THE BALDWIN LOCOMOTIVE WORKS

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ARE AMERICAN RAILROADS OVERCAPITALIZED?

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By ALBA B. JOHNSON
President of
The Baldwin Locomotive Works

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NEXT to agriculture, transportation constitutes the largest industry of the country. Therefore the prosperity of the country depends, after abundant crops, upon the prosperity of the railroads. After the Civil War the country set about developing its great unsettled western country. For this development first railroads and then population were necessary. So great was the need for the first that extraordinary inducements were held out to capitalists to invest in railroad construction. These inducements were offered by the National Government, by states, by counties and by individual cities and towns. Rates of interest were high and the details of capitalization were scrutinized only by the investor, for at that time there was no public authority having jurisdiction over such matters. At that time the public at large was glad to have railroads on any terms. Now, however, a careful review is being made by economists and Government bureaus, of these details of railroad finance, to determine their effect upon present-day problems.

If those who believe American railways are seriously overcapitalized would study thoroughly certain facts, it is probable that most of them would conclude that they have attached too much importance to capitalization and would feel readier to co-operate for invigoration of railway credit through re-enforcing railway revenue. The certainty of increased earnings for the railroads would do more for a restoration of National prosperity than any other factor conceivable. To start the roads into robust enlargement of facilities would feed many mouths, bless many regions, do much to steady business, postpone and minimize depressions and carry forward the widening of every man's selling area. This beneficent result is obstructed by the general delusion as to capitalization.

While President Brown, of the New York Central, was before the Interstate Commerce Commission in 1910, testifying for higher freight rates, an attorney of the shippers, Mr. James, was about to ask the witness his opinion of a statement in a book when Mr. Brown inquired, "What is that book?" Mr. James replied that it was "Chapters of Erie," by Charles Francis Adams, written in 1871, the statement referred to being the passage on stock watering. Chairman (since judge) Knapp leaned forward and remarked in surprise:

"Do you mean seriously to intimate that the New York Central is over-capitalized?"

Obsolete Railway Testimony

Sundry railway counsel, not appreciating the obstinacy with which the Adams fiber refuses to wither, and not knowing that this identical Adams, grandson of the sixth president and great grandson of the second, was at that moment in the prime of maturity at seventy-five, and capable of accepting summons and holding his own with any generation of interrogators whatever, jested on the point whether counsel would "produce Mr. Adams for cross examination," and whether he should be sought "above or below." So far back the lawyer had gone to find any competent authority to support his contention that the New York Central was over-capitalized.

The tradition of water securities is kept alive by a few classic instances. One earnest hydrophobe, who had heard that story about the New York Central, observed: "Please call Mr. Adams and ask him about ——," naming a railway company celebrated in recent times for stock jobbing.

Nothing is to be gained by issuing a clean bill of health to all roads since the discovery of the steam engine. If we are asked "Have American railway companies issued stock as a bonus with bonds?" the answer is "Yes; because it was then necessary to attract investors and was consistent with the business standards of the time; the practice was once general. Moreover in some consolidations securities were issued to a par value greater than that of the combined issues previously outstanding; also, directors have been known to operate construction companies and to issue stock to buy property from themselves."

squeezing out all the water originally contained; but many of the best-informed statisticians believe this to have been the case.

An Illuminating Comparison

Earnings which could have been paid to stockholders, as is the custom in some other countries, have on American roads been put into the property without increase of capitalization. The old rule of the Pennsylvania Railroad Company was a dollar expended for improvements for each dollar disbursed in dividends to stockholders, and for years this practice was emulated by many of the most prosperous and conservative roads. In the twenty years, 1891–1910, the amount expended for terminal improvements and charged to income account aggregated no less than $459,839,061. The rigid accounting system of the Interstate Commerce Commission was not put into effect until the fiscal year 1908, and in the years before that, large sums were expended on the property and charged to operating expenses which now are required to be assigned to capital account.

Stock again, instead of being given as a bonus "representing nothing but blue sky," has to a large amount been sold for cash above par. The economist, Floyd W. Mundy, cites three cases, the New York Central, Baltimore & Ohio, and Pennsylvania, which, in 1913, he estimates had a total capital stock of $934,242,088.

