THE RATE OF RETURN ON PENNSYLVANIA UTILITIES

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U. S. Supreme Court on Rate of Return

Inasmuch as the decisions of state regulatory commissions and courts are subject to review by our federal courts, the writer will preface the discussion of fair return, as viewed by the Pennsylvania Commission and Courts, with a resumé of what he believes to be the position of our highest court with respect to rate of return.

In 1894 the Supreme Court in passing upon a rate schedule prescribed by the Texas Commission ruled that rates should not only cover the railroad's operating expenses but also the interest on bonds, holding that "Justice demands that every one should receive some compensation for the use of his money or property." 1 The Court stressed only the right to a return, not what rate of return was fair or reasonable.

The Court went a step farther in the Smyth v. Ames case ruling that the return must be "fair" or "just". How difficult was the task of ascertaining the "just compensation" was recognized by the Court when it stated that: "How such compensation may be ascertained, and what are the necessary elements in such an inquiry will always be an embarrassing question." 2

Failure to grant rates sufficient to yield an adequate return to the utility owners would, in the long run, harm the consumer by destroying the investors' confidence in the utility, thereby making difficult the obtaining of funds for expansion. 3

The Court held in 1909 that no single rate of return could be applied to all types of utilities in all sections of the country. What is a fair rate of return depends upon the degree of risk in the particular utility, the nature of the locality, and the rate of return usually obtained in that region upon investments of approximately the same risk. Moreover those utilities that had a virtual monopoly, with very little risk, and which were free from competition could not expect as high a rate of return as a utility subject to greater risks. In the case then before the Court, a 6 per cent. return was allowed the utility. 4

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The Lincoln Gas & Electric case, decided in 1919, is significant because of the consideration devoted to the increase in the return on capital during the war. A return of 6 per cent., which prior to the war had been declared adequate for gas companies, was declared insufficient.\(^5\) How important the Court believed this general rise in the return on capital to be in determining the fair rate of return for utilities is indicated by the following excerpt from its decision: "It is equally well known that annual returns upon capital and enterprise the world over have materially increased, so that what would have been a proper rate of return for capital invested in gas plants and similar public utilities a few years ago furnishes no safe criterion for the present or for the future."

In the Bluefield Water Works case, decided in 1923, the Supreme Court not only restated its earlier pronouncements concerning fair rate of return but also made several new observations. Although a utility is entitled to a return on its property approximately equal to that earned at the same time in the same region by other businesses of similar risks, "it has no constitutional right to such profits as are realized or anticipated in highly profitable enterprises or speculative ventures".\(^6\) Secondly, the return should be sufficient "under efficient and economical management" to permit the utility to raise the funds needed in expanding the system. Thirdly, because of changes in business conditions in general and in opportunities for investment no one rate of return can be said to be reasonable for a very long period. Fourthly, investors when deciding whether to place their funds in a particular enterprise consider the past financial history of the company. An enterprise which has had a varying and uncertain income will have to offer a higher rate of return to prospective investors than would a business which had a record of reasonably high and steady earnings over a period of years.

The Court clearly indicated in 1926 that the rate of return on bonds plus brokerage is: "Substantially less than the rate of return required to constitute just compensation for the use of properties in the public service". Since part of the funds for the financing of public utilities is derived from stock the rate of return must be greater than the interest rate on bonds plus brokerage.\(^7\)

In the United Railways case, Justice Sutherland in delivering the Court's opinion restated the principle that a rate of return considered adequate in the past does not apply in the present. Nor can a fixed rate of return be applied to all types of utilities in all localities. What

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is a fair rate of return in a particular case is a matter of approximation rather than of precise mathematical calculation. The most significant point in this decision was the provision that in order for a rate of return to be adequate there should remain, after paying operating costs, providing for depreciation and for interest and "reasonable dividends", "something to be passed to the surplus account". Unless there is something to go into the surplus account the investor's confidence in the financial strength of the utility will be weakened, thus making it difficult for the enterprise to raise capital when needed. A return of less than 7.44 per cent. for the street railway company was held to be confiscatory.

The contention of a natural gas company that it was entitled to a return of 8 per cent. as against the Ohio Commission's allowance of 6.5 per cent. was rejected by the Supreme Court in 1934. In approving 6.5 per cent. the Court held: "In view of business conditions, of which we take judicial notice, the rate allowed was adequate".

This review leads one to summarize the Court's principles as to the rate of return as follows. Fair return is a flexible valuation factor which varies according to the special conditions of each case. Consideration should be given to the returns paid in the past. Efficiency of management should also be considered. The degree of risk present in a particular utility should be given weight in determining the rate of return. The rate granted must be sufficiently high to attract new capital for plant expansion. This amounts to saying that the utility must be allowed a rate of return comparable to that paid by other businesses having a similar degree of risk. Thus the Court gave recognition to the opportunity cost theory. The rate of return is ascertained as an over-all percentage applicable to the entire valuation rather than a certain yield to bonds and stocks individually. Prior to the World War the Court usually recognized 6 per cent. as a fair return, while thereafter the rate rose to about 7 per cent. Since 1934 the Court has approved returns of less than 7 per cent.

Pennsylvania Court and Commission on the Rate of Return—
1914 to 1934

More than a year prior to the Smyth v. Ames decision the Pennsylvania Supreme Court devoted a considerable part of its opinion concerning the validity of an increase in water rates to the question of the

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proper rate of return for a utility.\textsuperscript{10} In referring to this early case—students of valuation have not infrequently neglected to point out that, although the Court held that the rate of return to utility owners which could be considered fair must not be less than the legal rate of interest, the Court also indicated there was no obligation on the part of the state to guarantee that such a return would be paid. This is shown by the following excerpt from the Court's opinion: "They [owners] are entitled to a rate of return, if their property will earn it, not less than the legal rate of interest."

