Comment on Proposals by Canadian Pacific and Canadian National Railways Regarding Statutory and Related Rates on Grain and Grain Products in Western Canada

by

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Introduction

The purpose of this memorandum is to offer comment which will be useful to the Commissioners in considering proposals recommended to them by the CPR and CNR. The proposals in question are designed to offset the adverse effect on railway revenues of the frozen Statutory and Related Rates on Grain and Grain Products in Western Canada. The CNR proposal is for a simple straightforward supplement to gross revenue of an amount equal to revenue foregone through complying with statutory rates. The CPR proposal while generally similar in intent involves the use of the tax credit device. It is more sophisticated and more subtle than that of the CNR and for this reason it will need more particular comment. Accordingly to analyze its implications it will probably be helpful to set forth broadly the principles underlying the corporate income tax and the developments within the tax structure flowing from changing concepts in the fiscal field.

Principles Underlying Tax on Corporate Income in Canada

Originating in the First World War our tax on corporate income was introduced simply as part of a *general* tax on the income of persons residing in Canada. Broadly conceived the Income War Tax Act called for a levy on the income of all persons, whether natural or legally created, graduated for individuals (recognizing differences in ability to pay) but at a flat "impersonal" rate for corporate persons. Basically the sole objective was revenue. The corporation was regarded as standing by itself as a separate taxable entity with "ability to pay" quite distinct from that of the shareholders owning it. In this our tax on corporations is similar in concept to that in the United States. It departed from the pattern established in the U.K. where, although corporations pay the standard income tax, individuals receiving dividends out of profits taxed in corporate hands may claim a full offset against their personal income tax or a cash refund as the case may be. In a

sense the U.K. tax on corporations can be regarded merely as "deduction at the source". In fact, however, U.K. corporations have always paid full tax on total profits regardless of whether dividends were distributed or not. Thus on earnings retained by U.K. corporations the U.K. general income tax became, as it were, a corporate tax similar in effect to the Canadian and U.S. variety.

Since World War II these rather clear-cut lines of principle have been badly blurred. In the U.K. for example, a straight tax on corporate profits (without credits to individual shareholders) has been imposed on top of normal income tax. In the U.S. there is a minor recognition of so-called double taxation through a small tax credit to individual shareholders coupled with a minor exclusion of dividend income from personal income. In Canada the recognition of so-called double tax has gone much further and individuals are allowed a credit against personal income tax bills equal to 20 per cent of dividends received. Thus in none of these three countries is there a pure form of straight corporate tax, unrelated to personal income tax other than the upper layer of tax (10 per cent) on corporate profits in the U.K.

Unfortunately the above somewhat brief statement of principles underlying our corporate tax is not quite sufficient for purposes here, particularly since regulated companies are in the picture for consideration. The aspect of the tax which needs further special comment is the question of its incidence, that is, the question of who really bears the burden of the tax. This question flows logically from what has been stated in the previous paragraph about tax credits to individuals receiving dividends out of once-taxed profits. Until recent years it has been the generally accepted theory in both the United States and Canada that the burden of the tax on corporate profits falls upon the shareholders of the company. After all it is their ox that is being gored. Accordingly after decades of discussion and agitation among professors and students of public finance and taxation, Canada embarked in 1949 on a policy of removing this so-called double taxation by providing that individual income tax payers might take a dividend-received tax credit of 10 per cent. That is, their tax bill could be reduced by an amount equal to 10 per cent of their dividend income. This move was justified in Parliament as a step towards removing double taxation.

A rather absurd situation subsequently developed through the fact that the same Minister of Finance who introduced the tax credit later declared twice in Parliament that the corporation income tax is in practice passed on to the consumer in higher prices and accordingly could be described, in effect, as simply a sales tax. Thus after having introduced a measure to give relief to shareholders who, according to theory, bore the incidence of the corporate tax, he declared later that the tax did not fall on the shareholders at all but rather was passed on to consumers in higher prices. Subsequently

the tax credit was increased from 10 per cent to 20 per cent and at the time of announcing this increase in Parliament nothing whatever was said about removing double taxation. Rather the arguments at that time referred to the measure as one offering incentive for Canadians to acquire ownership in Canadian industry. It was supposed to improve the market for equities. Generally it was held out to be a very good thing. Thus the second half of our existing tax credit is an instance of where the tax credit device has been described as an incentive measure, that is, it is unrelated to any particular tax principle in a measure designed strictly for revenue purposes. It is a good example of the use of the tax instrument for policy purposes.

Whatever may be said in general about the incidence of the corporation tax it is quite clear that in the case of regulated industries the burden of the tax in practice is passed on to the consumer. The regulated industries regard the corporate tax simply as a cost. Perhaps most clearly has this doctrine been set forth in Bell Telephone cases before the Board of Transport Commissioners. It is argued that in order to raise capital for expansion they have to maintain their dividend rate. In order to secure one additional dollar for dividend purposes they have to ask for rate increases which will give them about $2 so that after income tax $1 will be left to support dividends so that capital may be secured in the market.

In this case then, which is the same for the railways, a dividend tax credit to the shareholders can only be justified in terms of an incentive measure. It certainly cannot be justified as a means of removing double taxation because none exists. The burden of the tax in these cases is passed on to the consumer and does not fall on the shareholders.

The purpose of dwelling here on this particular aspect of our corporate tax is twofold: (a) to show that the tax credit device has been used in this direction in Canada for policy purposes unrelated to the raising of revenue and (b) that in the case of railways no double taxation exists on the shareholders of the company because of the corporate tax being passed on to the consumer in calculations justifying the fixing of rates.

The above paragraphs have attempted to set forth the main objectives and principles of our corporation income tax. This tax is really an almost incredible phenomenon in modern capitalist society, of which the mainspring is supposed to be private enterprise. Both in Canada and in the United States, Governments over the past decade and a half have taken away about half the profits of industry. Twenty short years ago no economist or student of public finance would have believed this would have been possible. They would have flatly declared that there would be no business at all if half the rewards of risk-taking and enterprise were taken away. The fact is, of course, that during this period business both in Canada and the United States has prospered as never before and the volume of new capital investment has at

times been a positive embarrassment, leading to strong inflationary forces. This situation gives considerable support to the position of those who maintain that generally the corporation tax is passed on to consumers and is not borne by shareholders.

In the course of this upward movement in tax rates to such high levels there has been a great deal of attention devoted to improvement in the system and relief has been given in many directions for the sake of removing inequities. An outstanding example of developments of this sort is the carry backward and forward of losses so that in effect a corporation has about a seven year period of averaging.

It is probably unnecessary here to elaborate this development of alleviating provisions. It is sufficient to note that the trend has been clearly in this direction in recent years.

Policy Provisions in Income Tax Unrelated to Revenue Tax Principles

In view of the fact that CPR have recommended the use of the tax credit device under a revenue measure it is appropriate here to examine, both for the past and the present, the extent to which the tax instrument has lent itself to use for what might be called policy purposes unrelated to the general objective of raising revenue.

In paragraph 78 of their submission CPR, in proposing the use of income tax as a mechanism for granting assistance to them, make this statement:

> "The Income Tax Act has for many years been used as a vehicle for meeting National obligations and implementing National policies, for example, the special provisions dealing with mining companies in their early years, and the depletion allowance for such companies and the petroleum industry."

Unfortunately this statement relating to the mining and petroleum industry is only partly correct. These matters are never quite as simple as one would think they should be and it is necessary to devote a few pretty technical paragraphs to straighten out the picture:

(a) *3-Year Exemption for New Mines*

The Income Tax Act for many years has given new mines a three year exemption from income tax. This has clearly been an incentive measure indicating National Policy for the encouragement of mining in Canada. Regulations under this provision add greatly to its generosity through allowing mining companies to postpone capital cost allowances and write-offs for pre-production expenses

during the three year period, thus creating an extremely high and quite artificial concept of profits during the exempt period. The CPR is quite right in using this as an example. They might also have mentioned that cooperatives in Canada likewise enjoy a three-year exemption from income tax following their birthday. This is not too significant however because cooperatives do not pay much income tax anyway.

(b) *Depletion Allowances*

Perhaps no item in the Income Tax Act is so shrouded in mystery or surrounded by confused thinking as this so-called depletion allowance. The law does not even mention a "depletion" allowance, merely a special allowance for mining and petroleum companies.

In concept the allowance is quite simple. The law generally offers capital cost allowances for so-called depreciable assets such as buildings, machinery and equipment. Ordinarily in the mining industry one would likewise expect a provision allowing a company to amortize the cost of acquiring its ore body, which is a wasting asset. Apparently in the early development of income tax it was found difficult to actually determine the out-of-pocket capital cost to a company of its ore body. Most claims were acquired from prospectors for a few thousand dollars cash, with options on shares of the company formed to develop the claim. The problems inherent in this somewhat confused situation lead the authorities, possibly following a U.S. precedent, to allow a certain percentage of profits to be exempted from tax *in lieu of* amortizing the capital cost of the ore body. Rates of tax were low during this period and this simple hit or miss formula was presumably adopted to avoid complexities and argument.

Accordingly in its original form the depletion allowance was in no sense to be regarded as an incentive measure, as a concession of any kind, but was merely a device for side-stepping an awkward problem in ordinary accounting while computing profit for tax purpose.

It seems to be one of the accepted practices in Parliamentary procedure that few more words are spoken in the House of Commons by way of explanation of technical tax provisions than are demanded by the Opposition. So far as is known here there is no public statement or record in Hansard of the principles or objects regarding so-called depletion allowances. In public discussion and in the thoughts of most professional practitioners in the field of taxation and accounting the depletion allowance is regarded as an incentive measure, an exemption to encourage risk-taking and new development in the field of natural resources. So far as is known however the

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Government has never, at any time, admitted this. Perhaps, then, the CPR statement can be regarded as partially true although I know of no way in which they could prove it to a Judge.

What has been said above relates particularly to the mining industry but the presumption that the one-third exemption in the mining industry is an incentive provision does not necessarily hold true in the oil industry. Some years ago, before the oil industry developed to its present size, companies were allowed an exemption of one-third of their profits. At this time there were practically no capital costs involved in acquiring oil in place in the ground. Almost all of their outlays were on an annual basis, which were accordingly fully deductible in ordinary profit and loss accounting. During this period therefore the oil industry was getting something for nothing in a grand way. Subsequently the Alberta Government developed the practice of auctioning off so-called leases in semi-proven areas, the acquisition price being a capital sum which, in some instances, rides up to very large totals. These capital sums paid as bonuses for leases may not be amortized unless the leases are subsequently completely abandoned because they represent the very thing for which a depletion allowance was granted in the first instance.

There is one important independent oil company that has stated that it would be better off if it were allowed to amortize these large bonus payments rather than take the one-third exemption of profits. If this company is somewhere near correct in this statement then the depletion allowance in the oil industry cannot be regarded as an incentive measure. This particular company claims it is penalized by this system of percentage depletion.

The above discussion is perhaps a bit tedious but it was felt that as clear a picture as possible should be presented on this point raised in the CPR submission.

(c) *Exploration Expenses*

The CPR submission might have but did not mention the treatment in the law for exploration expenses in the mining and oil industry. In fact in this direction there is a very substantial policy concession to the mining industry but again there is not such a clear-cut basis for the same conclusion in the oil and gas industry.

During wartime, in order to encourage the development of new mines and new oil wells, the Government introduced annually for years a measure allowing mining and oil companies to charge against profit and loss account, their expenditures incurred anywhere in Canada in searching for new ore bodies and oil wells. Ordinary tax

accounting rules would not allow this kind of expenditure to qualify for deduction since they were obviously not incurred in the process of earning the income that was subject to tax. They were incurred off-property perhaps hundreds of miles from the place where their income was being earned. Accordingly it required special legislation to enable these expenses to be deducted in computing profit for tax purposes.

It was suggested above that the grounds for regarding this as a concession, while clear-cut in the mining industry, is not on such firm ground in the oil industry. The reason is this. An oil well lasts only a few years. A mine may last fifty years or more. Accordingly a company in the business of producing oil must inevitably be in the business of hunting for oil or acquiring new sources. Accordingly a broad, sensible view of the over-all operations of an oil company as a whole, could very well regard exploration expenses as part of the ordinary normal expenses of being in the business of producing oil and thus deductible. Accordingly it could be argued that in the oil industry this special provision in law is not necessary and cannot be regarded as a concession, whereas in the mining industry it clearly is a concession. A company may operate a mine for fifty years without having to look for a new one. So much for the mining and oil industries.

(d) *Tax Concessions to Shipbuilding Industry*

The CPR submission could have offered a firmer and less arguable case for the use of a tax device if they had referred to the concessions to encourage shipbuilding in Canada under the Canadian Vessels Construction Assistance Act. Under this legislation ship operators are allowed accelerated depreciation on ships built in Canadian shipyards. Likewise and very important is freedom from "recapture" in the event of sale of the ship if the funds realized from the sale are placed in escrow to be used for further shipbuilding in Canada. (Freedom from recapture means that a company is not compelled to take back into profit and loss account the selling price of the vessel where it is sold say, at original cost after it has been completely written-off in the books of the company. In this situation the net cost to the company for the vessel has been nothing. Accordingly it should be entitled to no capital cost allowance where this has happened. Under ordinary circumstances the company is deprived of all the capital cost allowances which it previously had taken. That is, it is subject to "recapture". It is freedom from this penalty that is given to vessels constructed in Canada under the Act referred to above.)

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A further concession is offered under the Act by allowing companies to set up a reserve for quadrennial surveys instead of having to wait until the expenditure was made and then amortize it.

This law giving tax concessions was introduced as a National Policy of assistance to shipbuilding in Canada.

The above items represent instances where specific industries have been offered tax concessions as matters of policy unrelated to the raising of revenue. In addition to this kind of example there are numerous cases where tax provisions have been used to achieve *general* economic and social objectives. For example in 1938 a measure to stimulate economic recovery was introduced into the Income Tax Act in the form of a tax credit for any taxpayer who would proceed with new capital investment in buildings, machinery, equipment, etc. The tax credit was 10 per cent of the amount of the capital expenditure. During wartime the Government imposed compulsory saving on top of income tax. The purpose of this was to assist in combating inflation during wartime and also it was argued that the return of these cash savings after the war would assist greatly in post-war recovery. Also in the post-war period taxpayers were allowed double the ordinary rates of depreciation on capital investment in a two-year period following the cessation of war. Similarly, though in reverse fashion, companies other than those in certain industries necessary for defence were compelled to postpone capital cost allowances on any capital expenditure incurred during a period when the Korean crisis existed.

It is clear from the above examples that tax incentive measures for special industries, as well as those of a more general nature in the economy, are a very common and well accepted feature in tax legislation in Canada. Accordingly the CPR submission is on pretty strong grounds even if they did not state their case very well.

It might be mentioned that other countries likewise use tax incentives quite freely both for the encouragement of particular industries and industry generally. In the United Kingdom for example the most significant development in recent years has been in the use of what they call "investment allowances". The principle here is that in amortizing the cost of ordinary depreciable assets the taxpayer is allowed to write off, say, an amount equal to 120 per cent of the cost. This is a straight exemption from tax of an amount of profits calculated by reference to the dollar amount of new investment. Shipowners in the U.K. enjoyed this concession for a few years to the exclusion of all others. In the last U.K. budget however this concession of investment allowances was granted to industry generally, in addition to some acceleration in depreciation allowances.

In the United States the Capital Gains Tax has traditionally been used as a device for giving relief from standard rates of tax. It has been

said by some writers that in the U.S. the Capital Gains Tax, as an instrument of tax policy, has been used more for giving relief from taxation than in imposing additional burdens. Just as an example the lumbering industry in the U.S. at one time was allowed to have the profits from standing timber taxed at the low capital gains rate rather than at the standard rate because they were using up capital assets at a very fast rate at a time when tax rates were abnormally high.

