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THE ASSET DEPRECIATION RANGE (ADR) SYSTEM: INEQUITY IN THE REVENUE ACT OF 1971

INTRODUCTION

The Internal Revenue Code authorizes an annual deduction for depreciation in the taxpayer's computation of taxable income.¹ The deduction for exhaustion, wear and tear, and obsolescence represents the amortization of the cost of property, *i.e.*, the original investment in property used in trade or business, or held for the production of income.² In authorizing this deduction Congress indicated that "[d]epreciation allowances are the method by which the capital invested in an asset is recovered tax-free over the years it is used in a business. The annual deduction is computed by spreading the cost over its estimated useful life."³ Treasury Regulation 1.167(a)-1 more technically defines depreciation as

that amount which should be set aside for the taxable year in accordance with a reasonably consistent plan (not necessarily at a uniform rate), so that the aggregate of the amounts set aside, plus the salvage value, will, at the end of the estimated useful life of the depreciable property, equal the cost or other basis of the property. . . .⁴

Accordingly, the sum total of depreciation deductions over the period of years of an asset's useful life (that is, the depreciation reserve) may not exceed the cost of the property as reduced by salvage value.

Congress empowered the Treasury Department to provide "all needful rules and regulations for the enforcement of [the Internal Revenue Code]. . . ."⁵ More specifically, the Code provides that the Secretary of the Treasury may issue regulations with respect to the manner of computing a "reasonable allowance" for depreciation.⁶ Recently, in an attempt to stimulate the sagging national economy, the Treasury adopted regulations which place into effect a new system of determining depreciation for machinery, equipment and other specific property.⁷ This system, called the Asset Depreciation Range (ADR) System, re-

¹ Int. Rev. Code of 1954, § 167(a), provides:

(a) General rule.—There shall be allowed as a depreciation deduction a reasonable allowance for the exhaustion, wear and tear (including a reasonable allowance for obsolescence)—

(1) of property used in the trade or business, or

(2) of property held for the production of income.

² Int. Rev. Code of 1954, § 167(a).

³ H.R. Rep. No. 1337, 83d Cong., 2d Sess. 22 (1954).

⁴ Treas. Reg. § 1.167(a)-1(a) (1964).

⁵ Int. Rev. Code of 1954, § 7805(a).

⁶ Int. Rev. Code of 1954, § 167(b).

⁷ Treas. Reg. § 1.167(a)-11 (1971).

ceived formal congressional approval in the newly enacted Revenue Act of 1971.⁸

This comment will explain and examine the ADR System. The analysis will proceed in four steps. First, the background of the depreciation law and Treasury regulation will be set out, with emphasis on the developments which led to formal legislative sanctioning of the ADR System in the Revenue Act of 1971. Second, the mechanics of the ADR System will be explained, particularly those sections which change the prior law and regulations. Third, the economic effects of the ADR System on business taxpayers will be examined. Finally, there will follow a discussion of the underlying tax policy considerations upon which ADR is based. The comment concludes that the ADR System is an inequitable and inefficient means of effecting national economic policy.

I. THE REGULATORY BACKGROUND

Presently, the Internal Revenue Code allows the taxpayer to utilize any reasonable method of depreciation so long as he uses it consistently. Three methods, which result in differing rates, are specifically approved.⁹ The first and simplest method is "straight line depreciation."¹⁰ Here, the basis of the property, usually cost less estimated salvage value,¹¹ is spread evenly over the estimated useful life of the property.¹² The other two approved methods are both accelerated depreciation procedures which allow larger deductions during the early years of the asset's life.¹³ Whereas, under the straight line method, the

⁸ Int. Rev. Code of 1954, § 167(m)(1).

⁹ Int. Rev. Code of 1954, § 167(b).

¹⁰ Int. Rev. Code of 1954, § 167(b)(1).

¹¹ Section 1012 provides in general that the basis of property shall be its original cost to the taxpayer. This unadjusted basis is subsequently increased or decreased to account for taxpayer's actions relating to such property. Capital improvements increase the basis while allowable depreciation deductions reduce it. Int. Rev. Code of 1954, § 1016.

¹² Treas. Reg. § 1.167(b)-1(a) (1956). For example, if an asset has an 8 year life, then $\frac{1}{8}$ or 12½% of the cost or other basis, less salvage value, may be deducted from income each taxable year.

¹³ The Revenue Act of 1954 provides for two specific means of accelerated depreciation. Under the first, the "declining balance" method (§ 167(b)(2)), the rate cannot exceed twice that acceptable under the straight line system. Thus, if the acceptable straight line rate is 12½%, a rate of up to 25% is acceptable for the declining balance method. Hence, a fixed or uniform rate is applied to a constantly declining adjusted basis. Salvage value is not considered in this computation, but depreciation is not allowable beyond the salvage value point. Treas. Reg. § 1.167(b)-2(a) (1964). This method allows "approximately 40 percent of an asset's cost to be depreciated in the first quarter of its service life, and two-thirds in the first half of its life." B. Bittker, *Federal Income Estate and Gift Taxation* 296 (3d ed. 1964). The other method of rapid depreciation specifically allowed under §.167 is the "sum of the years-digits" method. Under this method a depreciation rate is applied to the unadjusted basis reduced by salvage value. This rate varies and is reduced as the taxpayer moves from the initial use of the property toward the end of the asset's useful life. The rate for any year is a fraction in which the denominator is the sum of the digits representing the total years of estimated life of the asset, and the numerator is the remaining years of useful life at the beginning of the tax

depreciation deduction is the same for each taxable year; under an accelerated method the deductions follow a constantly decreasing pattern. Thus depreciation deductions are higher in the early years than in later years, thereby effecting a deferral of tax liability.¹⁴

Accelerated depreciation is based on the theory that new property is generally capable of producing more revenue than old property. Therefore, it is believed that a better matching of revenue and expenses is achieved by permitting larger depreciation deductions in the early period, when the property has its greatest usefulness. More practically, however, accelerated depreciation is intended to encourage new investment.¹⁵ Such an incentive is designed to stimulate capital formation for economic growth and to encourage the modernization and the expansion of uses of equipment in order to improve the U.S. competitive position abroad.¹⁶

In addition to the method of depreciation selected, the total amount of the annual depreciation deduction depends upon the "useful life" of an asset. An understanding of the basic changes in Internal Revenue Service policy in relation to the useful life concept is central to a discussion of the ADR System. As generally defined by Regulation 1.167(a)-1(b),

[t]he estimated useful life of an asset is not necessarily the useful life inherent in the asset but is the period over which the asset may reasonably be expected to be useful to the taxpayer in his trade or business or in the production of his income. This period shall be determined by reference to his experience with similar property taking into account present conditions and probable future developments. Some of the factors to be considered in determining this period are (1) wear and tear and decay or decline from natural causes, (2) the normal progress of the art, economic changes, inventions and current developments within the industry and the taxpayer's trade or business, (3) . . . conditions peculiar to the

year. Treas. Reg. § 1.167(b)-3 (1956). This method results in slightly less depreciation in the early years of the asset's life than does the maximum double declining balance method.

¹⁴ Because of the high level of income tax rates, the amount and pattern of depreciation deductions have an important effect on the cash position of a business. With an income tax rate of approximately 50%, a method which results in, for example, a \$20,000 greater depreciation deduction in any taxable year will reduce the cash requirements for income taxes by \$10,000. In other words, this allows cash to be recovered through the depreciation process. T. Fiflis & H. Kripke, *Accounting for Business Lawyers* 229 (1971). This is not a permanent saving since in later years the depreciation deductions are reduced because depreciation deductions cannot exceed the asset's basis. Treas. Reg. § 1.167(a)-1(a) (1964). For new or expanding businesses this deferral of income taxes is attractive since it permits an increase of cash on hand which may be used to purchase additional equipment.

¹⁵ B. Bittker, *Federal Income Estate and Gift Taxation* 296 (3d ed. 1964).

¹⁶ *Id.* at 296-99; see generally Torrey, *Current Problems Involving the Investment Credit*, 1965 U. So. Cal. Tax Inst. 569.

taxpayer's trade or business, and (4) the taxpayer's policy as to repairs, renewals and replacements.¹⁷

The initial method utilized by the Revenue Service to determine useful life was an item-by-item approach based on statistical studies. Bulletin F, issued by the Internal Revenue Service in 1920, set forth useful lives for thousands of depreciable assets.¹⁸ Although updated on occasion, by 1962 the bulletin had become obsolete, no longer adequately representing useful lives.¹⁹ In 1962, Revenue Procedure 62-21²⁰ was issued with the intention of providing "more liberal depreciation allowances as an incentive for economic growth and . . . to provide more objective standards for depreciation allowances in order to minimize the areas of controversy."²¹ Procedure 62-21 set forth guideline lives for about seventy-five broad classes of assets, which covered the majority of assets used in a trade or business. These lives were thirty to forty percent shorter than those previously allowed by Bulletin F.²² It was hoped that with a more rapid depreciation allowance taxpayers would modernize their business operations by replacing old and outdated machinery and equipment with new, more efficient and technologically advanced facilities.²³ Theoretical justification for the shortening of lives lay in the increased emphasis on obsolescence and technological change as factors in estimating useful lives. This emphasis represented a shift in attitude toward useful life estimations, which previously had been based primarily on retirement and replacement policies.²⁴

The 1962 Guidelines, in abandoning the item-by-item approach, grouped assets into heterogeneous classes. In determining these classes, the Treasury considered common factors based on physical characteristics.²⁵ For example, "office equipment" included desks and chairs as well as typewriters and calculating machines. This treatment was mutually advantageous to both the taxpayer and the Treasury. Allowing the taxpayer to combine assets in a single guideline class for tax purposes simplified his depreciation computation and record keeping;

¹⁷ Treas. Reg. § 1.167(a)-1(b) (1964).

