

CHAPTER VIII

UNECONOMICAL GOVERNMENT INTERFERENCE WITH, AND ENCOURAGEMENT OF, TRANSPORTATION

§ 1

Navigation Laws

ONE of the important methods which governments have sometimes followed in order to develop a national mercantile marine, has been the method of navigation acts, excluding foreign vessels from certain designated commerce. For example, England's navigation acts of 1646 to 1660 (act of 1651 perhaps of chief importance), prohibited the importation of any goods into England or Ireland or any of the British Colonies, except in British ships, owned and navigated by British subjects, or in ships of the country where the goods were produced; also these laws prohibited the export to foreign ports of any goods produced in the American colonies, except in British ships.¹ Our own Federal law regarding the coasting trade is of the same genus. This law requires that "no merchandise shall be transported by water, under penalty of forfeiture thereof, from one port of the United States to another port of the United States, either directly or via a foreign port, or for any part of the voyage, in any other vessel than a vessel of the United States."²

¹ See Lindsay, *History of Merchant Shipping*, London (Low, Low and Searle), 1847, Vol. II, pp. 182-180.

² 30 Stat. L. ch. 26, p. 748. Referred to in the Report of the Commissioners of Corporations, on *Transportation by Water in the United States*, Part

Such navigation acts are closely analogous to protective tariffs. Like protection, they develop the favored home industry by excluding foreign competition, not, as in the case of the bounty, by providing funds to help meet this competition. Like protection, these laws can do no more than guarantee home patronage; they can not insure successful invasions of other commerce, dependent soley on foreign patronage. As with protection, the burden of these laws rests upon consumers (of goods carried in the protected ships), rather than upon taxpayers as such. The burden rests upon consumers, because the exclusion from the designated commerce, of ships presumably able to carry goods more cheaply than the favored domestic ships,¹ tends towards high transportation rates, and, therefore, towards higher prices to consumers, of goods carried, or towards decrease of domestic commerce, or both. The burden of such a policy may not be equally distributed over a country enforcing it, but may rest with especial weight upon those sections of the country which, being on or near the coast line, have most to gain from cheap water transportation. A navigation policy like that established by the historic navigation laws of England, above mentioned, may also tend, by increasing transportation costs, to limit the export trade of the country adopting such a policy. Only in case other countries have no available alternative source of supply for goods desired, can the extra cost of

1, 1909, pp. 118, 119. Since the above was written, Congress has passed a law (August, 1914) admitting foreign-built ships to American registry if owned or purchased by Americans (See *New York World*, Aug. 18, 1914). Such vessels were not previously ranked as American and had to sail under alien flags. But the new law does not permit foreign-built ships to engage in the coasting trade.

¹ If the latter carried goods more cheaply, they could drive out foreign rivals without legal aid.

carrying these goods rest as a burden on the consumers of those other countries.

The main argument against navigation laws is the same as that against protection. Like protection, it diverts labor and capital from lines which they would otherwise follow, into relatively unprofitable lines. These laws are, therefore, as indefensible, economically, as are protective tariffs. Where navigation laws would be likely to develop a national marine, able, eventually, to compete in the world's commerce successfully without aid, there is a reasonable probability that conditions are favorable to this success and that it would be attained in time without government coddling. Where, in spite of navigation laws intended to develop a national marine, ability to compete outside of the protected limits is never attained, the protective laws involve a continuous burden on the general public. Whatever military justification may exist for such protection to national navigation, economic justification is usually absent, and is probably always of doubtful weight.

