

1982

## The Accelerated Cost Recovery System and Depreciable Nonrecovery Property - Making the Proper Elections

Comfrey Scott Ickes

Follow this and additional works at: <https://dsc.duq.edu/dlr>



Part of the [Law Commons](#)

---

### Recommended Citation

Comfrey S. Ickes, *The Accelerated Cost Recovery System and Depreciable Nonrecovery Property - Making the Proper Elections*, 21 Duq. L. Rev. 183 (1982).

Available at: <https://dsc.duq.edu/dlr/vol21/iss1/7>

This Comment is brought to you for free and open access by Duquesne Scholarship Collection. It has been accepted for inclusion in Duquesne Law Review by an authorized editor of Duquesne Scholarship Collection.

# The Accelerated Cost Recovery System and Depreciable Nonrecovery Property—Making the Proper Elections

## I. INTRODUCTION

The Economic Recovery Tax Act of 1981 (ERTA)<sup>1</sup> and the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA)<sup>2</sup> made sweeping changes in the tax law when ERTA created the Accelerated Cost Recovery System (ACRS)<sup>3</sup> and when TEFRA amended it. ACRS requires that assets be classed as 3, 5, 10, or 15-year property,<sup>4</sup> as opposed to the previous practice of determining the useful life based on the “facts and circumstances” test<sup>5</sup> or the asset depreciation range class lives.<sup>6</sup> To each new class of property a statutory percentage is applied to the unadjusted basis of the property to determine the recovery deduction,<sup>7</sup> unless the taxpayer elects straight-line recovery over specified periods.<sup>8</sup> Also allowable

---

1. Pub. L. No. 97-34, 94 Stat. 172 (codified as amended in scattered sections of I.R.C. (West Supp. 1982), enacted August 13, 1981 [hereinafter cited as ERTA].

2. Pub. L. No. 97-248, 1982 U.S. CODE CONG. & AD. NEWS (96 Stat.) (Special Issue No. 7) (codified in scattered sections of I.R.C. (West Special Supp. 1982) [hereinafter cited as TEFRA].

3. Sections 201(a), (c), 203(a), (b), (c)(1), (d), and 209 of ERTA amending I.R.C. § 167(a), (West Supp. 1982), repealing I.R.C. § 263(e) (West Supp. 1982), and adding I.R.C. § 168 (West Supp. 1982).

4. I.R.C. § 168(c)(2) (West Supp. 1982) defines 3-year property as I.R.C. § 1245 (West 1982) property with a class life of four years or less, 5-year property as all other § 1245 property, 10-year property as I.R.C. § 1250 (West 1982) property with a class life of 12.5 years or less, and defines 15-year real property as all other § 1250 property.

5. Treas. Reg. § 1.167(a)-1(b), T.D. 7203, 1972-2 C.B. 30, which provides that the useful life of an asset is determined by reference to the taxpayer's experience with similar property and lists four factors to be considered in determining this period.

6. I.R.C. § 167(m) (West Supp. 1982) and Treas. Rev. Proc. 77-10, 1977-1 C.B. 548 (updating Treas. Rev. Proc. 62-21, 1962-2 C.B. 418) prescribe specified useful lives for many different assets.

7. I.R.C. § 168(b)(1), (2) (West Special Supp. 1982).

8. I.R.C. § 168(b)(3) (West Special Supp. 1982) provides for 3-year property to be recovered using the straight-line method over either 3, 5, or 12 years, for 5-year property over 5, 12, or 25 years, for 10-year property over 10, 25, or 35 years, and for 15-year real property over 15, 35, or 45 years. For purposes of the analysis to follow in this comment, when the straight-line recovery is used, the shortest allowable straight-line life will be used (because it will generate the fastest write-off) unless otherwise stated.

for taxable years beginning in 1982, if the taxpayer so elects, is a deduction of up to \$5,000 of section 38, depreciable qualified investment credit property purchased by the taxpayer that would otherwise have been capitalized and depreciated.<sup>9</sup> An effect of making the election to expense such section 38 property is the loss of investment credit<sup>10</sup> on the expensed property.<sup>11</sup>

In addition to deduction changes, depreciation recapture rules,<sup>12</sup> and tax preference rules<sup>13</sup> were also changed. Whereas, under the prior law, all depreciation on section 1245 property was recaptured<sup>14</sup> and any additional depreciation<sup>15</sup> on section 1250 property was recaptured subject to partial nonrecapture by the applicable percentage,<sup>16</sup> all depreciation deductions on 3, 5, or 10-year prop-

---

9. I.R.C. § 179(a), (b)(1), (c), (d)(1) (West Supp. 1982).

10. See *infra* note 25 for an explanation of investment credit.

11. I.R.C. § 179(d)(9) (West Supp. 1982).

12. Depreciation recapture is the denial of capital gains treatment on the disposition of assets for which the ordinary deduction of depreciation was allowable. See *infra* notes 14-15 and accompanying text.

13. See I.R.C. § 56(a) (West Special Supp. 1982), which imposes an add-on minimum tax equal to 15% of the tax preference items (determined under I.R.C. § 57 (West Special Supp. 1982)) which, in the aggregate, exceed the greater of \$10,000 or the taxpayer's regular tax deduction. The regular tax deduction is defined in I.R.C. § 56(c) (West Supp. 1982) as one half of the taxpayer's tax liability, except for corporations, in which case the regular deduction is the entire tax liability. For taxable years beginning after 1982, TEFRA § 201 has amended I.R.C. § 56 (West Special Supp. 1982) to apply only to corporations and has made individuals only subject to the alternative minimum tax under I.R.C. § 55 (West Special Supp. 1982), whereas previously they were also subject to the add-on minimum tax.

The I.R.C. § 55 (West Special Supp. 1982) alternative minimum tax (as in effect before or after TEFRA) also has an effect on making the proper elections, but its effect is difficult to determine in advance of the end of the taxable year and depends mostly upon factors other than the depreciation deductions and investment credit being analyzed here. Thus, only the add-on minimum tax will be included in this analysis because the depreciation method chosen directly affects the add-on minimum tax. See *infra* notes 22-24 and accompanying text. Note that when the alternative minimum tax does apply and the regular tax exemption (I.R.C. § 55(a)(2) (West Special Supp. 1982) pre-TEFRA, I.R.C. § 55(f)(2) (West Special Supp. 1982) post-TEFRA) is being used, that tax preference items should be avoided in all cases because the extra deductions gained by use of the tax preference will increase the alternative minimum tax dollar for dollar, thus nullifying any benefit from the regular tax being reduced.

14. I.R.C. § 1245(a)(1) (West 1982).

15. I.R.C. § 1250(b)(1) (1976) defines additional depreciation as the excess of depreciation deductions allowed over the amount that would have been allowed if straight-line recovery over the same useful life was used. TEFRA increased the depreciation recapturable on recovery and nonrecovery § 1250 property for corporations (defined in I.R.C. § 291(e)(2) (West Special Supp. 1982)) by treating 15% of any § 1250 capital gain as ordinary income for dispositions after December 31, 1982. I.R.C. § 291(a)(1) (West Special Supp. 1982).

16. I.R.C. § 1250(a) (West 1982). Nonrecovery ("churned") property, see *infra* note 30,

erty are recaptured.<sup>17</sup> For 15-year nonresidential real property, all depreciation is recaptured unless straight-line recovery is elected,<sup>18</sup> and for 15-year residential rental real property, depreciation is recaptured only to the extent that it exceeds straight-line recovery over 15 years,<sup>19</sup> except for sales by corporations after December 31, 1982.<sup>20</sup> The tax preference rules for recovery property<sup>21</sup> provide for tax preference to be generated on 3, 5, and 10-year property only when the property is being leased by a non-corporate lessor,<sup>22</sup> and then only to the extent that the ACRS deduction allowed exceeds the deduction that would have been allowed using the straight-line depreciation method over specified periods.<sup>23</sup> For 15-year property,

---

is subject to recapture under I.R.C. § 1245(a)(1) (West 1982) and I.R.C. § 1250(a)(1) (West Supp. 1982), I.R.C. § 1250(b)(1) (1976).

17. I.R.C. § 1245(a)(2)(E), (5) (West 1982).

18. I.R.C. § 1245(a)(5)(C) (West 1982). See *supra* notes 8 and 15.

19. I.R.C. § 1245(a)(5)(A) (West 1982) excludes 15-year residential rental real property from the new ACRS rule of recapturing all depreciation, (§ 1245(a)(2)(E)), thus requiring recapture to the same extent as under prior law for all property and under present law for nonrecovery property. See *supra* notes 14-16 and accompanying text. Throughout this comment, "residential" property will not include low income housing, and the applicable percentage under I.R.C. § 1250(a)(1)(B) (West 1982) will be 100%.

20. TEFRA added I.R.C. § 291(a) (West Special Supp. 1982), which provides that 15% of the capital gain incurred upon the disposition of I.R.C. § 1250 (West 1982) property shall be treated as ordinary income, but only when transferred by a corporation other than a small business corporation as defined in I.R.C. § 1371(b) (1976). I.R.C. § 291(e)(2) (West Special Supp. 1982).

21. See *infra* note 30 for the definition and discussion of nonrecovery ("churned") property.

22. I.R.C. § 57(a) (West Special Supp. 1982). Small business corporations, as defined in I.R.C. § 1371(b) (1976), and personal holding companies, as defined in I.R.C. § 542 (West Special Supp. 1982), are subject to tax preference on leased 3, 5, and 10-year property, whereas other corporate lessors are not. I.R.C. § 57(a) (West Special Supp. 1982).

23. I.R.C. § 57(a)(12) (West Special Supp. 1982). For 3-year property, a 5-year straight-line recovery is used; for 5-year property, an 8-year straight-line recovery is used; for 10-year property a 15-year straight-line recovery is used. To compute the straight-line recovery, a half-year convention is to be used without regard to salvage value. *Id.*

TEFRA greatly limited the scope of tax preference on 3, 5, and 10-year property by repealing the add-on minimum tax for all noncorporate taxpayers for taxable years beginning after December 31, 1982. I.R.C. § 56(a) (West Special Supp. 1982). By comparing the definition of a leasing "corporation" as used in § 57(a), which excludes I.R.C. § 1371(b) (1976) small business corporations and I.R.C. § 542 (West Special Supp. 1982) personal holding companies, and the definition of "corporation" in § 56(a), as amended by TEFRA, which seems to exclude only small business corporations, Congress has repealed the add-on minimum tax for tax preference on 3, 5, and 10-year leased property for all taxpayers after 1982, except for personal holding companies. The oddity of making only personal holding companies subject to the add-on minimum tax on 3, 5, and 10-year leased property is not clarified in the committee reports as intentional, but personal holding companies should be

the tax preference amount is the excess of the deduction allowed over the deduction that would have been allowed using a straight-line recovery over 15 years.<sup>24</sup>

---

subject to the § 56 corporate (add-on) minimum tax since they are seemingly not subject to the I.R.C. § 55 (West Special Supp. 1982) alternative minimum tax by the probable definition of "corporation" in § 55(a).

The probable definition of "corporation" in § 55(a) is reached by several steps. First, "corporation" is not specifically defined in § 55, which causes it to be defined by I.R.C. § 7701(a)(3) (West Supp. 1982) as including any type of corporation except where "otherwise distinctly expressed or manifestly incompatible with the intent thereof . . . ." § 7701(a). Second, § 55(e) mentions I.R.C. § 165(c) (West Special Supp. 1982) losses, § 55(e)(1)(A), interest on a residence, § 55(e)(4)(A)(i), but does not mention an exemption for small business corporations or personal holding companies in § 55(f)(1), which thereby seems to indicate that making small business corporations and personal holding companies subject to the § 55 alternative minimum tax would be "manifestly incompatible with the intent thereof . . . ." Finally, personal holding companies and small business corporations were not subject to the § 55 alternative minimum tax in years before 1983, so it is unlikely that Congress would suddenly subject them to the § 55 tax without mentioning the change in the committee reports. See Internal Revenue Service 1980 Form 6251 which, in the upper portion, states that this form is to be attached to Forms 1040 (Individuals), 1040NR (Individual Nonresident), or 990-T (Trust), thus excluding personal holding companies which file Form 1120 and small business corporations which file Form 1120-S.

The definition of "corporation" in § 56(a) excludes only small business corporations, I.R.C. § 58(d)(1) (West Special Supp. 1982), except as provided in I.R.C. § 58(d)(2) for certain capital gains. The definition of "corporation" in I.R.C. §§ 57(b)(3), 291(e)(2) (West Special Supp. 1982) do not apply to § 56(a), since the phrase "applicable corporation" was not used in either § 55(a) or § 56(a), even though the phrase "applicable corporation" would be the proper phrase for § 56(a), except as provided in § 58(d)(2).

Finally, since personal holding companies are seemingly not subject to the § 55 alternative minimum tax, they must be subject to the § 56 corporate (add-on) minimum tax, or else they are generating a tax preference item by § 57(a)(12), in which case the last sentence of § 57(a) would be a useless provision. Small business corporations, conversely, pass the tax preference item generated under § 57(a)(12) onto their shareholders and the small business corporation is not itself (as a corporate entity) subject to the § 56 corporate (add-on) minimum tax on this item of tax preference by § 58(d)(1).

24. I.R.C. § 57(a)(12)(B) (West Special Supp. 1982). To compute the straight-line recovery, salvage value is to be disregarded. *Id.* Note that a half-year convention is not to be used, while it is used for 3, 5, or 10-year property. § 57(a)(12). This difference in treatment for 15-year property is consistent with a half-year convention being used in computing the statutory recovery percentage for the ACRS deduction for 3, 5, and 10-year property under I.R.C. § 168(b)(1) (West Special Supp. 1982), while for 15-year property the ACRS deduction is prorated for months in service under § 168(b)(2).

For taxable years beginning after 1982, the tax preference amount generated by the use of the § 168(b)(1) statutory percentages for 15-year property is subject to the I.R.C. § 55 (West Special Supp. 1982) alternative minimum tax for all taxpayers other than corporations, and the I.R.C. § 56 (West Special Supp. 1982) add-on minimum tax for corporate taxpayers. TEFRA § 201. For taxable years beginning before 1983, the tax preference generated on 15-year property was subject to the § 56 add-on minimum tax for both corporate and noncorporate taxpayers. See §§ 55, 56 prior to the August 19, 1982, enactment of TEFRA.

Due to the classification of all assets into either the 3, 5, 10, or 15-year category, the prior investment tax credit<sup>25</sup> subdivisions of 3-year but less than 5-year life, 5-year but less than 7-year life, and 7-year life or more<sup>26</sup> have been revamped into two classes. All 3-year property is qualified investment for 60% of its basis, while all other recovery property is qualified investment for 100% of its basis.<sup>27</sup>

Before ACRS was enacted, the most frequent decision to be made was whether to use the straight-line, declining balance, or sum-of-the-years digits method of depreciation on a given asset.<sup>28</sup> A secondary decision was whether to increase the useful life on an asset in order to obtain more investment credit on an asset.<sup>29</sup> Finally, a taxpayer could elect section 67(f) to reduce the salvage

---

25. Investment credit, I.R.C. § 46 (West Special Supp. 1982), is a tax credit which reduces the taxpayer's tax liability by one dollar for each dollar of credit earned (as opposed to deductions which reduce the taxpayer's tax liability only to the extent of the deduction multiplied by the taxpayer's marginal tax rate). The credit is earned when a taxpayer purchases certain tangible property (defined in I.R.C. § 38 (1976), which generally consists of machinery and equipment). The amount of the credit is equal to the amount of the qualified investment multiplied by 10%, § 46(a)(2)(B). For the amount of qualified investment on nonrecovery property ("churned" property as discussed *infra* note 30), see *infra* note 29.

26. I.R.C. § 46(c)(2) (West Supp. 1982). The 3-5, 5-7, and 7 or more year life categories still remain in effect for nonrecovery ("churned" property) discussed *infra* at note 30.

27. I.R.C. § 46(c)(7) (West Supp. 1982). For assets placed in service after 1982, a reduction in the basis of the asset is required to the extent of 50% of the investment credit allowable, I.R.C. § 48(q)(1) (West Special Supp. 1982) post-TEFRA. In lieu of this basis reduction, the taxpayer can elect to reduce his investment credit by 2%. § 48(q)(4).

Due to TEFRA, the analysis of recovery property for both non-tax preference and tax preference taxpayers must be divided into categories. The first category is recovery property placed in service in taxable years beginning before December 31, 1982, to which the TEFRA amendments mentioned above will not apply. The second category is recovery property placed in service in taxable years beginning after December 31, 1982, to which TEFRA will apply. Due to the small amount of time between TEFRA's enactment on August 19, 1982, and the commencement of editorial production of this comment, only the first category of recovery property will be analyzed.

28. I.R.C. § 167(b) (1982).

29. I.R.C. § 46(c)(2) (West Supp. 1982) provides for nonrecovery property which is I.R.C. § 38 (1976) property to qualify for investment credit on 100% of the basis for assets with a life of seven years or more, 66 ⅔% for assets with a life of five years but less than seven years, and 33 ⅓% for assets with a life of three years but less than five. Whatever life is used for depreciation purposes determines the life for investment credit purposes, *id.*; thus, a trade-off between tax credit and earlier tax deduction can be made by increasing or decreasing the useful life. The "facts and circumstances" test used to determine an asset's useful life, see *supra* note 5, is flexible enough to allow the taxpayer to choose his useful life within reasonable limits. The asset depreciation range, see *supra* note 6, and I.R.C. § 167(m)(1) (1982), permits a variance of 20% on the asset's class life, also, in effect, allowing an election on the useful life within certain boundaries.

value of an asset. These three decisions remain important today only for nonrecovery property ("churned property").<sup>30</sup> The elections under ACRS are more complex. The major decision is whether to use the ACRS statutory percentages<sup>31</sup> or straight-line recovery over the specified periods.<sup>32</sup> This decision determines the applicable tax preference<sup>33</sup> and depreciation recapture rules.<sup>34</sup> The secondary decision, similar to that made for nonrecovery property, is whether to increase the useful life of an asset to obtain more investment credit. A wholly new election, the section 179 expense election,<sup>35</sup> can be applied to any section 38 property.<sup>36</sup> The question is whether to use this election on 3, 5, or 15-year recovery property by considering the effect on the amount of investment credit lost on the expensed property.

A class of taxpayers for whom the above decisions must be made with special considerations are those who must pay the add-on minimum tax.<sup>37</sup> The proper elections for this class of taxpayers will

---

30. "Churned" property, for I.R.C. § 1245 (West 1982) assets, is property transferred after 1980, when the user of the property does not change. For I.R.C. § 1250 (West 1982) property, property transferred after 1980 is "churned" property only if the present and former owners are related persons. I.R.C. § 168(e)(4)(B) (West Special Supp. 1982). Thus, for real property, the user of the property need not change. Note that for either § 1250 or § 1245 property, property is not treated as owned before it is placed into service. § 168(e)(4). Without § 168(e)(4), the materials purchased to build an asset would be "churned" property. The purpose of these anti-churning rules is to prevent the transfer of used property solely to obtain the faster depreciation available under ACRS.

31. I.R.C. § 168(c)(2) (West Supp. 1982).

32. See *supra* note 8.

33. See *supra* note 13.

34. See *supra* notes 14-20 and accompanying text.

35. The I.R.C. § 179 (West Supp. 1982) election is not paralleled by the prior I.R.C. § 179 (West 1982). The prior § 179 allowed first year additional (bonus) depreciation only up to a \$2,000 deduction per taxpayer per year and did not have the effect of reducing the investment credit otherwise available, § 179(b). The prior § 179 was effectively repealed by ERTA, § 202(a), Pub. L. No. 97-34, 95 Stat. 172 (codified as amended in scattered sections of I.R.C. (West Supp. 1982)), so it will not apply to nonrecovery property or recovery property in any case.

36. I.R.C. § 179(d)(1) (West Supp. 1982).

37. These taxpayers (hereinafter referred to as tax preference taxpayers) have tax preference items under I.R.C. § 57 (West Special Supp. 1982) exceeding \$10,000, and exceeding their regular tax deduction under I.R.C. § 56(a) (West Special Supp. 1982). For these taxpayers, any additional tax preference items generated will be subject to the add-on minimum tax at the § 56(a) 15% rate. For taxable years beginning after 1982, only corporations will be subject to the add-on minimum tax. TEFRA § 201(d). The effect of the I.R.C. § 55 (West Special Supp. 1982) alternative minimum tax will not be considered simultaneously with the § 56 add-on minimum tax, as discussed *supra* note 13.

be analyzed separately.

The method which will be used to evaluate the consequences of each election is the internal rate of return method of decision analysis. This method will yield the interest rate required to make the taxpayer indifferent between the two choices.<sup>38</sup> Under this method, the deductions and tax credits resulting from a particular decision are converted into cash flows of taxes saved for each year over which the decision has an effect. The cash flows resulting from making the opposite choice are then computed. These two annual cash flows, when netted against each other, yield the yearly excesses or deficits for one choice over the other. By discounting these yearly excesses or deficits to the year in which the decision is to be made at a rate of interest that will make the choices have the same discounted tax effect,<sup>39</sup> the taxpayer can decide which election he should make by comparing the rate of interest used to discount the cash flows to his own after tax cost of capital.<sup>40</sup>

---

38. The only other possible method of decision analysis would be the net present value method, which requires the taxpayer's after tax cost of capital (see *infra* note 40) to be known in advance. The net present value method would severely limit the applicability of this comment to those few taxpayers who would happen to have the same after tax cost of capital as the one illustrated.

39. For example, if a particular decision would yield \$25 in tax savings the first year preceeding the decision and would cause an increase in taxes of \$30 in the second year, an interest rate of 20% would make the \$30 increase in the second year only have the effect of a \$25 tax increase when discounted back to the first year. The \$30 tax increase is multiplied by the 20% present value factor for a one year period, .833, to yield \$24.99. (The formula to compute the present value factor is  $1 \div (1 + i)^n$ , where  $i$  is the interest rate and  $n$  is the period). Thus, the internal rate of return on the decision is 20% because that interest rate will make the net present value of the first year tax savings of \$25 plus the second year tax increase of \$30 equal zero after discounting the \$30 back to the first year at the 20% interest rate.

40. The after tax cost of capital is figured by first determining what interest rate could be earned by the taxpayer in the market using any tax savings gained through depreciation deductions or investment credit. If the taxpayer would instead decrease loans which he has outstanding by making payments with any money saved in taxes, then his cost of capital is the interest rate on such loans. Likewise, it could be the interest rate that the taxpayer would have to pay to increase his loans if he would not have gained the tax savings. The after tax interest rate is the cost of capital interest rate decreased by taxes payable if the taxpayer had invested the money and earned income, or decreased by taxes saved due to the interest deduction if loans would be decreased (or at least not increased) due to additional funds being available from the tax savings. For example, if the taxpayer would invest any tax savings in a money market fund yielding 12% annually and his marginal tax rate is 40%, then his after tax cost of capital is 7.2% ( $12\% \times (1-40\%) = 12\% \times 60\% = 7.2\%$ ). If the taxpayer could avoid incurring a loan at 18% due to the tax savings, while his marginal tax rate is 40%, then his after tax cost of capital is 10.8% ( $18\% \times (1-40\%) = 18\% \times 60\% = 10.8\%$ ).



This comment will delineate the proper elections for taxpayers with various marginal tax rates<sup>41</sup> by using the internal rate of return method of decision analysis. First, a taxpayer's choices of depreciation methods and useful lives for nonrecovery property will be analyzed. Next, the same choices for recovery property will be examined. Finally, the proper elections for tax preference taxpayers on both nonrecovery and recovery property will be considered.

