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LEGAL IMPLICATIONS IN ACCOUNTING FOR DEPRECIATION

MELVIN F. WINGERSKY

Part 1*

CHALLENGES\(^1\) of, and proposals\(^2\) concerning, orthodox accounting\(^3\) methods and practices have been stimulated\(^4\) by the continuous elevation of the general price level.\(^5\) The gist of the

\(^*\)This is the first part of the article. The balance of this article will appear in the next issue of the DE PAUL LAW REVIEW.

\(^1\) Randolph, Rate Making and Inflation, 49 P.U. Fort. 3 (1952); Grady, Impact of Price Level Changes on Utility Depreciation Costs, Pt. I, 49 P.U. Fort. 819 (1952), Pt. II, 50 P.U. Fort. 31 (1952); Dean, Provision For Capital Exhaustion Under Changing Price Levels, 65 Harv. L. Rev. 1339 (1952); Young, Depreciation and Depletion—An Inter-American Comparison, 30 Tax Mag. 278 (1952); Inflation: Challenge to Free Enterprise, Controllers Institute of America (1951); Sanders, Depreciation and 1949 Price Levels, 27 Harv. Bus. Rev. 293 (1949); Jones, Effect of Inflation on Capital and Profits: The Record of Nine Steel Companies, 87 J. Accountancy 9 (1949); Broad, The Impact of Rising Prices Upon Accounting Procedures, 86 J. Accountancy 10 (1948); Paton, Depreciation and the Price Level, 23 Accounting Rev. 118 (1948); Depreciation and the Price Level—A Symposium, 23 Accounting Rev. 115 (1948).


\(^3\) “Accounting and the Social System” is discussed in American Institute of Accountants, Accounting Research Bulletin No. 1 (1939); Accounting Problems Arising From Devaluation of Foreign Currencies, Research Department, American Institute of Accountants (1949). This latter memorandum is a supplement to Accounting Research Bulletin No. 4 (special, 1949). See also, Accounting Research Bulletin No. 7 (special, 1949), for definitions of “accounting.”

\(^4\) City of Marietta v. Public Utilities Commission, 148 Ohio St. 173, 182, 74 N.E. 2d 74, 79 (1947). Consult the order issued in Re New England Tel. & Tel., F. C.

[Footnote 5 on next page following continuation of footnote 4]

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challengers’ thesis is characterized as the impact of inflation on conventional accounting policies. These dissents really embody a search for some method by which to articulate the disparity between contemporary monetary units and those previously recorded in the accounts of an enterprise. It is contended that prevailing accounting policies are predicated upon a theory of stable dollars; that recorded dollars portray dollar values at the time of a particular bookkeeping entry, but not at the time of the issuance of a balance sheet or income statement.

These problems, fostered and presented by the declining purchasing power of the dollar must be approached from the semantic side. Materials concerning present accounting methodology display a marked want of uniformity and established meanings for the terms

No. 1370, 94 PUR NS 65, 67 (1952), for a statement of objections to using current costs to arrive at a rate base.

It is not amiss, here, to recall a statement made by Mr. Justice Holmes in Weiss v. Weiner, 279 U.S. 333, 335 (1929): “The income tax laws do not profess to embody perfect economic theory. They ignore some things that either a theorist or business man would take into account in determining the pecuniary condition of the taxpayer. They do not charge for appreciation of property or allow a loss from a fall in market value unless realized in money by a sale.”

Reaction to a utility's request for recognition of current value, in a rate case, was expressed in The Wisconsin Telephone Co., Case No. 2-U-3573, CCH Util. Law Rep. § 16, 197, as follows: “The use of current value would reintroduce the wild uncertainty and recurrent rate controversies which characterized the reproduction cost era.”

5 Questions confronting regulatory bodies arising from requests by utilities for rate increases bottomed on inflationary conditions are discussed by Professor Morton in Rate of Return and the Value of Money in Public Utilities, 28 Land Economics 91 (1952). See the letter of Emil Schram, President of the New York Stock Exchange, dated January 10, 1949, attached to Accounting Research Bulletin No. 35 (1949), issued by the American Institute of Accountants.

6 P. Bakewell, Jr., What Are We Using For Money (1952); Kemmerer, The A B C of Inflation (1942). Depreciation is mentioned as one of the four principal elements of a public utility's cost of providing service by Hon. H. A. Scragg, Chairman Pennsylvania Public Utility Commission, in his article, A Restatement of Fundamentals of Utility Rate Making, 50 P.U. Fort. 347 (1952).