§ 2

Subsidies to Native Shipping

Another method of encouraging a national mercantile marine is that of paying so-called shipping subsidies. Shipping subsidies are simply bounties paid to the shipping industry. What was said in Chapter VII (of Part II) regarding bounties applies, therefore, to shipping subsidies. Like bounties and like protective tariffs, shipping subsidies divert national industry out of its natural lines into a line which, without such encouragement, it probably would not follow, or which it would not follow to

the same extent. Unlike protection, subsidies do not exclude foreign competition, but simply endeavor, by money payments, to make it possible for the national marine to meet this competition. As with other bounties, therefore, the burden falls upon taxpayers, rather than upon shippers or ultimate consumers. The two last classes may even gain somewhat, if a subsidy is sufficient to cause lower freight rates in spite of the greater cost of transportation in native ships. But even these classes will gain nothing if a subsidy is just high enough to enable native ships, previously unable to compete, to charge rates no higher (and no lower) than those charged by foreign ships.

One of the cruder arguments for subsidies, as for protective tariffs, is to the effect that when we patronize foreign vessels we have to send our money abroad, and that we would "save" this money if we carried the freight in our own vessels. As a matter of fact, money is not the one thing for which trade, in the last analysis, is carried on. Furthermore, if money flows out unduly, it thereupon begins to flow back again, in accordance with the principles which we have so often set forth in previous chapters.¹ As regards the most economical directions of industrial and commercial development, it should be apparent that if British or other ships can carry goods more cheaply than our own merchant marine, then our labor may better be devoted to the lines where it yields greater returns, to services which others cannot so well perform for us, to our factories, farms, mines, and railroads. If American labor is more profitable when devoted, for instance, to the running of railroad trains, then it is poor economic policy to draw it, by subsidies, into the running of ships.

¹ See, for example, Part I, Ch. V, §§ 6, 7, 8.

Another argument for subsidies is based on the assertion that "trade follows the flag." This assertion, used in relation to subsidies, suggests that a national merchant marine acts as a species of advertisement, that, for example, the American flag flying at the mast head of a merchant ship will stimulate a desire in South America or elsewhere, to examine, and, therefore, eventually to buy, American goods. Except for purposes of advertisement, foreign ships serve as well to carry American goods to market as do American ships, and better in proportion as they carry these goods more cheaply.

Probably there is some advertisement for a country's goods in the ubiquitousness of its merchant ships. Yet we must beware of exaggerating the amount and the value of this advertisement, and of overlooking its cost. France has made considerable effort to develop shipping and has hoped thereby to develop foreign commerce, while the United States has done almost nothing to stimulate foreign trade in American ships; yet a practically stationary foreign commerce of the former country has been contemporaneous with an extensive growth of the commerce of the latter.¹ "The history of the world's commerce seems to show conclusively that the nationality of ship owners is quite a secondary matter in the development of trade."²

So far as the presence of a nation's ships, *e.g.* American ships, on the high seas and in foreign harbors, really tends by its advertisement to stimulate American export trade, it would seem that the persons having to pay for this advertisement should be those who expected to reap special gain from it. Why should not merchants

¹ Meeker, *History of Shipping Subsidies* (in publications of the American Economic Association, August, 1905), p. 213.

² *Ibid.*

and manufacturers who are interested in exploiting the trade of any part of the world, and who seriously think that the presence there of vessels flying the American flag will bring them a larger market, be willing to subscribe to the stock of American lines, or pay a little extra to have their goods carried in American vessels, or both? Is it not possible that American merchants and manufacturers will not do this to any great extent, because the gain would be so small as not to equal the cost? Hard-headed business men spend a great deal of money in advertising. Some of them are enthusiastic over the assumed gains of this particular kind of advertising if it is proposed that it shall be done at public expense by means of subsidies. But would they consider the rather problematical results of such indirect and indefinite advertising worth paying for out of their own business profits? By the subsidy method, many persons and many sections of the country are taxed to secure results which may be of little or no benefit to them and which are probably of not very much benefit to any one.