## II. NONRECOVERY PROPERTY

### A. Depreciation Method

An important decision made before the enactment of ACRS which is now only relevant for nonrecovery property is whether the sum-of-the-years digits method or the double declining balance (200% of straight-line rate) method should be used on an asset which qualifies for these methods.<sup>42</sup> Analyzing this choice of methods is relatively simple because the taxpayer's marginal tax rate need not be considered because the decision deals only with deductions and not both deductions and tax credits where, as will be shown later, the marginal tax rate would be used to make the deductions comparable to the tax credits. As computed in Exhibit #1, the sum-of-the-years digits method should be used unless the

---

As an example, if the internal rate of return is 20%, as in the example in *supra* note 39, then the taxpayer with either the 7.2% or 10.8% cost of capital would not choose to make the election in *supra* note 39, because that choice is beneficial to him only if his after tax cost of capital exceeds 20%. Discounting the \$30 tax increase the second year to the first year at 10.8% yields a present value of \$27, which means that the taxpayer would have an economic loss of \$2 overall (\$27 present value of tax increase minus \$25 of tax savings).

Often the taxpayer will have no idea what is his after tax cost of capital. The best method of proceeding is then to determine his marginal tax rate based on prior year's tax returns. This rate can be used to translate the after tax cost of capital interest rate decision figure into a before tax rate. The taxpayer can then be asked if the interest he is earning on investments or the interest he is paying on loans (as appropriate) is more or less than the before tax decision interest rate.

Using the internal rate of return (after tax cost of capital), mentioned *supra* note 39, of 20% and a 40% marginal rate taxpayer, the before tax internal rate of return is 33% (20% x (1-40%)). The taxpayer would then be asked if he is earning on investments 33% or paying 33% on loans, to which he would certainly answer "no", thus indicating that he would not make the decision, referred to *supra* note 39, to save the \$25 in taxes in the first year at the expense of paying \$30 extra in the second year.

41. See *infra* note 61 for an explanation of the marginal tax rate.

42. Sum-of-the-years digits and double declining balance can only be used on new personal property with a useful life of three years or more, I.R.C. § 167(c) (1976), or new residential rental real property, I.R.C. § 167(j)(2)(A) (1976).

taxpayer's after tax cost of capital is over 15%, which is unlikely.<sup>43</sup>

*Exhibit #1 Nonrecovery Property—Sum-of-the-Years Digits Method v. Double Declining Balance Method*

Example:<sup>44</sup> \$10,000 personal property with a useful life of 3 years.<sup>45</sup> Sum-of-the-years digits deductions would be \$5,000 in year 1 ( $\$10,000 \times 3/6$ ), \$3,333 in year 2 ( $\$10,000 \times 2/6$ ), and \$1,667 in year 3 ( $\$10,000 \times 1/6$ ). Double declining balance deductions would be \$6,667 in year 1 ( $\$10,000 \times 66.67\%$ ), \$2,222 in year 2 ( $\$3,333 \times 66.67\%$ ), and \$741 in year 3 ( $\$1,111 \times 66.67\%$ ).<sup>46</sup>

43. To have an after tax cost of capital rate of 15% requires a 35% before tax rate for 57% marginal rate taxpayers, and a 21% before tax rate for 30% marginal rate taxpayers.

44. In this and all subsequent examples, a dollar amount of an asset will be used. Since all depreciation rates, capital gain amounts, investment credits, and minimum taxes can be expressed as percentages of the basis of an asset, the dollar amount of the asset is irrelevant because the same decision should be made whether the property's basis is \$1,000, \$10,000, or \$100,000, unless the deduction (or income in the case of a capital gain) causes the taxpayer to shift into another marginal tax rate bracket, in which case the marginal tax rate of the taxpayer would change. When the marginal tax rate of the taxpayer changes, the proper decision may or may not change, depending upon the decision involved and the materiality of the change in the marginal tax rate. If the marginal tax rate does change enough so that a different choice is proper, the decision should be analyzed based on the alternate marginal tax rate. In cases where the marginal tax rate change is only a few percentage points and the proper choice changes due to this small percentage change, the relative advantage between the previous proper choice and the new proper choice will be so slight that making the wrong choice will not cause significant losses in tax benefits in any event.

45. The analysis of property with a 4-year useful life need not be made because the useful life, by stretching it to five years, as discussed *supra* note 29 and accompanying text, allows 66 ⅔ % of the basis to qualify for investment credit, instead of 33 ⅓ % if a 4-year life is used, which will almost always be to the taxpayer's advantage. Similarly, a 6-year useful life should be stretched into seven years to allow investment credit on 100% of the basis instead of 66 ⅔ %. Stretching any life by two years is also advisable as shown *infra* Exhibit #2.

46. When computing any double declining balance method for only part of a year, divide the annual rate of depreciation by 12 months and multiply it by the number of months in use to yield the depreciation deduction. Do not take the annual rate of depreciation and divide it by 12 months to yield the monthly rate of depreciation because it will yield a lower amount of depreciation and is contrary to the method which the IRS used to figure the recovery percentages for 15-year recovery property.

Using 15-year recovery property held for 11 months in the first year will illustrate the difference in deductions between the two methods of computation. The 15-year property tables use the 175% declining balance method with a switch to straight-line in the sixth year, when the deduction is greater. If 15-year property is held a full year, the recovery percentage is 12%, (see *infra* note 152 and accompanying text), which is the 11.67% rate for 175% declining balance rounded-off ( $1 \div 15 \times 1.75$ ). If the asset is held only 11 months, the depreciation percentage is 11%, as in the Internal Revenue Service (IRS) table, which is the 11.67% declining balance rate multiplied by 11 months and divided by 12 months rounded-off ( $11.67\% \times 11 \div 12 = 10.70\%$ ).

The other method of computing the 11 month depreciation rate is to take the 11.67%

Comparing the deductions:<sup>47</sup>

Year	Sum-of-the-Years Digits	Double Declining Balance	Excess of Sum-of-the-Years Digits over Double Declining Balance
1	\$ 5,000	\$6,667	\$(1,667)
2	3,333	2,222	1,111
3	1,667	741	926
	\$10,000	\$9,630	\$ 370

As the \$370 excess of sum-of-the-years digits over double declining balance illustrates, the sum-of-the-years digits method generates more deductions over the three years because it does not have the salvage value which is built into the double declining balance method.<sup>48</sup> This built-in salvage cannot be eliminated by merely

rate and divide it by 12, which yields the .9725% monthly declining balance rate. The monthly rate of .9725% can be applied to the declining balance of un depreciated cost in each of the 11 months, such that 11 computations are necessary to figure the depreciation for 11 months rather than the one computation necessary using the first computation method. Using this second method effectively makes the depreciation to be taken over 15 periods (years) at 11.67% to be computed over 160 periods (months) at .9725%.

Since the number of periods has been increased from 15 to 160 by use of the second method (even though the asset's life still is 15 years under either method), the built-in salvage of declining balance (*see infra* note 48) increases by using the second method, which necessarily reduces the depreciation deduction. Using the 11 months in service example for 15-year property above, the first method of computation yields a depreciation deduction of 10.70% ( $11.67\% \times 11 \div 12$ ) while the second method yields 10.19% (.9725% monthly depreciation rate applied to the un depreciated declining balance left after each prior month's depreciation deduction). Knowing that the first computation method produces a depreciation deduction of 10.70%, which rounded-off is 11%, while the second method produces 10.19%, which rounded-off is 10%, it is apparent that the IRS used the first method in computing the 11% in the ACRS statutory percentage 15-year property table, thus sanctioning the use of the first method, which results in a higher depreciation deduction.

47. In this and all subsequent examples, except for those dealing with 15-year property, the asset will be assumed to be held for at least its depreciable life. If the holding period of the asset is longer than the depreciable life, the holding period is irrelevant, except for 15-year property, due to differing depreciation recapture rules depending upon the recovery depreciation method used, as will be shown in pt. III. C.

48. Due to this built-in salvage, anytime that a declining balance method is used, it is to be computed without adjustment for salvage. Treas. Reg. § 1.167(b)-2(a), T.D. 6712, 1964-1 (Part 1) 106. The built-in salvage increases as the life of the asset increases by the formula: basis multiplied by  $(1 - \text{declining balance } \%)^{\text{life}}$ . The salvage in Exhibit #1 is \$370, as shown in the excess of sum-of-the-years digits over double declining balance column, and is proved by using the salvage formula:  $\$10,000(1 - 66.67\%)^3 = \$10,000(.3333)^3 = \$10,000(.0370) = \$370$ . The effect of this salvage increasing will never become large enough to make straight-line depreciation more advantageous than either 125% or 150% declining balance on nonrecovery property for non-tax preference taxpayers. Note that the salvage values on assets should always be reduced to the least amount possible by the use of

electing, in the third year, section 167(f) to reduce the salvage and then deducting the \$370 of undepreciated cost.<sup>49</sup> Instead, the taxpayer must change to the sum-of-the-years digits or straight-line method, which in some cases requires the consent of the Commissioner of Internal Revenue,<sup>50</sup> and then elect section 167(f). The possibility of changing depreciation methods will be considered as a separate option for the taxpayer for each decision.<sup>51</sup>

---

the I.R.C. § 167(f)(1976) election, which will be discussed at pt. II C.

49. Treas. Reg. § 1.167(f)-1, T.D. 6838, 1965-2 C.B. 9 requires that the election be made "as of the time of which salvage is required to be determined . . ." which Treas. Reg. § 1.167(a)-1(c)(1), T.D. 7203, 1972-2 C.B. 12 requires to be "determined at the time of acquisition . . ." Under any declining balance method, salvage value is not taken into account, Treas. Reg. § 1.167(b)-2(a), T.D. 6182, 1956-1 C.B. 98, thus precluding an I.R.C. § 167(f) (1976) election at that time.

If the taxpayer is granted permission to change his method of depreciation to either the straight-line or sum-of-the-years digits method (*see infra* notes 50-51 and accompanying text) however, then the salvage value must be determined at that time and the § 167(f) election can be made. *See* Treas. Reg. § 1.167(f)-1(c) example (6), T.D. 6838, 1965-2 C.B. 9. Note that even though salvage value is not taken into account under the declining balance method, the asset nevertheless cannot be depreciated below a reasonable salvage value after reduction by the amount of the I.R.C. § 167(f) election had a method other than declining balance been used by the taxpayer. Treas. Reg. § 1.167(b)-2(a), T.D. 6182, 1956-1 C.B. 98.

50. I.R.C. § 167(e) (1976), Treas. Reg. § 1.167(e)-1, T.D. 7166, 1972-1 C.B. 78-79; Rev. Proc. 74-11, 1974-1 C.B. 420; Treas. Reg. § 1.167(a)-11(c)(1)(iii), T.D. 7763, 1973-1 C.B. 93-94.

51. Rev. Proc. 74-11, 1974-1 C.B. 420, § 7.02 restricts the availability of the change to once every ten years for each depreciation account, and Rev. Rul. 79-271, 1979-2 C.B. 96, denies the use of the automatic consent to change depreciation methods for manufacturers subject to Treas. Reg. § 1.471-11(c)(2), T.D. 7285, 1973-2 C.B. 163. Due to the fact that only some taxpayers can use Rev. Proc. 74-11, and that only some of those who can use Rev. Proc. 74-11 will use Rev. Proc. 74-11, the changing of depreciation methods will be presented as a separate preliminary choice for the taxpayer to make with respect to each decision. The optimum year for making the switch from the double declining balance method to straight-line is illustrated in [1982] 2 STAND. FED. TAX REP. (CCH) ¶ 1744 at 22,338.

For non-tax preference taxpayers, the use of the 200% declining balance method with a switch to straight-line under Rev. Proc. 74-11 on tangible property (I.R.C. § 167(c) (1976)) instead of the sum-of-the-years digits method is advisable for assets with useful lives of three, four, or five years, but is not better than the sum-of-the-years digits method on 6 or more year useful life property. This complete reversal in the proper decision once a 6-year life is used is caused by two factors. First, the annual cash flows materially favoring double declining balance occur in the first and fifth years for 5-year life property, and in the first and sixth years for 6-year life assets, thus requiring the final year cash flow favoring double declining balance to be discounted one additional year. Second, and more importantly, the relative acceleration in double declining balance deductions using a 5-year life instead of a 6-year life is greater than when a 4-year and a 5-year life are compared. Even though this relative acceleration occurs when even a 3 and a 4-year life are compared, it is not until a 6-year useful life is used that the accumulated difference in relative acceleration of deductions

The built-in salvage value of the double declining balance method is not, in any event, determinative of the decision because double declining balance generates a larger deduction in the first year. Considering the present value of the deductions over the three years makes double declining balance the better choice when the taxpayer's after tax cost of capital is over 15% which, although unlikely, is possible.

Year	Excess of Sum-of-the-Years Digits over Double Declining Balance	15% Present Value Factors	15% Present Value
1	\$(1,667)	1.000 <sup>52</sup>	\$(1,667)
2	1,111	.870	967
3	926	.756	700
	<u>\$ 370</u>		<u>\$ 0<sup>53</sup></u>

is sufficient to cause the complete reversal in the choice of the better depreciation method.

Real property, other than residential rental property, does not have the reversal in the proper depreciation method because sum-of-the-years digits cannot be used. I.R.C. § 167(j)(1), (2) (1976). Thus, the use of declining balance with a switch to straight-line pursuant to Rev. Proc. 74-11 is more advantageous for non-tax preference taxpayers than straight-line when sum-of-the-years digits is not available.

52. To reduce the amount of computation necessary without changing the result, the first years flows will not be discounted and all subsequent years will be discounted for one less year accordingly. When tax deduction, tax credit, and tax preference amounts are being analyzed in connection with the decision to purchase or not purchase an asset or make an investment, the first year flows must be discounted to the date on which the tax is or would have been due. The due dates for the taxes should be either on the date the return is to be filed or when the taxpayer's estimated tax payments are due. See I.R.C. §§ 6015 (West Special Supp. 1982), 6153 (West Special Supp. 1982), 6154 (1976). The column of present value factors will be omitted in subsequent exhibits, only the present values of the flows will be shown.

53. The internal rate of return in this example happens to be exactly 15%, because by using the 15% rate the discounted flows equal zero. Examples in subsequent exhibits will not yield zero for the discounted flows when the whole number interest rate is used but will, nevertheless, be the nearest whole number interest rate to the exact interest rate that would yield a zero for the discounted flows. Note that the \$370 in the excess of sum-of-the-years digits over double declining balance column is actually the discounted flows at a zero percent interest rate. When the discounted flows equal zero or a negative (bracketed) amount, as opposed to a positive number, that is the point at which the proper decision for that taxpayer changes. Had the flows in Exhibit #1 been discounted at a 14% interest rate instead of 15%, the total of the discounted flows would be positive, thus indicating that for a taxpayer with that after tax cost of capital (14%) or lower, he should choose sum-of-the-years digits instead of double declining balance. Had a 16% rate been used, the total of the discounted flows would have been negative, thus indicating that for a taxpayer with that after tax cost of capital (16%) or higher, he should choose the double declining balance method instead of the sum-of-the-years digits method. A taxpayer with a 15% after tax cost

When the sum-of-the-years digits and the double declining balance methods are compared over a 5-year useful life, double declining balance is the proper choice only when the taxpayer's after tax cost of capital exceeds 40%. Using a 7-year useful life, the taxpayer's after tax cost of capital must exceed 55% to make double declining balance the proper choice. Thus, sum-of-the-years digits is the better choice for nonrecovery assets with 3, 5, or 7-year lives and, by extrapolating the trend of the interest rate, sum-of-the-years digits can be seen as the proper decision for all eligible nonrecovery property.

The straight-line method will never be the better choice when sum-of-the-years digits method can be used, since sum-of-the-years digits provides greater deductions in the earlier years and expenses all of the asset's cost the same as straight-line. Straight-line will be the better choice instead of double declining balance only when the taxpayer's after tax cost of capital is less than 7%<sup>54</sup> for assets with a 3-year useful life, 10% for assets with a 5-year useful-life, and 9% for 7-year assets. Because the Internal Revenue Code does not currently provide for any assets on which double declining balance can be used while sum-of-the-years digits cannot, sum-of-the-years digits will always be the best choice when any of the three methods can be used.

When only straight-line and 150% declining balance are available, as occurs when new nonresidential property is depreciated,<sup>55</sup> the useful life becomes the key factor. Using a 30-year useful life, a taxpayer should choose straight-line if his after tax cost of capital is 8% or less. Using a 40-year life, straight-line is the better decision when the taxpayer's after tax cost of capital is less than 6%.

When only straight-line and 125% declining balance are available, as occurs when used residential property is depreciated,<sup>56</sup> the useful life is once again the key factor. Using a 30-year life, a taxpayer should elect straight-line if his after tax cost of capital is less

---

of capital would be indifferent between using either of the two depreciation methods.

54. The phrase "less than 7%" means the same as "under 7%" and intentionally excludes 7% from the phrase. If 7% was to be included, the phrase "7% or less" would have been used. Similarly, "over 7% up to and including 8%" ranges from 7.1% to 8% while "over 7% but less than 8%" ranges from 7.1% to 7.9% and "at least 7% but less than 8%" includes 7.0% but not 8.0%. Finally, "at least 7% up to and including 8%" ranges from 7.0% to 8.0%.

55. I.R.C. § 167(j)(1)(B) (1976).

56. I.R.C. § 167(j)(5)(B) (1976).

than 16%. Using a 40-year life, straight-line is the better election when the taxpayer's after tax cost of capital is less than 13%.<sup>57</sup>

*B. Increasing the Useful Life to Gain Additional Investment Credit*

Another election in the Code which has continued importance for nonrecovery property is the choosing of a useful life of an asset. This election is not phrased as an election in the Code but is, in effect, an election due to the flexibility in selecting the useful life of an asset under either the "facts and circumstances" test<sup>58</sup> or the 20% deviation in class life allowed under the asset depreciation range system.<sup>59</sup> The inclination in determining an asset's useful life is to use the shortest life possible. Although the taxpayer would obtain a faster write-off of the asset's cost, that approach ignores the fact that by choosing a slightly longer life, additional investment credit can be gained.<sup>60</sup> Exhibit #2 analyzes this tension between selecting a shorter life to get the fast cost recovery and a longer life to gain additional investment credit.

*Exhibit #2 Nonrecovery Property—Increased Useful Life to Gain Additional Investment Credit*

Example: \$10,000 of section 38 property with a useful life of three years qualifying for sum-of-the-years digits depreciation. Taxpayer has a marginal tax rate of 33%.<sup>61</sup>

---

57. Reviewing the declining balance methods versus straight-line decisions, it can be seen that each declining balance percentage (200%, 150%, and 125%) reaches a point over the useful life range at which the after tax cost of capital required to make declining balance the proper choice will be at its highest, and then declines from that point as the useful life increases. For 200% declining balance, this point occurred at a 5-year useful life; for 150% and 125% declining balance, this point occurred at a life less than 30 years.

58. See *supra* note 5 and accompanying text.

59. See *supra* note 6 and accompanying text.

60. See *supra* note 29 and accompanying text.

61. The marginal tax rate of the taxpayer is the percentage of tax which he must pay on the last dollar that he earned, as distinguished from the average tax rate. The marginal tax rate, not the average tax rate, is used to evaluate all decisions because if a 33% taxpayer's income would be decreased \$500 by a deduction, his taxable income would drop and he would save \$165 in taxes. Knowing that \$165 will be saved by a \$500 deduction, the percent saved in taxes is 33%, the marginal tax rate.

If the same taxpayer would make an election that would generate an additional \$100 in investment tax credit, he would save \$100 in taxes. This credit would be the equivalent of a deduction of \$303 ( $\$100 \div 33\%$ ) since either would save him \$100 in taxes at his marginal rate of 33%.

Using the sum-of-the-years digits method over three years will produce deductions of \$5,000, \$3,333, and \$1,667. Using a 5-year life will produce deductions of \$3,333, \$2,667, \$2,000, \$1,333, and \$667.

The investment credit earned on an asset with a 3-year life is \$333 (\$10,000 basis x 33 ⅓% applicable percentage x 10% regular investment credit percentage). On a 5-year life the investment credit is \$667 (\$10,000 basis x 66 ⅔% applicable percentage x 10% regular investment credit percentage).

3-Year Life Flows:

Year	Depreciation Deductions		Taxpayer's Marginal Tax Rate <sup>6a</sup>		Depreciation Tax Savings		Investment Credit Earned		Total Tax Savings
1	\$ 5,000	x	33%	=	\$1,650	+	\$333	=	\$1,983
2	3,333	x	33%	=	1,100				1,100
3	1,667	x	33%	=	550				550
	<u>\$10,000</u>				<u>\$3,300</u>		<u>\$333</u>		<u>\$3,633</u>

The amount of the deduction or credit can be enough to cause a change in the taxpayer's tax bracket, which complicates the computation of the marginal tax rate on that deduction or credit. Refining the marginal tax rate to an exact percentage is not very important, however, in making the proper election in a close decision. This is because the taxpayer's computation of his after tax cost of capital, as explained *supra* note 40, is likely to be inexact, due to its changing with the current market yields and loan rates. In both the after tax cost of capital computation and the marginal tax rate computation, an average of the rates over the years affected by the decision should be used, which requires a projection into the future that is also likely to be inexact. Thus, a sensitivity analysis on the effect of error in computing the current year's marginal tax rate or after tax cost of capital will show the effect to be minimal when averaged with the rates projected for other years affected by the decision. Further, an average rate is less accurate than using each year's projected rate for the particular year affected.

However, it must be kept in mind that any projections are based on estimates and necessarily involve assumptions over a spectrum of variables. With all these inherent inaccuracies in projecting the future, one begins to ponder the usefulness of an analysis designed to make the proper elections. Nevertheless, a decision made today affecting several future years is more likely to be made correctly by using the internal rate of return method than by some random process or by making a broad generalization for all taxpayers. In any event, after applying the internal rate of return method, the proper election is sometimes obvious (as in Exhibit #2) and will not change absent unconscionable error in predicting the marginal tax rate or the after tax cost of capital.

Once the marginal federal income tax rate is computed, the state and local income tax marginal rates should also be computed and added together to yield the aggregate marginal tax rate. For Pennsylvania, the state income tax rate on individuals is a flat 2.2%, 72 PA. CONS. STAT. ANN. § 7302(9) (Purdon Supp. 1982-1983), and a flat 10 ½% on corporations, *id.* § 7402. A decrease to 2% and 9 ½%, respectively, is scheduled for 1984, *id.* Local taxes vary by jurisdiction, but are usually a flat rate and are usually only imposed on the earned income of individuals. Generally, corporations are not taxed locally on the basis of income.

62. This column will be omitted in subsequent exhibits, only the depreciation tax savings will be shown.



## 5-Year Life Flows:

Year	Depreciation Deductions	Taxpayer's Marginal Tax Rate	Depreciation Tax Savings	Investment Credit Earned	Total Tax Savings
1	\$3,333	x 33%	= \$1,100	+ \$667	= \$1,767
2	2,667	x 33%	880		880
3	2,000	x 33%	660		660
4	1,333	x 33%	440		440
5	667	x 33%	220		220
	<u>\$10,000</u>		<u>\$3,300</u>	<u>\$667</u>	<u>\$3,967</u>

## Comparing the Tax Savings:

Year	5-Year Life	3-Year Life	5-Year Excesses	24% Present Values
1	\$1,767	\$1,983	\$(216)	\$(216)
2	880	1,100	(220)	(177)
3	660	550	110	72
4	440		440	231
5	220		220	93
	<u>\$3,967</u>	<u>\$3,633</u>	<u>\$ 334</u>	<u>\$ 3</u>

Thus, stretching a 3-year useful life into five years to gain additional investment credit will be advantageous to a 33% marginal tax rate taxpayer as long as his after tax cost of capital is 24% or less, which will always be the case.<sup>63</sup> For a 57% marginal rate taxpayer,<sup>64</sup> only when his after tax cost of capital is 11% or more should he not stretch a 3-year life into five years, which will rarely

63. In order to have an after tax cost of capital over 24%, a 33% marginal rate taxpayer would have to be either earning 36% on his investments or have an outstanding loan at that rate.  $(36\% \times (1 - \text{marginal tax rate}) = 36\% \times (1 - .33) = 36\% \times .67 = 24.12\%)$ .

64. A 57% marginal rate taxpayer is close to the highest possible for 1982, computed by using the 46% federal corporate rate plus a 10 1/4% rate similar to Pennsylvania's corporate tax. Only Minnesota corporations whose taxable income exceeds \$25,000, and Iowa corporations whose taxable income exceeds \$250,000, will pay a higher marginal rate (12%) than a Pennsylvania corporation (10 1/4%). 1982 STATE TAX GUIDE (CCH) at 1031.