¹⁸ 7 CCH 1971 Stand. Fed. Tax Rep. ¶ 6738, at 71,508 n.13, 71,510 [hereinafter cited as CCH Fed. Tax Rep.].

¹⁹ Bulletin F was first updated in 1931 and again in 1942. In the late 1950's a Treasury study was undertaken to again revise Bulletin F. This study concluded, however, that the asset-by-asset approach of Bulletin F did not adequately reflect obsolescence and that consequently it often projected longer useful lives than necessary. *Id.* at 71,508-09.

²⁰ Rev. Proc. 62-21, 1962-2 Cum. Bull. 418.

²¹ 6-4th Tax Management, Depreciation—Guideline Lives and Reserve Ratio, A-3 (1970) [hereinafter cited as Tax Management].

²² *Id.*

²³ Romak, Depreciation Reform: Using the New Guideline Lives, N.Y.U. 22nd Inst. on Fed. Tax 465 (1964).

²⁴ Tax Management, *supra* note 21, at A-5.

²⁵ CCH Fed. Tax Rep., *supra* note 18, at 71,511.

for the Treasury, it was much easier to determine an average useful life for a guideline *class* than for each asset within that guideline class.²⁶

A novel feature of the 1962 Guidelines, "the reserve ratio test," served as a control on the determination of guideline lives. Through this test it could be determined whether a taxpayer's actual retirement and replacement practices justified his continued use of the guideline lives;²⁷ depending on the results, the lives could be lengthened or shortened, thereby decreasing or increasing the acceptable depreciation deduction. The reserve ratio was expressed as the ratio of the total of the depreciation reserves for those assets in a guideline class to the original total cost of those assets. The ideal reserve ratio was based on a stable account, that is, one in which new assets were added only when necessary to replace retired assets. After a sufficient number of years, the dollar value of assets annually retired and replaced would be fairly constant. Under the straight line method of depreciation, the account as a whole would always be one-half depreciated, thereby providing a reserve ratio of fifty percent.²⁸ Realizing, however, that a perfectly stable account was impossible because of variations in businesses and in the expansion and contraction of business growth, the Treasury developed tables which gave the ideal reserve ratio for each guideline class, and also provided a range above and below the ideal.²⁹ If a taxpayer failed the reserve ratio test, he was nonetheless entitled to his depreciation deduction if he could show that circumstances justified the tax lives he had claimed.³⁰

The Treasury provided transitional rules designed to enable taxpayers to make a gradual adjustment to the full force of the reserve ratio test.³¹ Originally a transition period of three years was indicated, during which the guideline lives were permitted to be used as a matter of right, without regard to the reserve ratio test.³² As this three-year period ended in 1965, however, business taxpayers contended that more time was required in order to adjust their retirement and replacement

²⁶ Tax Management, *supra* note 21, at A-7.

²⁷ CCH Fed. Tax Rep., *supra* note 18, at 71,512.

²⁸ Romak, *supra* note 23, at 469. For example, if the original cost of assets in a guideline class were \$250,000 and straight line depreciation were used, then, assuming the group of assets was used by the taxpayer for a sufficient number of years so that retirements and replacements had occurred, the total of the depreciation reserve would be \$125,000 and, consequently, the reserve ratio would be 50% ($\$125,000 \div \$250,000$).

²⁹ Such ranges were given in tables established for various lives and types of depreciation methods. There were two variations of the reserve ratio test. One was called the tabular method form, Rev. Proc. 62-21, 1962-2 Cum. Bull. 439; the other, adopted in 1965, was called the guideline form, Rev. Proc. 65-13, 1965-1 Cum. Bull. 760. Generally, the latter method provided for more liberalized transition rules which the taxpayer could employ in applying the reserve ratio test. S. Surrey, W. Warren, P. McDaniel & H. Ault, *Federal Income Taxation* at p. 3-138 (unpublished text available from Profs. McDaniel and Ault, at the Boston College Law School).

³⁰ Rev. Proc. 62-21, 1962-2 Cum. Bull. 429-34.

³¹ Rev. Proc. 62-21, 1962-2 Cum. Bull. 436.

³² Johnson, *Selected Provisions of the Revenue Bill of 1962, 1963 U. So. Cal. Tax Inst.* 77, 106.

policies to conform with guideline lives.³³ Only about thirty-five percent of the taxpayers utilizing the 1962 Guidelines would have met the reserve ratio test. The other sixty-five percent therefore would have had asset depreciable lives increased, thereby reducing deductions for depreciation and increasing tax liability.³⁴ Responding to this situation, the Treasury issued Revenue Procedure 65-13. This Procedure supplied additional transitional rules which extended the three-year moratorium by raising the upper limit of the standard reserve ratio by a certain number of percentage points.³⁵ These rules were to be phased out over the guideline life periods. The result was that a full implementation of the reserve ratio test as originally conceived never occurred. In fact, because of the phase out period of the transitional rules, the reserve ratio test would not have begun to exert a real effect until 1971.³⁶

Opponents of the reserve ratio test, arguing that its approach was too complex, urged the finding of a simpler method to compute depreciation for tax purposes.³⁷ However, the Treasury and those favoring the reserve ratio test reasoned that it was "easier to go through the detailed computations surrounding the reserve ratio test beforehand, to determine the depreciation deduction, than to end up ultimately in time-consuming, costly controversies with revenue agents as to what the depreciable life should be."³⁸ In addition, the proponents argued that this approach was a good basis for determining the useful life of each class of assets.³⁹ However, the Treasury Department began to believe that the reserve ratio test was an ineffective control on the guideline system.⁴⁰ The Treasury based its conclusion on the fact that the test only measured the past practices of taxpayers.⁴¹ Further, the Treasury pointed out that "[s]eventy-five percent of the IRS conferees who [handled] disputed or unagreed depreciation issues beyond the revenue agent level . . ." believed that the reserve ratio test was too complicated and not helpful in solving controversies over useful lives.⁴²

On June 23, 1971, the Treasury again substantially altered the concept of "useful life" by issuing the ADR Regulations. The new rules permitted a taxpayer to vary the depreciation period of an asset by up to twenty percent from the 1962 Guideline lives; they also eliminated the reserve ratio test.⁴³ The promulgation of these regulations prompted

³³ Patton, *New Problems in the Interpretation and Application of the Depreciation Guidelines: Departure From Guidelines Under Appropriate "Facts and Circumstances,"* N.Y.U. 24th Inst. on Fed. Tax. 1609, 1615 (1966).

³⁴ *Id.* at 1616.

³⁵ Rev. Proc. 65-13, 1965-1 Cum. Bull. 767.

³⁶ CCH Fed. Tax Rep., *supra* note 18, at 71,515.

³⁷ Patton, *supra* note 33, at 1625.

³⁸ *Id.*

³⁹ *Id.* at 1626.

⁴⁰ CCH Fed. Tax Rep., *supra* note 18, at 71,516.

⁴¹ *Id.* at 71,515.

⁴² *Id.* at 71,516.

⁴³ Treas. Reg. § 1.167(a)-11(b)(4)(i) (1971).

immediate controversy.⁴⁴ Opponents of the new system, those who had supported use of the reserve ratio test, contended that the Treasury Department's substantial alteration of the useful life concept without some recognition of actual individual experience (supplied by the reserve ratio) was an unauthorized act under the Internal Revenue Code.⁴⁵ The Treasury Department based its legal authority to issue the ADR Regulations on Sections 167 and 7805 of the Code. Section 7805 (a) gives the Treasury power to "prescribe all needful rules and regulations for enforcement of [the Code],"⁴⁶ while Section 167(b) allows the Secretary to issue regulations determining the manner of computing a "reasonable allowance" for depreciation.⁴⁷ Since the term "useful life" is not defined by the Code, the Treasury felt justified in determining this factor under its Code authority.⁴⁸ In addition, the Treasury argued that, because it had previously defined useful life in Bulletin F and Revenue Procedure 62-21, it consequently had discretion to vary the concept through the ADR System.⁴⁹

The counterargument raised by opponents of the ADR Regulation was that Section 7805(a) calls only for a clarifying regulation, or one indicating the method of the Section's application, and that it does not provide the power to amend the Code by regulation.⁵⁰ Opponents conceded that there is nothing illegal about a regulation such as ADR, which is intended to stimulate economic growth, so long as it is within the scope of authority granted the Treasury under the Code.⁵¹ However,

⁴⁴ See Wall Street Journal, June 23, 1971, at 4, col. 3; July 7, 1971, at 1, col. 5; July 8, 1971, at 6, col. 3.

