PERIODS FOR COST RECOVERY OF 3-YEAR AND 5-YEAR PROPERTY

Property Class	
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

SOURCE: Internal Revenue Code, § 168.

The requirement of having to use the same method coupled with elimination of salvage value causes a problem for some taxpayers. In the past, when taxpayers expected that they would sell an asset for nearly as much as the purchase price (e.g., herd sire) they could establish a high salvage value and thus avoid recapture of depreciation.[1] This decision would not affect how they depreciated another asset placed in service the same year (e.g., a tractor). For the second asset, they could establish a salvage value and use a method of depreciation that best met their needs; possibly a method that accelerated depreciation. After ERTA, the only strategy taxpayers can employ to minimize potential recapture is to select a slower method of cost recovery. But that decision will also apply to all other assets of the same class placed in service the same year. As a result, taxpayers must consider the effect their decision will have on both assets (the herd sire and the tractor) rather than addressing each asset individually. In this situation, they will be forced to decide whether it is to their advantage to delay the tax savings which follow acquisition of the tractor and minimize recapture on the sire or to take greater tax savings but face the potential of more recapture.

[1]Recapture of recovered cost (depreciation) requires some income from the sale of depreciable property to be treated as ordinary income which increases tax liability even though the income appears to qualify for long term capital gains.

First Year Election to Expense

Additional first year depreciation was replaced with first year election to expense. The purpose of both options is to increase the value of tax savings by allowing more rapid deduction of the cost of depreciable assets. The amount deductible under the former provision was limited to 20 percent of the asset's cost and could not exceed $2,000 annually for each taxpayer ($4,000 for married couples filing joint returns). Computing the deduction as a percent of cost prevented taxpayers from deducting, under the election, the entire cost of small assets.

Election to expense does not use percent computation. Instead, a taxpayer may deduct in the first year the cost of an asset[2] as long as the total of such deductions for 1982 or 1983 does not exceed $5,000.[3] Expense election may be used, up to the limit, as the taxpayer chooses, applying it all to one asset or using some on each of several assets placed in service that year. Accordingly, the entire amount of low cost assets can be deducted the first year and taxpayers are required to maintain an accurate record of how expense election is used.

Another difference between these two elections is their effect on investment credit. Use of additional first year depreciation did not change the amount of investment credit available for the asset. To the contrary, election to expense decreases the amount of investment credit because any amount deducted under the election is not eligible for the credit. Taxpayers must now choose either 1) an immediate tax deduction or 2) more investment credit coupled with greater annual cost recovery deductions in subsequent

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[2]For tax purposes, cost of a new asset is its basis whereas cost of a used asset is the amount of cash paid.

[3]The limit increases to $7,500 for 1984 and 1985, and to $10,000 for 1986 and thereafter.

years. Even though 1982 is the second year taxpayers will use accelerated cost recovery system, it is the first time both cost recovery and first year election to expense are available.

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. After ERTA, taxpayers will not always maximize their tax benefits by electing to expense the maximum amount allowed. There are situations, as will be explained later, where a decision not to use expense election will maximize present value of tax savings.

Investment Credit Rules

Most 3- and 5-year properties qualify for investment credit at a rate of 6 percent of the cost of an asset for 3-year property and 10 percent for 5-year property. In the past, the amount of investment credit did not affect the basis of the asset. However, TEFRA amended this provision to require the basis of an asset placed in service after 1982 to be reduced by one-half the amount claimed as investment credit. This reduction applies in calculating the amount to be deducted as recovered costs and the adjusted basis when the asset is disposed. This amount will also be subject to recapture thus increasing the amount of ordinary income on which tax must be paid if and when the asset is sold for more than its adjusted basis. Conversely, the basis of the asset will be increased by one-half the amount of investment credit recaptured due to early disposition.

If this would have been the only change, taxpayers would not need to re-evaluate their management strategies. However, Congress included an alternative forcing taxpayers to decide which rate of investment credit to use. Rather than using the full investment credit rate and reducing the unadjusted basis, taxpayers will not be required to reduce the unadjusted basis if they

use a 2 percent lower investment credit rate; that is, 4 percent rate of investment credit for 3-year property and 8 percent for 5-year property.

These changes in investment credit apply to property acquired after 1982. Therefore, tax management strategies for assets placed in service during 1982 will be discussed first. Changes which will be in effect for 1983 will then be addressed. This allows development of strategies to use for 1982 which (as will be shown) will continue to be valid in later years notwithstanding TEFRA.

Identifying Important Considerations

The goal of taxpayers when deciding how to utilize election to expense and cost recovery is assumed to be to maximize present value of tax savings resulting from acquisition and ownership of depreciable property. It is also assumed that it is the end of the tax year, the depreciable property has already been acquired and placed in service, most facts are known or can be readily and accurately predicted, and remaining questions are: (1) which method of cost recovery should be used and (2) how much of the cost of the asset should be expensed by use of the election.

Present Value of Tax Savings

To calculate present value of tax savings it is necessary to know (1) the class of the property (which determines rate of investment credit and permissible methods), (2) its basis, (3) the year it was placed in service (determines the maximum amount that can be expensed), (4) the taxpayer's income tax bracket for the current year, (5) projected tax bracket for future years, (6) discount rate, (7) amount of first year expense election, and (8) method of cost recovery (determines schedule of specified percentages).

The basis of the asset, whether it is new or used and whether a trade of like-kind property was involved in the acquisition all affect present value

of tax savings. None of these, as well as property class or the year the asset is placed in service, however, affect the decision of which method or how much expense election should be used. The key factors in answering these questions are (1) the relation between the taxpayer's current and projected tax brackets and (2) the discount rate.

