The Monetary Value of the Dollar and Public Utility Rates

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THE MONETARY VALUE OF THE DOLLAR AND PUBLIC UTILITY RATES. The deflation of the dollar in the last three years to a point where commodity prices are forty per cent below the 1928 standard, together with the failure of the public utilities to lower their rates to conform with 1933 prices, makes the question of regulatory control of monopolistic utilities a most vital issue of the present day. Consumers who find their incomes drastically curtailed, and most of their expenses accordingly reduced, begin to question the success of a system of regulation which permits utilities to charge 1928 rates in 1933. Nor is their faith in this system at all restored when repeated attempts to reduce rates to fit present day incomes result in subterfuge, evasion, and expensive, drawn-out litigation.

An appreciation of the difficulties confronting modern regulatory bodies requires an understanding of the theory upon which rates are based. Generally, the determination of rates consists of two steps: first, the valuation of the property of the utility to ascertain the basis upon which the return should be earned; and second, the ascertainment of what would be a fair return upon this basis. Obviously, the second step although in itself a difficult problem, is of minor importance as compared to the first, for in the valuation of the rate base lies the test of the entire structure of regulation, and it is because of the inability of the courts to adopt a scientifically correct theory of valuation that the state commissions and the utilities have waged a thirty-five year war which has settled no problems and which today leaves the contestants in the exact positions they occupied in 1898.

Three theories have been advanced for the determination of the rate base of the utility: first, the original cost theory; second, the reproduction cost theory; and third, the prudent investment cost theory.

5 Cf. C. M. Clay, ibid. p. 74. In 1898 the utilities favored original cost because prices were deflated; in the post-war decade they shifted and favored reproduction cost because prices were inflated; today in 1933, there seems to be a realignment similar to that of 1898.
The original cost theory provided that the rate base consist of the actual amount invested in the utility as shown by the books of the utility. It was attacked by the public in the closing years of the nineteenth century, first because the original cost could not be definitely ascertained due to watered stock and inaccurate accounting methods; and second, because book values made in the period of inflated prices before the panic of 1893 would return enormous profits to the utilities in the era of deflation following the panic. Liberals, led by William Jennings Bryan, bitterly fought this theory with the result that in 1898, the Supreme Court of the United States, after deciding that it could assume jurisdiction over the question of rate regulation, enunciated the historic rule of Smyth v. Ames, 169 U.S. 466, (1898) as follows:

"We hold . . . that the basis of all calculations as to the reasonableness of rates to be charged by a corporation . . . must be the fair value of the property being used by it for the convenience of the public . . . What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience. On the other hand, what the public is entitled to demand is that no more be exacted from it . . . than the services rendered . . . are reasonably worth."

And further in the opinion, Mr. Justice Harlan expressed the dictum that present cost of construction was to be given due weight in determining the fair value upon which a fair return should be based. Later

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7 Mr. Justice Brandeis dissenting in Southwestern Bell Telephone Co. v. Public Service Commission, 262 U.S. 276 (1923):

"The adoption of present value of utility’s property as the rate base was urged in 1893, on behalf of the community; and it was adopted by the courts, largely, as a protection against inflated claims based on what were then deemed inflated prices of the past . . . The long depression which followed the panic of 1893 had brought prices to the lowest level reached in the nineteenth century."

8 Mr. Justice Brandeis, ibid., "Insistence upon reproduction cost was the shipper's protest against burdens believed to have resulted from watered stocks, reckless financing, and unconscionable construction contracts . . . Estimates of reproduction costs were then offered, largely as a means, either of supplying lack in the proof of actual cost and investment, or of testing the credibility of evidence adduced, or of showing the cost of installation had been wasteful."


10 Smyth v. Ames, 169 U.S. 466 (1898), Mr. Justice Harlan:

"the original cost of construction, the amount expended in permanent improvements, the amount and market value of its bonds and stocks, the present as compared with original cost of construction . . . are all matters for con-
cases followed the precedent established in Smyth v. Ames, and thus the original cost theory was gradually discarded, primarily because it failed to cope with the problem of the fluctuation in the monetary value of the dollar.