Thus, if the CPR had wished, they could have bolstered their case for the use of a tax device as a vehicle for giving effect to National policies by quoting excellent precedents in other countries as well as in Canada. It seems to me their case has been well made and that it is not necessary for them to show some similarity in the situations giving rise to the need for assistance, that is they should not have to show a clear analogy between the problem they are facing and those faced by other industries which have been assisted through the use of the tax instrument.

Direct Subsidies

No attempt will be made here to give an exhaustive review of the use of direct subsidies in Canada to assist particular industries. It will be sufficient to recognize the use that has been made of subsidies to artificially support the coal industry in Canada, as well as the livestock and poultry industries in areas of Canada distant from the source of feed grains. These facts are merely mentioned in passing as providing ample precedent for the CNR request for a direct supplement to their revenues.

Outside the field of transportation perhaps the most striking case of direct subsidy out of the Federal Treasury is found in the Emergency Gold Mining Assistance Act. In the gold mining industry the situation is quite nearly analogous to the situation facing the railways, where their selling prices of services are held down by Statute. In the case of the gold mining industry the price of gold has traditionally been fixed by Statute in Canada and although the Canadian market price is no longer fixed by Statute at home it is fixed by Statute in their chief market, the United States. The subsidy to gold mining takes the form of direct assistance geared to the costs of production in each individual mine, the high cost mines getting the greater degree of assistance. The subsidy operates under a somewhat elaborate formula to avoid, as far as possible, the charge by the chief buying country (the U.S.) that gold production *generally* in Canada was being subsidized. The general purpose of the subsidy was to prevent, if possible, the appearance of ghost towns in the gold mining areas and presumably the case for maintaining the benefits of the Statutory Rates is to prevent the appearance of ghost farms in Western Canada. The two problems are closely parallel.

Assessment of General Case for Assistance to Railways

The Commission is apparently precluded in their terms of reference from considering alterations in the Statutory Rates. Possibly however it is still open to them to comment on the significance of the type of benefit to Western grain producers under which they have been insured at the expense of other railway users against any increase in the cost measured in dollars of transporting their product to export points throughout a period when the rest of the country had to take their chances on the economic vagaries of inflation. While assuming that there may have been a case for some guarantee of stability in the *real* costs of transportation for those investing their money and their futures in Western grain areas this scarcely can justify the pyramiding of benefits which have accrued through the fall in the value of the Canadian dollar by more than half since the arrangements were entered into.

Recognizing the very practical principle in the political affairs of Democracies that benefits once uttered can never be recalled, the Commission has now to start with 1959 as a base point, pick up the pieces from there and make the best recommendations they can for the forthcoming years.

Obviously the first broad question to be answered is whether the sins of the fathers of the Crows Nest Agreement and subsequently Statutory Rates shall continue to be visited upon the customers of the railways or whether they should be shifted now to the shoulders of the Canadian taxpayers generally. This, in brief, sums up the problem in the submissions of the Railways to the Commission. The secondary questions are mainly ones of method.

The balance of argument is so strong today in favour of shifting the burden of this National Policy commitment to Western grain growers over onto taxpayers generally that probably only headings for the case need be presented here.

(a) The competitive position of the railways vis-à-vis other forms of transport becomes increasingly untenable. The basis upon which they can recoup losses forced on them by Statutory limitations inevitably becomes narrower and the distortion of "normal" rates on this account becomes increasingly severe and intolerable.

(b) It is palpably unwise economically for Canada, with such a high stake in export markets, to add in any way to the transport costs of export industries generally by shifting to them a part of the cost of assisting the grain export trade. Likewise this is quite unfair.

(c) Even in the absence of a competitive problem, leaving aside also the important aspects of export trade generally and even assuming a strongly inelastic demand for railway services, it still would not make good sense in a country such as Canada, where geography so hampers National economic development, to distort normal forces determining the location of industry by giving such a high degree of relief to one section of the economy and charging it as an expense against all others. This exaggerates existing National problems. For example it must have the effect of blurring somewhat the vision of expanding Northern development.

(d) Finally, as a matter of simple logic, if the public generally are to be called upon to support what is essentially a political policy of continued assistance to Western grain growers—and it appears that they are—then the public generally, as taxpayers, should bear the cost of this policy. The mere fact that the policy of assistance in this direction happens to take the form of transporting grain products below cost should not mean that transport costs of others in the economic community should be correspondingly inflated in order to recoup losses.

The above four points, it is believed, build up to a pretty strong case for a rather drastic departure from the status quo. The proposed shift in burden is a quite striking corrective of a situation that through the years has had to get worse before it could get any better. It is understandable that in the relatively simple and uncomplicated days of decades ago the freezing of rates for the grain trade seemed a very sensible and satisfactory way of dealing with the problem. However many things have happened in Canada in the meantime, and a rather lusty flock of chickens has come home to roost. Not least of all the things that have happened is a very fundamental change in the basic philosophy of Government. It has changed markedly from what it was even two short decades ago. Governments today take upon themselves full responsibility for the state of the economy. They presume to be responsible for all phases of the economic health of every industry. They take credit to themselves for full employment, prosperity and expanding capital investment when occasion permits them to do so and the Opposition at the same time forever attempts to pin on them full blame for all the economic ills and deficiencies, including Acts of God that we fall heir to.

What is being attempted in the foregoing paragraph is to present the idea that it is quite in keeping with the times that corrective programs in the economic field should emerge as a natural consequence of the modern attitude of Government toward affairs in the business world. Governments today are supposed to deal and deal intelligently with complicated matters such as

running railways. They are supposed to formulate National policies and place them on a sound and enduring basis. Mere makeshift improvising is no longer good enough in the present milieu. The simple fact is it is too dangerous. The new regime demands thought and care and regard for principles to a degree uncalled for in the good old days.

Technical Analysis of the Two Proposals

The general objective in the submissions put forward by both railway companies is that they should each henceforth be put substantially in the position financially which they think they reasonably would be in but for the existence of Statutory Rates. If the Commission agrees with this as a general proposition the next question is that of deciding upon the best method for giving effect to this principle. This calls for some careful analysis of the implications of the two proposals.

The first point to be observed is that while the CNR proposal for a straight subsidy would put *both companies* in the position which but for Statutory Rates they might reasonably expect to be in, the CPR proposal does this for the CPR but it does not do it for the CNR. The CNR benefit under the CPR proposal would be just half what it would be under their own proposal. The CPR formula utilizes in rather devious fashion the fact that the CPR pays income tax while the CNR does not.

Under the CNR proposal the proceeds of the subsidy would naturally be taken into corporate revenue for tax purposes just as are all income subsidies. Accordingly after tax has been paid on the subsidy (as proposed by CNR) the CPR would have left to itself from the subsidy exactly the same sum in dollars as they would receive under their own formula. The calculation is actually the same, *i.e.*, from the gross lump subtract an amount determined by applying income tax to the lump. However at this point CPR says, in effect, do not make an actual payment to us arrived at in this fashion but apply the proceeds against the tax bill we owe you. This gives them grounds then for calling the payment a tax credit and accordingly the payment (in effect) does not have to be taken into income for tax purposes. It is difficult to regard this illogical arrangement as anything other than a rather obvious piece of juggling.

Criticisms of Tax Credit Device (CPR)

(a) The first objection to the tax credit device for restoring the financial position of the railways to what it might reasonably be expected to be but for the existence of Statutory Rates is that the dollar value of the benefit passing to the railways under this CPR formula would always vary with any

future changes in the corporate tax rate. If the corporate tax rate were reduced in future the benefit to the CPR would increase, not mind you because of a change in any factor having to do with carrying grain but because of a change in some other quite extraneous factor. The reverse would be true in the case of an increase in the corporate rate.

This situation flows from the fact that in the CPR formula after setting up the amount of the addition to gross revenue which but for the Statutory Rates they might reasonably expect to receive, they then have a subtraction item, namely, an amount equal to the corporate income tax rate applied to the additional lump of revenue. Accordingly the payment to the railways—cash for CNR, an offset against a bill otherwise payable for CPR, becomes greater or less accordingly as the subtraction item becomes less or greater. This is quite indefensible in principle and just does not make good sense.

Incidentally the CPR brief in setting out their formula uses the words (para. 79(1)) "subtracting therefrom the amount arrived at by applying thereto whatever rate of income tax is applicable in the taxation year". This reference to the "rate of income tax" is a bit ambiguous. The Federal standard rate is now 50 per cent in 8 Provinces. On profits earned in Quebec the Federal Government however actually collects only 41 per cent because of an abatement of 9 percentage points to allow room for the Quebec Provincial tax of 9 per cent. It would clearly be to CPR's advantage to argue that they have in mind here Federal tax at the effective rate of 41 per cent instead of the standard rate of 50 per cent. In Ontario Federal tax is likewise abated by 9 percentage points while Provincial tax is 11 per cent, making Federal plus Provincial tax of 52 per cent. This is all very messy. In fact, however, CPR have indicated that they have in mind the 50 per cent rate which applies in the eight Provinces which do not levy corporation tax.

Recently the Minister of Justice spoke in public about a new Federal-Provincial Charter for the Provinces. Who can say what, if anything, will come out of this by way of shifts in tax sources between the two levels of Government. Thus quite apart from unilateral changes in the Federal corporate tax rate for revenue purposes in the future, even greater potential disruption to the status quo is inherent in the field of Federal-Provincial relations. To repeat, the tax level factor should not be allowed to enter as it does in the CPR formula as one of the determinants of compensation to the railways in this matter.

(b) The tax credit device obscures the essentials of the problem and disguises the real cost of the measures needed to correct it. Possibly political Governments might be pardoned for regarding at times a feature of this sort as one of great virtue but it is scarcely one that should be applauded by a Royal Commission dealing objectively with a National

problem. It is of utmost importance, of course, where such large amounts of public money are at stake that the issues be stated as clearly and simply as possible so that the public, in a fumbly sort of way, can pass judgement on them.

That this insistence on simplicity and clarity is not a purely theoretical point is illustrated strikingly in the CPR brief. For example in para. 81 their submission states:

> "The effect of the solution proposed in para. 72 is that freight assistance to the Western Grain Growing Industry to the extent of 50 per cent of the proposed level of rates would be provided."

While it is true that the benefit to the CPR and the cost to the Government for the tax credit as such amounts to only 50 per cent of the proposed hypothetical supplement to gross revenue (from which the tax credit is derived), the fact is that by not requiring this lump sum amount to be taken into income as proposed by the CNR the Government loses potential revenue equal to the tax on this lump sum supplement. In effect then the cost to the Government of assistance in this form rather than in the form suggested by CNR is 100 per cent of the lump sum supplement to gross revenue and not merely 50 per cent as suggested by CPR.

Their table under para. 82 again disregards this Government revenue factor on subsidies. The amounts shown as "Government assistance per net ton" according to my information must all be taken into gross revenue for tax purposes by persons receiving it and accordingly the Government recaptures about half these amounts which it has paid out to the companies in cash, just as for every other corporation in the country the Government takes in tax about half their profits. The result is that the final cost to the Government shown in the last column of their table is just not correct. Furthermore even if the companies concerned were not taxable in the year they received the subventions these additions to revenue would cut down their losses and thus reduce the amount otherwise available for a carry-forward to offset future profits. The CPR brief in these two directions badly confuses the issues. Their formula is completely artificial and illogical.

(c) The CPR tax credit proposal is unfair to the CNR. The proposal for a tax credit is put forward even though the CNR has traditionally not been a taxpayer, although of course it is liable for tax if and when profits emerge. The same law applies to both. The CPR proposal is that the CNR should receive payments in cash equal in dollars to the tax credit they would receive if they were a taxpayer, such tax credit being measured by the amount which would be left over for the company if the supplement had in fact been received as taxable income and taxed. Thus as stated above the payments to the CNR would be only half what they otherwise would be if a straightforward subsidy equal to revenue foregone were paid to them.

(d) It was made clear earlier in this memorandum that there is ample precedent in Canada for the use of income tax as an instrument for giving effect to National policies unrelated to the raising of revenue. The tax credit device as such, has been used to encourage capital investment (1938-39) and the dividend-received tax credit is currently operating as an incentive to Canadians to buy stocks in Canadian companies. However so far as is known there is no precedent whatsoever for the sort of use which CPR here proposes. In this instance the so-called tax credit is merely a mechanical method for effecting the payment of a sum of money by the Government to a company of an amount predetermined by a formula quite unrelated to any performance or act undertaken by the recipient. It is merely the offsetting of one debt obligation against another quite unrelated to it. This is not policy but simply mechanics. Accordingly the CPR reference in para. 78 of their submission to the use of income tax "as a vehicle for meeting National obligations and implementing National policies" is found to be scarcely relevant at all in supporting what they in fact propose.

(e) It might appear, superficially, that the CPR proposal would cost the Federal Treasury less than the CNR proposal since under the CPR proposal the cash payment to the CNR would be only half what it would be under the CNR's own proposal. If this were true it might be regarded as a point in its favour. In fact however since CNR deficits are met out of the Federal Treasury the lesser amount going to the CNR under this arrangement would merely mean that a correspondingly larger deficit had to be met by the Treasury. Accordingly it cannot be said that overall the Treasury would save money through the CPR proposal.

Miscellaneous General Comment

(a) The substance of para. 76 in the CPR submission is of fundamental importance in understanding their proposals. It shapes the whole nature of their approach to the problem. After having discussed various methods of assistance by means of direct payments or subsidies in one way or another their submission states:

> "In all the methods described above there is one basic difficulty in that it overstates the true dollar amount of assistance which the National Treasury is providing to Western wheat growers. This arises from the fact that payments would be in the nature of gross revenues and therefore in the case of Canadian Pacific would be subject to income tax and in the case of Canadian National would be applied against payments which would otherwise be the obligation of the National Treasury by virtue of the fact that Canadian National is a National enterprise."

This statement cannot be accepted in its entirety. The gross supplement to rates needed to bring the remuneration for carrying grain up to

reasonable economic levels seems to measure exactly the true dollar cost to the Treasury *and to other customers of the railways.* Income tax is one of the facts of corporate life in Canada. All industries have to take gross revenues into income for tax purposes and all have to turn about half of their profits over to the Government. No industry is allowed to short-circuit part of their gross revenue into "profits after tax" as the CPR proposes should be done. The Board of Transport Commissioners regard income tax as a legitimate cost in building a rate structure for the railways. Income tax is a National obligation. It certainly would be of real cost to the National Treasury if the Government allowed industries generally to by-pass the taxable income net with about half the gross proceeds needed from sales in order to operate economically. It is this misconception about the income tax factor contained in para. 76 which led the CPR into requesting a form of benefit (called a tax credit) which would not appear as gross revenue to be included in income for tax purposes.

(b) If the CNR proposal for a simple revenue subsidy (125 per cent of revenue from Statutory rates under CNR proposal and 100 per cent under CPR proposal) the gross amount of the subsidy both taken together would be about 71 million dollars. This, it must be admitted, is a very impressive, not to say shocking total. But surely the public is entitled to have it made abundantly clear to them what this National Policy of Statutory Rates for grain means to them in terms of dollars and cents.

While about 71 million dollars is the estimated total of the gross out-payments from the Federal Treasury the net final additional cash cost to the taxpayer is surprisingly small. First of all income tax would recapture about half of the subsidy payment to CPR, that is tax revenue would increase by about 17 million. Secondly the whole of the payment to the CNR would simply be a bookkeeping transaction so long as their deficit exceeds 35 million dollars. Under these conditions the net out-of-pocket additional cash cost to the Treasury of this clean, clear-cut simple solution would be only about 17½ million dollars unless of course simultaneously rates generally were cut for other railway customs restoring the CNR deficit to its original proportions.

