legal purpose, I think the answer should be clearly in the negative. As indicated on page 1167 of the treatise, several of the current definitions of value can be put to a variety of uses, and the acceptance of one definition, for example in a particular type of damage case, does not preclude the acceptance of the same definition, for instance in a particular type of tax case. On the other hand, different definitions of value may be required for various types of property that are to be valued for the same purpose; and they may even be required for the same type of property valued for the same purpose but held by different types of individuals. Hence, my answer to the above question will afford small comfort to those who seek a solution for the terribly complex problems of modern legal valuation in the development of some great, consistent system of value theory.

With the last part of the review, which suggests three other methods of approach to a theory of valuation, I have no quarrel. Already the first of these methods has long been accepted by economic theorists and is now being applied to great advantage by appraisal experts, such as F. M. Babcock. As the review indicates, our own study tries to interrelate all three of them, although I dare say that our attempt has been crude and faulty. To be sure, none of these three methods of approach will supply answers to the types of questions emphasized in our book. But this statement is not meant to condemn them or to belittle their usefulness. Practical problems in the social sciences must be attacked from many different angles and by many cross-classifications of the issues involved.

A CONSTITUTIONAL RATE BASE

JAMES BARCLAY SMITH*

I

FOR many years valuation has been a contentious subject. The tremendous importance of the existence of effective regulatory power to the citizen at his fireside and to government in action has been attached in some way to valuation for purposes of discussion. The varieties of the adhesions are as numerous as the expressions. While legal restraints are involved, necessarily the subject value carries economic features. Great names have imposed stifling effect on refutation by those often characterized as lawyer-trained. Because, it is said, legal rules cannot equate economic balances. But the true economic standard does not

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seem to be clear even to great economists. Because value sounds of worth and normally carries economic connotation economists say that legal rules or the language of judges can never comprehend the evidence nor properly direct the course of governmental regulation. It might seem that either the belief in the nonexistence of a hereafter or of indifference to eternal fires gives spontaneity to such iridescence. Perhaps it is a problem in legal education. On this it has been said that "It is merely another way of saying that persons engaged in a highly complicated ceremonial, filled with all sorts of symbolism in which they believe salvation is to be found, are always disturbed by practical observations about the ceremonial. If they were not so disturbed, it would mean only that they did not really believe in the ceremony." The absence of disturbance is not because they really believe but because they feel compelled by the force of the established order to believe and at the same time recognize the infirmity of their position. It is this awareness of infirmity which makes the challenge seem to charge a breach of faith or honesty such that only by violent protestations can their declared purity and chastity be outwardly preserved. Again, "Professor Robinson realized the truth of Alvin Johnson's remark that heretofore the union of the legal and social sciences has been a beautiful example of cross-sterilization." In the first place the remark is not descriptive because in the theater referred to there has been no union. At the most the stage has reflected an interfusion through which the result is as if the whole had become gelatinous and the solids, though in suspension, nevertheless remained in complete isolation. Thereafter the shapeless mass tends to desiccate. If there had been fusion there could be no cross-sterilization and the only question would be the virility of the result. In the training of those who are to direct societal operation we are not concerned with whether or not "The economist or the psychologist must be willing to set aside his professional contempt for the law and master some of its methods and doctrines before he can locate the points where materials in his field might be helpful" but only with the statement that the lawyer "will have to cease his reading of the latest cases and become familiar in some degree with the concepts and theory of the economist." The cleavage never was by nature nor even by chance of birth. The dissension is the result of shortsightedness of the lawyer on one hand and of legal anosmia on the other. The result is a quarrel over

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Note 2 supra.
institutionalism and a failure to distinguish the occasion for direction and the evidence which indicates the course. All are involved in governmental regulation of business. Valuation is only an incident to that purpose. The special knowledge of all expert training which is relevant is necessary to its achievement. It is the purpose of this study to inquire if the established course of judicial decision makes impossible the utilization of these forces for the common good.

II

Regulation in its broadest sense is nothing more than an attempt by government to correct a supposedly economic maladjustment for the common good. The sovereign's expression must be considered in terms of its stature. This includes the nature of the scheme of government, its relation with the individual, the authorized manner of declaration of such standards of adjustment, the agencies through which the sovereign will may be effected, the correlation between governmental agencies, and the conditions arising from constitutional limitation upon the expression of valid general standards for public amelioration.

Nowhere else do fundamental constitutional principles receive so much profession and so little appreciation as in the problem of governmental regulation of public utility charges. While there may be other features to the scheme of our constitutional government, we are here concerned only with the limitations in favor of private liberty and property imposed upon governmental action. If our governments are created to govern for the common benefit under delimited powers, the manifestations of government may vary as expedient. Where rights and immunities are created in the individual there is a correlative disability in the government. This is the paramount distinction between our scheme of government and that of the unlimited power of the governments of other nations. Our concern here is not whether a better plan might be devised but whether existing limitations preclude reasonable expediency in effecting an admittedly wholesome public policy. We must first examine the common representation that the extension of the doctrine of judicial review, established in Marbury v. Madison, to administrative rate-making has no constitutional foundation. This is an error which is often brilliantly and forcefully insisted upon. Whatever the scope of the provisions of the original Constitution, since 1791 it has been clear that appropriation of private property

6 1 Cranch (U.S.) 137 (1803).
7 Clark, Individualism and the Constitution, Reports of New York Bar Association (1934).
for public use could not be made by the United States without compensation.\textsuperscript{8} When the police power to destroy value and curtail previously unrestrained liberty is exhausted further destruction is in effect an act of illegal appropriation even though effected directly by primary legislative action. Whether the destruction is achieved by primary or secondary legislative action, the resulting illegal appropriations are identical. There is no jurisdiction for governmental rate control of private business, and public utility operation is private business, after rates are reduced below what will produce a reasonable return. The full significance of the confiscatory nature of such uncompensated appropriation was not grasped in the early years of the transition from an all powerful parliament to a constitutionally limited legislature.\textsuperscript{9} The habit of thought was so complete that price fixing was an inherent legislative prerogative to be exercised at discretion that no case was brought to the Supreme Court under the Fifth Amendment. There was less occasion to question state legislation under state constitutions and there was no provision of the federal fundamental law to suggest attack on state legislation reducing charges to consumers.\textsuperscript{10} Nor was there occasion for the consideration of the underlying concept until long after the states were brought under similar restraint by the Fourteenth Amendment in 1868. As late as 1877 such legislation was recognized by the Supreme Court as having existed "from time immemorial" and was summarily dismissed as a political issue outside of the doctrine of judicial review with the comment that "for protection against such abuses by legislatures the people must resort to the polls and not to the courts."\textsuperscript{11} Even in 1890 a dissenting justice refers to confiscatory price regulation as a "legislative prerogative, and not a judicial one."\textsuperscript{12} Whether the imposition of a public servitude on the operation of

\textsuperscript{8} Fifth Amendment.

\textsuperscript{9} Cf. Riddell, The Constitution of Canada, "The prohibition 'Thou shalt not steal' has no legal force upon the sovereign body," p. 130 . . . . "a Provincial Parliament has the power to say that the property of A shall hereafter be the property of B—and so it will be—and that without the necessity of making compensation." "In Canada nobody is at all afraid that his property will be taken from him . . . . Our people are honest as peoples go, and would not for a moment support a government which did actually steal; a new government would be voted into power and the wrong righted," pp. 148–149.

\textsuperscript{10} The amendments first added to the Constitution "contain no expression indicating an intention to apply them to the state governments." Barron v. Mayor of Baltimore, 7 Pet. (U.S.) 243 (1833).

\textsuperscript{11} Cf. Guillotte v. City of New Orleans, 12 La. Ann. 432 (1857) tracing legislation from 1807 fixing wages and prices of the butcher, the baker, and the candlestick maker without question as to constitutionality.

\textsuperscript{12} Munn v. Illinois, 94 U.S. 113, 133–4 (1877).

\textsuperscript{12} Chicago, Milwaukee and St. Paul Ry. Co. v. Minnesota, 134 U.S. 418 (1890).
utilities more burdensome than reduction of rates to a reasonable level was the equivalent of the prohibited direct appropriation received more extensive and constant consideration than perhaps any other theory of constitutional principle. Through a course of powerful dissenting opinions the purpose of protection of private property from governmental trespass was found in 1890 to be applicable to indirect action.\textsuperscript{13} If protection against governmental trespass has substance it necessarily must shield the owner against destructive official action by whatever name the agency be called.\textsuperscript{14} Value becomes the legislative jurisdictional fact which shows whether or not the private property was subject to destruction at legislative discretion or whether a prohibited area was entered with resulting illegal uncompensated appropriation. This will receive further treatment later.

III

Before proceeding with the function and determination of value it is necessary for distinction to briefly observe the nature of the police power. This is required by the common observation that there is no more occasion to inquire about value in price regulation than in any other exercise of the police power.\textsuperscript{15} The police power is the residuary or inherent power of either of our governments necessarily implied to make possible the purposes for which either government was created. Inherent through our concept of social compact to representative democracy is the principle that initiative in official action is conditioned upon common or general welfare. It is the Constitution which imposes the condition upon legislative-executive action which would otherwise be uncontrolled. With us the government is for the governed, the official is an agent and the official body an agency authorized to act, in the police power, where the welfare of the whole community requires the suppression of the individual's activity. Unless the fact of common benefit exists the governmental action is arbitrary and malicious meddling. The correlative necessarily receives the phrasing that freedom from regulation of private property and business is the plan and regulation is the exception. Our Constitution by stipulation

\textsuperscript{13} Note \textit{ supra. Stone v. Farmers' Loan & Trust Co., 116 U.S. 307, 331 (1886): "This power to regulate is not a power to destroy, and limitation (of rates) is not the equivalent of confiscation. Under pretense of regulating fares and freights, the State cannot require a railroad corporation to carry persons or property without reward; neither can it do that which in law amounts to a taking of private property for public use without just compensation, or without due process of law."}

\textsuperscript{14} For the relationship between the courts and legislative action whether direct or indirect see Smith, \textit{op. cit. supra} note 5.

\textsuperscript{15} Cf. Hale, Conflicting Judicial Criteria of Utility Rates, 38 Col. L. Rev. 959 (1938).
established immunities from governmental action. This novelty which characterizes our political order gave rise to the contention that the general police function was withdrawn. The negative answer is spontaneous and has always been recognized. While the general police power has always existed it has always been limited by stipulated immunity from governmental or legislatively imposed servitudes upon private property unless the common need is established. The need for the power to destroy is absolute. When the need is satisfied the immunity is absolute unless the taking is compensated. Appropriation only begins when the immunity is violated. The impingement is fully recognized: "The Constitution does not secure to anyone liberty to conduct his business in such fashion as to inflict injury upon the public at large, or upon a substantial group of people. Price control, like any other form of regulation, is unconstitutional only if arbitrary, or demonstrably irrelevant to the policy the Legislature is free to adopt, and hence an unnecessary and unwarranted interference with individual liberty."  

16 Speaking of the subject the Court has from the first presentation always carried forward the gist of its answer in Gibbons v. Ogden, 9 Wheat. (U.S.) 1 (1824), namely, that equally fundamental with the position of the individual is the power of all of the people through their common agency to regulate for the general welfare. Speaking specially of inspection laws the Court said that such laws form "a portion of that immense mass of legislation which embraces everything within the territory of the state, . . . all of which can be most advantageously exercised by the states themselves. Inspection laws, quarantine laws, health laws of every description, as well as laws for regulating internal commerce of a state, . . . are component parts of this mass." (Italics added.) The power of Congress "to regulate commerce" is a power which is subject to the same limits in the commerce among the states as is the power of the states to regulate practices within their jurisdiction. "The incidental effect which such reasonable rules may have, if any . . . does not constitute a taking but only a reasonable regulation in the exercise of the police power of the national government." Chicago Board of Trade v. Olson, 262 U.S. 1 (1923). "We have frequently said that in the exercise of its control over interstate commerce, the means employed by Congress have the quality of police regulations." Kentucky Whip & Collar Co. v. Illinois Central R. R. Co., 299 U.S. 334, 346 (1937).