Another argument in favor of subsidies is one that corresponds to the infant industry argument for protection. It is urged, in this view, that subsidies should be given to divert industrial and commercial activity more largely into shipping, in the hope that the merchant marine will develop in efficiency until it is able to stand alone. An important counter-argument is the fact that no one is able to foresee with any certainty whether or not the shipping industry ever can stand alone and that legislators are less likely to risk the public wealth wisely than business men are to risk their own. There is great danger that subsidies, once started, would continue indefinitely on the plea that they continued to be

necessary.¹ And if, as a consequence of a subsidy system, the national mercantile marine should become larger, though at the general expense, then the political pressure to maintain the subsidy system would very probably become greater. It is altogether too probable that if the giving of subsidies is generally recognized as a proper function of government, men who would otherwise devote themselves to planning improvements and to seeking real progress in efficiency, will instead devote themselves to influencing political action, in order that they may get, or maintain, or increase, a subsidy.² This method of acquiring gain is not consistent with the ideal of industrial and commercial morality. Industry and commerce should be so organized that profits will be made only by serving the public, and that profits will be large to any person or firm in proportion as that person or firm serves the public well. The prosperity of those engaged in operating a nation's merchant marine ought not to be made dependent upon their political influence rather than upon their economic service.

Apart from purely economic considerations, shipping subsidies are sometimes urged as a means of increasing a nation's naval strength. Two principal naval reasons are commonly given for the maintenance of a merchant marine, even at the expense of a subsidy. The first is the desirability of having a "naval reserve" made up of large and swift merchant steamers suitable for conversion into cruisers, colliers, and transports, should need for such arise. As a matter of fact, it is only as colliers and transports that such vessels are likely to be useful, since ships of war are nowadays highly specialized, and

¹ Meeker, *History of Shipping Subsidies*, p. 81.

² *Ibid.*, p. 116.

merchant vessels cannot, economically, be made over into cruisers.¹ The second reason is the desirability of having experienced seamen from whom to recruit colliers, transports, and additional fighting ships when war threatens, to replace those killed and wounded, to hold captured vessels, etc.

These objects may be perfectly justifiable, even laudable, in themselves. And it may be cheaper to pay subsidies to certain lines, thus helping to keep them in ships and men capable of emergency use by government, but letting them be mainly supported by commerce, than to support, continuously, and wholly at public expense, a larger naval force. But if the policy of subsidizing ships appears necessary to us for military reasons, we should frankly recognize that this policy involves an economic loss, that it is an expense borne for the same purpose as the expense of maintaining a navy. We should not deceive ourselves into the belief that the subsidizing of ocean navigation is an economically profitable policy. We should therefore aim to get the largest military result possible at the smallest possible cost. Large payments to swift mail lines and possibly to certain other ships constructed for speed and carrying capacity and conforming, in other ways, to possible emergency requirements, mark the limit beyond which we should not go in subsidizing, even if we should go so far. Subsidies granted according to these principles are payments for certain definite services or potential services, and are not to be classed with subsidies granted for purely commercial reasons.

¹ Meeker, *History of Shipping Subsidies*, p. 215.

§ 3

Indirect Subsidies, Favoring Native Ships as Compared with Foreign Ships

A country may try to extend and develop its own merchant marine, to the consequent decrease (or slower increase) of the number of foreign ships, by indirect as well as by direct subsidies. Any service which a country, through its government, performs for its own ships without pay, while charging foreign vessels for it, is equivalent to a money subsidy.

Were it not for clear treaty obligations, there would probably be, in the United States, as strong a demand for free use of the Panama Canal by all of our American merchant ships, as there has actually been for its free use by American vessels engaged in the coasting trade.¹ To let American vessels use the Panama Canal free would be equivalent to a money subsidy, because it would amount to the same thing as to make a charge for the use of the canal and then to make a payment equalling this charge, to American shipping interests. In either case, the taxpayers of the nation would bear a burden, or lose a chance for lower taxes, that special interests might be encouraged. For if letting American ships use the canal free would mean that the canal could never pay a reasonable return on its cost, then taxpayers must meet the deficit by taxes paid to government over a series of years, in order to liquidate, or at least pay interest upon, the indebtedness caused by building. If, on the other hand, though all American ships used the canal free of tolls, the amounts collected from foreign

