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DEPRECIATION–WORKING WITH THE ADR SYSTEM

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The asset depreciation range (ADR) system of depreciating property for tax purposes has been with us for some time, and by now experience may have moderated some of the extreme reactions that greeted its unveiling. "It's a gigantic giveaway to all capital-using business." "The procedures are so complicated and burdensome that, as a practical matter, it cannot be advantageous to use." Somewhere between these extremes lie the real value and effects of ADR, but the value and effects will not be the same for all businesses. For some it is a tremendous tax-saver; for others it is considered too burdensome to use; for still others it provides a relatively trouble-free means of accounting for capital cost recovery for tax purposes.

As many have noted from the very beginning, the ADR rules and regulations are very lengthy and in some areas very complicated. It would serve no useful purpose here to review all of the intricacies of the ADR regulations. However, practice and experience with ADR by the substantial number of businesses that have adopted it have revealed some useful, interesting and unusual planning opportunities that warrant our attention.

Since there are both advantages and disadvantages inherent in ADR for any business, these must be explored in order to decide whether to adopt the system and, if adopted, how best to make use of it. The system provides certain flexibilities not available without the use of ADR, and it contains some restrictions that must be recognized as well. Advantage can be taken of the flexibilities, and, fortunately, there are ways around some of the restrictions.

One of the factors at the very heart of ADR is the life over which depreciation deductions can be taken in the tax return. The availability of a tax life 20 percent shorter than the former guideline life, without fear of later

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adjustment, is one of the principal attractions of ADR. Typically, but not always, the appeal lies in being able to use a depreciable life shorter than the aggregate real lives and thereby defer the payment of income tax.

DISPARITY OF USEFUL LIVES WITHIN A CLASS

In most instances the various assets within a specific asset guideline class will have different expected useful lives. Some may be longer than the upper limit of the range for that class, and some may be shorter than the lower limit. Assuming that the goal is to maximize depreciation, a taxpayer would select the shortest life permitted for that class and depreciate all such assets over that life.

For example, assume that assets are acquired for the manufacture of chemical products and that, under the facts and circumstances, a life of thirteen years would be required for some assets but a life of five years could be supported for others. The asset depreciation range for such property has a lower limit of nine years and an upper limit of thirteen years. The election of ADR using a nine-year life would provide the advantage of depreciating some thirteen-year property over nine years. However, the cost recovery of the five-year property through depreciation would also have to be made over the nine-year span.

Further, when the five-year assets are retired at the end of, say, five years, a loss will undoubtedly occur because of the slow rate of depreciation deductions. Cost recovery through deduction for losses is not available currently. Under ADR, losses may not be deducted upon ordinary retirement. Instead, the retired asset continues to be depreciated along with the remaining assets in the vintage account. The loss is therefore spread over the remaining life of the account. However, losses are deductible when all assets in a particular vintage account have been disposed of. Therefore, the taxpayer would do well to consider placing the five-year assets in a vintage account separate from those with longer lives. Depreciation would still be deductible at the same pace for all the assets, but if the last five-year asset is disposed of at the end of five years, the cost recovery of those assets will have been completed at that time, rather than over the nine-year period.

To accomplish this the vintage account containing the five-year property must not be identical to the vintage accounts containing the longer-lived assets. It must have either a different method or a different life than those of other assets of the same class acquired in the same year.

DEPRECIATION METHODS

While the ADR system restricts the depreciation methods that may be used, it provides otherwise unavailable flexibility in changes of method. Further, the restrictions on methods available can be turned to advantage under some circumstances.

■ **Method Changes.** The regulation specifies that under ADR only three depreciation methods may be used: straight line, declining balance and sum-of-the-years digits. Of course, these are the methods most commonly used in any case, but there are other methods available in the absence of an ADR election.

Businesses have long used the tactic of computing depreciation by an accelerated method during the early years of asset life and then switching to the straight-line method at the appropriate time to deduct the greatest possible amount of depreciation in the shortest time. Using ADR it is possible to go that practice one better. The ADR regulation not only permits a change from an accelerated method to the straight-line method but also permits the change, without the necessity of requesting IRS permission, from declining balance to sum-of-the-years digits. This latter change requires the permission of the IRS if ADR has not been elected.

During the earliest stage of an asset life, the 200-percent declining-balance method provides the largest possible depreciation deductions. After a short time, however, the mathematics is such that the largest deductions would be produced by the sum-of-the-years-digits method. This usually occurs after the second computation year. At that time it is advantageous to make the first change in the series. The second change—from sum-of-the-years digits to straight line—would be made at a later time. The timing depends on the life being used.