A more extensive treatment of the rate of return was given by the Pennsylvania Supreme Court in 1908.\textsuperscript{11} Justice Mitchell enumerated the factors which the Court believed should be considered in ascertaining a rate of return. Moreover, he called attention to the fact that what is a fair rate of return to present owners of a utility is not necessarily the same rate as would be needed to attract new investors. Justice Mitchell declared: "What is a fair profit is a complicated and difficult question, but there are certain elements that are plainly to be regarded to avoid injustice, such as the original investment, the risks assumed at that time, the returns as compared with other enterprises as nearly similar as may be, the cost of maintenance and improvement, the prospects of increase and the present value in view of the preceding elements. Injustice is done by anything that fails to consider these, and to deal equitably with the private as well as the public interests involved. It is not necessarily regulated by what others would now make the venture for, under the present circumstances and with present knowledge."

In the case of Turtle Creek Borough v. Pennsylvania Water Company, which was decided ten days after the Public Service Act of 1914 became effective, unlike the Brymer case, no mention was made of the legal rate of interest as marking the lower limit of the return on public utilities. The Court held that the rate schedule must be "such as to yield a fair return upon a just valuation of the plant."\textsuperscript{12}

Examination of the decisions of the Pennsylvania Public Service Commission indicates that at least eight factors have been listed by this body as important in ascertaining the rate of return. These elements were the risks incurred by the particular utility, efficiency of management, the price paid for capital by other enterprises, condition of the utility's property, nature of the territory served, growth of population and industry in the region, nearness of a gas company to coal fields, and the fact that the consumers were mostly small users.

\textsuperscript{12} Turtle Creek Borough v. Pennsylvania Water Co., 243 Pa. 401, 414, 90 Atl. 194, 198 (1914).
In several cases the Pennsylvania Commission discussed the relative weight that should be placed upon the public interest and the interest of the utility. The primary purpose of state regulation of rates was pronounced by the Commission in 1918 when it stated that: "The State undertakes to see that the public shall be protected against undue profit to the company and that the company shall be protected against loss of fair return on the plant investment." 13 The Commission further amplified its stand in valuing a traction company in 1920, when it asserted that service to the public takes priority over return on the owners' investment. The theory underlying the regulation of valuation and the rate of return was expressed thus by the Commission: "The primary object of the state in permitting the organization and operation of respondent is service to the public. The State is not concerned in affording its owners an opportunity to make an investment in order to get a return thereon. The investment, however, having been made, State and Federal Constitutions prohibit its confiscation. Return is allowed for service rendered and service is the first consideration; the return follows but should not precede it." 14 Commissioner Rilling emphasized the fact that both the consumer and the utility are mutually interested in the rate of return. "The guiding star of the Commission in reaching its conclusions in this respect [rate of return] is the public welfare, and in no manner can the public interest be better served than by the adoption of a policy which will result in financially strong and efficiently constructed public utilities in order that they may render adequate service for a reasonable rate." 15

Commissions, courts, utilities, and economists have frequently stressed the importance of opportunity cost as the measure of the fair rate of return. In numerous instances the Pennsylvania Commission expressed its cognizance of the importance of opportunity cost in the setting of a fair rate of return. In 1918 the Commission stressed the fact that in order to obtain funds with which to expand its system, in order to keep pace with the growth of population and industry, it would be necessary to permit the water company in question to earn a rate of return sufficiently high to attract the required capital. The Pennsylvania Commission expressed itself thus: "To maintain the desired standard of service and to provide for the demands accompanying growth in population and industry, money for new investments is necessary and it must be readily available, that is, the business must be on such a sound basis that banking institutions can recommend to inves-

tors the purchase of the securities issued by the company." 16 Likewise in 1920 the Commission reiterated the necessity of offering a rate of return sufficient to attract investors, when it said: "It [the utility] should be so maintained that it can at all times meet its needs and that the finances required to make necessary improvements and extensions be forthcoming. Capital, especially in these times, will not invest itself in utilities that do not afford both ample security and a proper return." 17

Commissioner Rilling, in re-hearing a case in 1920 very clearly expressed the role of opportunity cost when he said: "It is common knowledge that at the present time many opportunities are afforded for conservative eight per cent. investments, and in order to obtain needed capital the cost to the owner of the utility, both in the rate of interest to be paid and other respects, is greater than formerly. It is obvious that if an eight per cent. return is assured with a greater degree of safety in other lines than is afforded in a public utility no money will be invested in utility properties." 18

In 1921 the Pennsylvania Commission refused to declare an increase in rates unreasonable pointing out that: "A large part of the new capital has been secured during the past few years at cost for the money in excess of 8 per cent. The respondent is in constant need of new funds each year to provide the additions and extensions necessary to meet the public demand for service." 19 How important opportunity cost is in the setting of a rate of return was clearly expressed by the Commission in 1924 when it said: "It is a conceded fact that unless public utilities can successfully compete for money for their capital requirements, public service will suffer." 20

In several instances the Commission specifically stressed the risk element in the ascertainment of the rate of return. Commissioner Rilling, in 1917, directed attention to the fact that those uninsurable hazards and risks, to which utilities are exposed, should be given weight in fixing the rate of return. 21 Although the Commission recognized that various risks should be considered in setting the rate of return, it carefully distinguished between insurable and uninsurable risks. Only the uninsurable type could be given weight in the rate of return. The

contention of a bridge company that its rate of return should be increased because of the unusual ice hazards on the Susquehanna River failed to convince the Commission. An allowance of $2,500 annually for insurance was granted by the Commission. When this case again came before the Commission in 1932 the utility claimed a 9 per cent. rate of return because of the physical hazard of flood and damage by ice and the economic hazard due to possible competition of other neighboring bridges. Had the Commission allowed a return of 8 per cent. on the fair value of $767,800 instead of 7 per cent. and an insurance allowance of $2,500, the total allowable income would have been increased $5,178 or 6 per cent. If the Commission had allowed 9 per cent., the total allowable income would have been increased $12,856, or 15 per cent.

