

## Railroads from World War II to Date and Beyond

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What follows will be a most ambitious survey of the railroads of the United States from the close of World War II to the present time with some speculation about prospects. The contents may not be new to anyone in the audience. On the other hand, the impact of the vast array of developments when recounted may be impressive. The railroads of the United States have just finished a record year in their history in terms of ton-miles. Moreover, the rate of return was the best in almost two decades. Complaints of shortages of cars were fewer than normally associated with the industry. Rates were up; the legislative climate was good; and employment down to almost a half million, suggesting that productivity per unit of labor was at record levels. The percentage of intercity ton-miles handled by rails had started to rise and thus at the start of 1975 the gloom which prevails regarding the future of many railroads -- and, indeed, the whole system -- seems paradoxical. Nor is all of the distress associated with the current recession. This is only an aggravating factor. The concerns are much more deep-seated. A thesis which will ultimately be developed in this paper is that the United States could have a very strong, efficient, and profitable railroad system which would strengthen the economy. Whether we will get it or not may be a different matter. The steps to success are not complex. We obviously have to straighten out the distress in the Northeast and free railroads elsewhere of some of the burdens that they carry currently. More lines must be dropped and net income must be doubled, if not tripled.

### THE RAILROADS IN 1945

Railroads emerged from World War II somewhat better off than from World War I. There had been inadequate maintenance of both rolling stock and lines. The railroads were the predominant form of freight transportation. More than two-thirds of all ton-miles of freight rode the rails and three quarters of commercial intercity passenger miles were handled by the system. Shortages of

gasoline and rubber for motor vehicles obviously were primary factors. The railroads had carried an enormous load in a superb manner. Freight was to remain high, though a relative decline would ensue. World War II might be considered an autumn honeymoon for passenger service. The railroads' share had declined with the advent of the automobile and perhaps World War II was merely a stay of execution. The mail business was still good and so was express. Railroads had long been involved in nonaffiliated enterprises. Some, through subsidiaries, owned hotels, mines, factories, forests, and other enterprises. Earnings had been good but by no means sensational and all of the showing of the war years did not offset the inadequate returns of the preceding decade.

The three decades following 1945 to date have covered many changes which I shall chronicle. Some items of seemingly little importance evolved into major matters and the converse.

#### UNIFORM CLASSIFICATION ORDER

Shortly after the close of the war, the Interstate Commerce Commission handed down its decision in the class rate investigation 28,300. We were to have uniform freight classification except for the Far West and this would free the southern and middle-western states from peonage under the dominance of the Northeast power interests. No longer would the South and the Midwest be the hewers of wood and drawers of water who supplied raw materials as colonies for the manufacturer of the official territory. Low rates on bulk commodities north and east were alleged to have been tied in with low manufacturing rates from the East to the South and West to preserve the vassalage. Much was expected from the Uniform Freight Classification. We even hoped that commodity rates and exceptions to class rates would be appreciably less important. The significance of the Uniform Classification order seems of much less consequence than had been expected. We have about as complex a rate structure as ever with relatively minimal use of the new and equitable classes.

#### ANTITRUST ACTION

The Uniform Classification order was paralleled by the action of aggrieved governors led by Ellis Arnall of Georgia. The railroads, presumably, had conspired against regional interests. The Antitrust Division has, over all of the years since the war, intruded into the sphere that many scholars and attorneys thought was the exclusive domain of the Interstate Commerce Commission. Contemplating all of these forays, including the battle over the Reed-Bulwinkle Act and protests against mergers, the conclusion can be drawn that antitrust originating in the Department of Justice has not been a serious problem.