17 "In the ratification of the Constitution these guaranties were not thought sufficient. The ratifying convention of Virginia proposed on June 27, 1788, that a declaration of rights (together with other changes) be inserted in the new Federal Constitution. The New York convention about a month later adopted an elaborate declaration of rights. In the ratification by these and other states, there was a substantial agreement that certain individual rights should be guaranteed through constitutional amendment. On August 1, 1788, the North Carolina convention declined to ratify the Constitution without a declaration of rights and other amendments, and ratification by this state came on November 21, 1789, after Congress had submitted twelve proposed amendments. Rhode Island did not ratify until May 29, 1790, and even at that late date proposed a series of amendments, some of which had already been submitted to the states by Congress. The first ten amendments to the Federal Constitution, proposed by the First Congress in 1789 and ratified in 1791, may thus be regarded as supplements to the original Constitution as framed in 1787." Dodd, Cases on Constitutional Law 793 (2d ed. 1937).

is the legislative jurisdictional fact whatever the nature of the infection to the body politic. If it does not exist the consequence of the legislative action is not legal destruction but illegal appropriation of private property. Unless there may be judicial review of the legislative-administrative action there is no constitution. 19 Even in the clearest possible case the property owner is entitled to a determination of the propriety of the claim of police power. "The right to so seize and destroy is, of course, based upon the fact that the food is not fit to be eaten. . . . . A determination on the part of the seizing officers that the food is in an unfit condition to be eaten is not a decision which concludes the owner." 20 Referring to Lawton v. Steele the Court said the owner "would not be bound by the determination of the officers who destroyed them, but might question the fact by an action in a judicial proceeding in a court of justice," and if he can show "that the alleged nuisance did not exist, he will recover judgment, notwithstanding the ordinance . . . . under which the destruction took place." While it is true that there is no more occasion for determining judicially the legislative jurisdictional fact for police power price-fixing than in any other exercise of the police power there is obviously just as much. It exists in all cases upon the plea of confiscation. There is, therefore, no distinguishing feature in the issue we are pursuing. This returns us again to the question of how price reduction could have been held to be property destruction so as to be within the scope of this doctrine. Nothing could seem simpler than that if the constitution provides immunity to the private owner from direct action there is no force to the prohibition to governmental action unless indirection having the same consequence as direct legislation is also within the prohibition. Thus the evolution of decision from Munn v. Illinois into Chicago, Milwaukee & St. Paul v. Minnesota was not misdirection but inevitable. 21

IV

That official discretion is not unlimited in price-fixing is the great obstacle to the validity of such conduct. If we can identify the function of

19 Note 6 supra.


In United States v. Carolene Products Co., 58 S. Ct. 778, 783 (1938), the Court says: "We may assume for present purposes that no pronouncement of a Legislature can forestall attack upon the constitutionality of the prohibition which it enacts by applying opprobrious epithets to the prohibited act, and that a statute would deny due process which precluded the disproof in judicial proceedings of all facts which would show or tend to show that a statute depriving the suitor of life, liberty, or property had a rational basis." The question for decision was whether the statutory characterization of filled milk as injurious to health and as a fraud upon the public precluded judicial inquiry into the nature and effect of the practices and facts. Cf. Filled Milk Act, 21 U.S.C.A. §§ 61–63.

the rate base the purpose and determination of constitutional tests will be less obscure and difficult. When an infection threatens, it can be controlled by whatever degree of supervision is necessary to protect either the body-politic or the body-natural for the general welfare of the state. The individual may be confined in the use of his property or his personal liberty. His beautiful cedar trees or his dairy herd may be destroyed; his buildings may be limited in height or use; if he is a typhoid-carrier he may be indefinitely incarcerated; he may not permit his jungle tiger to roam the crowded streets. All of such regulations are only examples of the correction of maladjustment to an acceptable standard. The means employed to achieve that end are valid if they have a substantial relation to the policy being pursued.

There are many types of correctable economic maladjustments of which the best marked is the common law monopoly. Perhaps the chief reason for its ostracism was its effects on prices. Certainly it is clear at this date that if the correction requires control of prices, prices as any other incident of private property can be abated. If the social disease be as it was in the *Nebbia* case, no issue of return or base arises. We are concerned only with whether a utility has charged too much. And we may define a utility for our purpose as an industry upon which the community has become so dependent that it is no longer privileged to pirate its position of vantage by unsupervised pricing. The only alleged wrongdoing is piracy or extortion through its position. The object of the regulation is not to fix any percentage of profit on investment much less to value the property. It is to reduce charges to consumers, a public servitude imposed upon utility property described as devoted to a public use. If the owner's investment justifies his profits the state has no jurisdiction to reduce his charges. That the police power extends to excessive charges is not open to discussion. The only function which the base can have in the program of rate making is as a partial defense to show that the difference between the owner's outlay and his inlay is not exaggerated. How the state computes the base or what it is found to be cannot control if the owner is unable to establish that the capital value devoted to the public is so great that the net operating return leaves so small a margin of profit that the Court must say that the state has exceeded its sovereign power and has imposed an

22 Note 18 *supra.*

23 "Therefore . . . the income actually in enjoyment cannot be a factor in determining the value of the property at all, because that is the very unknown quantity we are endeavoring to make specific." "The very purpose . . . of this bill and the valuation that is proposed is to enable us to ascertain in a proper way whether a given income enjoyed by a particular common carrier is too large or too small." Senate Rep. 1290, 62d Cong., 3d Sess. 701 (1913).
excessive use or servitude upon private property. When must the judiciary hold legislative-executive action violative of constitutional limitation? In addition to the inertia of the judiciary in cases of departmental over-reaching police power issues carry a wider border for legislative choice than do ordinary cases. What measure may the state use to ascertain the borderline to go beyond which must be held to be trespass?

V

All agree that regulation of utility charges is necessary and desirable. The task at any event is not a simple one. The expense, delay, and disruption to business caused by frequent valuation proceedings are enormous. If constant repetition of reappraisal be necessary few will approve and none can justify regulation of private property by such dilatory, expensive, and irritating practices. So far, because of them, except in isolated instances, regulation has not been regulation in fact but license for exploitation. There is nothing in the decisions of the Supreme Court which approves, much less requires, such methods.

In the first place a misplaced emphasis has been attached to the base while the important factor is return. As will be later pointed out, this was consistent with the interest of at least one side's position and directed the Court's attention particularly to one and not the other. Extended discussion of issues pressed does not mean decision of relative importance. Our terms are expenses, rates, profit return, value, and income. All are expressed in money. None is for this purpose a tangible physical thing to be measured by some arbitrary, infallible, fixed standard. While return must be kept in mind throughout and will be developed at more length after the base is discussed some immediate attention must be given to its relative importance.

The peculiar legal position of the regulated, monopoly public utility, as compared to competitive industry is well recognized. In Hegeman Farms


"The legislative discretion implied in the rate-making power necessarily extends to the entire legislative process, embracing the method used in reaching the legislative determination as well as that determination itself. We are not concerned with either, so long as constitutional limitations are not transgressed. When the legislative method is disclosed, it may have a definite bearing upon the validity of the result reached, but the judicial function does not go beyond the decision of the constitutional question. That question is whether the rates as fixed are confiscatory. And upon that question the complainant has the burden of proof, and the court may not interfere with the exercise of the State's authority unless confiscation is clearly established." Los Angeles Gas Corp. v. Railroad Commission, 289 U.S. 287 (1933).


Corporation v. Baldwin after pointing out that the Constitution "does not protect a business against the hazards of competition," the Court says that when subjected to maximum rates "a public utility . . . has no outlet of escape. If it is running its business with reasonable economy, it must break the law or bleed to death. In a business not subjected to maximum prices "If the price is not raised, the reason must be that efficient operators find that they can get along without a change."

Much of the misplacement of emphasis upon the value of the plant is due to the fact that return has usually been expressed as a percentage. An expression for convenience is subjected to the charge that it is an ossified formula. How this form of expression came to be used is of little concern. Its significance in rate-making is important. The reason for price regulation is not that the rate is high but that the owner is taking too much profit. There can be no profit until expenses are paid. When the capital employed is determined and the costs of operation are computed, it is of little importance whether one is expressed as a percentage of the other or not. What is important is that costs must be deducted from receipts before any question of profits can arise. While the value of the use of money in the particular type of risk may be a factor, that it is only one is fully recognized by the Court. "Sound business management requires that after paying all expenses of operation, setting aside the necessary sums for depreciation, payment of interest and reasonable dividends there should still remain something to be passed to the surplus account; and the rate of return which does not admit of that being done is not sufficient to assure confidence in the financial soundness of the utility to maintain its credit and enable it to raise money necessary for the proper discharge of its public duties."

Whether sums received from rates for necessary operating costs equal three or four or twice as much more percent of the capital account they must be allowed for in the rate. They command the percentage. They are independent of any ratio. In fact in their determination the capital account is irrelevant. The properties are involved because it is the cost of their efficient employment that is to be predetermined. When these have been adequately provided for, as it is only the whole return and not its separate component parts with which the judicial inquiry is concerned, it becomes apparent that the probability of unconstitutionality of the legislative-administrative action is minimized. There is another factor which may even be controlling. It is public policy. While the state has the power to destroy value reflected from profits to the point

27 293 U.S. 163, 171 (1934).
of confiscation it is not compelled to exhaust its power. It need not regulate at all. These are the two extremes. The latter has been eliminated by the facts. But in the exercise of administrative discretion something more than the utilities' constitutional right may be allowed in the return without violating any consumer's right to minimum rates. If such allowance is made the probability of judicial interference is again reduced as the excess is a part of the whole and only the whole return concerns the judiciary. If it appears that all proper operating costs have been compensated this excess becomes allocable to any deficiency which might appear in the allowance for use of the owner's capital impounded in the plant. We must now examine the standards insisted upon by the Court for the determination of this element. When determined, the consideration which it must receive in the rate and return becomes paramount.

VI

We are brought to the problem of the so-called rate base. It has been demonstrated that the only function of what is commonly referred to as the base or value of the plant relevant in the process of judicial review of administrative-legislative action is as a partial defense in support of the plea of confiscation. The rate-making body should consider it, firstly, in order to stay within its authority, and, secondly, to demonstrate, when its action is judicially questioned, that it has made allowance therefor as great as the owner's constitutional right. Smyth v. Ames has been approved in every case since its decision whenever the plea of confiscation from regulated utility rates has been before the Court. No decision having so much influence upon the economic and political adjustments has received such consistent and repeated approval by specific or included citation and confirmation. It is not merely a case but a course of decision and justifies extended treatment to assure a common meeting ground. Did the Court say that the legislature should allow a reasonable return on a fund equivalent to the actual expenditure of the owner, or what it would cost at the date of the fixing of the rates to build the same plant or one as adequate, or that the value base should be found by capitalizing as some specified rate the income (gross or net) being earned under the existing unregulated rate, or did it say that upon the most reliable evidence available the issue of confiscation should turn upon such sum of money as at the time of construction and consistent with sound and honest business practices would have been required to produce the presently

29 169 U.S. 466 (1898).
useful plant and which impounded through it is devoted to the use of the public?

If the judicial issue is whether the utility owner is being paid too little for the use of his property and that payment is in money, while the plant is composed of physical sticks and stones and steel, and for convenience, the courts sometimes employ the term physical value, the value referred to cannot be a physical trait but must be a relationship also expressed in terms of money. This is inescapable regardless of how either return or value are to be determined. While the balance must be struck by the weight of reason and practical experience and not by the weight of lead the same may be said of other adjustments of human and legal relations and supplies no novelty or devastation to the task of regulation. The use of the term value where the function of the relationship is different neither makes its uses synonymous nor the functions identical any more than is true of the different adjective functions of other words, i.e., good, bad, red, and yellow.

VII

When competitive business or properties are sold the price is the relative attractiveness of the going concern compared to a sum of money described by the price to the seller and buyer. It is stated as the amount for which the property would sell under ordinary conditions as contrasted with a forced sale. This market or exchange value is computed by capitalizing anticipated net earnings under a specified rate. The basis of this estimate, and it is an estimate, is the earning power of the business as a going concern. But earning power depends upon rates, and where the rate is the issue to use exchange value as the rate base would be to establish rates by the rates themselves. Since market value is primarily a capitalization of earning power and earning power depends upon rates, we cannot find rate-making value by exchange standards. If exchange value were the base for rate-making, no rate could be reduced without a destruction of property because ordinarily property would be destroyed to the extent that capitalization of rates under reduced rates is less than under existing rates.