The framers of the Pennsylvania Public Service Company Law of 1913 recognized that the utility should be permitted to share in savings resulting from efficient management. Utilities were permitted "To participate, to such an extent as may be permitted by the Commission, and deemed by the Commission wise, for the purpose of encouraging economies, efficiencies, or improvements in methods or service, in the additional profits which will be afforded by such economies, efficiencies, or improvements in methods or service." The contention of a municipality that a 6 per cent. return was sufficient for a water company, because substantial and regular dividends had been paid for many years, was rejected by the Commission. The Commission held that "It does not seem to be either fair or logical to thus penalize respondents because of the fact, that as the result of prudent and careful management, their property has been a prosperous going concern able to pay dividends to the shareholders as well as make reasonable provisions for all the requirements of public service in the communities in which they operate." In the Philadelphia Rapid Transit case, decided in 1923, the Commission gave considerable attention to efficiency of management, pointing out that the utility had "established the existence of economies and efficiencies in its operation and is entitled to share in the results thereof."

In numerous instances several state commissions have, because of inefficient management, reduced the rate of return. The Kansas Commission set rate of return for a water company at 6 per cent. until efficiency increased.\(^{27}\) The Wisconsin Commission set the return for a telephone company at 6 per cent. instead of 8 per cent. because of slowness in handling service complaints.\(^{28}\) A six per cent. return was held to be adequate by the Illinois Commission for an electric utility which rendered inadequate service.\(^{29}\) Examination of Pennsylvania Commission decisions does not reveal any such practice. In view of the fact that the Pennsylvania Commission adhered, at least verbally, to the view that efficiency of management should be rewarded by participation in the savings, it would be reasonable to expect that there would be a statement that those utilities which were below average in efficiency of operation should be penalized in fixing the rate of return.

Not infrequently the Commission enumerated factors, which it stated were considered in setting the rate of return, without giving any clue as to the relative weight given to each element. Thus in setting the rate of return for a water company in 1918 the Commission stated that “Taking into account the condition of respondent’s property and the important territory it serves, the tremendous growth of population and industry, the Commission finds that a rate of return of 7 per cent. on the investment rate base will be fair and reasonable.”\(^{30}\) Conceding that the Commission may have considered all the factors enumerated it is impossible to determine, from such a general statement, what relative value, if any, was given to the various items.

In valuing a street railway company in 1932 the Pennsylvania Commission made a worthwhile distinction between a rate of return which was legally justified and one which was economically most profitable in the long run. The Commission pointed out that, although the company was legally right in increasing its rate schedule, such increase might not yield “a fair return or the maximum return”. At the Commission’s suggestion the utility substituted a schedule designed to increase the use of the street railway by the inhabitants of that community. To have instituted a rate schedule that was legally correct in relation to the value of the property, but higher than the community was willing to pay, would have resulted in all probability in a decline in revenue and the rate of return.\(^{31}\)

The Pennsylvania Commission did not consider the fairness or unfairness of the rate of return on the basis of net returns for a short

\(^{27}\) Leavenworth v. Leavenworth Water Co., P. U. R. 1915 B, 611.
\(^{28}\) Re Lodi Telephone Co., P. U. R. 1921 D, 538.
\(^{29}\) Re McHenry County Light and Power Co., P. U. R. 1921 B, 10.
period of time. In valuing a gas company in 1932 the Commission refuted the contention that a utility is entitled to a fair return each year. The impracticability of assuring utilities a fair return every year was shown by the Commission in its statement that "To assume that a company is entitled to its proper fair return each year is to assume that rates shall be revised annually to meet the current changes in price levels, depreciated values, business volumes, etc. which is impossible. The statement of fair return is general in character and should be approximated by the facts over a reasonable period but not necessarily at every instant therein." While agreeing that the rate of return allowed utilities should not be fixed, but should vary with changing conditions, the Commission maintained that every change in business conditions did not warrant altering the rates. This view was expressed by the Commission in 1920 when it stated: "One cannot read the provisions of the Public Service Company Law without being convinced that rates to be paid all utilities should not be maintained at a fixed and definite stationary amount, but should reflect the conditions under which each is obliged to operate; the same to be increased or decreased as existing conditions require. Not every change in conditions, however, should necessarily be followed by an alteration in rates."

The Commission distinguished between the right to earn a fair return on the entire property and on an extension. Where the balance of the utility system earns sufficient revenue to pay the return on the entire property it is not necessary that the earnings derived from an extension be sufficient to provide a fair return thereon, unless the extension be of such size and require so much capital that the earnings of the remainder of the system are not large enough to yield a fair return on the entire system.

The preceding discussion deals with the Commission's concept or philosophy of the rate of return as expressed in its numerous decisions. Let us now examine these cases in order to ascertain the actual rate set by the Commission. Prior to 1934 the Commission seldom deviated from a 7 per cent. return on the fair value of the property. In the Bloomsburg Water Co. case, decided in 1920, the rate of return, allowing for depreciation, was slightly less than 7 per cent. on the basis of an historical cost of $247,000. On the basis of capitalization, the return, allowing for depreciation, did not exceed 6 per cent. The revenue available for depreciation and return on a gas company under the rates complained against was 6.8 per cent.; allowing for deprecia-

tion the return on the fair value of $195,000 did not exceed 6 per cent. A rate reduction was ordered by the Commission on the grounds that the consumers were mostly small users.36