To remedy the defect in the original cost theory, the reproduction cost or "present fair value" theory was adopted by the courts. The public and the utilities both believed that since reproduction cost would correspond to current prices and costs, the difficulty of the fluctuating dollar would be eliminated from the problem of ascertaining a fair rate base. Consequently, with the sudden spurt of prices to a new peak during the World War the United States Supreme Court in a series of decisions beginning with the case of Des Moines Gas Co. v. Des Moines, 238 U.S. 153, (1915), and continuing on through the case of Western Distributing Co. v. Public Service Comm. ___U.S.____, 76 I. ed. 655, 52 Sup.Ct. 283, P.U.R. 1932B, 236, (1932) definitely laid down the rule that the valuation of the rate base was to depend upon the present market value of the utility property. Thus the court expressed its views in the case of Benton v. Belt Line R. Corp. 268 U.S. 413, 69 L. ed. 1020, 45 Sup.Ct. 534, P.U.R. 1926A, 317, (1925):

"It is well known, and the court will take judicial notice of the fact that the purchasing power of money has been much less since 1917 than it was in 1912, when the order was made; and that the cost of labor, materials and supplies necessary for the proper operation and maintenance of street railways has greatly increased." 

13 Commodity prices jumped from 100 per cent to 240 per cent during the period between 1916 and 1921. Cf. (United States Bureau of Labor Statistics) Index of Wholesale Prices, 1932.
15 Thus in Bluefield Co. v. Pub. Serv. Comm. (W.Va.), 262 U.S. 679, (1923), Mr. Justice Butler said:

"It is clear that the court also failed to give proper consideration to the higher cost of construction in 1920 over that in 1915 and before the war, and failed to give weight to the cost of reproduction less depreciation on the basis of 1920 prices ... The final figure ... was arrived at substantially on the basis of actual cost less depreciation plus ten per cent for going value and
In this manner, the decade following the war witnessed a reversal in
the legal positions of the utilities and the commissions. In 1898 the pub-
lic had advocated and the utilities had opposed the theory of reproduc-
tion cost because it had been to the disadvantage of the utilities to have
their properties valued according to the deflated dollar. In 1928
with commodity prices fifty per cent above their pre-war level\(^6\) it was
obviously to the advantage of the utilities and the disadvantage of the
commissions to have properties valued on the basis of reproduction
cost. Whereupon commissions and liberals proceeded to attack the very
theory they had espoused thirty years before.\(^7\)

Yet the reproduction theory of cost was not without its faults. Per-
haps no better criticism can be given of the theory than that advanced
by Mr. Justice Brandeis in his brilliant dissenting opinion in the case
of Southwestern Bell Telephone Co. v. Public Service Commission,

“The so-called rule of Smyth v. Ames is, in my opinion, legally and
economically unsound. The thing devoted by the investor to the public
use is not specific property, tangible and intangible, but capital em-
barked. Upon the capital so invested the Federal Constitution guaran-
tees to the utility the opportunity to earn a fair return. Thus, it sets the
limit to the power of the state to regulate rates. The Constitution does
not guarantee to the utility the opportunity to earn a return on the
value of all items of property used by the utility, or of any of them.”

Briefly then, according to Mr. Justice Brandeis, the rule of Smyth v.
Ames as developed into the the reproduction cost theory breaks down
in that it fails to provide the means for establishing a definite, stable,
and readily ascertainable rate base. The present market value can be
determined only by the enumeration of opinions as to the value of land
and buildings, the plant, the expenses of construction, and the value of
such intangibles as good will, franchise value, going-concern value, and
working capital.\(^8\) And inasmuch as the opinions of experts have in

\(^6\) Cf. United States Bureau of Labor Statistics Index of Wholesale Commodity
Prices, 1932.

\(^7\) Cf. Wisconsin-Minnesota Light, etc. Co. v. Railroad Comm. 183 Wis. 96, 197
N.W. 359, (1924):

“It is not so long ago that the utilities were before the courts contending
with great earnestness that investment cost was the proper method of valu-
atlon and the public authorities were claiming with equal earnestness and
candor that cost of reproduction new less depreciation was the proper basis. The
situation is now exactly reversed.”

certain cases varied by as much as almost 100 per cent\textsuperscript{19} the efficiency of this system can be taken for what it is worth. That it isn't worth very much is strenuously indicated by both the majority and minority reports of the Committee on the Revision of the New York Public Service Commissions Law. According to the majority report:

"Its decisions, (the U. S. Supreme Court) taken all together, lay the ground for methods of determining values that permit of a great variety of interpretations and emphases. In these decisions intangibles are recognized, concerning which the most expert technicians fail to agree. The way is open for inflation of claims by the companies, which if the court decisions be taken as a criterion sometimes run into hundreds of millions of dollars . . .