Although the Supreme Court has definitely, continuously, and repeatedly rejected exchange value as the rate base many still talk as if the contrary were true. Prior to 1898 the Court had treated the question of value in regard to taxation and condemnation. In each the purpose is

30 Cf. United States v. Chandler-Dunbar Co., 229 U.S. 53, 81 (1913): "The owner must be compensated for what is taken from him; but that is done when he is paid its fair market value for all available uses and purposes."; Boston Chamber of Commerce v. Boston, 217 U.S. 189, 195 (1910): "The question is, what has the owner lost, not what has the taker gained."; United
to leave the individual in as good a position comparatively as if he had not been visited by the state—in expropriation to leave him with what he could have sold for at the time; in taxation in a position in comparison with other taxpayers so that their relative position is maintained. The Court was neither ignorant nor careless in excluding this test as the measure of value of the rate base in *Smyth v. Ames*. "The probable earning capacity under particular rates prescribed by statute, and the sum required to meet operating expenses" is often quoted from that case as requiring a capitalization of earnings to find the base value. But the Court was familiar with the measure of value in condemnation and taxation cases and within a year sanctioned a reduction of rates at the same time that it affirmed the facts evidentiary of value as therein declared for rate-making, it could not have intended exchange value to be the measure of the rate base. The above quotation was not used in that case to establish capitalization of earnings as the measure of the rate base value but was used in connection with rate-making policy (as will subsequently be shown) to test a rate which, operating in the future, will provide a reasonable return without the need of immediate revision to avoid confiscation. At any event operating expenses would have to be met before there would be any income to capitalize.

States v. New River Collieries Co., 262 U.S. 341, 343 (1923): "The owner was entitled to the full money equivalent of the property taken, and thereby to be put in as good position pecuniarily as it would have occupied, if its property had not been taken."

Cf. *Note 13 supra*. Six years after the Railroad Commission cases and four years before *Smyth v. Ames* the Court recognized that rates could be constitutionally reduced. *Regan v. Farmers Loan and Trust Co.*, 154 U.S. 362 (1894). Market value measured by capitalization of earnings was approved for expropriation in *Monongahela Navigation Co. v. United States*, 148 U.S. 312, 328 (1893), the Court saying: "The value of property, generally speaking, is determined by its productiveness,—the profits which its use brings to the owner. . . . These tolls, in the nature of the case, must enter into and largely determine the matter of value." The Court had always noticed that reduction of utility rates destroys value. In *Munn v. Illinois*, 94 U.S. 113, 143 (1877), it was said by Justice Field that if rates were reduced "the amount fixed will operate as a partial destruction of the value of the property, if they fall below the amount which the owner would obtain by contract," and it was recognized by the Court that the reduction would "operate as a partial destruction." *Id.*, at 134.

"The property is not ordinarily the subject of barter and sale and, when rates are in dispute, earnings produced by rates do not afford a standard for decision. The value of the property, or rate base, must be determined under these inescapable limitations. And . . . the Court has refused to be bound by any artificial rule or formula which changed conditions might upset. We have said that the judicial ascertainment of value for the purpose of deciding whether rates are confiscatory "is not a matter of formulas, but there must be a reasonable judgment, having its basis in a proper consideration of all relevant facts." *Los Angeles Gas & Electric Co. v. Railroad Commission*, 289 U.S. 287, 305 (1933).

Cf. *Newton v. Consolidated Gas Co. of New York*, 258 U.S. 165 (1922): "When it became clear that the prescribed rate had yielded no fair return for more than a year, and that this condition would almost certainly continue for many months, the company was clearly entitled to relief."
Under the conditions existing in 1898, the lines of the Union Pacific could have been built across the State of Nebraska for about $20,000 a mile. Because of "injudicious contracts, poor engineering, unusually high cost of material, rascality on the part of those engaged in the construction and management of the property," under the conditions existing at the time of construction, the cost to the security holders was nearly five times that much. In Smyth v. Ames the utility contended for a valuation measured by the securities issued and bitterly opposed the argument of the State for a base measured by the then cost of reproducing the properties. With the turn of the century construction costs began to rise rapidly. As the previously made expenditure did not change the graph lines soon crossed. As the two approached each other the importance of either position decreased. The cost at any given time of building similar property became the greater, and as the trend remained rather constantly upward while the value once claimed remained constant, reproduction new became the lodestone of the utilities in all valuation for rate-making. Finding no embarrassment in changing their position, they naturally sought to fortify their new entrenchment. They argued that the word "present," adjective of "value," called for a complete review and reappraisal in reaching a "reasonable judgment" figure on all evidentiary facts thereof for and during each rate period. As the trend was upward this was constantly self-serving. Secondly, it was contended that the present cost of reproducing the existing property is the exclusive measure (plus, of course, going value, etc.) of value for rate-making. "This insistence upon cost of reproduction new at current prices to the exclusion of everything else, or at least everything that might tend to lower value, calls for the closest scrutiny."

The cost of reproduction is asserted by its proponents as the true basis of what the present physical plant is "worth." The difficulty here is that, if we inquire the present worth of the existing plant, we must look at it either as a living concern, or at it as dismembered, or as assembled but devitalized. The first calls for a capitalization of earnings, which valuation is irrelevant as evidentiary of value for rate-making. The second commands only scrap value, and the third is beyond the realm of facts. It is purely speculative to imagine what a new company would pay for the plant with-

\[33\text{ Naturally there was little litigation when no material difference would result from the acceptance of either theory as the measure. When the intersection was safely passed the utilities quite graciously took the cue and in the Minnesota Rate Case, 230 U.S. 352 (1913), the orphan reproduction new was definitely adopted.}

\[34\text{ Excess Income of the Manufacturers Railway Company, 124 I.C.C. Rep. 3 (1927).} \]
out a franchise in preference to building an imaginary new plant. Neither
such new company nor such purchase is possible under the facts. The
plant is part of a going business. This test would call for the cost of
reproducing the service and not the (physical) value of the existing plant.
Assuming such imaginary buyer would look only at the plant without the
business, in contemplating the construction of a new plant he would be
concerned only with duplicating the service or the production not of an
identical plant but of a plant of equal capacity. Obsolescence may make
this possible at a fraction of the cost of building an identical plant.

The reproductionists claim allowance for unearned increment because,
it is said, there is no reason for allowing it in competing business and
denying this stimulus to investment in utilities. Among other reasons why
this claim is without merit are those involved in realization. In unregu-
lated competing properties enjoying a market for other uses, unearned
increment may be realized through sale. Regulated public utility proper-
ties are not for sale and whether neighborhood changes create or destroy
the attractiveness of the property for other uses is wholly immaterial on
the question of costs either to the owner or to the consumer. If it did have
some relevancy to the utility operator it becomes a two-edged sword.35
From pure economic theory appreciation instead of being added to the
capital account and reflected in an increased charge to consumers with
more propriety might be charged as income to the owner and taxed as
such.36 It is further said to be a social loss unless allowance is made when
consumers would pay more for some other use. Again, we are dealing with
utilities—they are regulated and a substituted use in this sense is beyond
the practical. Further, the argument involves the use of an element sought
to be found as a means of finding it. If the community is willing to pay for
the utility service at a reasonable rate, it is as socially desirable in this
sense as any other service. Neither does the theory solve the question of

34 "Income is the money value of the net accretion to one's economic power between two
points of time." Haig, The Concept of Income (1921).

35 "It was possible at the outset to say that capital gains and losses were not income at all;
they are not popularly so regarded, and in Great Britain for example they are not taxed as
such. In this country we have decided otherwise, and that step taken, we might have gone
further and said that any increase in value was income; that would have been awkward in ad-
ministration;—it would involve an annual appraisal of all the taxpayer's goods—but it would
have been rational. The Supreme Court held otherwise; the gain must be 'realized.' " Hewitt
Realty Co. v. Comm'r, 76 F. (2d) 880, 884 (C.C.A. 2d 1935); per Judge Learned Hand.

Another objection is that a change in the money worth of a commodity at the end of a period
may be nothing but a fall in the value of gold. Foreign unearned increment taxes have re-
moved this objection by reference to index prices. Cf. Helvering v. Winmill, 59 S. Ct. 45, 47
and note 10 (1938).
economic waste in a monopoly serving a traffic which would not move under a rate high enough to yield a normal return on present construction costs, because the present construction cost to measure economic justification would be the cost of reproducing the service through the most efficient hypothetical new plant imaginable and not the present, partially obsolete, plant.

Without emphasizing forces of competition in unregulated fields, the argument is frequently made in favor of reproduction new as the only means of securing new construction. If new plants are to be built, the cost is measured by prices at the time of construction and return must be allowed on these prices. But as the new would compete with the existing and if their prices were limited to prudent investment their rates would be lower than the new utility could meet without sacrifice of investment, therefore, new construction will be discouraged unless reproduction new is adopted as the rate base. In parallel it is argued that reproduction new will encourage just enough construction to handle economically justified traffic. The fallacy of these arguments is indicated above. It should be noted also that it is a fallacy to segregate additional earnings and new capital required for extensions from earnings and cost of the entire plant. History has shown the utter futility of attempting to enforce such a theory.

The cost of reproduction seems to fluctuate more widely than any other suggested rate base. This is so because it is wholly an estimate making possible extravagant self-serving assertions as well as wide differences of opinions expressed in good faith. The records show variances ranging to several hundreds percentum both between sides and between the experts of the same side. The variables are so great that if in fact there were not wide differences the probability of independent estimates would be slight. There is no check or balance to weigh against a conclusion other than some other "expert." Aside from witnesses' individual differences vertical fluctuations have been violent and its instability as a rate base is shown by the annual fluctuations. Violent fluctuation has been rather common since the World War. A familiar example demonstrates the deceitfulness of this base theory. The round number steam railroad valuation under cost of reproduction new was eighteen billions in 1919, forty-one billions in 1920, thirty-five billions in 1921, twenty-two billions in 1922, and thirty-one billions in 1923. During the same period the net additions and betterments were around four billions. It would have been much cheaper for the country to have given the additions than to gratify the reproductionists' theory of attracting new capital and so to have permitted the
increase of the public debt some twenty billions. The opposite consequence attaches to the expenditures actually made during the high prices—nearly fifty per cent would have been wiped out within a year. This instability is enhanced by the uncertainty of the time when the revaluation may be made. Theoretically it should be made with each material shift. This would mean the breakdown of all regulation. In spite of the obvious, unearned increment is held forward as an attraction to capital. But about two-thirds of the outstanding securities are fixed income and so unaffected while the balance in common shares becomes a sinkhole.

The companion argument is that reproduction new by following prices stabilizes income and stimulates construction during low cost periods in order to gain advantage of future rises. No one knows when or if prices will rise and the utility cost cycle varies widely from other cost cycles. Further complications arise from the fact that extensive utility construction affects other commodity prices which in turn affect utility construction costs.

The reproductionists answer the allegation that reproduction new as a base is expensive, uncertain and highly litigious by the assertion that it is simple and stimulates efficiency. Administratively simple, it is said, because it can be brought down to date by index multipliers. The practical difficulty with the multiplier argument is that often there are no facts upon which reliable multipliers may be computed. The multipliers during such periods must be compiled largely from manufacturers' records and price statistics, but these are not market prices as the purchases were not made, and they do not allow for improved methods of assembly and construction. An increase in the former might be offset by a decrease in the latter. Disregarding these weaknesses, multipliers are not applicable to the intangibles claimed nor even to the physical elements if the reproduction new base is measured by the cost of duplicating the service rather than duplicating an obsolete equipment. The efficiency argument has been made only during the periods when the cost of reproduction new has

37 Cf. the reputed soundness of investment in 1930 in miniature golf courses.

38 From the date of Ames v. The Union Pacific Railway to 1914, because of economies, railroad construction did not vary greatly although wide differences occurred in the prices of labor and materials. Taking the wages, etc., index with 1919 as 100, 1920—230, 1921—195, 1922—157, and 1923—194, the change in rates would be: 1920—increase of 114 per cent, 1921—decrease of 14 per cent, 1922—decrease of 18 per cent, and 1923—increase of 10 per cent. This would hardly have been attractive to capital.

been so high that regardless of efficiency a reasonable return thereon could not be exceeded.

The rate assured the railroads during the period of federal control was based on average net railway operating income for the three years 1914–1917 inclusive. This was determined without regard to prices. Business judgment precluded a demand for a rate which would produce a reasonable return upon the cost of duplication. Public indignation would not have tolerated such exorbitant charges where no expenditure had been made. At no time during the period 1920–26 did the rails as a whole receive as much as six per cent on reproduction new cost, but during that period the market for their securities improved and the trend of interest was downward. If rates had been computed on a reproduction new base the increase in 1920 would have been from about seventy-five to ninety per cent instead of from about twenty-five to forty per cent. Assuming the consumer would acquiesce, the profits would have gone to the common shares. The converse of this is what makes the duplication base attractive to the market manipulator.40 For example, the 1920 prices as compared to the 1914 prices would have justified doubling the security issue while at present nearly one-half of them would be water. These wide fluctuations make the fixing of rates for any period of reasonable duration impossible with the result that adjustment would have to be made very frequently if reproduction new were the measure of the rate base.41 Nothing could be more disrupting to business than abrupt shifts in general rate levels.