Marginal Tax Rate

Federal income tax rates range from 11 percent (12 percent in 1982) to 50 percent and a tax rate must be specified for each year of the cost recovery period. The assumption of a constant marginal tax rate for future years eliminates the difficulty of predicting a specific rate for several years into the future. One way to estimate a future tax rate is to adjust the average tax rate for the past several years. These adjustments should take into account any long term trend up or down in taxable income, inflation and changes in tax law.[4]

The opportunity to specify a different rate for future years permits a more accurate description of the current year. If the current year is average, the two rates should be equal, whereas if the current year is better than average, the projected tax bracket should be less than current tax bracket. In fact, the exact rates are not as important as the relationship between current and future marginal tax rate.

Taxpayers should be able to estimate marginal tax rate for the current year if it is (as stated in the assumptions) the end of the tax year. However, use of first year election to expense can lower the marginal tax rate for that year. The impact of this reduction can be more easily explained later; but for now, it will be assumed that use of expense election does not affect current tax rate.

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[4]Economic Recovery Tax Act will reduce rates in 1983 and implement indexing of tax brackets after 1984; both have the effect of offsetting the impact of inflation.

Discount Rate

Selecting a discount rate[5] is not easy. There is no one correct discount rate and there is little agreement among professionals, including economists, on which rate to use. Some suggest the discount rate should be equal to the real interest rate; that is, the interest rate that would prevail if inflation was nonexistent. Others suggest using the nominal interest rate; that is, the rate charged by financial institutions for loans. A third school of thought suggests using the after-tax nominal rate; that is, the nominal rate reduced by the taxpayer's tax bracket. For example, the discount rate for someone using this third approach assuming 16 percent bank interest rate and 25 percent tax bracket would be 12 percent (16 percent - (25 percent x 16 percent)).

An implicit assumption, when using a real interest rate, is that all future cash flows are equally affected by inflation, an invalid assumption in this case because annual depreciation deduction will not increase with inflation. The third approach is better than the second because it takes taxes into account. Income will either be used to reduce debt which, in turn, reduces interest charges, or invested and earn interest. In either situation, tax liability is increased; thus the nominal rate must be adjusted according to taxpayers' tax rate. Another estimate of after-tax nominal interest rate is the market interest rate on obligations with tax-exempt earnings; e.g., municipal bonds. The first examples illustrate several discount rates; however, a 12 percent discount rate will be used for the remainder of the report.

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[5]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.

Management Strategies

First Year Expense Election

Taxpayers will maximize present value of tax savings by using either the maximum expense election or none at all. In some situations, taxpayers should use the maximum election whereas they should not use the expense election in others. However, in no instance will taxpayers maximize present value of tax savings by electing to expense an amount other than the maximum or none. Therefore, taxpayers will use either the maximum amount permitted ($5,000 in 1982 and 1983) or none.

Figure 1 illustrates, using an example of 5-year property and accelerated cost recovery method, the combinations of current tax rate and future tax rates for three discount rates (4 percent, 12 percent, and 16 percent) where present value of tax savings is equal regardless of the amount expensed. These lines are referred to as critical lines. Taxpayers will use the maximum election if their situation is above and left of the critical line but will not use the election if below the line.

The main diagonal line (45°) represents a constant income tax bracket. A taxpayer will need to be in a lower marginal tax bracket in future years relative to the current year in order to justify use of the election if a 4 percent discount rate is used. For example, a taxpayer with a current marginal tax rate of 35 percent will need to drop below 26 percent in the future in order to justify use of the election. Use of higher discount rates reduces the amount of decrease needed in order to justify use of the election. In fact, taxpayers in high tax brackets (39 percent or higher) who use 16 percent discount can actually justify use of the election even if their future marginal tax rate is slightly greater than their current rate.

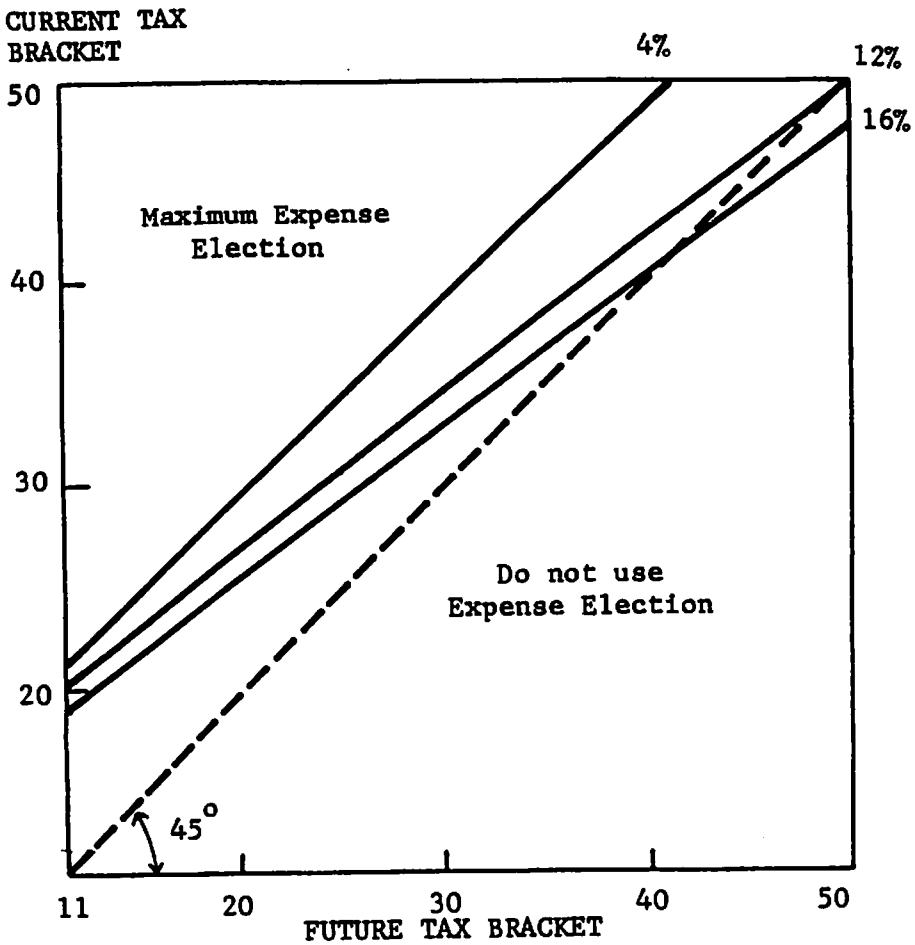


Figure 1. Expense Election Management Strategies for 5-Year Property Using Accelerated Cost Recovery Method and Selected Discount Rates