¹ For a discussion of the economic advisability of giving American coasting lines this special privilege, see § 4 of this chapter (VIII of Part II).

ships would suffice to pay interest on the debt contracted, still this interest might be had and more besides, were the American lines also made to contribute.¹ In other words, to allow American ships free use of the canal must, in any case, mean either a loss or a smaller net revenue yielded to the government than might otherwise be yielded. If the canal is to yield the nation a revenue because of its use by foreign ships, that revenue should be used to lighten the burden of taxation on the whole people; it should not be used to encourage a single industry by giving it something for nothing. Thus to encourage American shipping would be to give it an artificial advantage over other American industries, and would be, in so far, to interfere with the tendency of labor and capital to engage in the industries really most profitable for the nation. There is no economic gain² in having our commerce carried in American ships if foreign ships are able to carry it more cheaply. Nor would the prosperity of the nation as a whole, including those who bear the burden of taxation, be so much furthered by having our commerce carried in American ships which could pay little or nothing for the use of the canal, as by having it carried in foreign vessels which could pay a reasonable amount for its use without charging correspondingly higher transportation rates. Assuming these to be the relative abilities of native and foreign vessels,

¹ It is not intended to assert that either American or foreign ships should be charged exorbitant rates. Such rates on ships carrying American commerce, of whatever nationality the ships might be, would tend to discourage this commerce, even when it could pay the proper costs of its own movement and would therefore be profitable. As to the effect on American welfare of exorbitant rates charged ships not carrying American commerce, see footnote at end of this section.

² Unless we assume a gain from the advertisement thus secured. See § 2 of this chapter (VIII of Part II).

the foreign vessels would be a more economical means for us of carrying our commerce than our own; for them to carry it would mean either lower rates and, therefore, lower prices to consumers and higher prices to producers, or larger returns to the government, favorable to taxpayers, or both such lower rates and higher prices; for them to carry our commerce would mean gain to our people as producers and consumers, or as taxpayers, or as both. It would be desirable, therefore, for our capital and labor to seek other kinds of activity; but this is just what discrimination in the rates charged for use of the canal would prevent.¹

§ 4

The Free Use for Navigation of Government-built Canals

Since to give free use of the Panama Canal to all American ships and to no others, seemed clearly to involve a violation of treaty obligations, Congress was content, in the Panama Canal Act of 1912, to confer this privilege only upon American ships engaged in the coasting trade. Even this lesser tolls exemption appeared to many to be a violation of treaty rights; and the law has recently,² at the request of President Wilson, been changed in this regard so as to require the same charges from American coasting vessels as from all other merchant ships. We shall discuss, here, the possible eco-

¹ Were we to plan, intelligently, so to discriminate in rates charged for use of the Panama Canal, as to pay for it, as largely as possible, at the expense of foreigners, we would base the discrimination on the sources and destinations of goods carried, rather than on the nationality of the ships which carried them. Goods going to and from the United States would be allowed, perhaps, to pass through the canal at fairly low rates, lest American consumers or producers be unduly taxed; while goods going from one foreign country to another would be charged the highest rates possible to collect.

² June, 1914.

conomic effects of tolls exemption for American coasting ships. As we have already seen,¹ the Federal government assures American vessels a monopoly of the coasting trade, including the trade from any port of the United States to any other port, e.g. from Baltimore to San Francisco. Free use of the Panama Canal by American vessels engaged in the coasting trade could not, therefore, increase our mercantile marine at the expense of foreign rivals in the trade. The primary effect of free tolls to this special class of ships would be to reduce the expense of coast to coast trade, and therefore, supposedly, to reduce rates. Possibly foreign vessels could carry at the lower rates, even without free tolls. If the coasting trade were open to foreign ships, the effect of discrimination in favor of American vessels engaging in this trade might simply be that the American ships would be able to get part of the trade away from their foreign competitors, at substantially the same rates. As it is, such free tolls would tend to make rates lower than they would else be, though much of the saving might be diverted to the owners of monopolistic navigation companies. Hence traffic would be encouraged to go through the canal, which otherwise would not.