IX

In the foregoing discussion the term reproduction has referred to a process of hypothetical duplication of the existing structures. It is also used in another sense, namely, reproduction of the service. If we were confronted with the task of building a plant, we must either duplicate the existing plant or build one that is different. In industries controlled by competitive forces, the entrepreneur is concerned only with what it will cost him to place a commodity on the market. He is not interested in duplication of obsolete machinery but with the cheapest and most efficient modern devices. Prices under such conditions are supposed to be just

about the point where a competitor can afford, or cannot afford, to enter the field. The value of a plant is about the cost of duplicating the service rendered. If exchange value, or what a willing buyer will pay, were the issue, duplication of the service must be considered because our buyer would not pay more for an existing plant than what he thinks just as good a plant would cost. To the extent that the service may be duplicated by more efficient modern machinery, obsolescence has accrued in the existing plant. This may go so far that the old plant is of little or no value for sale. It might occur in the briefest period of time through new invention although there has been no physical depreciation. So far as the cost of reproduction new is advanced as the exclusive test of value for rate-making this attack is overwhelming. Each assumes a competitive market for product or plant or both. Proof of value by evidence of reproduction cost presupposes that a plant like that being valued would be reconstructed, but this is not true if it were obsolete. In value for rate-making reproduction new cost is not the measure of the base but only the estimated cost at the time of valuation of duplicating the physical plant used and useful in the public service and is accepted as evidence in reaching a judgment estimate of the amount reasonably necessary and expended in its production. Utilities are not freely competitive and exchange value is irrelevant.

While functional depreciation as distinguished from physical may have nothing, through the mere fact of its accrual, to do with the fair value of the plant, it is a matter which should be considered in every accounting system. Because of the fact that sooner or later the present equipment must be replaced, charges should be set up against operating income. The purpose is to spread the loss over a long period. But as the function of rate making is to protect the fair investment, obsolescence not so provided for cannot be deducted. It may accrue through competing enterprises although the special field is closed—busses cut railroad patronage. In this way functional depreciation may become important in rate making policy. A lowering or other rate adjustment may multiply traffic so as to produce a reasonable return. It may be that no adjustment of rates would produce a reasonable return. The fact that no interest is paid does not disprove the loan. Furthermore there is no constitutional guarantee to the owner or lender of a substantial return. His right is limited to freedom from interference with returns less than a fair return. While it is true that the difference between scrap value of existing property and the cost of building a modern, efficient, new plant is the same no matter what caused the

42 "Our concern is with confiscation. Rate making is no function of the courts." Pacific Gas & Electric Co. v. San Francisco, 265 U.S. 403 (1924).
failure to make the replacement, nevertheless the "consumers pay for service, not for the property used to render it," and the cost of reproducing the service is not the rate base, nor even a fact evidentiary of such value. The consumers pay for the service but they pay for the reasonable cost of service received under efficient operation of the existing plant, and the cost of the service above quoted means what reasonable outlay was necessary to render service received. This is shown by the facts in that case, and other statements by the Court. There was no issue of reproducing the service, but merely if future deficient earnings could be made up from past excesses. These excesses had been plowed into the plant, and of them the Court says, "the just compensation safeguarded to the utility by the Fourteenth Amendment is a reasonable return on the value of the property used at the time it is being used for public service," and "constitutional protection against confiscation does not depend on the source of the money used to purchase the property. It is enough that it was used to render the service." Obviously reproduction of the service may be a belaying-pin to the reproduction new proponents, but careless use of language in one instance cannot be made to spell reproduction of the service as the rate base out of the New York Telephone case. Of course the public pays for service. I should not pay subsidy to the Edison Company merely because it owned a plant if no electricity is furnished. It is "compensation for the service given to the public," a fact, with which we are concerned. Purely speculative theory is immaterial and irrelevant, as are exchange values and sales prices. In the Consolidated and Des Moines Gas cases value not represented by legitimate expenditure was excluded.

X

There is no case in the history of the Supreme Court wherein the Court does not refer to the "cost" of property in connection with fair value for rate-making. To ascertain this cost all relevant facts must be weighed and a reasonable judgment reached without the aid of formulae. It is in this that the cost of reproducing the present physical plant is a relevant evidentiary fact. The plant presently used at the time of determination of such ultimate fact is taken because that represents tangibly a major portion of the cost to the lender to produce the service rendered. "Present" plant eliminates from consideration an imaginary plant and obviously

46 Ibid.
physical depreciation must be subtracted or we would not be dealing with facts but with some different hypothetical plant. This is the element called for in *Smyth v.Ames* and all cases since that date. At the time that case arose there was no reliable evidence of a single source of that reasonable expenditure necessary to produce the plant existing at the time of valuation. The issue was purely judicial—the ascertainment of that fact. As in tort or crime or any other type of issue, the Supreme Court indicated evidentiary facts which must be considered in a judgment of ultimate fact. Is there any formula or rule of thumb for judicial determination of fact in such cases? What it would now cost to build that plant was judicially noticed in *Smyth v.Ames* as not the fact sought but was required by the Court as a check, caution, or evidentiary fact. In the *Southwestern Bell* case where no issue of plant efficiency was involved, the State Commission had not followed *Smyth v.Ames* in that it did not consider the cost of reproducing the plant in use at the time of valuation, but in lieu of that cost used an amount more than twenty-five per cent less. Adherence to *Smyth v.Ames* required a rejection of the state commission’s determination.

The language of Mr. Justice Butler “it is clear that a level of prices higher than the average prevailing in the ten years ending with 1923 should be taken as the measure of value of the structural elements on and following the effective date of the rate order complained of” in the *McCardle* case has been mistaken as a benediction by the reproductionists. We search in vain for any expressed intention on the part of the Court to overrule *Smyth v.Ames*. The discussions by the Court arise from the statement by the state commission whose determination was in issue. It said: “Considering all the facts, including all the appraisals and other evidence concerning the trend of prices, the commission is of the opinion that in this case the average prices for the ten-year period ending with 1921, the last ten years available, most nearly represent the fair value of the petitioner’s physical property.” The end of this average period was more than two years before the rate order became effective. While the average price so determined was higher than the original cost, it was lower than the cost of reproducing the plant at the time of ascertaining the legitimate expenditure to produce it. An arbitrary figure was taken, a


48 272 U.S. 400 (1926).

formula, in effect, which was not even one of the evidentiary facts re-
quired by Smyth v. Ames to be considered. The peculiar localization of
this service strongly demanded the consideration of the evidentiary fact
of value, namely, the cost of duplicating the physical plant at the time its
value for rate-making was being determined, but the McCardle case is not
a holding that the cost of duplication of either the plant or the service is
the exclusive measure of value for rate-making. If a study of the case
itself leaves this conclusion in doubt, we may look to the subsequent
explanation of the Court itself to glean its intention in the McCardle case.
In the O'Fallon case,\textsuperscript{50} citing decisions from Smyth v. Ames to the McCardle
case, inclusive, the Court says: "The elements of value recognized by the
law of the land for rate-making purposes have been pointed out many
times by this court. Among them is the present cost of construction or
reproduction."\textsuperscript{51} Further, and consistently adhering to its long-declared
policy that this expenditure be determined in reasonable judgment weigh-
ing all relevant facts, the Court refrains from stating a formula, saying,
"the weight to be accorded thereto is not the matter before us. No doubt
there are some, perhaps many, railroads the ultimate value of which
should be placed far below the sum necessary for reproduction." (Is there
a formula in tort, crime, or contract that fits all cases?)

Neither reproduction new nor reproduction of the service has ever been
approved by the Court as the exclusive measure of the rate base. If one
were to be selected as the manner of determining the base the latter, al-
though it does suffer from a hereditary ichthyosis, would have something
in theory to recommend it. The former was the measure contended for by
the State in Smyth v. Ames. It continues to be contended for by the utili-
ties in all cases where if accepted it would call for a higher base than would
result from any other recognized theory. We must now examine the other
theory of valuation presented in Smyth v. Ames, namely, the theory ad-
vanced by public utility.

XI

One of the oldest of the various so-called rate bases is "original cost."
It is the total financial sacrifice incurred by the security holders. It is
immaterial to this base whether the expenditures in setting up the prop-
erties were frugal or prodigal. It does not deal with present properties.
The base is permanent in quantity and is brought to date merely by
adding net expenditures. It is permanent or fixed in the sense that we

\textsuperscript{50} St. Louis & O'Fallon Ry. Co. v. United States, 279 U.S. 461 (1929).
\textsuperscript{51} Italics supplied.
refer to a fact, how many dollars have been contributed to the enterprise. This was the base contended for by the carrier in *Smyth v. Ames* but it was not accepted there and has subsequently been rejected by the Court as the exclusive measure of the base.\(^5\) While the court has definitely rejected this base as it has the cost of duplicating the physical plant or reproduction new, both of which were claimed by the respective parties in *Smyth v. Ames* as the exclusive measure of value for rate-making purposes, it has recognized each as one of the relevant facts to be considered in reaching a reasonable judgment of the cost of the plant.

As the original cost theory deals only with the sum contributed, the elements of depreciation, appreciation,\(^5\) and unearned increment are wholly irrelevant.\(^5\) Going value is relevant as the failure to obtain a return on the investment until the business norm is reached is a loss or part of the contribution or financial sacrifice of the investor. The chameleonic use of the word "depreciation" has led to much confusion. *Smyth v. Ames* requires by its own statement the subtraction of physical depreciation of the structural properties valued in order to establish what the structural properties are for reproduction new. But the deduction of physical depreciation from one of the evidentiary facts does not mean that it should be deducted in the original cost theory or under any other theory, or from the judgment estimate. This confusion has led some to feel that the action by the Supreme Court in the *Blue-Field Water*,\(^5\) *Southwestern Bell* and *Galveston Electric* cases is approval for depreciating original cost. Nothing is further from the fact. It would be appropriate, using depreciation as equivalent to amortization, to set up monthly or annual depreciation or amortization charges and when so set up they should be deducted from the base, original cost.\(^6\) This is so because these are in effect a repayment of the loan, and to the extent repaid is no longer owed. This confusion has led to citation of such cases as *United States v. Ludey*\(^5\) as authority for depreciating original cost. But this case is neither an aid to the reproductionists nor authority for depreciating original cost in rate valuation. It may be used in analogy as authority for subtracting from


\(^5\) 274 U.S. 295 (1927).
value, under *Smyth v. Ames* a sum set aside as depreciation reserve in amortization, but it has no bearing on the function of physical depreciation either under the original cost theory or in reproduction new. The *Ludey* case arose under the federal income acts. "Gain" thereunder is the selling price minus cost. Cost must be diminished by depreciation and depletion allowable as deductions. Before gain can be determined, these computations must be made. Since their use was to ascertain whether or not the cost had been exceeded by the return, it was necessary to allow the amount of depreciation, which had been allowable as a deduction from gross income, as a deduction from cost. The function of the allowance was to equate selling price and cost. The depreciation allowable as the deduction in gross income was analogous to a sale to that extent. Under the statute these proceeds could not be touched until they exceeded cost. The purpose of the state to this extent was not to interfere with the money of the taxpayer until his financial outlay had been inlaid. Thereafter he could have all he could make over a certain percentage. In rate-making a somewhat similar base might be subject to amortization and over the amortization charges the utility might have all it could make up to a certain percentage but no more. Certainly, the *Ludey* case is not authority for subtracting physical depreciation from original cost in valuation for rate-making.