Individuals could pay a maximum of 50% to the federal government plus 16% in Minnesota. *Id.* at 1512. The 57% marginal rate used will be greater than or equal to the maximum aggregate marginal state and federal tax rates in all but 16 states. *Id.* Any local taxes imposed on net income should also be included in the aggregate marginal tax rate when analyzing any decision.

Pennsylvania, conversely, has the lowest individual income tax rate (2.2%) of any state except for Indiana (1.9%). *Id.* It is also interesting to note that Pennsylvania's 6% sales tax is only exceeded by Connecticut at 7 1/2%, and the 8% rate paid in New York City when the 4% New York state and 4% New York City tax rates are combined. 1982 FED. TAXES (P-H) ¶ 13,299.

be the case.<sup>65</sup> For a 12% marginal tax rate taxpayer,<sup>66</sup> the proper election is always to use a 5-year life, because in that case the \$334 additional investment credit that will be gained translates into an equivalent deduction of \$2,783.<sup>67</sup> This makes the 5-year life first year flow exceed the third year flow by an amount sufficient to make the 5-year life the proper choice at any rate of interest.<sup>68</sup>

Since it is more advantageous for all taxpayers<sup>69</sup> to increase a 3-year life into five years to gain additional investment credit, it would seem probable that the same would be true for stretching a 5-year life into seven years. And so it is, with even greater force. A 57% marginal rate taxpayer would only choose a 5-year life if his after tax cost of capital exceeded 12%, a 33% taxpayer if his after tax cost of capital exceeded 42%, and a 12% taxpayer would never choose a 5-year life, no matter what his after tax cost of capital.<sup>70</sup>

---

65. As a 57% taxpayer, an 11% after tax cost of capital would require either a 26% before tax earnings on investments or a 26% rate of interest on a loan, which is highly unlikely.

66. The 12% rate is the lowest federal tax bracket and would be the taxpayer's marginal rate if he was not subject to any state or local income taxes. If a taxpayer earns so little as to not be subject to any income taxes, then he should choose the 5-year life so that he will have the largest possible investment tax credit carryforward under I.R.C. § 46(b)(1) (West Special Supp. 1982) and the largest possible net operating loss carryforward under I.R.C. § 172(b)(1) (West Supp. 1982).

67. The \$334 in additional investment credit will reduce a 12% marginal federal tax rate taxpayer's taxes by \$334 and a deduction of \$2,783 would have the same effect ( $\$2,783 \times 12\% = \$334$ ). Note that the 12% rate used here is the federal rate only and not the aggregate federal, state, and local marginal tax rates because investment credit is allowed only on the federal tax return. As stated in the text, the 5-year life is always the proper choice for a 12% aggregate marginal tax rate taxpayer and the 5-year life is so overwhelmingly the proper choice that the distinction between the federal and the aggregate marginal tax rates becomes insignificant for such low tax rate taxpayers.

68. The 5-year life first year flow exceeds the 3-year flow for the first year by \$1,666 which, by itself, is sufficient to offset the only flow favoring a 3-year life, which occurs in the second year and amounts to \$666. Even a negative rate of interest would not make the 3-year life the proper election, because the third, fourth, and fifth year flows favoring the 5-year life also exceed \$666 in the aggregate.

69. Note that in the above exhibit and in all other computations that the sum-of-the-years digits method of depreciation was used. If the double declining balance or straight-line method had been used, the deductions for depreciation would have been less lucrative as compared to the additional investment credit that could be gained by stretching the useful life. This occurs because the double declining balance and straight-line depreciation methods do not generate the most advantageous deductions for the taxpayer, as shown in Exhibit #1. Thus, using the double declining balance or straight-line method would increase the after tax cost of capital interest rate which causes the stretching of the useful life to not be the proper choice.

70. Taxpayers with marginal tax rates between the 57%, 33%, and 12% rates men-

Thus, the useful life should be increased from three to five years, or from five to seven years, to gain the additional investment credit.

Knowing that a 3-year life should be increased to five years and a 5-year life to seven years, it is obvious that a 4-year life should be stretched to five years and a 6-year life to seven years. The next questions are if a 4-year life should be increased to seven years, and if an item which could be expensed should be capitalized for three years to gain investment credit. The answer is no, because neither the 20% deviation allowed from the asset depreciation range class life<sup>71</sup> nor the "facts and circumstances" test<sup>72</sup> is flexible enough to allow that great of an increase in useful life.

Nonresidential real property can qualify for investment credit under ACRS when it is a qualified rehabilitation expenditure and such expenditure has a useful life of twelve and one half years or more and does not otherwise qualify for investment credit.<sup>73</sup> Expenditures made before January 1, 1982, qualify for investment credit equal to 66  $\frac{2}{3}$  % of its basis if its life was five or more years but less than seven years, and for 100% of its basis if the asset had a useful life of seven or more years.<sup>74</sup> This prior law does not apply to nonrecovery rehabilitation expenditures incurred after December 31, 1981;<sup>75</sup> recovery and nonrecovery property are not distin-

---

tioned above will have after tax costs of capital between the 12%, 24%, and infinity interest rates respectively. Thus, the after tax cost of capital for a 45% taxpayer can be interpolated to be about 18% by computing 45% to be half-way between 33% and 57%, and 18% to be half-way between 12% and 24%. A more accurate method of interpolating is to graph the coordinates from which a curve can be drawn. Using this method, the after tax cost of capital for a 45% marginal rate taxpayer appears to be closer to 17%.

71. I.R.C. § 167(m)(1) (West Supp. 1982).

72. Treas. Reg. § 1.167(a)-1(b), T.D. 7203, 1972-2 C.B. 30.

73. I.R.C. § 48(a)(2) (West Supp. 1982), (g)(1), (g)(2) (West Special Supp. 1982). In general, qualified rehabilitation expenditures must be made on buildings at least 30 years old and 75% of the existing exterior walls must be retained. § 48(a)(2)(F), (g)(1). The investment credit for certified historic structures, § 48(g)(3), will not be discussed in this comment.

74. See I.R.C. § 46(c)(2) (West Supp. 1982) and I.R.C. § 48(g) (West Special Supp. 1982) as they existed prior to the enactment of ERTA on August 13, 1981.

75. To be nonrecovery property requires that the property be "churned", which for I.R.C. § 1250 (West 1982) real property means the property was previously owned by a related person. See *supra* note 30 and accompanying text. If the property was previously owned and used by a related taxpayer, such used property would probably be more similar to a cost of acquiring a presently existing building or an interest therein within I.R.C. § 48(g)(2)(B)(ii) (West Special Supp. 1982), as opposed to a cost of acquiring property to be utilized in rehabilitating a building. Costs of acquiring presently existing buildings or an

guished for purposes of the rehabilitation investment credit since both qualify.<sup>76</sup> Nevertheless, the proper decision for pre-1981 tax returns<sup>77</sup> and for rehabilitation expenditures made after December 31, 1980 and before January 1, 1982,<sup>78</sup> is to increase the useful life, except for 50% or more marginal tax rate taxpayers whose after tax cost of capital exceeded 11%, and 57% taxpayers whose after tax cost of capital exceeded 7%.<sup>79</sup>

---

interest therein do not qualify for rehabilitation investment credit. *Id.* Therefore, the terms "nonrecovery property" and "qualified rehabilitation expenditure" are mutually exclusive by definition in most cases. The only situation in which property could be "churned" (previously used by a related taxpayer) and still be a qualified rehabilitation expenditure is when a taxpayer would sell building materials that he previously used to a related taxpayer who would then employ the materials to rehabilitate a building. Note that by § 48(g)(4), such used materials would be treated as new materials for I.R.C. § 38 (1976) purposes.

76. I.R.C. § 48(g)(2)(A), (B) (West Special Supp. 1982).

77. Pursuant to I.R.C. § 6511(a) (1976), calendar taxable year 1979 tax returns can be amended for most taxpayers until April 15, 1983, and 1980 returns until April 15, 1984. The useful life of an asset, however, can be changed only when the change is significant and there is a clear and convincing basis for redetermination. Treas. Reg. § 1.167(a)-1(b), T.D. 7203, 1972-2 C.B. 30. Thus, only when an audit causes items to be capitalized that were previously expensed could the life on nonrecovery property be stretched.

78. See I.R.C. § 48(g)(2)(A) (West Special Supp. 1982) and 1981 Internal Revenue Service Form 3468, lines 7 and 9. Rehabilitation expenditures incurred before January 1, 1982, qualify for investment credit if they have a useful life of five or more years but less than seven years (for qualified investment of 66 ⅔% of the basis) or seven years or more (100% of the basis). Note that if the expenditure is incurred after December 31, 1980, and before January 1, 1982, it is recovery property and, thus, is either 10-year or 15-year property. It is classed for investment credit purposes in either the five or more years but less than seven, or the seven or more years useful life category. Due to this, increasing the useful life from less than seven years to seven or more years to gain the additional investment credit is always advisable, because whether the life is less than seven years or seven years or more, the asset will still be 10-year property (as long as the useful life is 12.5 years or less), so faster depreciation deductions are not lost by the stretch. I.R.C. §§ 46(c)(2) (West Supp. 1982), 168(c)(2)(C)(ii) (West Supp. 1982).

79. A 50% marginal tax rate taxpayer with an 11% or more after tax cost of capital would have to have pre-tax cost of capital of 22% or more, which is unlikely. A 57% marginal tax rate taxpayer faced with this decision on rehabilitated nonresidential real property should increase the useful life from five years to seven years unless his after tax cost of capital exceeds 7%, which would require a 16% pre-tax rate.

For all of the computations made to reach the decisions in this footnote and accompanying text, the 150% declining balance method of depreciation under I.R.C. § 167(j)(1)(B) (1976) was used. This is the best method to choose, despite the built-in salvage value of any declining balance method as discussed *supra* note 48. Comparing the over 7% rate necessary to make the 5-year life more advantageous under the 150% declining balance depreciation method to the over 12% rate necessary when sum-of-the-years digits was used for personal property to decide if the life should be increased from five to seven years, it can be seen that the faster that the cost can be recovered, the less advantageous the additional investment credit becomes.

*C. The Section 167(f) Election to Reduce an Asset's Salvage Value*

The salvage value of depreciable personal property with a useful life of three years can be reduced by an amount not to exceed 10% of the basis of such property.<sup>80</sup> Since electing to reduce the salvage allows greater deductions in the earlier years of an asset's life without reducing the investment credit available nor the capital gain upon eventual sale (if any), the section 167(f) election should always be made by non-tax preference taxpayers.<sup>81</sup>

SUMMARY FOR NONRECOVERY PROPERTY

Decision

Proper Choice

A. Depreciation Method

1. When Sum-of-the-Years  
Digits and 200% Declining  
Balance are Available

a. 3-Year Useful Life

Sum-of-the-years digits, unless the taxpayer's after tax cost of capital exceeds 15%, then use 200% declining balance. If the taxpayer will use Revenue Procedure 74-11 after the second year<sup>82</sup> use double declining balance with a switch to straight-line.

b. 5-Year Useful Life

Sum-of-the-Years Digits. If the taxpayer will use Revenue Procedure 74-11 after the third year use double declining balance with a switch to straight-line.

c. 7-Year Useful Life or More

Sum-of-the-Years Digits.

2. When 150% Declining  
Balance and Straight-Line are  
Available

80. I.R.C. § 167(f)(1), (2) (1976).

81. Tax preference taxpayers will be analyzed *infra* pt. IV. B. 3. Electing I.R.C. § 167(f) (1976) increases the ordinary gain upon sale, I.R.C. §§ 1245(a) (West 1982), 1016(a)(2) (West 1982), but the additional ordinary gain will be equal to or less than the additional ordinary deductions previously allowed under § 167(f) by depreciating expenditures that would otherwise be nondepreciable salvage. The present value of the additional deduction allowed will always exceed the present value of the additional ordinary income incurred in a later year; thus, § 167(f) should always be elected.

82. See *supra* note 51 for a discussion of the use of Rev. Proc. 74-11.

- |  |  |
|--|--|
| <p>a. 30-Year Useful Life</p>  | <p>Straight-Line, unless the taxpayer's after tax cost of capital is over 8%. If the taxpayer will use Revenue Procedure 74-11 after the eleventh year use 150% declining balance with a switch to straight-line.</p>      |
| <p>b. 40-Year Useful Life</p>  | <p>Straight-Line, unless the taxpayer's after tax cost of capital is 6% or more. If the taxpayer will use Revenue Procedure 74-11 after the fourteenth year use 150% declining balance with a switch to straight-line.</p> |
| <p>3. When 125% Declining Balance and Straight-Line are Available</p>  |  |
| <p>a. 30-Year Useful Life</p>  | <p>Straight-Line, unless the taxpayer's after tax cost of capital is 16% or more. If the taxpayer will use Revenue Procedure 74-11 after the seventh year use 125% declining balance with a switch to straight-line.</p>   |
| <p>b. 40-Year Useful Life</p>  | <p>Straight-Line, unless the taxpayer's after tax cost of capital is 13% or more. If the taxpayer will use Revenue Procedure 74-11 after the eighth year use 125% declining balance with a switch to straight-line.</p>    |
| <p>B. Increasing Useful Life to Gain Additional Investment Credit (Regardless of using Revenue Procedure 74-11).</p> |  |
| <p>1. One Year Increase</p>  | <p>Always increase the life if additional investment credit will be gained thereby, otherwise do not.</p>  |
| <p>2. Two Year Increase</p>  |  |
| <p>a. 3-Year Increased to Five Years</p>   | <p>Increase the life.</p>  |
| <p>b. 5-Year Increased to Seven Years</p>  | <p>Increase the life.</p>  |
| <p>3. Three Year Increase</p>  | <p>Taxpayer cannot increase the life because a three year stretch is not permissible under the Code.</p>   |
| <p>4. Rehabilitation Investment Credit Expenditures Made Before January 1, 1982</p>                                  |  |

- |   |   |
|---|---|
| a. Under 50% Marginal Rate Taxpayers  | Increase the life from five to seven years.                                     |
| b. 50% Taxpayers  | Increase the life, unless the taxpayer's after tax cost of capital exceeds 11%. |
| c. 57% Taxpayers  | Increase the life, unless the after tax cost of capital exceeds 7%.             |
| C. Section 167(f) Election to Reduce Salvage Value (Regardless of using Revenue Procedure 74-11). | Always elect section 167(f).  |

### III. RECOVERY PROPERTY<sup>83</sup> PLACED IN SERVICE IN TAXABLE YEARS BEGINNING BEFORE DECEMBER 31, 1982

#### A. *Increasing Useful Life to Gain Additional Investment Credit*

As shown above for nonrecovery property, the life of an asset

83. The analysis of recovery property becomes complex when the taxpayer's aggregate marginal tax rate is computed because an applicable state income tax law might allow only part or none of the increased deductions under ACRS. Pennsylvania, for example, allows all entities except corporations to use ACRS; corporations must use the pre-ACRS rule for calendar years 1981 and 1982. 72 PA. CONS. STAT. ANN. § 7401(3)(e) (Purdon Supp. 1982-1983). For calendar year 1983, the pre-ACRS depreciation deductions are allowable plus one half of the excess of ACRS depreciation on the same assets over pre-ACRS depreciation. *Id.* § 7401(3)(g). Then, for calendar year 1984 and thereafter, ACRS depreciation is allowed plus one fourth or \$10,000, whichever is greater, of the amount previously disallowed. *Id.* 7401(3)(i). Complicating the analysis further, Pennsylvania allows the prior I.R.C. § 179 (West 1982) (amended 1981) additional first year depreciation for calendar year 1981, *id.*, while the federal government does not, I.R.C. § 179 (West Supp. 1982).

As can be seen by the example of Pennsylvania law, the federal marginal tax rate and deductions should now be separated from the state marginal tax rate and deductions to reflect the differences in the laws in computing the annual flows. Using as an example a corporate tax return of a corporation in which the author recently was involved in preparing, the total ACRS deductions amounted to \$97,000 while the pre-ACRS depreciation on the same assets amounted to \$77,000. Thus, the ACRS deduction exceeded the pre-ACRS deduction by about 21% over a wide variety of assets, including all classes of recovery property. Since the Pennsylvania tax rate was 10 ½ %, while the federal rate was 46%, Pennsylvania's tax was about 19% of the total taxes. Multiplying the 21% deduction difference between ACRS and pre-ACRS by the 19% proportional share of taxes, the effect of the Pennsylvania state law was only 4% of the total taxes incurred. Further reducing the state law effect is the disallowed 4% in calendar year 1981 being recovered, beginning in 1984, by larger deductions in 1984 and subsequent years. The final justifications for ignoring the difference in state law on ACRS deductions are the same as the reasons stated in the fourth paragraph of *supra* note 61, regarding the propriety of refining the marginal tax rate to an exact number. Thus, although the taxpayer's aggregate marginal tax rate should continue to include the state income tax rate, the differences in state law on ACRS deductions need not be reflected.

should be stretched from three to five years to gain the extra investment credit equal to 3.34% of an asset's basis.<sup>84</sup> For recovery property, the amount of investment credit gained by increasing the life from four years or less (3-year property) to over four years (5-year property) is 4% of the asset's basis.<sup>85</sup> The faster 3-year recovery, however, offsets the advantage of the additional investment credit for 50% marginal tax rate taxpayers with after tax costs of capital of 11% or more and 57% taxpayers with after tax costs of capital of 9% or more.<sup>86</sup>

---

It is interesting to note that because the Pennsylvania law disallows ACRS for one year, 1981, and then allows one half of the extra deductions under ACRS in the second year, the double declining balance method of depreciation should be used for state income tax purposes because it will generate larger deductions in those two years than will the sum-of-the-years digits method. More importantly, it will generate a larger deduction in the first year, 1981. Thus, the assertion in Exhibit #1 that the sum-of-the-years digits method should be used when both methods are available under I.R.C. § 167 (West Supp. 1982) does not apply when only Pennsylvania state income taxes are at issue, because the relevant period is no longer the entire useful life of the asset but rather only two years.

84. See *supra* note 29. The basis of I.R.C. § 38 (1976) nonrecovery property with a 3-year life is qualified investment for 33 1/3% of the basis while 5-year life nonrecovery property is qualified investment to the extent of 66 2/3% of its basis. The qualified investment is then multiplied by 10% to yield the amount of investment credit, I.R.C. § 46(a)(2)(B) (West Special Supp. 1982). Thus, 3% of the basis (33 1/3% x 10%) is gained in investment credit by increasing the life from three years to five years for nonrecovery property.

85. Under I.R.C. § 46(c)(7) (West Supp. 1982), 3-year recovery property is qualified investment to the extent of 60% of its unadjusted basis, and 5-year property for 100% of its unadjusted basis. Therefore, 40% of the unadjusted basis is gained as additional qualified investment. When multiplied by the 10% regular percentage for investment credit, § 46(a)(2)(B), 4% of the unadjusted basis (40% x 10%) is gained in investment credit by increasing the life from three to five years for recovery property.

86. For a 12% marginal tax rate taxpayer, the life should be increased from three to five years unless the taxpayer's after tax cost of capital is over 50%, which is virtually impossible. A 46% marginal tax rate taxpayer would increase the life unless his after tax cost of capital is 12% or more, which would require a 26% before tax rate.

The reason that increasing the useful life is less advantageous under ACRS than for nonrecovery property is because 3-year ACRS generates deductions of 25% of the unadjusted basis in the first year, 38% in the second year, and 37% in the third year, while 5-year ACRS generates deductions of 15%, 22%, 21%, and 21%, thus making the 3-year recovery produce greater deductions in the earlier years. The 3-year deductions are 10% greater (25% less 15%) in the first year, 16% greater in the second year and 16% greater in the third year; the 5-year life deductions are greater in the fourth and fifth years amounting to 21% in each year. When nonrecovery property was analyzed in Exhibit #2, the sum-of-the-years digits method of depreciation was used for both the three and five years lives, which produced deductions of 50%, 33%, and 17% over the 3-year life, and 33%, 27%, 20%, 13%, and 7% over the 5-year life, for a difference of 17% and 6% favoring the 3-year life in the first two years, and favoring the 5-year life by 3%, 13%, and 7% in the last three years. By comparing the 3-year ACRS excesses in deductions of 10%, 16%, 16%, -21%, and -21% to the nonrecovery 17%, 6%, -3%, -13%, and -7%, it can be seen that the loss of



Investment credit can be gained by increasing the useful life of qualified rehabilitation expenditures made after December 31, 1981,<sup>87</sup> from twelve and one half years or less to over twelve and one half years.<sup>88</sup> When the building is thirty to thirty-nine years old, 15% investment credit can be gained, and for buildings forty or more years old, 20% investment credit can be gained.<sup>89</sup> Whether the investment credit gained is 15% or 20%, and no matter what the taxpayer's marginal tax rate or after tax cost of capital, stretching a twelve and one half or less year life to over twelve and one half years is the proper decision.<sup>90</sup>

### *B. Proper Use of the Section 179 Expense Election*

The first question that section 179 raises is whether it should be elected at all and, if it should, the second question is whether section 179 should be elected on 3, 5, or 15-year recovery property.<sup>91</sup>

---

earlier depreciation deductions is much greater under ACRS. This accounts for the decrease in the after tax cost of capital interest rate necessary to make stretching the useful life the improper choice for recovery property, despite the loss of a 4% investment credit as opposed to 3% for nonrecovery property.

87. See *supra* note 78.

88. See *supra* notes 73, 78.

89. I.R.C. § 46(a)(2)(F)(i) (West Special Supp. 1982). Note that it is assumed that property with a life of 12.5 or less years does not qualify for investment credit as 10-year property. This is because 10-year property is defined in I.R.C. § 168(c)(2)(C)(ii) (West Supp. 1982) as I.R.C. § 1250 (West 1982) property, which § 1250(c) defines as all property that is not I.R.C. § 1245 (West 1982) property. Section 1245(a)(3)(A) defines § 1245 property as personal property, thus excluding personal property from the 10-year recovery class. Since I.R.C. § 48(a)(1)(A) (West Supp. 1982) requires property to be tangible personal property to qualify for investment credit, 10-year property cannot qualify for investment credit unless it comes within the other § 48(a)(1) types of qualifying property. Reviewing the other six types ((B) through (G)) of qualifying property, there are very limited situations in which any 10-year property will qualify for investment credit, unless it is a rehabilitation expenditure within § 48(a)(1)(E). To be a qualified rehabilitation expenditure requires expenditures made before January 1, 1982, to have a useful life of at least five years, I.R.C. § 48(g)(2)(A)(i) (West Special Supp. 1982) (as in effect prior to August 13, 1981 (ERTA)), and for expenditures made after December 31, 1982, the property must be 15-year property, § 48(g)(2)(A)(i), thus excluding 10-year property.

90. An additional factor which was taken into consideration is that if 15-year property is not put into use until the end of the taxable year, the depreciation deduction must be pro-rated by months. Thus, the first year deduction for 15-year property of 12% of the unadjusted basis becomes only 1% when the asset is placed in service in the last month of the taxable year. I.R.C. § 168(b)(2)(A) (West Special Supp. 1982).

91. Pursuant to I.R.C. § 48(g)(2)(A)(i) (West Special Supp. 1982), 10-year recovery property cannot be rehabilitation investment credit property. *Cf. supra* note 89 (10-year property can in limited situations qualify for investment credit). Nor can nonrecovery property qualify for the I.R.C. § 179 (West Supp. 1982) expense election because I.R.C. §

Section 179 itself requires that the property on which section 179 is elected qualify as section 38 investment credit property. Section 179 denies investment credit on the part of the property for which section 179 has been elected.<sup>93</sup> Thus, there is a direct trade-off between the faster cost recovery and investment credit.<sup>93</sup>

The surprising answer to the question whether section 179 should be elected is that it should not be elected unless the taxpayer has a very high after tax cost of capital<sup>94</sup> or has 15-year qual-

168(e)(4)(A), (D) (West Supp. 1982) defines nonrecovery property as property owned or used by a related person within I.R.C. § 267(b) (1976) or I.R.C. § 707(b)(1) (1976), and I.R.C. § 179(d)(2)(A) (West Supp. 1982) excludes from § 179-eligible property any property acquired from a related person within § 267 or § 707(b).