Fairness of the rate of return in the case of street railways was influenced considerably by the growth of competing methods of transportation, the private automobile and the bus. In valuing the Valley Railways Company in 1919, the Commission, in reply to the utility's claim for an 8 per cent. return, stated that "We are not prepared to say that this request is unreasonable, but the net revenue available from a seven cent fare would not produce 8 per cent., and we do not consider that the fare should be more than seven cents."37 Apparently the Commission felt that, in spite of the probable justice of an 8 per cent. return, the increase in fares which would be necessary in order to pay an 8 per cent. return might result in a decline in traffic and also work a hardship on the users of trolley service. Under the schedule of rates approved by the Commission, the net income, after operating expenses and annual depreciation were deducted, was equal to but 4.85 per cent. on the fair value of $2,350,000. In approving this schedule the Commission made no statement that a yield of 4.85 per cent. was confiscatory. Similarly in 1921 the Commission, in approving a rate schedule which would yield a return of but 4.33 per cent. made no mention of the inadequacy of this return in this period of high interest rates.38

In a few cases the Commission granted a rate of return in excess of 7 per cent. Commission approval of a rate schedule which would yield over 9 per cent. on the fair value of the property was refused in 1917. The schedule approved by the Commission yielded 7.14 per cent.39 Because of local conditions and the difficulty of obtaining new capital, the Commission granted an 8 per cent. return to a water company in 1918.40 The Commission's reasoning in this case seems rather clouded because, while attributing the 8 per cent. return primarily to the high rate of return necessary to secure new capital, it was pointed out by the Commission that inasmuch as the population of the district has remained stationary for many years, there seemed very little likelihood of any need for additional capital for plant expansion.

The fairness of a return in excess of 7 per cent. for an electric company which had been borrowing large sums of capital for several years at a cost in excess of 8 per cent., was supported by the Commis-

sion in 1921. A careful examination of all the facts in this case and the Commission's opinion indicate that the Commission supported an 8 per cent. return, not on the entire property, but only on that part of the plant constructed with funds borrowed at the high interest rates prevailing during the war and post war period.

In numerous cases Commissioner Rilling argued for a rate of return in excess of 7 per cent. His stand was based on the contention that the property of a utility was a specialized type of capital subject to government supervision and not readily salable except at scrap value. Moreover since there were many conservative investments offering an 8 per cent. return, it was necessary to permit a comparable return to utilities in order to insure an adequate supply of new capital.

With the exception of the several cases discussed above, the Pennsylvania Commission used a 7 per cent. return. This rather rigid adherence to 7 per cent. has been attributed to early decisions of the Pennsylvania Supreme Court which ruled that a rate less than the legal rate of interest was unreasonable. Admitting that the Commission, in its first case, may have been influenced by these court decisions, other reasons seem equally potent. The United States Supreme Court in 1919 declared insufficient a return of 6 per cent., which prior to the war had been adequate. In but one instance has the United States Supreme Court declared a 7 per cent. return inadequate. Thus by adhering to a 7 per cent. return during the war and post war period the Pennsylvania Commission adopted a rate which the Courts would, in all probability, approve as fair to the owners of the utility and not unjust to the consumer. Moreover, examination of the opinions of the Pennsylvania Superior Court in valuation cases does not reveal any statement by that court that the lower limit for the rate of return was 6 per cent. In fact from the opinion of the Superior Court in the Scranton-Spring Brook case that a maximum rate of return, applicable to all kinds of utilities, could not be set due to variation in the facts from case to case, it could be argued that no fixed minimum rate of return could be set, applicable to all utilities.

Several other Commissions likewise adhered more or less consistently to a rate of return in excess of 6 per cent. Of 142 valuation cases decided by the Illinois Commission prior to 1925, the rate of

44. Lincoln Gas and Electric Light Co. v. City of Lincoln, 250 U. S. 256 (1919).
return in 31 per cent. of the cases was set at exactly 7 per cent. A rate of return of less than 6 per cent. was set in only 28 per cent. of the cases, and in no instance was the return in excess of 8 per cent. In 70 per cent. of the cases the rate of return was fixed between 6 per cent. and 8 per cent.\footnote{Kneier, \textit{State Regulation of Public Utilities in Illinois} (1926) 14 \textsc{University of Illinois Studies in the Social Sciences} 107.} In valuing a utility in 1918 the Illinois Commission stated that the rate of return which it usually granted was 7 per cent.\footnote{\textit{In re Monmouth Public Service Co.}, F. U. R. 1918 D, 121.}

The Commission on Revision of the Public Service Company Law of the State of New York indicated in its report that an 8 per cent. return was a settled policy with the New York Commission. This was true in spite of the fact that each case had its own peculiar conditions. In twenty-eight of the thirty-three valuation cases decided by the New York Commission from 1916 to 1921, the return was set at 8 per cent. The rate was in no instance less than 7 per cent. A flat 8 per cent. was fixed in twenty-eight of the forty cases decided from 1921 to 1929. In only three of the forty cases was the return set at less than 7 per cent. The average return for the 1921-1929 period was 7.67 per cent.\footnote{Report of Commission on Revision of Public Service Commissions Law, State of New York (1930) \textit{Hearings}, Vol. 3, pp. 2825-2830.}

Pegrum concluded that although the California Commission has frequently stated that no one rate of return fitted all cases, the rate actually set "usually centers around 8 per cent."\footnote{Pegrum, \textit{Rate Theories and The California Railroad Commission} (1932) 10 \textsc{University of California Publications in Economics} 38.} The rate of return, prior to the depression, as fixed by the California Commission tended "to be fixed by more or less rigid and absolute standards".