⁴⁵ *Id.*

⁴⁶ Int. Rev. Code of 1954, § 7805(a). Courts have often used this section to uphold the validity of regulations. The Supreme Court has stated that "Treasury regulations must be sustained unless unreasonable and plainly inconsistent with the revenue statutes. . . ." *Commissioner v. South Texas Lumber Co.*, 333 U.S. 496, 501 (1948); accord, *Morrison v. United States*, 355 F.2d 218 (6th Cir. 1966), cert. denied, 384 U.S. 986 (1966). Furthermore, the courts have declared § 7805 regulations invalid "only where there is an attempt to amend by regulation a clear, specific and unambiguous statute." 117 Cong. Rec. H3180 (daily ed. April 28, 1971) (statement by Joel Barlow, John Ellicott and Jeffrey Howard, before the Department of the Treasury on April 12, 1971, placed into the Record by Congressman Anderson).

⁴⁷ Int. Rev. Code of 1954, § 167(b).

⁴⁸ 117 Cong. Rec. H3182 (daily ed. April 28, 1971).

⁴⁹ *Id.* at H3181.

⁵⁰ *Id.* at H3180. This viewpoint is supported by *Koshland v. Helvering*, 298 U.S. 441 (1936). In this case the Supreme Court, in determining the validity of a regulation, held that:

Where the [revenue] act uses ambiguous terms, or is of doubtful construction, a clarifying regulation or one indicating the method of its application to specific cases not only is permissible but is to be given great weight by the courts. And the same principle governs where the statute merely expresses a general rule and invests the Secretary of the Treasury with authority to promulgate regulations appropriate to its enforcement. But where . . . the provisions of the act are ambiguous, and its directions specific, there is no power to amend it by regulation.

Id. at 446-47.

⁵¹ Bittker, Treasury Authority To Issue the Proposed "Asset Depreciation Range System" Regulation, 49 *Taxes* 265, 268 (1971).

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ADR, it was argued, by arbitrarily altering the useful life periods, exceeded the "reasonable allowance" authority granted to the Secretary by the Code.⁵²

Opponents also criticized the Treasury's contention that the term "useful life" had not been defined by the Code. They noted that the congressional intent, as expressed in the legislative history of section 167, was to allow annual depreciation deductions *only* if the computation took into account the actual useful life of the asset.⁵³ The Supreme Court, in interpreting section 167, held that depreciation is to be calculated over an asset's estimated useful life while the asset is actually employed by the taxpayer, and that "[t]his requires that the useful life of the asset be related to the period for which it may reasonably be expected to be employed in the taxpayer's business."⁵⁴ Critics noted that whenever Congress has seen a need for an artificial depreciation period unrelated to an asset's actual life, such as in areas of low-income housing or pollution control equipment, Congress has enacted exceptions to the general rule, rather than leaving such responsibility to the Treasury.⁵⁵ In addition, it was argued that the result sought to be achieved by the ADR Regulation, that is, the stimulation of investment, was the same as that intended through the use of the investment tax credit.⁵⁶

⁵² Id. at 272.

⁵³ 117 Cong. Rec. E4560, E4565 (daily ed. May 18, 1971) (letter submitted by Paul R. McDaniel, Assistant Professor of Law, Boston College Law School, dated May 5, 1971, placed into the Record by Congressman Vanik). It was noted that when § 167, dealing with depreciation, was adopted by the Internal Revenue Code of 1954, the House Ways and Means Committee had expressly stated that depreciation is "the method by which the capital invested in an asset is recovered tax-free over the years it is used in a business. *The annual deduction is computed by spreading the cost of the property over its estimated useful life.*" H.R. Rep. No. 8300, 83d Cong., 2d Sess. 4046-47 (1954) (emphasis added).

⁵⁴ *Massey Motors, Inc. v. United States*, 364 U.S. 92, 107 (1960). Taxpayers in this case were in the business of leasing new cars. Approximately a year and one-half after acquisition, the cars were sold and new ones purchased. The court determined that the proper depreciation period for the cars was not their intrinsic economic life but the period during which they were actually used by the taxpayer; accord, *Hertz Corp. v. United States*, 364 U.S. 122 (1960).

As previously noted in the discussion of the 1962 Guidelines, the reserve ratio test was adopted in order to tie group life to the taxpayer's own replacement and retirement experiences. In fact, "leading experts [had] said that dropping the reserve ratio test without substituting any other procedures to police a close relationship between tax lives and actual lives would require an act of Congress." 117 Cong. Rec. H3396 (daily ed. May 3, 1971) (Richard Pollock, in his Treasury Research Study No. 2. for the Dep't of the Treasury, entitled "Tax Depreciation and the Need for the Reserve Ratio Test," published August 1, 1968, placed into the Record by Congressman Vanik).

⁵⁵ Bittker, *supra* note 51, at 270. Congress has enacted depreciation and amortization provisions covering expenditures for rehabilitating low-income housing (§ 167(k)), pollution control facilities (§ 169), research (§ 174), soil and water conservation (§ 175), trademark and trade names (§ 177), additional first-year depreciation (§ 179), and railroad and rolling stock (§§ 184 and 185).

⁵⁶ In the Revenue Act of 1962, Congress, through § 38, provided an incentive to investment by enacting the investment credit. This device was designed to stimulate the economy by allowing a tax credit for new investment. The investment credit was suspended in 1966 by § 48(h) because it had worked too well, causing too heavy a demand

When the investment tax credit was repealed by the Tax Reform Act of 1969, the Senate Finance Committee recommended that if "the need should . . . arise for a . . . stimulant to investment, the Congress will . . . be free to consider various alternative types of treatment."⁵⁷ This position has been interpreted to mean that, in repealing the investment credit, Congress implied that if it decided that a stimulus was needed, Congress would reenact legislation, and not leave the responsibility to an administrative agency.⁵⁸ Congress apparently has conceded that doubt existed as to the Treasury Department's power to promulgate the ADR Regulations, since included in the recently enacted Revenue Act of 1971 is a provision which specifically allows a twenty percent reduction in useful lives from the present guideline system.⁵⁹

II. THE ADR SYSTEM

Whereas the 1962 Guideline system attempted to administer its depreciation provisions on an individual basis through use of the reserve ratio test, under the ADR System a reasonable allowance for depreciation may be based on industry-wide, rather than individual taxpayer experience regarding the useful lives of assets.⁶⁰ The system is optional. If the taxpayer chooses ADR, his election must be made in the income tax return for the taxable year in which he places the eligible property into service.⁶¹ Those assets placed in service after December 31, 1970, are eligible for ADR treatment.⁶² Such assets include tangible personal property used in manufacturing, production or extraction, that used in a trade or business, and also public utility property.⁶³ These assets are specifically described and classified by guideline lives in Revenue Procedure 71-25, which accompanied the initial ADR Regulation.⁶⁴ This

on credit, which in turn created inflationary pressures. The credit was reactivated in 1967 by § 48(j), when the credit demand had subsided, but repealed in 1969, under § 49, because of increased inflation. 117 Cong. Rec. S5569 (daily ed. April 26, 1971) (statement of Senator Tower). However, the credit has again been reactivated by the Revenue Act of 1971. Int. Rev. Code of 1954, § 50.

The investment credit allows most taxpayers a 7% investment tax credit which is applied directly against the amount of income tax liability. Depreciation is instead deducted from income in order to arrive at the taxable income figure upon which income tax liability is computed. The advantage of an investment credit is that it more directly reduces the cost of property, while faster depreciation tends to distort income accounting because it is a function of the taxpayer's marginal rate. Torrey, *supra* note 16, at 569.

⁵⁷ S. Rep. No. 522, 91st Cong., 1st Sess. 226 (1969).

⁵⁸ Bittker, *supra* note 51, at 269.

⁵⁹ Section 167(m)(1) of the 1971 Act states that the reasonable allowance for depreciation is "only an allowance based on the class life prescribed by the Secretary or his delegate which reasonably reflects the anticipated useful life of that class of property to the industry or other group. The allowance may . . . permit a variance from any class life by not more than 20 percent . . ."

⁶⁰ CCH Fed. Tax Rep., *supra* note 18, at 71,518.

⁶¹ Treas. Reg. § 1.167(a)-11(f)(2)(i) (1971).

⁶² Treas. Reg. § 1.167(a)-11(b)(2)(iii) (1971).

⁶³ Treas. Reg. § 1.167(a)-11(b)(2)(ii) (1971).

⁶⁴ Rev. Proc. 71-25, 1971 Int. Rev. Bull. No. 28.

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Procedure does not provide guideline periods for buildings and realty improvements. However, these assets were subsequently included in the ADR System by the Revenue Act of 1971. The Act provides transitional rules for these assets which allow the taxpayer either to use guideline lives prescribed in Revenue Procedure 62-21, or, until the Treasury revises class lives for such assets, to use other, shorter lives if justified under the 1962 Guidelines.⁶⁵

If the taxpayer elects ADR, the election generally must apply to all his eligible property.⁶⁶ The taxpayer may exclude all his used property from this election if the total used property placed in service exceeds ten percent of the basis of all eligible property placed in service during the taxable year.⁶⁷ Presumably, this limitation is intended to encourage the purchase of new rather than used machinery and equipment; and also to make ADR correspond to section 167(c)(2), which limits accelerated depreciation to new property acquired by the taxpayer.⁶⁸ Property depreciated according to any method other than straight-line, declining balance and sum of the years-digits, is to be excluded from ADR treatment; and use of such methods will exclude all other eligible property in the same asset guideline class.⁶⁹ In addition, property acquired merely through a change in the form of conducting a trade or business is ineligible for the ADR System of depreciation.⁷⁰ This section is designed to prevent taxpayers from manipulating their businesses so as to achieve inclusion of property placed in service before January, 1971.