92. I.R.C. § 179(d)(1), (9) (West Supp. 1982). Another collateral effect of the § 179 election is the denial of installment sale treatment on the amount deducted under § 179, I.R.C. § 453(i) (West Supp. 1982). The loss of installment sale treatment on the part of an asset expensed under § 179 will not be taken into account in this analysis due to its varied affect on taxpayers, based on their holding periods and gains upon sale, as well as the fact that most assets are never involved in an installment sale.

93. I.R.C. § 179 (West Supp. 1982), prior to ERTA, allowed additional first year (bonus) depreciation of 20% on up to \$10,000 per taxpayer of the cost of new property with a useful life of six years or more, and did not deny investment credit on the 20% bonus depreciation. Thus, for any marginal rate taxpayer with any positive after tax cost of capital, the pre-ERTA § 179 should have been elected.

94. The following table delineates the after tax cost of capital interest rate which must be exceeded for a given taxpayer to make the I.R.C. § 179 (West Supp. 1982) election advantageous to him:

Aggregate Marginal Tax Rate Taxpayer	Category of Property to be Expensed			
	3-Year	5-Year	15-Year Rehabilitation Investment Credit Property	
			Age of Building	
			30-39 Years	40+ Years
57%	11%	10%	2%	3%
50%	13%	12%	3%	5%
33%	20.8%	20.5%	7%	13%
27%	27.2%	27.9%	11%	25%
12%	115%	1350%	Never elect § 179*	

\*The actual marginal rates at which § 179 should never be elected are 15% for 30-39 year old buildings and 21% for 40 or more year old buildings. At those low tax rates, the first year flow without electing § 179 exceeds the flow if § 179 is elected, therefore, the taxpayers should not elect § 179.

As the above chart illustrates, the after tax cost of capital interest rates at which the § 179 election should be made are lower for the 5-year property until the taxpayer's aggregate marginal tax rate is 27% or less, thus indicating that 5-year property should be expensed under § 179 before 3-year property is expensed. Moving into the next two columns on the chart, it can be seen that 15-year rehabilitation expenditures on 40 or more year old buildings should be expensed before 3-year or 5-year property, and that 15-year rehabilitation expenditures on 30-39 year old buildings should be expensed before either 40 or more year

ified rehabilitation expenditures on which he can elect section 179.<sup>95</sup> The marginal rate taxpayer who has the lowest after tax cost of capital at which he would elect section 179 is a 57% taxpayer as shown below in Exhibit #3. For 27% or higher marginal rate taxpayers, the section 179 election would be chosen on 5-year recovery property if it is ever to be elected.<sup>96</sup>

It is almost inconceivable that Congress would enact an expense election such as section 179 with the purpose of economic recovery when the election is not advantageous for almost all taxpayers. This is even more inconceivable when the pre-ERTA section 179 election is taken into account, which allowed 20% additional first year (bonus) depreciation that was advantageous to all taxpayers.<sup>97</sup> The problem with the new section 179 in comparison to the prior section 179 is that investment credit is lost on the new section 179 expensed property, whereas it was not under the prior section 179.<sup>98</sup> Less importantly, the useful life necessary to gain investment credit on 10% of the cost of the property was reduced from seven years to five years,<sup>99</sup> thus reducing the period over which the property would be recovered through depreciation deductions if section 179 is not elected.<sup>100</sup>

old buildings, 3-year property, or 5-year property.

When the taxpayer's marginal tax rate is below 27%, 3-year property should be expensed prior to 5-year property. This switch from 5-year being more advantageous to expense than 3-year is consistent with the fact that the lower the taxpayer's marginal tax rate, the more important the additional investment credit on 5-year property becomes. This fact is also reflected *supra* note 86, where the after tax cost of capital interest rate necessary to make the stretch from 3-year property to 5-year property not advantageous increased as the taxpayer's marginal tax rate decreased, even though no change in the proper election occurred, as in the table above, at the 27% marginal tax rate.

In computing the interest rates for the 15-year property in the table above, both the I.R.C. § 48(g)(5)(A) (West Special Supp. 1982) (pre-TEFRA), § 48(q)(3) (West Special Supp. 1982) (post-TEFRA) requirement that the basis of 15-year property be reduced by any rehabilitation investment credit, and the § 48(g)(2)(B)(i) requirement that straight-line recovery under I.R.C. § 168(b)(3) (West Special Supp. 1982) must be used, were reflected. The 15-year recovery period under § 168(b)(3)(A) was used for the straight-line recovery, using the percentages as shown in the table in the text following *infra* note 154. See also *supra* note 90.

95. See *supra* note 73 and accompanying text for a discussion of rehabilitation investment credit.

96. See *supra* note 94.

97. See *supra* note 93.

98. *Id.*

99. I.R.C. § 46(a)(2)(B), (c)(2), (7) (West Special Supp. 1982 & West Supp. 1982).

100. For a 57% marginal tax rate taxpayer, the investment credit gained on 5-year property instead of using the I.R.C. § 179 (West Supp. 1982) expense, is \$500 on a \$5,000

*Exhibit #3 Recovery Property—Proper Use of the Section 179 Expense Election*

Example: \$5,000 of qualifying section 179 recovery property, first using a 3-year recovery, then a 5-year recovery, and finally a 15-year recovery. Taxpayer has an aggregate marginal tax rate of 57%.

The section 168(b)(1) deductions for 3-year property are \$1,250 (25%) in the first year, which will save \$713 ( $\$1,250 \times 57\%$ ) in taxes, \$1,900 (38%) in the second year, for a tax saving of \$1,083 ( $\$1,900 \times 57\%$ ), and \$1,850 (37%) in the third year, which will save \$1,054<sup>101</sup> ( $\$1,850 \times 57\%$ ) in taxes. The investment credit earned is \$300 and the section 179(b)(1) expense election is \$5,000.

Year	If Section 179 is not Elected:		Total Tax Savings	If Section 179 is Elected:		Difference: 3-Year Excesses over Section 179
	Depreciation Tax Savings	Investment Credit		Tax Savings (\$5,000 Deduction $\times$ 57%)		
1	\$ 713	\$ 300	\$1,013	\$ 2,850		\$(1,837)
2	1,083		1,083			1,083
3	1,054		1,054			1,054
	<u>\$2,850</u>	<u>\$ 300</u>	<u>\$3,150</u>	<u>\$ 2,850</u>		<u>\$ 300</u>

Year	3-Year Excesses	11% Present Values
1	\$(1,837)	\$(1,837)
2	1,083	976
3	1,054	855
	<u>\$ 300</u>	<u>\$( 6 )</u>

Thus, section 179 should be elected on 3-year recovery property only if the taxpayer's after tax cost of capital is 11% or more, which would require a before tax interest rate of 26% ( $11\% \div (1 - 57\%)$ ).

For 5-year recovery property, the depreciations are \$750 (15%), \$1,100 (22%), \$1,050 (21%), \$1,050 (21%), and \$1,050 (21%), which will generate tax savings of \$428, \$627, \$599, \$598 and \$598. The investment credit earned is \$500 and the section 179 expense election is \$5000.

---

asset (10%), which is equal to an equivalent deduction of \$877 in the first year ( $\$500 \div 57\%$ ), while § 179 would generate a deduction of \$5,000. Thus, a deduction equal to \$877 or 17.5% of the cost of the asset ( $\$877 \div \$5,000$ ) is effectively gained by not electing § 179.

101. To compute the tax savings, the last year or years of computation are adjusted in this and all subsequent computations in order to cause the total tax savings to be as close to the total deductions multiplied by the marginal tax rate as is possible using whole numbers. This adjustment may also be made in subsequent computations without a footnote due to the adjustment being relatively immaterial.

Year	If Section 179 is not Elected:			If Section 179 is Elected:		Difference:	
	Depreciation Tax Savings	Investment Credit	Total Tax Savings	Tax Savings (\$5,000 deduction x 57%)	5-Year Excesses over Section 179	10% Present Values	
1	\$ 428	\$ 500	\$ 928	\$2,850	\$ (1,922)	\$ (1,922)	
2	627		627		627	570	
3	599		599		599	495	
4	598		598		598	449	
5	598		598		598	408	
	\$2,850	\$ 500	\$3,350	\$2,850	\$ 500	\$ 0	

Thus, section 179 should be elected on 5-year recovery property for 57% aggregate marginal tax rate taxpayers only if the taxpayer's after tax cost of capital is 10% or more.

For 15-year rehabilitation property on a building thirty to thirty-nine years old, the deductions<sup>102</sup> are \$298 (7%) for the first ten years and \$255 (6%) for the last five years, which will generate \$170 and \$144 in tax savings, respectively, each year. The investment credit earned is \$750 (15%) and the section 179 expense election is \$5,000, which will generate a tax savings of \$2,850 in the first year.

Year	If Section 179 is not Elected:			If Section 179 is Elected:		Difference:	
	Depreciation Tax Savings	Investment Credit	Total Tax Savings	Tax Savings on Section 179 Deduction	15-Year Excesses over Section 179	2% Present Values	
1	\$170	\$750	\$ 920	\$2,850	\$(1,930)	\$(1,930)	
2-10	170		170		170	1,388 <sup>103</sup>	
11-15	144		144		144	568 <sup>104</sup>	
	\$2,420	\$750	\$3,170	\$2,850	\$ 320	\$ 26	

Thus, section 179 should be elected on 15-year property rehabilitating thirty to thirty-nine year old buildings any time that a 57%

102. The basis of the property must be reduced by the investment credit taken, I.R.C. § 48(g)(5)(A) (West Special Supp. 1982), and straight-line recovery under I.R.C. § 168(b)(3)(A) (West Special Supp. 1982) must be used pursuant to § 48(g)(2)(B)(i). Even though these two adjustments must be made before investment credit can be taken, it is always to the taxpayer's advantage to gain the investment credit on either 30-39 year old buildings or 40 or more year old buildings.

103. The flows for years two through ten are the same, thus allowing them to be treated as an annuity being received at the end of each year for nine years. The formula to compute the present value factor of such an annuity is  $(1 - (1 + i)^{-n}) \div i$ , where  $i$  is the interest rate and  $n$  is the number of years, or 8.1622 in this annuity.

104. The flows of years 11-15 are the same, thus allowing them to be treated as an annuity, the same as in *supra* note 103. The present value factor here is 4.7135, thus yielding \$679 as the value of the annuity discounted to the beginning of year 11. By discounting the \$679 to year 1, which is nine periods (years) from the tenth year to which the annuity is discounted by its computation, the present value of \$568 is attained.

marginal tax rate taxpayer's after tax cost of capital exceeds 2%, which will almost always be the case.<sup>105</sup>

For 15-year property rehabilitating a building forty or more years old, the deductions are \$280 for the first ten years and \$240 for the last five years, which will generate \$160 and \$136 in tax savings, respectively, each year. The investment credit earned is \$1,000 (20%) and the section 179 expense election is \$5,000, which will generate a tax savings of \$2,850 in the first year.

Year	If Section 179 is not Elected:			If Section 179 is Elected:		Difference:	
	Depreciation Tax Savings	Investment Credit	Total Tax Savings	Tax Savings on Section 179 Deduction	15-Year Excesses over Section 179	3% Present Values	
1	\$ 160	\$1000	\$1,160	\$2,850	\$(1,690)	\$(1,690)	
2-10	160		160		160	1,246	
11-15	136		136		136	477	
	\$2,280	\$1000	\$3,280	\$2,850	\$ 430	\$ 33	

Thus, section 179 should be elected on 15-year property rehabilitating forty or more year old buildings anytime that a 57% marginal tax rate taxpayer's after tax cost of capital exceeds 3%, which will usually be the case.

By the above computations, it can be seen that section 179 should be elected by a 57% marginal tax rate taxpayer on 3-year property only when his after tax cost of capital is 11% or more, on 5-year property when his after tax cost of capital is 10% or more, on 15-year property rehabilitating thirty to thirty-nine year old buildings when his after tax cost of capital exceeds 2%, and on forty or more year old buildings when his after tax cost of capital exceeds 3%.<sup>106</sup> Due to the after tax cost of capital being the lowest on thirty to thirty-nine year old buildings, section 179 should first be elected on that type of property, next on the type of property with the next lowest after tax cost of capital, and so forth.

### C. Election of Statutory ACRS Percentages or Straight-Line Recovery<sup>107</sup>

Non-tax preference taxpayers should all choose the statutory

105. A 2% after tax cost of capital for a 57% taxpayer is a mere 5% before taxes, which is less than the rate which can be earned on a daily interest savings account.

106. For other marginal tax rate taxpayers, see *supra* note 94.

107. When straight-line recovery is elected on 3, 5, or 10-year property, it must be elected on all recovery property in that class for that taxable year. I.R.C. § 168(b)(3)(B)(i) (West Special Supp. 1982). This requirement does not change the decision whether the statutory percentages or straight-line recovery should be used because it will either be better to use the statutory percentages on all property in that class or straight-line recovery for all property in that class.

ACRS percentages for 3, 5, and 10-year property instead of the optional straight-line recovery<sup>108</sup> because the statutory percentages yield higher deductions in the earlier years, which is almost always advantageous to the taxpayer. The only instance in which the slower, straight-line recovery should be used on 3, 5, or 10-year property by a non-tax preference taxpayer is when the taxpayer expects to have a low taxable income year or years in the early years of the asset's life, such that level deductions will decrease the taxpayer's average marginal tax rate over several years, instead of decreasing the taxpayer's taxable income greatly in the earlier years, producing a low marginal tax rate in the earlier years while causing high taxable income and marginal tax rates in the later years.<sup>109</sup>

For 15-year real property, the depreciation recapture rules complicate the decision. When sold by noncorporate taxpayers, depreciation on nonresidential property is recaptured in full unless straight-line recovery is used,<sup>110</sup> and depreciation on residential rental property is recaptured only to the extent that the deduc-

---

For 15-year property, the election to use the statutory percentages or straight-line recovery is elected on each piece of property individually. § 168(b)(3)(B)(ii). In certain situations, it will be better to use the statutory percentages on 15-year residential rental property, while electing the straight-line recovery on 15-year nonresidential property. *See supra* pt. III. C. 2.

108. I.R.C. § 168(b)(1), (3) (West Supp. 1982). The statutory percentages for 3-year, 5-year, and 10-year property are computed by using the 150% declining balance method with a half-year depreciation convention and a switch to straight-line when the deduction will be higher. For 15-year property, the 175% declining balance method is used with a switch to straight-line and no depreciation convention; the annual percentage is instead pro-rated by months. By switching to straight-line after using declining balance, the built-in salvage of any declining balance method is avoided. *See supra* note 48 for a discussion of this built-in salvage.

The straight-line recovery periods for 3, 5, and 10-year property, *see supra* note 8, are also computed using a half-year convention. *See infra* note 148 for a table of the percentages.

109. For example, if a single taxpayer was fairly certain that his taxable income for 1982, 1983, and 1984 would be \$10,000, \$19,000, and \$29,000 in that order, his marginal federal tax rates would be 19%, 28% and 34%. I.R.C. § 1(c) (West Supp. 1982). By shifting \$4,000 of deductions out of 1982 and evenly into 1983 and 1984, his marginal tax rates will be changed to 23%, 24%, and 30%, thus losing 4% in 1982 but gaining 4% in both 1983 and 1984. Note that the present value of the tax savings in the later years should be used to analyze the decision to postpone deductions, since a dollar saved in taxes one year from now is not worth a dollar saved today. The interest rate used to discount the taxes saved is the taxpayer's after tax cost of capital.

110. I.R.C. § 1245(a)(5)(C) (West 1982).

tions exceed straight-line recovery over fifteen years.<sup>111</sup> When sold by corporate taxpayers after December 31, 1982, 15% of any capital gain on residential or nonresidential 15-year property is treated as ordinary gain.<sup>112</sup> The differences in tax advantages between the ACRS statutory percentages and straight-line recovery lie in the fact that deductions for the 15-year period favor the faster ACRS statutory percentages, and depreciation recapture upon sale at a gain favors a straight-line recovery. The most important factors in making the decision to use the statutory percentages or straight-line recovery on 15-year property are, first, the gain, if any, at which the building will be sold, thus determining the amount of depreciation recapture and, second, the year in which the gain will be incurred in order to discount the depreciation recapture to the present.

The amount of the gain upon sale is relevant only if the amount of the gain is greater than or roughly equal to the ACRS depreciation taken. This is because no depreciation recapture occurs when property is sold at a loss<sup>113</sup> and less recapture occurs when the gain is less than the depreciation, so all or some of the disadvantage of the statutory percentages as opposed to the straight-line recovery disappears, thus making the statutory percentages the proper choice for all non-tax preference taxpayers with any after tax cost of capital. Similarly, no depreciation recapture occurs when property is transferred from a decedent,<sup>114</sup> so the statutory percentages should be used by a taxpayer who expects to devise or pass through intestacy the 15-year property.

Regarding the holding period until sale, it is only relevant if depreciation recapture is a possibility, as discussed above. When the holding period is relevant, the longer the property is held the less important the depreciation recapture becomes because of its present value effect decreasing; therefore, the statutory percentages are favored over the straight-line recovery.

---

111. See *supra* notes 19-20.

112. I.R.C. § 291(a)(1) (West Special Supp. 1982). For purposes of § 291, corporations do not include small business corporations as defined in I.R.C. § 1371(b) (1976), § 291(e)(2), but does include personal holding companies.

113. I.R.C. § 1250(a)(1)(A)(ii) (West 1982), Treas. Reg. § 1.1250-1(a)(5), (b)(5), T.D. 7193, 1972-2 C.B. 489.

114. I.R.C. § 1250(d)(2) (West 1982).



### 1. *Nonresidential 15-year Property*

A recent tax article<sup>115</sup> graphically analyzed the effect of the holding period on the cost of capital interest rate necessary to make the statutory percentages the proper choice for 15-year property. The internal rate of return method was used (although not stated in the article), making the valid assumption that the gain upon sale would be high enough to cause full recapture.<sup>116</sup> The graph for nonresidential property in the article delineated the proper decision for holding periods up to thirty years and for costs of capital from 0% to 35%.<sup>117</sup> Thus, a wide range of situations were covered by the graph, which was produced by a computer program.<sup>118</sup> In Exhibit #4 below, one of the points on the graph is computed.

*Exhibit #4 Recovery Property—Statutory Percentages v. Straight-Line Recovery for Nonresidential 15-Year Real Property—Noncorporate Taxpayers*

Example: \$100,000 15-year nonresidential real property sold after 15 years for \$100,000. The taxable statutory percentage ordinary gain is therefore \$100,000, and for straight-line recovery, \$40,000 ( $\$100,000 - (60\% \times \$100,000 \text{ section } 1202)$ ).<sup>119</sup>

---

115. Whitmore and Reynolds, *Selecting the Optimum Depreciation Method for Real Estate Under the New ACR System*, 55 J. TAX'N 360 (1981).

116. This assumption is the only reasonable assumption that can be made to cover many actual situations, since the value of 15-year nonresidential real property generally rises each year. Should a taxpayer be fairly certain that less than full depreciation recapture will result upon resale, he need only adjust the "Gain on Sale" line in Exhibit #4, and then find the new internal rate of return.

117. Whitmore and Reynolds, *supra* note 115, do not state whether the cost of capital (discount rate) used is the after tax cost of capital or the before tax cost of capital. No matter which rate was intended, the discount rate shown should be used as the after tax cost of capital.

118. *Id.* at 362. Any of the decisions analyzed in the above exhibits could be reduced to a formula and used to produce a graph. The various after tax costs of capital and marginal tax rates referred to in this comment represent points on a graph. By taking the highest marginal tax rate illustrated in this comment (57%) and all rates used below it, the mathematical trend can be visualized and, if reduced to a graph, will produce a curve that will vary in shape for each decision analyzed.

119. Despite its irrelevance to the analysis of the proper depreciation method for noncorporate taxpayers on 15-year nonresidential property, the aggregate marginal tax rate does remain important to translate the after tax cost of capital into the before tax cost of capital to compare the before tax cost of capital to the interest rate in the marketplace paid for loans or received on deposits.

Year	Depreciation Deduction:		Statutory Percentages Excesses	16% Present Values	17% Present Values
	Statutory Percentage	Straight-Line Recovery <sup>120</sup>			
1	\$12,000	\$ 7,000	\$ 5,000	\$ 5,000	\$ 5,000
2	10,000	7,000	3,000	2,586	2,564
3	9,000	7,000	2,000	1,486	1,461
4	8,000	7,000	1,000	641	624
5	7,000	7,000	-0-	-0-	-0-
6-9	6,000	7,000	(1,000)	(1,545)	(1,464)
10	5,000	7,000	(2,000)	( 526)	( 487)
11-15	5,000	6,000	(1,000)	( 861)	( 779)
	\$100,000	\$100,000	\$ -0-	\$ 6,781	\$ 6,919
15 Gain	100,000	40,000	(60,000) <sup>121</sup>	(7,512)	(6,661)
				\$( 731)	\$ 258

Thus, when the holding period on nonresidential 15-year real property is fifteen years, the straight-line recovery should be used if the noncorporate taxpayer's after tax cost of capital is 16% or less, and the statutory percentages should be used if the taxpayer's after tax cost of capital is 17% or more.<sup>122</sup>

A ten year holding period causes the straight-line recovery to be the proper choice as long as the noncorporate taxpayer's after tax cost of capital is under 22%, and for holding periods under ten years, straight-line recovery should almost always be used.<sup>123</sup> When

120. For straight-line recovery percentages, see *infra* note 148.

121. This figure is bracketed because taxable gains are being compared instead of deductions as in the remainder of the exhibit.

122. These after tax cost of capital rates are slightly higher than those in the graph, due to authors of the article computing the straight-line recovery without rounding the recovery percentage, as shown in *infra* note 142. Thus, Exhibit #4 shows straight-line recovery of \$7,000 for each of the first 10 years, and \$6,000 for the last 5 years (total \$100,000), while the authors in producing their graph would have used \$6,667 as the recovery for each of the 15 years (total \$100,005). By using \$6,667, the statutory percentage excesses in the earlier years is increased, thus favoring the use of the statutory percentages slightly. Since all of the recovery percentages in I.R.C. § 168(b)(1) (West Special Supp. 1982) are rounded to the nearest whole percent, the straight-line recovery percents should be similarly rounded. Rounding-off the percentages is to the taxpayer's advantage, since it always yields higher deductions in the earlier years, just as the rounded percentage in Exhibit #4 yielded a depreciation deduction of \$7,000 in the first year while the un-rounded deduction is \$6,667, or .333% less than the rounded percentage (\$333 difference ÷ \$100,000 asset). The authors of the article used a computer program to compute their graph and probably used the \$6,667 un-rounded amount because it is easier to write a computer instruction to compute the exact amount than it is to round-off the amount or enter the amount for each year individually.

123. See Whitmore and Reynolds, *supra* note 115, at 362. A 22% after tax cost of capital requires a 57% aggregate marginal tax rate taxpayer to have a before tax cost of capital of 51%, a 50% taxpayer, 44%, a 20% taxpayer, 28%, and a 12% taxpayer, 25%.

the holding period is increased to twenty years, straight-line recovery should be used for taxpayers with an after tax cost of capital of less than 13%, and the statutory percentages for those with an after tax cost of capital of 13% or more. Once the holding period reaches twenty-nine years, use straight-line for after tax costs of capital of 9% or less, and the statutory percentages for all others.<sup>124</sup>

Nonresidential 15-year property can qualify for rehabilitation investment credit, but only when straight-line recovery is used.<sup>125</sup> When rehabilitation investment credit can be gained by electing straight-line recovery over a 15-year period, straight-line should always be elected for both corporate and noncorporate taxpayers.