There is good justification these days for being horrified at the pyramiding of fixed charges in the National Budget. However the problem involved in the railway rate structure is such an extremely serious one that some drastic move is imperative to restore order and logic in the pattern. We are fortunate in Canada in having a growth factor in our economy which, from the Federal revenue point of view keeps throwing up for use something of the order of 300 million dollars a year under conditions of normal growth and expansion. This factor helps to alleviate somewhat the fear and despair for our financial future which otherwise might overwhelm us. The 300 million odd is roughly the leverage of the tax system on normal annual increases in

gross National product. This heaven-sent annual revenue bonus in prosperous years can perhaps be regarded as a sort of reserve for absorbing the cost of past mistakes.

(c) There is always a sound cause for hesitancy in recommending direct payments out of the Treasury or beneficial provisions under tax legislation for special groups or particular industries because of the danger of creating precedents that will arise to plague the Government in future years. This point always deserves careful study. From this point of view the policy of direct assistance to the railways explored in this memorandum seems singularly free from the danger of being used as a lever for subsidies or tax abatement in other directions.

The unique feature of the present problem is that the railways are frustrated because of a Federal statute. National legislation prevents them from operating as an ordinary business concern where pricing for services rendered is a matter within their own discretion. The main issues here are simple and understandable. Federal law compels the railways to carry Western grain to export points at a figure way below the cost of doing so—at less than half of what can be established as a reasonable price. It is obviously not right to saddle the other customers of the railway with the burden of this concession. It is therefore proposed to pay the railways a fair price for performing this service ordered by Statute. What could be fairer, particularly since the over-all profit position of the railways is subject to Federal control. This, as a case, sounds all very reasonable and sensible and the policy can scarcely be represented (as CPR fears) as a measure favouring any special interests of any kind or of shielding an industry from the operations of ordinary economic forces in a free enterprise market system.

(d) Para. 61 in the CPR submission is quite blunt in its implications. The substance of it is that the agricultural economy of Western Canada is not in a position to pay a just and reasonable rate for transporting grain to export points. The clear implication of this statement is that the grain growing industry in Western Canada is uneconomic, that it must be regarded as a liability in the Canadian economy rather than an asset. This certainly brings down the status of the industry from one of grandeur to that of a kept woman. This humiliation has also happened to the gold mining industry as well as most of the coal industry in Canada. Western farmers cannot be expected to relish publicity to this situation asserted in the Joint Brief but essentially the remedies suggested are based on this unpalatable assumption.

(e) It might be pointed out that the CPR quite openly seeks assistance in a form which will avoid annual controversy when Department of Transport Estimates are before Parliament (paras. 73 and 74). This attempt to avoid the scrutiny of Parliament is perhaps an understandable objective but it

scarcely sounds decent as an argument for inclusion in a document for public consumption in a democracy. Presumably the CNR proposal would result in the annual payments appearing in the estimates although possibly some statutory authority might be taken to effect some other arrangements.

Information and Comment to be Obtained from Government Departments

Presumably the theory of the Royal Commission is that it is an independent body created to undertake an objective study of a problem and to submit recommendations for its solution. The present problem is one that potentially involves transfers of huge sums of money between two parties, Government and Railways. It would therefore seem particularly appropriate in this instance that both parties should make submissions to the Commission or at least that interested Government departments should be asked for comments on the proposals put forward by the railways. Accordingly it would seem to be in order for the Commission, if it wished to do so, to invite the views of the Department of Transport as well as of the Board of Transport Commissioners.

The Department of Finance traditionally stands in a somewhat unique position as a department of Government in that although their main interest is in the financial aspects of any problem they usually take it upon themselves to examine and pass judgement upon the basic policies giving rise to the expenditure of money. Accordingly it would not be out of line with practice to ask Finance at the official level for general comment on the two submissions. On this broad basis the comment might be expected to take considerable time in preparation and it is suggested that your approach to them might be limited to the CPR submission with particular reference to the use of income tax as a vehicle for giving effect to a policy. It could be indicated that you do not wish to impose on them the burden of an exhaustive study of the main problem but etc., etc.

As for the Income Tax Division of the Department of National Revenue the approach would be solely for information. They profess no interest in policy matters. Mainly as a matter of courtesy it would be well to ask the Deputy Minister whether in the proposals contained in the two submissions there is anything which would be awkward from the point of view of their administration. They might specifically be asked to confirm that the payments as proposed in the CNR brief would, in the absence of specific provision to the contrary, be included in income for tax purposes. They should certainly be asked to confirm or deny that the dollar benefits going to CPR under their formula would not have to be included in income for tax purposes. The point here is that this memorandum suggests that what the CPR

call a "tax credit" is in essence a thinly disguised payment and that the so-called tax credit is merely the offset of one payment against a contra-payment.

An illustration of the point being explored here might be given. Under our old Succession Duty Act in assessing a person receiving an inheritance which the testator had provided should be paid to him free of tax the Department in adding up the value of what the man received under the bequest included not only the inheritance itself but in addition an amount equal to the tax on it as well since this would be the real value of what he received. Freedom from tax is certainly worth something these days. The point of securing certainty on this question is that if the CPR assumption that this benefit through the tax offset is not taxable income is wrong their whole formula is badly shot.

As for the railways not much information is really needed from them. The Commission might like to see CPR taxable income and Federal tax actually paid thereon over the past 10 years. The company might be asked to show for each year the amount by which their tax bills would have been reduced had the offset which they now propose been operating. This is not very essential but perhaps interesting.

CNR might be asked to show their profit and loss position for the suggested 10 year period calculated under income tax accounting rules, to reveal how far they have been in each year from becoming a taxpayer. Presumably these figures would show the size of current account deficits met each year by the Federal Government. Likewise the company might be asked to show, for the period, what their profit and loss position would have been had their proposed formula been in effect.

Possibly the Board of Transport Commissioners staff has these data readily at hand and could make it available to the Commission more promptly than the railways.

The Economic Consequences of the Charges Provisions of the Transport Act of 1953

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The Economic Consequences of the Charges Provisions of the Transport Act of 1953

Preface

In its Transport Act of 1953 the Government of the United Kingdom tried to reduce the regulatory handicaps of the railways in that country and to free them to compete more effectively with road and water transport. To assess the effectiveness of the 1953 Transport Act in promoting these objectives, the Royal Commission on Transportation invited the Economist Intelligence Unit to appraise the consequences of that Act. The Economist Intelligence Unit report follows.

Terms of Reference and Methods of Work

The terms of reference for this investigation were set out in letters from Mr. F. W. Anderson to the Economic Research Corporation, Montreal, dated 13th, October and 5th, November 1959. In brief, the report was to give a clear-cut statement of the intentions of the Transport Act of 1953, insofar as they related to railway charges, from evidence both prior to and subsequent to its passage, and the effects of the Act on British Railways, public hauliers and shippers of goods. Particular attention was to be paid to the following questions:

1. whether the Railways now regard themselves able to pursue a commercial pricing policy and, if not, why not;
2. whether and in what ways the "for-hire" segment of the trucking industry feels the Act has discriminated against it *vis-à-vis* British Railways and British Road Services;
3. how the private segment of the trucking industry has been affected by the Act, with supporting data on rate of growth;
4. what the stated objection to the Act has been from the regions of Great Britain where road haulage does not in effect provide alternate service to the Railways.

The analysis was to be based mainly on published sources of information.

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The report commences with a brief historical summary of Government control of railway charges in Great Britain prior to the 1953 Act. This is followed by an outline of the origins of the charging provisions of the Act and their development during the Bill's passage through Parliament. The position after the passage of the Act and the confirmation of the subsequent freight charges scheme is then considered in the light of statements by railway officers, road hauliers and traders, and the report concludes with a statistical analysis of the effects of the Act on road vehicle registrations and railway freight traffic.

The report is based on an examination of editorial opinion and statements by railway officers, road hauliers, traders and their associations, published in transport journals and in the national press, and on discussions with officers of the British Transport Commission, the Road Haulage Association, the Traders' Road Transport Association (representing "C" licence operators) and the Association of British Chambers of Commerce. Statistics of goods vehicle registrations are taken from the Ministry of Transport returns and those of railway freight traffic from British Transport Commission reports and statistical statements.

Summary and Conclusions

Although legislation to free the railways from nineteenth-century restrictions relating to undue preference, equality of charges and publication of charges was promised just before the outbreak of the Second World War, the implementation of the promise was ultimately a consequence of the 1951 Conservative Government's decision to sell publicly-owned road haulage vehicles.

Under the original draft of the Transport Bill the railways were to receive financial compensation for the loss of traffic which was expected to result from increased road competition; only minor changes in charging powers were made. Following heavy criticism of the Bill, the idea of financial compensation was abandoned and in its place the railways were freed from the obligation to publish charges, other than maximum charges, and from the restrictions relating to undue preference and equality of charges. In general, traders, road transport operators and their associations did not object to these changes and other minor ones made during the passage of the revised Bill through Parliament.

There was no criticism of the charges provisions of the Bill, or of the subsequent Merchandise Charges Scheme, from regions of Great Britain which considered that road haulage did not offer an alternative service to the railways.

Railwaymen tended to discount the effects of the ending of undue preference and equality of charges. They attached much more importance to the removal of the requirement to publish charges, other than maximum charges, and to the resultant greater flexibility in charging, which had, however, to await the confirmation of a charges scheme.

It has been held that the confirmed charges scheme, which generally implemented the principle of maximum charges related to consignment weight and loadability, left the railways "virtually free to charge what they can get, in competition, for rather less than half their freight traffic".

For a number of reasons, there was bound to be some delay, after the coming into force of the charges scheme, on 1st July 1957, before the effects of the railways' new freedom in charging began to show themselves. Important factors were the administrative work involved, the progress of railway modernisation and the decision of the British Transport Commission to retain most of the active rates for the time being.

A survey by the Association of British Chambers of Commerce towards the end of the first year of operation of the scheme showed that the effects of the charges scheme in improving the railways' competitive position were only just beginning to be felt. Nevertheless, road hauliers were, in the summer of 1958, already complaining of increased railway competition. Their implicit assertion that some of the rates quoted by the railways were uneconomic is not confirmed by the evidence available.

"C" licence operators have generally welcomed the greater freedom in charging given to the railways as an aid to more efficient and competitive working.

Statistics of road haulage vehicle registrations do not show any slowing of the rate of growth of the long- and medium-distance haulage fleets as a result of increased railway competition.

In recent months the railways have halted the decline in their general merchandise traffic. This seems to be largely due to their attempts to attract and retain traffic by competitive charging and improved services.

Government Control of Railway Charges in Great Britain

In common with other railways, British railways' freedom of charging was for more than a century restricted by legislation passed when they had, over a wide field, an effective monopoly of inland transport. As early as 1845, Section 90 of the Railway Clauses Consolidation Act (the Equality Clause) provided that the same rate should be charged for all similar consignments requiring the same or similar service over the same line of railway. Undue preference was prohibited by the Acts of 1854 and 1888 and the

1873 Act made the publication of rates obligatory. The 1888 Act also established a system of statutorily fixed maximum rates based mainly on the value of the commodity carried. Under the 1921 Act, which provided for the amalgamation of the 123 main-line companies then existing into four undertakings, maximum rates were replaced by standard charges. These charges, also based on the value of the commodity carried, were to be fixed at a level which, with efficient and economical working and management, would yield an annual net revenue, known as the "Standard Revenue", equal to that earned in 1913 plus certain additional allowances. This amounted to £51 million, but, with the growth of road competition, it was never achieved. In 1929 net revenue reached £49 million but it fell sharply thereafter to £27 million in 1932 and, despite some recovery, never reached £40 million in the period between 1932 and the outbreak of the Second World War.

Seeking to put themselves on more equal competitive terms with the road hauliers, the railways presented a memorandum to the Minister of Transport in 1938 asking for greater freedom in charging and, in particular, the repeal of statutory regulation of charges and the requirements relating to classification, publication and undue preference. This request, which was presented to the public as a demand for a "square deal", was remitted to the Transport Advisory Council for consideration. The Council arranged a series of meetings between representatives of the railways and other interests concerned and recommended the adoption of agreements reached at these meetings. Substantial concessions were to be made to the railways' demand for greater freedom in charging and undue preference was to go. An agreement between the railways' and road hauliers' representatives provided for the establishment of a committee to devise principles for the joint regulation of road and rail charges.

Shortly before the war, the Government promised legislation implementing the recommendations of the Transport Advisory Council but a few years later, in 1943, the Minister of War Transport (Lord Leathers) stated that the "square deal" failed to reach the root of the problem and some more radical solution would have to be found. The solution offered by the postwar Labour Government, in the Transport Act of 1947, was the nationalisation of the railways and their associated steamships, docks, hotels and omnibuses, London Passenger Transport, the inland waterways and most long-distance road haulage for hire or reward. Control of these assets was vested in a public corporation, the British Transport Commission, charged with the duty of providing, or securing the provision of, "an efficient, adequate, economical and properly integrated system of public inland transport and port facilities within Great Britain". The charges provisions of the Act were clearly ancillary to this central objective of the integration of

transport. Section 77 of the Act provided for charges schemes, covering any or all forms of transport operated by the Commission, which, (in the words of the Chief Charges Officer of British Railways Staff) "could have had almost any kind of mixture of fixed charges, maximum charges, minimum charges, standard charges, exceptional charges, special charges and agreed charges but, subject to the limitations of the scheme, which could have been severe, the Commission were to have an unfettered determination of the charges to be made in all or any cases". However, the Commission still had to publish their charges and they were still subject to the laws relating to undue preference and equality of charges. No freight charges scheme had been published by the autumn of 1951 when the election of a Conservative Government changed the situation again.

The White Paper on Transport Policy and the Transport Bill

The Conservative Party was committed to the denationalisation of long-distance road haulage and Government proposals for this were published in a White Paper in May 1952. There was to be a levy on all goods vehicles operating under "A", "B" or "C" licence ("A" and "B" are public hauliers' licences, "C" licences cover vehicles operated by firms for the carriage of their own goods) to cover the expected loss on the sale of the publicly-owned vehicles and to make "some provision for the loss of railway revenue arising from the further transfer of traffic to the roads". The White Paper also stated "The Commission will be given greater latitude to vary their charges schemes so as to improve the ability of the railways to compete with other forms of transport. Within prescribed limits they will be free to raise or lower their charges with subsequent approval by the Transport Tribunal and subject to the overriding powers of the Minister".

Provision for a levy for the two purposes mentioned above was included in the first draft of the Transport Bill, published in July 1952. In the charges field, Clause 19 of the Bill provided that charges schemes, which were to be reduced in scope in accordance with the emasculation of the British Transport Commission's functions proposed, would provide only for maximum charges. The discretion of the Commission to fix charges for goods within these maxima was, however, still to be restricted by the laws relating to undue preference and equality of charges and they would still have to publish their rates. The Commission's freedom to fix charges was further hampered by Clause 20 of the Bill which provided that transport operators who considered that a rate put in by the Commisison would result in a loss to the Commission, and that it had been fixed with a view to eliminating competition, might complain to the Transport Tribunal and the Transport Tribunal could, if it thought fit, order the charge to be altered.

In fact, the only benefit that the Bill conferred on the Commission was the power to increase charges by a limited amount (not more than 10 per cent) before obtaining the approval of the Transport Tribunal. By eliminating the time-lag between higher costs and high rates, provision of this kind would improve the financial position of the Commission. But it was qualified by the requirement that if the Commission took advantage of the provision it must increase all rates by the same proportion. The Commission could not discriminate between those rates where an increase would mean an increase in revenue and those where it would mean no increase or even a reduction in revenue. Thus the increased revenue obtainable from an overall increase in rates or fares of a certain percentage might be less than that obtainable from a discriminatory increase of the same amount.