Of this, $547,770,653 was issued since 1900, upon which the cash realized was $620,788,035. Three of our largest roads, he means, got an average of more than eight per cent. premium on at least sixty-one per cent. of their total stock now outstanding. Among other effects of this policy it has served in the case of these companies to wipe out, many times over, any increases of capitalization through unearned stock dividends.

As a result of these two sets of forces—the sins of the fathers and the penance of the sons—is the burden of interest and dividends sufficiently excessive to require a readjustment of that situation before the matter of re-enforcing railway credit and reinvigorating railway progress is undertaken?

Let us seek an answer by sweeping away the cobwebs of par value and per mile of line, which may mean anything or nothing, and applying a test, perhaps rarely used, but a test fundamental, comprehensive and conclusive. Let us ask: Are payments to capital excessive? There happens to be one foreign country, Great Britain, which has a considerable railway system, privately owned and operated, and yielding statistics comparable with those for the United States. How does our burden of payments to stockholders and bondholders compare with the British? What share of the receipts goes into dividends and interest on funded debt? The figures are as follows:

Railway Receipts and Payments to Capital

United Kingdom, 1911	
Receipts (returns to British Board of Trade, p. xix)	£ 127,199,570
Total capital (do., p. xxiv)	1,324,018,361
Average rate interest and dividends (do., p. xxvii)	3.59 per cent.
Amount of interest and dividends (computed from above)	£ 47,532,259
United States, 1910	
Operating revenue (Interstate Commerce Commission Statistics of Railways, p. 70)	$2,750,667,435
Net revenue from outside operations (do., p. 70)	2,225,455
Total receipts	2,752,892,890
Net interest (do., p. 69)	370,092,222
Net dividends (do., p. 69)	293,836,863
Interest and dividends	$663,929,085
Comparison	
Interest and dividends percentage of receipts:	
United Kingdom	37.3
United States	24.1

If capital had received from American railways the British proportion of total receipts, 37.3 per cent., instead of 24.1 per cent., as was the fact, the American distribution of interest and dividends in 1910, would have been $364,772,072 more than it actually was.

Does this test of whether capitalization is or is not excessive afford an overwhelming motive for staying railroad progress in this country, while returns to owners and creditors of our roads are being scaled down?

To many, like the attorney above mentioned who wanted to call Mr. Adams and ask him about a specific road, averages for all the lines of each country compared may not be conclusive. To these, perhaps, one fact in the hand is worth two in the bush. Average statistics is the bush, and the particular instance known to him is the bird in the hand. How can we tell but that a considerable number of the principal American lines are carrying too heavy a burden of interest and dividend disbursements? Let us examine for his benefit an Eastern and a Western road which have been most criticized—Alton and Erie. What are the figures? Here they are:

Net Dividend and Interest Percentage of Receipts

United Kingdom (1911)	37.3
United States (1910)	24.1
Alton (1910)	25.8
Erie (1910)	17.3

These figures do not excuse wrong doing, if wrong doing there has been, but on the other hand do they furnish reason for blocking American railway leadership as a whole in the development of American industry, commerce, agriculture and territory?

Par value of capitalization should be mentioned, lest the omission be misinterpreted. Par value affords no secure basis of comparison. The usual method is to assign capital per mile of line. This is faulty, because it leaves unanswered the question, What is a mile of line? A mile of line on an average in Texas has only 58.7 per cent. as many lines of track as has a mile of line in the statistical group situated in New York, New Jersey, Pennsylvania, Delaware and Maryland, only 23.2 per cent. as many locomotives and only 15.7 per cent. as many cars. So of terminal cost figures; the per-mile-of-line basis means little unless we know how many miles of line there are per terminal. If two roads have each two terminals worth $1,000,000 apiece, and one is 1000 miles long while the other is but 500, then the 1000-mile line has capitalization charged to its two terminals of $2,000,000, or $2000 per mile of line, while the 500-mile road has a capitalization charged to its two terminals of $2,000,000, or $4000 per mile of line. Cost of road construction again may be as low as $20,000 a mile on the prairie and as high as $250,000 a mile through the mountains, or $1,000,000 a mile through the city. For this and other reasons comparison of capitalization is unsatisfactory. The facts, however, for what they are worth, are creditable to American railways by such a margin as fairly to raise the question whether any conceivable allowance for difference in conditions would offset it.