Once the taxpayer elects ADR, all eligible property is grouped into "vintage accounts."⁷¹ These accounts reflect the taxable year in which the taxpayer first placed eligible assets in service. Each account consists of assets belonging to a single guideline class. Assets in the same asset guideline class may be divided among any number of vintage accounts⁷² because the permissible range of useful lives for each guideline class allows a variance of up to twenty percent above or below the designated guideline life. For example, a taxpayer acquiring four assets eligible

⁶⁵ Pub. L. No. 92-178, § 109(e) (Dec. 10, 1971).

⁶⁶ Treas. Reg. § 1.167(a)-11(b)(5)(ii) (1971).

⁶⁷ Treas. Reg. § 1.167(a)-11(b)(5)(iii) (1971). For example, assume that the unadjusted basis of all eligible property placed in service during a taxable year is \$150,000. If the unadjusted basis of all the used property placed in service during that taxable year is over \$15,000, the taxpayer may determine the lives of both new and used property under ADR or, alternatively, he may determine the useful lives of the used property by non-ADR methods.

⁶⁸ Int. Rev. Code of 1954, § 167(c)(2).

⁶⁹ Treas. Reg. § 1.167(a)-11(b)(5)(v)(a) (1971). Section 167(b)(4) of the Code allows the taxpayer to use methods other than straight line, declining balance and sum of the years-digits so long as they are used consistently. Methods which have been commonly used are the unit-production, retirement and machine hour methods. ADR, however, specifically excludes these and all other methods except straight line, declining balance and sum of the years-digits. Treas. Reg. § 1.167(a)-11(b)(5)(v)(a) (1971).

⁷⁰ Treas. Reg. § 1.167(a)-11(b)(7)(i) (1971).

⁷¹ Treas. Reg. § 1.167(a)-11(b)(3)(i) (1971).

⁷² Treas. Reg. § 1.167(a)-11(b)(3)(i) (1971).

for a given guideline class might choose to split them into two vintage accounts, one of which might use the designated useful life and the other employing a twenty percent shorter life.

A. *Permissible Range of Useful Life Periods*

As previously noted, the most significant change from any prior depreciation method is in the range of useful lives permitted under ADR: the Revenue Act of 1971 provides that the reasonable allowance for depreciation may vary "from any class life by not more than 20 percent . . . of such life."⁷³ The Treasury has determined the guideline periods, that is, the useful lives of the asset guideline classes, and these are set out in detail in Revenue Procedure 71-25. Under Revenue Procedure 62-21, taxpayer use of the guideline lives was not a matter of right; rather, the taxpayer had to justify his assets' useful lives by means of the reserve ratio test, or alternatively, through an explanation supported by facts and circumstances.⁷⁴ The ADR System, however, in eliminating the reserve ratio as well as alternative tests, requires no justification of past retirement or replacement experience.⁷⁵

Proponents of the ADR System believe that this change will greatly simplify the administration of the depreciation provisions.⁷⁶ However, in removing the burden of proof from the taxpayer, a premium is placed on the accuracy of the guideline lives. If any Treasury guideline life is erroneous, the taxpayer has no recourse. Although taxpayers may vary asset lives by twenty percent in either direction,⁷⁷ it is expected that most taxpayers will select a useful life at the lower end of the asset depreciation range, thereby effecting a twenty percent shortening of useful lives.⁷⁸ In order to insure the accuracy of the guideline periods, the ADR System also provides for periodic revision and supplementation of the guidelines, which will reflect current industry-wide experience with such assets.⁷⁹

B. *Salvage Value*

Another difference between the prior regulations and ADR lies in the treatment of "salvage value." Salvage value is the estimated value which the taxpayer will realize when he sells or otherwise disposes of the property at the end of its useful life.⁸⁰ This value has been treated in dif-

⁷³ Int. Rev. Code of 1954, § 167(m)(1). For example, under Revenue Proc. 71-25 office furniture and fixtures such as desks and files have a guideline life of 10 years. The useful life range would thus be between 8 (80% of 10) and 12 years (120% of 10).

⁷⁴ 7 CCH 1971 Stand. Fed. Tax Rep. ¶ 6738, at 71,530 [hereinafter cited as CCH Fed. Tax Rep.].

⁷⁵ Sunley, *The 1971 Depreciation Revision: Measures of Effectiveness*, 24 Nat. Tax J. 19, 21 (1971).

⁷⁶ CCH Fed. Tax Rep., supra note 74, ¶ 6738, at 71,503.

⁷⁷ Treas. Reg. § 1.167(a)-11(b)(4)(i) (1971).

⁷⁸ Sunley, supra note 75, at 21.

⁷⁹ Treas. Reg. § 1.167(a)-11(b)(4)(ii) (1971).

⁸⁰ Treas. Reg. § 1.167(a)-11(d)(1)(i) (1971).

ferent ways in various methods of computing depreciation. One approach has been to reduce the unadjusted basis of the asset by its salvage value and to use the resulting figure as a basis for depreciation.⁸¹ Another approach has been to use a rate of depreciation that takes into account the salvage value by depreciating the asset only until salvage value is reached.⁸² To simplify and make "uniform the treatment of estimated salvage value for depreciation purposes . . ."⁸³ the ADR System disregards salvage value in the determination of the annual depreciation deduction. However, no vintage account may be depreciated below its salvage value.⁸⁴ Therefore, the depreciation deduction for a taxable year may not exceed the excess between the unadjusted basis of the vintage account and the total amount of the depreciation reserve plus its estimated salvage value.⁸⁵ Thus the salvage value reduces the annual depreciation only in the last year of the asset's life instead of being spread over the entire period. The result is yet another form of accelerated depreciation for the taxpayer since, by not reducing the basis for depreciation by the salvage value, he uses a larger basis from which to compute the annual depreciation deduction.

The question arises, however, as to which asset life the taxpayer should use in estimating the asset's salvage value upon his election of an ADR asset depreciation period which differs from the asset's actual period of use. The ADR System does not indicate which of several possibilities should be used for the determination. The problem lies in the fact that, the smaller the estimated salvage value used, the larger will be the total amount of the depreciation deduction. This problem is illustrated by the following example. Assume the taxpayer has an asset having an actual useful life of fourteen years but an assigned asset guideline period of ten years. The asset therefore falls within a depreciation range of eight to twelve years. If the salvage value were based on the actual (fourteen year) life, it would be much less than the salvage value based on useful life within the guideline range. By reducing salvage value, the taxpayer would increase his basis for the depreciation deduction, thus further accelerating the deduction. This result would be in accord with the ADR's economic goals. However, selection of the

⁸¹ This procedure is followed in the straight line and sum of the years-digits methods of depreciation. Treas. Reg. §§ 1.167(b)-1(a), 1.167(b)-3(a) (1956).

⁸² This is the procedure followed in the declining balance method of depreciation. Treas. Reg. § 1.167(b)-2(a) (1964).

⁸³ CCH Fed. Tax Rep., supra note 74, ¶ 6500A, at 71,279.

⁸⁴ Treas. Reg. § 1.167(a)-11(d)(1)(iv) (1971).

⁸⁵ For example, assume a vintage account has an unadjusted basis of \$100,000 with a guideline life of 10 years and an estimated salvage value of \$10,000. Prior to ADR, the basis of the property, for depreciation purposes, was reduced by the salvage value so that for the 10 year period the annual deduction was \$9,000 (\$100,000 - \$10,000 × 10%). At the end of the guideline period the depreciation reserve totalled \$90,000. Under ADR, the annual depreciation deduction would be \$10,000 (\$100,000 × 10%). Because there can be no depreciation below the vintage account's salvage value, this annual deduction could be taken for only 9 years, rather than 10; after 9 years at an annual deduction of \$10,000, the depreciation reserve would total \$90,000.

actual life would seriously conflict with the objective of administrative simplification sought under the ADR System. An asset's actual life will differ from taxpayer to taxpayer, depending upon individual use. To allow the taxpayer to justify use of a salvage value based upon the subjective determination of the asset's actual life would lead to the type of administrative/judicial controversy which was meant to be avoided through the elimination of the reserve ratio.

If the salvage value is determined by using the taxpayer's "elected life and he selects the lower limit of the guideline range (an eight-year life), the estimated salvage value would be much higher than the salvage value resulting from use of the actual (fourteen year) useful life. This method would provide the taxpayer with a lower basis from which to compute his total depreciation deductions. Although the selection of this shorter period would decrease the taxpayer's total deduction, and would not conform to the ADR goal of increased acceleration, it would eliminate the IRS-taxpayer controversies which would occur if *actual* useful life were used to determine salvage value.