The construction of a canal across the Isthmus of Panama, to be used without charge by American coasting vessels, would therefore mean that traffic from the East to the West, and *vice versa*, which is not worth the whole cost of carrying, might nevertheless be carried at the expense of the tax-paying public. If it is worth \$5000 to get certain goods from New York to San Francisco, and the cost of carriage, including proper payment for all necessary facilities, is \$6000, and if this cost is

¹ § 2 of this chapter (VIII of Part II).

covered by the charge made, the goods will not be sent. It will be more economical to have a greater degree of local self-sufficiency and less geographical division of labor. But if the taxpayers should contribute more than \$1000 in the form of maintenance and running cost of the canal, and interest on its cost of construction, then the goods would be shipped, for the charge to the shippers could be made less than \$5000. The total cost would be \$6000 and the total gain would be \$5000. There would be a real net loss. But this loss would be borne by the taxpayers, and therefore the traffic would be carried.

Again, the encouragement of the coasting trade by the building of an Isthmian ship canal to be used by coasting vessels, free of charge, might mean that goods would be carried by water or partly by water, at the taxpayers' expense, which might be more economically carried by rail. Suppose that a quantity of goods can be shipped from New York to Salt Lake City by rail for \$4000, including a proper allowance for wages of employees and something towards profits. Suppose that, at the same time, the cost by water and rail, including risk, damage, longer time in transit, maintenance cost of the canal and interest on canal facilities provided, is \$5000. \$1000 may be saved if the goods go by rail, and to make them go by the other route, if we include interest on the cost of partly constructing this route for them, maintenance expenses, etc., would be to waste \$1000. The community or the nation would be so much poorer, yet if the government were to provide the \$1000 or more in the form of canal facilities paid for, eventually, by the taxpayers, shippers would gain by using the waterway route.

It is not asserted, of course, that all goods ought to pay in the same proportion to use the canal, if discriminations should prove to be practicable. If the plant is incompletely utilized, it may not be improper to let some goods go through for comparatively low rates, provided they would not otherwise go at all. But no goods ought to be allowed to go through which cannot pay at least a fair share towards running expenses, wear and tear from use, and (probably) a little towards interest. And the canal should not have been built (military considerations aside ¹), unless it was expected that the traffic through it, as a whole, would be enough cheaper to pay interest on it. To build it, if it could not be made to pay, was economic waste, was, as above pointed out, to encourage transportation not really worth its total cost to the people. Now that the canal is completed, it would be unfair to the American people as a whole that the traffic which goes through it should not, if possible, pay for it, that those who realize the chief benefit should not contribute in proportion to the benefit realized.

Here, as in the case of protection, we meet the possibility that government interference with the direction of industry may affect differently the people of different sections, benefiting some at the expense of others. It is obviously only that part of our population living on or reasonably near the coast, which has much to gain from subsidizing, directly or indirectly, coast to coast water transportation. Those living in the far interior will, in any event, have to rely mainly on other means of transportation. Yet by the scheme of indirect subsidizing under discussion, but which has, fortunately, been aban-

¹ As a matter of fact, it is hardly to be doubted that economic considerations had great weight in inducing its construction.

done, those in the interior would be made to contribute to the cost of facilities of transportation which others use and which they cannot use in the same degree.¹

The principles above elaborated apply equally when government builds canals in the interior, if traffic is allowed to use these canals free of charge. New York State is now enlarging the once busy and profitable Erie Canal at an estimated cost of not less than \$100,000,000, in order that it may carry barges of 1000 tons capacity from the Atlantic Ocean to the Great Lakes and *vice versa*. The plan is to charge nothing for the use of the canal. This will mean a burden on the taxpayers of the state, an uncompensated loss to the taxpayers in those parts of the state which cannot economically use the canal either to market their produce or to obtain goods for consumption. It amounts to a gift by the taxpayers of the state of New York to those producers and consumers in other states, who can sell their products for more or buy desired goods for less, because of the free use of the Erie Canal. It involves encouragement to transportation via the canal of goods which might better go by railway or by the St. Lawrence river. If the traffic which is expected to use the canal would be able to pay the cost of operation and maintenance, and interest on the \$100,000,000 or more sunk and to be sunk, then it should be charged this cost and interest, to the end that those who reap the benefit of the canal in lower cost of carriage, and in prices of goods higher to producers and lower to consumers, shall pay for the advantage so se-