Corporate taxpayers are confronted with the same question of whether to use the ACRS statutory percentages or straight-line recovery, but the analysis differs. First, corporations must treat 15% of any capital gains from sales after December 31, 1982, as ordinary income.<sup>126</sup> Second, corporations who have taxable incomes in

124. *Id.* The curve on the Whitmore and Reynolds graph becomes almost horizontal once the 30-year holding period is exceeded, so the 9% after tax cost of capital needed to make the statutory percentages the proper choice only drops to approximately 7% as the holding period increases another 10 years. When a taxpayer must look 30 years into the future to predict when he will sell his building, he must concurrently estimate his after tax cost of capital for over 30 years, which will be a guess at best. If the taxpayer (if one or a few individuals) were to die within the 30 years, the statutory percentages would have been the proper choice.

A noncorporate, non-tax preference taxpayer should elect the 15 year straight-line recovery under I.R.C. § 168(b)(3)(A) (West Special Supp. 1982) for nonresidential 15-year property for the following holding periods and after tax costs of capital:

<u>Holding Period (Years)</u>	<u>After Tax Cost of Capital</u>
5	Any (always elect straight-line)
10	Under 22%
15	Under 17%
16	Under 16%
17	Under 15%
20	Under 13%
23	11% or less
29	9% or less
39	7% or less
59	5% or less
110	Under 3%
over 110	Never elect straight-line

125. I.R.C. § 48(g)(2)(B)(i) (West Special Supp. 1982). Note also that the basis of 15-year property must be reduced by any investment credit allowed. § 48(g)(5)(A)(pre-TEFRA), § 48(q)(3)(post-TEFRA).

126. I.R.C. § 291(a)(1) (West Special Supp. 1982). For § 291 purposes, small business

excess of \$50,000 are subject to the corporate alternative capital gains tax imposed at a flat 28%,<sup>127</sup> instead of the regular corporate tax rates.<sup>128</sup> Due to the differing corporate rates on taxable income and capital gains, the marginal tax rate of the corporation becomes relevant in analyzing the proper depreciation method for 15-year nonresidential property, whereas it was not for noncorporate taxpayers.<sup>129</sup>

Corporations with aggregate marginal tax rates of 57%<sup>130</sup> and holding periods of less than twenty years should use the statutory percentages, as should 51% aggregate marginal tax rate<sup>131</sup> corporations with holding periods of less than sixteen years.<sup>132</sup> Corporations with taxable incomes of \$75,000 or less should always use the

corporations, defined in I.R.C. § 1371(b) (1976), are not included in the definition of corporations, § 291(e)(2), and personal holding companies, defined in I.R.C. § 542 (West Special Supp. 1982) are included.

127. I.R.C. § 1201(a) (West 1982).

128. I.R.C. § 11 (West Supp. 1982).

129. See *supra* note 119.

130. See *supra* note 64. Note that the aggregate marginal capital gains tax rate for corporations is 28% for federal taxes, I.R.C. § 1201(a) (West 1982), plus the 10½% state tax for a total of 38½% in Pennsylvania. The 10½% Pennsylvania rate used is very similar to the rates in Alaska, Arizona, California, Connecticut, Delaware, the District of Columbia, Iowa, Minnesota, New Jersey, and New York. 1982 STATE TAX GUIDE (CCH) at 1031. Twelve other states, Idaho, Louisiana, Maine, Maryland, Massachusetts, Montana, New Hampshire, North Dakota, Oregon, Rhode Island, Vermont, and Wisconsin have rates not materially different. *Id.*

131. See *supra* note 64. The 51% aggregate marginal tax rate is comprised of the I.R.C. § 11(b)(4) (West Supp. 1982) 40% rate and the 10½% state tax. The capital gains tax on such a corporation is 28% federal, I.R.C. § 1201(a) (West 1982), plus 10½% state.

132. The following table delineates when a corporate, non-tax preference taxpayer should elect the 15 year straight-line recovery under I.R.C. § 168(b)(3) (West Special Supp. 1982) instead of the statutory ACRS percentages under § 168(b)(1) on 15-year nonresidential property.

57% Aggregate Marginal Tax Rate Corporation		51% Aggregate Marginal Tax Rate Corporation	
Holding Period (In Years)	After Tax Cost of Capital	Holding Period (In Years)	After Tax Cost of Capital
5	21% or Less	5	Less than 16%
10	Less than 14%	10	11% or Less
15	11% or Less	15	9% or Less
16	Less than 11%	16	Less than 9%
20	9% or Less	22	7% or Less
27	7% or Less	35	5% or Less
42	Less than 5%	71	Less than 3%
83	3% or Less	123	Less than 2%
141	Less than 2%		

statutory ACRS percentages, no matter what their after tax cost of capital or holding period.<sup>133</sup>

## 2. Residential 15-year Property

Residential 15-year property is treated the same as nonresidential property, except for depreciation recapture.<sup>134</sup> Despite this difference, the statutory ACRS percentages are advantageous to most taxpayers. Generally, the only noncorporate taxpayers who should not use the statutory percentages are those who hold the property for fifteen years and whose after tax cost of capital is under 5%.<sup>135</sup>

133. Corporations with federal marginal tax rates of 30%, I.R.C. § 11(b)(3) (West Supp. 1982), will only be paying 2% more in taxes on ordinary income than on capital gain income (28% under I.R.C. § 1201(a) (West 1982)) and, thus, should always use the statutory ACRS percentages for federal tax purposes. As long as the applicable state law does not tax capital gains at a much lower rate than ordinary income, the statutory ACRS percentages will be the proper choice when both the federal and state marginal tax rates are considered.

134. See *supra* notes 19-20 and accompanying text.

135. A noncorporate, non-tax preference taxpayer should elect the straight-line recovery under I.R.C. § 168(b)(3) (West Special Supp. 1982) on 15-year residential property only for the following holding periods and after tax costs of capital:

<u>Holding Period In Years</u>	<u>After Tax Cost of Capital</u>
5	Never elect straight-line
7	2% or Less
10	Under 4.1%
14	Under 4.8%
15	Under 5%
20	Under 4.2%
25	Under 3.7%
30	Under 3.4%
35	3% or Less
40	Under 3%
over 40	Never elect straight-line

Note that the statutory percentages are the proper choice at both the shortest and the longest holding periods, and that the highest after tax cost of capital at which straight-line would be elected is 5%, occurring at the 15-year holding period. This result stems from the depreciation recapture rule for residential property under I.R.C. § 1250 (West 1982) which taxes as ordinary income the depreciation which exceeds straight-line (additional depreciation). Using a \$100,000 building as an example, this point can be illustrated.

A 5-year holding period would allow straight-line deductions totaling \$35,000, while the statutory ACRS percentages would allow \$46,000. The additional depreciation taken, computed each year individually, is \$5,000, \$3,000, \$2,000, and \$1,000, for a total of \$11,000. See *infra* column following note 155 in the text. All of the \$35,000 is capital gain, which is equal to \$14,000 (40%) in ordinary income. The \$46,000 is taxed \$35,000 as capital gain and \$11,000 as ordinary income, which is equivalent to a total of \$25,000 in ordinary income (((\$35,000 x 40%) + \$11,000)). Thus, the difference in gain upon sale is \$11,000 for a 5-year holding period.

## Corporations are even less inclined to use the straight-line recov-

A 10-year holding period yields straight-line deductions of \$70,000 and statutory percentage deductions of \$75,000, and the additional depreciation under I.R.C. § 1250(b)(1) (West 1982) remains the same at \$11,000. The equivalent ordinary income for the straight-line recapture is \$28,000 ( $\$70,000 \times 40\%$ ), and for the statutory percentage recapture, \$36,600 ( $(\$64,000 \times 40\%) + \$11,000$ ). Thus, the difference in gain upon sale is \$8,600.

A 15-year holding period allows deductions of \$100,000 under either recovery method, thus making the capital gain for the statutory percentage \$89,000. The equivalent ordinary income for a 15-year or more holding period using straight-line is \$40,000 (40%), while using the statutory percentages yields \$46,600 ( $(\$89,000 \times 40\%) + \$11,000$ ). Thus, the difference in gain upon sale is \$6,600.

The 5-year holding period difference in gain is \$11,000 which, for the 5-year holding period and any shorter holding period, also represents the total excess of statutory percentage deductions over the straight-line deductions. Thus, for these short holding periods, the ordinary income recapture is equal to the total extra deductions allowed, which means that the extra deductions allowed over the entire period are recaptured and no more than that, so a direct trade-off is made between extra deductions and the later ordinary income recapture at sale. Because of this, the statutory percentages are the proper choice.

Contrast the 5-year holding period situation to that of the 10-year period. The 10-year period causes ordinary income of \$8,600 to be recaptured, while the total extra deductions over the 10-year period are only \$5,000 ( $\$75,000$  less  $\$70,000$ ). Thus, the recapture amount exceeds the extra deductions allowed over the period, which has the effect of making the statutory percentages less favorable as compared to the straight-line. The 4.1% after tax cost of capital for a 10-year holding period as compared to the use of the statutory percentages in all cases for a 5-year holding period illustrates this favoring of straight-line.

The 15-year holding period generates \$6,600 in additional gain upon sale, while no extra deductions are allowed over the full 15 year period ( $\$100,000$  less  $\$100,000$ ). This accounts for the 15-year holding period having an after tax cost of capital of 5%, which is higher than either the 10 or the 5-year holding period.

Once the holding period is longer than 15 years, the \$6,600 additional gain upon sale occurs farther in the future, thus causing the present value of this cash flow favoring the use of the straight-line recovery to decrease as the holding period increases. This has the effect of lowering the after tax cost of capital from 5% down to 3% as the holding period increases from 15 to 40 years.

Thus, the point at which the after tax cost of capital will be the highest is at a 15-year holding period, as the table above illustrates. If the points in the table were placed on a graph and compared to a graph for tax preference taxpayers, the curves would be seen to be very similar in slope between the 15 and 40-year holding periods, while for holding periods below 15 years, the curves diverge. This is due to the imposition of the minimum tax which favors the use of the straight-line recovery to a great degree in the first four years of depreciation when all of the tax preference is generated and due to the recapturable statutory percentage depreciation decreasing dollar for dollar as the statutory percentage depreciation decreases. The dollar for dollar decrease causes the great increase in the after tax cost of capital once the holding period is five years or less for tax preference taxpayers. Note that the add-on minimum tax on tax preference mentioned above was repealed for noncorporate taxpayers after 1982. TEFRA § 201(d)(1).

Comparing the above residential 15-year property non-tax preference taxpayer's table to the statement in Whitmore and Reynolds, *supra* note 115 at 362, that "for residential property without the minimum tax . . . , the accelerated cost recovery method is always more beneficial . . . ," an apparent inconsistency arises. The authors of that article do not

ery. All non-tax preference, corporate taxpayers should use the statutory ACRS percentages unless they hold the 15-year residential property for fifteen years and have an after tax cost of capital of 2.5% or less.<sup>136</sup>

**SUMMARY FOR RECOVERY PROPERTY PLACED  
IN SERVICE IN TAXABLE YEARS BEGINNING BEFORE  
DECEMBER 31, 1982**

<u>Decision</u>	<u>Proper Choice</u>
<b>A. Increasing Useful Life to Gain Additional Investment Credit</b>	
<b>1. Increase from Four Years or Less to Over Four Years</b>	
a. Under 46% Marginal Rate	Increase the life.
b. 46% Marginal Rate Taxpayers	Increase the life, unless the taxpayer's after tax cost of capital is 12% or more.
c. 50% Marginal Rate Taxpayers	Increase the life, unless the taxpayer's after tax cost of capital is 11% or more.
d. 57% Marginal Rate Taxpayers	Increase the life, unless the taxpayer's after tax cost of capital is 9% or more.

illustrate any graph for that conclusion, which seems to indicate that the curve might not appear on the graph shown for residential property. The authors might have, however, concluded that because the cost of capital rate is only 5% at its highest point, it did not need to be shown, since even a daily interest savings account yields 5%. If that was their reasoning, then they used the 5% as the before tax cost of capital rate when they should have been using it as an after tax cost of capital rate. The appropriate before tax cost of capital rate for a 5% after tax cost of capital rate for a 50% aggregate marginal tax rate taxpayer (which is the tax rate which they used for their minimum tax curves) is 10% ( $5\% \div (1-50\%)$ ), which might be higher than the before cost of capital of some taxpayers.

136. The following table delineates when a corporate, non-tax preference taxpayer should elect the 15 year straight-line recovery under I.R.C. § 168(b)(3) (West Special Supp. 1982), instead of the statutory ACRS percentages under § 168(b)(1) on 15-year residential property.

<u>57% Aggregate Marginal Tax Rate Corporation</u>	<u>Below 57% Aggregate Marginal Tax Rate Corporation</u>
<u>Holding Period (In Years)</u>	<u>After Tax Cost of Capital</u>
10	less than 2%
15	2.5% or Less
29	Less than 2%

Always use the statutory ACRS percentages.

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>2. Increase from Twelve and One Half Years or Less to Over Twelve and One Half Years for Rehabilitation Investment Credit</li> </ul>  | <ul style="list-style-type: none"> <li>Increase the life.</li> </ul>   |
| <ul style="list-style-type: none"> <li>B. Section 179 Expense Election<sup>137</sup></li> <li>C. Election of Statutory ACRS Percentages or Straight-Line Recovery</li> </ul>   |  |
| <ul style="list-style-type: none"> <li>1. 3, 5, or 10-Year Property</li> <li>2. 15-Year Property               <ul style="list-style-type: none"> <li>a. Expected to be Sold at a Loss, at a Low Gain, or Pass Through an Estate</li> <li>b. Nonresidential 15-Year Property                   <ul style="list-style-type: none"> <li>1. Noncorporate Taxpayers</li> <li>2. Corporate Taxpayers</li> </ul> </li> <li>c. Residential 15-Year Property                   <ul style="list-style-type: none"> <li>1. Noncorporate Taxpayers<sup>140</sup></li> <li>2. Corporate Taxpayers<sup>141</sup></li> </ul> </li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>Statutory ACRS Percentages.</li> <li>Statutory ACRS Percentages.</li> <li>Straight-Line Recovery when Rehabilitation Investment Credit can be gained.<sup>138</sup></li> <li>Straight-Line Recovery when Rehabilitation Investment Credit can be gained.<sup>139</sup></li> </ul> |

#### IV. TAX PREFERENCE TAXPAYERS<sup>142</sup>

Tax preference taxpayers are confronted with the same elections

---

137. See table in *supra* note 94.

138. If rehabilitation investment credit can not be gained see *supra* note 124.

139. If rehabilitation investment credit can not be gained see *supra* notes 132-33.

140. See *supra* note 135.

141. See *supra* note 136.

142. For an explanation of tax preference, see *supra* notes 13, 24, and 37 and accompanying text.

This comment will analyze only the I.R.C. § 56 (West Special Supp. 1982), corporate add-on minimum tax that is directly imposed at a 15% rate on the total I.R.C. § 57 (West Supp. 1982) tax preference items by § 56(a). An indirect corporate minimum tax is imposed when the corporation's regular tax deduction (defined in § 56(c)) exceeds the \$10,000 "exemption" under § 56(a)(1). An example will best illustrate this indirect minimum tax.

Using the statutory ACRS percentages on 15-year residential property with an unadjusted basis of \$100,000, the depreciation deduction is \$12,000, while a \$7,000 deduction is allowable if the 15 year straight-line recovery is elected. The difference in the deductions is \$5,000, which, for the 50% aggregate marginal tax rate corporation, saves \$2,500 in taxes.



as all other taxpayers on both recovery and nonrecovery property. The imposition of the minimum tax has the effect of making any depreciation deduction less advantageous to the taxpayer. Thus, gaining investment credit by increasing useful lives becomes more lucrative, as does the section 179 expense election, while accelerated methods of depreciation and the section 167(f) election to reduce salvage value become less desirable.

The analysis for tax preference taxpayers was prepared prior to the enactment of TEFRA and was designed to delineate the proper decisions for individuals and corporations. TEFRA repealed the add-on minimum tax for individuals after 1982<sup>143</sup> and changed the depreciation recapture rules for corporations,<sup>144</sup> thus rendering parts of the analysis useless and limiting other parts to only one or two types of entities. As this comment was going into production, the no-longer-applicable decisions were deleted and the scope of the remaining decisions were appropriately limited.<sup>145</sup>

---

Note that the extra \$5,000 deduction also caused a direct minimum tax of \$750 (15%) to be imposed.

If that corporation was using its regular tax deduction as its add-on minimum tax "exemption," the \$2,500 saved in taxes will reduce the "exemption" by \$2,500. Since the "exemption" is reduced by \$2,500, another \$2,500 in tax preference items will now be subjected to the minimum tax which were not subject to the minimum tax had the 15 year straight-line recovery been used, which would have avoided any tax preference. The extra \$2,500 in tax preference items now subject to the minimum tax causes the minimum tax to increase by \$375 ( $\$2,500 \times 15\%$ ). Thus, there is an indirect minimum tax of \$375 imposed, besides the \$750 of direct minimum tax imposed, for a total minimum tax increase of \$1,125.

In order for a corporation with a taxable year beginning in 1982 to use the regular tax "exemption" for add-on minimum tax, it must have a taxable income of at least \$54,167 and not be entitled to any tax credits. I.R.C. §§ 56(c) (West Special Supp. 1982), 11(b) (West Supp. 1982). Since the indirect minimum tax would require a second analysis of all decisions for tax preference corporations which have regular tax liabilities exceeding \$10,000 after reduction by any tax credits, it will not be considered. The rate of the indirect minimum tax is computed by multiplying the direct minimum tax rate (15%), by the taxpayer's marginal tax rate. In the example above, the corporation's aggregate marginal tax rate was 50%, which would yield an indirect minimum tax rate of 7.5% ( $15\% \times 50\%$ ). The \$375 indirect minimum tax computed above proves this computation ( $\$375 \div \$5,000 = 7.5\%$ ).

143. TEFRA § 201(d).

144. See *supra* note 15.

145. The marginal tax rates shown for many of the decisions will not equal the aggregate marginal tax rates of many corporations or personal holding companies due to the marginal rates illustrated originally being chosen to apply to individuals and corporations. As stated in *supra* note 70, marginal tax rates between those shown can be interpolated mathematically or graphically. The 12% aggregate marginal tax rate shown in some exhibits will never apply to a corporation or personal holding company, I.R.C. § 11(b) (West Supp. 1982), but are nevertheless given so that an interpolation can be made, and will be marked as "For Interpolation." Also, even though some of the decisions apply only to personal holding com-

Since individuals are subject to the add-on minimum tax only for 1982, the proper decisions for individuals who are subject to the section 56 add-on minimum tax for 1982, but not the section 55 alternative minimum tax, are similar to those for non-tax preference taxpayers. To approximate the proper decisions for these add-on minimum tax individuals, the non-tax preference taxpayer's after tax cost of capital rates should be moderately increased or decreased (as appropriate) to disfavor the use of a faster depreciation method, to favor increasing the useful life to gain additional investment credit, to disfavor electing section 167(f) to reduce the salvage value of nonrecovery property, and to favor electing section 179 to expense recovery property.

The amount of the section 57 tax preference item (used to compute either the section 55 add-on minimum tax or the section 56 alternative minimum tax) generated by the use of the ACRS statutory percentages for depreciation is easily reduced to a table of percentages similar to the table of the ACRS statutory percentages for depreciation.

---

panies, much of the same method of analysis and breakdown of the taxpayer and the decision into subclasses will apply to other entities.

The term "corporation," as hereinafter used, will include all corporations subject to the I.R.C. § 56(a) (West Special Supp. 1982), corporate minimum tax, which excludes small business corporations but includes personal holding companies. Only when the term "corporation" is used in express contradistinction to personal holding companies will the term "corporation" not include personal holding companies. See *supra* note 23.

3-Year Leased Property Tax Preference Percentages<sup>146</sup>

Year	Statutory ACRS Percentages			3 Year Optional Straight-Line Recovery		
	Statutory ACRS Percentage <sup>147</sup>	Tax Preference Straight-Line Recovery <sup>148</sup>	Tax Preference Amount <sup>149</sup>	3 Year Straight-Line Recovery	Tax Preference Straight-Line Recovery	Tax Preference Amount
1	25%	10%	15%	17%	10%	7%
2	38	20	18	33	20	13
3	37	20	17	33	20	13
4		20		17	20	
5		20			20	
6		10			10	
	100%	100%	50%	100%	100%	33%

146. No columns are shown for the optional 5 year or 12 year straight-line recovery under I.R.C. § 168(b)(3)(A) (West Special Supp. 1982), because those periods do not generate any tax preference due to their recovery period being identical to or longer than the tax preference straight-line recovery period under I.R.C. § 57(a)(12)(A) (West Special Supp. 1982).

147. I.R.C. § 168(b)(1) (West Special Supp. 1982).

148. I.R.C. § 57(a)(12) (West Special Supp. 1982). This "Tax Preference Straight-Line Recovery" is not the same as the straight-line recovery elections under I.R.C. § 168(b)(3)(A), (B) (West Special Supp. 1982) for 3, 5, and 10-year property (except for the 3-year property 5 year straight-line recovery election, which happens to be the same as the tax preference straight-line period of 5 years) which are as follows:

Year	3-Year Property		5-Year Property		10-Year Property	
	3 Years	5 Years	5 Years	12 Years	10 Years	25 Years
1	17%	10%	10%	4%	5%	2%
2	33	20	20	8	10	4
3	33	20	20	8	10	4
4	17	20	20	8	10	4
5		20	20	8	10	4
6		10	10	8	10	4
7				8	10	4
8				8	10	4
9				9	10	4
10				9	10	4
11				9	5	4
12				9		4
13				4		4
14-25						4
26						2
	100%	100%	100%	100%	100%	100%

Whole number percentages are used in the above table and all other tables because the percentages in § 168(b)(1) are all given in whole number percentages. Using whole number percentages is to the taxpayer's advantage in all of the above tables instead of showing decimal percentages, because the percentages before being rounded-off were lower for the straight-line percentages in the earlier years and higher for the tax preference percentages in the earlier years, even though the totals are identical.

149. I.R.C. § 57(a)(12)(A), (B) (West Special Supp. 1982).

5-Year Leased Property Tax Preference Percentages<sup>150</sup>

Year	Statutory ACRS Percentages			5 Year Optional Straight-Line Recovery		
	Statutory ACRS Percentage	Tax Preference Straight-Line Recovery	Tax Preference Amount	5 Year Straight-Line Recovery	Tax Preference Straight-Line Recovery	Tax Preference Amount
1	15%	6%	9%	10%	6%	4%
2	22	13	9	20	13	7
3	21	13	8	20	13	7
4	21	13	8	20	13	7
5	21	13	8	20	13	7
6		12		10	12	
7		12			12	
8		12			12	
9		6			6	
	100%	100%	42%	100%	100%	32%

10-Year Leased Property Tax Preference Percentages<sup>151</sup>

Year	Statutory ACRS Percentages			10 Year Optional Straight-Line Recovery		
	Statutory ACRS Percentage	Tax Preference Straight-Line Recovery	Tax Preference Amount	10 Year Straight-Line Recovery	Tax Preference Straight-Line Recovery	Tax Preference Amount
1	8%	3%	5%	5%	3%	2%
2	14	7	7	10	7	3
3	12	7	5	10	7	3
4	10	7	3	10	7	3
5	10	7	3	10	7	3
6	10	7	3	10	7	3
7	9	7	2	10	7	3
8	9	7	2	10	7	3
9	9	7	2	10	7	3
10	9	7	2	10	7	3
11		7		5	7	
12-15		6			6	
16		3			3	
	100%	100%	34%	100%	100%	29%

150. No columns are shown for the optional 12 year or 25 year straight-line recovery under I.R.C. § 168(b)(3)(A) (West Special Supp. 1982), because those periods do not generate any tax preference due to their recovery period being longer than the 8 year tax preference straight-line recovery period under I.R.C. § 57(a)(12)(A) (West Special Supp. 1982).

151. No columns are shown for the optional 25 year or 35 year recovery under I.R.C. § 168(b)(3)(A) (West Special Supp. 1982) because those periods do not generate any tax preference due to their recovery period being longer than the 15 year tax preference straight-line recovery under I.R.C. § 57(a)(12)(A) (West Special Supp. 1982).