7 Terminology, employed in their field, has been the subject of a constructive project undertaken by the American Institute of Accountants, i.e., Committee on Terminology, Accounting Research Bulletins Nos. 7 (special, 1940), 9 (special, 1941), 12 (1941), 16 (1942), 20 (special, 1943), 22 (1944), 34 (1948). This situation is aptly described by Weiner and Bonbright in their article, Theory of Anglo-American Dividend Law: Surplus and Profits, 30 Col. L. Rev. 330, 331 (1930).

See also Heflebower, An Economic Appraisal of Price Measures, 46 J. Amer. Statistical Assoc. 461 (1951), for some comments on price indexes.

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utilized by their authors. This confusion of meanings permeates the opinions rendered by tribunals engaged in adjudicating financial and accounting cases.

A financial statement is a method of communication, its translation and interpretation being dependent upon myriad factors. Certain nomenclature, however, is customarily utilized in balance sheets and income statements. But the characteristics of such terms and phraseology, embodied in these statements, are mutable. Policy, purpose and

Both the American Institute of Accountants, Bulletin No. 9 op. cit. supra note 7, and the American Law Institute, Draft No. 6, p. 190, discuss the definition of "income" enunciated in Eisner v. Macomber, 252 U.S. 189, 207 (1920).

For another phase of the matter of interpretation, see Kripke, A Case Study in the Relationship of Law and Accounting: Uniform Accounts 100.5 and 107, 57 Harv. L. Rev. 433 (1944).

"Though there are differing conceptions of 'income,' for the purpose of income taxation, income has been broadly defined as 'the true increase in amount of wealth which comes to a person during a stated period of time. [citing] This definition states an underlying principle that, however, requires explanation, if not qualification, as applied to specific facts. For example, mere appreciation in value, not realized, though in a broad sense representing an increase in wealth, is not ordinarily regarded as 'income' for the purpose of taxation." Commissioner of Corporations v. Filoon, 310 Mass. 374, 385, 38 N.E. 2d 693, 700 (1941).


A recent English decision concerning rate of exchange is Cummings v. London Bullion Co., Ltd., [1952] 1 All E.R. 383. For a disposition made in a probate case involving debts payable in German marks and conversion at the present rate of exchange, see Estate of Michael Heck, 128 N.Y. Law Journ. 59 (Surr. Ct., 1952).


Referring, here, to balance sheet, profit and loss statement (or income statement) and exhibits showing changes in surplus, analytically.

Analysis of financial statements is treated by Paton, Accountants' Handbook, § 2 (3rd ed., 1951). Under that topic, the editor reports (Ibid., 67) a comment concerning use of "confusing terminology."

For an interesting sidelight concerning evaluation of the financial condition of an enterprise, see Dobrovolsky's article, Depreciation Policies and Investment Decisions, 41 Amer. Economic Rev. 906 (1951). This article examines basic relationships between depreciation methods and the net income derived from investment in certain types of equipment under various conditions and different income tax provisions.

Illustrative of this point are the terms and phrases collected by Graham and Meredith, The Interpretation of Financial Statements, Pt. III (7th ed., 1937); and see Meyer, Financial Statement Analysis (1946).
purport all underlie financial statements. Treatment accorded each segment of a transaction, flowing into accounts upon which financial statements are predicated, stems from a contrariety of opinions. Numbers posted in accounts are symbolic end-products of accumulated judgments and opinions. Typical instances of which are those forecasts of service life and estimates of final salvage value under-

13 Other instances and phases of this hypothesis are found, for example, in U.S. v. New York Telephone Co., 326 U.S. 638 (1946); American Telephone and Telegraph Co. v. U.S., 299 U.S. 232 (1936).

Marginal note 40 to the dissenting opinion of Mr. Justice Jackson, in Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591, 643 (1944), contains this interesting statement: "To make a fetish of mere accounting is to shield from examination the deeper causes, forces, movements, and conditions which should govern rates. Even as a recording of current transactions, bookkeeping is hardly an exact science. As a representation of the condition and trend of a business, it uses symbols of certainty to express values that actually are in constant flux." The remainder of this footnote reflects Justice Jackson's observations concerning the article by Hamilton, Cost as a Standard For Price, 4 Law & Contemp. Prob. 321, 323 (1937).