The writer's contention that the Pennsylvania Commission's adoption of a 7 per cent. rate of return was not due chiefly to the early pronouncements of the Pennsylvania Supreme Court that the rate of return must not fall below the legal rate of interest, but was in agreement with the general tendency among commissions to allow a rate somewhere between 7 per cent. and 8 per cent. is supported by a study of 163 cases decided by the various commissions and courts from 1915 to 1930. In 134 of the 163 cases the return allowed lay between 7 per cent. and 8 per cent. This comparison leads one to conclude that the rate of return allowed to utilities in Pennsylvania, particularly water, electric and telephone companies was not so high as was allowed by numerous other commissions.\footnote{Smith, \textit{The Fair Rate of Return in Public Utility Regulation} (1932) 131.}
good case for demanding that the rate of return be set at less than 7 per cent. Granting the validity of this view the writer directs attention to the fact that consumers in other states, where the return allowed exceeded 7 per cent., and was as much as 8 per cent. in numerous instances, had an even stronger case for seeking a reduction in the rate of return than did consumers in Pennsylvania.

The writer’s contention that the rate of return allowed by the Pennsylvania Commission, 7 per cent., was in line with that granted by other commissions, following the dictates of the federal courts, is substantiated by the fact that in each of the twelve cases decided by the various United States District Courts between 1917 and 1930, the return allowed was 7 per cent. or higher, and in 8 of the 12 cases it was set at 8 per cent. A well known authority on utility valuation has thus described the views of the United States Supreme Court on the rate of return and the effect of its views on commissions: “For the most part, there is a tendency toward standardization near 7 per cent. When in any instance the percentage is lower there is close scrutiny as to its adequacy. When it is higher, the excess is subjected to special attack. The standard rate is practically 7 per cent., with moderate deviation only as conditions distinctly warrant or require a higher or lower percentage. Exact market conditions and variations are mostly ignored.”

Efforts To Obtain More Than 7 Per Cent.

It is apparent from the above evidence that consumers had little chance of obtaining a reduction of the return below 7 per cent., nor was there much likelihood of a rate being granted in excess of 8 per cent. In several cases, however, the complainants and respondents argued for a rate of return other than 7 per cent.

The respondents in the Westmoreland Water case, decided in 1917, contended that three elements should be considered in setting the rate of return. One factor was the company’s early history, the conditions under which the plant was originally built and the difficulty of obtaining capital. A second factor was the rate of return then necessary to attract capital for purposes of extensions and betterment. The respondent’s witnesses could not agree as to what rate was necessary to attract additional capital as shown by the fact that one expert set 8 per cent., another 9 per cent., and a third 10 per cent. The third element advanced by the utility was the rate of return which would

51. BAUER AND GOLD, PUBLIC UTILITY VALUATION FOR PURPOSES OF RATE CONTROL (1934) 354.
52. Greensburg v. Westmoreland Water Co., 2 P. S. C. 1034 (1917). The arguments in full were given in the respondents’ brief.
be necessary, in the future, to attract capital to the utility. A fair rate of return was held by the water company to be not less than 7½ per cent.

In this same case the complainants argued that a 6 per cent. return was adequate. They maintained that since the utility held an exclusive franchise to serve the region it would be protected from competition and should, because of the small risk involved, not receive more than 6 per cent. In 1920 a water company argued unsuccessfully for an 8 per cent. return.53

The complainants in the *York Water* case contended that because the company had paid substantial and regular dividends for many years, a 6 per cent. return was adequate. In reply the Commission stated that to set the return at 6 per cent. because the company had been successful in the past would penalize “prudent and careful management”.54

In the *Philadelphia Rapid Transit* case, decided in 1923, the utility contended for an 8 per cent. return as necessary to avoid confiscation. Numerous decisions by other commissions were cited wherein an 8 per cent. return was granted to various types of utilities in 1921 and 1922.55 Examination of the decisions of other commissions in street railway cases indicates that the return allowed centered around 7 per cent.

Efforts of a telephone company to obtain a return of 7.42 per cent. in 1929 were denied by the Commission.56 Likewise in 1930 a sewerage company failed to convince the Commission that it should receive a return of 7.5 per cent.57

**Rate of Return 1934-1937**

On April 2, 1934, the Pennsylvania Commission adopted a resolution that a 6 per cent. rate of return was adequate so long as the existing economic conditions prevailed. The resolution was as follows: “That so long as the present economic conditions of the country exist, this Commission believes that an annual rate of return of six per centum (6%) to public service companies in its jurisdiction is a fair and reasonable return on the value of the property used and useful in the

rendition of the service to the public.” Until its abolition in 1937 the Pennsylvania Commission adhered to the 6 per cent. rate.\textsuperscript{58}

Examination of decisions handed down by numerous commissions and courts indicate that the Pennsylvania Commission either failed to realize, as soon as did other regulatory bodies, that the depressed condition of business in general should be given weight in setting the rate of return for utilities, or, if it was cognizant of this situation, was hesitant to admit its existence.

As early as 1923 the United States Supreme Court clearly indicated that changing economic conditions warranted a change in the rate of return, when it stated 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.”\textsuperscript{59} The same Court ruled in 1930 that: “What is a fair return within this principle cannot be settled by invoking decisions of this court made years ago based upon conditions radically different from those which prevail today. The problem is one to be tested primarily by present-day conditions.”\textsuperscript{60} Early in 1932 Chief Justice Hughes dwelt upon the weight which should be attached to the change in economic conditions which occurred between September, 1928, and 1931. Justice Hughes said that: “It is plain that a record which was closed in September, 1928, cannot be regarded as representative of the conditions existing in 1931. That record pertains to a different economic era and furnished no adequate criterion of present requirements. This is not the usual case of possible fluctuating conditions but of a changed economic level.”\textsuperscript{61}

During 1932 two United States District Courts upheld the lowering of the rate of return. In 1932 the Indiana Commission lowered the rate of return of a water company, set at 7.5 per cent. in 1926, to 6 per cent. In refusing the utility an injunction against the enforcement of the Commission’s order, the Court in July, 1932, held that: “We have concluded that a rate of return of 6 per cent. under the conditions existing today would not be confiscatory.”\textsuperscript{62} A Federal Court likewise refused in January, 1933, to grant a temporary injunct-


\textsuperscript{60} United Railways and Electric Co. v. West, 280 U. S. 234, 249 (1930).