## GUARANTEED RATES AND AGREED CHARGES

Our railroads struggled to get the commission to lend a sympathetic ear to guaranteed rates and agreed charges of the sort introduced into Canada and in Europe. The commission generally did not hear. Modification of various commodity rates has created de facto guaranteed rates or reasonable facsimiles. The commission has been more receptive to lower rates permitted by the utilization of unit trains and, indeed, finally authorized the rent-a-train concept as initiated by the Illinois Central, now the Illinois Central Gulf. The changes in freight rates in the last three decades are not easy to measure. One can note that the revenue per ton-mile was 9.5 mills in 1944 and approximately a penny in 1945. The comparable figure for 1974 has yet to be released but is probably in the vicinity of 1-3/4 cents. In the interim, there has been a major change in the consist of freight on the railroads and from most points of view a downgrading in the consist. The nature of the service offered in 1945 differed greatly from 1975. The disappearance of LCL freight, with its sharply higher rates, obviously affects average figures. Notwithstanding the downward bias because of changing consist, the level of revenue per ton-mile was in 1975 surprisingly low in relation to the earlier period in the light of a comparison with other prices. During the last couple of years there have been sharp increases, although a 7.5 percent rise was recently rejected by the commission.

## KINDS OF FREIGHT TRAFFIC

Mention was made of the near death of LCL traffic. Almost none of this remains anywhere in the country. The motor truck, for the most part, took over the LCL business both for short and, ultimately, for long hauls. High terminal expenses for short-haul movements even in carload lots made that traffic somewhat vulnerable to inroads by trucks. Piggyback, which had already had a history of 120 years of limited application, burgeoned during the middle 1950s. A steady rise occurred under a variety of numerical and fractional plans. This, presumably, was to take the place of LCL. To a certain extent this is so, although the number of carloadings of piggyback in the last few years has been about 10 percent of the number of carloadings of LCL traffic back as far as 1929. Shippers put high-rated traffic in trailers to move at all commodity rates while putting low-rated traffic in conventional freight cars so that, in effect, the rate structure was somewhat emasculated. Yet the piggyback can probably be deemed a success. Containerization did not flourish to the same extent. Freight moved for forwarders and carloading companies failed to develop to offset the decline of LCL and, indeed, the industry with a few

exceptions languished. One bright spot was the resurgence of the railroads in the hauling of automobiles. The railroads' share of automobile hauling had dropped rather low. The introduction of bilevel and trilevel cars in the 1960s led to a recovery, so that by 1974 the railroads were up to 53 percent. Unfortunately, in 1974 the percentage was good but the volume of cars was off approximately 40 percent from the preceding year. Movements of fruits and vegetables had suffered sharply from motor carrier competition. Livestock shipment was especially hard hit in the postwar period as compared with prewar years. Decentralization of meatpacking plants and a variety of related factors had changed the movement of both live animals and their products to the detriment of the rail system. Meanwhile, coal, lumber and its products, and grain continued to move on a large scale. Water competition cut into this somewhat, but this was more than offset by the expanding economy except in local situations.

#### HEAD-END TRAFFIC

One of the dramatic changes of the postwar period was the precipitous decline of head-end traffic. The United States Post Office shifted business away from the rails to trucks and to air. This, in turn, made the passenger runs even less profitable. The rise of the other modes of transport and the curtailment of passenger trains reduced both the supply and demand for express services. The Railway Express Agency, later REA Express Agency, incurred deficits. The accusation was made many times that it was not well run. This may be true but the best run express company could not have survived the obstacles. Eventually, REA was sold to outside interests and partially financed by railroad loans. On 18 February 1975, REA applied for reorganization under Chapter 11. REA is now a trucking company specializing in small shipments. Its future remains to be seen but it is not regarded as a growth company.

#### THE PASSENGER BUSINESS

Three-quarters of intercity commercial passenger business was by rail at the end of World War II. During hostilities, one of the Santa Fe trains left Los Angeles in seven sections, pulled by 14 locomotives. It was alleged that a passenger boarded a train in Kansas City so crowded that he fainted in the vestibule. The train was entering Chicago before the passenger could slump to the floor. Recovery of the automobile industry caused passengers to resort to private transport. The rise of airlines cut heavily into the Pullman volume. Passenger travel, except for the war, had not be a profitable operation for years and the burden became