14 "There are different methods for setting up book depreciation, the most widely used of which is what is known as the straight line depreciation. Since the adoption of the Federal Income Tax Law, accounting practice follows closely the treasury regulations. In Bulletin 'F' (Revised, January 1942) United States Treasury Department, Bureau of Internal Revenue, Income Tax, Depreciation and Obsolescence Estimated Useful Lives and Depreciation Rates, various methods and rates for computing the allowance for depreciation and obsolescence are discussed and set up, See, also, Accountants' Handbook (1943) page 765 et seq.; Auditing Theory and Practice by Montgomery, page 317 et seq.; The Fundamentals of Accounting by William Morse Cole, pages 126, 301; General Accounting, page 266 (Finney)." Wheeling Steel Corporation v. Evatt, Tax Commissioner, 143 Ohio St. 71, 80, 54 N.E. 2d 132, 137 (1944). This opinion is also quoted here for the source materials cited therein.


Mr. Justice Jackson, delivering the opinion of the Court in Detroit Edison Co. v. Commissioner, 319 U.S. 98, 101 (1943), described the element of prediction, involved, in this way: "Experience and judgment hit upon usable mortality tables for classes of property from which annual rates of accrual are estimated and several different methods are employed for relating this physical deterioration and functional obsolescence to financial statements. The calculation is influenced by too many variables to be standardized for differing enterprises, assets, conditions, or methods of business. The Congress wisely refrained from formalizing its methods and we prescribe no over-all rules."

Mr. Justice Douglas, delivering the majority opinion in Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944), referred to Lindheimer v. Illinois Bell Telephone Co., 292 U.S. 151 (1934), and quoted therefrom, inter alia, in marginal note 10, at page 606: "If the predictions of service life were entirely accurate and retirements were made when and as these predictions were precisely fulfilled, the depreciation reserve would represent the consumption of capital, on a cost basis, according to the method which spreads that loss over the respective service periods. But if the amounts charged to operating expenses and credited to the account for depreciation reserve are excessive, to that extent subscribers for the telephone service are required to provide, in effect, capital
lying accounting treatment of depreciation. Computations of salvage value and estimates of service life are based largely on an interplay of judgment and opinion. Dollar amounts charged as expense, for the item of depreciation, are not resultants of infallible and rigid formulae. Gross error in this area could possibly make for inadequately depreciated assets, which, when retired, would thereby produce a permanent increase in net plant assets of an enterprise. Overstatements of estimates of service life and of salvage value result in underdepreciation. This, in turn, causes magnification of present plant value. On the other hand, excessive depreciation tends to conceal the aggregate of profits. Balance sheet and income statement are closely integrated exhibits. The former depicts financial status of an enterprise as at a particular date, and the latter mirrors activity for a period stated.

An overview of those areas blanketed by various materials, previously noted, discloses a broad sweep. Need for a basic avenue of inquiry is readily apparent. This approach can be best effected by isolating one strand from the variety of ideas embodied in those contents mentioned at the threshold of this article. Certainly, tangential excursion into related parts of the broad topics, so suggested, can be more advantageously treated when a focal point is chosen first.

Depreciation is an aspect of the situation which lends itself for a point of beginning. Of course, it is not the sole springboard for ideas with which to resolve certain of the problems at hand. But at least this technique identifies one of the intellectual shuttlecocks involved.

Recognition of the interdependence of valuation and depreciation

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15 Estimated cost of removal is sometimes a factor. It is a companion element to that of salvage, being deducted from gross salvage to ascertain net salvage.


17 Notes 1 and 2 supra.

18 “Depreciation, which for the past 50 years has been given extended and increasing consideration by accountants, engineers and appraisers, is recognized legally as an important element in the determination of value, net earnings and income.” Fidelity Union Trust Co. v. McGraw, 138 N.J. Eq. 415, 423, 48 A. 2d 279, 282 (1946).