It is now possible to explain the effect that use of the election has on current tax rate. Use of the election reduces taxable income which in turn can have no effect on the taxpayer's current tax rate or reduce it as much as 6 percent, depending on which tax bracket and how close to the bottom of that bracket a taxpayer is. The critical line can be adjusted by simply shifting it up by the amount the marginal tax rate will be reduced by use of the election. Taxpayers immediately above the original critical line are actually below the adjusted critical line and should not use the election. Due to the variability

of effect on marginal tax rate, it will be assumed for the remainder of this report that use of the election does not alter the current tax rate.

Method of Cost Recovery

Critical lines can also be drawn for combinations of current and future marginal tax rates where present value of tax savings is equal whether the cost recovery method is straightline or accelerated. Figure 2 illustrates (for various discount rates) which method is appropriate assuming 5-year property, and no use of expense election.

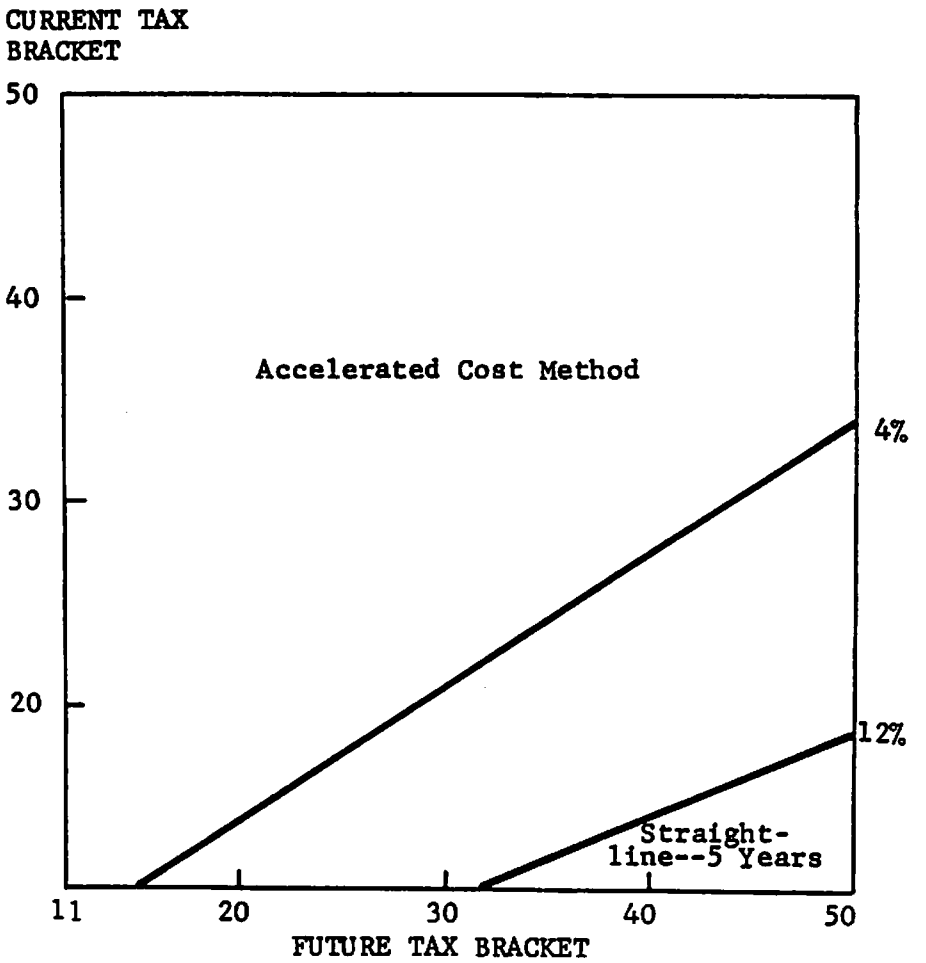


Figure 2. Appropriate Method of Cost Recovery for 5-Year Property, No Expense Election and Various Discount Rates

Taxpayers should use the accelerated method if their situation is above and left of the critical line but should use straightline for 5 years if their situation is below the line. With 12 percent discount rate, only persons expecting substantial increase in their marginal tax rate (tax bracket) should use straightline. However, two conditions could change this. First, a lower discount rate due to reduced interest rates means the appropriate after-tax discount rate could be less than 12 percent. Accordingly, the critical line would be above and left of the 12 percent critical line in Figure 2 increasing the number of combinations of current and future tax rates where present value of tax savings is maximized by using the straightline method. The second condition is the current agriculture situation of low farm income (low current tax bracket) and expectations of higher level of taxable income in future years. These two factors may increase the number of taxpayers who should use straightline.

One 5-Year Asset

The appropriate method and amount of expense election for 12 percent discount can be identified from one graph with both critical lines (Figure 3). To demonstrate the use of this figure, assume five farmers (A, B, C, D, E), each in a different tax situation, purchased a $35,000 tractor during 1982. Farmer A is currently in a high tax bracket (35 percent), expecting to be in a lower bracket (25 percent) in the future. Accelerated cost method and maximum election will maximize present value of tax savings for Farmer A. Farmers B, C, and D should also use accelerated cost method but not the expense election. Farmer E, expecting a substantial increase in tax bracket (from current bracket of 15 percent to 45 percent), should use the straightline method for 5 years and no expense election to postpone the tax savings to future years when they will be more beneficial. The straightline method with the maximum