Like the White Paper that preceded it, the first draft of the Bill was heavily criticised by transport operators and transport users and the Government allowed it to lapse at the end of the Parliamentary session. When Parliament re-assembled a revised Bill was produced. This second draft, laid before the House of Commons early in November 1952, limited the levy to compensating the BTC for the loss on the disposal of road haulage. The levy was no longer to provide compensation to the railways for the loss of traffic to road hauliers. Instead the railways' competitive power was to be increased. Firstly, they were relieved of the obligation to publish any charges that they applied which were less than the maximum charges laid down in a charges scheme. Secondly, once a freight charges scheme had been confirmed, the railways were to be given greater freedom to vary charges, in particular they were no longer to be subject to the laws relating to undue preference and equality of charges. This greater latitude in charging was to be limited in two ways. In the first place, the right of objection by competing transport operators provided for in the first draft of the Bill, remained in the second draft (as clause 21). Secondly, the revised Bill provided that any consignee of merchandise who could only send it by rail might complain to the Transport Tribunal if he considered that the charge requested by the railways was unfair and unreasonable, and the Tribunal, after hearing both sides, might order the charge to be altered if they considered it unjust (clause 20). In the revised Bill too, the original provision authorising the Commission to make temporary increases in maximum charges of up to 10 per cent to meet sudden increases in costs was replaced by a provision that the Commission might apply to the Transport Tribunal to authorise, without public inquiry, temporary increases that would produce not more than 10 per cent additional revenue. Insofar as it removed the need for equiproportionate increases in all rates, this was an improvement on the original clause.

Reactions to the Bill

When he opened the debate on the Second Reading of the revised Bill on 17th November 1952 (the First Reading is a mere formality, the Second Reading offers the opportunity for the main general debate on the Bill), the Minister of Transport explained the changes from the original Bill in the following terms:

> "When we introduced the earlier Bill in July, there were improvements on the old situation in the competitive position of the railways. As hon. Members will know, we introduced a head-room clause, as it is called, to provide for sudden increases in expenses to which the Commission might be subjected while the matter was being considered by the Transport Tribunal and which might land them in a very large deficit. Second, we arranged in the Bill that, instead of charges being either fixed, standard or maximum, they should be put in a charges scheme only as maximum charges.
>
> "None the less, I and my colleagues did not feel that we had fully measured up to the problems of the railways in this sphere, or to the new and tolerant view of the majority opinion in Britain towards railway obligations. As the House will know, many of these obligations on railway freedom in the matter of charges which it is proposed to sweep away under this Bill date from the days when they were a monopoly, and now there is every reason to believe that the carrying capacity of road haulage is just as high as the railway capacity."

He went on to say:

> ". . . These very great changes (i.e. in the charges provisions of the revised Bill) are, I believe, wholly desirable but I share the feeling of a number of people that some protection is necessary in the early days against the possible misuse of these great new powers. . . . We ought to do our utmost to resolve these doubts in the interest of traders—Clause 20—and in the interests of competitors—Clause 21. It may be that in the passage of time the opinion of the country may accept the fact that these protections are no longer necessary. But we have to deal with facts . . ."

In general, traders, road transport operators and their associations did not object to the Bill as redrafted. The one important exception was the Associated British Chambers of Commerce. The Associations were prepared to concede that the railways were entitled to a measure of flexibility in charging; but they were opposed to the non-publication of charges, other than maximum charges. They contended that, if actual charges were not to be published, Clause 20 of the Bill provided no adequate protection for transport users.

On the other hand, the Bill was criticised by the Parliamentary opposition, and in the technical transport press, for too severely limiting the freedom to be granted to the railways. In the first place, they considered it unfair that competitors should be able to challenge the Commission's charges, while it was not able to challenge theirs. Secondly, the greater

freedom granted to the railways was not to come into effect until a charges scheme had been prepared and confirmed. This would probably mean that several years would elapse before the railways derived any benefit from the clauses. During the passage of the Bill through Parliament, the Government made concessions to both of these views. The clause enabling competitors of the BTC to complain to the Transport Tribunal about rates fixed by the Commission was deleted and protection for road hauliers thereby eliminated. That given to coastal shipping (a traditional beneficiary) was retained by alterations to other clauses of the Bill. Further amendments provided that the railways should be released from their existing obligations relating to undue preference and equality of charges from the time of passing the Bill, instead of from the introduction of new charges schemes. The provision for temporary increases in charges was changed once again for goods charges so that, in this case, the Commission might, in order to offset a sudden increase in costs, increase all or any of the maximum charges fixed under a charges scheme by up to 10 per cent.

There was no criticism of the charges provisions of the Bill or of the subsequent Merchandise Charges Scheme from regions of Great Britain which considered that road haulage did not offer an alternative service to the railways. Criticism of the Bill by Scottish Members of Parliament was directed at the provisions for the disposal of publicly-owned road haulage, which they considered would leave some areas of Scotland with freight transport services markedly inferior to the combined road-rail services that British Railways and British Road Services were providing prior to the passage of the Bill.

The Position After the 1953 Act

The Transport Bill finally became law on 6th May 1953. From that date the railways were thus free from obligations of undue preference and equality of charges. In the eyes of most railwaymen these restraints were less important than those, e.g. publication of charges, whose demise had to await the confirmation of a charges scheme, although they were nevertheless glad to see them go. For example, in a paper read to the British Railways Western Region Debating Society in January 1954 Mr. H. D. Poole, Assistant to the Commercial Superintendent, stated:

> "We may summarize the comments on undue preference by saying that although the withdrawal of this repressive legislation will ease the mind of those who have to fix charges, it may not prove to be of such assistance as is generally looked for . . . .
>
> "The restriction (i.e. the requirement of equality of charges) was of limited scope and, in view of the fact that having granted a rate between a given pair of stations for a specific traffic the railways have

> invariably quoted that rate and its appropriate conditions to any trader who might be concerned, no difficulties have been experienced over the last quarter of a century. It may therefore be stated that the remark I made regarding the removal of undue preference applies with greater force on the equality issue."

Similar views on the ending of undue preference were expressed by Mr. A. A. Harrison, Chief Charges Officer, British Railways Central Staff in a paper read to the Institute of Transport in March 1957. He stated:

> "How far this restraint has really stopped commercial enterprise in the last quarter of a century is anybody's guess—perhaps not very far—but generations of rate men have felt inhibited by it and there has been an unconscious if not a conscious reflection of it."

The British Transport Commission (Merchandise) Charges Scheme

It was nearly two years after the passage of the Act before the BTC lodged a draft Merchandise Charges Scheme with the Transport Tribunal. (It had previously been discussed with the Traders' Co-ordinating Committee and other bodies representative of users.) The draft Scheme provided for a single set of maximum charges related to consignment weight and loadability instead of commodity value. These charges were to be based on costs of carriage in adverse conditions because, as the Commission's counsel stated at the subsequent inquiry, they must be high enough to cover "the cost of carriage in all the conditions in which the Commission have to carry traffic in significant quantities". The proposed maximum charges were, consequently, to be associated with the "outer, but not the extreme, ranges of cost".

The Transport Tribunal heard spokesmen for the Commission and objectors to the Scheme at a public inquiry extending over forty-four days between July 1955 and March 1956. In July 1956 they isssued an interim decision which represented a compromise between the views of the Commission and those of the objectors. On the one hand, they accepted the Commission's proposal for graduated maximum charges related to consignment weight and loadability. They also accepted the principle of a 10-mile standing charge, with a ton-mile progression rate thereafter, and the determination of the level of maximum charges by reference to costs incurred in adverse but not extremely adverse circumstances. On the other hand, the Tribunal decided that traffic in 100-ton consignments and in owner's wagons should be excluded from the maximum charges schedules. These were to be subject to "reasonable" charges. They also decided that there should be separate maxima for bulk traffics and other traffic and for station and private siding traffic. In all cases, the maxima were to be somewhat lower than those proposed by the Commission.

The principles laid down in the Interim Decision were implemented in the confirmed charges scheme which came into force on 1st July 1957. For the railways this meant, in the words of Mr. Harrison, "enlarged freedom in charging but by no means the complete freedom enjoyed by their principal competitors". He estimated that about a quarter of the railways' total freight revenue was accounted for by consignments of 100 tons or more and Owner's Wagon Traffic, for both of which charges were to be subject to the requirement of reasonableness. A further quarter could also be subject to the reasonableness factor through Section 22 of the Act (the section which gives traders whose goods can only be sent by rail the right to complain to the Transport Tribunal if they consider that charges are unreasonable). Finally "the authorized maxima for traffic in Commission owned wagons, in consignments of less than 100 tons, are in themselves effectively restrictive for a considerable volume of traffic. . . . I think it is fairly widely known that the authorised maxima are lower than the charges now being levied (i.e. in March 1957) for an appreciable quantity of good loading traffic passing over medium distances". The railways were consequently to be "virtually free to charge what they can get, in competition, for rather less than half their present traffic and for a share of the traffic, now on the road, much of which ought to be on the rail, at all events for its truck haul".

Freight Charges Under the Scheme

In a memorandum to the Minister of Transport in September 1956, the BTC indicated that they would use their new charging powers to encourage traffic passing in large quantities, good wagon loads and regular flows and to avoid loss, if necessary by discouraging users, on traffic passing in small consignments or over short distances. Their hopes for gains in traffic and revenue clearly centred on general merchandise traffic. In 1956 this traffic accounted for £104 million out of a total freight train revenue of £284 million, and the scope for exercising freedom in charging was greater than for other goods traffic. Railway carryings of general merchandise had reached a peak of 53.2 million tons (7,078 million ton-miles) in 1951 and fallen to 42.5 million tons (6,008 million ton-miles) by 1956.

For a number of reasons, it was to be expected that it would be some time after the coming into force of the new charges scheme before the effects of the railways' new freedom in charging began to show themselves. In the first place, although some preliminary work must doubtless have been done, there was the administrative work involved in calculating, e.g., where rate reductions would prove profitable and how they should be applied. Secondly, as the Commission's spokesmen had stressed during the public inquiry into the Scheme, exploitation of freedom in charging was closely

linked to the improvement in facilities made possible by the railways' modernisation plan. The benefits of expenditure on modernisation have been slower to mature in the freight field than in the passenger field. Finally, the Commission did not wish to annoy its customers by carrying out a revolution in freight charges overnight, even if this had been practicable. In the memorandum referred to above, the Commission declared its intention to "continue in operation most of the rates in active use at the time the Scheme comes into force . . ., for the time being, to enable a comprehensive and systematic review of such rates to be made". This review has, as the Commission promised, subsequently been carried out in consultation with representative bodies of traders.

When the Scheme came into force, the Commission continued to apply all existing rates on coal and coke; all exceptional rates on mineral and merchandise traffic used between January 1955 and July 1957 apart from "any quantity" rates not retained as 1 ton rates; most livestock rates; and all "live" rates for merchandise by passenger train except returned empties. This concession covered the bulk of wagon load traffic (consignments of 1 ton or more) then passing by railway. On the other hand, most "smalls" traffic (consignments of less than one ton), which account for over an eighth of railway freight revenue, was immediately subject to the new charges scales.

The Association of British Chambers of Commerce Survey

The results of a survey into the working of the Charges Scheme, carried out by the Associated British Chambers of Commerce towards the end of its first year of operation (and published early in July 1958), have to be interpreted in the light of the factors outlined above. As the ABCC itself admitted, the real effects of the scheme were only just beginning to be felt.

The survey, which was carried out through the ABCC's affiliated chambers of commerce, covered about 700 traders. They were asked to answer six questions, aimed at determining, from the users point of view, whether the new arrangements for freight charging were operating smoothly and whether the railways had been able to attract new traffic. The ABCC interpreted the results of the survey as showing that although the reorganisation, following the introduction of the scheme, was almost complete and the railways were showing a more commercial outlook, they still had a long way to go, as regards rates and standards of service, to compete effectively with road transport; secondly, that the scheme was operating smoothly, and users, as a whole, were experiencing few difficulties in obtaining on-the-spot quotation of rates. This, together with the quotation of high rates at the

start of negotiations often led to delays and consequent loss of traffic. Replies to individual questions were summarised as follows:

"1. *Have the railways in your area reorganised completely their organisation and charging procedure so that the new scheme is operating smoothly ?*

There is a general feeling among Chambers of Commerce that the reorganisation has been of benefit and is in the main complete; the teething troubles having been overcome, the scheme is working smoothly. However, as many exceptional rates still operate, the real effects of the scheme are only just being felt.

2. *Is there any evidence that the railways are now more competitive and commercially minded regarding rates and service than before ?*

Generally it appears to Chambers of Commerce that British Railways has become more commercially minded but not yet competitive as regards rates compared with road. There is some evidence in the replies of more competitive rates being offered particularly in those classes of traffic the railways wish to attract. There is also evidence of improvement of standards of service. There has been a marked change in the railways' selling technique, but they still have far to go in the field of quoting competitively for rates and in service.

There is still a fairly general complaint that the delegation of authority as regards rates to district officers is not operating as was expected from the traders' side. Frequently the comment is made that there is no ready on-the-spot quotation of rates, etc., without reference to headquarters. This has led to delays and loss of traffic.

3. *Is there any evidence of traffic being either won back by the railways from the road, or conversely being lost by the railways as a result of the new scheme ?*

On the whole the evidence indicates that no marked change has taken place. The trend is still in favour of road transport on account of service and less handling (even where cost is equal or lower by rail).

The comment was frequently made by companies that they use the railways little. They are not interested in the railways or the new charges scheme. Traffic continued to be lost to road on rate, speed of delivery, less handling, fewer breakages and general service. Small consignments were being lost because of high rates and traffic generally through increased demurrage charges. The railways' practice of indicating high rates at the start of negotiations did result in no further interest being taken by a potential buyer of transport. The present recession in trade, however, makes the replies to this question difficult to assess.

4. *Are your members experiencing any special difficulties under the new charges scheme ?*

The main difficulties mentioned are the increased charges for returned empties and the checking of accounts. Also comment is made on the abnormal length of time taken to quote rates and again the initial quotation of high rates. High demurrage rates are also mentioned.

5. *Have you any evidence that local railway officers are using the wagon guide scale as a rigid charge list ?*

The majority of replies were in the negative but this result should be interpreted with caution. Some of those replying in the negative did so because they are being charged their former exceptional rates. Also many answering "No" are small firms, who do not perhaps recognize the charges they receive as wagon load rates—which scale, of course, is not

made available to the public. There is, however, some indication that where the wagon guide scale has been used, chiefly in cases where traffic does not flow regularly, negotiations are possible.

6. *Is the new published small consignment scheme creating any problems?*

The general opinion is that the present small scale, as a publication is convenient, handy, and an improvement, but the level of charges in the main is considered high—even extortionate in some cases. In other replies, where the companies' traffic was previously highly classified on account of value, the level appears satisfactory. Some firms experience difficulty in checking their charges as the relevant distances are not published, and can only be obtained by reference to stations. There is a feeling that in not allowing cartage rebates from the scale, where such services are performed by traders, the railways are being unfair."

Complaints from Road Hauliers

A few months later, in October 1958, a press statement by the Road Haulage Association (the body representing private road hauliers operating for hire) indicated that in some cases, at least, the railways were making effective use of their new charging powers. The statement claimed that in order to capture traffic from road transport "some freight charges were drastically reduced, in several cases below the cost of road haulage". RHA members were said to have reported reductions from 67s 6d to 40s per ton in the rate for frozen goods from East Coast fishing ports to London and reductions of up to 30 per cent elsewhere in the Eastern Counties. The statement continued "railway rates for the carriage of potatoes from Norfolk to London have been reduced to 12s per ton*—about half the cost of road haulage; in Kent, the rate for carrying hops has been brought down below the 1947 level; in South Wales, the rate for taking tinplate to London has been reduced from 41s 3d to 32s per ton. As a result of the reduction of the railway rate for carrying goods from Consett (Durham) to South Wales at least one road haulier has been forced out of business".