The outstanding virtue of the original cost theory as an exclusive base is the simplicity of administration and the alleged stability of return. It is very interesting to note the shift of the carrier from the position in *Smyth v. Ames* to the extremely complicated reproduction new. If the trend of prices continues indefinitely downward, it may be that "the turning away from the simple shall slay them and the prosperity of fools shall destroy them." With much justification the original cost base is attacked on the ground that its outstanding supposed virtue of stability is mythical as it links return to the dollar and due to inflation no real stability results; and because expenses are at current costs while the return is on expenditure only. These claims are identical and well founded. They apply with equal force to any theory which multiplies together two fixed elements for rate-making purposes. While original cost has never been recognized as the exclusive base for the reasons pointed out in *Ames v. The Union Pacific*, but as the Court is always looking for the amount that was reasonably necessary to produce the properties at the time of their construction, it naturally called in *Smyth v. Ames* for a consideration of what was actually spent, and then proceeded to enumerate other evidentiary

58 King James Translation, Proverbs 1:32.
facts to be weighed against original cost to ascertain how much it should be reduced. As stated by the Court in *Regan v. Farmers Loan & Trust Co.* 59 "justice demands that every one should receive some compensation for the use of his money or property if it is possible without prejudice to the rights of others." Therefore, original cost was primarily emphasized in *Smyth v. Ames* and always since has been held relevant, subject to the ascertainment of the extent to which it was, or is, unfairly prejudicial to the rights of others.

**XII**

The original cost described as total pecuniary sacrifice to the investor should be distinguished from *historical cost*. The latter refers to the actual cost of the present property. While historical cost deals with present property, it is measured by the actual cost as a matter of history as distinguished from the present cost of duplication. The historical cost base is frequently confused with the "prudent investment" base. Each deals with the present property and with its cost, but prudent investment delimits the cost of the present property to a reasonable expenditure—the amount which under honest and efficient management would have been adequate to produce the property at the time of its construction. The less imprudent and dishonest the construction expenditure, the nearer original cost approaches historical cost, and the latter, in turn, the prudent investment. Historical cost is sometimes used as nearly synonymous with prudent investment. In this sense it does not mean the historical narrative or enumeration of expenditures, but the history of prices contemporaneous with the construction of units used in the plant as a measure of prudent expenditure.

The historical cost is subject to the same lack of reliability as original cost with no greater merits as a measure of legitimate loan. Historical cost, prudent investment, and original cost offer simplicity of administration and alleged stability of return. None are subject to charges for physical depreciation as in the case of reproduction new and to all should be added going value. Stability of income and credit under each is said to be fictitious as an attempt to produce stability of real income by tying it to the dollar. It is said to discourage initiative in promotion and management as no inducement exists to improve service beyond the point of maximum return. This latter argument was developed by the reproductionists during inflation of costs when the current costs of duplication would be much greater. As the utility would be entitled to a return on

59 154 U.S. 362 (1894).
current costs, it would be stimulated to improve the plant. It is also said that on a long continued downward cost trend a point would soon be reached at which public resentment to a return on an amount so greatly excessive of current reproduction costs, that cost bases, however determined, must be abandoned. It is postulated in this paper that original cost, historical cost, security issue and reproduction new are not exclusive measures of the rate base. Historical cost has not been treated specifically by the Court as it is included in original cost as used by it. These so-called rate bases have all been required by the Court as aids to finding the prudent investment. The legitimate assault by the reproductionists upon the prudent investment, namely, that it fails to produce stability because it links return to the dollar, is dealt with elsewhere herein. It is often said that, other things being equal, return is rate times the base. Discussions of the various rate bases generally treat, without explanation, the process as if the multiplier (with the possible exception of the cost of reproduction of the service) was for some unexplained reason immutably fixed and, therefore, if reasonableness is the complexion of the product, necessarily the multiplicand must be hitched to business, construction, and commodity cycles, to keep the product from blushing. In outlining the more common proponent-styled rate bases, this must be kept in mind. The fact that we live in this world, and not in some other, and that we are dealing with existing properties, should be remembered. Some of our self-serving seers styling their preachings as "economic principle" would not only have us imagine that the gigantic engine thundering by us is not only not there but that we do not even know the location of the track on which it runs and, therefore, a sum must be allowed for reconnaissance so that we may go out and find where it is.60

XIII

Smyth v. Ames was an accumulation of all that went before. It has been affirmed by all that has followed it. The Court was confronted with the argument that the railroad was entitled to rates "which will enable it at all times, not only to pay operating expenses, but also to meet the interest regularly accruing upon all its outstanding obligations, and justify a dividend upon all its stock; and that to prohibit it from maintaining rates or charges for transportation adequate to all these ends will deprive it of its property without due process of law and deny to it the equal protection of the law."61 This contention was advanced as representing the financial

60 Expert witnesses seem to be available for any sort of testimony. Cf. note 88 infra.

61 Italics supplied.
sacrifice to establish the business. This is answered by showing that the expenditures may have been imprudent, that the bonding may have been excessive, and so not representing a fair measure of the necessary financial sacrifice. The Court was seeking the cost of the property rendering the service, or as the term is used interchangeably, the cost of the service; and to find this, and having no accurate reliable primary evidence it balanced the rights of the debtor public and the creditor corporation on the fulcrum of “fair value.” The carriers were contending for the cost of their property as the base and this cost was to be measured by securities issued. They were opposed by the argument that the present cost of reproducing the property was the proper measure of that outlay. The Court directs its attention to the carriers’ argument and agrees that the contribution of the carriers is the basis of return. Then to ascertain the amount loaned to the public—the value of that which it employs for the convenience of the public—the Court inquires (1) what was actually spent to build the plant, (2) how much has been added to it since, (3) what securities were issued and what they were worth, (4) the present value of the physical property, and (5) working capital as evidence thereof. These were the evidentiary facts of the ultimate fact—reasonable or prudent investment. The Court treats with equal impartiality the debtor public. To measure whether or not the debtor is paying too much interest if the amount thereof be measured as the carrier asked, it inquires how much the creditor loaned. The facts evidencing that loan are set out above. To the extent that its business will permit, the creditor is entitled to a reasonable return thereon.

XIV

The Court also had before it a rate-making policy in regard to which it directs a consideration under the contested rate to (1) probable traffic and (2) to operating expenses (the rate was fixed by the statute before it). Recognizing that the loan is a fixed sum and the interest or return is a variable measured by (1) the rate, (2) the traffic and (3) the operating expense, the Court then considers usury. This is a matter left to the rate-making body. It is one which will vary with, and, as the Court says, must be measured by all of the circumstances. Thus Smyth v. Ames, if followed, would leave only the rate-making policy to be dealt with and there could be an unconstitutional taking of property only when the interest allowed

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6a How return came to be expressed as a percentage is apparent from the carrier's claim. The money impounded was at issue. A consideration is always to be paid by the beneficiary. The utility was confident of its expression in normal interest rates. The base contended for was so high that charges to income could be disregarded. The same was true at later periods under reproduction new claims.
on the investment is more or less than the use of the loan is reasonably worth at the time. The rate-making aspect of *Smyth v. Ames* is further emphasized by the privilege extended to the rate-making body to apply to the Circuit Court for the enforcement of the contested rate, if circumstances so changed that the statutory rate would provide the creditor the compensation entitled. The product under the contested rate would not have equalled operating expense or even a reasonable return upon the lowest estimate of value, namely, reproduction new.

It must be borne in mind that the Court had considered value in many taxation cases and a number of years before this case had found that value to be the selling price of the property. The refusal of the Court to establish the same rule for valuation for rate-making purposes was to reject earning power as the measure of rate-making present fair value. It was the part of the total expenditure that could be determined with fairness to both sides, the prudent or historical investment, that the Court sought. And while the original cost was too excessive and imprudent through jobbery and corruption to be taken as a base, it was, nevertheless, given first place on the Court's list. The Court recognized that there might be other evidence of the reasonable financial outlay other than those expressly enumerated. It is further evidence that the rule of *Smyth v. Ames* is the prudent investment that the Court in always reaffirming that case has allowed the consideration of other elements evidentiary thereof, for example, interest during construction, going-concern value, etc. The evidentiary facts of this base were selected by the Court with a view to (1) fairness to investors in a regulated business and (2) adequate service at reasonable rates. The *Smyth v. Ames* base is the cost or amount which could have reasonably been paid to establish the existing plant used and useful in the public service and the business. It is not the present value of the present property, nor the actual cost of the present property, nor the total contributions of investors, nor the cost of a substitute plant,\(^6\) nor the cost of a substitute service. It is the cost of service, which is a fact, produced through an existing plant. It includes, therefore, as part of the cost of such service, in addition to the physical plant, and as part of the capital charge, such elements as going value and working capital. The amount of going-concern value earned is a fact of history, as is the cost of

\(^6\) "It is elementary that value of a going concern may be less than, equal to, or more than, present cost of plant less depreciation plus necessary supplies and working capital." Denver Union Stockyard Co. v. United States, 58 S. Ct. 990, 996 (1938).

This antipyretic to either original cost and reproduction new as exclusive alternate measures of the base was expressed by the Court through Mr. Justice Butler.
putting the physical plant into operation. Private citizens came forward with a bag of seed and sowed it in the public service. The Court is seeking to ascertain how much thereof grew to fruition. Its conclusion is an estimate, a judgment estimate, taking into account all factors which should have weight in fixing a sum which is fair both to the lender and to the debtor community. (How else can a fact be judicially determined?)

That *Smyth v. Ames* was seeking to ascertain the outlay reasonably necessary to set up the present plant, and not calling for repeated revaluation, is pointed out in the Referee's opinion in the *Brooklyn Gas* case. That the cost of reproduction new is a variable is clearly recognized. It is also recognized that *Smyth v. Ames* requires that it be considered in fixing the rate base, but "it can not be said that there is a constitutional right to have the rates of a public service corporation based upon the estimated cost of the reproduction of its property at any particular time regardless of circumstances." The variable is to be used as a check or as an evidentiary fact in finding "the actual bona fide and prudent investment" which is the "fair value of the property" and as to which "there must be a reasonable judgment based upon a proper consideration of all relevant facts." If the rule of *Smyth v. Ames* gives a right to a reconsideration of all the evidence necessary in reaching a "reasonable judgment," one not unfair to either the public or the company, at each change in the cost of reproduction new:

this would result in allowing a public service corporation to take advantage of a public calamity by increasing its rates above what would be a liberal return, not only on actual investment, but upon a normal reproduction cost, in the view that unless it could make an essentially exorbitant demand upon the public it would be deprived of its property without due process of law. . . . Likewise, to base rates upon an estimated cost of reproduction far lower than the actual bona fide and prudent investment because of abnormally low prices would be unfair to the company.65

In the opinion of the referee both propositions were expressly repudiated by the cases cited.

That the relevant facts which include, among others, the cost of reproduction new, are merely evidentiary of the fact in issue, the actual bona fide and prudent investment, which once established is no longer subject to doubt, is the Referee's conclusion. If the corporation's history discloses it, no further pursuit thereof is necessary. If it is known for only the latter part of the corporation's history, the amount not so disclosed must be judged from the relevant facts. To the judgment amount so determined

64 *Brooklyn Gas* case (Charles E. Hughes, Referee), P. U. R. 1918F, 335, 345-348.
65 *Id.* at 348. Italics added.
under the rule of *Smyth v. Ames* must be added “the actual investment since that time. There is no reason why there should be a substituted or hypothetical estimate reaching an amount virtually in excess of the actual investment.”

With equal definiteness an attempt to make another of the relevant facts evidentiary of the prudent investment, namely, original cost, the rate base is rejected. The referee’s opinion is permeated with the single purpose that fairness to each party is effected in finding what prudent outlay was necessary to produce the present service. This includes, in addition to allowing the utility “credit for all the property it uses in the public service,” working capital, going-concern value if any, etc., and the subtraction of the amount returned through amortization. The purpose of the Supreme Court is shown in the opinion of the referee to determine a historical fact and not to speculate in metaphysics of the future. If the latter were in situation, he must have estimated going value upon some nonexisting plant seeking to acquire an imaginary volume of business in an equally conjectural period of time. Instead he deals with things that are, an existing plant presently rendering public service. He, therefore, denies the claim for an additional amount as going value to cover alleged pioneer loss, because he says that from the beginning of the enterprise the utility had not failed to earn a return equivalent to the reasonable norm in unregulated fields.


67 *Cf. Des Moines Gas Co. v. City of Des Moines,* 238 U.S. 153 (1915): “Included in going value as usually reckoned is the investment necessary to organizing and establishing the business which is not embraced in the value of its actual physical property. In this case, what may be called the inception cost of the enterprise entering into the establishment of a going concern had long since been incurred. The present company and its predecessors had long carried on the business in the City of Des Moines, under other ordinances, and at higher rates than the ordinance in question established. For ought that appears in this record these expenses may have been already compensated in rates charged and collected under former ordinances. As we have said, every presumption is in favor of the legitimate exercise of the rate-making power, and it is not to be presumed without proof, that a company is under the necessity of making up losses and expenditures incidental to the experimental stage of its business.” A get-going cost if you please.