■ **Exclusion of Property by Use of an "Other" Method.** If a method other than one of the three specified in the regulation is used for any property, the ADR election cannot apply to that property. This does not mean, however, that certain property within a guideline class may be selected for exclusion by the use of another method, such as machine hour or units of production, while ADR is used for the remaining assets in that class. If such other method is used for any asset in a class, then all assets in that class acquired in the same year must be excluded from ADR.

Under certain circumstances, however, use of a nonapproved method can be useful. Assume that a company acquires a new line of business by the purchase of used assets that are in a guideline class not otherwise used by the company and that the expected useful lives of the used assets are shorter than the lower limit for that class. The company could elect ADR for all of its other eligible property and could exclude the equipment for the new line by electing to use the machine-hour or units-of-production method for that equipment. The company would therefore be free to use the shorter expected useful lives for the newly acquired assets.

AVERAGING CONVENTIONS

For several years before ADR came along, the depreciation regulations permitted the use of "averaging conventions." An averaging convention is an assumption as to the timing of acquisitions and retirements, irrespective of the actual timing. For example, one averaging convention is the assumption that acquisitions and retirements are made uniformly throughout the year. Averaging conventions were first permitted as a matter of convenience in cases where numerous assets are acquired for or disposed of from multiple-asset accounts. Their use is not permitted under non-ADR regulations if a substantial distortion of depreciation results. Therefore, if an unusually large acquisition is made late in the year, it is unlikely that a half year's depreciation using an averaging convention would be permitted under the non-ADR depreciation regulations.

Under ADR, however, no distortion test is required, and one of two averaging conventions *must* be used. The "half-year convention" treats all covered assets as having been placed in service at the midpoint of the year and allows a half year's depreciation on all of the assets acquired. This is true even if all or a significantly large portion of the year's acquisitions are made late in the year. The "modified half-year convention" treats all assets placed in service in the first half of the year as having been acquired on the first day of the year and allows a full year's depreciation on those assets, even if a significant portion of the aquisitions is made just before the middle of the year. Under this second convention, assets acquired during the last half of the year are treated as having been acquired on the first day of the succeeding year, and no depreciation is allowed for the year of acquisition.

It is permissible to select one of these methods purely on the basis of the tax benefit to be obtained in the year of acquisition. If the annual depreciation provision for assets placed in service in the first half of the year is greater than that for assets acquired in the last half, the modified half-year convention would result in a larger deduction because a full year's depreciation would be allowed on the assets producing the greater deduction. Conversely, if the annual provision for assets placed in service during the last half of the year is greater, the half-year convention will result in the greater deduction by allowing a half year's depreciation on all of the assets acquired.

It is not necessarily the cost of assets placed in service that is important, since the depreciable lives may vary. Instead, it is the size of the annual depreciation provision that makes the difference.

■ **Importance of Placed-in-Service Date.** The selection of the averaging convention must be made with the tax return and cannot be changed after the return due date. As we have seen, the most advantageous convention will depend upon the dates when property is placed in service.

The selection for each year is made after the close of the year, so it can be based on facts and firm calculations. However, disputes often arise as to the time when property was placed in service. Suppose that the modified half-year convention is selected because a major asset addition is believed to have been placed in service during the first half of the year, but later it is determined that the addition must be considered as having been placed in service after the midpoint of the year. Instead of being able to deduct a full year's depreciation on the asset, the company would be denied any deduction at all for that year. Obviously it would have been preferable to use the half-year convention, but the election has been made and it is too late to amend it. The IRS will not bend the amendment rule to permit a taxpayer to change its selection, even if the taxpayer made a good-faith determination of the placed-in-service date which is later determined to be erroneous.

If there is a question as to the placed-in-service date and if there is much depreciation at stake, it may be advisable to seek an advance ruling from the IRS to the effect that the date used is proper.

Suppose that a major plant or addition is constructed during the first half of a taxable year but, because of a need for testing or for other reasons, is not put into commercial operation at full capacity until after the middle of the year. There could well be a factual question as to the time the plant was "placed in service."

If the plant was placed in service in the first half of the year, the modified half-year convention would permit deduction of a full year's depreciation. On the other hand, if the plant was placed in service in the last half of the year, the modified half-year convention would result in *no* depreciation for the year, and the company would be better off electing the half-year convention which would permit a half year's depreciation.