¹ An excuse for such discrimination against dwellers in the interior might perhaps be found in the fact that those living on the coast chiefly bear the burden resulting from the limitation of the coasting trade to American vessels. Two policies, each tending towards economic waste, would partially offset each other as regards inequality of effect.

cured; and that those who reap the most gain shall pay the most; and to the end that the burden shall not fall upon the general public without any regard to proportionate use and to benefits received.¹ If, on the other hand, it is not believed that those using the canal can meet such charges and still find it profitable to carry goods over it, then we must conclude that the canal ought not to be (or, in part, to have been) enlarged, since the total expenses, including cost of this enlargement, of carrying goods over it, will probably be greater than the benefits to be received from transporting the goods, or will be greater than if the goods were carried over another route, *e.g.* a railroad.

Before the days of railroads, much confidence was felt in the possibilities of canals. A number of our states expended a great deal of money in canal building. To-day it is generally recognized that, since the capital cost of canals is a tremendous initial expense, railroads are generally cheaper. Only in a comparatively few cases can canal building be expected to pay. These are, first, cases where the canals connect navigable waters located near to each other, and between which, if they are connected by a canal, there will be large traffic; second, cases where comparatively short canals, like the Suez Canal, save a very great sailing distance and so are extensively used; third, cases more doubtful, where short canals connect with the ocean, great cities which have grown up not

¹ It is no sufficient answer to this contention to cite the usual practice regarding our numerous streets and roads. To charge tolls, individually, on each person as he used any given street, would obviously be an intolerable nuisance. These facilities we must have, anyway, and substantial justice may be secured, if care is taken to avoid extravagance, by levying on local property owners according to some fair system. Since land values depend largely on streets, etc., it may be possible, by basing assessments or taxes on land values, to make costs to different persons vary, on the whole, in proportion to benefits.

far from it.¹ "Practically all the canals now in most successful use are ship canals, forming comparatively short links between important natural waterways, and opening up extended routes of transportation by water for large vessels. Such short-link ship canals are to be clearly distinguished from long inland canals, and the success of the one offers no safe criterion as to the probable success of the other."² Moulton's study of the much vaunted waterway system of Germany seems to provide conclusive evidence that canals are as cheap as railways for shippers, only if the taxpayers, in effect, help pay the freight, and that, in general, canals and canalized rivers involve tremendous loss to the nation which undertakes their construction, and are therefore a source of industrial and commercial weakness rather than of strength.³

If there were adequate reason to believe that canals, generally, were cheaper and more satisfactory means of transportation than railroads, it would not be necessary to have public agitation and political pressure to get canals built. Private companies would undertake to build them for profit, just as they build railroads for profit, and just as canals were built, in England particularly, before the days of railroads.⁴ As a matter of fact, investors are not clamoring for a chance to buy the securities of such companies, nor are promoters eagerly looking for opportunities to project new lines. When the build-

¹ Preliminary Report of United States National Waterways Commission, 1912, pp. 13, 14. Reprinted in Final Report, 1912, pp. 25, 26. See, however, as to an example of the third class of cases, viz. the Manchester Ship Canal, Moulton, *Waterways versus Railways*, Boston and New York (Houghton Mifflin Co.), 1912, Ch. VII.

² Report of Commissioner of Corporations on *Transportation by Water in the United States*, Part I, p. 45.

³ Moulton, *Waterways versus Railways*, Chs. IX, X.