The Road Haulage Association objected to the rate reductions applied by the railways on the grounds that "British Railways are not a private concern but a public body which depends on loans of public money to make good the deficits it has been incurring in recent years. . . . Road hauliers, therefore, have a legitimate cause of complaint in view of the present rate cutting policy by British Railways since not only are they adversely affected by this development but they are also members of the public that loans British Railways, through the British Transport Commission, millions of pounds annually to continue this policy". The Association suggested that some of the rates British Railways were quoting might be "so low as to be below costs and hence completely uneconomic" and supported this suggestion

* According to the railways the new rate is actually 15s per ton for 10-ton loads.

by statistics of railway freight revenue, which showed that for the first 36 weeks of 1958, during which time the new charges scheme had been in operation, revenue at £180 million was lower than in the comparable periods of both 1957 (£197 million) and 1956 (£191 million). So far as we are aware, this suggestion is erroneous; British Railways do not quote rates below the direct cost of carriage, calculated by their costing department. As subsequent analysis will show, later freight traffic statistics than those quoted present rather a different picture.

"C" Licence Operators

Operators of road vehicles under "C" licence for the carriage of their own goods are, generally, also substantial users of the railways and hired road haulage vehicles. The organisation which represents "C" licence operators, the Traders' Road Transport Association, has made no public statement on the charges provisions of the 1953 Act and their consequences but the Association has told us that its members welcome the greater freedom in charging given to the railways as an aid to more efficient and competitive working. This is broadly confirmed by statements by transport officers of leading industrial firms, who are large operators of "C" licensed vehicles. Thus, Mr. M. G. Burleigh, transport officer of Imperial Chemical Industries and chairman of the Traders' Co-ordinating Committee, which discussed the new charges scheme with the British Transport Commission, said in a paper read to the Irish section of the Institute of Transport, in April 1957, "In my view, the Transport Act, 1953, is the boldest step that any country has taken as a contribution to the solution of the major inland transport problem". In a paper read to the British Railways (London Midland Region) Lecture and Debating Society early in 1959, Mr. E. G. Whitaker, Transport Adviser to Unilever said ". . . there are many indications that the railways are taking advantage of the charging freedoms they were granted under the 1953 Act. We ourselves have instances of contracts entered into recently which I am sure will prove mutually beneficial in the long run, and others are under consideration, and one can certainly applaud the measures the railways have taken and are taking to attract traffic".

The Growth in Road Haulage Fleets

Statistics of goods vehicles licensed in Great Britain offer no clear indication of the impact on road transport of the new charging policy pursued by the railways. As Table 1 shows, although the increase in the total number of "C" licensed vehicles in 1958 was the lowest for any year from 1950 onwards, the number of larger "C" licensed vehicles (which provides a

TABLE 1—NUMBER OF ROAD GOODS VEHICLES LICENSED IN GREAT BRITAIN ON 31st DECEMBER OF THE YEAR STATED[a]

('000)

	1950	*1951*	*1952*	*1953*	*1954*	*1955*	*1956*	*1957*	*1958*	*1959*[b]
British Road Services[c]	39.9	41.3	39.3	35.8	25.4	17.6	16.1	16.3	16.0	n.a.
Other "A" licence	56.2	53.4	53.4	68.2	79.7	91.6	97.2	100.3	100.9	n.a.
Total general haulage	96.1	94.7	92.7	104.0	105.1	109.2	113.3	116.6	116.9	118.8
"B" licence	63.1	62.5	62.9	63.6	64.6	66.5	68.9	70.7	72.6	73.7
"C" licence[d]	733.0	796.3	833.9	866.3	899.8	944.2	998.2	1,070.2	1,099.3	1,125.0
of which: Over 3 tons unladen weight	(43.3)	(49.2)	(52.8)	(56.4)	(61.3)	(67.0)	(73.3)	(80.9)	(91.4)	(100.9)
Total	892.2	953.5	989.5	1,033.9	1,069.5	1,119.9	1,180.4	1,257.5	1,288.8	1,317.5

[a]An "A" licence is a general carrier's licence, a "B" licence a limited carrier's licence and a "C" licence permits the carriage of a firm's own goods. "A" and "B" licences are granted on proof of need, "C" licences on application.

[b]30th September.

[c]B.R.S. vehicles did not require "A" licences before 1953; the decline in their numbers, and the increase in other "A" licensed vehicles, from 1952 to 1956, is mainly accounted for by the disposal of publicly-owned vehicles under the Transport Act, 1953.

[d]Many of these are local delivery vehicles; the number of vehicles over 3 tons unladen weight, broadly equivalent to 5½–6 tons carrying capacity, is a more useful indicator.

n.a.—Not available.

better indication of their use in long- and medium-distance haulage) increased even more than in the preceding years. On the other hand the increase in the number of "A" licensed vehicles was the lowest for six years. But 1958 was, in any case, a year of stagnation when a low rate of expansion in goods vehicle fleets was to be expected. The changes during the first nine months of 1959 throw little more light on the position, and it is clear that a longer period must elapse before one can say with any certainty whether or not the greater competitiveness of the railways has discouraged the expansion of goods vehicle fleets.

The Trend of Railway Freight Traffic

A more direct measure of the railways' success in attracting and retaining traffic is provided by their carryings of freight. The tonnage of general merchandise traffic (i.e. freight traffic other than coal, minerals and livestock) carried by British Railways reached a peak of 53.2 million tons in 1951 and has fallen in every year since then. By 1957, despite the temporary boost provided by petrol restriction in the months following the Suez campaign, it was down to 41.6 million tons, and in 1958 recession in the steel and associated industries, which provide a large proportion of the railways' merchandise traffic, brought a further catastrophic fall to 36.3 million tons. However, a comparison of the tonnage of general merchandise carried in the year prior to the introduction of the charges scheme and that carried in the two following years shows that the decline between 1957-58 and 1958-59 was smaller than that between 1956-57 and 1957-58. Carryings were 42.8 million tons for the year July 1956 to June 1957, 38.1 million tons for July 1957 to June 1958 and 35.7 million tons for July 1958 to June 1959. One cannot necessarily conclude from this that, by the exercise of their new charging powers, the railways have been able to slow down their loss of general merchandise traffic. In 1956-57 railway freight traffic was boosted by the rationing of petrol and diesel fuel in the post-Suez period, so that, in the absence of countervailing factors, a correspondingly steep decline might have been expected in the following year when this restriction on road haulage had been removed. On the other hand, the volume of production in manufacturing industry rose slightly between 1956-57 and 1957-58, whereas it was practically unchanged between 1957-58 and 1958-59. Other things being equal, this should have meant a smaller decline between 1956-57 and 1957-58 than in the following year. In the event, these two factors may have largely offset one another and reductions in charges have helped to stem the loss of traffic by the railways. To determine if this has been the case it is necessary to look at general merchandise carryings in recent years in more detail.

TABLE 2—TONNAGE OF GENERAL MERCHANDISE CARRIED BY BRITISH RAILWAYS

('000 tons)

4-weekly periods	*1956*	*1957*	*1958*	*1959*	*Percentage change* *1957 on 1956*	*1958 on 1957*	*1959 on 1958*
1	3,344	3,596	2,911	2,642	+ 7.5	−19.0	− 9.2
2	3,301	3,600	3,047	2,909	+ 9.1	−15.4	− 4.5
3	3,491	3,579	3,003	2,943	+ 2.5	−16.1	− 2.0
4	3,312	3,264	2,870	2,682	− 1.4	−12.1	− 6.5
5	3,323	3,240	3,006	2,870	− 2.5	− 7.2	− 4.5
6	3,153	3,128	2,728	2,722	− 0.8	−12.8	− 0.2
7	3,115	3,067	2,751	2,806	− 1.5	−10.3	+ 2.0
8	2,610	2,585	2,308	2,435	− 1.0	−10.7	+ 5.5
9	3,051	2,962	2,546	2,693	− 2.9	−14.0	+ 5.8
10	3,352	3,160	2,727	3,041	− 5.7	−13.7	+11.5
11	3,415	3,227	2,898	3,202	− 5.5	−10.2	+10.5
12	3,581	3,275	3,010		− 8.5	− 8.1	
13	3,293	2,807	2,681		−14.8	− 4.5	

Table 2, which is based on the four-weekly "Transport Statistics" published by the British Transport Commission, compares the tonnage carried in each of the four-weekly periods from January 1957 with that carried in the same period of the preceding year. It will be seen that in period 7 of 1959 British Railways' merchandise traffic was, for the first time for more than two years (much longer if the abnormal post-Suez period is excluded), greater than in the same period of the preceding year. In subsequent periods traffic has been consistently greater than a year before and the percentage gain has tended to increase.

During the period in which these gains have been made the railways have clearly been making substantial reductions in rates. Table 3 compares the tonnage of, and revenue from, merchandise and livestock traffic (separate revenue figures for merchandise are not available, but livestock traffic is in any case not very important, accounting for little more than 1 per cent of the combined tonnage and revenue) in 1958 and 1959. In periods 7 to 9, with the tonnage carried in 1959 greater than in 1958, the revenue was smaller; in periods 10 and 11 with the tonnage carried in 1959 over 10 per cent higher than in 1958 revenue was practically unchanged.

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TABLE 3—BRITISH RAILWAYS CARRYINGS OF GENERAL MERCHANDISE AND LIVESTOCK

4-weekly periods	*Tonnage ('000 tons)*		*Revenue (£'000)*		*Percentage change 1959 on 1958*	
	1958	*1959*	*1958*	*1959*	*Tonnage*	*Revenue*
1	2,951	2,670	8,158	7,085	— 9.5	—13.2
2	3,091	2,939	8,749	7,808	— 4.9	—10.8
3	3,050	2,978	8,598	7,805	— 2.4	— 9.2
4	2,912	2,719	7,951	7,127	— 6.6	—10.4
5	3,047	2,900	8,510	7,708	— 4.8	— 9.4
6	2,770	2,745	7,644	7,360	— 0.9	— 3.7
7	2,786	2,824	7,952	7,404	+ 1.4	— 6.9
8	2,339	2,453	6,600	6,387	+ 4.9	— 3.2
9	2,585	2,719	7,251	7,087	+ 5.2	— 2.3
10	2,773	3,074	7,896	7,895	+10.9	....
11	2,943	3,246	8,316	8,502	+10.3	+ 2.2
12	n.a.	n.a.	8,404	8,673	n.a.	+ 3.2

n.a.—Not available.

In the second half of 1959 industrial production was substantially higher than in 1958 (e.g. in September the index for manufacturing industry was 10 per cent higher than in September 1958). But the significant fact is that railway carryings of general merchandise have risen by a similar proportion. In the past the railways' merchandise traffic has fallen despite an increase in industrial production. Their attempts to attract and retain traffic by competitive charging and improved services are, apparently, achieving a substantial measure of success.

Summaries and Extracts from Studies of the French Railways

by
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Summaries and Extracts from Studies of the French Railways

Preface

Extensive damage to the railways of France during the Second World War made it necessary to rebuild a major part of the rail system in that country. This reconstruction programme provided an opportunity to modify railway facilities in accordance with the changes in transport conditions and to adopt modern innovations in technical operations and pricing practices. This unique experience of rapid renovation of facilities, techniques and rate-making could be expected to yield fruitful information for an appraisal of railway transportation problems in Canada. It was with this objective that the following report was prepared for the Royal Commission on Transportation. Permission of the publishers to summarize and quote the reports herein referred to is gratefully acknowledged.

Nationalization and Organization

Continuing deficits of the French railway companies in the nineteen-thirties led to nationalization which came about after the general election in 1936. The progressive intervention of the state, up to the time of nationalization, is described in the following chronological summary.

Early Period of Railroad Building

The state granted concessions to private companies for building and operating railways. Agreements with the companies covered the limitation of the area of operations, the financial responsibility of the state and railway companies, and the remuneration the companies were to receive.

The state purchased the land to be used for railway lines and paid the cost of establishing the basic facilities.

The first railway was organized in 1842. Others followed. From 1852 to 1859, under a reform programme, the number of companies with railway concessions was reduced from 26 to 6 and concessions were granted for a period of 99 years.

Royal Commission on Transportation

1859 and 1883

The state granted new agreements in 1859 which guaranteed bond issues on new lines; in 1883, the state guaranteed minimum dividends on companies' shares and granted loans to cover deficits on new lines.

1908

The state purchased one of the six concessionary companies.

1914-1919

During the war, the state took over the operation of the railways. After the war, the state gained ownership of the Alsace-Lorraine Railway.

1921

In order to improve railway administration, a Management Committee and a Superior Council of Railways were created by the state to co-ordinate operations, rates and financing for existing railways. Company and state representatives were included in both groups.

A common fund was established and deficits on certain lines were to be covered by revenues from companies operating with a surplus. General deficits were to be covered by loans from the state and reimbursed by modifications or increases in rates.

1933

State representation in the bodies created in 1921 was enlarged. But rate revisions had failed to cover the increasing annual deficits.

1936-1937

Deficits amounted to 21,776 million francs in 1936 and to 26,386 million francs in 1937.

Nationalization

After studying several possible solutions to the railway problem, a financial act was passed by the French Chamber on December 31, 1936, authorizing a complete reorganization of the existing railway system which was to be integrated in a co-ordinated public transport service.

On June 30, 1937, an act was passed granting the French Government the necessary power to ensure the financial stability of the French railways.

Two Orders in Council, issued in August, 1937, established the new rules governing the financial status of the railways.

The first Order pertained to the unification of the railways and the second to the co-ordination of railway and other forms of transportation. The unification approach was in effect nationalization.

The Order in Council on unification provided for the grouping of the existing seven railways, five of which were privately operated and two state owned, into one enterprise.

Under the terms of this Order in Council, a limited company was established to operate and if necessary to build railways. A subsequent Order in Council, proclaimed on December 31, 1937, gave the new body, known as "La Société nationale des chemins de fer français" or SNCF, the right to retain, for the next 45 years, all concessions granted to the existing five railway companies. All railway assets, except the private property of the companies, were transferred to the new company.

The company's new capital included in part the assets of the two state railways, the rights retained from state contributions to the other railways and all loans made by the state to the common fund established in 1921. Those assets represented 51 per cent of the total capital. The remaining 49 per cent of the capital included the assets of the five other railways to be retained by the former administrations until the end of 1955, and thereafter, by their shareholders until the end of the concession (1982).

Organization

The SNCF as indicated above is a mixed ownership company, that is, the state owns 51 per cent of the capital and the remainder is in the hands of the shareholders of the former concessionary companies. It operates under the Companies' Act of 1867 and various state controls.

The main body of the SNCF is the Board of Directors. The Board, through the President, is responsible for the general and financial organization, and through the Director for the technical direction.

The technical direction is decentralized on a regional basis. The country is divided in six regions and each region has the responsibility for three departments: traffic, rolling stock and motive power, and civil engineering. Each department is administered by districts.

State control in this mixed ownership company is apparent at all levels. The Board of Directors is composed of 21 members: 10 civil servants from the main departments of the government, including the President; five representatives from the shareholders of the former companies; five state-appointed representatives from the organization and one government agent, the General Director of Railway and Transport of the Department of Public Works.

Technical and administrative controls are supervised very closely by specialized branches of the Department of Public Works.

Financial controls come under the jurisdiction of the Control Commission of Railway Contracts of the Department of Public Works for contracts of major importance and of a Permanent Mission of Financial Control with regard to works, materials, pay, superannuation, rates and transport co-ordination.

The Accounting Commission representing the shareholders and the Accounting Commission of Verification of the Departments of Finance and Public Works, and various courts also have some control over the financial activities, through their year-end review.

Government Financial Contribution

Agreement and Order in Council of 1937

The railway reform stipulated with respect to the financial operations of the new company that, in principle, expenditures must be balanced by an automatic adjustment in rates. The financial sections of the Order in Council are as follows:

(1) the company is entitled to a compensating indemnity if the Department of Transport refuses to permit a rate increase and the money for the indemnity is to be voted by Parliament. The amount of the indemnity is to be equal to the amount expected from the proposed rate increase;

(2) the company is also entitled to a similar indemnity when it is ordered to reduce rates by the Department of Transport, and the money covering the indemnity is to be voted by Parliament;

(3) the company is entitled to payments based on average costs for services rendered yearly to the Post Office;

(4) to cover annual deficits, if any, reimbursable capital loans (called equilibrium subsidies) are made to the company by the state (The loans bear interest and up to 1949 were reimbursable in the following fiscal year.);

(5) in case of a large surplus, the agreement provides for its use for payments on current loans made by the state, for establishing a capital investment fund and a reserve fund and for payments on loans made by the state under the Agreement of 1921.