Upon a presentation of the facts the Service will generally rule on the date that property is considered placed in service for this purpose. With the assurance of such a ruling, a company can safely select the more advantageous averaging convention.

HIGH-SALVAGE PROPERTY

The following kinds of property cannot be combined in the same vintage account:

Property in different guideline classes

New and used property

Property with different depreciation methods and different selected lives

These restrictions aside, a taxpayer may select as few or as many vintage accounts as desired, even to the point of placing each individual asset in a separate account.

While salvage value need not be recognized in computing annual deductions using any method under ADR, vintage accounts may not be depreciated below salvage value. This would curtail deductions in the last year or years of an account's life. However, salvage value up to 10 percent of cost can be disregarded. Therefore, if salvage is 10 percent or less, an account can be fully depreciated; if salvage is 15 percent, an account can be depreciated down to 5 percent of cost. Where additions in a guideline class include property with salvage value of both over and under 10 percent, the property should be combined in vintage accounts so that the least possible amount of salvage value will have to be recognized in curtailing later depreciation deductions.

For example, if two assets in the same class cost the same, and one has a salvage value of 15 percent while the other has a salvage value of 5 percent, the two could be placed in one account and the entire salvage value could be disregarded; the account could be depreciated to zero. On the other hand, if they were placed in separate accounts, only one asset could be depreciated to zero. Depreciation on the other would be stopped when the net book value was reduced to 5 percent of cost.

Even if there is no property with salvage value of 10 percent or less, it may still be advantageous to combine property with significantly high salvage value and property with lower salvage value in the same vintage accounts. As noted earlier, a vintage account cannot be depreciated below the salvage value for that account. Isolation of the high-salvage property in a separate vintage account would cause that account to depreciate down to salvage value earlier than would an account containing both high- and low-salvage property, even though annual deductions would not be any greater up to that point.

USE OF SEPARATE ENTITIES

While it may not be practical in many instances, it is possible to separate assets for which the ADR election is desirable from those for which it is not by having them acquired by different entities. This might be done through new or existing related corporations, or new or existing partnerships owned by the corporations or their shareholders. For instance, used assets with resultant short lives could be acquired by a subsidiary of a corporation that wants to elect ADR for its own acquisitions. The parent's use of ADR would not affect the subsidiary's use, under the facts and circumstances, of lives shorter than the lower ADR limit for the used property. A partnership formed by a corporation's shareholders or by two or more corporations could be used for the same purpose.

On the other hand, a corporation not intending to elect ADR for its acquisitions generally may find it desirable to make the election only with respect to a particular major acquisition. It may accomplish this by making the major acquisition through a separate entity. This can have a material effect on the amount of depreciation allowable in the year of acquisition. An existing entity with the same taxable year would be entitled to the same depreciation allowance on the acquisition as would the primary taxpayer if it elected ADR.

Assume that the calendar year is used. Under the half-year convention, all additions would be treated as having been placed in service on July 1, and one-half of a full year's depreciation would be allowed for the year. Under the modified half-year convention, all property placed in service from January 1 to June 30 would be treated as having been placed in service on January 1, and a full year's depreciation would be allowed. All property placed in service from July 1 to the end of the year would be treated as having been placed in service on the first day of the succeeding year, and no depreciation would be allowed.

If a new entity is formed to use the property, depreciation cannot be claimed for more than the actual number of months during which it was in existence (or half the number of months if the half-year convention is used). For example, if assets are acquired on April 1, an existing taxpayer could claim twelve months' depreciation by using the modified half-year convention. A new entity formed on April 1 could claim only nine months' depreciation. If assets are acquired on July 1, an existing taxpayer could claim a maximum of six months' depreciation by using the half-year convention. A new entity formed on July 1 would likewise be entitled to claim six months' depreciation, but by using the modified half-year convention. (The half-year convention would result in three months' depreciation.) However, a new entity formed on April 1 could benefit by using the modified half-year convention, since the July 1 addition occurred in the *first half* of its year. It could therefore deduct nine months' depreciation, which is more than the existing entity could deduct.

STATISTICAL DATA

The criticism that the ADR system increases the recordkeeping burden is a valid one. The tax benefit often outweighs this disadvantage, but it is there nevertheless, especially when the repair-allowance provisions are adopted.