Under ADR salvage value must be estimated at the time of filing the tax return for the year the asset is placed in service.⁸⁶ The estimate is no longer subject to redetermination by the IRS, provided that the facts and circumstances known at the time of estimation sufficiently supported the estimation and the estimate does not need an adjustment of more than ten percent of the cost of the asset.⁸⁷ This ten percent margin of error in the estimation of salvage value is in addition to that provided by Section 167(f)(1) of the Code, which already permits the taxpayer to reduce estimated salvage value by ten percent of the asset's cost.⁸⁸

Another new ADR provision deals with the taxpayer's desire to change his method of depreciation. Prior to ADR, a change in depreciation methods was allowed only with the permission of the Treasury.⁸⁹ The Regulations state, however, that this procedure does not apply to a taxpayer who selects ADR.⁹⁰ The taxpayer need only indicate the

⁸⁶ Treas. Reg. § 1.167(a)-11(d)(1)(iii) (1971).

⁸⁷ Treas. Reg. § 1.167(a)-11(d)(1)(v) (1971).

⁸⁸ Treas. Reg. § 1.167(a)-11(d)(1)(ii) (1971). For illustration, assume a taxpayer in 1971 places in service assets which have an unadjusted basis of \$120,000 and an estimated gross salvage value of \$30,000. The taxpayer may reduce the amount of salvage value to be taken into account by \$12,000 (10% of \$120,000) as permitted by § 167(f). The result is a salvage value of \$18,000. Because of the added margin of error now allowed under ADR the salvage value figure will not be redetermined unless the Internal Revenue Service can show that there is a sufficient basis for determining a different salvage value for the vintage account. In our example the taxpayer could claim \$6,000 salvage value (\$30,000 salvage value minus \$12,000 allowed by § 167(f), minus an additional \$12,000 reduction allowed under ADR) before being subject to redetermination. Therefore, whereas that basis absent the Code sections would have been \$90,000 (\$120,000 - \$30,000), it can be enlarged to \$114,000 (\$120,000 - \$16,000), thereby increasing the depreciation deduction for most of the asset's useful life.

⁸⁹ Treas. Reg. § 1.167(e)-1(a), (1965).

⁹⁰ Treas. Reg. § 1.167(a)-11(c)(1)(iii) (1971).

change and the vintage account for which he is making the change on the income tax return of the year he makes the change. However, any change must apply to all property in the taxpayer's vintage account.

The overall effect of these changes reflects the liberalized depreciation allowances afforded by ADR. The burden is no longer on the taxpayer to justify his estimation of salvage value or his change in methods of depreciation; rather, the burden is now on the Treasury. This presumption of correctness will simplify the administrative tasks of both the taxpayer and Treasury. However, these changes will also have the effect of further reducing taxable revenue.⁹¹

C. Repair Allowance

Section 162(a) of the Code states that "[t]here shall be allowed as a deduction all the ordinary and necessary expenses paid or incurred during the taxable year in carrying on a trade or business . . ."⁹² Although a business expenditure may be ordinary and necessary, it is not deductible, however, if capital in nature. A *repair* to depreciable property is a deductible ordinary and necessary expense; but the amount spent to *restore or improve* depreciable property is considered a non-deductible capital expenditure. The determinative question is whether the expenditure has appreciably prolonged the life of the property. Regulation 1.162-4 summarizes this test as follows:

The cost of incidental repairs which neither materially add to the value of the property nor appreciably prolong its life, but keep it in ordinarily efficient operating condition, may be deducted as an expense. . . . Repairs in the nature of replacements, to the extent that they arrest deterioration and appreciably prolong the life of the property, shall either be capitalized and depreciated in accordance with section 167 or charged against the depreciation reserve if such account is kept.⁹³

Whether an expenditure "appreciably prolongs an asset's life," however, is to some extent a matter of judgment which must be determined by regulatory interpretation or through a case-by-case judicial approach.

The ADR System, on the other hand, provides an optional mechanical test for determining whether certain ambiguous expenditures are deductible or capital in nature. ADR Revenue Procedure 71-25 provides an asset guideline repair allowance percentage for each guideline class.⁹⁴ These percentages are based on the "Treasury's evaluation of statistical and other data reflecting industry experience with respect to such expenditures for asset guideline classes."⁹⁵ The repair allowance deduc-

⁹¹ See 117 Cong. Rec. E4563 (daily ed. May 18, 1971).

⁹² Int. Rev. Code of 1954, § 162(a).

⁹³ Treas. Reg. § 1.162-4 (1958).

⁹⁴ Treas. Reg. § 1.167(a)-11(d)(2)(iii) (1971).

⁹⁵ CCH Fed. Tax Rep., supra note 74, ¶ 6738, at 71,506. Taxpayers who elect ADR

tion for a taxable year is computed for each vintage account by multiplying the allowed percentage by the average balance of the unadjusted basis of the vintage account.⁹⁶ This amount represents the repair expense deductible in the current taxable year. Repair, maintenance, rehabilitation and improvement expenditures which exceed such repair deductions are treated as "property improvements,"⁹⁷ and are capitalized in "special basis vintage accounts."⁹⁸ These special accounts, in turn, are depreciated over the same depreciation period as their related vintage accounts.

The following example illustrates the effect of a taxpayer's election to apply the asset guideline repair allowance percentage. Assume that, for a particular taxable year, the taxpayer has an average unadjusted basis of \$100,000 in a certain vintage account and that its corresponding asset guideline repair allowance percentage for that class is 5.5 percent. In addition, assume that the taxpayer incurs \$9,000 worth of expenditures for repair, maintenance, rehabilitation and improvement of such property in that vintage account. The asset guideline repair allowance is \$5,500 ($\$100,000 \times 5.5$ percent) and, therefore, the taxpayer can deduct that amount as a current expense. The taxpayer must capitalize the remainder, or \$3,500, in a special vintage account and depreciate that amount over the same guideline life selected for the capitalized asset's vintage account.

As noted, the repair allowance election covers only an expenditure ambiguous as to whether it is deductible as a repair expense or non-deductible as a capital outlay.⁹⁹ However, the problem of who determines what constitutes an ambiguous expenditure is left unanswered by ADR. It remains to be seen whether the decision will be left to taxpayer discretion or to administrative/judicial determination. Expenditures which are clearly to be capitalized are "excluded additions" and as such are excluded in the computation of the repair deduction.¹⁰⁰ These exclusions are expenditures which amount to an additional identifiable unit of property; or which substantially increase the productivity or capacity of an identifiable unit of property; or which represent a modification of an existing unit of property for a substantially different use.¹⁰¹ Each excluded addition is capitalized in a vintage account and treated accordingly.¹⁰²

The purpose of the ADR's procedure for determining repair expenses is to simplify the problem of distinguishing a deductible repair

are required to provide the Treasury with information as to such expenditures in order that repair allowance percentages may be revised. Treas. Reg. § 1.167(a)-11(f)(4)(ii)(e) (1971).

⁹⁶ Treas. Reg. § 1.167(a)-11(d)(2)(iii) (1971).

⁹⁷ Treas. Reg. § 1.167(a)-11(d)(2)(iv)(a) (1971).

⁹⁸ Treas. Reg. § 1.167(a)-11(d)(3)(vi) (1971).

⁹⁹ CCH Fed. Tax Rep., *supra* note 74, ¶ 6738, at 71,506.

¹⁰⁰ Treas. Reg. § 1.167(a)-11(d)(2)(iv) (1971).

¹⁰¹ Treas. Reg. § 1.167(a)-11(d)(2)(vi) (1971).

¹⁰² Treas. Reg. § 1.167(a)-11(d)(2)(viii)(c) (1971).

expense from a capital expenditure. However, as with all mechanical tests, it fails to account for the actual experience of the individual taxpayer. In the example above, if the total \$9,000 were actually all deductible repair expenses, then, by deducting only \$5,500 currently, the taxpayer overstates his taxable income by \$3,500. Conversely, if the entire amount should have been capitalized, then the taxpayer understates his taxable income by \$5,500. ADR does, however, provide some subjectivity by making the percentage formula optional. If the taxpayer does not elect to follow the repair allowance percentage method, he must continue to use the usual Code tests previously described.¹⁰³ In this situation, his capitalized expenditures are included in the special vintage accounts and depreciated in the same manner as property improvements.¹⁰⁴

D. Retirement of Assets

Under Treasury Regulation 1.167(a)-8, the retirement of an asset means "the permanent withdrawal of depreciable property from use in the trade or business or in the production of income."¹⁰⁵ An asset can be retired as a result of a sale, an exchange, a transfer of the property to a supplies or scrap account, an abandonment, or any other permanent disposition of the property. Although this same definition is used in the ADR System, the specific rules of Treasury Regulation 1.167(a)-8 do not apply to the retirement of property from vintage accounts.¹⁰⁶

For purposes of ADR, retirements are classified as "ordinary" or "extraordinary."¹⁰⁷ An extraordinary retirement is (a) one that renders the property economically useless to the taxpayer as the result of a casualty such as a fire, storm or shipwreck; or (b) one in which the property is retired as a direct result of the taxpayer terminating, curtailing or disposing of his trade or business, and in which the retired property exceeds twenty percent of the unadjusted basis of the entire vintage account prior to the event.¹⁰⁸ Upon retirement, the unadjusted basis of the retirement asset and its estimated salvage value are removed from the vintage account, and the depreciation reserve (amount of depreciation deductions already allowed) is reduced by the applicable amount of depreciation allowed for the retired property in prior years.¹⁰⁹

¹⁰³ Int. Rev. Code of 1954, §§ 162, 263. See text accompanying note 93 supra.