15-Year Property Percentages<sup>153</sup>

Year	1			2			3			4		
	ACRS <sup>153</sup>	Straight-Line <sup>154</sup>	Tax Preference <sup>155</sup>	ACRS	Straight-Line	Tax Preference	ACRS	Straight-Line	Tax Preference	ACRS	Straight-Line	Tax Preference
1	12%	7%	5%	11	6	5	10	6	4	9	5	4
2	10	7	3	10	7	3	11	7	4	11	7	4
3	9	7	2	9	7	2	9	7	2	9	7	2
4	8	7	1	8	7	1	8	7	1	8	7	1
5	7	7		7	7		7	7		7	7	
6	6	7		6	7		6	7		6	7	
7	6	7		6	7		6	7		6	7	
8	6	7		6	7		6	7		6	7	
9	6	7		6	7		6	7		6	7	
10	5	7		6	7		5	7		6	7	
11	5	6		5	7		5	6		5	6	
12	5	6		5	6		5	6		5	6	
13	5	6		5	6		5	6		5	6	
14	5	6		5	6		5	6		5	6	
15	5	6		5	6		5	6		5	6	
16							1	1		1	2	
100%	100%	11%		100	100	11	100	100	11	100	100	11

152. Any deductions and tax preference amounts are pro-rated for months in service, I.R.C. §§ 168(b)(2) (West Special Supp. 1982), 57(a)(12)(B) (West Special Supp. 1982), thus requiring a table showing the percentages for each month placed in service. The column headed "1" is the column to be used if the asset is placed in service in the first month of the taxpayer's taxable year. E.g., a calendar year taxpayer who places equipment in service in March would use the column headed "3," while a June 30 fiscal year end taxpayer would use the column headed "9" for property placed in service in March.

No columns are shown for the optional 15, 35, or 45 year recovery under § 168(b)(3)(A) because those periods do not generate any tax preference, due to their recovery period being equal to or longer than the 15 year tax preference straight-line recovery under I.R.C. § 57(a)(12)(B) (West Special Supp. 1982). Thus, only the statutory ACRS percentages need to be illustrated.

153. This column is the ACRS statutory percentages from I.R.C. § 168(b)(1) (West Special Supp. 1982).

154. This column is both the straight-line recovery deduction election under I.R.C. § 168(b)(3)(A), (B) (West Special Supp. 1982), and the tax preference straight-line recovery under I.R.C. § 57(a)(12)(B) (West Special Supp. 1982), since the percentages are identical for 15-year property. The tax preference straight-line and the optional straight-line percentages differ for 3, 5, and 10-year property. See *supra* note 148.

155. This column is the tax preference percentages to be multiplied by the unadjusted basis of the property to yield the tax preference amount under I.R.C. § 57(a)(12)(B) (West Special Supp. 1982) for any given year.

Year	5			6			7			8		
	ACRS	Straight-Line	Tax Preference	ACRS	Straight-Line	Tax Preference	ACRS	Straight-Line	Tax Preference	ACRS	Straight-Line	Tax Preference
1	8	5	3	7	4	3	6	4	2	5	3	2
2	11	7	4	11	7	4	11	7	4	11	7	4
3	10	7	3	10	7	3	10	7	3	10	7	3
4	8	7	1	8	7	1	9	7	2	9	7	2
5	7	7		7	7		8	7	1	8	7	1
6	7	7		7	7		7	7		7	7	
7	6	7		6	7		6	7		6	7	
8	6	7		6	7		5	7		6	7	
9	5	7		6	7		5	7		5	7	
10	5	7		5	7		5	7		5	7	
11	5	6		5	6		5	6		5	6	
12	5	6		5	6		5	6		5	6	
13	5	6		5	6		5	6		5	6	
14	5	6		5	6		5	6		5	6	
15	5	6		5	6		5	6		5	6	
16	2	2		2	3		3	3		3	4	
100	100	11		100	100	11	100	100	12	100	100	12

Year	9			10			11			12		
	ACRS	Straight-Line	Tax Preference	ACRS	Straight-Line	Tax Preference	ACRS	Straight-Line	Tax Preference	ACRS	Straight-Line	Tax Preference
1	4	2	2	3	2	1	2	1	1	1	1	0
2	11	7	4	11	7	4	11	7	4	12	7	5
3	10	7	3	10	7	3	10	7	3	10	7	3
4	9	7	2	9	7	2	9	7	2	9	7	2
5	8	7	1	8	7	1	8	7	1	8	7	1
6	7	7		7	7		7	7		7	7	
7	6	7		6	7		6	7		6	7	
8	6	7		6	7		6	7		6	7	
9	5	7		6	7		6	7		6	7	
10	5	7		5	7		6	7		5	7	
11	5	6		5	6		5	6		5	6	
12	5	6		5	6		5	6		5	6	
13	5	6		5	6		5	6		5	6	
14	5	6		5	6		5	6		5	6	
15	5	6		5	6		5	6		5	6	
16	4	5		4	5		4	6		5	6	
100	100	12		100	100	11	100	100	11	100	100	11

*A. Postponing Placing an Asset into Service to Avoid Tax Preference*

The first question which arises when reviewing the 15-year property table is if property to be placed in service in the ninth month of the taxpayer's taxable year should be postponed until the tenth month in order to reduce the total amount of tax preference from 12% to 11% of the unadjusted basis, and the 15-year property table immediately above reveals. This question will only arise when the taxpayer is indifferent between the asset being placed in service in the ninth or the tenth month and must expend the funds for the asset in the ninth month regardless of when it will be

placed in service.<sup>156</sup>

When the question does arise, postponing the placing into service from the ninth month of the taxable year to the tenth month is the proper decision generally only for 33% or lower aggregate marginal tax rate corporations.<sup>157</sup> This is because the tax preference incurred by a low marginal rate corporation translates into a

156. To be indifferent to the ninth and tenth months of the taxable year requires that the corporation would not lose a significant amount of after tax income due to the one month postponement. In Exhibit #5, if the \$10,000 asset will generate \$15 per month in after tax income, or a 1.8% annual rate, the purchase should not be postponed, because that \$15 lost in the first year will offset the extra minimum tax incurred of \$15 (2% first year ninth month less 1% first year tenth month equals 1% tax preference, multiplied by \$10,000 basis equals \$100 tax preference item, multiplied by 15% equals \$15 minimum tax). The corporation, therefore, should not postpone the placing into service anytime that its after tax cost of capital is positive.

An example of when a new asset will not generate extra net income is when a window or door is replacing one currently in use. An example of 15-year property increasing net income would be an addition onto a building or a new building to be used for sales or production.

The text also points out that the corporation must be required to expend the funds in the same month in order for this question of when to place an asset in service to arise. If a corporation can avoid expending \$10,000 for an additional month, it can earn 1/12th of its annual after tax cost of capital interest rate on that \$10,000. In Exhibit #5, if the corporation can postpone paying for the asset for one month, it can earn .67%, or \$67 (\$10,000 x .67%), if the corporation's after tax cost of capital is 8% annually. This extra \$67 earned by postponing the payment more than offsets the additional \$15 gained by placing the asset in service in the ninth month, thus making postponement the proper choice.

Complicating matters further, if the corporation will lose the 1.8% annual after tax net income per month by postponement, but would earn the 8% annual rate for one month by postponing payment, it should enter 6.2% (8% less 1.8%), or \$52 per month (\$10,000 x 6.2% ÷ 12), as an additional flow in the first year in brackets, since it favors postponing until the tenth month. Using these amounts, postponement is the proper choice.

The situation in which this question will most often arise is when the property is paid for in the ninth month and is ready for use in the last few days of the ninth month. In this case, payment is made at the same time, regardless of whether the property is used during the last few days of the month or not used until one week later, which falls in the tenth month. The one week postponement will most likely not significantly affect the net income generated by the property.

157. The actual marginal tax rates and after tax costs of capital interest rates which must be reached or exceeded to make not postponing from the ninth month until the tenth month the proper decision are:

<u>Marginal Tax Rate Corporation</u>	<u>After Tax Cost of Capital</u>
57%	4%
50%	5%
33%	8%
25%	13%
20%	19%
Below 20%	Always Postpone

higher equivalent lost deduction than that for a high marginal rate corporation.<sup>158</sup>

*Exhibit #5 Tax Preference Corporations—Postponing Placing an Asset into Service to Avoid Tax Preference*

Example: \$10,000 of 15-year property acquired in either the ninth month of a 33% marginal rate corporation's taxable year or the tenth month.

Year	Depreciation Deductions				Tax Preference <sup>159</sup>			Total	8% Present Values
	Month in Service		Ninth Mo. Excesses	Tax Savings	Month in Service		Ninth Mo. Excesses		
	Ninth	Tenth			Ninth	Tenth			
1	\$ 400	\$ 300	\$ 100	\$ 33	\$ 30	\$ 15	\$(15) <sup>160</sup>	\$ 18	\$ 18
2	1,100	1,100							
3	1,000	1,000							
4	900	900							
5	800	800							
6	700	700							
7	600	600							
8	600	600							
9	500	600	(100)	(33)				(33)	(18)
10-15	500	500							
16	400	400							
	\$10,000	\$10,000	\$ 0	\$ 0	\$ 30	\$ 15	\$(15)	\$(15)	\$ 0

Thus, a 33% marginal tax rate corporation should postpone an asset's placement into service from the ninth month of its taxable year until the tenth month unless its after tax cost of capital equals or exceeds 8%.

Because assets placed in service in the eighth month of the corporation's taxable year incur a total of 12% of their unadjusted basis in tax preference, while assets placed in service in the tenth month only incur 11%, the next decision to be made is if a two month postponement should be made.<sup>161</sup> Generally, no corporation

158. For a 33% corporation, the equivalent lost deduction of \$15 in add-on minimum tax is \$45 ( $\$15 \div 33\%$ ), while a 57% corporation's equivalent lost deduction is only \$25 ( $\$15 \div 57\%$ ).

159. This set of columns reflects the tax preference tax amount which is computed by multiplying the unadjusted basis of the property (\$10,000) by the tax preference item amount percentage (2% for the first year when placed in service in the ninth month), yielding \$200, which is then multiplied by 15%, I.R.C. § 56(a) (West Special Supp. 1982), to arrive at the \$30 shown in the first year of the ninth month column.

160. This item is bracketed because the lower tax preference tax in the tenth month column is preferable to the higher amount for the ninth month column.

161. Two month postponements, with the corporation being indifferent between the month placed in service while still paying for the asset in the same month, will be much less common than the one month postponement discussed in *supra* note 156. Instead of only a possible one week difference in actual time placed in service for a one month postponment,



will postpone usage of the property for two months.<sup>162</sup> Similarly, a corporation should not postpone the placing into service from the seventh month of the taxable year until the tenth month.<sup>163</sup>

## B. Nonrecovery Property

### 1. Depreciation Method

*Exhibit #6 Nonrecovery Property—Personal Holding Company—Sum-of-the-Years Digits Method v. Double Declining Balance v. Straight-Line*

Example: \$10,000 leased personal property with a useful life of seven years, 57% aggregate marginal rate tax preference personal holding company. The investment credit is the same under any of the methods and, thus, will not be shown.

Year	Sum-of-the-Years Digits Depreciation		Tax Preference				Sum-of-the-Years Digits Net Tax Savings <sup>164</sup>
	Sum-of-the-Years Digits Deductions	Tax Savings	Sum-of-the-Years Digits Deductions	Straight-Line Deductions	Tax Preference	Minimum Tax (15%)	
1	\$ 2,500	\$ 1,425	\$ 2,500	\$ 1,429	\$1,071	\$ 161	\$ 1,264
2	2,143	1,222	2,143	1,429	714	107	1,115
3	1,786	1,018	1,786	1,429	357	53	965
4	1,429	815	1,429	1,429			815
5	1,071	610	1,071	1,428			610
6	714	407	714	1,428			407
7	357	203	357	1,428			203
	<u>\$10,000</u>	<u>\$ 5,700</u>	<u>\$10,000</u>	<u>\$10,000</u>	<u>\$2,142</u>	<u>\$ 321</u>	<u>\$ 5,379</u>

over one month of delay becomes necessary for a two month postponment.

162. The actual marginal tax rates and after tax costs of capital interest rates which must be exceeded to make not postponing from the eighth month to the tenth month the proper decision are:

Marginal Tax Rate Corporation	After Tax Cost of Capital
Over 33%	Do not Postpone
33%	2%
25%	3%
20%	4%
15%	6% (For Interpolation)
12%	9% (For Interpolation)

163. Besides the internal rate of return indicating that the postponment from the seventh to the tenth month should not be made, a three month postponment is even more unlikely to be unimportant to a taxpayer than is the two month postponment for the reasons discussed in *supra* note 161. A four month postponment is never advisable, not only because a three month postponment is not advisable, but also because the total tax preference in the sixth month is 11% of the unadjusted basis. This is identical to the 11% in the tenth month, so depreciation will be lost without decreasing the amount of tax preference.

164. The aggregate marginal tax rate is used even though the state tax treatment of

Year	Double Declining Balance Depreciation		Tax Preference				Double Declining Balance Net Tax Savings
	Double Declining Balance Deductions	Tax Savings	Double Declining Balance Deductions	Straight-Line Deductions	Tax Preference	Minimum Tax (15%)	
1	\$2,857	\$1,629	\$2,857	\$ 1,429	\$1,428	\$ 214	\$1,415
2	2,041	1,163	2,041	1,429	612	92	1,071
3	1,458	831	1,458	1,429	29	4	827
4	1,041	593	1,041	1,429			593
5	744	424	744	1,428			424
6	531	303	531	1,428			303
7	379	216	379	1,428			216
	<u>\$9,051</u>	<u>\$5,159</u>	<u>\$9,051</u>	<u>\$10,000</u>	<u>\$2,069</u>	<u>\$ 310</u>	<u>\$4,849</u>

federal tax preference items differs. In Pennsylvania, accelerated depreciation on real property and on personal property subject to a net lease is disallowed as a deduction to the extent that it is a federal tax preference item, but is only disallowed for corporations, not individuals. 72 PA. CONS. STAT. ANN. § 7401(3)(d) (Purdon Supp. 1982-1983). Thus, a corporation could not deduct for Pennsylvania tax purposes the \$1,667 shown as tax preference for the sum-of-the-years digits method and the \$3,334 shown for the double declining balance method.

Since those deductions are lost in Year 1, where the accelerated depreciation exceeds straight-line, the deductions lost are allowed in later years to the extent that straight-line exceeds the accelerated method. For the sum-of-the-years digits method, the \$1,667 lost in Year 1 is allowed as an extra deduction of \$1,667 in Year 3, thus making the allowed deductions over the life of the asset equal to those deductions had straight-line been elected. For the double declining balance method, the \$3,334 deduction is recouped in Year 2 for \$1,111, and in Year 3 for \$2,223. See PA. ADMIN. CODE § 153.14 (Shepard's 1979). Combining the prior table and the recoupment figures with the recoupment percentages shown in brackets:

Pennsylvania Corporate Net Income ACRS Tax Preference Percentages

Year	3-Year Property	5-Year Property	10-Year Property	15-Year Property - Month of Taxable Year Property Is Acquired:											
				1	2	3	4	5	6	7	8	9	10	11	12
1	15%	9%	5%	5%	5%	4%	4%	3%	3%	2%	2%	2%	1%	1%	-0%
2	18	9	7	3	3	4	4	4	4	4	4	4	4	4	5
3	17	8	5	2	2	2	2	3	3	3	3	3	3	3	3
4	(20)	8	3	1	1	1	1	1	1	2	2	2	2	2	2
5	(20)	8	3	-0-	-0-	-0-	-0-	-0-	-0-	1	1	1	1	1	1
6	(10)	(12)	3	(1)	(1)	(1)	(1)	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
7		(12)	2	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
8		(12)	2	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(1)	(1)	(1)	(1)	(1)
9		(6)	2	(1)	(1)	(1)	(1)	(2)	(1)	(2)	(2)	(2)	(1)	(1)	(1)
10			2	(2)	(1)	(2)	(1)	(2)	(2)	(2)	(2)	(2)	(2)	(1)	(2)
11			(7)	(1)	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
12			(6)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
13			(8)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
14			(8)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
15			(6)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
16			(3)				(1)	(1)	(1)	(1)	(1)	(1)	(1)	(2)	(1)
	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

The effect of any state's treatment of federal tax preference items will not be reflected

	Straight-Line Depreciation		Tax Preference				Straight-Line Net Tax Savings
	Straight-Line Deductions	Tax Savings	Straight-Line Deductions	Straight-Line Deductions	Tax Preference	Minimum Tax (15%)	
1	\$ 1,429	\$ 815	\$ 1,429	\$ 1,429	\$-0-	\$-0-	\$ 815
2	1,429	815	1,429	1,429			815
3	1,429	814	1,429	1,429			814
4	1,429	814	1,429	1,429			814
5	1,428	814	1,428	1,428			814
6	1,428	814	1,428	1,428			814
7	1,428	814	1,428	1,428			814
	<u>\$10,000</u>	<u>\$5,700</u>	<u>\$10,000</u>	<u>\$10,000</u>	<u>\$-0-</u>	<u>\$-0-</u>	<u>\$5,700</u>

Comparing Sum-of-the-Years Digits and Double Declining Balance:

Year	Sum-of-the-Years Digits Net Tax Savings	Double Declining Balance Net Tax Savings	Sum-of-the-Years Digits Excesses	69% Present Values
1	\$1,264	\$1,415	\$ (151)	\$ (151)
2	1,115	1,071	44	26
3	965	827	138	48
4	815	593	222	46
5	610	424	186	23
6	407	303	104	8
7	203	216	(13)	(1)
	<u>\$5,379</u>	<u>\$4,849</u>	<u>\$ 530</u>	<u>\$ (1)</u>

Thus, sum-of-the-years digits should be used, unless the personal holding company's after tax cost of capital is 69% or more,

in any decision analysis. The reasons are threefold. First, as stated in *supra* note 83, the deduction adjustments that would be required are complex and are generally immaterial. Second, the state tax treatment of federal tax preference items varies. Finally, as shown in *infra* notes 190, 192, and 193 and accompanying text, the straight-line recovery under I.R.C. § 168(b)(3) (West Special Supp. 1982) should often be elected for 3, 5, and 10-year property, thus further reducing the materiality of the tax preference.

The straight-line recovery, however, when elected over the shortest possible recovery period, does generate some tax preference, as computed in the following table. The table is comprised of (1) straight-line recovery of 3-year leased property over a 3 year period, 5-year leased property over a 5 year period and a 10-year leased property over a 10 year period, under § 168(b)(3)(A) (as shown in *supra* note 148) in the first column, (2) the tax preference straight-line recovery percentages from the table in the text following *supra* note 146 in the second column, and (3) the resulting tax preference percentages to be multiplied by the unadjusted basis to yield the tax preference amount under I.R.C. § 57(a)(12)(A) (West Special Supp. 1982), in the third column. The percentages in brackets are the Pennsylvania Corporate Net Income ACRS tax preference recoupment percentages, as discussed above.

which will never occur.

Comparing Sum-of-the-Years Digits and Straight-Line:

Year	Straight-Line Net Tax Savings	Sum-of-Years Digits Net Tax Savings	Straight-Line Excesses	7% Present Values
1	\$ 815	\$1,264	\$ (449)	\$ (449)
2	815	1,115	(300)	(280)
3	814	965	(151)	(132)
4	814	815	(1)	(1)
5	814	610	204	156
6	814	407	407	290
7	814	203	611	407
	\$5,700	\$5,379	\$ 321	\$ (9)

Thus, straight-line should be used on 7-year useful life leased nonrecovery property when a 57% marginal rate tax preference personal holding company's after tax cost of capital is below 7%, sum-of-the-years digits should be used when the company's after tax cost of capital is at least 7% but less than 69%, and double declining balance should be used when the company's after tax

Year	3-Year Leased Property			5-Year Leased Property			10-Year Leased Property		
	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>
	\$168(b)(3) S-L Recovery	Tax Pref. S-L Recovery	Tax Pref. Amount	\$168(b)(3) S-L Recovery	Tax Pref. S-L Recovery	Tax Pref. Amount	\$168(b)(3) S-L Recovery	Tax Pref. S-L Recovery	Tax Pref. Amount
1	17%	10%	7%	10%	6%	4%	5%	3%	2%
2	33	20	13	20	13	7	10	7	3
3	33	20	13	20	13	7	10	7	3
4	17	20	(3)	20	13	7	10	7	3
5		20	(20)	20	13	7	10	7	3
6		10	(10)	10	12	(2)	10	7	3
7					12	(12)	10	7	3
8					12	(12)	10	7	3
9					6	(6)	10	7	3
10							10	7	3
11							5	7	(2)
12								6	(6)
13								6	(6)
14								6	(6)
15								6	(6)
16								3	(3)
	100%	100%	-0%	100%	100%	-0%	100%	100%	-0%

The imposition of tax preference on the above I.R.C. § 168(b)(3) (West Special Supp. 1982), straight-line recovery periods causes the longer optional periods of 5 years on 3-year leased property, 12 years on 5-year leased property, and 25 years on 10-year leased property to be the better depreciation method in certain situations. These longer optional straight-line recovery periods are analyzed at *infra* pt. IV. C. 1.

cost of capital is 69% or more. By converting those after tax cost of capital rates into before tax rates of 16% and 160%, it can be seen that most tax preference personal holding companies with 57% aggregate marginal tax rates should use the straight-line method, a few should use the sum-of-the-years digits method, and none should use the double declining balance method.

As the marginal tax rate decreases, the after tax cost of capital which must be exceeded to cause the sum-of-the-years digits method to be the proper choice increases. This has the effect of making the straight-line method always the best choice for tax preference personal holding companies with marginal rates below 30% on 7-year useful life nonrecovery leased property.<sup>165</sup> When the useful life of nonrecovery leased property is three or five years, straight-line is the best choice for all marginal rate tax preference taxpayers.<sup>166</sup> This is due to the year in which the straight-line deduction exceeds the deduction of either accelerated method occurring much sooner than when the useful life is seven years, thus causing the straight-line excess to have a much greater present value.

---

165. The following table delineates when a tax preference personal holding company should use the straight-line method of depreciation on leased nonrecovery property with a 7-year useful life. When the after tax cost of capital rates shown below are exceeded, the sum-of-the-year digits method should be used; double declining balance should never be used even if a switch to straight-line is made as discussed in *supra* note 51.

<u>Aggregate Marginal Tax Rate</u>	<u>Personal Holding Company's After Tax Cost of Capital</u>
57%	Less than 7%
50%	Less than 8%
40%	Less than 11%
30%	16% or less
Less than 30%	Always use Straight-Line

166. For 3-year useful life leased nonrecovery property, a 57% marginal rate tax preference personal holding company's after tax cost of capital must be 16.5% or more for the sum-of-the-years digits method to yield greater tax benefits than the straight-line method. For 5-year useful life leased nonrecovery property, the same company's after tax cost of capital must be 10% or more, which is equivalent to a very high 23% before tax rate ( $10\% \div (1-57\%)$ ). Lower marginal rate companies have even higher after tax cost of capital interest rate breaking points, due to the minimum tax being equivalent to a higher lost deduction at lower marginal tax rates, see *supra* note 158. Note that because the tax preference incurred is the major disadvantage of the declining balance method as discussed in *supra* note 51, the possibility of switching to the straight-line method after using a declining balance method does not enhance the declining balance method sufficiently to make it a viable choice for tax preference personal holding companies on 3 or 5-year useful life nonrecovery property.