These figures, showing an excess over American capitalization ranging from 81.7 per cent. in Germany to 424.1 per cent. in England and Wales, are averages for all roads. "Net capitalization," on the basis used by the Interstate Commerce Commission for all the roads consolidated in one account, is not easy to compute for individual American roads, owing to the interweaving network of subsidiary corporations. To deduct from the total for the given road the securities of other roads held in its treasury still leaves a sum higher than the "net" actually is, because there would remain to be deducted, the securities held in the treasury of every subsidiary, and so on in an all but endless chain. But consider the primary elimination, deducting from the total for the parent corporation only those securities of other companies directly held by it. This shows that there is no American road of considerable size which is not capitalized at less than the British average. Of American roads two hundred or more miles long, that having the highest gross capitalization per mile is the Erie. Its net figure, after making the partial deduction above defined, is $239,573. The United Kingdom shows an average for all lines 14.9 per cent. higher than the Erie; England and Wales 37.1 per cent. higher. The Alton net, thus figured, stands at $129,413. The French average for all roads shows 11.7 per cent. higher than the Alton; United Kingdom, 112.6 per cent., England and Wales 153.7 per cent. higher than the Alton.

The Shoe on the Other Foot

Suppose it were the railways of the United States instead of the European lines which showed excess of capitalization per mile of line 81.7, 130.9, 339.1, 424.1 per cent.; would not the country visit condemnation upon our roads in good round terms? It is not good form in the United States to applaud railways. I would not suggest the indecorum of Americans throwing up hats over their impressive accomplishment in keeping down the capitalization charges on transportation; but may not one reasonably ask whether "overcapitalization" according to world standards, has really been so flagrant in the United States as to constitute a national emergency? To meet it, ought the replenishment of equipment and the building of terminals for the accommodation of freight to wait?

Is the question of capitalization, then, as related to actual investment, to be ignored and railway managers left foot-free? The problem is receiving assiduous attention. Railways operating five hundred miles or more of lines which pass through states having statutes for the regulation of railway securities aggregate 198,854 miles, which is 94.6 per cent. of the total in the five-hundred-mile class. The Interstate Commerce Commission is at this moment, under mandate of Congress, inquiring into railway capitalization.

valuable and where elevated, depressed, tunnel and other costly structures have been frequent, another less so; one had to be carried over or under mountains, another traverses mainly a level country. Measuring the actual cost of the roads to the public by the sure test of the percentage of receipts paid to owners and creditors we find that the New York Central distributed in 1910 in net interest on funded debt and in dividends 11.2 per cent. of receipts; Erie, 17.3 per cent.; Pennsylvania, 13 per cent., and Baltimore & Ohio, 23 per cent. What, in the light of these figures, can capitalization have to do with freight rates?

Justice to Railroads

The Interstate Commerce Commission, as it observed in the Eastern trunk line rate advance case, handed down through Commissioner Prouty, "is called upon to deal with rates as they exist, and in so doing we ordinarily consider them, not from the revenue standpoint, but rather from the commercial and traffic standpoint." He went on to declare, discussing the Baltimore & Ohio, Pennsylvania and New York Central: "Under rates reasonable for these three systems there may be lines whose earnings will be extravagant, but that is their good fortune. There may be lines which cannot make sufficient earnings, but that is their misfortune." The need of the average road was adopted by the Commission as the test. Anxious citizens, who come to see that poverty for their railway means a handicap to those it serves, may inquire what an average road is. They will at least want the door left open for making the rate level adequate for the particular road on which they depend.

Possibly we have been splitting hairs. A new railway question confronts us requiring statesmanship for its solution. When it becomes clear to enough people that the railroads have before them, in enlargement of facilities and provision for safety, a task which must be done, and which cannot be done with money now available, the Interstate Commerce Commission will have before it the demand that this work be accomplished and that conditions be made such that the roads can obtain the capital. No single adjustment for one territory or for one year will suffice. What is required is a permanent policy of protection to railway revenues.