¹⁰⁴ Treas. Reg. § 1.167(a)-11(d)(2)(iv)(b) (1971).

¹⁰⁵ Treas. Reg. § 1.167(a)-8(a) (1956).

¹⁰⁶ Treas. Reg. § 1.167(a)-11(d)(3)(i) (1971).

¹⁰⁷ Treas. Reg. § 1.167(a)-11(d)(3)(ii) (1971).

¹⁰⁸ Treas. Reg. § 1.167(a)-11(d)(3)(ii) (1971). Under Treas. Reg. § 1.167(a)-8(b) (1956) retirements are classified as "normal" and "abnormal." The abnormal retirement is similar to ADR's extraordinary retirement in that it includes situations where the asset was made economically useless by a casualty. It differs from the ADR categorization by including a retirement due to extraordinary obsolescence which was not foreseen by the taxpayer at the time he placed the asset in service.

¹⁰⁹ Treas. Reg. § 1.167(a)-11(d)(3)(iv) (1971).

It is at this time that the taxpayer will recognize any gain or loss due to the extraordinary retirement.¹¹⁰

All other ADR retirements are considered ordinary; in this category there is no recognition of loss and only limited recognition of gain.¹¹¹ All proceeds received by the taxpayer in an ordinary retirement are added to the depreciation reserve of that asset's vintage account, and the retired asset's unadjusted basis and applicable depreciation reserve allowance are not removed from the vintage account. The underlying purpose of this procedure is that the unrecovered basis of the retired asset is to be recovered through the depreciation deductions, rather than by an immediate recognition of loss.¹¹² The procedure is intended to prevent taxpayer manipulation of losses. In an ordinary retirement, when the addition of proceeds to a vintage account's depreciation reserve causes the vintage account's unadjusted basis to be less than the depreciation reserve plus the salvage value, the total salvage value must be reduced (even to zero) so that the unadjusted basis is never exceeded by the reserve for depreciation plus salvage value.¹¹³ At the end of the taxable year, if a vintage account's unadjusted basis is still exceeded by the depreciation reserve (even though the vintage account's salvage value has been reduced to zero), the entire amount of excess is recognized as a gain for that taxable year.¹¹⁴ The depreciation reserve is reduced by the amount of gain recognized so that the total unadjusted basis of the vintage account will equal the depreciation reserve; consequently, no further depreciation deductions would be allowed for this account.¹¹⁵ When the last asset in a vintage account is retired and the account's unadjusted basis exceeds the depreciation reserve, then such excess is recognized as a loss and the vintage account is terminated.¹¹⁶ Costs of dismantling, demolishing or removing the retired assets are treated as an expense deductible in the taxable year incurred.¹¹⁷

The operation of the ADR retirement provisions is illustrated in the following example. Assume that a taxpayer has selected a ten year useful life for a vintage account having an unadjusted basis of \$10,000; the account has a salvage value of \$1,000 and has been depreciated by the straight-line method for six years. The depreciation reserve would, therefore, total \$6,000 (6 × \$1,000). In the seventh year the taxpayer sells an asset for \$1,000 in an ordinary retirement.

¹¹⁰ Treas. Reg. § 1.167(a)-11(d)(3)(iv) (1971). All gains and losses are specifically subjected to Code provisions § 165 (losses), § 1231 (involuntary conversions) and § 1245 (recapture). In addition, "all other applicable provisions of law" apply to ADR retirements. *Id.*

¹¹¹ Treas. Reg. § 1.167(a)-11(d)(3)(iii) (1971).

¹¹² Treas. Reg. § 1.167(a)-11(d)(3)(iii)(a) (1971).

¹¹³ Treas. Reg. § 1.167(a)-11(d)(3)(iii)(a) (1971).

¹¹⁴ Treas. Reg. § 1.167(a)-11(d)(3)(ix)(a) (1971).

¹¹⁵ Treas. Reg. § 1.167(a)-11(d)(3)(ix)(a) (1971).

¹¹⁶ Treas. Reg. § 1.167(a)-11(d)(3)(ix)(b) (1971).

¹¹⁷ Treas. Reg. § 1.167(a)-11(d)(3)(x) (1971).

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He would recognize no gain or loss on this transaction, only an increase in the depreciation reserve by the amount of the proceeds, bringing its total to \$7,000. At the end of the seventh year, again based on the straight-line method, the taxpayer would be allowed a \$1,000 deduction, thereby increasing the reserve to \$8,000. If, in the eighth year, there occurred an extraordinary retirement which completely destroyed an asset having an unadjusted basis of \$1,000 and prior allowable depreciation of \$700, the unadjusted basis of the vintage account would be reduced to \$9,000 (\$10,000 minus \$1,000) and the reserve would decrease to \$7,300 (\$8,000 minus \$700). In addition, at this time, the taxpayer would recognize a \$300 loss. If, in that same year, there occurred an ordinary retirement yielding proceeds of \$1,800, then the reserve (\$7,300) plus the salvage value (\$1,000) when added to the proceeds (\$1,800) would exceed the unadjusted basis of the account by \$1,100 (\$11,100 minus \$9,000). The effect of this transaction would be a reduction of the salvage value to zero and a recognition of the excess \$100 as gain. The recognition of this gain would in turn reduce the depreciation reserve to \$9,000. Since this amount would equal the unadjusted basis of the vintage account, no further depreciation would be allowed.

When a retired asset is not immediately sold upon an ordinary retirement (such as withdrawal of the asset from productive use without a disposition), the taxpayer may transfer the retired asset to a supplies or scrap account.¹¹⁸ This involves reducing the vintage account's salvage value by the amount of salvage value attributable to the retired asset, thereby assigning the retired asset a basis of zero in the supplies or scrap account.¹¹⁹ Under an alternative method, the taxpayer may reduce the vintage account's value by the retired asset's salvage value, but then that amount would be added to the vintage account's depreciation reserve. This would make the retired asset's basis in the supplies or scrap account the same as its salvage value.¹²⁰ Because the basis of the retired asset in the supplies or scrap account will normally enter into the computation of taxable income in the near future, when the asset is disposed of, the alternative method can have the result of accelerating a deduction.¹²¹ Such acceleration is due to the probability that the retired asset in the supplies or scrap account will soon be disposed of at a loss. This loss represents a deduction in the year disposed. If, instead of its transfer to a supplies or scrap account, the asset had been immediately retired, there would have been an ordinary retirement. The proceeds from this retirement would have increased the depreciation reserve and the taxpayer would not recognize a loss until termination of the vintage account.

¹¹⁸ Treas. Reg. § 1.167(a)-11(d)(3)(ii) (1971).

¹¹⁹ Treas. Reg. § 1.167(a)-11(d)(3)(vii)(c)(1) (1971).

¹²⁰ Treas. Reg. § 1.167(a)-11(d)(3)(vii)(c)(2) (1971).

¹²¹ Monyek, Asset Depreciation Range Regulation Adopted With No Major Changes, 35 J. Taxation 150, 151 (1971).

III. THE ECONOMIC EFFECTS OF ADR

Despite projections of a general increase in tax revenue attributable to ADR's effect on the nation's economy, it is clear that the System will generate a substantial revenue loss. It is estimated that the provision will create a \$2.8 billion reduction in business tax revenue in 1971 and that this loss will increase annually, reaching a high of \$4.7 billion in fiscal 1976.¹²² The Treasury Department, however, contends that the savings to taxpayers will increase business activity, which in turn will generate additional tax revenues to offset most of the revenue reduction. Treasury studies project that business will increase its pace of investment by at least 2.5 percent above what would have been invested in eligible property if ADR had not been adopted.¹²³ Further, it is contended that increased investment in modern production machinery and equipment, stimulated by the new liberalized depreciation System, will serve to increase the Gross National Product, decrease unemployment, and slow down inflation.¹²⁴

In order to understand the scope of tax savings to a taxpayer switching to ADR, the effect of the twenty percent reduction in guideline lives must be analyzed. Table 1 shows the impact of ADR on a taxpayer who has been using the straight line method for five assets, each having an unadjusted basis of \$40,000, a guideline useful life of five years, and no salvage value. For purposes of Table 1 it is assumed that the taxpayer has been in business for a sufficiently long period of time so that his replacements are made fairly regularly, that he replaces one fully depreciated asset at the beginning of each year, and that consequently he always has five assets in use. In 1971, the taxpayer elects ADR and takes advantage of the twenty percent reduction in the depreciation period, thereby decreasing the useful life of each asset to

¹²² Sunley, *supra* note 75, at 19. These figures were computed on the basis of a modified half-year convention, a tax device included in the initial ADR provisions but omitted by the Revenue Act of 1971. The resulting tax loss will not be as great as originally projected.