19 I Bonbright, Valuation of Property, cc. I, II (1937). While these two chapters are cited as pertaining to the general problem of ascertaining the meaning of “valuation,” obviously the entire work is devoted to the subject. For another viewpoint, particularly in the area of rate making, see Barnes, The Economics of Public Utility Regulation (1947).
brings into focus an important dichotomy. Earnings of an enterprise are affected by the annual rate of depreciation, being charged as an item of operating expense, while insufficient credit to the account labeled reserve for depreciation maintains that account at too low a level. This quantitative difference produces an overstatement of the net book value of the particular asset to which it is applied. This is a representative segment of contentions urging that present accounting practices foster overstatement of earnings during an inflationary period.

Depreciation is implicit in evaluating physical assets. This corre-

As an example of the problem, see Wolbert, Jr., American Pipe Lines (1952), wherein the author comments on "valuation" under the Elkins Act consent decree.


21 The resultant is produced by deducting the credit balance of an account commonly labelled "Reserve for Depreciation" from the debit balance of the account for a specific asset or group of assets to which the so-called reserve applies or corresponds. Book value is discussed infra.

22 This is a convenient juncture at which to footnote some comments with respect to definitions, meanings and materials concerning depreciation:


(ii) Among other things, the joint dissent (which contains an excellent analysis of depreciation) of Justices Holmes and Brandeis in United Railways v. West, 280 U.S. 234, 260 (1930), contains the following observations, pertinent here: "The annual account of a street railway, or other business, is designed to show the profit or loss, and to acquaint those interested with the condition of the business. To be true, the account must reflect all the operating expenses incurred within the accounting period. One of these is the wearing out of plant. . . . in ascertaining the profits of a year, it is generally deemed necessary to apportion to the operations of that year a part of the total expense incident to the wearing out of plant. This apportionment is commonly made by means of a depreciation charge."

(iii) "The theory underlying this allowance for depreciation is that by using up the plant a gradual sale is made of it. The depreciation charged is the measure of the cost of the part which has been sold. When the plant is disposed of after years of use, the thing then sold is not the whole thing originally acquired." U.S. v. Ludev, 274 U.S. 295, 301 (1927). There is a similar definition in Nashville C. & St. L. Ry. Co. v. U.S., 269 Fed. 351 (C.A. 6th, 1920), cert. denied 255 U.S. 569 (1921).

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23 That is, valuation, estimate, or appraisals in the broad sense. Speaking of "value," in the case of Group of Institutional Investors v. Chicago, M. St. P. & P. R. Co., 318 U.S. 523, 540 (1943), the court stated that the word "... gathers its meaning in a particular situation from the purpose for which a valuation is being made."
lation is the environment in which examination of income concepts should be made. Such a methodology crystallizes the more serious aspects of problems concerning valuation of assets grounded upon prevailing economic conditions.

Ohio St. 253, 257, 74 N.E. 2d 359, 361 (1947): "Functional depreciation occurs where property, although still in good physical condition, has become obsolete or useless due to changing business conditions and thus to all intents and purposes valueless to the owner. There can be no hard-and-fast rule as to valuation or depreciation."

In re Fifth Madison Corporation, 297 N.Y. 155, 77 N.E. 2d 134 (1948), is an instance where a reviewing court held that the phrase "cost of maintenance and operation" embodied in rent legislation was to be confined to sums actually paid out or incurred. Accordingly, depreciation was not considered to be a cost within the meaning of the Business Rent Law.

(iv) Illustrative of treatment accorded this matter is S.E.C. Reg. S-X, Rule 3-20 (c); S.E.C., Uniform System of Accounts for Mutual Service Companies and Subsidiary Service Companies, 17 Code Fed. Regs. § 256.180 (1936). The caption of the account, on the page cited in this last reference, is "180 Reserve for Depreciation," the accompanying text states: "It is the purpose of the reserve to accumulate during the useful life of the property an amount sufficient to write off the book cost, plus cost of removal, less salvage, of all classes of property included in account 100..."

(v) Depreciation is defined in the Uniform System of Accounts prescribed for telephone companies by the Federal Communications Commission, 47 Code Fed. Regs. § 31.01-3 (m).

(vi) I Bonbright, The Valuation of Property, 179 et seq. (1937), contains a thorough exposition of the meanings of depreciation as well as an excellent discussion of its basic concepts.


(ix) The matter of crystallizing and establishing definitions of this subject is carefully and cautiously explored in the Reports of Committee on Terminology, American Institute of Accountants in Accounting Research Bulletins (issued by the Committee on Accounting Procedure, of that Institute) numbered 16 (special, 1942); 20 (special, 1943); 22 (special, 1944); Bulletin 27 (1946) is entitled "Emergency Facilities" and not recorded as being a Report of the Committee on Terminology.

