# Woman C.P.A.

Volume 6 | Issue 1

Article 7

12-1943

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### **Recommended Citation**

Traer, Wayne S. (1943) "Accelerated Depreciation," *Woman C.P.A.*: Vol. 6 : Iss. 1 , Article 7. Available at: https://egrove.olemiss.edu/wcpa/vol6/iss1/7

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### Accelerated Depreciation

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Accelerated depreciation is not a new theory. It has been existent since the theory of depreciation was developed, but only recently has the term again become significant in the vocabulary of the average accountant and executive. Under normal business conditions, accelerated depreciation becomes a Rip Van Winkle; in a war economy, with its vastly increased production requirements, old Rip wakes up.

Let us consider exactly what is meant by accelerated depreciation. First, we need a definition of depreciation. One authority says that "Depreciation is a decline in value of property as a result of wear and tear and gradual obsolescence." "Accelerate," according to Webster, means "to cause to move faster; to quicken the natural or ordinary progression or process of." Accelerated depreciation, then, would mean a hastened or quickened decline in value of property as a result of increased usage or other factors causing it to wear out or become economically useless prior to the time its useful life would expire under normal conditions.

The question now arises, "Does depreciable property actually undergo accelerated depreciation in periods of greatly increased usage?" A correct answer can be based only on the facts in each individual case and let me say right here that in many cases I do not believe sufficient facts can be developed at the present time.

Assume a company operates a group of fifty machines, identical in every respect, which have an expected useful life, under normal conditions and without consideration of the obcolescence factor, of ten years. Normal conditions mean the machines are in use forty hours per week. Theoretically, if the work-week were stepped up to eighty hours, the machines would lose their useful life in five years. Actually I do not think this would be true. If the machines were kept in a state of good repair, the repair bills might be higher in comparison with periods of normal usage, but the useful life of the machines might still be ten years or nine or eight or some other number.

Who knows? It would be rather interesting to see the results of a test of the fifty machines. Suppose twenty-five were operated forty hours a week and twenty-five, eighty hours a week, both groups under the same operating conditions. If the twenty-five machines operating forty hours a week continue to operate efficiently for an average of ten years (the normal useful life), do you think the twenty-five machines operating eighty hours a week would lose their useful life, on the average, at the end of five years? Your guess is as good as mine. So many factors enter into depreciation computation that we all know that neither normal nor accelerated depreciation can be precisely computed. Such computations must be matters of opinion, differing widely among individuals.

To satisfy my own curiosity, I made a test based on the records of a large company. I confined this test to delivery trucks of the same make and selected all such trucks which were retired during the year 1941. There were 48 of them. I divided these trucks into two groups— Group A and Group B.

In Group A, there were 20 trucks which had been in use at the time of their retirement from 40 to 83 months and had covered 150,200 to 416,700 miles. In Group B, there were 28 trucks. These had been operated from 48 to 116 months and had been driven 42,200 to 148,200 miles. Next, I made several computations and found that the Group B trucks had an average useful life of  $73\frac{1}{2}$  months, during which time the average mileage was 95,400, and that the depreciation actually sustained (as discovered at the time the last truck in the group was retired) was at the annual composite rate of  $13\frac{1}{2}\%$ ; the Group A trucks, however, which had been driven an average of 193,200 miles or more than twice the average distance covered by the Group B trucks, sustained depreciation, on the average, not at 27% per year (twice the rate applicable to the Group B trucks), but at an annual rate of only 17%.

In other words, doubled usage increased the annual sustained depreciation rate only 26% rather than 100% as one might expect. Thus, it is clear in this case that an accelerated depreciation rate in proportion to the increased usage would be incorrect. Just a word as to costs of operating these 48 trucks. By costs of operating, I mean gas, oil, grease, washing, painting, repairs, tires, etc. Taxes, depreciation and insurance are not included. These costs of operating were practically the same for each group—3.2 cents per mile for Group A and 3 cents per mile for Group B.

The results of this test are not necessarily conclusive and the records of another company might produce entirely different results. Accordingly, we come right back to the statement which I made a short while ago that accelerated depreciation can be based only on the facts in each individual case.

The increased usage of machinery is not the only reason for its being subject to accelerated depreciation. Longer working hours are an important factor, but perhaps equally important are operation with unskilled labor, use of different materials than is customary or for which the machinery was built, conversion to produce different products, and operation without proper repairs because of inability to obtain parts or because the machinery can not be kept idle a sufficient length of time.

In this period of war activity, I believe that, from an accounting standpoint, the question of acceleration of depreciation rates which are based on the time element only, should be carefully considered by the accountant, the engineer and the management. If in their judgment, after considering all of the available facts, an accelerated rate of depreciation is advisable it would seem prudent to revise the normal depreciation rates. It would indeed be unfortunate for an executive to awaken some fine morning five years hence and discover that his factory machinery had fallen apart five years sooner than was anticipated.