To find the value of the physical property a commission must weigh (1) the cost to the date of valuation (2) the cost of reproduction new and (3) the cost of reproduction less depreciation. To be weighed with the cost of the physical plant are “other values and elements of value,” other expenditures in establishing the business that may be charged as loan to the debtor community. Cost means the expenditure or cash outlay throughout the history of the property, of and since its dedication to public service, for construction and improvement, excluding amounts representing property no longer in use. Against what was actually spent is balanced what it would actually cost to build it now, namely, the present physical value or the cost of reproduction new less depreciation. With equal emphasis is required the consideration of the
Present fair value (a fact) was used in *Smyth v. Ames* to indicate a weighing of all the facts which, being considered, would establish a sum fair to both sides without involving any retroactive application of any rate base theory not enforced by the state at the time of the loan. The amount being fairly established need not be revised. The legislature has power to say on what terms future increases shall be made. Both are definite sums subject to accounting control governing maintenance through operating expenses, amortization, etc. The word "present" is used properly in connection with both the rate base and the rate. It is present value of the property (present property) whose original cost is first investigated. That is, the final value, reasonable value, or prudent investment, is to be ascertained by weighing what the property cost against what it would cost at the date of valuation to find what it should have cost.

If there are other elements of value they are to be added. These "intangible values" are the reasonable expenditures of the creditor in bringing a plant to its norm of production. Going-concern value, working capital and cost of franchises are to be added. Going-concern value is included because it represents the loss incurred by the creditor in putting his money in the utility before production begins. It is limited to the norm because the public does not guarantee a reasonable return. If a reasonable return were forthcoming before the norm were reached, this would mark the end of the period. The Constitution merely guarantees non-interference with returns less than a reasonable return. If the investor has paid his money into a business which is incapable of earning a reasonable return, he must bear the burden of his lack of business acumen. The capital necessary to operate the plant is as much a part of money advanced by the creditor as is the money advanced to build the physical plant. The expenditure necessary to acquire the privilege to engage in the business is similar. These elements have been passed upon by the Court and may be recognized by the legislator. This is not to say that some specific amount must be added to the base because of having a well established volume of business under some term as "going concern" merely because such might be considered in the exchange value of a competitive business. Of course the physical property is valued as a going concern for otherwise it would have only scrap or salvage value. But as to any attached-business going-concern value "That element is not separate from or necessarily in excess of reasonable cost figures attributable to the plant." *Denver Union Stockyards Co. v. United States*, 58 S. Ct. 990, 996 (1938). Italics added.

The inquiry as to the contribution of security holders is combined with the purpose of ascertaining the extent of water in securities and calls for the financial history. The purpose is to ascertain ownership and not ownership—the amount of the loan to public use. Each properly requires a consideration of the evidentiary facts that will aid in reaching a reasonable estimate thereof. The original cost, reproduction new, the amount and market value of securities, are not merely bogies causing naevi but are the spore from which the final single sum judgment estimate grows. The fixed base plus adjustments would make the extent of watered securities promptly determinable at any time. If a state of facts, which as yet has not been found should come to pass, namely, that not only are all expenditures and outlay thrifty and honest, but also are known, then reproduction new will no longer be relevant. Then too the occasion for distinction between historical cost, original cost and prudent investment will become immaterial as they approach identity and measure the cost to the investor to present the service rendered to the public. Reproduction of the service and exchange value base theories were excluded in *Smyth v. Ames*.
properly used in connection with the rate base in establishing one of the primary evidentiary facts, namely, reproduction new less depreciation. As the object here is the value at the time of the investigation, depreciation is to be included. “Present” as of the time of the valuation calls for depreciation to ascertain the actual physical property, for without considering this element the reproduction costs would be of a different property. “Present” as used by the Court in connection with the rate base has never meant that a new base must be established for each future rate. Once properly considered in connection with the other facts required in establishing the rate base, there is no necessity of its subsequent reconsideration as its function is performed. All judicial determinations are present determinations, however ancient are the evidentiary facts considered or the ultimate fact established. “Present cost” or “present value” in connection with rate-making policy must be as of the time of each rate making. This rule was declared in *Smyth v. Ames* and often repeated since. *Smyth v. Ames* required a consideration of the probable earning capacity under the rates prescribed. This is an estimate, with the results directly affected by costs. Future costs must be predicted with present cost as a point of departure. This meaning is made clear in the *Southwestern Bell* case. *Smyth v. Ames* involved rate-making policy, as well as judicial fact-finding. In the *Southwestern Bell* case the Court said it is impossible to ascertain what will amount to a fair return upon properties devoted to public service without giving consideration to the cost of labor, supplies, etc. at the time the investigation is made. An honest and intelligent forecast of probable future value made upon a view of all the relevant circumstances is essential. If the highly important element of present cost is wholly disregarded such a forecast becomes impossible. Estimates for tomorrow can not ignore prices of today.

In the latter case the Court was confronted with rate-making policy and acted consistently with its position stated in *Smyth v. Ames* that present costs were necessary in estimating the probable effect of the rate in issue. One of the many important criteria in predicting that fact is the cost of labor and materials. Necessarily they must be considered. The best evidence of their future cost is their present cost projected into the future by present trends and anticipated events.

This conclusion is sustained by the decision in *United Railways and*
Electric Co. v. West.\textsuperscript{70} The expression used by the Court therein, "it is the settled rule of this court that the rate base is present value," is reproduction new. The Court goes on "... and it would be wholly illogical to adopt a different rule for depreciation." In connection with rate-making policy with which the Court is there presented and not with the valuation case, the Court says: "The purpose of permitting a depreciation charge is to compensate the utility for the property consumed in service, and the duty of the commission, guided by experience in rate-making, is to spread this charge fairly over the years of the life of the property." The Court is dealing primarily with rate-making policy. The depreciation dealt with by the Court is depreciation in the sense of amortization. The rate base, the amount of the loan, which is to be repaid through amortization charges is the base measured by original cost as well as other elements.\textsuperscript{71} It would be clandestine to measure the amount of the loan by one standard, and to repay it by a different one. This is expressed by the Court: "The utility is entitled to see that from earnings the value of the property invested is kept unimpaired, so that at the end of any given term of years the original investment remains as it was at the beginning."\textsuperscript{72} Present value is used in the same sense here that it was in all other cases under and since Smyth v. Ames. In so far as the Court uses depreciation as meaning charges for current maintenance, obviously replacement must be at current prices or present value. It should also be noted that the manner in which the value, subject to amortization charges against operating expenses, is raised on the record, the presently agreed valuation is equivalent for the purpose to a determination thereof under the rule of Smyth v. Ames. To test the reasonableness of the anticipated return as a matter of rate-making policy, it was necessary to consider the present cost of labor, materials, etc., in order to estimate their effect upon such return.

XVI

Oversight of the simplest and primary principle in the whole program of rate-making under judicial supervision that has led to needless confusion stems from the hoary phrasing that when property has become devoted to a public use its prices may be regulated. This is no more than a phrasing of "police power." The previously uncontrolled privilege to pirate through prices has become subject to a condition subsequent and a right of entry arises in the state. It is that to which the power to enter arises that is mistaken. The plant is not taken but remains in the dominion of the owner as private property under managerial control. He continues

\textsuperscript{70} 280 U.S. 234 (1930).

\textsuperscript{71} Deductions for salvage values, and working capital, etc., are proper.

\textsuperscript{72} Italics added.
to vend his goods to all takers very much as do unregulated owners. He

gains a franchise from the state, usually monopolistic and sheltered from

the tribulations of a competitor, which the state in turn prevents him
from abusing by substituting direct regulation for the regulation of com-
petition. This franchise or certificate that the public convenience and

necessity are being served is at least quasi-contractual in nature and

specifically enforceable to the extent that once undertaken there is a very

limited privilege of withdrawal. The result is that through the property
the funds outlayed are impounded. No rate hearing is for the purpose of

expropriation of the property or capital. The issue is whether the use has
been appropriated. If the return is too low confiscation has resulted.

There is, therefore, no opportunity, whatever the judicial phrasing, for
applying exchange or eminent domain principles to the base.73 The results

of litigation show no such application and the language of the Court shows

its appreciation of the distinction. In Smyth v. Ames the Court said that

rates cannot be regulated so as to deprive the owner of "a fair return upon

the value of that which it employs for the public convenience."74 The

Court was well aware of the fact that the properties were not on the
market as a commodity. No such allegation was even suggested by the

pleadings. In Reagan v. Farmers' Loan & Trust Co.75 the result was com-
pelled as the rate left no net income. The statement that had the state
been expropriating the plant it must pay "the value of the property as it

stood in the markets of the world, and not as prescribed by an act of the

legislature" is explained by the question "Is it any less a departure from

the obligations of justice to seek to take not the title but the use for the
public benefit at less than its market value?"76 This clearly recognizes

that the issue is not on the taking of the property but only of the value of

the use of the impounded fund. The inquiry of the Court ended before it
came to any question of valuation of the property. It does indicate that

the latter must be related to available returns on similar risks. In the

opinion appealed from in Smyth v. Ames the Court, through Mr. Justice
Brewer, drew a similar analogy for distinction and emphasis saying that

"if the public were seeking to take the title to the railroad by condemna-
tion, the present value of the property and not its cost" would be the

measure of compensation.77 Recognizing what it would require if the

property were being taken and that the plant was not being taken, it con-
tinues to consider the measure of the value of the use which was taken.

73 Their applicability to the use which is alleged to be taken will be discussed later.
74 At pp. 546, 547. 75 Note 59 supra. 76 Id. at 410. Italics added.
77 It should also be noted that it is cost and not market which the Court was treating as the
base. Cf. note 67 supra.
"In like manner, it may be argued that, when the legislature assumes the right to reduce rates, the rates so reduced cannot be adjudged unreasonable if, under them, there is earned by the railroad company a fair interest on the actual value of the property."  

The test, with explanatory modification, was approved on appeal. But the market test had no application to the base. As has already been shown the relation of rates to market value was well known to the Supreme Court and to the author of the opinion in *Ames v. Union Pacific Ry.* The refusal of the Court to permit interference with the base of *Smyth v. Ames* and to substitute any present commodity market value was most emphatically repeated in *West v. Chesapeake & Potomac Telephone Co.* and the distinction between the taking of the property and the taking of the use of the property was maintained. The Court said: "The established principle is that as the due process clauses safeguard private property against a taking for a public use without just compensation, neither the nation nor State may require the use of privately owned property without just compensation." For emphasis the distinction is repeated. "When the property itself is taken by the exertion of the power of eminent domain, just compensation is its value at the time of taking. So, [in alternative] where by legislation prescribing rates or charges the use is taken, just compensation assured by these constitutional provisions is a reasonable rate of return upon that value."  

The base value is violated only when the commission refuses to fairly receive and weigh the facts evidentiary of value. Eminent domain value is not and cannot be its measure, but an analogy is drawn in determining the value of the use. This was done in *Smyth v. Ames* which with all its descendants is cited.  

As the Court on judicial review of the legislative administrative action needs only to inquire if the plea of confiscation is justified, in so far as the base or prudent investment is concerned, even though all of the relevant facts evidentiary of value have not been considered by the commission if the facts considered must prove a higher base than if all were entertained, or conversely if the only possible operation of the omitted facts would be to compel a smaller base, clearly there is no injury to the owner. This was recognized in *Los Angeles Gas & Electric Corp. v. Railroad Commission of California* and followed in *Denver Union Stock-

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79 295 U.S. 662, 671 (1935). Italics added. 80 *Note 5 supra.*
81 Cf. *Omaha v. Omaha Water Co.*, 218 U.S. 180, 203 (1910) a condemnation case where the Court referring to the property said "both cases were rate cases and did not concern the ascertainment of value under contracts of sale."
82 *Id. note 6.* 83 *Note 26 supra.*
yards Co. v. United States. The evidentiary fact depended upon was a conglomerate called "historical cost" and in the latter reproduction new. The result is the same so far as the issues therein were concerned. The base used involved no confiscation of the properties. The doctrine of Smyth v. Ames while approved was not affected either way. If the rate is so low that no matter how the base is computed no part of the return would be available as compensation for its use there is confiscation. Conversely, if the net operating income is so large that no matter how the base is computed that more is received than the owner has any right to claim the plea of confiscation must fail. In neither case is there a decision on what method of determination or resulting base would be approved if the Court were required to pass on the issue.