(x) National Association of Railroad and Utilities Commissioners, Report of Committee on Depreciation (1943) (it should be noted, with respect to this citation, that the NARUC issued a clarification report in 1944). May, The NARUC and Depreciation, 79 J. Accountancy 34 (1945); Scharff, Public Utility Depreciation, 38 Col. L. Rev. 1037 (1938).

(xi) The following cases involve questions concerning the purposes and methods of accounting for depreciation: Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944); West v. Chesapeake & Potomac Telephone Co., 295 U.S. 662 (1935); Clark's Ferry Bridge Co. v. Public Service Commission,
Depreciation, as an item of expense, is the product of a jumbled background sponsored by conflicting concepts and divergent interests. The nature and meaning of depreciation is no small portion of this difficulty. Several judicial definitions of depreciation have been continuously reiterated since they were first announced. Notable among them is one frequently cited from *Lindheimer v. Illinois Bell Telephone Company*:

Broadly speaking, depreciation is a loss, not restored by current maintenance, which is due to all the factors causing the ultimate retirement of the property. These factors embrace wear and tear, decay, inadequacy, and obsolescence. Annual depreciation is the loss which takes place in a year.

More recent is the opinion in *Attorney General v. Trustees of Boston Elevated Railway Company*, which contains a broader description:

Depreciation represents the consumption of physical assets, resulting from the manufacture of goods or the furnishing of services, which is not restored by current maintenance in making repairs or by the substitution of new assets.  

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Virginian Hotel Corp. v. Helvering, 319 U.S. 523, 525 (1943), contains the cogent remark: "Wear and tear do not wait on net income." Depreciation is described in the dissenting opinion of Mr. Justice Jackson. However, by H.R. 3168, 82nd Cong. 2nd Sess. (Pub. L. No. 539, June 14, 1952), which amends Int. Rev. Code § 113 (G) (1) (B), 26 U.S.C.A. § 113 (G) (1) (B) (1948), Congress has changed the status of this case as precedent.

26 *Bonbright*, op. cit. supra note 19.

25 292 U.S. 151, 167 (1934). During the course of its opinion the court indicates some of the ramifications implicit in depreciation as a factor in the rate making process, by stating: "In determining reasonable rates for supplying public service, it is proper to include in the operating expenses, that is, in the cost of producing the service, an allowance for consumption of capital in order to maintain the integrity of the investment in the service rendered." Ibid., at 167.

This case is noted in II *Bonbright*, Valuation of Property, pp. 1136 ff. (1937), and 48 Harv. L. Rev. 3 (1934). It is subjected to examination by Barnes, *The Economics of Public Utility Regulation*, pp. 393 ff. (1947).

26 319 Mass. 642, 661, 67 N.E. 2d 676, 688 (1946). Here it was similarly observed: "The purpose of a charge for depreciation is to protect the integrity of the investment, and the cost of service ought not to be burdened with any item that yields the company more than is required to offset the loss due to depreciation." Ibid., at 662 and 689.
minor or small parts which have become worn. Depreciation is the deterioration of physical assets due to wear and tear, decay and age. Another form of depreciation is obsolescence. This we understand to mean a loss in the service value of a fixed asset or capital asset which has become useless or inefficient on account of advances in the art, new inventions, inadequacy, the shifting of business centers, the loss of trade or some governmental ruling. [Cases collected]. The service life of a machine or plant is shortened by use, and the depreciation if correctly estimated and properly entered upon the books will reflect the lessened value of this capital asset. This lessened value which has occurred in a year is the basis for making a charge against income for annual depreciation as a part of the operating expenses.

Under this last definition the purpose of a depreciation charge is to protect "the integrity of the investment." Accordingly, in order to shelter an investment in plant, provision must be made for its renewal or replacement or both.

But, it is this proposition which embodies the core of the issues fashioned with those economic theories voiced by challengers to present accounting practices. The answer depends primarily on the objective to be attained in utilizing a charge for depreciation as part of the accounting apparatus.