Some companies have experienced difficulty in completing portions of Form 4832, the statement of election of ADR and the repair allowance. Instructions are not clear as to exactly what information is being sought, and some of the information appears to have no bearing on the depreciation or repair deductions. In response to a request for clarification, the IRS said that it is asking for the amount of repair deductions on all property not subject to the election that is of a type for which the election could be made. The Service wants the information for such property even if acquired before the ADR system was effective. It also asks for all expenditures (other than new property additions) capitalized as property during the year.

Most accounting systems are not capable of readily disclosing the information requested. Reasonable answers can be given in many cases, but only with considerable difficulty. The Service has said that this information is requested in order to provide statistical data by industry concerning total amounts expended on property acquired in prior years. This appears to impose an inordinate burden on many taxpayers merely for the purpose of providing statistical data.

■ **Statistical Model for Repair Allowance.** Use of the repair allowance is optional under ADR, and the cumbersome recordkeeping requirements might deter companies from using it. However, the economic climate indicates that capital outlays for new plant and equipment might be reduced. This would result in the need for greater expenditures for repairs, making the repair allowance more attractive. With respect to major property items, there is usually little difficulty in determining whether expenditures are for repairs or for excluded additions. However, for accounts containing great numbers of items where there are numerous repairs and small replacements, the required recordkeeping can be very difficult. There are usually numerous work orders of relatively small amounts individually that involve both recurring, routine repairs and small additions of new capital plant. A vast amount of work and voluminous records would be required to provide the requested information. Further, the analysis requires knowledge of both the regulations and the physical property itself. Clerical personnel generally do not have this knowledge.

A suggested solution to the problem is the use of a statistical model. Procedures would be developed so that a representative sample of expenditures would be analyzed to provide the determination required by the regulations, and the results of that sample would be extrapolated to cover the expenditures for the entire year. It should be possible to employ a statistical model that would assure 95-percent accuracy. It may be advisable to obtain a ruling that the particular method is acceptable.

■ **Statistical Sampling for Salvage Estimation.** Regulations require that taxpayers state the amount of salvage value for each vintage account as a part of the ADR election. Many companies have not been facing up to the salvage value of property at the time of its acquisition. Estimation of salvage value can be a difficult task. One approach would be to use as the basis for the determination the actual salvage value for all retirements of property of the same kind during the year for which ADR is adopted. If there are many retirements during the year, a statistical-sampling plan could be devised for the examination of individual retirements, and the results of the sample extrapolated to cover all retirements during the year. In this way it would be possible to estimate with reasonable assurance the ratio of salvage value to original cost for the property.

SHORT-LIVED ASSETS

ADR can provide benefits in situations where they would appear to be unlikely at first glance. For example, automobiles owned by a car-rental agency would normally have an expected useful life of under one year. Absent ADR, the agency would be limited to straight-line depreciation because the cars have useful lives of under three years, would have to recognize salvage value in computing the annual depreciation allowance because straight-line is used, and would not be entitled to investment credit. For cars purchased and disposed of in the same taxable year this makes no difference, but since some of the cars are acquired in one year and disposed of in the following year, even a company with such short-lived assets can benefit from ADR.

The class life for automobiles is three years, and the range is from two and one-half to three and one-half years. The class life selected is considered to be the life for all purposes. Therefore, an ADR election with the selection of a three-year life will permit the use of double-declining-balance depreciation without recognition of salvage value except as a floor below which the vintage account cannot be depreciated. Assuming that purchases are made evenly throughout the year and that salvage value is 80 percent, the depreciation of the "average" car without ADR would be 10 percent of its cost in the first year and 10 percent in the second year.

Under ADR *all* of the allowable depreciation can be taken in the first year. A half year's depreciation computed by the double-declining-balance method over three years is $33\frac{1}{3}$ percent of the cost. Of course the vintage account cannot be depreciated below a reasonable salvage value (in this case 80 percent). However, since the property is considered for all purposes as having a useful life of three years, only salvage value in excess of 10 percent of cost has to be taken into account. Thus, 30 percent of the cost can be depreciated rather than 20 percent, and since that is less than $33\frac{1}{3}$ percent, it can all be taken in the first year.

Since the property will be depreciated below actual salvage value there will be recapture, but the gain on normal retirements will not be recognized under ADR until the last asset in the vintage account is disposed of, which will be the second year or perhaps even later. In addition, investment credit, based on a three-year life, could be claimed on the cars not disposed of during the first year, and the company would have the use of the credit for a year before it was recaptured. ●