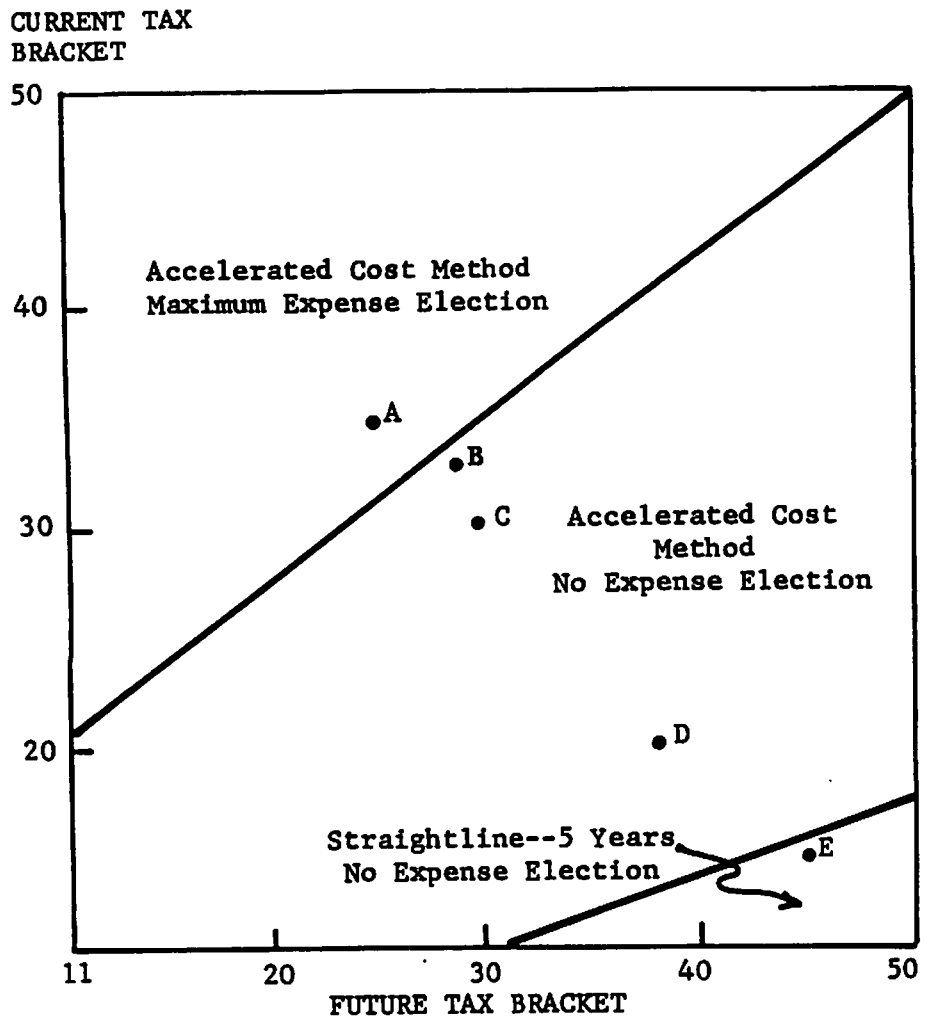


Figure 3. Management Strategies for 5-Year Property Using a 12 Percent Discount Rate

expense election does not maximize present value of tax savings when one asset is placed in service.

One 3-Year Asset

Critical lines for 3-year property at 12 percent discount rate are illustrated in Figure 4. Assume the same farmers purchased a pick-up truck for $4,500 during 1982. For this asset, A and B should use accelerated method and maximum expense election. Farmer C will maximize present value of tax savings by using the accelerated method but no expense election. Farmers

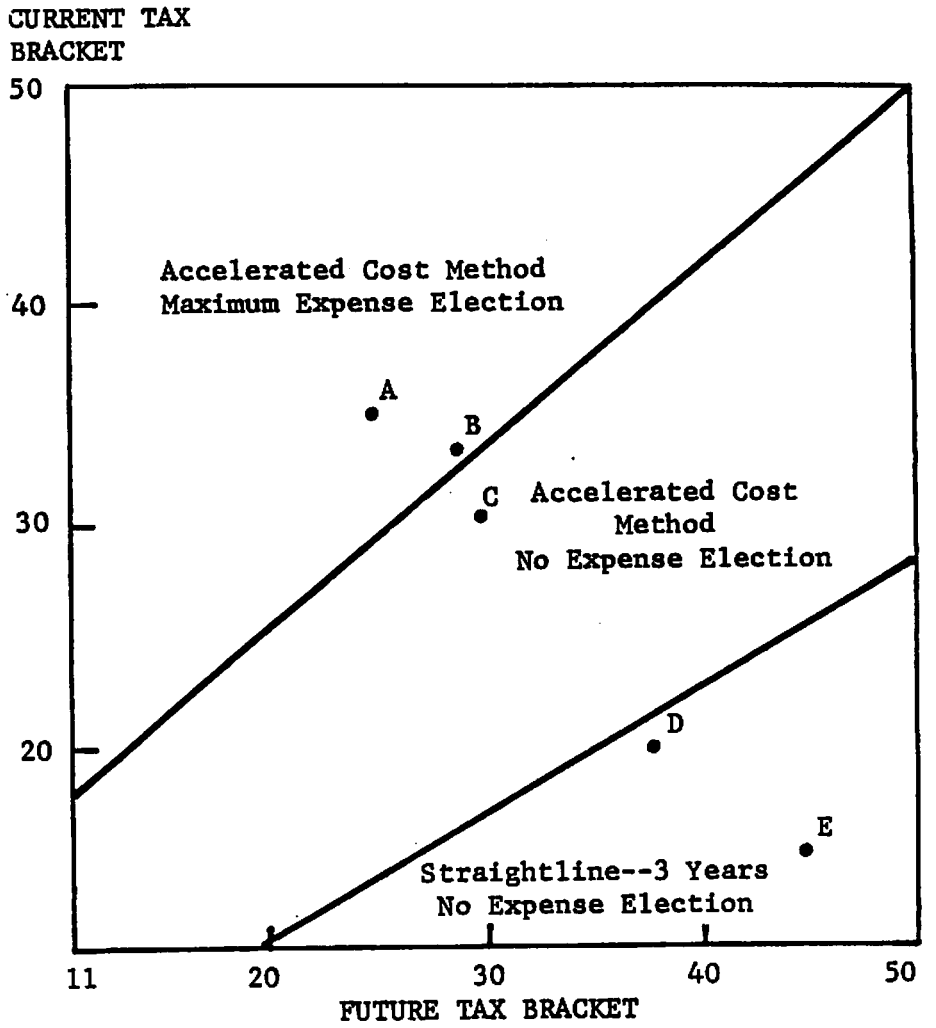


Figure 4. Management Strategies for 3-Year Property Using a 12 Percent Discount Rate

D and E should use straightline method for 3 years and no expense election. Again, the straightline method with maximum expense election will not maximize present value of tax savings if only one asset of each class is placed in service during the year.