"Instead of a progressive clarification of the principles which in the judgment of the Supreme Court should guide those responsible for fixing valuations, the difficulties of applying such principles are apparently increasing rather than lessening."\textsuperscript{20}

And according to the minority report:

"The standard of a 'reasonable return on fair value' of a public utility is not an objective standard based on ascertainable facts. It is rather a vague and indefinable concept that functions as a disguise for the absence of any real standard. Its determination is largely a matter of judgment and, therefore, of endless controversy. Consequently, it gives full sway to the exercise of bias on the part of commissioners or courts and offers the best opportunities to the companies, whose resources are practically unlimited. Its difficulty of ascertainment postpones beyond reason the settlement of rate disputes . . . By the inclusion of such costless values as going value, water right values, easement values, and by the failure to make anything like complete deductions for accrued depreciation and obsolescence, companies are able to establish 'values for rate-making purposes,' so large that even the most prosperous and profitable enterprises make the false appearance of earning only a very limited rate of return."\textsuperscript{21}

The reproduction cost theory supplanted the original cost theory because the latter failed to cope with the problem of the fluctuating dollar. But instead of simplifying the situation the reproduction cost theory with its nebulous standard of valuation\textsuperscript{22} has made the procedure of ascertaining the rate base such a tangled confusion of reports

\textsuperscript{19} In Re Marin Municipal Water Dist. (Cal.) P.U.R. 1915C, 433 valuations ranged from $670,163 to $1,031,436. In Duluth St. R. Co. v. R. R. Comm. 161 Wis. 245, 152 N.W. 887, (1915) valuations of two experts, both employed by the state, were $600,000 and $1,100,000.

\textsuperscript{20} Majority Report, New York Legislative Document (1930) No. 75, pp. 16-18.

\textsuperscript{21} Minority Report. Introductory Outline prefixed to Parts I and II, pp. 250.

\textsuperscript{22} Cf. Mr. Justice Brandeis, dissent in Southwestern Bell Telephone Co. v. Public Service Commission, 262 U.S. 276, (1923).
and opinions that cases have been litigated for ten years without reaching any final adjudication.\(^{23}\) Within the last three years the severe slump of the dollar has made corresponding reductions in utility rates imperative. Theoretically the reproduction cost theory should have brought about a reduction in rates, for since the reproduction cost of the utilities should be lower in 1933 than in 1928, the rate base, and consequently the rates should be lower. Practically, however, the necessity of valuating the property of the utilities requires such an expenditure of time and money that relief cannot be granted within the short space of two or three years. True, in some cases utilities have voluntarily reduced their rates to meet the change in prices, but in the majority of instances the public is without immediate relief. Thus, where the Minnesota Railroad and Warehouse Commission ordered a temporary reduction of rates of a telephone utility pending an investigation of the rate base of the utility,\(^{24}\) the Federal Court enjoined the reduction on the ground that the due process and protection of the state law were denied where rates had been temporarily reduced without first fixing a permanent valuation.\(^{25}\) And inasmuch as the process of valuating the utility's rate base in this case was halted by lack of funds on the part of the commission, the people of Minnesota shall continue to pay 1928 rates until the return of prosperity shall give the commission enough funds to enable it to continue its work, at which time the valuation will be comparatively worthless.

But serious as the problem of raising funds to carry on the investigation may be,\(^{26}\) the problem of completing the valuation in time so as to make immediate use of it of greater importance. Thus in Wisconsin where by statute the utilities are assessed for the costs of special investigations,\(^{27}\) the Public Service Commission was forced to resort to the

\(^{23}\) Example of the New York Telephone Co. case cited in the Minority Report, ibid. Part I. p. 266, in which the fair value varied from $366,915,493 to $615,000,000, the fair return varied from $25,635,000 to $49,200,000, litigation continued from Aug. 20, 1920 through Feb. 1, 1930 without any definite adjudication, and in which $5,000,000 was expended by the utilities. More than 62,864 pages of testimony were involved. Cf. C. M. Clay, ibid. p. 81.


\(^{26}\) Re Alabama Power Co. (Ala.) P.U.R. 1932E, 323, in which the commission said:

"If the operating utilities and telephone companies are going to be allowed by the states in which they do business to continue this system, the only way . . . that the states can have, or expect to have intelligent, reasonable, and prompt regulation of these public service companies, is to require them to pay the additional cost that is necessary to enable the state to provide real and effective regulation."