Now let us look at this problem from an income tax standpoint. The Internal Revenue Code states that in computing net income there shall be allowed as deductions, among other items, depreciation. Depreciation is explained as "a reasonable allowance for the exhaustion, wear and tear of property used in the trade or business, including a reasonable allowance for obsolescence."

The Regulations make further explanation. They state that the proper allowance for depreciation of any property used in the trade or business is that amount which should be set aside for the taxable year in accordance with a reasonably consistent plan (not necessarily at a uniform rate), whereby the aggregate of the amounts so set aside, plus the salvage value, will, at the end of the useful life of the property in the business, equal the cost or other basis of the property.

In other words, the taxpayer is entitled to recover, through deductions from income, the net cost of his depreciable property during the period of its useful life. Note the language of the Regulations. It is provided that amounts representing depreciation should be set aside "in accordance with a reasonably consistent plan" but "not necessarily at a uniform rate." This opens an avenue for periodic revisions of rates which would include what we have termed "accelerated depreciation."

The Regulations further state:

"The necessity for a depreciation allowance arises from the fact that certain property used in the business gradually approaches a point where its usefulness is exhausted. The allowance should be confined to property of this nature. In the case of tangible property, it applies to that which is subject to wear and tear, to decay or decline from natural causes, to exhaustion, and to obsolescence due to the normal progress of the art, as where machinery or other property must be replaced by a new invention, or due to the inadequacy of the property to the growing needs of the business. It does not apply to inventories or to stock in trade, or to land apart from the improvements or physical development added to it."

Commenting on the method of computing depreciation, the Regulations continue:

"The capital sum to be recovered shall be charged off over the useful life of the property, either in equal annual installments or in accordance with any other recognized trade practice, such as an apportionment of the capital sum over units of production. Whatever plan or method of apportionment is adopted must be reasonable and must have due regard to operating conditions during the taxable period." There again is a provision for accelerated depreciation. "The reasonableness of any claim for depreciation shall be determined upon the conditions known to exist at the end of the period for which the return is made . . . The deduction for depreciation in respect of any depreciable property for any taxable year shall be limited to such ratable amount as may be reasonably necessary to recover during the remaining useful life of the property, the unrecovered cost or other basis. The burden of proof will rest upon the taxpayer to sustain the deduction claimed ... A taxpayer is not permitted under the law to take advantage in later years of his prior failure to take any depreciation allowance or of his action in taking an allowance plainly inadequate under the known facts in prior years."

The Regulations also provide for obsolescence.

I quote the entire section:

"With respect to physical property the whole or any portion of which is clearly shown by the taxpayer as being affected by economic conditions that will result in its being abandoned at a future date prior to the end of its normal useful life, so that depreciation deductions alone are insufficient to return the cost or other basis at the end of its economic term of usefulness, a reasonable deduction for obsolescence, in addition to depreciation, may be allowed in accordance with the facts obtaining with respect to each item of property concerning which a claim for obsolescence is made. No deduction for obsolescence will be permitted merely because, in the opinion of a taxpayer, the property may become obsolete at some later date. This allowance will be confined to such portion of the property on which obsolescence is definitely shown to be sustained and can not be held applicable to an entire property unless all portions thereof are affected by the conditions to which obsolescence is found to be due."

Thus, it can be seen that while the Regulations provide, in effect, for accelerated depreciation, the burden of proof is on the taxpayer. And it is rather difficult to present factual evidence supporting not only accelerated depreciation but normal depreciation and obsolescence as well.

The Board of Tax Appeals, now called "The Tax Court of the United States," has, in several cases, allowed accelerated depreciation because of overtime operation and the use of unskilled labor. Even buildings (of wooden construction) have been the subject of accelerated depreciation because of the effect of abnormal vibration and steam. I will not attempt to discuss the basis on which the accelerated depreciation was allowed in these cases, most of which date back to the period from 1918 to 1921.

In one case, involving cotton mill machinery with a normal depreciation rate of 5%, an accelerated rate of  $7\frac{1}{2}\%$  was allowed for 1918, 1919 and 1920, upon a showing that the mill was operated 84% overtime in 1918, 47% in 1919 and 80% in 1920. This represents a 50% increase in depreciation, although there was an average increase in usage of 70%.

In another case, a printing plant was operated 22 to 24 hours a day in 1920 and 1921, instead of the normal 8 hours a day. Its normal depreciation rate on machinery of 10% was increased to 20%.

Here is a recent Board of Tax Appeals memorandum opinion, dated April 17, 1941: Machinery had a normal useful life of 5 years, based on one 8 hour shift a day. This machinery was used nearly 24 hours a day, 7 days a week, for 7 months without opportunity for proper maintenance, with the result that the value of the machinery after 7 months was but 40%of the original cost. The Board sustained the taxpayer's claim that the machinery should be depreciated 60%.