A and B, by expensing the maximum amount, will deduct the entire cost of the truck the first year. They will not receive any investment credit nor be allowed a depreciation deduction in future years. Both taxpayers have the option of using the remaining $500 ($5,000 - $4,500) expense allowance on another asset placed in service the same year.

Several Assets in One Class

Critical lines will identify the proper management strategy regardless of the number of assets placed in service during the year provided the taxpayer does not dispose of them early. Different lines must be used if the taxpayer anticipates early disposition by either trade or sale. Implications of early disposition will be discussed after further explanation of strategies to use on assets expected to be held full term.

Taxpayers should use the same strategy on each asset if more than one asset of the same property class is placed in service during the year. This rule is valid with respect to both method and expense election. If the strategy includes use of expense election, the owner can expense one asset or split the allowance among several acquired that year. The exact use can vary in this situation as long as the maximum amount is expensed. For example, if Farmer A (Figure 3) purchased a tractor and a combine (both 5-year property) during 1982, expense election could be deducted from the cost of either or both assets as long as the total expense election deduction does not exceed the $5,000 limit.

One Asset in Each Class

Critical lines will also identify appropriate strategies if an asset of each class is placed in service during the year. A different method of cost recovery will be used for each property class. Expense election, if it should be used, will be first applied towards 3-year property and only if some remains, will 5-year property be expensed. This is primarily due to the higher rate of investment credit 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 was applied to 3-year property. This application can be clarified with an example.

Assume five farmers each purchased a tractor (5-year property) and a pick-up truck (3-year property) and these were the only depreciable assets acquired during 1982 (Table 2). Figure 5 illustrates the critical lines for

TABLE 2. COST RECOVERY METHOD AND EXPENSE ELECTION USE WHEN TAXPAYER PLACES BOTH 3- AND 5-YEAR PROPERTIES IN SERVICE DURING 1982 FOR VARIOUS TAX RATES AND 12 PERCENT DISCOUNT RATE

	Current Tax Rate	Future Tax Rate	3-Year Property		5-Year Property	
			Method	Expense Election	Method	Expense Election
A	35	25	Accelerated	Maximum	Accelerated	Remainder
B	33	29	Accelerated	Maximum	Accelerated	Do Not Use
C	30	30	Accelerated	Do Not Use	Accelerated	Do Not Use
D	20	38	Straightline	Do Not Use	Accelerated	Do Not Use
E	15	45	Straightline	Do Not Use	Straightline	Do Not Use

both property classes using a 12 percent discount rate. Farmer E would use the shortest permissible straightline method on each asset and no expense election on either. The method for the tractor should be straightline for 5 years whereas straightline for 3 years will maximize value of tax savings on the pick-up truck.

Farmer D would maximize value of tax savings by using straightline for 3 years on the pick-up and accelerated cost method for the tractor. Farmer C should use the respective accelerated method for each property class; that is, accelerated method for 5 years on the tractor and accelerated method for 3 years on the pick-up truck. Neither C nor D should elect to expense any of the cost of their assets.

Farmer B should also use the respective accelerated methods but, in addition, expense the maximum amount on the pick-up. Use of the election will recover the entire cost of the pick-up and it will not be listed on the depreciation schedule for subsequent tax returns. If the cost of the pick-up