It is to be hoped this may become a national policy. To this end business men may well study the question of capitalization for themselves. Should they perceive that it is largely irrelevant to freight rates let them frankly admit it, they and their representatives in the legislative councils of states and nation.

The following correspondence may be of interest in connection with this article:

New York, August 9, 1913

Editor, *Saturday Evening Post,*

Sir:

I have read the article on railroad capitalization in your issue of August 9th. The rate of foreign capitalization does not seem to me to be evidence, in the matter of degree of overcapitalization. As a business man, my understanding of the matter is that freight rates should be such that after paying all operating costs, sufficient should remain to pay a reasonable return on the actual fixed investment; fixed investment to mean precisely as defined by Mr. Payne, in the same issue of the *Post*. If this view is correct, then the fixed investment must have a considerable bearing upon the rates of freights.

I will appreciate your kindness if you will refer this letter to Mr. Johnson, and use your influence to have him prepare an article which will make clear to business men, the reasons why the fixed investment, or which should be the same thing, capitalization, has no bearing upon the freight rates.

Yours very truly,

(Signed) S. PEACOCK

Between Chicago and St. Paul there are six different competitive railways, and their capitalization per mile is as follows:

Chicago, Burlington & Quincy	$36,338 per mile
Minneapolis, St. Paul & Sault Ste. Marie	36,362 per mile
Chicago & Northwestern	43,900 per mile
Illinois Central—Minneapolis & St. Louis	58,000 per mile
Chicago, Milwaukee & St. Paul	58,343 per mile
Chicago Great Western	74.983 per mile

Assuming equality in the character of the service rendered by these lines, it is obvious that the rates charged by them upon traffic between Chicago and St. Paul must be the same, or the line quoting lower rates would secure all the competitive business and compel the other lines to meet the reduced rate if they were to retain their share of the traffic. In other words, difference in rates quoted by these lines would precipitate rate wars which would be disastrous both to the railroads and to the public. If then, these six roads are to charge equal rates, how can they bear any fixed relation to capitalization. It is clear that the Burlington and the Soo Line would be in a position to quote the lowest rates, and that the Illinois Central and Minneapolis & St. Louis and the Chicago, Milwaukee & St. Paul lines would have to charge about seventy per cent. higher, whilst the Chicago Great Western line would have to charge more than double the lowest rate. The conclusion is therefore inevitable, that uniform rates cannot possibly bear any fixed relation to capitalization. Therefore, the vast labor and cost of making a physical valuation of the railroads will be thrown away if done for the purpose of establishing a basis for rates, because rates must be uniform, whilst neither the capitalization represented by outstanding securities, nor the actual appraised value, could be taken as having a fixed relation to rates.

Very truly yours,

(Signed) ALBA B. JOHNSON

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The Baldwin Locomotive Works

ALBA B. JOHNSON,
President

PHILADELPHIA, October 3, 1913

MR. S. PEACOCK,
Care International Agricultural Corporation, 165 Broadway, New York City

Dear Sir:

Your letter of August 9th, to the Editor of the *Saturday Evening Post* was referred to me during an absence in Europe. I find it awaiting me upon my return.

I acknowledge that the capitalization of foreign railroads has little direct bearing upon the question of what rates American railroads shall be allowed to charge. It was cited only to show how much more conservative is the valuation of even those American railroads accused of the grossest overcapitalization, than is the average valuation of railroads in other countries. American railroads have been built so economically and are operated so cheaply and efficiently, that long before there was any attempt at governmental control they were carrying freights at rates so low that they would have caused speedy bankruptcy if charged for the transportation of similar commodities in any other country. The capitalization of foreign railroads was referred to only as throwing an interesting side light upon our own problem.

Were all American railroads under one ownership, so that the capitalization of all the different lines were pooled, then there could be no question that freight rates should be such that after paying all operating costs, sufficient should remain to pay a reasonable return on the actual fixed investment. The problem, however, is not so simple as this. Let us analyze a concrete example.

Between Chicago and St. Paul there are six different competitive railways, and their capitalization per mile is as follows:

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