overwhelming. Service was discontinued; stations closed; and finally AMTRAK was born. This ended an era about which there is much nostalgia. A first-class passenger train with meals by Fred Harvey, fine wine, and a good cigar is still one of the great joys in the memory of people of my vintage. There was much to be said for getting on a train, having a nice compartment, and arriving the next day for a business conference, having had ample time to contemplate life in general and the forthcoming meeting in particular. Whether the incidence of ulcers was less then or now is not known, but the slower way may have had advantages over a dash to the plane, fastening of a seatbelt in a crowded coach or even first class, bolting some food, listening to some announcements, and then coming down at an airport so fast that the businessman moved into the meeting still confused with the thoughts he was sorting out in his office a couple of hours before.

From a standpoint of a finance officer of a railroad, the end of passenger service was an unmixed blessing. It was not wholly eliminated because the railroads still had a stake in AMTRAK and, furthermore, had to deal with it. A limited number of lines elected not to join AMTRAK. Under the permissive legislation, this will enable them to be wholly removed from the business.

#### CHANGES IN MOTIVE POWER AND ROLLING STOCK

One of the biggest changes was, of course, Dieselization. Some Diesel switchers came in the 1920s. The passenger Diesel locomotives came in the 1930s and the Diesel freight engines had been introduced immediately prior to the war. Nevertheless, the conversion was a postwar achievement. Estimates were made that the rate of return on substitution of Diesel power for steam was as high as 33 percent. Not only was an enormous capital investment required in the locomotives themselves but also in the facilities for their maintenance. Longhouses superseded roundhouses. A shift to Diesel power had many business advantages but some sentimental disadvantages. Certainly, the smooth, quiet, Diesels -- no matter how powerful -- were much less awesome than the big Baldwins. They did not capture the imagination of young people who now dreamed of becoming pilots instead of engineers. Attempts were made to promote gas and coal turbines but these were somewhat abortive on both the Union Pacific and the C & O. Diesel hydraulics of Austrian design were tried and these, too, were discarded. A change ensued in the manufacture of motive power as electromotive came to the fore. Steam locomotives were scrapped, given to museums, or turned over to parks where children showed a great capacity to dismantle them. Some freight cars changed dramatically; others stayed much the same or perhaps are still in service. The average freight carload, which was a little over 40 tons in 1945, was up almost 50 percent. On the other hand, a car

travels very little more than it did at an earlier date. Thanks to roller bearings and to hotbox detection devices, the long-time problem of setting out freight cars was largely solved with approximately a 90 percent reduction in the frequency rate. A sharp reduction in the number of freight cars has ensued. We are roughly 900,000 below 1929 and more than 200,000 below 1945. Furthermore, the reduction has been largely in cars owned by the railroads. There has been a slight increase in the number of railroad cars owned by car companies and shippers. Not only are the new cars larger but we have had an enormous rise in the number of specialized cars tailored to the more sophisticated shipping requirements. This has reduced the number of all-purpose cars and accounted for much of the distress over car supply during the last decade.

#### YARDS AND TRACK

CTC has been installed on thousands of miles of lines. Automated hump yards provide a place for sorting cars and making up trains on a vast scale. Welded rail has been installed and automatic signals have superseded flagmen. Indeed, the investments in the postwar period have been enormous and even though maintenance has been inadequate in many years, viewing the country as a whole, the investment in railroads during the last few years has been at record levels in the history of the industry. A railroad such as the Santa Fe will invest more money in 1975 than the total investment in the railroad at the turn of the century.

#### RAIL ABANDONMENT

We have dropped approximately 25,000 miles of railroad in the postwar period. These have been largely branchlines. We have also eliminated much additional track, growing out of the technical efficiency of centralized traffic control. Little new construction has been undertaken. Rather, the railroads, for the most part, have been rebuilt. Abandonment of this mileage has been arduous and exasperating. The hearings have been tedious and the political barriers well-nigh insurmountable. If three times as much mileage had been abandoned, the railroads would probably be in a much healthier state.