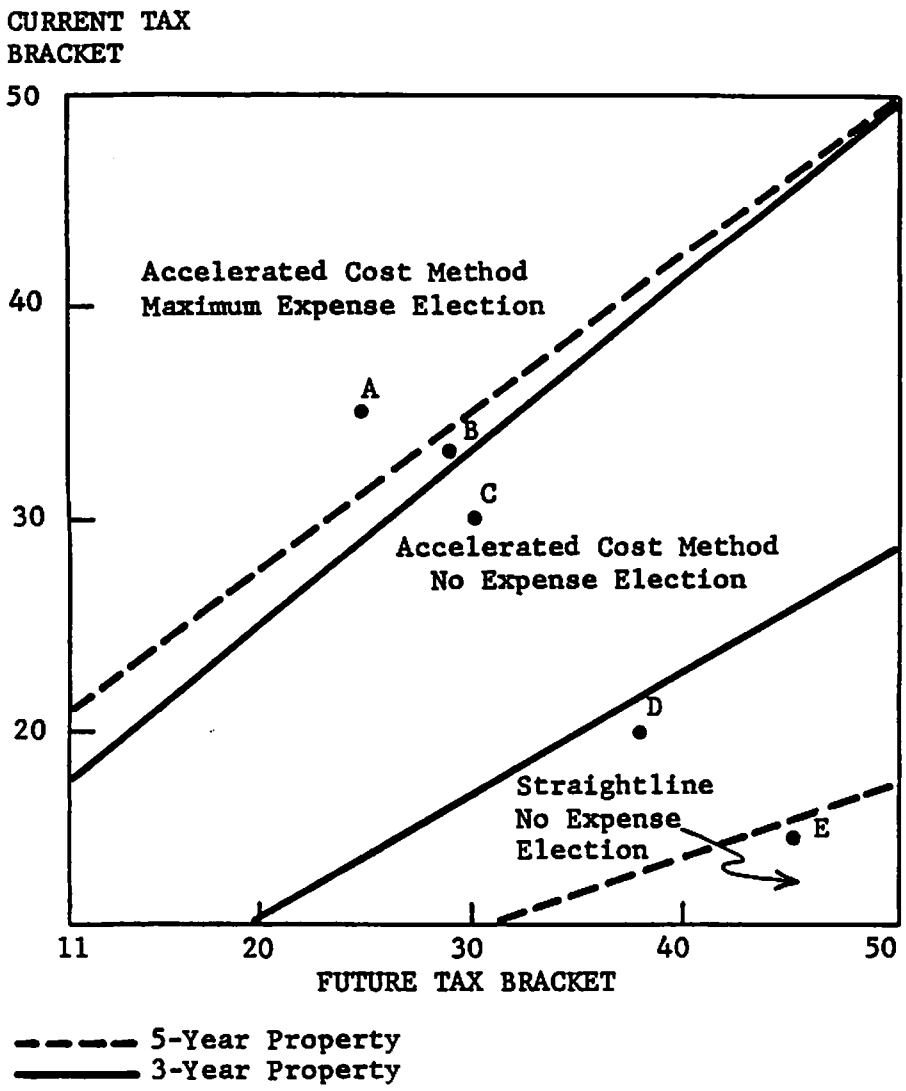


Figure 5. Strategies when Properties of Both Classes are Placed in Service Assuming a 12 Percent Discount Rate

had been more than $5,000, the amount above the maximum expense election would be recovered in subsequent years using the accelerated method. Farmer B has, in this example, $500 expense election remaining for 1982. This remainder will not be used because the critical line for 5-year property indicates that Farmer B should use the accelerated method but no expense election on the tractor.

Farmer A's situation is above and left of all critical lines, indicating that the accelerated methods and maximum expense election should be used for

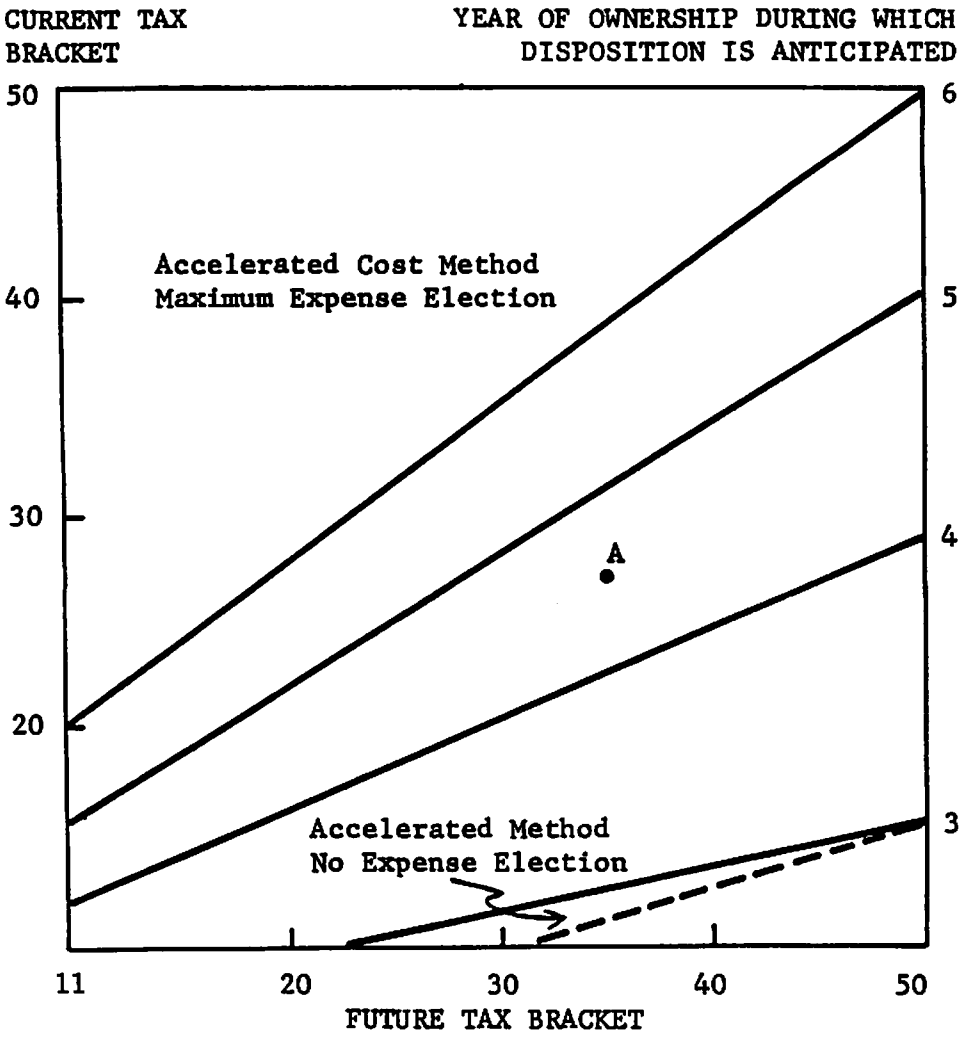
both assets. This situation, however, is different than the one where the taxpayer acquired two assets of the same class. The taxpayer, in that situation, could use the expense election on either asset or some on each. However, when assets of each class are placed in service, the owner will maximize value of tax savings by first expensing the cost of the 3-year property and only then use any remaining expense election on 5-year property. Farmer A should expense the entire cost of the pick-up and $500 on the tractor.

Early Disposition

Discussion to this point has assumed the property will be owned by the taxpayer for a full term; that is, until the time when trade or sale of the asset will not trigger recapture of investment credit. Different strategies, however, must be followed when the asset is expected to be disposed early. More specifically, early disposition includes trading or selling an asset before it has been owned by the taxpayer for three years for 3-year property or five years for 5-year property. The remainder of this report discusses management strategies for taxpayers anticipating early disposition by trade or sale.