Corporations, other than personal holding companies and small business corporations, do not generate tax preference by the use of accelerated methods of depreciation on personal property and 10-year real property.<sup>167</sup> Therefore, they should make the same decision as non-tax preference taxpayers which, in general, is to use the sum-of-the-years digits method.<sup>168</sup>

If only straight-line and 150% declining balance are available, as occurs when new nonresidential property is depreciated,<sup>169</sup> an under 30% marginal tax rate corporation should choose straight-line when using a 30-year useful life.<sup>170</sup> Similarly, 30%, 33%, and 57% corporations will in most cases choose straight-line<sup>171</sup> because the imposition of the minimum tax greatly offsets the advantages of the accelerated declining balance method. Using a 40-year useful life and 150% declining balance is not advisable for any tax preference corporation; straight-line is the proper choice.<sup>172</sup>

The 125% declining balance method of depreciation for tax preference taxpayers is even less favorable, as compared to straight-line, than the 150% declining balance.<sup>173</sup> Using a 30-year life, a 57% marginal rate tax preference corporation should not elect 125% declining balance until its after tax cost of capital is 18% or more. All other marginal rate tax preference corporations should choose straight-line.<sup>174</sup> When the useful life is forty years, it is

---

167. I.R.C. § 57(a) (West Special Supp. 1982).

168. See *supra* Summary for Nonrecovery Property, A., 1., b, and c.

169. I.R.C. § 167(j)(1)(B) (1976).

170. A 30-year and a 40-year useful life were chosen as common examples of useful lives used on buildings, just as they were used for the analysis of declining balance and straight-line for non-tax preference taxpayers.

171. A 30% marginal rate tax preference corporation will use straight-line on 30-year useful life nonrecovery property as long as its after tax cost of capital is under 14%, a 33% corporation as long as its after tax cost of capital is under 13%, and 57% marginal tax rate corporation as long as its after tax cost of capital is under 10%.

172. A 57% marginal tax rate tax preference corporation should choose 150% double declining balance over 40 years only if its after tax cost of capital is 21% or more. As discussed in *supra* note 158, the add-on minimum tax is a greater burden on low marginal rate taxpayers, thus making the 21% after tax cost of capital necessary for 57% marginal rate corporations the lowest after tax cost of capital rate for any marginal tax rate preference corporation using 150% declining balance over a 40-year useful life.

173. The choice of either straight-line or 150% declining balance arises on nonrecovery used residential real property. I.R.C. § 167(j)(5) (1982).

174. Because the minimum tax imposes a greater burden on lower marginal tax rate corporations as discussed in *supra* note 152, the after tax cost of capital for marginal rates lower than 57% increases as the marginal tax rate decreases, thus making corporations with marginal rates under 57% even less likely to find the declining balance method to be more

more advantageous for a 57% marginal tax rate tax preference corporation to use straight-line until its after tax cost of capital is 17% or more. Corporations below the 57% rate should elect straight-line.<sup>175</sup>

## 2. Increasing Useful Life to Gain Additional Investment Credit on Nonrecovery Property

The conclusion for non-tax preference taxpayers on nonrecovery property was that a one year increase in useful life to gain additional investment credit was always desirable, and a two year increase was desirable from 3 to 5-year useful life for 57% marginal tax rate taxpayers when their after tax cost of capital was under 11%, and for 33% taxpayers when their after tax cost of capital was 24% or less.<sup>176</sup> A 57% marginal tax rate tax preference personal holding company will increase the useful life from three to five years as long as its after tax cost of capital is 7% or less, a 50% marginal rate company as long as its after tax cost of capital is 8% or less, a 40% company as long as its after tax cost of capital is under 11%, a 30% company as long as its after tax cost of capital is under 17%, and 29% or lower marginal rate personal holding companies should always increase the useful life of nonrecovery leased property from three to five years.<sup>177</sup>

advantageous.

175. See *supra* note 168.

176. See *supra* note 65 and accompanying text and Exhibit #2.

177. Combining the analysis of the proper depreciation method from *supra* note 166 and accompanying text with the analysis of increasing the useful life, the best elections for tax preference personal holding companies on 3-year life leased nonrecovery property are as follows:

Company's Aggregate Marginal Tax Rate	Company's After Tax Cost of Capital	3-Year Useful Life Depreciation Method	5-Year Useful Life Depreciation Method	Should the Company Increase The Useful Life If Possible?
57%	7% or Less	S-L	S-L	Yes
	Over 7%	S-L	S-L	No
50%	8% or Less	S-L	S-L	Yes
	Over 8%	S-L	S-L	No
40%	Less than 11%	S-L	S-L	Yes
	11% or More	S-L	S-L	No
30%	Less than 17%	S-L	S-L	Yes
	17% or More	S-L	S-L	No
Less than 30%	Any	S-L	S-L	Yes

Increasing the useful life of nonrecovery leased property from five to seven years is always advisable for tax preference personal holding companies.<sup>178</sup> This is not due to the five to seven year stretch being inherently more advantageous than the three to five year stretch, but is instead due to the sum-of-the-years digits method being the better depreciation method for those tax preference companies who would otherwise use straight-line and not increase the useful life. When the sum-of-the-years digits method is used on 7-year useful life nonrecovery property and is compared to straight-line method properly being used on 5-year life nonrecovery leased property, the stretch in useful life will always yield greater tax benefits.<sup>179</sup>

The additional rehabilitation investment credit gained on expenditures made before January 1, 1982, far outweighs the loss of the faster depreciation deductions when the useful life of such property is increased from five to seven years. This is true for all

178. Combining the analysis of the proper depreciation method from *supra* notes 165-66 and accompanying text, with the analysis of increasing the useful life, the best elections for tax preference personal holding companies on 7-year life leased nonrecovery property are as follows:

Company's Aggregate Marginal Tax Rate	Company's After Tax Cost of Capital	5-Year Useful Life Depreciation Method	7-Year Useful Life Depreciation Method	Should the Company Increase The Useful Life If Possible?
57%	Less than 7%	S-L	S-L	Yes
	7% or More	S-L	SYD	Yes
50%	Less than 8%	S-L	S-L	Yes
	8% or More	S-L	SYD	Yes
40%	Less than 11%	S-L	S-L	Yes
	11% or More	S-L	SYD	Yes
30%	16% or Less	S-L	S-L	Yes
	Over 16%	S-L	SYD	Yes
Less than 30%	Any	S-L	S-L	Yes

179. The comparison of straight-line on 5-year life leased nonrecovery property and sum-of-the-years digits on 7-year life shows the 7-year life to be superior in tax benefits at any after tax cost of capital. This is due to the 7-year life sum-of-the-years digits producing more investment credit (10%) and a higher depreciation deduction ( $7 \div 28$  or 25%) than does the straight-line over a 5-year life ( $6 \frac{2}{3}\%$  and 20%, respectively). The minimum tax incurred by using the sum-of-the-years digits method was more than offset by those investment credit and depreciation deduction benefits.

Note that just as a three year stretch in useful life cannot be made for non-tax preference taxpayers, it cannot be made for tax preference taxpayers. See *supra* notes 71-72 and accompanying text.



marginal tax rate tax preference corporations.<sup>180</sup>

### 3. *The Section 167(f) Election to Reduce an Asset's Salvage Value*

When section 167(f) is elected, the salvage value is reduced, which thereby increases the depreciation deductions allowable. Since more depreciation deductions are allowable, more tax preference is generated if any depreciation method other than straight-line is used on nonrecovery property. Thus, section 167(f) should always be elected when a tax preference personal holding company is using the straight-line depreciation method, the best method for 3 or 5-year useful life nonrecovery leased property.<sup>181</sup> Corporations do not generate tax preference on leased personal property<sup>182</sup> and thus should always elect section 167(f), whether straight-line or an accelerated depreciation method is used on nonrecovery 3, 5, or 7-year life property.

Nonrecovery leased property with a 7-year useful life should most often be depreciated using the straight-line method by personal holding companies,<sup>183</sup> and in those instances when sum-of-the-years digits should be used, the section 167(f) election should also be made. This is due to the extra tax preference generated being minimal and the additional ordinary income upon sale having a small present value.<sup>184</sup>

---

180. The faster depreciation deductions on a 5-year life, as opposed to a 7-year life, is offset both by the imposition of the minimum tax and by the loss of the additional investment credit. A 57% marginal tax rate corporation should stretch the useful life from five to seven years as long as its after tax cost of capital is 29% or less. For marginal tax rates under 57%, the after tax cost of capital necessary to make not increasing the useful life the proper choice are even higher, for the reasons stated in *supra* note 158. As stated in *supra* note 75 and accompanying text, nonrecovery property cannot qualify for rehabilitation investment credit today in most cases.

181. See *supra* pt. IV. B. 1.

182. I.R.C. § 57(a) (West Special Supp. 1982).

183. See *supra* note 163.

184. The amount of tax preference generated using the sum-of-the-years digits method on 7-year life leased nonrecovery property with a basis of \$10,000 is \$321, while an asset with a depreciable basis of \$9,000 (i.e., a \$10,000 asset with a \$1,000 salvage value unreduced by I.R.C. § 167(f) (1982)) is \$289. This \$32 difference is only .32% of the asset's basis and is, therefore, only a slight discouragement to the tax preference personal holding company from electing § 167(f). This fact, combined with the extra ordinary income (depreciation recapture) incurred at eventual sale not occurring until seven years later (if held for the asset's useful life), makes the § 167(f) election advisable.

It is interesting to note that, if a personal holding company would use the sum-of-the-

#### 4. *Individuals Subject to the Section 55 Alternative Minimum Tax*

Individuals<sup>185</sup> are not subject to the section 56 add-on minimum tax for taxable years beginning after 1982,<sup>186</sup> but are still subject to the section 55 alternative minimum tax. When individuals are subject to the section 55 minimum tax, their proper decision is to avoid generating any additional tax preference items, because for every dollar that their regular tax<sup>187</sup> is reduced by a tax preference item, their alternative minimum tax will increase one dollar.<sup>188</sup> Avoiding tax preference items for these taxpayers is the proper decision for both recovery and nonrecovery property.

#### C. *Recovery Property Placed in Service in Taxable Years Beginning Before December 31, 1982—Tax Preference Personal Holding Companies*

##### 1. *Election of Statutory ACRS Percentages or Straight-Line Recovery*<sup>189</sup>

The statutory ACRS percentages are always more beneficial for

---

years digits method on 3-year useful life leased nonrecovery property, which it should not do, that most tax preference companies with marginal tax rates of 50% or more would most often not elect § 167(f). This is caused by the present value of the additional ordinary income (depreciation recapture) being much greater if the asset is held for its 3-year useful life, as opposed to the 7-year useful life as discussed above. Nonrecovery property with a 5-year useful life, if that property is similarly erroneously depreciated by using the sum-of-the-years digits method, falls in between 3 and 7-year useful life property, with very few tax preference personal holding companies not finding § 167(f) being beneficial to them.

185. Individuals, for purposes of this comment, include individuals, estates, trusts, and partnerships. A partnership should use its own after tax cost of capital to evaluate the proper decisions, while using the average aggregate marginal tax rates of its individual partners.

186. TEFRA § 201(d).

187. I.R.C. § 55(f)(2) (West Special Supp. 1982).

188. I.R.C. § 55(a)(1) (West Special Supp. 1982), imposes a tax computed at 20%, but only to the extent that it exceeds the regular tax in § 55(a)(2). Thus, the alternative minimum tax will increase dollar for dollar as the regular tax decreases. Note that decreasing the regular tax by one dollar of investment credit has the same effect as increasing the alternative minimum tax by one dollar. However, investment credit should still be sought, since investment credit is considered unused to the extent of the alternative minimum tax, I.R.C. § 55(c)(4) (West Special Supp. 1982), thus allowing it to be carried back three years and forward fifteen years I.R.C. § 46(b)(1) (West Supp. 1982).

189. When straight-line is elected on either 3, 5, or 10-year property, the election must be made to use the same straight-line recovery period for all other property in that same 3, 5, or 10-year class placed in service in the same taxable year. I.R.C. § 168(b)(3)(B)(i) (West Special Supp. 1982). This required election is not a drawback to electing straight-line, how-

non-tax preference taxpayers on 3, 5, and 10-year property than the optional straight-line recovery,<sup>190</sup> but once tax preference will be generated because of the use of the statutory percentages for 3, 5, and 10-year property,<sup>191</sup> the statutory percentages lose some, or all, of their benefits. Instead, the optional straight-line recovery periods of either three or five years for 3-year property, five or twelve years for 5-year property, and ten or twenty-five years for 10-year property<sup>192</sup> should in some cases be elected, depending upon the tax preference personal holding company's marginal tax rate and after tax cost of capital.<sup>193</sup>

*Exhibit #7 Recovery Property—Tax Preference Personal Holding Companies—Statutory ACRS Percentages v. 3 Year Straight-Line Recovery v. 5 Year Straight-Line Recovery for 3-Year Property*

Example: \$10,000 of leased 3-year recovery property, 50% marginal tax rate personal holding company.

---

ever, because if it is more advantageous for a taxpayer to elect straight-line on one asset within a class, it will almost always be more advantageous to elect the same straight-line recovery period on all the assets in that class. The only situation in which a taxpayer might not have desired to elect the same straight-line recovery period for all assets in either the 3, 5, or 10-year class is if he was using the election on only some assets in order to adjust his depreciation deductions to fine-tune his taxable income to a specific figure. This is not allowed for 3, 5, and 10-year property, even though a taxpayer could use double declining balance on one nonrecovery asset while using sum-of-the-years digits on another identical nonrecovery asset.

A taxpayer can elect, however, to use straight-line recovery for only some of his 15-year property, while not so electing on other 15-year property placed in service in the same taxable year. I.R.C. § 168(b)(3)(B)(ii) (West Special Supp. 1982). Thus, a taxpayer's taxable income can still be fine-tuned by adjusting the depreciation deduction, but to a much lesser degree.

190. See *supra* pt. III. C.

191. Tax preference is incurred on 3, 5, and 10-year property when it is being leased by a noncorporate lessor. See *supra* note 22 and 23 and accompanying text. When 3, 5, or 10-year property is not being leased and, therefore, not generating any tax preference, the proper decisions are the same as those for non-tax preference taxpayers.

192. I.R.C. § 168(b)(3) (West Special Supp. 1982).

193. The optional recovery periods of 12 years for 3-year property, 25 years for 5-year property, 35 years for 10-year property, and 35 and 45 years for 15-year property should never be used, because no minimum tax is avoided by their use instead of the next shorter optional straight-line recovery period under I.R.C. § 168(b)(3) (West Special Supp. 1982).

Comparing the Statutory Percentages and 3 Year Straight-Line Recovery:

Year	Depreciation Deductions				Minimum Tax			
	Statutory Percentage	3 Year Straight-Line Recovery <sup>194</sup>	Statutory Percentage Excesses	Tax Savings	Statutory Percentage	3 Year Straight-Line Recovery	Statutory Percentage Excesses	Minimum Tax
1	\$ 2,500	\$ 1,700	\$ 800	\$ 400	\$1,500	\$ 700	\$ 800	\$120
2	3,800	3,300	500	250	1,800	1,300	500	75
3	3,700	3,300	400	200	1,700	1,300	400	60
4	_____	1,700	(1,700)	(850)	_____	_____	_____	_____
	\$10,000	\$10,000	\$ -0-	\$ -0-	\$5,000	\$3,300	\$1,700	\$225

Year	Tax Savings	Minimum Tax	Statutory Percentage Excesses	17% Present Values
1	\$ 400	\$ 120	\$ 280	\$ 280
2	250	75	175	150
3	200	60	140	102
4	(850)	_____	(850)	(531)
	\$ -0-	\$ 255	\$(255)	\$ 1

Comparing the 3 Year Straight-Line Recovery and the 5 Year Straight-Line Recovery:

Year	Depreciation Deductions				Minimum Tax			
	3 Year Straight-Line Recovery	5 Year Straight-Line Recovery	3 Year Straight-Line Excesses	Tax Savings	3 Year Straight-Line Recovery	5 Year Straight-Line Recovery	3 Year Straight-Line Excesses	Minimum Tax
1	\$ 1,700	\$ 1,000	\$ 700	\$ 350	\$ 700	\$-0-	\$ 700	\$105
2	3,300	2,000	1,300	650	1,300	_____	1,300	195
3	3,300	2,000	1,300	650	1,300	_____	1,300	195
4	1,700	2,000	(300)	(150)	_____	_____	_____	_____
5	_____	2,000	(2,000)	(1,000)	_____	_____	_____	_____
6	_____	1,000	_____	(500)	_____	_____	_____	_____
	\$10,000	\$10,000	\$ -0-	\$ -0-	\$3,300	\$-0-	\$3,300	\$495

194. See *supra* note 148 for the recovery percentages.

195. See *supra* tables in text following note 146.

Year	Tax	Minimum Tax	3 Year	12% Present
	Savings		Straight-Line Excesses	Values
1	\$ 350	\$105	\$ 245	\$ 245
2	650	195	455	406
3	650	195	455	363
4	(150)		(150)	(107)
5	(1,000)		(1,000)	(636)
6	(500)		(500)	(284)
	\$ -0-	\$495	\$ 495	\$ (13)

Thus, a 50% marginal rate tax preference personal holding company should use the statutory percentages when its after tax cost of capital is 17% or more, 3 year straight-line when its after tax cost of capital is less than 17% and is 12% or more, and 5 year straight-line when its after tax cost of capital is below 12%. A below 12% after tax cost of capital will most often be the case, since the 12% tax rate is equivalent to a 24% before tax rate (12% x (100% - 50%)).

The only personal holding company which might elect 3 year straight-line on 3-year leased property is a 57% marginal rate tax preference company because 3 year straight-line is more beneficial to it than 5 year straight-line when its after tax cost of capital is over 10%, which requires a 23% before tax rate. Similar to the 50% tax preference company, a 57% tax preference company will almost never use the statutory percentages due to its after tax cost of capital not being over 10%.

Any tax preference personal holding company with an aggregate marginal tax rate under 50% should always elect the 5 year straight-line recovery for 3-year leased property. This is once again due to the company's after tax cost of capital not exceeding the very high 17% interest rate.<sup>196</sup>

Similar elections face the tax preference personal holding company with respect to 5-year leased property. The options available are the statutory ACRS percentages, a 5 year straight-line recovery, or a 12 year straight-line recovery. The deciding factors is the imposition of minimum tax on any recovery period less than eight

---

196. The 17% rate was computed for a 40% marginal rate personal holding company. As the company's marginal tax rate declines, the minimum tax incurred has a greater effect, thereby favoring the longer recovery periods and making the after tax cost of capital interest rate which must be exceeded to make the shorter recovery periods more advantageous even higher than the 17% rate.

The following table delineates the best election for tax preference personal holding companies to make on 3-year leased property:

years in length.<sup>197</sup> Because of the 8 year tax preference straight-line recovery used to compute the tax preference amount, 57% marginal tax rate tax preference personal holding companies will use the optional 5 year straight-line recovery under section 168(b)(3)(A) in most cases. Only if its after tax cost of capital is under 3% should the company elect the 12 year straight-line recovery, and only if its after tax cost of capital is 8% or more should the company choose the statutory ACRS percentages.

As the personal holding company's marginal rate decreases, it is more inclined to use the longer recovery periods. A 50% marginal rate tax preference personal holding company reaps greater tax benefits from the use of the 12 year optional straight-line recovery on 5-year leased property when its after tax cost of capital is under 3%, the 5 year optional straight-line recovery when its after tax cost of capital is over 3% up to and including 9%, and the statutory ACRS percentages when its after tax cost of capital is over 9%. Tax preference companies with aggregate marginal tax rates below 50% should rarely use the statutory ACRS percentages. They should most often elect the 5 year straight-line recovery period.<sup>198</sup>

The ACRS statutory percentages for 10-year leased property are much more useful to tax preference personal holding companies than the 5-year property ACRS statutory percentages. All tax preference companies with marginal tax rates of 40% or more should always use the statutory percentages, as should most companies

<u>Tax Preference Company's Aggregate Marginal Tax Rate</u>	<u>Company's After Tax Cost of Capital</u>	<u>Depreciation Method</u>
57%	10% or less	5 Year S-L
	Over 10% up to and including 14%	3 Year S-L
	Over 14%	ACRS Stat. Pcts.
50%	Less than 12%	5 Year S-L
	At least 12% but less than 17%	3 Year S-L
	17% or more	ACRS Stat. Pcts.
40%	17% or less	5 Year S-L
	Over 17%	3 Year S-L
Less than 40%	Any	5 Year S-L

197. I.R.C. § 57(a)(12)(A) (West Special Supp. 1982).

198. The following table delineates the best election for tax preference personal holding companies to make on 5-year leased property:

with marginal rates between 30% and 40%.<sup>199</sup> Surprisingly, all tax preference personal holding companies with marginal rates below 18% should never use the statutory percentages on 10-year leased property; they should instead elect the 10 or the 25 year straight-line recovery.

The final class of recovery property to be analyzed is 15-year property, which requires the most complex analysis of the classes due to three variables: the holding period, the after tax cost of capital, and the marginal tax rate. Because three variables are involved, the decision of which depreciation method to use for residential or nonresidential property can only be illustrated either in tables delineating the individual points of the three coordinates in separate graphs for each marginal tax rate or holding period, or in a plane in three dimensional space, as opposed to the line on a graph (two dimensional) that could have been used for non-tax preference taxpayers.

An extensive analysis of the proper depreciation method for 15-year residential and nonresidential property was prepared using the pre-TEFRA tax law. Due to the new capital gain rules for sales

<u>Tax Preference Company's Aggregate Marginal Tax Rate</u>	<u>Company's After Tax Cost of Capital</u>	<u>Depreciation Method</u>
57%	Less than 3%	12 Year S-L
	At least 3% but less than 8% 8% or more	5 Year S-L ACRS Stat. Pcts.
50%	Less than 3%	12 Year S-L
	At least 3% up to and including 9% Over 9%	5 Year S-L ACRS Stat. Pcts.
40%	Less than 4%	12 Year S-L
	At least 4% but less than 13% 13% or more	5 Year S-L ACRS Stat. Pcts.
30%	5% or less	12 Year S-L
	Over 5% but less than 19% 19% or more	5 Year S-L ACRS Stat. Pcts.
20%	9% or less	12 Year S-L
	Over 9%	5 Year S-L
12%	23% or less	12 Year S-L
	Over 23%	5 Year S-L
(For Interpolation)		

199. The following table delineates the best election for tax preference personal holding companies to make on 10-year leased property:

of section 1250 property by corporations after December 31, 1982,<sup>200</sup> and the repeal of the section 56 add-on minimum tax for individuals,<sup>201</sup> the 15-year property analysis prepared is no longer relevant for any taxpayers and thus will not be presented. Certain conclusions not relying on the law which TEFRA amended are presented in the summary for tax preference taxpayers.

<u>Tax Preference Company's Aggregate Marginal Tax Rate</u>	<u>Company's After Tax Cost of Capital</u>	<u>Depreciation Method</u>
57%	1% or less	25 Year S-L
	Over 1% up to and including 2%	10 Year S-L
	Over 2%	ACRS Stat. Pcts.
50%	Less than 2%	25 Year S-L
	At least 2% but less than 3%	10 Year S-L
	3% or more	ACRS Stat. Pcts.
40%	Less than 2%	25 Year S-L
	At least 2% but less than 4%	10 Year S-L
	4% or more	ACRS Stat. Pcts.
30%	Less than 3%	25 Year S-L
	At least 3% but less than 6%	10 Year S-L
	6% or more	ACRS Stat. Pcts.
20%	Less than 4%	25 Year S-L
	At least 4% but less than 12%	10 Year S-L
	12% or more	ACRS Stat. Pcts.
18%	4% or less	25 Year S-L
(For Interpolation)	Over 4% up to and including 16%	10 Year S-L
	Over 16%	ACRS Stat. Pcts.
15%	Less than 6%	25 Year S-L
(For Interpolation)	6% or more	10 Year S-L
12%	Less than 9%	25 Year S-L
(For Interpolation)	9% or more	10 Year S-L

200. See *supra* note 20.

201. TEFRA § 201(d).



## 2. Increasing Useful Life to Gain Additional Investment Credit on Recovery Property

### a. Increase from Four Years or Less to Over Four Years—Personal Holding Companies

The advisability of increasing the useful life on leased recovery property from four years or less to over four years depends greatly upon which method of depreciation a tax preference personal holding company with a particular after tax cost of capital is using on 3-year property and 5-year property. Using a 57% aggregate marginal tax rate tax preference company as an example, this point can be illustrated.