ADR will also exert a significant influence on the economies of the individual states. Since the computation of a state's tax revenue depends heavily on federal corporate tax rules, any change in permissible depreciation causes similar changes for the state's revenues. 117 Cong. Rec. E9630 (daily ed. Sept. 15, 1971) (letter from Vincent X. Yakowicz, Deputy Secretary for Taxation for the Commonwealth of Pennsylvania, dated Aug. 26, 1971, placed into the Record by Congressman Green). For example, it has been estimated that California will lose about \$30 million in annual corporate tax revenues because of the new ADR System. *Id.* at E9631 (letter to the Nation's Governors, Mayors, and County Executives, from Ralph Nader, placed into the Record by Congressman Green): "In 1969, California derived \$593 million from this source. Therefore, the loss represents 5% of annual corporate tax revenues." *Id.* ADR will also reduce local government's property tax revenues, because local property assessors often depend on the Treasury's depreciation rates for computing the tax base of property. *Id.* This decrease in the taxable property base could be quite substantial. "Furthermore, the loss will not be spread evenly. Rather, it will be concentrated in heavily industrialized areas such as Chicago, Gary, Cleveland, and Newark," cities which cannot bear any more fiscal problems than they already face. *Id.*

¹²³ CCH Fed. Tax Rep., *supra* note 74, ¶ 6738, at 71,528.

¹²⁴ *Id.* at 71,530.

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TABLE 1.—ADR EFFECT ON THE STRAIGHT LINE TAXPAYER

Year	Before ADR (5 years useful life)	After ADR (4 years useful life) ^b	Difference	Tax Effect at 48% Rate	Cumulative Tax Saving
1970	\$40,000 ^a	—	—	—	—
1971	40,000	\$42,000	\$2,000	\$ 960	\$ 960
1972	40,000	44,000	4,000	1,920	2,880
1973	40,000	46,000	6,000	2,880	5,760
1974	40,000	48,000	8,000	3,440	9,600
1975	40,000	40,000	—0—	—0—	9,600

^a Since each asset (having a five-year useful life) cost \$40,000, the annual depreciation by the straight line method is \$8,000. With five assets each depreciated at an annual rate of \$8,000, the total depreciation for all assets is \$40,000.

^b See Table 2.

TABLE 2.—DEPRECIATION COMPUTATION

Year Asset Placed In Service	Annual Replacement Cost	1971	1972	1973	1974	1975
1967	\$40,000	\$8,000				
1968	40,000	8,000	\$8,000			
1969	40,000	8,000	8,000	\$8,000		
1970	40,000	8,000	8,000	8,000	\$8,000	
1971 ^c	40,000	10,000	10,000	10,000	10,000	\$—0—
1972	40,000		10,000	10,000	10,000	10,000
1973	40,000			10,000	10,000	10,000
1974	40,000				10,000	10,000
1975	40,000					10,000
		<u>\$42,000</u>	<u>\$44,000</u>	<u>\$46,000</u>	<u>\$48,000</u>	<u>\$40,000</u>

^c Under ADR, the average life of each asset is four years; each asset has an annual depreciation of \$10,000.

four years (5 × 80 percent). (Table 2 shows the computation of depreciation deductions from 1971 through 1975, the period during which the taxpayer uses ADR). As Table 1 demonstrates, the taxpayer would enjoy steadily increasing tax savings for the first four years and no tax savings in year five and thereafter. However, the cumulative tax savings effect would be quite substantial, as the \$9,600 figure indicates, although theoretically this amount is only a deferral, to be repaid in later years of the useful life of the assets when depreciation deductions will be small.

Table 1 shows only the tax savings resulting from ADR's decrease of the depreciation periods. The illustration does not take into account additional tax savings resulting from increased business deductions through the use of the new repair allowance percentage, the salvage value methods, or the other changes in tax depreciation brought about by the ADR System. Even more important, Table 1 assumes a stable business, that is, one with no investment expansion. When these factors are considered, it is clear that an even greater tax saving would result.

Table 1 shows that after the fifth year (1974) there is no further annual tax saving. As noted, however, certain variables have been eliminated for purposes of illustration. For instance, expenditures for equipment do not stay the same each year. According to current economic trends, inflation alone will cause an increase in expenditures for replacement equipment.¹²⁶ In addition, in computing the actual tax saving, one must consider additional investments. As the replacement cost and additional equipment purchases increase, so too will the basis for computing depreciation. This increase in basis will increase the taxpayer's annual depreciation which, in turn, will permanently decrease the amount of his tax liability. Therefore, considering the overall effect of these variables, the taxpayer's annual tax saving under ADR will in fact never be reduced to zero.

ADR's benefits to the taxpayer may also be measured in terms of an "equivalent price reduction of assets," which measures the reduction in the actual cost of capital assets to the taxpayer; or in terms of a reduction in the effective tax rate applied to income resulting from the ownership of capital assets due to the higher depreciation deductions allowable.¹²⁶ If a corporate taxpayer acquiring an asset with a guideline life of twelve years takes advantage of the lower limit of the useful life range (nine and one-half years), under the ADR System the cost of this asset would be reduced by 3.78 percent,¹²⁷ and, assuming a 48 percent corporate tax rate, the effective tax rate would be reduced to 44.3 percent.¹²⁸

Still another means of demonstrating the economic effects of ADR is to reflect the System's acceleration of depreciation in terms of an investment tax credit equivalent. As noted previously,¹²⁹ this tax device, used to stimulate the national economy through increased investment, applies a fixed percentage of the price of the newly purchased business equipment or property directly against the amount of a taxpayer's tax liability.¹³⁰ The increased ADR deductions, if expressed in terms of a direct credit against tax liability, would be equivalent to a 2.84 percent investment tax credit for an asset having a twelve-year life, based on a twelve percent after-tax rate of return on investments.¹³¹ This comparison is significant because it measures the effects of ADR in terms of

¹²⁶ 117 Cong. Rec. S5301, S5302 (daily ed. April 21, 1971) (Paper by Prof. Robert Eisner, Dept. of Economics, Northwestern University, entitled *The Asset Depreciation Range System*, placed into the Record by Senator Humphrey).

¹²⁶ Sunley, *The 1971 Depreciation Revision: Measures of Effectiveness*, 24 *Nat. Tax J.* 19, 21-30 (1971).

¹²⁷ *Id.* at 24. It is interesting to note that the 7% investment tax credit reintroduced in the Revenue Act of 1971 (§ 50) is worth an additional 9.29% decrease in the cost of the asset. The investment tax credit and ADR together effect a price reduction of 13.07%. *Id.*

¹²⁸ *Id.* at 27. The new 7% investment tax credit alone reduces the 48% corporate tax rate to 37.7%. *Id.*

¹²⁹ See note 56 and accompanying text *supra*.

¹³⁰ *Int. Rev. Code of 1954*, § 46.

¹³¹ Sunley, *supra* note 126, at 29.

the effects of an investment credit. Because an increase in the investment credit could achieve the same goals sought by ADR, it is necessary to examine the tax policy considerations which underlie ADR.

IV. TAX POLICY CONSIDERATIONS

Since the ADR System will reportedly decrease tax revenue by over \$35 billion over the next decade,¹⁸² and by almost \$50 billion by 1990,¹⁸³ its putative merits should be closely examined. As previously noted, the Treasury's rationale for supporting this reduction in business tax liability is that ADR will encourage higher investment, which in turn will produce the multiplier effect of spurring economic productivity and growth by increasing wages, creating jobs and curbing inflation.¹⁸⁴ The underlying assumption is that the additional purchasing power effected by the tax reduction will be directed toward increasing business production capacity.¹⁸⁵ However, this assumption may be fallacious. Noted economists have pointed out that a "business produces for profits," and that it will not usually increase production unless there exists a commensurate consumer demand.¹⁸⁶ Simply because it has more funds available for equipment investment does not necessarily mean that a business will invest.¹⁸⁷ Conversely, even if it has no cash on hand, a business might make the necessary expenditure for new equipment if it speculates a higher rate of return than the cost of investment. In this case, the business will borrow to meet the additional costs.¹⁸⁸

Opponents of the ADR System have suggested that businesses will not likely increase their productive capacity by investing in new equipment when, under present economic conditions, manufacturing industries are operating at only seventy-five percent capacity.¹⁸⁹ In fact, critics argue that the reason for such a low capacity rate is that the economy was unable to sustain the capital investment growth between 1963 and 1969, a growth encouraged and stimulated by both the decreased depreciation lives of the 1962 Guidelines and the seven percent investment tax credit.¹⁴⁰ They contend that because of this subsidy,

¹⁸² Bittker, Treasury Authority To Issue the Proposed "Asset Depreciation Range System" Regulation, 49 *Taxes* 265, 267 (1971).

¹⁸³ 117 Cong. Rec. S5302 (daily ed. April 21, 1971). Note, however, that this figure was computed with the modified half-year convention, another accelerated depreciation device, now excluded by § 167(m)(2). Nonetheless, the resulting figure is not significantly changed.

¹⁸⁴ 7 CCH 1971 Stand. Fed. Tax Rep. ¶ 6738 at 71,530.

¹⁸⁵ *Id.*

¹⁸⁶ P. Samuelson, *Economics* 384 (6th ed. 1964). See also 117 Cong. Rec. S5302 (daily ed. April 21, 1971).

¹⁸⁷ 117 Cong. Rec. S5302 (daily ed. April 21, 1971).