Two practical differences in various concepts of depreciation as an item, contradistinguished from the condition, emerge at this juncture. First, depreciation is viewed merely as a charge to punctuate current operating expenses periodically with a piecemeal expression of original cost, i.e., writing off. Repetition of such an item of expense is dependent upon the estimated service life of the particular asset to which it is ascribable. Or, on the other hand, depreciation accounting may be employed as a mode of setting up funds or reserves to replace the particular asset after depreciating it on the books.

A plan of spreading the value of a specific fixed asset, or composite of such assets, over those accounting intervals occurring during

27 This view indicates recognition that accounting for depreciation involves the making of predictions.

28 This is an important aspect of the problem under consideration. Contrast the position asserted by the American Institute of Accountants, Accounting Research Bulletin No. 20, p. 164 (special, 1943). See also the dissent of C. W. Smith in Changing Concepts of Business Income, op. cit. supra note 2, pp. 124 ff.

29 Reference to the "books" is made advisedly since it must be noted that it is possible for accounts of an enterprise to reflect a fully depreciated asset, and the physical item still remain in service. This situation could, and is, compounded in composite assets.

its service life is also descriptive of depreciation—or, of accounting for depreciation. While the periodicity of closing financial books and striking a balance of accounts brings on the entry making the charge for depreciation as an operating expense, cash is not actually deposited to offset the reserve\textsuperscript{31} for depreciation. Since the expiration of an asset’s service life rarely coincides with the termination of a fiscal period, such accounting procedure, or very similar methods, have been adopted.

But describing the goal of computations for depreciation charges as spreading the value of an asset over its life span assumes that the word “value” communicates a standard concept, an agreed purpose, and a common viewpoint. Original\textsuperscript{32} cost, historical\textsuperscript{33} cost, actual cost, and book\textsuperscript{34} cost are not nuances to be cast out as irrelevant factors in legal equations treating of depreciation charges. Each has an important connotation. Each suggests a value.\textsuperscript{35}

Original cost of an asset is often the basic figure commonly utilized

\textsuperscript{31} Reserves necessitate separate consideration. United Oil Co., Inc. v. Eager Transportation Co., 273 Mass. 375, 173 N.E. 692 (1930), is an interesting sidelight on the matter of “reserves.”

\textsuperscript{32} State of Missouri v. Public Service Commission, 262 U.S. 276 (1923), marginal note 6, pp. 294 ff., in the famous dissenting opinion by Mr. Justice Brandeis, with whom Mr. Justice Holmes concurred, contains descriptions of book cost, original cost, actual cost, historical cost and reproduction cost. The prudent-investment principle is sponsored in this dissent.

Recently the Maine Public Utilities Commission circularized other regulatory bodies to ascertain what rate basis had been adopted in cases involving members of the Bell System. The results of the Commission’s inquiries are itemized in the proceeding entitled Re New England Telephone and Telegraph Company, F.C. No. 1370, 94 PUR NS 65, 67-68 (1952). Rate bases used in the proceedings of eighteen states are tabulated.

Historical cost and prudent investment are reviewed in New England Tel. & Tel. Co. v. Dept. of Public Utilities, 97 N.E. 2d 509 (Mass., 1951); Lowell Gas Co. v. Department of Public Utilities, 324 Mass. 80, 84 N.E. 2d 811 (1949).

For a discussion to the effect that investment is used in the sense of the value of property used in the business and has no reference to any particular formula, see State v. Mountain States Telephone and Telegraph Co., 54 N.M. 315, 333, 224 P. 2d 155, 167 (1950).


\textsuperscript{34} Public Utilities Comm. v. Bangor Hydro-Electric Co., 92 PUR NS 46, 56 (1952): “Since depreciation represents the loss in service value, or the difference between book cost and net salvage value, it is essential that salvage values be computed with some accuracy and reflected in the ultimate depreciation rates employed.”

\textsuperscript{35} General price trends in connection with estimating fair value were examined by the court in St. Louis & O’Fallon Railway Co. v. U.S., 279 U.S. 461 (1929).
in mathematical computations underlying charges for depreciation. Product produced or service rendered are charged for consuming the plant of their origin. But seldom does an asset item retain its original component parts during all of its service life. Starting at the date on which an asset is put into service or from the date of installation, pieces of varying size, shape and style, are added, changed and modified. So that at various moments during its service life, different parts or portions of a piece of complex equipment represents a cluster of service lives, having varying expectations and salvage values of different magnitudes. Similarly, members of that total asset item would be retired at different intervals. Complexities\textsuperscript{36} of this calibre confront appraisers seeking to ascertain current or present value of property on a spot date during service life.