Under this financial system, the company showed a deficit in 1938, a surplus from 1939 to 1943, and a deficit again from 1944 to 1951.

Codicil of 1952

The financial obligations of the company were modified by a codicil in 1952:

(1) the company was relieved of its obligation to balance expenditures only by action on rates;

(2) the state began participating in certain expenditures.

While compensating indemnities and equilibrium subsidies remain, the state now assumes 60 per cent of the maintenance and renewal expenditures for trackage, tunnels, bridges, culverts and safety devices, and 50 per cent of the expenditures on railway crossing signals for highways.

The company, in return, pays a rent for the use of the services amounting to 5 per cent of its gross receipts.

The financial results of the company's operations are available for certain years after 1951. They show a deficit for 1952 and 1953 and also for 1957 and 1958.

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Cost Price Principle[1]

"The legal principle of equality of transportation over the same distance, irrespective of the line used has always been the basis of the rate structure in Europe. That principle can be defined as the choice of the shortest distance between the destination and the point of shipment, for the purpose of establishing a rate, without taking into account the route actually used or the operating possibilities of the shortest distance.

[1]Extracts translated from a paper by R. Hutter, "La différenciation des tarifs d'après le prix de revient", extrait de "l'Europe Unie par le Rail", édition 1958-1959, pp. 1, 2, SNCF, Paris.

"From this principle most of the prices for transportation are calculated by applying to this shortest distance the uniform kilometric schedule corresponding to the commodity; while railway rates are differentiated according to the nature of the commodities, even if that nature does not affect average cost, they compensate unprofitable items with profitable items and avoid differences in cost prices by averaging.

"The acceptance of this principle is based in part on practical reasons: the schedule system based on the shortest distance is one of the most simple and makes it possible to group all rates supervised by the government in one handy book. It also has a theoretical justification: the compensation it establishes between regions which are readily accessible and regions which are difficult to service, and generally relatively poor in terms of the general economy.

"A fundamental idea of 19th century economic thinking was that railway rates were a compensation fund for the economy as a whole which was not limited to the equalization of profitable and unprofitable services; it was expressed also in the *ad valorem* theory of ratemaking which wrongly attributed to commodities the role of economic agents, charging high-value commodities with the low rates granted to low-value commodities and in the grading which attempted to compensate for the remoteness of certain regions by lowering long distance rates. In the 19th century, the wide acceptance by the railways of such concepts was based on the following:

(1) the monopoly they exercised along with the inelasticity of transportation permitted them to equalize or differentiate without directly harming their traffic;

(2) the assistance given by high rate traffic to low rate traffic permitted to develop the latter beyond the optimum and, as a consequence, to increase total traffic and total receipts;

(3) since the accounting system of that period did not permit systematic calculation of the cost of each haul, the biases resulting from the equalization were not well known and there was no objective basis to warrant a rate differentiation;

(4) individual cases where uniform rating was harmful to traffic, such as for lines parallel to waterways, were solved by special reduced rates readily approved by governments.

"Road competition (in the thirties) which developed without being submitted to the principle of rate equalization, took advantage of the situation by attacking first the important services with a good grade, where its technical cost was the lowest and return freight was abundant while relatively neglecting regions not easily accessible.

"Without being of the same importance as the "creaming" of high-value traffic because of the *ad valorem* rate theory, the "creaming" of important services was very apparent and happening as it did during a recession period, it was very much felt.

"To analyse the situation railway administrations settled down to a systematic calculation of cost prices."

Value of Transportation and Cost Prices [1]

"An agreement between the transport firm and the customer, *i.e.*, a shipper of commodities or a passenger, must be reached before transportation takes place. To that effect, there will be haggling between them. The transport firm will try to obtain a price as high as possible. In granting concessions to the customer, it will not be able to go below the average total cost; if it accepted a lower price, it would operate at a loss. The customer, on the other hand, will try to get a price as low as possible, but in any case, he can only accept a price for transportation which is below a certain limit; if the price of transport were above that limit, he would not agree to ship; that limit represents for him the use value of transportation, or in simple words: the value of transportation.

"In order to reach an agreement and if transportation is to take place, average cost must be below the value of transportation; the price of transportation will be fixed between those two limits; the spread between the price of transportation and average cost represents the carrier's profit; the spread between the value of transportation and the agreed price is an indirect profit for the customer: it is the portion he retains of the amount he would have been willing to pay for the movement to take place.

"For railway transportation, things do not work out exactly that way: rates are published in advance and the customer chooses from the schedule of existing rates the one he wishes to see applied to his particular case.

"Properly speaking there is no haggling between the railway and the customer: if he ships at all, the latter accepts the printed rates. The contract takes the form of an accepted contract. It sometimes happens, mostly when special rates are involved, that prices are established by the railway after discussion with the interested manufacturers or traders. We have then the normal action of supply and demand.

"It can be seen, in the establishment of the rate level, that average cost and value of transportation play a fundamental role; before we examine on what principles the rates are fixed between those two limits, we will attempt to define value and cost price of transportation."

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[1]Extracts translated from "l'Exploitation commerciale des chemins de fer français", by R. Bourgeois, édition Léon Eyrolles, Paris, 1955, pp. 45-61.

A. *Value of Transportation*

"For each movement made under given conditions of speed, safety and comfort, there is a value of transportation such that, if the railway asks for too high a price, shipment will not take place, because there will be no traveller or shipper.

"What are the factors underlying the value of transportation? We will answer the question by looking at the case for commodities. . .

"For freight, it can be said that the value of transportation is represented by the increase in the market price of the commodity caused by moving it from one place to another, which is the difference between the price of the commodity at the destination and its price at the point of shipment.

"If, for example, a commodity is worth 8,000 francs in A and its sale in B brings net receipts of 9,000 francs, its transportation from A to B increases the value of the commodity by 1,000 francs; if the transportation between A and B costs 300 francs, a trader who wishes to ship that commodity to B for a sale will not hesitate to go through with a transaction bringing a net profit of 700 francs; if, on the other hand, the price of transportation is only a little higher than 1,000 francs, no trader will desire a shipment bringing a loss; 1,000 francs, the difference between the selling price in B and the selling price in A, really represents the limit which the cost of shipping cannot exceed if there is to be a movement of the commodity; it is the value of transportation. A number of factors affect the value of transportation.

"In the first place, with economic conditions changing as the shipment gets farther away from the shipping point, the difference between the price of the commodity at the shipping point and its value at its destination must vary also with distance; it is evident that distance affects the value of transportation.

"But the way changes occur varies according to cases. If the value of transportation does increase with distance, it is not so in all cases; for example, the value of transportation of a ton of coal might be higher for an area located 150 km from the mine and far away from any other coal mine, than for an area located at 800 km but receiving shipments of competitive coal from another source at a lower price. The classical example of agricultural products can be used to show that prices vary a great deal according to meridians and very little according to parallels; conditions affecting growth do present in general greater fluctuations in the first case than in the second.

"When the value of transportation increases with distance, the increase is not generally proportional and, in most cases, it grows less rapidly than distance; this explains the practicality and interest in graded schedules, which are used almost exclusively for commodity traffic.

"The value of the commodity is another important variable which affects the value of transportation; in general, rates which can support on the same route different commodities are highest for the most expensive commodities; it can be seen that, between two distant areas, a shipment of silk weighing 100 kg valued between 1 and 2 million can support more easily a price spread of 2,200 francs than a ton of fertilizer valued at 20,000 francs. But this rule is far from being absolute: a grain crop harvested everywhere, such as wheat, will not show, even between two distant areas, significant price spreads and will require for transportation a rate lower than the one applied to sea salt and talc, which have a much lower value at the production point, but for which the distribution according to the location of the mining areas calls for transportation over great distances to areas which are in need of them.

"Finally, the use to which a commodity is put can also affect the value of transportation: this applies to lime, for example, which can be used either for building or land improvement. It is easily understood that the building trade will agree to a higher price for lime—a material of primary importance—than the farmer who, strictly speaking, can forego its use as he did before.

"But to those many sources of variations of the value of transportation originating in the difference between the values of a commodity at the point of shipment and at its destination, others must be added that have a considerable influence depending upon the transportation conditions: speed, regularity, convenience, etc., in summary, the quality of transportation.

"Speed of transportation, by shortening the period the commodity is moving, permits inventory reductions for the receivers and consequently reductions in frozen assets; it speeds up account settlements between shipper and receiver and tends to reduce the time during which funds are tied up; it is the only way in which urgent needs can be satisfied. Some shipments would not even take place if they were not carried with sufficient speed; such is the case with perishable products: sea food, meat, fresh fruits and vegetables, for which the value is based on the speed with which they are moved. It can easily be seen that for certain commodities the value of a transport increases in proportion to the speed of the transportation.

"The same remarks can be made on the regularity with which shipments are made and on the financial advantages to industry and trade; in that regard, railways, because of their transportation obligations, must accept commodities for delivery and route them according to schedules fixed in advance and known to the public, thus ensuring a regularity which constitutes one of the main factors of the value of rail transportation.

"The convenience of timetables, the accessibility of railway stations which permit trucks to gain time on delivery, the reduced risk of damages

in classification yards which reduces packing costs and eliminates lawsuits, in summary, all the technical improvements which help improve the quality of transportation, increase the value of transportation."

B. *Cost Prices*

(a) *General Remarks on Cost Prices*

"Before discussing cost prices for the railways, it is essential to review briefly some of the fundamentals of cost prices in general.

"The cost price of an article or a commodity is what that article or commodity costs to the one who sells it.

"The application of that definition is easy when the trader sells—or the product manufacturer produces—only one category of goods; a manufacturer who makes one type of shoe will calculate the cost price of a pair of shoes coming out of his factory by dividing all the expenditures made during a given period by the number of pairs of shoes manufactured during the same period.

"The problem is more complex when more than one article is manufactured. If, for example, the manufacturer we speak of makes sandals and laced-boots, he will, to calculate the cost price of a pair of sandals and the cost price of a pair of laced-boots, divide all his expenditures in two parts, the first one relating to sandal manufacturing and the second one to laced-boot manufacturing.

"But if certain expenditures such as for labour, raw materials and machinery maintenance are easily attributable to one or the other product, certain general expenditures (management, general publicity, etc. . .) affect over-all production. Their distribution among the various products can be made according to several more or less arbitrary methods, and some hesitation is possible in choosing one rather than another.

"In the above example, the manufacturer may distribute the expenditures common to the manufacturing of sandals and laced-boots according to the number of pairs made in each group. But he may distribute them, for example, according to the value of the articles produced; if the value of laced-boots is much higher than the value of sandals, the second method of distribution gives sandals a lower cost price, and laced-boots a higher cost price than the first formula. It is possible to apply to the category which is the most easily sold a systematically higher share of the general expenditures, or most of them.

"One can imagine, even in the simplest of cases, many other methods of distribution for general expenditures between different products. It is clear that the number of possible formulas of distribution will increase according to the number of products for which a separate cost price must

be calculated. On the other hand, cost prices are influenced by the possibilities of distributing general expenditures to a degree which depends on the size of the expenditures. The arbitrary and uncertain nature of the cost price calculations is th : efore increased in proportion to the variety of the products and the amount of the general expenditures.

"The cost price as we have defined it is calculated on the total expenditures of the firm; we will call it the total cost price or the complete cost price to distinguish it from another cost—the marginal cost price—which we will now consider.

"If we call the factory production P, and total expenditures D, it follows from the above that the total cost price is equal to $\frac{D.}{P}$

"If production varies from level P by a small quantity $\triangle$ P, expenditures will vary also, by the quantity $\triangle$ D, and we will call the marginal cost price $\frac{\triangle D}{\triangle P}$; or the variation in expenditure by unit of production.

"In ordinary terms, it represents the additional expenditures necessary to produce one additional unit or the savings made when production is reduced by one unit.

"With this, one can easily see that the value of the marginal cost price depends upon the level of production P from which it is calculated by comparison to the level of maximum production P, which a factory can reach with its facilities and which we will call level of full employment.

"If P is below P, the factory is underemployed; a small increase in production will bring an increase in a certain number of expenditures (for shoes: labour, leather consumption machinery wear, etc.) called variable expenditures, other expenditures remaining fixed (general expenditures, part of management expenditures, capital charges, etc.).

"If, on the contrary, the factory is in full employment, an increase in production will bring an increase not only in variable expenditures as in the previous case, but also in the ones which were fixed a moment ago: necessity to buy new machines, to enlarge buildings, to increase management, etc. The average marginal cost price is thus higher than when the factory is underemployed.

"The marginal cost price for full employment is defined as corresponding to increases in expenditures by unit of production when the factory is constantly in full employment, that is, its facilities are constantly adapted to production. It is to be noted, however, that, when production varies, expenditures cannot all be constantly adapted to production. For example, when production decreases, certain expenditures which can be immediately cut off (raw material, day to day labour) are reduced without

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delay in the same proportion; other expenditures which can be cut off gradually (machinery, contract labour) disappear only after a while. Other expenditures, finally, are inescapable and cannot disappear (financial charges, land). The result is that the progressive marginal cost price (case of a factory for which production increases constantly) is different from the regressive marginal cost price (case of a factory with decreasing production), the first being higher than the second.

"We assume before that $\triangle$ P is a relatively small increase in output. In practice, to calculate the marginal cost prices a substantial increase (or decrease) of P is generally assumed; the value of $\frac{\triangle D}{\triangle P}$ depends then upon the importance of $\triangle$ P.

"Without going into excessive details, it can be seen that the higher $\triangle$ P is, the greater will be the number of expenditure categories it will cause to rise. For example, coming back to the shoe factory, if we assume a factory underemployed, an output increase of a few pairs of shoes will not entail important variations in labour expenditures or supply (leather, thread, etc.). If the number of shoes added increases, it will become necessary to buy a new machine, the ratio $\frac{\triangle D}{\triangle P}$ will be greater; if $\triangle$ P increases more, the size of the factory will have to be enlarged, etc.

"It can be seen that looked at as the ratio of an increase (or decrease) in expenditures to an increase (or decrease) in output from a level of production P, the marginal cost price depends on the one hand on the level of output, and on the other hand on the variation envisaged by the calculations.

"This remark will be useful in the case of the railway.

"The selling price will be, in general, above the total cost price if the factory is to prosper. It can happen that for certain products it will be below cost price if, for others, it is above; it will be sufficient that on the average the selling price is at least equal to the total cost price.

"On the other hand, the selling price of a given product must never be below its marginal cost price because, then, the manufacturer would have to stop production, price receipts would fall short of production expenditures.

"Thus, between the selling price and the marginal cost price, there is always a differential which accounts for the gross primary profit representing the share of the general expenditures of the firm charged to the product concerned.

"In a depression, if the selling price cannot be increased to a level high enough to cover all expenditures, rather than closing the factory, it may be worthwhile to establish a selling price, on the average, at an inter-

mediary level between the marginal cost price and the total cost price so as to cover only a part of the inescapable expenditures. For example, a smaller return will be attributed to capital.

"It will be acceptable, under normal conditions, to base the selling price on the marginal cost price in a case where total expenditures are already covered by current production and a new order comes in; for this new production, the excess of the selling price over the marginal cost price will be a supplementary net profit. The marginal cost price, in such a case, is in fact the cost price of this additional production, and it is sometimes called: the additional cost price.

"In summary, receipts on the whole must cover total cost prices; but certain sales may be made at a lower price, between total cost prices and marginal cost prices, provided only that other sales are made at a price sufficiently higher for the average selling price to be at least equal to total cost prices.