\textsuperscript{61} Atchison, Topeka & Santa Fe R. R. v. United States, 284 U. S. 248, 260 (1932).

\textsuperscript{62} Indianapolis Water Co. v. McCardle, P. U. R. 1933 B, 222, 223.
tion restraining the enforcement of a rate order of the Illinois Commission resulting in a return of 5.17 per cent. for a water company. The Court ruled that: "Under the existing generally depressed industrial and financial conditions, indicating a greatly abnormal condition both generally and locally, all of which appears in the record, we are not warranted in finding that the probable return of 5.17 per cent. is confiscatory." 63

In numerous instances in 1932 commissions, relying upon the above discussed views of the United States Supreme Court, ordered rates which resulted in a reduction in the rate of return. The Connecticut Commission held in January, 1932, that, "In determining the rates and the percentage rate of return to be allowed on the fixed capital, some consideration should be given, the Commission believes, to the general economic conditions obtaining throughout the country." 64 Recognition of the fact that business conditions in general must be considered in regulating the return granted to utilities was expressed by the Wisconsin Commission, in June, 1932. The Commission ruled that "When business generally is at as low an ebb of activity and profitableness as it is at this hour it is inevitable that the respondent telephone company must be content with a more moderate return than is its due in times of normal or more nearly normal business conditions." 65

The Tennessee Commission stated in October, 1932, that "This Commission and all judicial tribunals must take judicial knowledge of the fact that an economic crisis of the greatest proportions exists throughout the United States and that a fair return on any particular property must be determined by conditions that exist at the time the return is allowed." 66 Similar views were expressed by the Commissions of New York, Washington and the District of Columbia.67 The Texas Commission ruled in March, 1933, that since a 6 per cent. return was equivalent in purchasing power to a 9 per cent. return in 1929, the lower return was fair. 68 Thus while most commissions, by the end of 1933, were allowing a 6 per cent. return, the Pennsylvania Commission still adhered to a 7 per cent. rate. 69

69. Bernstein, Public Utility Rate Making and the Price Level (1937) 118.
Our discussion of the rate of return has dealt with the rate which the Pennsylvania Commission set as fair in its decisions. Let us now examine to what extent the utilities conformed to the 7 per cent. rate. Although it is readily admitted that the outstanding securities of a utility are a poor index of its fair value, there were sufficient cases on the Commission's record wherein outstanding securities greatly exceeded the fair value to indicate the wisdom of investigating companies when rate of return on their capitalization considerably exceeded 7 per cent. Capitalization exceeded fair value in at least eighteen cases decided by the Commission between 1916 and 1927. The excess of outstanding securities over the fair value set by the Commission is shown in the table set forth at the end of this article. Attention is directed to the fact that in several instances the outstanding securities are two and a half times the sum set for fair value.

Evidence was introduced at the legislative investigation, March, 1931, to show that the Pennsylvania Commission was aware of high earnings in the electrical industry as indicated by the company reports filed with the Commission and by the reports of the Commission's Bureau of Accounting. Of nineteen electric companies listed in the investigation, six were earning over 14 per cent. on the common stock, three were earning 40 per cent., and two were earning over 50 per cent. In 1927, one company earned 100 per cent. on its common stock. It would be indeed difficult to justify such earnings, even during the period from 1920 to 1930, on the grounds of the then current cost of funds.

An accountant for the House Investigating Committee, using the reports of fifty-three electric companies to the Pennsylvania Commission, found that on the basis of fixed capital, thirty-two companies earned 10 per cent. or more during 1929. Seventeen companies earned 15 per cent. or more; and thirteen earned 20 per cent. or higher. One company paid common stock dividends in 1924, 1925 and 1926 of 14½, 16, and 11 per cent. respectively. From 1927 to 1930 inclusive the Chester Valley Electric earned 11.7, 12, 14.4, and 13 per cent. respectively on its fixed capital. Earnings on the capital stock for the same years were 64, 75, 88 and 83 per cent. respectively.

70. Report of House Committee on Investigation of Public Service Commission (1931) 4 Pennsylvania Legislative Journal 5309 et seq. This was the majority report submitted May 25, 1931.
Another example of high earnings in the electric industry during the nineteen-twenties was the Scranton Electric Company. In every year from 1925 to 1930 inclusive the earnings on fixed capital exceeded 12.9 per cent. and during three of the six years they were 15 per cent. or higher. During the same years earnings on the capital stock did not fall below 48 per cent. and for two years were somewhat in excess of 100 per cent. A cash dividend of 48 per cent. was paid in 1927.

Numerous other electric companies with high earnings on common stock could be listed. However, the numerous Pennsylvania Commission cases in which outstanding securities exceeded fair value and the fact that a high return was earned by a goodly number of electric companies on fixed capital, and particularly on the common stock, should have been sufficient evidence to stimulate some action on the part of the Commission. It is significant that no rate investigation was started on the Commission's own initiative until 1930, although it was clearly empowered to do so under the provisions of the Public Service Company Law. 73

Commission laxity in compelling adherence to its prescribed rate of return was evident in the Clark's Ferry Bridge case. Although the Pennsylvania Commission, in 1926, set this company's gross annual revenue at $85,905, the actual revenue during each of the four succeeding years exceeded the prescribed sum by at least $32,000. In 1929 the excess was $55,653. 74 Likewise the Elwood Water Company was granted a total revenue of $71,250 and a return of $30,450 in 1921. In 1923 and 1924 the actual gross revenue exceeded the Commission's figure by more than $13,000; and in 1925 and 1926 by $27,000 and $31,000 respectively. For each year from 1923 to 1926 inclusive the sum available for interest and dividends exceeded the prescribed sum. In 1923 and 1926 the amount actually available for interest and dividends exceeded the Commission's allowance by 19 and 35 per cent. respectively. 75