When a 57% rate tax preference personal holding company has an after tax cost of capital of less than 3%, it should elect 5 year straight-line recovery on 3-year leased property and 12 year straight-line recovery on 5-year leased property.<sup>202</sup> Thus, it is these two methods of depreciation which must be compared, based on the depreciation deductions, minimum tax, and investment credit amounts. Since a 57% rate tax preference personal holding company using these two methods should increase the useful life when its after tax cost of capital is less than approximately 2.2%,<sup>203</sup> the company should always increase the useful life, because only 57% rate tax preference companies with after tax costs of capital of less than 3% should elect 5 year straight-line recovery on 3-year leased property and 12 year straight-line recovery on 5-year leased property.

Using the same 57% rate tax preference personal holding company, but increasing its after tax cost of capital to at least 3% but less than 8%, the company should elect 5 year straight-line on 3-year leased property and 5 year straight-line on 5-year leased prop-

---

202. See *supra* note 196 for 3-year property, note 198 for 5-year property.

203. The computation of the 2.2% after tax cost of capital is relatively simple compared to the remaining useful life stretch decisions for tax preference taxpayers, because neither the 5 year straight-line election on 3-year property, nor the 12 year straight-line election on 5-year property generates any tax preference. I.R.C. § 57(a)(12)(A) (West Special Supp. 1982). Thus, only the additional investment credit gained and the faster depreciation lost need to be compared which, when computed, indicate that the increase should be made. This is due to the slower depreciation using 12 year straight-line not being important to such low after tax cost of capital personal holding companies (less than 3%) being analyzed here.

erty.<sup>204</sup> Due to the fact that the depreciation deductions are identical,<sup>205</sup> it would seem that increasing the useful life would always be the proper decision. But such is not the case, because 5 year straight-line on 3-year leased property generates no tax preference, while 5 year straight-line on 5-year leased property generates tax preference to the extent of 32% of the unadjusted basis of the property over the five years<sup>206</sup> which, multiplied by the 15% add-on minimum tax rate,<sup>207</sup> is 4.8%. The investment credit gained in the first year is 4%.<sup>208</sup> The internal rate of return on the 4% investment credit in the first year versus the 4.8% minimum tax over five years is 9%, which indicates a 57% tax preference personal holding company with an after tax cost of capital of at least 3% but less than 8% should never increase the useful life to gain the additional investment credit.

For 57% rate tax preference companies with after tax costs of capital of at least 8% up to and including 10%, over 10% up to and including 14%, and over 14%, the respective depreciation deductions and tax preference amounts for the method of depreciation which personal holding companies in each range should select must similarly be compared to the amount of investment credit gained. Companies with aggregate marginal tax rates of 50%, 40%, 30%, and 20% also have ranges of after tax costs of capital within each marginal rate for which stretching the useful life must be analyzed. Overall, more tax preference personal holding companies should increase the useful life from four years or less to over four years than those who should not.<sup>209</sup>

*b. Increase from Four Years or Less to Over Four Years—Corporations (Not Including Personal Holding Companies)*

Corporations are not subject to tax preference on 3, 5, and 10-

---

204. See *supra* notes 196 and 198.

205. See *supra* note 148.

206. See *supra* note 140 and table in text following *supra* note 144.

207. I.R.C. § 56(a) (West Special Supp. 1982).

208. See *supra* note 85.

209. The following table delineates which tax preference personal holding companies with various marginal rates and after tax costs of capital should increase the useful life of leased recovery property from four or less years (3-year property) to over four years (5-year property):

year leased property.<sup>210</sup> Thus, the proper decisions for corporations (other than personal holding companies), are the same as those for non-tax preference taxpayers.

*c. Increase from Twelve and One Half Years or Less to Over Twelve and One Half Years—Corporations (Including Personal*

Company's Aggregate Marginal Tax Rate	Company's After Tax Cost of Capital	Depreciation Method from <i>Supra</i> Notes 196 and 198		Increase Useful Life?
		3-Year Property	5-Year Property	
57%	Less than 3%	5 Year S-L	12 Year S-L	Yes
	At least 3% but less than 8%	5 Year S-L	5 Year S-L	No
	At least 8% up to and including 10%	5 Year S-L	Stat. Pcts.	Yes
	Over 10% up to and including 14%	3 Year S-L	Stat. Pcts.	Yes
	Over 14%	Stat. Pcts.	Stat. Pcts.	No
50%	Less than 3%	5 Year S-L	12 Year S-L	Yes
	At least 3% up to and including 9%	5 Year S-L	5 Year S-L	No
	Over 9% but less than 12%	5 Year S-L	Stat. Pcts.	Yes
	At least 12% but less than 17%	3 Year S-L	Stat. Pcts.	Yes
	17% or more	Stat. Pcts.	Stat. Pcts.	No
40%	Less than 4%	5 Year S-L	12 Year S-L	Yes
	At least 4% up to and including 9%	5 Year S-L	5 Year S-L	Yes
	Over 9% but less than 13%	5 Year S-L	5 Year S-L	No
	At least 13% up to and including 17%	5 Year S-L	Stat. Pcts.	Yes
	Over 17%	3 Year S-L	Stat. Pcts.	Yes
30%	5% or less	5 Year S-L	12 Year S-L	Yes
	Over 5% up to and including 9%	5 Year S-L	5 Year S-L	Yes
	Over 9% but less than 19%	5 Year S-L	5 Year S-L	No
	19% or more	5 Year S-L	Stat. Pcts.	Yes
20%	9% or less	5 Year S-L	12 Year S-L	Yes
	Over 9%	5 Year S-L	5 Year S-L	No
12%	23% or Less	5 Year S-L	12 Year S-L	Yes
(For Interpolation)	Over 23%	5 Year S-L	5 Year S-L	No

210. I.R.C. § 57(a) (West Special Supp. 1982).

### *Holding Companies)*

Rehabilitation investment credit can be gained by increasing the useful life from twelve and one half years or less (10-year property) to over twelve and one half years<sup>211</sup> (15-year property) on rehabilitation expenditures made after December 31, 1981. That increase should always be made by tax preference corporations, whether the credit gained is 15% or 20% of the basis,<sup>212</sup> and whether or not the corporation uses the statutory ACRS percentages or the optional straight-line recovery on either the 10-year or the 15-year property. For expenditures made before January 1, 1982, the increase from five to seven years should also be made.<sup>213</sup>

### *3. Proper Use of the Section 179 Expense Election—Tax Preference Personal Holding Companies*

For non-tax preference taxpayers, section 179 should be elected first on 15-year nonresidential<sup>214</sup> rehabilitation investment credit property, next on 5-year property, and finally on 3-year property.<sup>215</sup> Due to the numerous methods of depreciation which tax preference personal holding companies should use depending upon their after tax cost of capital,<sup>216</sup> the order in which classes of property being depreciated by certain methods should be expensed under section 179 are quite complex.<sup>217</sup> Generally, every tax prefer-

211. I.R.C. §§ 48(g)(2)(i) (West Supp. 1982), 168(c)(2)(C)(ii), (D) (West Supp. 1982).

212. I.R.C. § 46(a)(2)(F)(i) (West Special Supp. 1982).

213. See *supra* note 79 and accompanying text.

214. Residential 15-year property cannot qualify for investment credit, I.R.C. § 48(a)(3) (West Special Supp. 1982), and thus cannot be expensed under I.R.C. § 179, § 179(d)(1) (West Supp. 1982). Since 10-year property rarely qualifies for investment credit, see *supra* note 90, it can rarely be expensed under § 179. Rehabilitation expenditures incurred before January 1, 1982, on either residential or nonresidential property cannot be expensed under § 179, because § 179 cannot be elected until January 1, 1982. I.R.C. § 179(b)(1) (West Supp. 1982).

215. See *supra* note 94. Non-tax preference taxpayers with aggregate marginal tax rates of 27% or less should elect I.R.C. § 179 (West Supp. 1982), on 3-year leased property before 5-year leased property. *Id.*

216. See *supra* note 196, 198-99.

217. The following table delineates when a tax preference personal holding company should elect I.R.C. § 179 (West Supp. 1982), on what class of leased or not leased property, and with which depreciation method. Note that in the table below some depreciation methods do not appear; this is due to those depreciation methods never being concurrently both the proper depreciation election and the proper § 179 expense election.

The 15-year property shown below does not need to be distinguished as leased or not leased because whether leased or not leased, 15-year property for which 15 year straight-line

ence personal holding company with an aggregate marginal tax rate of 40% or more will elect section 179 on at least 15-year non-residential rehabilitation investment credit property on buildings

recovery is elected does not generate any tax preference. Also note that to compute the after tax costs of capital for the 15-year property listed below that the 15 year straight-line recovery election under I.R.C. § 168(b)(3) (West Special Supp. 1982), was used. This election must be made in order to gain the always advantageous rehabilitation investment credit.

Also, in order to qualify for the expense election, § 179 requires that the property be investment credit property, I.R.C. § 179(d)(1) (West Supp. 1982), thus excluding residential 15-year property, I.R.C. § 48(a)(3) (West Supp. 1982). Further, I.R.C. § 46(g)(5)(A) (West Special Supp. 1982), requires that the basis of qualified rehabilitation expenditures be reduced by the amount of investment credit allowed.

57% Aggregate Marginal Tax Rate Tax Preference Personal Holding Company

<u>Elect I.R.C. §179 on this Class of Property, on which this Depreciation Method is Used.</u>	<u>When the Taxpayer's After Tax Cost of Capital is:</u>	<u>Order To be Expensed</u>
3-Year Leased Prop. Stat. Pcts.	Less than 1%	#1
3-Year Leased Prop. 3 Yr. S-L	At least 1% up to and including 2%	#2
15-Year Prop. 30-39 Yr. Old Bldg.	Over 2% up to and including 3%	#3
15-Year Prop. 40+ Yr. Old Bldg.	Over 3% but less than 4%	#4
5-Year Leased Prop. Stat. Pcts.	Exactly 4%	#5
5-Year Leased Prop. 5 Yr. S-L	Over 4% but less than 5%	#6
3-Year Leased Prop. 5 Yr. S-L	At least 5% up to and including 10%	#7
5-Year Not Leased Stat. Pcts.	Over 10% up to and including 11%	#8
3-Year Not Leased Stat. Pcts.	Over 11%	#9

50% Aggregate Marginal Tax Rate Tax Preference Personal Holding Company

3-Year Leased Prop. Stat. Pcts.	Less than 2%	#1
3-Year Leased Prop. 3 Yr. S-L	At least 2% up to and including 3%	#2
15-Year Prop. 30-39 Yr. Old Bldg.	Over 3% up to and including 4%	#3
5-Year Prop. Stat. Pcts.	Over 4% but less than 5%	#4
15-Year Prop. 40+ Yr. Old Bldg.	Exactly 5%	#5
5-Year Leased Prop. 5 Yr. S-L	Over 5% up to and including 12%	#6
3-Year Leased Prop. 5 Yr. S-L	Over 5% up to and including 12%	#7
5-Year Not Leased Stat. Pcts.	Over 12% up to and including 13%	#8
3-Year Not Leased Stat. Pcts.	Over 13%	#9

40% Aggregate Marginal Tax Rate Tax Preference Personal Holding Company

Do not elect I.R.C. §179	Less than 2%	
3-Year Leased Prop. 3 Yr. S-L	At least 2% up to and including 5%	#1
15-Year Prop. 30-39 Yr. Old Bldg.	Over 5% but less than 6%	#2
5-Year Leased Prop. Stat. Pcts.	At least 6% but less than 7%	#3
5-Year Leased Prop. 5 Yr. S-L	At least 7% but less than 9%	#4
3-Year Leased Prop. 5 Yr. S-L	At least 7% but less than 9%	#5
15-Year Prop. 40+ Yr. Old Bldg.	At least 9% but less than 16%	#6
5-Year Not Leased Stat. Pcts.	Exactly 16%	#7
3-Year Not Leased Stat. Pcts.	Over 16%	#8

30% Aggregate Marginal Tax Rate Tax Preference Personal Holding Company

Do not elect I.R.C. §179	Less than 8%	
5-Year Leased Prop. Stat. Pcts.	At least 8% but less than 9%	#1
15-Year Prop. 30-39 Yr. Old Bldg.	At least 9% but less than 10%	#2
5-Year Leased Prop. 5 Yr. S-L	At least 10% up to and including 18%	#3
3-Year Leased Prop. 3 Yr. S-L	At least 10% up to and including 18%	#4
15-Year Prop. 40+ Yr. Old Bldg.	Over 18% up to and including 23%	#5
3-Year Not Leased Stat. Pcts.	At least 23% but less than 24%	#6
5-Year Not Leased Stat. Pcts.	24% or more	#7

20% Aggregate Marginal Tax Rate Tax Preference Personal Holding Company

Do not elect I.R.C. §179	Less than 17%	
3-Year Leased Prop. 5 Yr. S-L	At least 17% but less than 19%	#1
5-Year Leased Prop. 5 Yr. S-L	At least 19% up to and including 35%	#2
15-Year Prop. 30-39 Yr. Old Bldg.	Over 35% but less than 47%	#3
3-Year Not Leased Stat. Pcts.	At least 47% but less than 49%	#4
5-Year Not Leased Stat. Pcts.	49% or more	#5

that are thirty to thirty-nine years old (as distinguished from forty or more year old buildings).<sup>218</sup>

SUMMARY FOR TAX PREFERENCE TAXPAYERS

<u>Decision</u>	<u>Proper Choice</u>
A. Corporation Postponing Placing an Asset into Service to Avoid Tax Preference	
1. Postponing from Ninth month of the taxable year to Tenth month <sup>219</sup>	
2. Postponing from Eighth month of the taxable year to Tenth month <sup>220</sup>	
3. Postponing from Seventh month of the taxable year to Tenth month	Do not postpone.
B. Nonrecovery Property	
1. Depreciation Method	
a. When Sum-of-the-Years Digits, 200% Declining Balance, and Straight-Line are Available on Leased Property	
(1) Personal Holding Companies	
(a) 3 or 5-Year Useful Life	Straight-Line.

(For Interpolation)

12% Aggregate Marginal Tax Rate Tax Preference Personal Holding Company

Do not elect I.R.C. §179	38% or less	
3-Year Leased Prop. 5 Yr. S-L	Over 38% but less than 92%	#1
5-Year Leased Prop. 5 Yr. S-L	92% up to and including 115%	#2
3-Year Not Leased Stat. Pcts.	Over 115% up to and including 1350%	#3
5-Year Not Leased Stat. Pcts.	Over 1350%	#4

The use of the above table can be illustrated by an example. A 57% marginal rate tax preference personal holding company with an after tax cost of capital of 3.5% would elect § 179, first, on 3-year leased property on which the statutory percentages are used, second, on 3-year leased property on which 3 year straight-line recovery is used, third, on 15-year non-residential rehabilitation investment credit property on a 30-39 year old building on which 15 year straight-line must be elected, and finally, on the same 15-year property except on a 40 or more year old building. Since this 57% rate tax preference personal holding company has an after tax cost of capital of 3.5%, it should choose the 5 year straight-line recovery on 3-year leased property (see *supra* note 188) and, accordingly, will not have any 3-year leased property on which the statutory percentages or 3 year straight-line will be used. Thus, the 15-year property will be the first class of property on which this particular personal holding company should elect § 179.

218. See *supra* note 217.

219. See *supra* note 157.

220. See *supra* note 162.

- (b) 7-Year Useful Life<sup>221</sup>
- (2) Corporations (Not Including Personal Holding Companies)
- (a) 3-Year Useful Life
- Sum-of-the-years digits, unless the corporation's after tax cost of capital exceeds 15%, then use 200% declining balance. If the corporation will use Revenue Procedure 74-11 after the second year<sup>222</sup> use double declining balance with a switch to straight-line.
- (b) 5-Year Useful Life
- Sum-of-the-Years Digits. If the corporation will use Revenue Procedure 74-11 after the third year use double declining balance with a switch to straight-line.
- (c) 7-Year Useful Life or More
- Sum-of-the-Years Digits.
- b. When Sum-of-the-Years Digits, 200% Declining Balance, and Straight-Line are Available on Property Not Being Leased
- See pt. II. A. 1. Summary.
- c. Corporations (Including Personal Holding Companies) When 150% Declining Balance and Straight-Line are Available
- (1) Under 30% Aggregate Marginal Tax Rate Corporation, 30 or 40-year Useful Life, Rev. Proc. 74-11 not being used
- Straight-Line.
- (2) 30% or More Aggregate Marginal Tax Rate Corporation, Rev. Proc. 74-11 not being used
- (a) 30-year Useful Life<sup>223</sup>
- (b) 40-year Useful Life
- Straight-Line.

---

221. See *supra* note 165.

222. See *supra* note 51.

223. See *supra* note 171.



- (3) If Rev. Proc. 74-11 is being used after the 11th year for 30-year life assets or after the 14th year for 40-year life assets

150% Declining Balance with a switch to straight-line.

- d. Corporations (Including Personal Holding Companies) When 125% Declining Balance and Straight-Line are Available

Straight-Line. If the corporation will use Revenue Procedure 74-11 after the seventh year for 30-year life assets or after the eighth year for 40-year life assets use 125% declining balance with a switch to straight-line.

2. Increasing Useful Life to Gain Additional Investment Credit (Regardless of using Revenue Procedure 74-11.)

- a. Personal Holding Companies — Leased Property

- (1) One Year Increase

Always increase the life if additional credit will be gained thereby, otherwise do not.

- (2) Two Year Increase

- (a) Three Year Increase to Five Years<sup>224</sup>

- (b) Five Year Increase to Seven Years

Increase the life.

- (3) Three Year Increase

Not permissible under the Code.

- b. Corporations (Not Including Personal Holding Companies) — Leased Property

- (1) One Year Increase

Always increase the life if additional credit will be gained thereby, otherwise do not.

- (2) Two Year Increase

- (a) Three Year Increase to Five Years

Increase the life.

- (b) Five Year Increase to Seven Years

Increase the life.

---

224. See *supra* note 177.

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>(3) Three Year Increase</li> </ul>   | <p>Not permissible under the Code.</p>  |
| <ul style="list-style-type: none"> <li>c. Property Not Being Leased (Other than Rehabilitation Expenditures)</li> </ul>   | <p>See pt. II. B. 1., 2., and 3. Summary.</p>   |
| <ul style="list-style-type: none"> <li>d. Corporations (Including Personal Holding Companies) Rehabilitation Investment Credit on Expenditures Made Before January 1, 1982</li> </ul> | <p>Increase the useful life from five to seven years.</p>   |
| <ul style="list-style-type: none"> <li>3. Section 167(f) Election to Reduce Salvage Value for Corporations (Including Personal Holding Companies)</li> </ul>                          | <p>Always elect section 167(f).</p>   |
| <ul style="list-style-type: none"> <li>4. Individuals Subject to the section 55 Alternative Minimum Tax</li> </ul>  | <p>Choose whichever option in any decision will generate the least tax preference under section 57.</p> |
| <p>C. Recovery Property Placed in Service in Taxable Years beginning before December 31, 1982</p>   |   |
| <ul style="list-style-type: none"> <li>1. Election of Statutory ACRS Percentages or Straight-Line Recovery</li> </ul>   |   |
| <ul style="list-style-type: none"> <li>a. Personal Holding Companies</li> </ul>   |   |
| <ul style="list-style-type: none"> <li>(1) 3-Year Leased Property<sup>225</sup></li> </ul>  |   |
| <ul style="list-style-type: none"> <li>(2) 5-Year Leased Property<sup>226</sup></li> </ul>  |   |
| <ul style="list-style-type: none"> <li>(3) 10-Year Leased Property<sup>227</sup></li> </ul>   |   |
| <ul style="list-style-type: none"> <li>(4) 3, 5, and 10-Year Property Not Leased</li> </ul>   | <p>Statutory ACRS Percentages.</p>  |
| <ul style="list-style-type: none"> <li>b. Corporations (Not Including Personal Holding Companies)</li> </ul>  | <p>Statutory ACRS Percentages.</p>  |
| <ul style="list-style-type: none"> <li>c. (1) 15-Year Property Expected to be sold at a Loss, Low Gain, or Pass Through an Estate</li> </ul>  | <p>Statutory ACRS Percentages.</p>  |
| <ul style="list-style-type: none"> <li>(2) Nonresidential 15-Year Property Qualifying for Rehabilitation Investment Credit</li> </ul>   | <p>15-Year Straight-Line Recovery.</p>  |
| <ul style="list-style-type: none"> <li>(3) All other 15-Year Property</li> </ul>  | <p>Not available at press time.</p>   |
| <ul style="list-style-type: none"> <li>2. Increasing Useful Life to Gain Additional Investment Credit</li> </ul>  |   |

---

225. See *supra* note 196.

226. See *supra* note 198.

227. See *supra* note 199.

- a. Increase from Four Years or Less to Over Four Years
    - (1) Personal Holding Companies
      - (a) Leased Property<sup>228</sup>
      - (b) Property Not Being Leased III. A. 1. Summary.
    - (2) Corporations (Not Including Personal Holding Companies) III. A. 1. Summary.
  - b. Increase from Twelve and One Half Years or Less to Over Twelve and One Half Years for Rehabilitation Investment Credit on Expenditures Made after December 31, 1981 by Corporations (Including Personal Holding Companies) Increase the life.
  - 3. Section 179 Expense Election
    - a. Personal Holding Companies<sup>229</sup>
    - b. Corporations (Not Including Personal Holding Companies) Not available at press time.
  - 4. Individuals Subject to the section 55 Alternative Minimum Tax Choose whichever option in any decision that will generate the least tax preference under section 57.
- D. Individuals subject to the Section 56 Add-on Minimum Tax for 1982, but not the Section 55 Alternative Minimum Tax<sup>230</sup>

## V. CONCLUSION

Even before the enactment of ACRS, the elections to be made regarding depreciation methods and useful lives required careful analysis to reveal the most advantageous choices for non-tax preference and tax preference taxpayers. The Accelerated Cost Recovery System presents numerous decisions to be made, despite the simplicity of having only four classes of property.

The proper choices under ACRS with respect to the depreciation method (statutory percentages versus optional straight-line recovery periods), useful life (increase to gain additional investment credit), and the section 179 expense election are each dependent

228. See *supra* note 209.

229. See *supra* note 217.

230. See text following *supra* note 145.

upon which election was made for the other decisions. Due to this, the proper sequence to analyze the depreciation method, useful life, and section 179 elections is to first, choose the proper depreciation method for the property's actual useful life. Then, the taxpayer should decide if the useful life should be increased to gain additional investment credit. If the useful life is increased, then the depreciation method is different, since the useful life is longer. Finally, the taxpayer must decide if the section 179 election should be made on this property. If so, then the useful life and depreciation method become irrelevant, since the asset will not be capitalized. The taxpayer must keep in mind that he might have other property to which the section 179 maximum of \$5,000<sup>231</sup> should first be applied.

All of the recovery property decisions presented in this comment are for property placed in service after December 31, 1980, and in taxable years beginning before December 31, 1982.<sup>232</sup> Besides the scheduled changes in recovery property by TEFRA,<sup>233</sup> any amendment to tax preference, capital gain, or investment credit rules will also have an effect on some of the decisions analyzed in this comment.

*Comfrey Scott Ickes*

---

231. I.R.C. § 179(b)(1) (West Supp. 1982). The maximum increases to \$7,500 for 1984 and 1985 and to \$10,000 for taxable years beginning in 1986 or thereafter. *Id.* This increase will not change the proper decisions. *See supra* note 44.

232. After December 31, 1980, ACRS came into effect under ERTA, I.R.C. § 168(b)(1) (West Special Supp. 1982). In taxable years beginning after December 31, 1982, several of the TEFRA amendments affecting recovery property become effective.

233. The changes include the repeal of the I.R.C. § 56 (West Special Supp. 1982), add-on minimum tax for individuals, TEFRA § 201(d), reduction of basis for 50% of investment credit allowed, I.R.C. § 48(q)(1) (West Special Supp. 1982), (TEFRA § 209(d)(2)), and 15% of corporate I.R.C. § 1250 (West 1982), capital gain treated as ordinary income, I.R.C. § 291(a)(1) (West Supp. 1982), (TEFRA § 204(d)). *See supra* note 214.