#### DISPOSAL OF PROPERTY

The abandonment of 25,000 miles of railroad has posed a problem of disposal, as has the discontinuance of LCL freight and reduction in passenger operations. There is little use for abandoned lines. Weeds take over; the railroad may continue to pay property

taxes at too high a rate; and adjoining landholders do not or cannot use the property. In some areas these abandoned lines lend themselves to parks for walkways, bicycle paths, wildlife conservation, and recreation generally. Their accessibility is excellent at road crossings and their potential greater for this purpose than perhaps for many others. The property vacated by the closing of freight and passenger stations has posed different sorts of problems, generally desirable. Much of the land had high site value and has already generated millions for the owners.

## EMPLOYMENT

The number of employees at the close of World War II was approximately 1,400,000. This was about two-thirds what it had been in the early 1920s. Employment currently is slightly above 500,000. This drop is attributable to the discontinuance of LCL traffic and passenger trains which were labor-intensive as compared with carload freight operations. The debate persisted throughout the whole of the period as to whether or not all of the employees at any time were necessary, because of alleged featherbedding. Some progress was made with regard to firemen and, in some states, brakemen. Labor relations have had their ups and downs in the railroad industry with some government seizures. The strike record is relatively good. Some antirailroad people contend that this is because management and the government always yielded. In all fairness, one is not likely to have the acme of labor morale in an industry that drops 60 percent or more of its employees over a 30-year period.

## RAILROAD MERGERS

This is a subject which could be discussed for hours. We have had some dramatic combinations, most of which were preceded by unbelievably long negotiations and hearings. The GM & O took on the Alton and, in turn, became a part of the Illinois Central Gulf complex. Burlington Northern, Northern Pacific, and Great Northern were rebuffed by the Supreme Court years ago but in the new era they combined forces with a considerable amount of finesse. The C & O took on the B & O and the Chessie system emerged. Numerous other combinations occurred. They were mostly conceived and decided on an ad hoc basis with little relationship to any of the great organization plans which were worked out in the 1920s and 1930s. For the most part, a lull has developed in the merger movement. The prospective combinations are rather involuntarily involving the distressed roads of the Northeast. We have left hanging the dismemberment of the Rock Island and the fitting of its parts into several established systems. Within 10 years this

process may be completed. The recent decision did little to speed agreement.

#### RAILROAD FINANCE

The outstanding facet of railroad finance in the last three decades has been the inordinately low rates of return. The inadequacy is accentuated in an industry of heavy capital investment. This is enlarged in effect because of chronic inflation. The persistently low returns represent an overstatement because of conformity to accounting rules laid down by the ICC. All of these influences have accounted, in part, for the undermaintenance of railroad properties and widespread deterioration. Low earnings have been deterrents to technical as well as managerial innovation. These remarks should be tempered with acknowledgment of higher returns by some carriers and, certainly superior managerial inputs. Earnings, however, on even the best railroads have been inadequate. Very little money has been raised during the entire period by going directly to the capital markets. Depreciation, limited earnings with low payout ratios, leasing and equipment trust issues seem to have been the dominant sources for funds. The cost of borrowed capital has soared. Immediately prior to the war a major western carrier financed equipment at an average of 1.76 with the one-year maturities bearing a yield of .18 of one percent. This audience does not need to be told that times have changed.

#### HOLDING COMPANIES

A dramatic change has occurred in the ownership of railroads. They have moved into the era of the holding company. Most major railroads have organized a holding company to exchange its shares for those in the hands of the railroad stockholders. Thus, we have the Chessie system, the Illinois Central Industries, Kansas City Southern Industries, and so on. This move paralleled the rise of the conglomerates with all of their glamour. The movement also is alleged to represent an attempt to escape from the restrictions of the Interstate Commerce Commission and give top management an opportunity in the interests of the former railroad shareholders to participate in a diversification program both in transportation and outside. Railroads had long been involved in coal, lumber, hotels and other real estate, colonization, and to a limited extent, trucking under the Grandfather Clause, pipelines, and local shipping. The new machinery put some former railroads, or their newborn parents into steel, cement, textile treatment, shoes, mutual funds, radio stations, and computer software. The results of this have been mixed and the rates of return in non-carrier affiliates unimpressive, on the average, with examples of