This brings us to a consideration of the plea of confiscation as applied to the value of the use as distinguished from the value of the property.

When the rate proceedings involve properties constructed before full commission regulatory supervision was assumed the dearth of primary evidence invites the gladiatorial technique of the lawyer to further his client's interest as much as possible. Much of the commission's record will be occupied by the testimony of expert witnesses. The lawyer asks his economists, engineers, and accountants if there is any theory which they can advance which will serve his purpose. And when the fee is large it seems from the history of such testimony that any theory can be adduced in evidence in a most pontifical tone. Censure of predacious practices may not be in order. The important thing is that the tribunal be competent to appraise the relevancy. "It is unnecessary to analyze the testimony of these witnesses, as it is obviously too conjectural to justify us in treating the failure to include their estimates as a sufficient basis for a finding of confiscation." As the rate order operates pro-

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87 Los Angeles Gas & Electric Corp. v. Railroad Commission of California, 289 U.S. 287, 319 (1933). Would the word professional instead of expert be improper in some cases? Where abstraction is substituted for reality one is reminded of the well-known Needle-Point case. The more one ponders it the more seductive it becomes. Whether the method be induction or deduction there is opportunity for expression according to the taste until exhaustion causes suspension—and then only animated suspension. Whether by postulate or premise the pursuit becomes increasingly infectious as the elusiveness of the conclusion becomes constantly more apparent. Marked difference is that here the actors appear as the cherubim.

To dispose of a consistent course of decision it would seem that something more substantial
spectively establishing a standard for future conduct it is said to be a legislative as distinguished from a judicial function. This gives a range of policy expression not inherent in other types of official action. The Constitution imposes a direct limitation on that choice by prohibiting the imposition of a rate which will effect confiscation of the value of the use of the impounded fund through a net operating income which is less than the reasonable market for the use of funds in comparable risks. A vice common to much of the personnel of rate commissions is the idea that theirs is the position of a party to an adversary proceeding. While the consumer is represented by the commission it is an agency of the state to equate the interests of all. The utility is not an outcast—only some of its obnoxious practices are contra bones mores. The dependence of the community gives rise to the power to regulate and from that dependency comes the conclusion that unless the utility is healthy the community cannot be properly cared for. Too little nourishment injures both. Starvation violates the constitutional immunity of the utility and it will be unable to serve the community well. Conversely, overfeeding gives more than is needed either for the health of the utility or the general welfare of the community. Standards must be established to effect financial stability. Financial stability depends upon assurance that existing property will be protected plus the capacity to attract additional capital. The safer the principal and the more certain a uniform return, the more readily new capital will be forthcoming in diminishing costs. To give the most efficient service at the lowest

must be offered than merely describing the conduct of the Court as "logomachy" and "dialectic."

It might be well to note the result of utilities' practices under another issue, namely, the liability of common carriers from Coggs v. Bernard, 2 Ld. Raym. 909 (1703) and Forward v. Pittard, L. T. R. 27 (1785) through Railroad Co. v. Lockwood, 6 How. (U.S.) 343 (1848) into the second Cummins amendment, 39 Stat. 441, 442 (1916). It could hardly be said that they were not vigilant.


91 In the Nebbia case, note 18 supra, at 537, the Court said: . . . "in the absence of other constitutional restriction, a state is free to adopt whatever economic policy may reasonably be deemed to promote public welfare, and to enforce that policy by legislation adapted to its purpose."

92 Cf. notes 27, 29, 24, 28, supra and 119 infra. "As the property remains in the ownership of the complainant, the question is whether the complainant has been deprived of a fair return for the service rendered to the public in the use of the property." (Italics added.) Los Angeles Gas & Electric Corp. v. Railroad Commission, 289 U.S. 287 (1933).

93 Liberty bonds have been refinanced at lower rates. Treasury offerings have been most attractive when the hazard to principal in other fields has been great. "Acting Secretary Mills announced yesterday subscriptions of $200,798,000 had been received for tenders of $60,000,000 of 91-day Treasury bills offered August 3. The bills were dated August 10 and mature
rate fair to the producer necessitates a large and constant inflow of capital. The lowest rate charges to both the debtor and creditor must provide a fair return under honest, efficient and economical management over and above reasonable expenditures of maintenance of way, structures and equipment. If this is true, private capital will be readily forthcoming. If the inflow is so great as to deflect capital from other fields in amounts more than are necessary for utility stability, rates are too high. Value is merely an expression of a relationship between various economic interests used to describe that relationship in regard to various property concepts. This relationship or value is generally expressed and determined in terms of money, but money is merely the medium of exchange described in dollars. Valuation for rate-making is analogous only to a limited extent to valuation in condemnation proceedings. The determination of the base alone does not establish whether or not the constitutional rights of the owner have been recognized. It is a question of fact in every case as to whether or not his return on the value of his property devoted to the public service is reasonable. The obligation of the debtor community or state as distinguished from the ordinary debtor-creditor relationship is not to pay a fixed sum or number of dollars in the future but to protect or assure the owner of the property from unreasonable taking and at the same time to recognize the right of the community or debtor to be served at a reasonable rate. There is no constitutional right of the owner of property devoted to a public service to earn more than a reasonable return upon the fair value of his properties. Correlatively expressed, the owner of such property is under a duty to provide the service rendered at at reasonable rate. He is not entitled, as in competitive fields with unregulated properties, to a return measured by what traffic will bear. At the same time he is protected through the duty imposed upon the rate-fixing bodies to a return which will provide, to the extent that the traffic will sustain the burden, a reasonable return on that value. The greatest difficulty in valuation proceedings is to divorce the public mind from the popular concept of the debtor-creditor relationship to pay in the future a certain sum measured in terms of dollars. The rate-fixing body, representing both the debtor and the creditor in the peculiar relationship involved in all valuation proceedings, must perform its duties to both parties impartially. If public service is to be rendered, by the devotion of private capital to such enterprises, any method of valuation or rate-making which fails to currently provide a return which will induce private capital to

November 9. The highest bid made the 99.878, equivalent of an interest rate of about 0.48 per cent annually, and the lowest 99.846, equivalent of an interest rate of 0.61." Associated Press, Sept. 7, 1931.
enter the field of public service fails to discharge the duty of the rate-fixing body to each party. If capital devoted to public purposes cannot be assured of a return equivalent to that obtainable in services other than those impressed with public interest, funds for their financing must be forthcoming from other sources. The constitutional obligation, if it may be so expressed, of the rate-making body, is to provide a rate to the owner of such properties which will be equivalent to the return which the money invested would produce to him if invested in comparable risks.93 Therefore, if the fixed base is established by the consideration of all of the elements required in Smyth v. Ames, there is established for all times for the purpose of rate-making the sum on which the investor is entitled to a return, and the reasonableness of that return is to be measured by the buying power or want-satisfying capacity of a similar sum devoted to other available similar enterprises at any particular time. The reasonable cost of the existing properties is their value for rate-making—the amount loaned to the use of the community.94

In the prognosis of the program of a rate structure there are many factors which are responsive to local conditions and the habitat of the utility and subject to adjustment under the administrative policy of the commission. The dependency which gives the regulatory power tends with improved standards of living to make the commodity (electricity, etc.) a necessary and this calls for a rate adjustment which promises to bring

93 The importance to the owner of the valuation of the property as compared with the income therefrom varies about the ratio of one to sixteen.

94 The use of the actual prudent investment as the base does not involve any hitching of the base to the dollar so as to make the owner the victim of inflation and so contrary to due process of law. We have seen that while the doctrine of Smyth v. Ames involves no market value for the base it does involve a market (a market limited to a comparable risk) value for the use. The base is expressed in money but the base money has of itself no value—its value arises as it is a source of human wants or satisfaction. Money serves as a medium of exchange, with some objectivity, but under state direction as an instrumentality with which to settle debts. Cf. Norman v. Baltimore & Ohio R. Co., 294 U.S. 240 (1935); Nortz v. United States, 294 U.S. 317 (1935); Perry v. United States, 294 U.S. 330 (1935); Holyoke Water Power Co. v. American Writing Paper Co., 300 U.S. 324 (1937). We have already adverted to wealth in regard to income taxes in connection with appreciation under the theory of reproduction new. The income tax is relevant at this point for two reasons. It demonstrates that to retain capital at a fixed sum and not subject it to economic corrective index multipliers is a well established and constitutionally recognized institution. While income taxes differ functionally from property taxes for appraisement purposes, with the use the latter value has relevancy and the connotation of income taxing has a familiar sound. The norm is to retain and express the capital fund in dollars without adjustment, (cf. Irving Fisher's theory of controlling dollar value by adjustment of gold content) and to bargain in the current market for the amount of the consideration for its use as income. This goes even further in loans represented by long-term fixed-income securities. To take advantage of lower use-of-capital costs call provisions are inserted in bonds. Cf. Liberty Loan bonds and Holyoke Water Power Co. v. American Writing Paper Co., 300 U.S. 324 (1937).
it within the reach of all income groups. A downward adjustment may be shown by appropriate evidence to predict a greater net operating income but mere guesswork is not enough.\textsuperscript{95} Where competing types of utilities as gas and electricity producers are subject to the jurisdiction of the same commission a similar problem exists.\textsuperscript{96} These and others may be used as goads to more efficient management and extended operation.\textsuperscript{97} The sliding-scale device may be used to further the local public policy.

\section*{XVIII}

Space permits only reference to the determination of the return. We have seen that \textit{Smyth v. Ames} gives pertinence to the base only as an element in the rate structure as an \textit{appoggiatura} to test the adequacy of the net income, and that through the equivalent of a forced sale by the imposed regulation the value of the use is the present market of comparable risks.\textsuperscript{98} Under this doctrine, subject to net additions and better-

\textsuperscript{95} "We are not unmindful of the argument urged by counsel for the commission that the effect of lower prices may be to swell the volume of the business, and by thus increasing revenues enhance the ultimate return. Upon the record as it comes to us, this is guesswork, and no more. There has been no attempt to measure the possible enhancement by appeal to the experience of other companies similarly situated or by any other line of proof. Present confiscation is not atoned for by merely holding out the hope of a better life to come." \textit{West Ohio Gas Co. v. Public Utilities Commission of Ohio}, 294 U.S. 79, 82 (1935).

\textsuperscript{96} There is always the possibility of state competition as municipal ownership and Tennessee Valley Authorities become more commonly accepted.

\textsuperscript{97} "The question, then, is as to the estimates of revenue and expenses. The company complains that the commission's estimate of revenue was too high. The problem largely concerns temperatures, and it is plain that the commission was justified, in fixing rates which were to apply for a considerable period, in taking average temperatures. The District Court, with its special knowledge of local conditions, and speaking in April, 1932, held that the action of the commission was fair. The Circuit Judge supplemented this finding of the majority by his holding that there was "nothing unreasonable in the estimate of returns by the commission so far as temperature is concerned" and that there was "nothing to indicate that due consideration was not given to the possible effect of the depression upon the consumption of gas." \textit{Los Angeles Gas & Electric Corp. v. Railroad Commission}, 289 U.S. 287, 320 (1933).

\textsuperscript{98} Cf. \textit{United Railways and Electric Co. v. West}, 280 U.S. 284 (1930). In \textit{Los Angeles Gas & Elec. Corp. v. Railroad Comm.}, 289 U.S. 287 (1933), the Court said: "We said in \textit{Bluefield Water Works Co. v. Public Service Commission}, supra, 262 U.S. 692, 693, that a 'public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures.' We added that the return 'should be reasonably sufficient to assure competence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties.' And we recognize that 'a rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.' \textit{See Smith v. Illinois Bell Telephone Co.}, 282 U.S. 133, 160."
ments, the base once determined need not be recomputed nor adjusted. The use, however, is constantly subject to contemporaneous conditions.\textsuperscript{99} Under existing statutes the commission is compelled to anticipate probable adjustments. The present is the basis for departure. The financial history of the company, its relations and business opportunities as affected by local conditions, and the general situation as to investments must be considered.\textsuperscript{100} Facts which experience indicates as having probative value are relevant in the formation of the judgment.\textsuperscript{105} The costs are a prediction derived from trends with present costs as a point of departure. They include the prices of the material and labor consumed in current operation. These include expenditures for maintenance of way, structures, and equipment. In making such determination the commission must give due consideration to the utility needs of the country and the necessity of enlarging the facilities so as to provide an adequate system. From the earliest time the Court's objective has been reasonable or prudent expenditure both as to construction and operation. Smyth v. Ames included both. In Chicago & Grand Trunk Railway Company v. Wellman,\textsuperscript{102} the Court says in regard to current expenditures:

Surely before the courts are called upon to adjudge an act of the legislature fixing the maximum . . . rates for railroad companies to be unconstitutional, on the ground that its enforcement would prevent the stockholders from receiving any dividends on

\textsuperscript{99} In West v. Chesapeake & Potomac Telephone Co., note 79 \textit{supra}, the Court invalidated the order because of the attempt to attach an improved base to a general commodity index. This does not involve the measure of the value of the use of sound utility-indices with a proved reproduction new.