Trading for Like-kind Property

Taxpayers intending to trade an asset early will maximize present value of tax savings by using a more rapid method of cost recovery. A different critical line is used for each year until the asset has been held long enough so that its disposition will not trigger recapture of investment credit (Figure 6). A farmer acquiring a combine in 1982 expecting to trade it for a different one three years later is one 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 6), value of tax savings will be maximized by



– – – – Distinguishes accelerated method and straightline method both without expense election. This line is of no consequence unless the taxpayer intends to own the asset more than two years.

Figure 6. Management Strategy When Anticipating Early Disposition of 5-Year Property by Trade During Various Years of Ownership and 12 Percent Discount Rate

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 original critical line should be used to identify the appropriate management strategy; for this example, that would be the accelerated method but

no expense election. The accelerated method and maximum expense election should be used by all taxpayers intending to trade the property within two years of acquisition.[6] The dramatic shifts in the critical lines from the original position means anticipated early disposition by trade will influence management strategies for many taxpayers.

The critical line which distinguishes between accelerated method with no expense election and straightline method with no expense election (broken line in Figure 6) is not altered if the trade is expected to occur after two years of ownership. In that case, some taxpayers with a low marginal tax rate for the current year but expecting to be in a substantially higher tax bracket in future years will maximize value of tax savings by using straightline method without the expense election. Consequently, few taxpayers will use accelerated method and no expense election if disposition is expected during the third year of ownership.

Sale of Asset

Selling a depreciable asset can trigger recapture of both investment credit and recovered cost, shifting both critical lines and altering management strategies for some taxpayers (Figure 7). Few taxpayers will use the accelerated method and no expense election if the sale is expected to occur during the second year of ownership. Most taxpayers, instead, 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 critical lines shift approximately an equal proportion towards the original line until the sixth year of ownership when there is no longer any difference.

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[6]The critical line for 5-year property expected to be traded within two years lies below the 11 percent tax bracket.

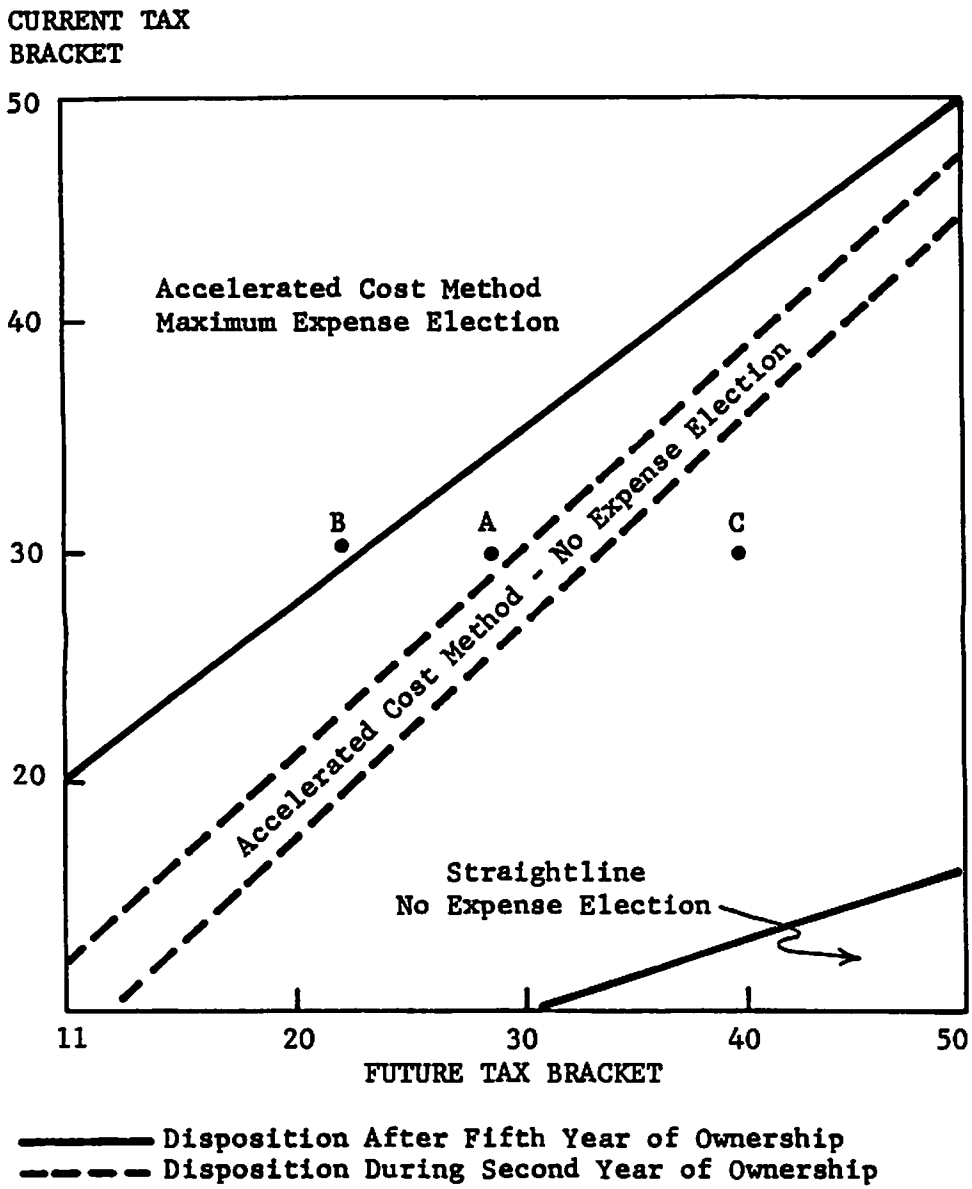

Figure 7. Strategies for 5-Year Property; Full Term Ownership and Early Disposition Triggering Recapture of Investment Credit and Recovered Cost (12 Percent Discount Rate)

For purposes of illustration, a herd sire will be used as an example of 5-year property that is commonly disposed of by sale before it has been owned for five years. Farmer A (Figure 7) 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.