spectacular successes and failures. Diversification may account for the weaknesses shown in railroading because the top brains of the company are preoccupied with creative thinking and responsibilities in lines of endeavor in which they have little expertise. One may concede that the marginal efficiency of capital by other entrepreneurs may be higher in some of these alien fields but this does not mean that newcomers can succeed and may well mean that when the leadership is diverted, trouble will develop in the basic operation. These remarks are delivered in the shadow of Northwest Industries which ultimately noticed the comparative lack of productivity in railroading and moved out of the business entirely. Northwest Industries provided a pattern with dangerous implications for the railroad industry. This is not to disparage the success which has come from a financial point of view of stock in Northwest Industries.

#### THE PENN CENTRAL CASE

The audience will be spared any attempt to summarize the dramatic problems of the Penn Central. You have probably heard too much and you would have heard a lot more except that it was overshadowed by Watergate. The Penn Central represented an attempt to see if two sick friends could get well together. The answer was "No, they might only infect each other." In an unpublished study made of mergers of all transportation modes in the postwar period, I discovered that approximately three out of four mergers resulted in less money earned in the ensuing five years than the companies earned individually in the prior five years. Unless one company has surplus of management, seemingly the task of blending two managements and operations together is overwhelming. While it is preoccupied with the fusion of the bodies, competitors are gnawing at the flanks. The firm loses its coordinated thrust; costs get out of hand; gross revenues are likely to fail; and net obliterated. At this stage in development, there is much more merit in outlining a program to rationalize the half-dozen bankruptcies in the Northeast in preference to exhuming the bodies of the participants.

#### LEGISLATION

Legislation since World War II has until recently been of relatively minor significance. The Reed-Bulwinkle Act of 1948 providing certain immunity from antitrust laws for rate bureaus always seemed redundant. The Act of 1958 had several bold provisions that were neutralized within a couple sentences. Seemingly, "the Lord giveth and the Lord taketh away." Emergency loans to railroads which could not get funds from private sources were

authorized but the same credits were supposed to be self-liquidating in 15 years. If they were really self-liquidating, then obviously, the monies could have been obtained privately. The more recent legislation, dealing largely with the Northeast, is of great significance even if much of it is illogical. The ASTRO effort was somewhat abortive. Some intermodal cooperation was achieved in preparing bills for Congress but these encountered difficulty both with DOT and the various interest groups within as well as outside Congress. Bailing out the railroad retirement program was, of course, an absolute essential for the solvency of the program. The creation of AMTRAK was another move of some significance.

#### PROBLEMS OF TODAY

Intermodal competition is present but, to a certain extent, regulated carriage has carved out niches for the separate modes. Regular common carrier trucklines of general commodities are plagued by private trucking, however, in much the same manner that railroads are. There is no doubt that the water carrier and pipeline industries have developed impressively, yet the consequences of their development may have been so beneficial to sectors of the economy that the spillover effects have been positive for railroads rather than negative. Indeed, there is much truth to the assertions of John Creedy that some of the best railroad results are in areas served by expanding water operations.

#### Inflation

All of the regulated industries have been plagued by inflation. Their costs have risen in advance of rates and in the railroad industry there was little margin for absorption. During the last few years, the railroad rate increases have been numerous. These may have diverted some business to other modes and, in any event, they have suggested that the alleged umbrella ratemaking of the commission was not a valid accusation. All the railroads had to do was not ask for increases and they would automatically have low rates. If general increases were secured, more extensive flagging should have been utilized. The postwar competition has produced some bizarre results. Economists had always argued that 250 to 300 miles represented the maximum length in which trucks were efficient. This was, of course, from an economic point of view. Some of the most profitable trucklines in the United States in 1974 had average hauls above 1,000 miles. Several motor carriers had average hauls double the maximum average haul of any railroad. The possession of large capital investment bought in earlier days was, of course, a boon to the railroads but unfortu-

nately this has to be replaced. Both costs of the assets and the money to finance them have been at high levels, thereby accentuating the problem of financial security for this low-return industry.