\textsuperscript{100} Los Angeles Gas & Electric Corp. v. Railroad Comm., 289 U.S. 287, 319, 320 (1933).

\textsuperscript{102} "We think the adoption of a single year as an exclusive test or standard imposed upon the company an arbitrary restriction in contravention of the Fourteenth Amendment and of 'the rudiments of fair play' made necessary thereby. The earnings of the later years were exhibited in the record and told their own tale as to the possibilities of profit. To shut one's eyes to them altogether, to exclude them from the reckoning, is as much arbitrary action as to build a schedule upon guesswork with evidence available. There are times, to be sure, when resort to prophecy becomes inevitable in default of methods more precise. At such times, 'an honest and intelligent forecast of probable future values, made upon a view of all the relevant circumstances' (Southwestern Bell Telephone Co. v. Public Service Commission of Missouri, 262 U.S. 276, 288; Los Angeles Gas & Electric Corp. v. Railroad Commission of California, 289 U.S. 287, 311), is the only organon at hand, and hence the only one to be employed in order to make the hearing fair. But prophecy, however honest, is generally a poor substitute for experience. 'Estimates for tomorrow cannot ignore prices of today.' Southwestern Bell Telephone Co. v. Public Service Commission of Missouri, \textit{supra}, at page 288 of 262 U.S. We have said of an attempt by a utility to give prophecy the first place and experience the second that 'elaborate calculations which are at war with realities are of no avail.' Lindheimer v. Illinois Bell Telephone Co., 292 U.S. 151, 164. We say the same of a like attempt by officers of government prescribing rates to be effective in years when experience has spoken. A forecast gives us one rate. A survey gives another. To prefer the forecast to the survey is an arbitrary judgment." West Ohio Gas Co. v. Public Utilities Commission, 294 U.S. 79, 81 (1935).

\textsuperscript{105} 143 U.S. 339 (1892).
their investments, or the bondholders any interest on their loans, they should be fully advised as to what is done with the receipts and earnings of the company; for if so advised, it might clearly appear that a **prudent and honest management would**, within the rates prescribed, secure to the bondholders their interest, and to the shareholders reasonable dividends. While the protection of vested rights of property is a supreme duty of the courts, it has not come to this, that the legislative power rest subservient to the discretion of any railroad corporation which may, by exorbitant and unreasonable salaries, or in some other improper way, transfer the earnings into what it pleased to call operating expenses.\(^{103}\)

This policy has been perpetuated through recent cases. In the *Los Angeles Gas* case\(^ {104}\) when it appeared from the financial history exorbitant charges had been made for operating costs, which excess indicated that on proper allocation would have provided an adequate net return, it was “not necessary for the commission to make an annual allowance which in the light of experience would be excessive.” This placebo to alleged departure from *Smyth v. Ames* is emphatically re-expressed in *Lindheimer v. Illinois Bell Tel. Co.*\(^ {105}\) It was pointed out early in this paper\(^ {106}\) that the actual net result must be examined before the plea of confiscation will be granted. If the examination shows that all to which the utility is entitled has been received, it clearly has failed to sustain its burden of proof to the contrary. How the operator has mis-labeled the receipts allocable to net return is immaterial. “In determining .... net return .... charges to operating expenses may be as important as valuations of property. Thus excessive charges of $1,500,000 to operating expenses would be the equivalent of 6 per cent, on $25,000,000 in a rate base.”\(^ {107}\) Excessive charges were also made to operating expenses for a “depreciation reserve.” The sum of the excess charges exceeded annually the amount which the commission’s order reduced the net earnings. There was no issue on the adequacy of the earnings prior to the effective date of the order. The ultimate result is an admittedly adequate base and return.\(^ {108}\) *Smyth v. Ames* is confirmed.\(^ {109}\) The company’s practice of

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\(^{103}\) Italics supplied.


\(^{105}\) 292 U.S. 151 (1934).

\(^{106}\) Note 24 *supra*.

\(^{107}\) Cf. note 93 *supra*. Shades of Billy Bryan’s sixteen to one.

\(^{108}\) “The foregoing considerations limit our inquiry. It is not necessary to traverse the wide field of controversy to which we are invited and to review the host of contested points presented by counsel. In the view that the existing rates cannot be regarded as inadequate, the question is simply as to the effect of the reduction in net income by the rates in suit. The question is whether the company has established, with the clarity and definiteness befitting the cause, that this reduction would bring about confiscation.” *Los Angeles Gas & Electric Co. v. Railroad Commission*, 289 U.S. 287, 304, 305 (1933).

excessive charges to what it called maintenance and depreciation was in effect rebuilding the plant with consumers' money through the current maintenance account and at the same time taking its invested funds out of the capital account through excessive charges to the so-called depreciation account. The company's plan was to charge the consumers for the use of their own money. Public welfare does not require that this be allowed, and neither did Smyth v. Ames.\textsuperscript{110} The admonition of honest, efficient and economical management applies to plant additions as well as to current operating costs. Attracting capital and the reasonable worth of services involves shares as well as bonds, for unpreferred as well as preferred securities are necessary for the maintenance and extension of the enterprises.\textsuperscript{111} In calculating return by comparable risks, it cannot be overemphasized that, assuming demand, the utility is not a hazardous enterprise and that the application of the doctrine of Smyth v. Ames raises even common shareholders into the position of secured bondholders in competitive business. The reduction of the hazard to principal and the assurance of income promises ready and cheap\textsuperscript{112} loans. These assurances are attractive to capital.

Under the doctrine of Smyth v. Ames to the rate-making authority is committed the task of ascertaining the prudent investment reasonably necessary to produce the service rendered in fact, the determination of what net operating income promotes the policy of the state and is fair to the owner, and the prescription of rates adequate to produce such

\textsuperscript{110} The approval of the Court of basing amortization charges on the cost confirms my analysis of the Baltimore Railways case, note 70 supra. This is in accord with earlier declarations. The company "is entitled to see that from earnings the value of the property invested is kept unimpaired, so that at the end of any given term of years the original investment remains as it was the beginning." City of Knoxville v. Knoxville Water Co., 212 U.S. 1 (1909).

\textsuperscript{111} A point not yet clarified by decision arises in regard to proper charges. If fixed security charges are paid as operating costs there seems to be doubtful validity in setting up the loan in the base. While the Court has said that the source of the plant (omitting public donation) is not material, that does not answer the question. If the rate were computed as a percentage on the whole base omitting fixed security charges from operating expenses this would follow. It seems a non sequitur, however, where the bond interest is charged to operating expenses. If B borrowed $50 from C and loaned it with $50 of his own to D, D would not have to pay the interest on $150 or the interest on $100 he borrowed from B plus the interest owed C by B.

\textsuperscript{112} In a copyrighted advertisement (1938) Bank of New York & Trust Company published the following statement: "Further development of the electric power and light industry, with resultant benefits to national well being, depend largely upon its ability to attract sufficient capital to undertake needed expansion of plant and distribution facilities."

In 1932 the bonds of the Washington Gas Light Company were selling at a higher premium than those of the United States. An increasing service demand and a more than average efficient regulation gave this result.
The first, when finally determined, need only be adjusted for net additions and betterments. The return must be declared periodically. The declaration of the period is in the discretion of the commission and depends on circumstances. While a permanent fixed standard has been approved for the base, the Court has been careful to avoid approbation to any fixed rate, percentage or ratio. Under a fixed rate utility security holders would be at the mercy of the value of gold. This is avoided by allowing the market rate for comparable risks and permits adjustment reflected by commodity prices. While this doctrine makes possible reasonably efficient and effective regulation its operation is open to great improvement by legislation.

XIX

The chief administrative defect lies in the necessity under existing practice of fixing the rate in advance. Because the value of the use depends on the current market, errors of prophecy result in a greater or smaller return than contemplated. Experience reduces the probability of variation but does not allow for correction. Litigation arises.

Certainly it is as delicate an undertaking to determine in advance the value of the use of a man for life either within or without workmen’s compensation acts, yet no one bewails the attempt.


"The distinctive feature ... is that the capitalization is not to exceed the actual value of the property held for or used in the transportation service. One of the chief causes leading to the public distrust of railroad financing is the deep conviction on the part of the people that the past capitalization of many of the railways grossly exceeds the real value of the property which renders the service. When the Interstate Commerce Commission finishes the valuation in which it is now engaged and when those valuations, as they are judicially determined, and only those values, pass into the capitalization of the newly organized or reorganized corporations under this act, that serious obstacle in the way of effective regulation will have disappeared."


Cf. note 94 supra.

There is no practical necessity for submission to the fickleness of the market and to let the devil take the hindmost one. This is not trial and error which enlightens as any material adjustment of the future market causes either or both parties to suffer. True rate control would provide for correction and permit all to benefit by experience. The advantage of back-sight rate-making has been recognized by Congress and the Court. The possible advantages afforded in the opportunity for assured accuracy in adjustments founded upon historical facts as distinguished from prophecy in the Lindheimer and McCart cases were lost because of leech-like practices. Reasonable operating costs under efficient supervision over the test period become knowable facts. Such knowledge in regard to the value of the use would be even more desirable. The rate would cease to be a matter in terrorem which the operator must fight to the last ditch at the consumer’s expense. Certainly the State’s police power is as great as that of the United States. In Dayton-Goose Creek Ry. Co. v. United States, 263 U.S. 456 (1924), the Court said: “It was insisted in the two cases referred to, and it is insisted here, that the power to regulate interstate commerce is limited to the fixing of reasonable rates and the prevention of those which are discriminatory, and that when these objects are attained, the power of regulation is
of unduly liberal return would assure against confiscation through subsequent price changes and would give special invitation to capital, but this partially defeats the occasion for regulation and the adjustments are reflected in the common securities. The reason why back-sight adjustment is not possible is that when no controlling statute is applicable the excess vests in title in the operator as in any private property owner so that past losses cannot be used to support an excessive future rate nor can previous excessive rates be used to justify presently confiscatory ones. But these issues arose without legislative provision for corrective adjustment. Is the legislature disabled by these decisions from providing for corrective adjustment? The answer is "No." While mistakes of pre-regulation periods cannot be corrected as an afterthought, the power and duty of the state is to maintain reasonable rates not merely to declare them. The issue was met in the Dayton-Goose Creek Railway Co. v. United States. The purpose of the rate-making policy in issue was to assure a reasonable return upon the properties. The Court said that the utility was not entitled as of constitutional right to more than a fair net operating income, and that when provision was made in advance for correction of return from a previously declared excessive rate the result was the same as if the rate had been correctly stated in advance.

In this manner stability of rates may be effected by an initial liberal rate with subsequent adjustment of the impounded surplus. The balance is subject to control and direction so that it could, under the supervision of the commission, be transferred to income whenever the return under any period should be too low. This, as stated by the Court, is rate-making as much as the initial declaration. Under a competent commission the adjustments would not be large. Income would be stabilized. Litigation would be reduced to a minimum.

exhausted. This is too narrow a view of the commerce clause. To regulate in the sense intended is to foster, protect and control the commerce with appropriate regard to the welfare of those who are immediately concerned, as well as the public at large, and to promote its growth and insure its safety."


119 263 U.S. 456 (1924).

120 "The reduction of the net operating return provided by the recapture clause is, as near as may be, the same thing as if rates had all been reduced proportionately before collection. It is clearly unsound to say that the net operating profit accruing from a whole rate structure is not relevant evidence in determining whether the sum of the rates is fair. The investment is made on the faith of a profit, the profit accrues from the balance left after deducting expenses from the product of the rates, and the assumption is that the operation is economical and the expenditures are reasonably necessary. If the profit is fair, the sum of the rates is so. If the profit is excessive, the sum of the rates is so. One obvious way to make the sum of the rates reasonable, so far as the carrier is concerned, is to reduce its profit to what is fair." Id. at 483.