\(^{27}\) Wisconsin Statutes, 1931, Chapter 196.85.
height of legal ingenuity in an attempt to secure a temporary rate reduction without first going through the process of valuating the utility's rate base. In the now famous case of Re Wisconsin Telephone Co. P.U.R. 1932D, 173, the Commission based its order upon two general grounds:

1. The "emergency theory" to the effect that if an emergency justifies a temporary increase in utility rates without full investigation, it may also justify a decrease in rates for the same reason; that the Commission is given specific authority to reduce rates in an emergency which affects the business or interests of the people; and that the economic depression is an emergency within the meaning of the statute.

2. The "reasonable value of service theory" to the effect that the rule that the company is entitled to a fair return is limited by the rule of Smyth v. Ames that no more be exacted from the public than the services rendered are reasonably worth; and that services which were worth a certain amount in periods of high prices are not reasonably worth the same amount in periods of low prices.

The order of the Commission was granted June 30, 1932; was restrained by the decree of a statutory three judge Federal District Court; and is now on appeal before the United States Supreme Court. Since the investigations of the Commission were begun July 29, 1931, it will be at least two years before the efforts of the Commission to reduce rates to conform to price levels will bring any kind of results, thereby again illustrating the inadequacy of present methods of regulation, even in cases where extraordinary measures for relief are introduced. The comment and furor aroused by the reasoning in this case, and the fact that its language was followed in In re Kentucky-Tennessee Light & Power Co., P.U.R. 1932E, 386, warrants


29 Wisconsin Statutes, 1931, Chapter 196.70.

30 "On the other hand, what the public is entitled to demand is that no more be exacted from it . . . than the services rendered . . . are reasonably worth."


33 Cf. ibid. p. 61.

34 "In view of the foregoing decision, we are of the opinion that one circumstance to be considered in determining the return which a utility should have is that since 1929 the purchasing power of the dollar has increased very materially, and that the dollar will buy a great deal more in wholesale markets
a further study of its reasoning. Ostensibly, the case seeks to escape from the theory of reproduction cost by granting relief first because of the emergency of the times, and second because of the unreasonable rate for the services. Without going into the merits of the "emergency theory" it is at once obvious that this theory is a drastic form of adjusting rates to changes in the monetary value of the dollar, and as such is a "rough and ready" short-cut in the process of formulating the rate base according to reproduction cost theory. True there is no attempt under this theory to even arrive at a rate base, the very language of the order admits this fact, but there is implied the argument that since the price level has dropped (or raised as the case may be) the reproduction cost has dropped, and therefore the rate base and the rate should be reduced. The Commission merely eliminates the process of guessing at what the valuation might be.

Similarly, the "reasonable value of service theory" may be analyzed in the same manner. Why is a rate for service which was reasonable in 1928 unreasonable in 1933? The answer obviously is that it is unreasonable for a utility to demand a 1928 price in 1933 when its own costs have been reduced from the 1928 level to the 1933 level. If any other answer is attempted, the court is set to the problem of measuring the subjective value of telephone service to the consumer, with the possibility of a million and on standards ranging from plus $1,000,000 to minus $1,000,000. Consequently, the reasoning of the Wisconsin Commission, although purporting to disregard the valuation basis for rate determination, is really an ingenious method of applying the reasoning of such cases as Benton v. Belt Line R. Corp., 268 U. S. 413, 69 L. Ed. 1020, 45 S. Ct. 534, P.U.R. 1926A, 317, (1925) by omitting to form an opinion as to what the reproduction value or present market value of the utility property might be. Reduced to its logical conclusion that commission order signifies just this: because it is too difficult to ascertain just what the present market value of the utility property is, the commission will assume that the rates for 1928 were reasonable for 1928 conditions, and will therefore scale down those rates to fit 1933 conditions.

than it did in 1929, and that each dollar paid to an electric utility should buy more electricity than it did in 1929 and for some years prior thereto when the purchasing power of the dollar was considerably under what it is now."