#### Excess Mileage

The railroads still have far too many miles of lines. The recent DOT report on the Northeast Railroads called for discontinuance of some 38 percent of the mileage in the state of Indiana and somewhat less in other states. Although there were obvious errors in the study which discredited it, some of the principles involved were sound. The railroads have to drop at least one-fourth of the present mileage in the United States and could justify more than that. We should go ahead with the provisions that have already been made to a limited extent and borrowed from England and France. If branchlines will not pay, then local governmental units with broadly based revenues should pay the differential. There is no justification for cross-subsidy.

#### Labor

Much progress has been made in rationalizing labor utilization. Unfortunately, there are still countless ways in which resources are wasted. The odd rules in turn force management to adapt their decisions to the incongruities which, in turn, may make both operating practices and technological changes less than optimal. The manner of payment and seniority combine to provide a system of deferred wage payments which are bound to result in a mismatch of performance and reward. The decline in total employment, along with seniority, has raised the age of employees which is generally associated with reduced productivity.

#### High Interest Rates

These have already been referred to previously. Union Pacific has bond issues out at 2.5 to 3 percent which were refunded during the Depression. Not even the Union Pacific with all its strength could refund an issue at much less than three times the outstanding rate, and the industry is fortunate to have a large volume of long-term bonds outstanding at historic low charges. As these issues mature, financial stress will ensue.

#### High Property Taxes

Utilities generally have been singled out by taxing bodies for discrimination. Suits have been introduced by the railroads

in many states and some measure of equity achieved. Federal pressure has been exerted and the problem is not as acute as in days gone by. On the other hand, assessments have gone down not only to take care of inequities but because the low earning power of the properties has finally been recognized. Needless to say, the Penn Central has not paid much in property taxes in Indiana or elsewhere recently.

### Misleading Accounting

A survey of annual reports of railroads will reveal that some of them are now reporting two incomes: the first according to commission regulations and the second according to generally accepted accounting practices. The inordinately long lives attributed by the ICC to railroad assets have made the depreciation charges generally inadequate and have tended to overstate earnings. Although good financial managers should allow for this, there has been a tendency to go along with the official returns. As a consequence, earnings have generally been overstated. Dividend payouts, although low, have been higher than commonly believed and in some cases liquidating dividends were paid unwittingly. A review of the ratio of federal income taxes paid to income before interest in many railroads reveals that the ratio for many is around 10 to 15 percent rather than 50 percent, which suggests the extent of deviation in methods of accounting. The general public and management would have been much more aware of the problems of the railroads had the accounting regulations differed.

### Slow Hearings

Slowness in merger cases as topic needs no elaboration. The Rock Island case is a good example. It went on for years with thousands of pages of testimony. Expert witnesses forgot what they had said by the time they were cross-examined. We finally got a decision whose nature suggests that the implementation may take another five or ten years. Surely we ought to be able to lay down guidelines for many types of the cases which come before the commission and speed up the hearings and disposition.

### Earnings

Although 1974 showed the highest rate of return in years, this level -- slightly below 4 percent -- is still grossly inadequate. The recession at the end of the year boded ill for the future. Nineteen seventy-five is virtually certain to yield inferior results.

## Adaption to Markets

The rise of logistics and PDM is probably the most significant problem confronting the railroads. Many aspects of this have eluded railroad officials, the ICC, and especially the economists. A preoccupation with rates has persisted at a time when a total cost approach to distribution permeated industry. Logistics experts placed new importance on frequency of shipments, dependability of service, inventory levels, packaging costs, and the other inputs of the new order. The failure of many railroads to adapt both operations and the sales effort to the new demands of shippers has resulted in the loss of traffic. This has been the choice traffic and in effect the diversion to other modes which has occurred in many cases represents cream-skimming. The failure of economists to evaluate the service differentials of modern physical distribution management is what distorts their estimates of savings in event of deregulation.