The Waynesburg Water Company case, decided in 1922, also revealed a rather consistent exceeding of the Commission's total allowable income and rate of return. A total allowable income of $33,000 was fixed by the Commission. In all but one of the four succeeding years the gross income exceeded the Commission figure by at least 20 per cent. and in 1926 by 33 per cent. Even if we concede that the excess income above the Commission's figure was partly consumed

73. Pa. Laws (1913) 1374, art. 5, § 20 (a), "The Commission shall have power, upon application or upon its own motion, to ascertain and determine the fair value of the property of every public service company in this Commonwealth. . . ."
74. (1931) 4 Pennsylvania Legislative Journal 5313.
by increased operating expenses, attention is directed to the fact that in each of the four succeeding years the net income available for interest and dividends exceeded the Commission figure by 15 per cent., and by 34 per cent. in 1926. Inasmuch as there was practically no change in the fixed assets of the company from the time of the Commission's decision, there appears to be no justification for these excessive earnings. The net income available for interest and dividends from 1923 to 1926 inclusive was equivalent to a 7 per cent. return on a fair value of $235,000, $268,000, $228,000 and $240,000. Fair value was set by the Commission in 1922 at $200,000.\textsuperscript{76}

The South Pittsburgh Water Company case, decided in 1927, furnishes an excellent illustration of the consistent exceeding of the return allowed by the Commission. Fair value was set at $7,500,000 and the return 7 per cent., or $525,000. During each of the next four years the net income available for interest and dividends exceeded the above return by no less than $181,000 or an excess of 34 per cent. In 1931 the sum available for interest and dividends exceeded the Commission figure by $426,000 or an excess of 81 per cent. The net income for each of the four years was equivalent to a 7 per cent. return on a fair value of $10,102,000, $11,419,865, $12,064,000 and $13,602,000 respectively. Even though we augment the fair value of $7,500,000 set in 1927 by the increase in the fixed assets, as shown by the company's balance sheet, the net income available for interest and dividends yields more than 7 per cent. on the resulting figure. For example, if the $7,500,000 fair value is increased by the rise in fixed assets during 1928, $464,000, the net income for 1928 of $706,439 would yield a return of 8.8 per cent. on the combined fair value and fixed asset increase. In 1931, using the same method, and making no reduction due to the lower price level prevailing at this date, the net income was equivalent to a 10 per cent. return on the Commission's $7,500,000 fair value plus the $2,000,000 increase in fixed assets, as reported in the Company's balance sheet.\textsuperscript{77}

These several illustrations appear to support the belief that the Commission failed to compel compliance to its orders with respect to gross income and return on the fair value.\textsuperscript{78} It cannot be argued that, having set a fair value and the rate of return, the Commission had no further means of compulsion at its disposal. Article 6, section 34 of the Public Service Company Act provided that the Attorney General

\textsuperscript{76} Waynesburg v. Waynesburg Water Co., 5 P. S. C. 745 (1922).
\textsuperscript{78} The fact that many of the small utilities valued by the Commission did not submit reports to rating agencies, or were parts of larger systems and did not issue individual reports, made it impossible to check on their actual rate of return.
"shall also, upon request of the Commission, or upon his own motion, proceed, in the name of the Commonwealth, by mandamus, injunction, or quo warranto, or other appropriate remedy at law or in equity to restrain violations of the provisions of this Act, or of the orders of the Commission."

Summary

Our examination of the Pennsylvania Commission's fixing of fair return, particularly prior to April, 1934, indicates rather clearly that little or no effort was made to consider the various elements usually enumerated as influencing factors. Efficiency of management, the degree of risk, and rate of return usually obtained in the locality, all of which have been listed by the United States Supreme Court as affecting the rate of return were given little actual weight by the Pennsylvania Commission. Where numerous factors were listed by the Commission, little indication was given as to the relative weight of each in the determination of fair return. If the several elements usually listed as determinants had been actually considered in each case it is hardly likely that a 7 per cent. return would have been found in practically all cases.79

Students of utility valuation for rate-making frequently set as the proper rate of return the rate earned by privately operated industries having comparable risks. The weakness of this standard lies in the difficulty of ascertaining industries attended by a similar degree of risk. Examination of the writing of those who advance this measure of fair return fails to reveal mention of specific industries having the same degree of risk as do utilities. Many Pennsylvania water companies have been in operation for more than fifty years. Unregulated Pennsylvania industries attended by such a small amount of risk would be difficult to find. Businesses having the same degree of risk as do most utilities are usually monopolistic rather than competitive, such as industries possessing valuable patents and processes, and those owning resources limited in quantity and distribution. Such industries obviously do not provide a satisfactory basis for comparison.80

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79. The Pennsylvania Commission was not alone in its failure to analyze the weight attached to the various elements considered in ascertaining the fair rate of return. From his study of more than one thousand Commission and court cases, decided between 1915 and 1928, Smith concluded that little or no explanation was given of the relative weight attached to the several factors said to have been considered in arriving at the fair rate of return. Smith, The Fair Rate of Return in Public Utility Regulation (1932) c. 6.

80. Wu points out that "Seldom do those, who testify on fair return from the standpoint of risk, present any exhibits showing the actual earnings of other industries subject to the same risks." Wu, Railroad Valuation and Fair Return (1930) 90.
In selecting unregulated industries of comparable risks it would be necessary to measure the extent and nature of various types of risks such as the risk of competition, population shift, and the introduction of substitute products. The difficulty of such a task is indicated by the paucity of studies dealing with the relative risks of utilities and unregulated enterprises.