That a physical asset, for which depreciation is to be computed, may consist of multiple components is not the lone cause of complexity here. Another facet of this subject matter concerns an array of bases\textsuperscript{37} employed for ascertaining depreciation charges. A preliminary cataloguing of such bases includes actual, historical, original cost,

\textsuperscript{36} Speaking about amounts set aside for depreciation, actual retirements and average excess of depreciation over retirements per year, it was said, in Peoples Gas Light & Coke Co. v. Slattery, 373 Ill. 31, 59, 25 N.E. 2d 482, 496 (1940): “This disparity is caused by a difference of opinion as to the life of the several structures of the company and the present percentage condition of the property of the company. The expert witnesses are in hopeless conflict as to the amount that should be set up in a depreciation reserve.”

\textsuperscript{37} Note 32 supra, Re New England Telephone and Telegraph Company, 94 PUR NS 65 (1952).

Ammonia Soda Co. v. Chamberlain, 1 Ch. 266, 9 B.R.C. 819, 87 L.J.R. 193 (1918), and Foster v. New Trinidad Lake Asphalt Co., 1 Ch. 208, 1 B.R.C. 959, 70 L.J.R. 123 (1901), treated with payment of dividends after appreciating capital assets.

Dovey v. Cory, 70 L.J. Ch. 753, 759 (1901): “Even the distinction between fixed and floating capital which may be approximate enough in an abstract treatise like Adam Smith’s Wealth of Nations, may with reference to a concrete case be quite inappropriate.”

See the opinion in Re Illinois Central E. & G. Co., 5 S.E.C. 115 (1939) for a discussion concerning a rate base, cost of reproducing property new, and their relationship to the issuance of new securities.

The matter of dividends and unrealized appreciation was considered in Randall v. Bailey, 288 N.Y. 280, 43 N.E. 2d 43 (1942).

Dr. I. R. Barnes, Public Utility Control in Massachusetts (Yale University Press, 1930).

Bonbright, The Impact of Inflation On Utility Rate Control, discussed in 47 P.U. Fort. 642 (1951); Braunstein and Johnson, Public Utility Depreciation and the Income Tax, 52 Harv. L. Rev. 1077 (1939). For observations on the use of eminent domain principles as criteria for utility rate making, see Hale, Conflicting Judicial Criteria of Utility Rates, 38 Col. L. Rev. 959 (1938); Beutel, Valuation as a Requirement of Due Process of Law in Rate Cases, 43 Harv. L. Rev. 1249 (1930).
reproduction cost new, replacement cost, current or present value. Propriety of their utilization\(^{38}\) is a derivative problem necessitating exploration for effectual consideration of the matter under discussion. While these bases function as parameters, in computations of the charge for depreciation, they are, themselves, residue from the application of other variables.\(^ {39}\)

Closely related to adoption of a reproduction cost new base, for example, is the topic of ascertaining of physical condition by observation. This phase, in turn, necessitates considering various current techniques\(^ {40}\) used in connection with field inspections of physical properties undertaken to determine their condition at a specified date.

The foregoing is an outer rim of the vortex of problems posed by economic conditions. Clearly, various concepts of depreciation, their ramifications, theories and application, must be subjected to closer scrutiny. The balance of this article will be devoted to detailed analyses of the main theme in support of particular suggestions in the area under consideration.

\(^{38}\) Freeman, An Enlightened Judgment Approach To Rate of Return, 61 Harv. L. Rev. 1380 (1948); Harbeson, The Demise of Fair Value, 42 Mich. L. Rev. 1049 (1944); Hale, Does The Ghost of Smyth v. Ames Still Walk, 55 Harv. L. Rev. 1116 (1942) [while this article was written before the decision in Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944), it contains thought provoking comments on the general subject matter of valuation]; Bonbright, Utility Rate Control Reconsidered in the Light of the Hope Natural Gas Case, 38 Am. Econ. Rev. 464 (1948).

\(^{39}\) West v. Chesapeake & Potomac Telephone Co., 295 U.S. 662 (1935), is illustrative of an instance where a regulatory body attempted to translate the dollar value of a public utility's plant into equivalent contemporary dollars. Portions of the opinion are devoted to striking down the use of price trend indices.