"It is therefore most important to know the marginal cost price, which constitutes the limit below which the selling price must never go.

"All those remarks apply without modification to the railways; however, railways are different from other industries in some respects, which we will now consider."

(b) *Cost Prices for Railways*

"Railways sell a service, transportation, which is varied: passengers transported, tons transported (transport of persons and commodities), passenger kilometer, net ton-kilometer (transport of one passenger or of one ton of commodity over one kilometer, etc.).

"These services, called traffic services, are the ones for which it is useful to know the cost price. To that effect, it is often necessary to calculate beforehand the cost prices of other services called operating services.

"The latter are many and varied; they may be related, in effect, to all the operations carried on by the railway. Movement of trains, terminal operations, classification, etc. The most important for the purpose of cost price calculations are: the train-kilometer (movement of one train over one kilometer) and the gross ton-kilometer moved (GTKM, movement of one ton of train, engine excluded, over a distance of one kilometer).

"Before indicating the conditions under which those costs are used for commercial purposes, we should analyse, in a short theoretical study on the total cost price and the marginal cost price, the characteristics of those costs and the particulars of their calculations.

(i) *Total Cost Price*

"A given service may in general be produced under extremely variable conditions, which influence its total cost price,

depending upon the itinerary, the time of transportation and circumstances.

"The total cost price of a train-kilometer, or GTKM, depends upon many variables:

—the train category (fast, express, direct, omnibus)

—the train tonnage by itself (the price of a train-kilometer increases with the train tonnage, all other factors being equal; on the contrary, the price of one GTKM decreases as the train tonnage increases)

—the motive power

—the grade of the lines used (the total cost price of the train-kilometer and the GTKM is proportionate to the grade)

—the density of the line (the total cost price of a train-kilometer decreases as the traffic on the line used increases; expenditures independent from the traffic, applicable to the line, are divided by a greater number of services).

"The total cost price of a service may have very different values depending upon the conditions under which it is made. It is particularly important to emphasize this, because it determines, in a large measure, the railway rate structure. For example, in the most unfavourable cases (shipment of a carload at the lowest weight provided for in the tariff on a regular freight train serving a small low density line), the total cost price of a net ton-kilometer of goods may be more than 45 times the total cost price of a similar service performed under better conditions (mass transportation on a full train on a line with a good grade). We encounter here, for the first time, an essential characteristic of railway transportation, that is, the possibility of getting very low prices for mass transportation.

"Also, the total cost price of freight transportation depends to some extent on the nature of the freight. An indivisable quantity of great weight, necessitating the use of special transport equipment and special loading and unloading precautions, might cost more to transport than the same weight of a commodity loaded normally on an ordinary car; transportation of a commodity easily damaged, such as wine in tank-cars, is, weight being equal, more expensive than it would be for a less fragile commodity such as asphalt. Higher damage risks influence the total cost price of a transport, etc.

"Thus, it is not possible to find a formula covering all conditions under which a given service might be performed and the practice is to calculate for each service an average total cost price for a

given period over a certain number of given lines; for example, the average total cost price for the first class passenger-kilometer on all the lines of the SNCF, or for a train-kilometer for express trains, under steam traction, in a given area.

"In certain cases, the average cost of a well-defined movement may be needed. For example, one may wish to know the transportation cost price for a full train of minerals of a given tonnage between two given stations, or for a special daily train requested by a manufacturer to carry his workers from the factory to the city. It is called a particular cost price (as opposed to the average total cost price), the cost of a transport for which the characteristics are known.

(ii) *Marginal Cost Price*

"Before beginning, a remark must be made: the existing facilities of the railway are, in general, capable of absorbing much more traffic than is being done. In other words, the railway is underemployed and any traffic variations which might develop do not have the effect of moving it into full employment. Exceptional traffic peaks such as departures on holidays might move it towards a state of full employment as far as passenger facilities are concerned, but, at the same time, the facilities for moving commodities are far from being fully used.

"It follows, in practice, that marginal cost prices of full employment are unimportant for the railway operator and in most cases marginal cost prices of underemployment are taken into account. The marginal cost price of a service depends, as does its total cost price, on many variables, and, for the reasons given in the preceding paragraph, one must use in most cases average marginal cost prices or, in some cases, particular marginal cost prices.

"Most of the variables affecting the total cost price of a service (motive power, train tonnage, loadability per car, distance) affect also its marginal cost price, but the latter depends also on other factors. On the same line, traffic is seldom in perfect equilibrium, and there is, in general, a one-way movement of empty cars on their way to be loaded; it is evident that their return with freight adds very little cost; on the return trip the marginal cost price of the freight is thus very small.

"Sometimes one might be justified in including capital charges in marginal cost prices; this is the case of new traffic requiring basic installations, such as doubling a line. But, if these capital

charges must be taken into account, before the expected traffic is in operation when the railway studies future productivity, the situation is no longer the same when basic installations are completed. From that moment, of course, capital charges acquired take a definite character; they would subsist if the traffic disappeared and they can no longer appear in the calculations.

"The traffic increase, which enters into the calculations of the marginal cost price of a given service, may also cause wide variations in that price. For a small increase, a few passengers, for example, the marginal cost price of the passenger-kilometer is insignificant, because transportation expenditures are not affected. However, in the case of a number of passengers large enough to require the use of a full car, the marginal cost price is increased by the costs of car upkeep and depreciation, by handling at the arrival and departure stations, and by the added costs in terms of motive power. If the supplementary traffic is large enough to call for the movement of a full train, the marginal cost price will include, in addition to the costs already mentioned, those related to locomotive upkeep and depreciation, to personnel directing and accompanying the train, to fuel consumption, etc. So, during periods of departure on holidays, the costs of doubling regular trains determines the added marginal cost price.

"A similar reasoning applies to freight traffic. Other things being equal, when the volume of traffic on which the calculations of the average cost price of a given service are based . . . increases, the marginal cost price of the service increases.

"This is a very important factor and we will refer to it when speaking of competition between forms of transportation. It shows that if a small amount of traffic going over the railway line disappears, the savings made by the railway are small and do not compensate, in general, for losses made by the reduction in receipts, because the marginal cost price of the traffic which is gone does not include the important operating charges which exist on account of the remaining traffic and which would disappear if the line could be abandoned.

"The ratio between the average marginal cost price and the average total cost price varies little with distance or weight of the shipment (small parcels, retail, carloads, full trains). It is of the order of 70 per cent.

"On the other hand, the ratio between a particular marginal cost price and the corresponding total cost price may vary extremely, depending upon the fact that the railway has or has not part or all of the personnel and material required to move the shipments involved.

"For transporting considerable additional quantities of commodities by full trains, for which the total cost price per net ton-kilometer is very low, the marginal cost price might be in the order of 80 per cent of the total cost price, if the situation of the equipment is such that all interest and depreciation charges on rolling stock are taken into account.

"On the other hand, in the case of carload transportation on a line where trains are not fully loaded, the marginal cost price might only be in the order of 25 or 30 per cent of the total cost price.

"In most actual cases, this ratio is maintained at a relatively low level, which is below 50 per cent. This is an essential characteristic of railway operation, which derives from fixed charges and we emphasize it because it influences in a large extent the railway rate level and the solutions that could be advocated to solve the problem of road competition.

"Also, the differential between the marginal cost price and the total cost price is particularly important for the transport firms which give regular service on fixed schedules: on a regular maritime line with a regular weekly departure, as long as the boat is not fully loaded and the volume of traffic does not call for doubling the services, the marginal cost of shipment is relatively low and corresponds only to the increased fuel expenditures resulting from the fact that the boat moves loaded and not empty, because the boat has to make the trip; the same applies to the railway for services with fixed schedules as for passenger traffic and for certain regular express or freight trains. It is the reverse for the tramp which carries full loads on demand, or for the road shipper, who makes shipments on demand; the marginal cost price of a shipment is then little different from the total cost price.

"For road transportation, the differential between the marginal cost price and the total cost price of transportation is relatively low. It is again appreciable for the regular passenger services by bus because of their regularity; however, even for those services the differential between prices is not very large because of the low capacity of the vehicles and the obligation of the

operator to put on the road supplementary services as soon as traffic is a little above average. But, in connection with non-scheduled transportation services, *i.e.*, the majority of the public road carriers or inland waterway transportation, the greatest part of the firm expenditures are represented by traction expenditures (drivers, fuel, upkeep and depreciation of equipment) which represent the marginal cost price.

"To understand this better, let us compare, under the economic conditions of 1954, the cost price of a net ton-kilometer for a 15-ton truck travelling over a long distance and the corresponding cost for a carload by railway under the same conditions; we see that the marginal cost price represents 85 per cent of the total cost price for the road and only 50 per cent for the rail.

"From this we have the following main ideas:

"The cost prices of the two most used traffic services in the trade (passenger-kilometer and net ton-kilometer) are values which are extremely varied: in practice, for each particular haul considered by itself, there are different values for those costs.

"On the other hand, three essential characteristics of railway cost prices have the greatest influence on its commercial policy:

1. the low rate for total cost prices which the railway can achieve for mass transportation allows it to set very low rates in this field when necessary;
2. the significant spread, in most cases, between marginal cost prices and total cost prices allows highly differentiated rates;
3. the variation of the marginal cost price according to traffic volume taken into account in the calculations demonstrates that the disappearance of a given traffic gives the railway important savings only if it calls for elimination of equipment (such as abandoning a line).

(iii) *Calculations of Cost Prices for the Railway*

"It is understandable from what has been said that calculating railway cost prices is difficult and should, in most cases, be left to specialists.

"The first difficulty stems from the numerous services for which cost prices must be calculated; we have seen that the complexity of the calculations increases for a firm with a number of product categories for which a separate cost price must be calculated. For instance, there are 44 categories of trains for which the SNCF calculates average total cost prices.

"Another difficulty in the calculations of the total cost prices for the railway pertains to the relatively high common costs to be distributed according to *a priori* formulas between the various services.

"If, to use a simple example, one calculates, on the one hand, the general average cost price of a passenger train-kilometer and on the other hand, the general average cost price of a freight train-kilometer for the SNCF, for a given period, all the expenditures of the period must be distributed between the passenger traffic and the freight traffic.

"Certain expenditures can be distributed immediately and easily between the two traffics; this is the case, for example, for the expenditures for the crews operating the trains, for motive power, for the upkeep of rolling stock, for certain station services, and for rolling stock charges. But a considerable amount of expenditures remains. They cannot be attributed *a priori* to either traffic; this is the case for general expenditures, general station expenditures, expenditures for common installations and building charges of the railway which are common to both traffics.

"In 1952, expenditures common to both traffics amounted to 37.6 per cent of the total expenditures of the SNCF, expenditures immediately attributable to each traffic represented 62.4 per cent of the total.

"For the distribution of joint costs between the various categories of services, the rules used differ according to the kind of expenditures involved. It is not possible to indicate here the rules used in all cases. We will give only one example: in the case studied above regarding the calculations of the cost price of a passenger train-kilometer and freight train-kilometer for the SNCF, the general station expenditures (management, office, etc. . .) and the expenditures related to the movement are distributed *pro rata* to the personnel expenditures directly attached to each category of train, that is, the personnel used to sell and check tickets, to register shipment, to handle commodities, . . .

"As for marginal cost prices, we never use, as indicated before, the marginal cost with full employment.

"The average marginal cost price is calculated for a significant traffic increase, taking into account personnel and equipment charges; the composition of personnel and equipment has to be adapted to the new traffic level, but general expenditures and

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fixed equipment charges are excluded, since no equipment is supposed to be necessary to face the increased traffic.

"For example, as far as freight traffic is concerned, we include in the calculations of the marginal cost price of a net ton-kilometer the direct expenditures for station employees, expenditures related to the train movement and to transportation and the financial charges for equipment and we exclude the general expenditures, the station general expenditures, the supervision expenditures, the upkeep and renewal expenditures for the tracks, the civil engineering expenditures and the financial charges of construction.

"The general average cost price on SNCF lines for a net ton-kilometer moved in carload is six francs and the average marginal cost price is only 4.3 francs or 72 per cent of the total cost price.

"For passenger traffic, the general average cost price of a fast and express train-kilometer is 1,200 francs and the average marginal cost price is 700 francs, or only 58 per cent.

"The marginal cost price of a car-kilometer on a fast and express train, corresponding to the expenditures in relation to the addition of a car to an existing train, that is, without any addition in the distance moved, is only 30 per cent of the total cost price.

(iv) *Use of Cost Prices*

"Knowing the cost prices is essential for the railway operator in many circumstances, particularly for commercial requirements.

"Studies relating to changes in the rate structure such as those required to improve routing of freight and the grouping policy, cannot be properly undertaken unless they are based on cost prices.

"Special mention must be made, in that respect, of the tariff reforms of March 17, 1947, and August 1, 1951, which were two milestones for the increasing role played by cost prices (average total cost prices and average marginal cost prices) in determining rates for freight transportation.

"The same remarks can be made with regard to rates being influenced by the technical improvement of motive power (electrification, dieselization) of equipment (building of open cars of a greater capacity, weight reduction in cars of great capacity, etc.). Rate decreases granted to shippers stem in this case from lower cost prices from technological advance.

"A clause in the 1937 Agreement provides for reimbursing at cost price transportation charges attributable to the Post Office; clause 18 of the same Agreement stipulates that the SNCF must propose rate increases if the expected receipts seem insufficient, taking into account the market for transportation, and to prepare the appropriate rate measures, it must compile for different traffic categories, cost prices and receipts.

"Knowing the particular marginal cost prices is equally important in many cases where a decrease in transportation prices is requested by a firm, either for new traffic which would not develop without a sufficiently low rate or for traffic attracted to another form of transportation which the railway would like to retain; the marginal cost price will give, in such a case, the limit below which the railway will not go in its concessions.

"In the same manner, cost prices play an essential role in the establishment of special rates to solve particular problems.

"Finally, numerous studies which may have important consequences for the general policy of the railway require information on cost prices, *i.e.*, balance sheets for a certain line, profits shown by a new line, normalization of a branch line, comparison between the cost of moving by railway or by some other proposed method (canal, pipeline, etc.).

"It can be seen that the knowledge of cost prices plays an essential role in the operation of a modern railway and, in many cases, no sound decision can be taken without them.

"One of the first duties of the SNCF was, in the early days, to create a special service to study and calculate its cost prices; the documents assembled by that service are, for the railway operator, an indispensable tool."

SNCF Methods of Calculations [1]

The cost price calculations for a railway are different from those used by other industries. The very large number of movements on a railway involve many variables and different costing.

A. *Methods*

The objectives of the methods adopted by the SNCF, which are those of the Union Internationale des Chemins de Fer, are as follows:

(i) to determine the general average total cost price for different categories of traffic and trains;

[1] Summary from "Le calcul des prix de revient à la SNCF", SNCF, Paris, 26 pages.

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(ii) to permit calculations, on demand, of any cost price for particular movements.

B. *Expenditures*

Expenditures are grouped under ten chapters and 197 items. The chapter headings are: charges as employer—general administration and general expenditures—operating expenditures—equipment and motive powers —trackage and buildings—electric power—marine equipment—cost prices of assignment and services for others—renewal charges—financial charges and others. Many items are subdivided into paragraphs:

(i) personnel
(ii) business and miscellaneous
(iii) materials
(iv) miscellaneous expenditures
(v) distributed expenditures.

The accounting system of the SNCF supplies most of the information. Corrections are made in real expenditures to normalize programmes of renewal of equipment and trackage over the years.

The calculations are made for 71 train categories.