"Having made no finding of fair value we have, of course, made no finding as to what percentage return upon fair value the rates ordered will produce, and such a determination we believe unnecessary for the purposes of this interlocutory order."
Summarizing the faults of the first two theories of rate regulation, it may be repeated that the original cost theory fails to make any provision for the adaptation of rates to the fluctuation of the monetary value of the dollar, while the reproduction cost theory, although expressly adopted to cope with this problem, makes the process of ascertaining the rate base such a lengthy procedure of guess work as to break down in periods when prices are deflated or inflated. The real need therefore, is for some theory by which the rate base can be definitely and quickly ascertained, and can be immediately adapted to the changing values of the dollar. The third theory, the prudent investment cost theory, stands today as being the one method by which a stable, definite, and readily ascertainable rate base can be determined. Under this theory an appraisal is made of the property of the utility at the actual or reasonable cost of installation; the accrued depreciation is deducted from this appraisal, and the final result is accepted as being the net monetary investment in the utility's property, unaffected by changes in the level of prices. The net monetary investment is then adjusted to compensate the common stockholders for changes in the price level subsequent to their investment. Thus, the rate base once determined, would remain fixed subject to future additions in the form of subsequent investments.

This theory of prudent investment cost was advocated by Mr. Justice Brandeis in his dissent in the case of Southwestern Bell Telephone Co. v. Public Service Commission, 262 U. S. 276, 67 L. Ed. 981, 43 S.C. 544, (1923), it was advocated by Mr. Justice Rosenberry of the Wisconsin in Supreme Court in the case of Waukesha Gas & Electric Co. v. Railroad Commission, 181 Wis. 281, 194 N.W. 846, (1923), and is today being advanced by President Roosevelt who stated in his speech in Milwaukee, October, 1932:

"We must substitute for this (reproduction cost theory) a rate base which rests upon the theory of prudent investments—in other words, a fair return on the actual money going into the public utility itself, and no more."

Further adherents of this plan include such economists as Dr. John Bauer, author of "Effective Regulation of Public Utilities," Commissioner Eastman of the Interstate Commerce Commission, and the Committee on the Revision of the New York Public Service Commissions Law.

However, this theory shares with the original cost theory the fault of lack of response to price changes, and for that reason was rejected by the majority of the United States Supreme Court in the South-
western Bell Telephone Co. case. To correct this fault it has been suggested that while the rate basis remain stable, the rates be multiplied by a price index to correspond with the change in the monetary value of the dollar. Thus, if $1,000,000 were invested in utility properties in 1913 and the rate of return was seven per cent, the return would be $70,000. In 1928, under this plan, the rate base would continue to remain $1,000,000, and the rate of return of seven per cent would still be given, but the return would be multiplied by the price index of 1.5 so as to correspond to the change in prices, thereby giving a return of $105,000. Then again in 1933 the return of $70,000 multiplied by a price index of 1.0 would give the same return as in 1913. This suggestion, however, fails to take into consideration the fact that a consistent return must be paid by the utility to holders of its bonds and its preferred stock. Consequently, a better proposal would be either that only the value of the common stock investment be multiplied by the price index, or else that the entire financial structures of the utilities be reorganized so as to provide for investment on the basis of a fixed utility dollar. By organizing utilities on the basis of a fixed utility dollar the problem of the fluctuating monetary value of the dollar would be largely done away with. For example, by making the dollar of 1913 represent the fixed utility dollar at 100%, it would be necessary in 1913 to invest $1,000 to get a $1,000 bond bearing a return of 6% multiplied by the current price index; it would be necessary in 1919 to invest $2,000 to get a $1,000 bond bearing a return of 6% multiplied by the current price index; and it would be necessary in 1926 to invest $1,500 for the same bond. Thus although $15,000,000 of 1926 dollars were invested in the utilities, the actual book increase would amount to only $10,000,000. The bondholders could not object since their income on $10,000,000 multiplied by the price index would be equal to the income they would get elsewhere at the same per cent on $15,000,000. Their purchasing power would thus be protected in periods of inflation, and the interests of the consuming public would be safeguarded in periods of deflation. There is reasonable ground to believe that legislation providing that produce investment cost multiplied by the current price index be the standard for valuation, would be upheld by the Supreme Court. Certainly, if such a procedure were adopted, public

38 Mr. Justice Reynolds:
"We concur . . . in holding that the value of the property is to be determined as of the time when the inquiry is made regarding the rates."

39 Jones & Bigham, ibid. p. 246:
"The fundamental reason for this optimistic view is that rate making is recognized by the Supreme Court to be a legislative function, and not a judicial one." Cf. Minnesota Rate Cases, 230 U.S. 352, (1913); Newton v. Consolidated as Co., 258 U.S. 165, (1922).
regulation commissions would finally possess a theory by which the rate base could be definitely ascertained without expensive litigation, and by which rates could be automatically adjusted to correspond with the changing monetary value of the dollar.

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