Several Assets in One Class with One to be Sold Early

Appropriate managment strategies can also be identifed for two assets of the same class placed in service the same year with one asset expected to be disposed of early. Figure 7 illustrates the two sets of critical lines a taxpayer would use if two 5-year properties are placed in service; one expected to be held full-term, the other to be sold after one year. For example, assume the two properties are (1) a tractor with a basis of $35,000 expected to be held full-term and (2) a herd sire purchased for $4,200 and expected to be sold after one year. Also assume three farmers (A, B, and C) each completed these purchases and that each is currently in a 30 percent tax bracket (Table 3).

TABLE 3. COST RECOVERY METHOD AND EXPENSE ELECTION USE FOR TAXPAYER WHO PLACES TWO 5-YEAR PROPERTIES IN SERVICE DURING 1982; ONE ASSET EXPECTED TO BE HELD FULL-TERM, THE OTHER ASSET EXPECTED TO BE SOLD AFTER ONE YEAR (12 PERCENT DISCOUNT RATE)

	Current Tax Rate	Future Tax Rate	Full-Term		Sold After One Year	
			Method	Expense Election	Method	Expense Election
A	30	28	Accelerated	Do Not Use	Accelerated	Maximum
B	30	20	Accelerated	Remainder	Accelerated	Maximum
C*	30	40	Accelerated	Do Not Use	Straightline	Do Not Use

*The same method of cost recovery must be used on all assets of the same class placed in service the same year; therefore, a taxpayer must decide which of the indicated methods will maximize present value of tax savings for the class of property.

Farmer A, however, expects to be in a slightly lower tax bracket in the future; Farmer B anticipates a more substantial decrease in his rate while Farmer C expects to be in a higher tax bracket in future years.

Farmer A will use the accelerated method on both assets but the expense election on only the sire. Although $800 ($5,000 - $4,200) of the expense election remains, Farmer A should not use it on the tractor.

Farmer B, like Farmer A, will use the accelerated method on both assets and the maximum expense election on the sire but in addition will also use the remaining $800 expense election on the tractor. A taxpayer in this situation could use the expense election on either asset; nevertheless, when two assets of the same class are placed in service and one asset is expected to be disposed early by sale, the owner will maximize present value of tax savings by expensing the maximum amount on the asset expected to be sold early. The taxpayer should elect to expense the asset expected to be held full-term only if some expense election remains after expensing the asset expected to be sold early.

The appropriate strategy for Farmer C is less obvious. Critical lines for both assets indicate that the expense election should not be used. In addition, the lines specify the accelerated method for the tractor and straightline method for the sire. The statuatory requirement that the same method be used on all assets of the same class placed in service the same year, however, forces the taxpayer to select one method. Taxpayers faced with this problem should consider two factors in choosing a method. The first factor is the basis of each asset. The method indicated for the asset with the larger basis is a better choice than the method indicated for the asset with the smaller basis. Second, the method indicated for the asset of the critical line which lies further from the taxpayer's situation is the better choice. In this example, the tractor has a larger basis and the critical line distinguishing between accelerated method and straightline method for the tractor is further from the taxpayer's situation (point C) than the corresponding line for the sire. Both criteria in this case suggest the taxpayer should use accelerated method.

In situations where these two criteria suggest different methods, the best procedure is to compute the present value of tax savings for both assets

using the two methods. The cost recovery method that yields the greatest present value is the appropriate strategy. Unfortunately, these computations are complex.[7]

Tax Management for Years After 1982

Recent tax legislation includes changes which will not be effective until tax years beginning after 1982. One such change (contained in ERTA) was to encourage business investments by accelerating the rate for recovering the cost of assets.[8] These increased specified percentages have been repealed by TEFRA. Specified percentages (as well as tax management strategies) for 1981-1984 will continue to be used after 1984 unless Congress again changes the law.

A second change scheduled to take affect in future years increases the maximum amount that may be expensed by using first year election. The maximum is $5,000 for 1982 and 1983; up from zero for 1981. This limit will again be increased to $7,500 for assets placed in service during 1984 and 1985. A final increase is scheduled for 1986 when the limit will reach $10,000. This change, however, will not affect any critical lines. Under present law, taxpayers will continue to use either none of the election or the maximum amount regardless of the limit.

As discussed above, taxpayers will be required, for assets placed in service after 1982, to reduce the basis by one-half the amount claimed as investment credit or use a lower rate in computing the credit. Few taxpayers

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[7]Taxpayers in this one situation where it is so difficult to identify the best strategy should be reassured that regardless of which method they select, they have done their best and the effect on their taxes should be minimal.

[8]For assets placed in service during 1985, the specified percentages were to reflect 175 percent declining balance rather than the specified percentages to be used for tax years 1981 through 1984 which reflect 150 percent declining balance. For assets placed in service after 1985, the percentage rates were to be based on 200 percent declining balance.

expecting to own a depreciable asset until all its cost is recovered will benefit by using the lower rate for computing investment credit. Unless present statutes are amended, management strategies which maximize present value of tax savings for assets placed in service during 1982 will also be appropriate in future years even though the law is scheduled to change.

Summary

One of three combinations of cost recovery method and expense election will most often maximize present value of tax savings due to ownership of depreciable property. These combinations are (1) accelerated method with maximum expense election, (2) accelerated method with no expense election, and (3) straightline method with shortest permissible recovery period with no expense election. The combination a taxpayer will select depends primarily on the marginal tax rate for the year the asset is placed in service relative to projected marginal tax rate for future years. Expectation of a higher tax rate in future years, high discount rates, or expectation of trading the asset for like-kind property before all cost is recovered will induce taxpayers to use combinations which accelerate realization of tax savings. Anticipation of early sale leads taxpayers to use either the accelerated method with maximum expense election or the straightline method with no expense election.

Strategies which maximize present value of tax savings will not be affected by changes in the law scheduled to occur after 1982. Limits on the amount that can be deducted will not alter the use of the election to expense. Taxpayers should continue to use the maximum amount or none. Likewise, taxpayers will maximize present value of tax savings by using the full rates to compute investment credit.

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