C. *Distribution of Expenditures*

Cost price calculations are made by regions. Expenditures which are not directly attributable, such as general administration expenditures and other indirect charges, are distributed by regions. The expenditures are then attributed, item by item, to the various services and train categories. Three methods are used:

(i) 13 per cent of the charges are distributed by direct accounting procedures, *i.e.*, repairs and maintenance of equipment used in suburbs;
(ii) 65 per cent of the charges are distributed according to statistical methods or surveys;
    1. crew costs are distributed by form of motive power, according to the distance covered by each category of train, the average distance covered by the crews and the average annual salary of each crew;
    2. station expenditures: survey method;
    3. trackage maintenance and expenditures: according to GTKM;
(iii) 22 per cent of the charges are distributed according to accounting key formulas, *i.e.*, general expenditures.

D. *Variation of Cost Prices According to Certain Parameters*

The two chosen parameters are the load and the distance. Other parameters are constant and equal to their average value, that is the various hauls are assumed to be distributed in the same manner over the railway lines.

E. *Factors of Correction*

Investigations are carried out from time to time to find out how P, the real general average cost price of a given category of traffic, differs from Px, the general average cost price corresponding to the various average cost curves obtained from P and to the traffic distribution by section of distance and by load. It is in the order of 2 to 3 per cent.

F. *Use of Calculations*

The calculations are used:

(i) to establish the balance sheet of operations;

(ii) to adjust rates;
more and more the rate structure is modified according to marginal costs, the only way to ensure fair competition between the various forms of transportation;

(iii) to calculate particular cost prices.

Rates[1]

Generalities on Traffic and Rates for Commodities — SNCF

"The SNCF carries freight of all kinds over a very ramified network of about 39,000 km. Its annual traffic is now of the order of:

210 million taxed tons

53 billion taxed ton-kilometers (or about $\frac{1}{3}$ of the total French kilometer traffic)

These movements are assigned different rates according to the transportation method (consignments, shipments by carload or by trainload) and according to speed.

"(a) Consignments (parcel post and small parcels) account for a large number of shipments (more than 60 million parcels a year), but represent only 2 per cent of the total tonnage.

[1] Extracts translated from: "Notice sur le trafic et la tarification des transports de marchandises", SNCF, Paris, 1960, 12 pages.

Shipment is handled by the railway; home delivery is made in all relatively important localities [5,000 or more]. Transportation by freight car represents annually about 6 million shipments and 13 million loaded cars, accounting for 98 per cent of the traffic.

"The SNCF makes available to shippers three types of cars (box, open top and flat), and a few special types. Shippers are free also to use their own cars under certain conditions (about $\frac{2}{3}$ of the traffic by car for coal, minerals and refrigerated commodities are made that way).

"(b) The rates provide for three types of speed:

(i) express trains (passenger trains) which apply only to consignment shipments on demand;

(ii) fast trains (great speed) which apply automatically to consignments and to shipments by car affected by special rates (general per car rates, grouping, perishable commodities) or, on demand, for shipments mostly made by ordinary trains; those shipments are thus rated according to the general rates;

(iii) ordinary trains (low speed), which apply to all other shipments.

"When shipments are made under normal operating conditions (that is by ordinary cars from the yard and moved from one station to the other by trains under the general plan of movement) they are rated as follows:

general rates

numbered rates 1 to 25 and 100

"(a) The *general rates* are made up of four chapters:

(i) Parcels

(ii) Small consignments

(iii) General rates by car

(iv) Express shipments.

"(b) The *numbered rates 1 to 25* are the common rates for shipments by car. Each rate includes a group of related commodities according to kind such as:

rate 1: Livestock

rate 6: Beverages

rate 7: Mineral fuels

rate 18: Chemical products, etc.

Their presentation is identical and includes:

(i) Chapter 1, specifying the commodities and the applicable rates from station to station;

(ii) various special chapters, applicable to certain designated commodities and under given conditions such as:

designated train services;
quality (quarries, factories) of shippers and receivers;
guarantee of traffic (fidelity pledge and subscription formulas).

Rate number 100 is concerned with the grouping of commodities delivered by middle-men in the field of transportation.

"An important section of the traffic is made under special operating conditions. For those shipments the rates are called rates subject *to regulations* (numbered 101 and over) and each one relates to a definite mode of operation.

Rate No. 101—Indivisible shipments and goods of exceptional size

Rate No. 102—Private sidings

Rate No. 103—Full trains

Rate No. 104—Private cars, etc.

"The stipulations of those rates are added to or modify the other rates. They might be related to a third party not related to shipping or receiving (such as the owner of a private car).

"Traffic exchange with foreign countries accounts for one third of the total traffic; 30 per cent of the tonnage at SNCF rates on the French routing—70 per cent, at prices and direct international rate conditions according to the foreign railway administrations interested.

"Without going into the details, we will now give a few general principles on rate calculations for shipments by freight car.

"(a) As a general rule, the rate is based on weight, at schedule prices for an effective ton, according to distance (schedules consist of 110 distance levels).

"(b) The rate gives for each commodity, for Chapter I as well as for the special chapters, one or several schedules, applicable for a minimum load.

The price applicable is the lowest resulting from the conditions under which the shipment is made.

"(c) The distance from point A to point B is (except as stated otherwise) the shortest of the various routes joining A and B.

The distance for each of the 6,800 locations to each other is given in the Distance Document. It may be noted that:

(i) The real routing distance is often very much above the distance for which the rate is given (on the average, 24 per cent above for shipments by ordinary train).

(ii) Occasionally, the distances (established from the services operated in 1941) used are calculated over parts of lines now closed as far as railway operations are concerned.

"The pricing of small shipments is based on real weight and shortest distance: the schedules show prices by 100 kg and have 26 levels.

"The pricing of parcels is made according to fixed rate by parcel; prices vary according to weight and zones of distance designated in the rates.

"The ratemaking for shipments by car is extremely varied . . ."

SNCF Ratemaking Policy

"(i) to limit rates at the top to the average price level which cannot be exceeded because of competition;

(ii) to limit rates at the bottom to the direct expenditures involved in the carrying out of each shipment (marginal cost);

(iii) to adapt staggering of rates to marginal costs.

"In general, experience has shown that rates can still remain very appreciably differentiated according to the value and the economic role of commodities, either for level rates or rates graded for distance. However, the difference between the highest and the lowest rates is much less than in the past.

Up to now, two reforms affected profoundly the rate evolution: the 1947 reform and the 1951 reform.

"The 1947 reform established the framework of modern ratemaking.

"For shipments by car, it has shown in the rates (per effective ton and according to distance):

(i) the considerable influence of the load on cost prices, which vary roughly, per ton, from one (per 20 ton car) to eight (per two ton car); the loading capability of various commodities (density, fragility, etc. . . .) was thus made a main element of the rate structure;

(ii) the average minimum road competition according to load; the former highest prices per 10 ton car were lowered by about one third of their value;

(iii) the lower limit in the rate, in relation to the general average marginal cost according to load; the former lowest prices were subject to varied increases according to distance and load, in some cases (rare in any case) up to 100 per cent.

"For consignment shipments, it raised the rates taking into account the particular charges for that service (office work, reception, delivery) and classified the commodities not according to value but to density.

"Finally for rates subject to regulations, the following principles were established:

—separation of rates: each one relates to one given category of facilities;

—principle of surcharge or reduction; . . .

—principle of addition from the application of rates subject to regulations when a transport is subject to a number of rates. . . .

"An important problem remained to be solved: the rate differential according to train services.

"For an equal chargeable distance and the same load, the cost price of transportation varies according to train services.

—On one hand, because the itinerary followed differs more or less from the shortest itinerary.

—On the other hand, because expenditures on the actual itinerary vary according to many factors: stations, classification yards, grade of the line, line equipment, distance covered respectively by local trains and through trains.

"While economically sound with regard to cost price variation from one train service to the other, the idea of rate differential according to train services was also an answer to competition: the best railway lines correspond, because of geography, to the itineraries where road transportation is most advantageous and offers its lowest prices.

"Such is the origin of the 1951 reform which introduced in the rate structure, without modification of form, a systematic differential by train services on high level rates of a general nature, that is directly involved with road competition.

"Based on the fact that in general transportation between two stations costs less for greater cities, the solution to express this differential in rates consisted in preparing a rate index to each station: the sum of the indexes of two stations is the index of train service between those stations; in view of the characteristics of the proportional schedule keyboard used since 1947, it is easy to vary the applicable scale according to the index of train service.

"For the highest rates, the differential between prices on the best train services and the most costly may be about 20 per cent. This differential decreases when the level of rates is lower and, for the lowest rates, the effect of the indexes is nullified.

"This is only an approximative solution (the price is always based on the short distance) and voluntarily limited (the indexes affect only one fifth of the tonnage and one third of receipts from the per car rates).

"The principle is as follows: the cost price being high or low according to lines, it is the same as saying, for the same expenditure, the movement is made over a longer distance on a good line compared to a costly line; this can be translated by giving to each section of a line a certain coefficient, called weighted, by which its metric length is multiplied.

"On the network so weighted, the new distance will be calculated on the weighted short itinerary . . .; this itinerary is in fact most often the one followed."

Description of the Existing Rate Structure

"(a) *Freight Classification of commodities*

Freight is distributed in 700 groups. Each group has a generic destination and covers:

(i) one commodity, *i.e.,* wheat, when the traffic is important;

(ii) or many commodities related by the nature, density, value, etc. . . . (*i.e.,* non-identified grain).

"Also, a given commodity may be classified in two or three different groups according to its packaging (from which depends its loading facilities); *i.e.,* glass in common crates, frames or barrels or, glass otherwise packaged.

"For each generic designation there is a normal condition of tonnage, related to the highest possible load, under normal condition in a 20 ton car. This normal condition is given in the following series in tons.

20—15—12—10—8—7—5—3—2—1.5.

"In other respects the generic designations are in four classes, according to the following relation with their normal condition:

4th class: 20 T and 15 T
3rd class: 12 T and 10 T
2nd class: 8 T and 7 T
1st class: 5 T and less

"(b) *Carload rates*

(i) For each condition of tonnage given in the above series, two rate limits are defined:

—one high (ceiling) taking into account the average level of prices from road competition and represented by a schedule with very little grading;

—one low (floor) in relation to the direct expenditures of railway transportation and represented by a schedule with large grading.

"For a given tonnage, the rates may be quite varied in form and level from one commodity to the other; but they are always included between a floor and a ceiling.

"The [following] table shows, in relation to the floor value 20 T at 25 km used as a unit, the ceiling and floor values by 20 T and 2 T at 25 and 800 km and their ratio.

	20 T		*2 T*	
	25 km	*800 km*	*25 km*	*800 km*
Ceiling	2	20.8	10.2	83
Floor	1	5.2	7.6	41.5
Ratio	2	4.06	1.35	2

(ii) For each generic designation, there is a normal rate in Chapter I of the numbered rates where it is classified.

To the normal rate are added auxiliary . . . rates for less than carload shipments. For a normal load of 15 T for example, there are auxiliary rates for 10, 7 and 5 T.

All rates are in principle proportional between themselves. The difference in price per ton for two conditions of tonnage is related to the respective marginal costs (principle of equality of toll).

As a general rule, the rates in Chapter I have a maximum and a minimum, that is represented by two schedules; those schedules are proportional between themselves. The price ratio is 1.35 for high rates and decreases with the lowering of rates to be 1.10 for the lowest rates.

(iii) For each commodity as justified by the traffic, there are special chapters affected by special conditions and designated for each case.

The special rates apply for a given tonnage, with, as a general rule, only one scale.

(iv) The indexes of train services (the sum of station indexes) range from three to 12. They determine, within the maximum and minimum rate, the applicable schedule for each train service.

"(c) *Rates for small consignments.* Their rates are for shipments:

(i) up to 1000 kg

(ii) for 1000 to 3000 kg in the 1st and 2nd classes and up to 5000 kg in the 3rd and 4th classes.

The rates depend on the classes and the indexes of train services.

"(d) *Parcel post*

The parcels are charged at fixed prices depending on weight and distance. The prices are established on 8 weight division (0-50 kg) and 20 distance zones.

"(e) *Additional rates.* Two particularly new rates:

(i) the possibility of granting directly and with a minimum delay (publication eight days ahead) rate reductions within certain limits between the maximum and minimum rates;

(ii) the possibility of making private agreements with customers, approved by the minister but not published."

Road Competition

Road and Rail Compared

"The comparison of cost prices shows the advantages of rail over road for mass transportation. Total cost prices for the movement of a 20 ton car by rail are less than half the costs of a similar movement in a modern heavy truck." Total cost prices for a train load of coal are about one-quarter what they would be for a similar movement by heavy trucks, leaving aside the calculations of road depreciation involved in such large undertakings.

Fixed schedules, well defined routes with specific points of departure and arrival and the difficult problem of using the facilities to full capacity for certain types of shipments are the main handicaps of the railway.

The freight car is a slave of the train, while the truck can follow a flexible schedule according to the needs of the commodity transported. Terminal costs on the railway must be added to cost prices. The truck moves from the shipping to the delivery points while the railway must supply an additional service equivalent for delivery in Paris to the average cost of 150 km of rail movement.

With regard to speed of service, irrespective of the price charged, the transportation and delivery of a shipment on the same day by a truck, which reduces risks of damages and necessitates less packing, puts the railway at a disadvantage.

With regard to the tonnage carried, trucks with their smaller loads have more flexibility, while rail shipments must be of the order of 10 to 20 tons to take advantage of reduced rates.

One can also imagine the expenditures involved for the use of the railway for shipments of small quantities over short distances compared to the full use of the facilities for bulk shipments.

Road Transport Regulations

From the very beginning of road transportation, the railways of France felt the effect of competition. After World War I, the trucking transportation services were parallel to the most remunerative railway lines. This extraordinary development of road transportation added to service facilities and made them well above the requirements warranted by the prevailing economic conditions.

A first attempt was made in 1934 to provide for transport co-ordination. Machinery was set up for agreements between road and rail transport. Very little was done following this first legislation, except for a slow-down in the growth of truck services. In 1937, the agreements were made mandatory and specific regulations were issued on long-distance truck transportation concerning route, commodities transported and rates, all favouring rail services. But not much had been accomplished when the war came.

The war legislation provided for the elimination of duplicate facilities. In 1946 and more so in 1949, the regulations were modified considerably with an extension of trucking operations, the abandonment of unremunerative railway lines (replaced by truck services at railway rates) and more flexible railway rates. Lack of control impaired the effectiveness of the regulations, and the extension on truck services was looked upon as regressive rather than a step forward with regard to co-ordination.

Measures Taken by the Railway to Defend Itself

The railway in an attempt to consolidate its position adopted or gained the following:

1. flexibility in establishing rates by a reduction in the procedure of rate approvals;
2. adaptation to competition by following closely its cost prices;
3. fixation of a minimum and a maximum price with a range of prices in between. With a more important consideration of the cost price in rate calculations, the value of the commodities, their capacity to support higher rates, the distribution of production areas and the competition of imported products are factors which are still under consideration;

4. special agreements for which rates are not published;
5. other services—speed of trains, door-to-door services, rationalization;
6. agreement between the SNCF and the Fédération nationale des transports routiers to obtain:
   (i) establishment and publication of road rates;
   (ii) professional organization of road transportation agents to supervise tariffs;
   (iii) progressive changes in rates to bring them back to a level of prosperity of the enterprises concerned;
   (iv) harmony of the two rates to achieve equalization between rates and cost prices.

The results of this co-ordination are not known as yet.

Current Outlook

"We think that the solution for the problem can be found by distributing traffic between the two forms of transportation based upon a co-ordinated ratemaking.

"In such a system, the shipper is free to send his traffic to one or the other form of transportation available, taking into account the rates and the advantages they offer. The rates are established at such a level that they provide an incentive for using one form instead of the other; traffic can be directed towards the form of transportation which is considered desirable in the general interest because its cost of production is the lowest. Such rate regulations, by establishing the average level of co-ordinated rates at an acceptable standard, also permit receipts and expenditures to balance and thus eliminate deficits."

References

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Measures Taken by the Railway
Ibid., pp. 92-96 and 121-122.

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Ibid., quote from page 132.