I might mention one more case. Accelerated depreciation and obsolescence on hotel property were denied by the Board because the showing that the erection of better hotels in the vicinity did not, in the opinion of the Board, indicate, by itself, a shortening of the property's economic life.

Until quite recently, the attitude of the Treasury Department toward accelerated depreciation was not at all favorable and claims for activity depreciation were generally turned down. However, in view of the fact that a number of claims for extra or activity depreciation have been and are being presented, we may expect some modification of the Department's attitude. We can also expect that it will be made as difficult as possible for taxpayers to establish their right to extra depreciation.

I have heard of one instance where a taxpayer requested permission to adopt the activity basis of depreciation on the theory that a change in accounting procedure was involved. I understand that the taxpayer was then requested to submit a mass of information which I do not believe many taxpayers could assemble from the records maintained. It would appear that the request was primarily for the purpose of making it difficult for the taxpayer.

If I intended to claim accelerated depreciation, I would not request advance permission for I do not believe the acceleration of depreciation rates constitutes a change in accounting procedure contemplated by the Regulations which require that the Commissioner's permission must be obtained before making a change in the method of accounting.

Present indications are that where facilities are being used to an abnormal extent, the Bureau may approve depreciation charges in excess of normal and which fluctuate with activity. The full rate of depreciation, however, will not be permitted to fluctuate with activity but only a portion thereof. This is because a part of the normal depreciation rate relates to obsolescence which is not affected by activity. It will be necessary, then, to determine what part of the normal depreciation rate represents the use factor and what part represents the obsolescence factor.

For example, assume that the normal depreciation rate on machinery is 10%. Assume further that it is determined that one-half of such rate represents the use factor and one-half obsolescence and that it can be demonstrated that increased usage results in increased depreciation in the same ratio. If the machinery is now being operated twice as many hours as normally, it is possible that a rate of 15%would be allowed. This of course is determined by doubling the use factor rate to which is then added the nonfluctuating obsolescence factor rate.

I do not intend to go into the subject of what detailed records should be kept to substantiate claims for accelerated depreciation. I will say, however, that you must compile now data which will later be required to establish your right to adequate depreciation deductions. The type of records is your problem. Be sure that your records of plant assets are complete and sufficiently detailed to enable you to demonstrate with facts and figures the extent and conditions of their operation. At the time such assets are retired, you should see that detailed stories are written as to the reasons for retirement. These reasons should be specific. Was the machine inefficient or obsolete? Or was it just plain worn out? What caused its inefficiency? Was it lack of proper maintenance? Operation by unskilled labor? Or what? This information can generally be obtained at the time of retirement from the foreman or workmen who are intimately acquainted with the particular items. The main thing is to get the facts and record them while they are still fresh in the minds of those who know.

So far I have not mentioned amortization of emergency facilities. It is a subject by itself and, being governed by statutory requirements and regulations thereunder, does not present problems similar to those connected with accelerated depreciation. Provisions for amortization of emergency facilities were inserted in the Internal Revenue Code in 1940 in order to encourage plant expansion at a time when we needed such expansion in our defense effort. The Revenue Act of 1942 liberalized to some extent these provisions. If your plant has been expanded for war production it might be to your advantage to make a careful study of the statute.

#### Annual Meeting

The annual meeting of the officers and directors of AWSCPA was held jointly with that of ASWA at the Waldorf-Astoria Hotel in New York on October 17 with Mrs. Grace A. Dimmer, Detroit, Michigan, presiding as President of AWSCPA and Mary Gildea, Chicago, Illinois, presiding as President of ASWA. As current conditions made impracticable the usual annual meeting of the memberships of the two Societies, all within that vicinity were invited to attend the joint board meeting and a goodly number were present.

Announcement was made of the unanimous election of officers nominated by both Societies and of the approval of suggested amendments to by-laws, the voting having been conducted by mail.

Reports of various committees presented a comprehensive review of the year's work. Of especial interest were the reports of the Public Relations Committee and the Research Committee. Achievements and future possibilities of Public Relations are covered fully elsewhere in this issue (page 4) and the wealth of information resulting from the survey of women accountants made by the Research Committee will be covered in a subsequent issue.

Mrs. Ida S. Broo expressed the appreciation of the membership for the splendid work of the committees and asked for a vote of thanks as a tribute to the committees and to the retiring presidents for the progress of the two Societies made under their leadership.

Many women accountants remained in New York throughout the week to attend the Annual Convention of the American Institute of Accountants during which many constructive talks on various phases of Wartime Accounting and Postwar Planning were presented by a brilliant array of speakers.