The generally conceded fact that utilities as a group are attended by less risk than is present in unregulated enterprises is not a measure of the extent of this difference in risk. Moreover assuming that such a measure could be determined for the utility industry as a whole, it would also be necessary to determine the difference in risk prevailing in the various types of utilities as compared with unregulated businesses.

A study of utility risks from 1909 to 1929 revealed that subsequent to 1921 the risks in utilities, excepting electric railways and steam railways, declined more rapidly than in industrial enterprises. Reinboth shows that by 1927 the yield on utility bonds was less than on industrial bonds. Moody's comparison of utility and industrial bond yield substantiates this conclusion. On the basis of forty industrial and forty utility bonds, consisting of four groups of bonds differing in grade, the annual average bond yield for each year from 1922 to 1930 was less than that of industrials. Since 1917 the price of new capital derived from bond issues has been also consistently lower for utilities than for industrials. This decline in the price of utility capital is attributable to the growth of urban centers, increased per capita consumption and decreasing operating costs.

That utilities must be allowed a return sufficient to attract the necessary capital for expansion is conceded. However, it is significant that as the credit position of utilities rose they were able in the post-war period to dispose of their securities "at very favorable rates, both absolutely and comparatively".

Examination of Pennsylvania Commission decisions during the post war period shows it to have been either unaware or unmindful of the declining cost of utility capital. Moreover, it is to be remembered that in numerous instances the utilities valued had not sold bonds or stocks for some years, nor were they contemplating expansion. To base the rate of return in such cases on the cost of capital at the time of the valuation would be to ignore the facts of the case. While indicating that the likelihood of any need of additional capital by a par-

82. Moody, Manual of Industrials. Standard Statistics also supports this conclusion, 3 Standard Trade and Securities (Statistical Section).
ticular water company was small, the Commission granted a return of 8 per cent. on the grounds that it would be difficult to obtain funds at a lower rate. To thus grant a rate of return necessary to attract capital which the utility did not need nor contemplate seeking was clearly in contradiction to the facts of the case.

Unlike several other commissions the Pennsylvania Commission in setting the fair rate of return gave little consideration to the financial set-up of the particular utility or to the price of capital. In 1915 the New York Commission allowed a return of 6.75 per cent. on a fair value of $584,961. This rate of return was largely dictated by the fact that it would be sufficient to pay the holders of $200,000 of bonds a 6 per cent. return and an 8 per cent. return on $300,000 of bonds.

Similarly in 1926 the New York Commission refused a telephone company's claim for an 8 per cent. return and instead allowed 7 per cent. on the grounds that it was a reasonable return in view of the fact that the actual cost of money was 6.4 per cent. and that an offering of 6.5 per cent. preferred stock had been oversubscribed at a premium. The Massachusetts Commission ruled in 1916 that where one half of the investment consisted of bonds paying 4.7 per cent., a return of 6 per cent. was sufficient since it left 7.3 per cent. for stockholders. In 1919 the Nebraska Commission held that a return of 7 per cent. on investment was excessive where the average rate of interest and dividends was approximately 6 per cent.

The Johnstown Water Company, at the time of its valuation in 1922, had $690,000 of 5 per cent. bonds and $375,000 of stock outstanding. On the Pennsylvania Commission's fair value of $4,750,000 the company was entitled to a 7 per cent. return, or $332,500. Deducting the 5 per cent. return due to bondholders there remained $298,000.

84. Montrose v. Consumers Water Co. of Montrose, 3 P. S. C. 265 (1918).
87. Bay State Rate Case, P. U. R. 1916 F, 221.
for the holders of the $375,000 of stock. It may be argued that on the basis of fixed capital of $3,338,000, the return was not excessive because the accumulation of a large fixed capital in proportion to the outstanding securities may have been due in considerable part to good management. However, the public protection against competition and the growth in population were also contributing factors in the company's success for which the stockholders should not be remunerated.91

The Armstrong Water Company, valued in 1926 at $400,000, had outstanding $350,000 of 5 per cent. bonds and $75,000 in stock. After deducting $17,500 bond interest from the allowable income of $28,000 there remained $10,500 or 14 per cent. available for return on the stock. The actual sum available for dividends exceeded 14 per cent. for several years between 1928 and 1933.92

To set the rate of return for an established utility at the current rate of return on new investments without regard to the actual cost of capital to the company, especially where the major part was obtained through bonds, would during a period of high rates pay excessive returns to the stockholders, and unusually low returns during a period of low rates.93 Our study of the Pennsylvania Commission's fixing of the fair rate of return indicates that for the first twenty years of its existence it considered the rate of return an inflexible factor in the ascertainment of a utility's allowable income. In spite of the fact that since 1909 the United States Supreme Court had recognized that no one rate of return was applicable to all utilities and that the nature of the particular utility was to be considered in setting the rate, the Pennsylvania Commission in almost every case, whether water, electric, bridge, telephone or other utility, clung tenaciously to 7 per cent. Differences in risk attending various utilities, cost of capital, financial structure, efficiency and the past financial history of the utility being valued played a small, if any, part in the Commission's consideration. Although it is evident from a study of utility valuation that many Commissions gave the rate of return the same slight consideration as did

93. Whitten and Wilcox conclude that: "Without doubt the rule that fixes the rate of return to be allowed at the monetary rate of return applicable to new investments in the same community disregarding the actual cost of capital to the utility, has the effect of duplicating the difficulties inherent in the fair value rule. No stable financial structure can be erected in the public utility field, even under public regulation so long as neither the investment nor the rates of return is stable or capable of ascertainment at any given time except through the expensive and long-drawn out process of rate litigation." 2 WHITTEN AND WILCOX, VALUATION OF PUBLIC SERVICE CORPORATIONS (2d rev. ed. 1928) 1193.
the Pennsylvania Commission, it is also apparent from our discussion that several Commissions gave actual consideration, as reflected in the rate of return allowed, to such elements as efficiency of management, financial structure, and changes in business conditions.