¹⁸⁸ *Id.*

¹⁸⁹ 117 Cong. Rec. E4560, E4564 (daily ed. May 18, 1971) (article by Charles Davenport entitled Comment on Treasury's Proposed Substitution of Cost Recovery Allowances for Depreciation, placed into the Record by Congressman Vanik).

¹⁴⁰ 117 Cong. Rec. E6725, E6727 (daily ed. June 29, 1971) (article by Nat Goldfinger entitled The Fast Write-Off Tax Gimmick, published June, 1971, in the AFL-CIO American Federationist, placed into the Record by Congressman Gibbons).

investment in capital goods increased at a rate faster than that of the Gross National Product. This situation, in turn, helped generate the present inflationary trend since the tax incentives caused the economy's productive capacity to increase at a rate artificially higher than that of the economy's demand.¹⁴¹

As is generally true of most tax incentives, the ADR System discriminates among types of taxpayers.¹⁴² Because its provisions are restricted to business property, its benefits do not directly reach individual nonbusiness taxpayers. Furthermore, because the effect of ADR is an increase in a deduction taken against gross income, its worth to a given taxpayer becomes a function of his marginal rate. An individual in the seventy percent bracket having noncorporate business income will receive far greater benefits than one in the fourteen percent bracket.¹⁴³ Corporations—those most significantly affected by the ADR changes—while not taxed at the same graduated rates as individuals, have a modified form of progressivity in their two-tier tax rate: those with taxable income of \$25,000 or less are taxed at a twenty-two percent rate, while those earning more than \$25,000 are taxed at twenty-two percent on the initial \$25,000 and forty-eight percent on the remainder.¹⁴⁴ Thus a corporation with low income receives less benefit than a large one, and one with no income or losses receives no benefit at all. This difference in benefits may be seen by comparing the effects of ADR, in terms of the percentage reduction in the cost of capital assets, upon twenty-two and forty-eight percent corporate taxpayers. The price of an asset having a twelve-year guideline life (ADR reduction to nine and one-half years) is reduced by only 1.42 percent to the twenty-two percent corporation, but by 3.78 percent to the forty-eight percent corporation.¹⁴⁵ Therefore, the overall effect of ADR's acceleration of depreciation is to shield income by higher depreciation deductions. This result favors large business taxpayers who would otherwise be paying a high rate of tax on their income.¹⁴⁶ The preferential treatment accorded to large businesses tends to prejudice the relative competitiveness of small businesses.¹⁴⁷

Even conceding that ADR will actually increase and stimulate growth through the use of increased depreciation deductions, it is suggested that there exists a more efficient means of attaining this goal.

¹⁴¹ *Id.*

¹⁴² Surrey, *Tax Incentives As a Device for Implementing Government Policy: A Comparison With Direct Government Expenditures*, 83 *Harv. L. Rev.* 705, 722 (1970); 117 *Cong. Rec.* E4563 (daily ed. May 18, 1971).

¹⁴³ Surrey, *supra* note 142, at 731. For example, the taxpayer in the 70% income tax bracket who increases his taxable income by the same figure—say \$50,000—also reduces his tax liability by the same 70% rate, or \$35,000. The same depreciation deduction increase of \$50,000 to a taxpayer in the 50% bracket results in only a \$25,000 decrease of his tax liability.

¹⁴⁴ *Int. Rev. Code of 1954*, § 11.

¹⁴⁵ Sunley, *supra* note 126, at 24.

¹⁴⁶ 117 *Cong. Rec.* E4563 (daily ed. May 18, 1971).

¹⁴⁷ Sunley, *supra* note 126, at 25 n.16.

THE ASSET DEPRECIATION RANGE (ADR) SYSTEM

The investment tax credit avoids the aforementioned discriminatory effect as between large and small businesses. Since the credit is applied against tax liability, it is of equal benefit to big and small businesses which invest in eligible property. If the seven percent investment tax credit provided by the Revenue Act of 1971 alone cannot produce the desired results, then the credit should be increased accordingly. There would then be no need for an ADR System which presently appears to give rise to inefficiency, inequity and wasteful tax expenditures.

Under the ADR System unequal tax treatment results even among those taxpayers in the same income bracket. The new system only confers benefits on those businesses which are capital intensive,¹⁴⁸ that is, those that require substantial capital assets for production. The increase in depreciation deductions effected by ADR is of little value to a business requiring few depreciable capital assets, no matter how great its income. The ADR salvage value provisions also create different treatment of similarly situated businesses. The rule under ADR is that salvage value is ignored in computing depreciation—except that property may not be depreciated below salvage value.¹⁴⁹ Previously, salvage value was deducted from the cost of the property in order to determine the basis on which depreciation was computed. ADR benefits the taxpayer who replaces his asset at a time when it still has a salvage value; but ADR provides no benefit to the taxpayer who uses his asset until it has no salvage value or until the end of its actual useful life.¹⁵⁰ The combination of these discriminatory factors makes the new system questionable on grounds of tax policy alone, even ignoring economic policy. Instead of helping to achieve the goal of equally taxing similarly situated persons, the ADR changes assure that similarly situated persons will be taxed unequally.¹⁵¹

As noted previously, the ADR changes will result in a \$3 billion annual subsidy to the business community over the next decade. If, as opponents of ADR suggest, this tax saving is not used for additional capital investment, it will be a considerable windfall to corporations, perhaps distributed to stockholders in the form of dividends.¹⁵² Furthermore, because stockholders tend to be in higher income brackets,¹⁵³ a high percentage of their dividends would be saved, rather than consumed, since they need only spend a small portion of their income in order to cover needs.¹⁵⁴ Conversely, the lower-income individual consumes a much greater percentage of his income. If the tax reduction effected by ADR were to be distributed to the individual instead of the

¹⁴⁸ 117 Cong. Rec. E4563 (daily ed. May 18, 1971).

¹⁴⁹ Treas. Reg. § 1.167(a)-11(d)(1)(iv) (1971).

¹⁵⁰ 117 Cong. Rec. E4563 (daily ed. May 18, 1971).

¹⁵¹ *Id.* at E4564.

¹⁵² *Id.*

¹⁵³ *Id.*

¹⁵⁴ P. Samuelson, *supra* note 136, at 210.

corporation, consumer demand might be greatly increased.¹⁵⁵ Such a distribution could be achieved by increasing the personal exemption by \$100,¹⁵⁶ or by lowering the taxes of those in the lower brackets.¹⁵⁷

CONCLUSION

The Asset Depreciation Range radically alters the concept of useful life in the determination of depreciation. Although the issue of the Treasury Department's authority to effect this change has been mooted by the Revenue Act of 1971, the question remains whether ADR represents effective tax policy. The accelerative effects produced by ADR's salvage value, repair and retirement provisions, as well as its twenty percent reduction in useful lives, will cost the government over thirty-five billion dollars during the next decade. Even conceding that the ADR System will act to stimulate the national economy, it is submitted that the billions of dollars of benefits it confers will be distributed disproportionately. Small businesses will be discriminated against in favor of large ones because of the marginal rate effect produced by the increased deductions. It is submitted that the investment tax credit procedure reenacted by the Revenue Act of 1971 is a much more equitable and efficient business incentive than ADR since its benefits are restricted to actual investments and do not become a function of the taxpayer's marginal rate. If the seven percent tax credit alone cannot produce the results projected by ADR, then it is suggested that the credit be increased to meet this need. This increase would obviate the necessity for the ADR System, which can only produce unnecessary duplication resulting in inequity and wasteful tax expenditures.

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¹⁵⁵ 117 Cong. Rec. E4564 (daily ed. May 18, 1971).

¹⁵⁶ 117 Cong. Rec. E3401 (daily ed. April 23, 1971) (statement of Congressman Corman). The Revenue Act of 1971 does raise the personal exemption from \$650 to \$675 (§ 151(b)). The purpose behind allowing a deduction for personal exemptions is to avoid taxing persons with income below a subsistence level who, consequently, do not have the capacity to pay taxes. However, the dollar amount of the personal exemption has been far below minimum subsistence levels. For this reason Congress enacted § 141(c), which provides a low income allowance to aid poverty level persons. Even so, the increase in personal exemptions provided by § 151(b) and the low income allowance under § 141(c) are still inadequate and fall short of the poverty level for families of various sizes. S. Surrey, W. Warren, P. McDaniel & H. Ault, *Federal Income Taxation*, at pp. 3-402-3-404 (unpublished text available from Profs. McDaniel and Ault, at the Boston College Law School).

¹⁵⁷ ADR will reduce tax revenues by \$3 billion in the first year alone. President Nixon vetoed in 1971 the education and housing bills because they exceeded his requests by \$453 million and \$514 million, respectively. 117 Cong. Rec. S5301, S5304 (daily ed. April 21, 1971) (article by Dan Oberdorfer, *A Curious Tax Break*, *Washington (D.C.) Post*, April 1, 1971, at 35, col. 4, placed into the Record by Senator Humphrey). In addition, from 1967 to 1971 the corporate share of income tax revenue has steadily decreased, from approximately 36% to 25%. 117 Cong. Rec. H3396 (daily ed. May 3, 1971) (statement by Congressman Vanik). With the introduction of ADR, as well as the reintroduction of the investment tax credit, the corporate share will decrease several more percentage points. This reduction is offset by an increase in the percentage share of tax revenues borne by individual taxpayers. *Id.*