## Deferred Maintenance

This has already been alluded to. Although the components being installed in the postwar period have been of superior quality, the volume has not been adequate for replacement. The lines of many railroads are in poor, if not unsafe, condition. Derailments are at record levels and show little likelihood of abatement. Train speeds are low and service slow. The acquisition of heavy cars has accentuated the wear and tear on the lines. Lengthy trains have contributed to slowness of delivery both because long waits were inevitably entailed in making up the long train and delivering the cars at the other end.

## Car Management

Although an ambitious electronic car identification program has been in the process of being installed for some years with a view both to better pool management and shipment information, the results to date are disappointing. The separate proprietary interests of the railroads somehow seem unduly dominant and the prospects for more effective car utilization and superior service to customers are not as promising as had been hoped.

## The Cancer of the Northeast Railroads

The distress of the Penn Central and the other five lines in the Northeast poses major problems. Manifestly, there is an element of inequity in pouring federal money into the proposed new

railroad to strengthen it in relation to the N & W and the Chessie, which have been well managed and have secured modestly good results. Many features of the legislation which is to prevail for rejuvenation purposes represent political capitulation and seemingly promise inadequate pruning and streamlining. This may well be the Arab's nose and the camel's tent and the case may serve as a precedent for additional advances by the federal government through open or hidden subsidies. Federal ownership of roadbeds and rights-of-way is seen by some as a way out of the Northeast crisis and a boon to railroads elsewhere. This is, at best, a poor screen for a subsidy and will probably obviate the possibility of various corrective actions which must be taken. Canada has experimented along this line and France did it many years ago. The scheme was bad then and still is. Virtually the same thing can be said for guaranteed loans. An outright, unadulterated subsidy reveals what is going on in an era of truth-in-lending laws and consumerism.

#### THE BRIGHTER SIDE OF PROSPECTS

As indicated earlier in this lengthy treatment, the railroads are now largely out of the passenger business and the inevitable losses shifted elsewhere, although some controversy remains -- especially on the Penn Central -- as to whether or not full compensation is being made. Likewise, the less-than-carload traffic and express business are no longer burdens on the industry. Many short lines have been abandoned and there are prospects that the movement will accelerate. Productivity of labor is high and relations with management are generally good. Railroads are virtually certain of securing adequate supplies of fuel because of their priority position. The industry is an efficient generator of ton-miles in terms of BTUs. The public's impression of this may be even better than the actual facts. Rising costs of fuel could be quite a burden to the industry, notwithstanding its efficiency, growing out of the relatively low level of profits. Some of the mergers which have been consummated seem to be working out and give promise of even better results. The competitive position of American agriculture in world affairs is more pronounced than ever and gives promise of good volumes. Greater reliance of the nation on coal for energy purposes augurs well. The shortage of water in western coal areas suggests that gasification and liquefaction may occur at points remote from the mineral sources. Western railroads are certain to benefit. The legislative climate is favorable to rail, which may not be nearly as helpful as some of the other influences. Management has made significant strides in recruitment and development of staff. No simple solutions can be offered which will guarantee establishment of the industry on a sound basis. The recent study of the Task Force on Railroad Pro-

ductivity (*Improving Railroad Productivity*, Report to the National Commission on Productivity and the Council of Economic Advisers (Washington, November 1973)) concluded, as I do, that an eclectic effort must be made. The starting point should be an analysis of the present and prospective markets for railroad services. These are multiple markets in which the buyers may not be dominant but they are at least well informed in modern logistics. Operations must follow the market rather than attempt to make it. Such an approach might delineate better the lines to be abandoned, the length of trains, the management information system, the weight of rail, the amount of ballast, the compensation of officers, the work rules of the rank and file, the extent of diversification, and ultimately the success of the railroads. They can play a critical and profitable role in the economy in the years ahead and I hope they do.