⁴ *Ibid.*, p. 99.

ing of canals is mentioned favorably, the assumption is always made that taxpayers shall bear the burden, or at least the risk, of building them.

§ 5

The Improvement of Harbors

Water transportation which is not worth its cost, may likewise be stimulated by a wrong system of harbor improvement. In the United States, the construction and care of lighthouses, the building of breakwaters, the dredging of harbors, and the dredging of channels between the sea and harbors, are done largely by the Federal government.¹ It cannot be said that nothing is paid towards the expenses involved, by the traffic aided, since the tonnage dues collected by the government amount to \$800,000 or \$900,000 a year.² But considering the fact that the Federal government appropriates about \$5,000,000 a year for lighthouse maintenance alone,³ and, on the average, appropriates millions of dollars each year for dredging, breakwater construction, etc., the traffic entering and leaving the ports of the United States cannot be said to bear the costs which it occasions. Rather is this traffic, in a considerable degree, subsidized at the expense of taxpayers. As with canals, so with lighthouses and harbors, we must conclude that those who benefit by them should be the ones required to pay for them, and that to place the burden of their construction

¹ Report of Commissioner of Corporations on *Transportation by Water in the United States*, Part III, 1900, pp. 39, 40.

² Johnson, *Ocean and Inland Water Transportation*, New York (Appleton), 1911, p. 252. Given in Report of Commissioner of Corporations on *Transportation by Water in the United States*, Part I, p. 404, as \$1,076,571.69 in 1908. The coasting trade is free even from this.

³ *Ibid.*, p. 262.

and support on the general public, with no reference to benefit received, is undesirable and unfair.¹ We must further conclude that constructions and improvements made in harbors, for which the traffic using the harbors cannot afford to pay, involve national economic loss and ought not to be undertaken.

In many cases the money spent in harbor improvements by the Federal government is wholly or partly wasted, for appropriations are frequently made for which there is no economic justification and for which there would be no economic justification even if the largest sums possible were to be realized by charging the users. Such wasteful appropriations are doubtless in part due to lack of business sense among legislators. They are perhaps more largely due to the pressure of local interests. The very fact that these appropriations are so largely made by the central government, and that there is, or seems to be, a chance for interested localities to get something for nothing, results in expenditures which would not be made if the localities particularly concerned had always to provide the means, or if private capital had to be induced to do so.²

¹ It is not a sufficient answer to the above argument, to assert that our tariff system taxes trade and that therefore this trade pays for itself by paying for the facilities used. For the burden, nevertheless, does not fall where it properly belongs. It does not fall anything like evenly on all traffic which uses the facilities provided. On some goods the tariff has been, until recently, prohibitive, artificially interfering with normal and profitable trade. On other commerce and on passenger traffic, the tariff duties are little or nothing. Such commerce and traffic may, in effect, be receiving a subsidy, while the remainder of commerce is burdened. The principle of charging the cost of facilities provided, to those who use them and upon different interests in some proper proportion to the benefit received, is not conformed to. We fall far short of the economic ideal when we set up contradictory policies of discouragement and encouragement. These contradictory policies do not exactly neutralize each other, but in one case there is a net loss in one direction, and elsewhere there is a net loss in another direction.

² Cf. Preliminary Report of National Waterways Commission, p. 20 (Final Report, p. 82).

A different system, and one which is economically more defensible, is that common in Great Britain. There the central government, except as naval considerations may be involved, does nothing whatever by way of harbor improvement, but leaves this matter to the localities immediately concerned. The British system of harbor improvement and maintenance requires the creation for each harbor of a so-called "public trust" or public harbor trust.¹ A public harbor trust is a semi-public body or a corporation, authorized by parliament, to which body is granted power to own, improve, and manage a particular harbor. It has been compared² to the board of trustees of an American university or charitable institution. The members receive no salaries, but regard their position as an honorary one. The composition of a harbor trust is determined by statute. Representatives are usually selected by the British government, the government of the city concerned, boards of trade and chambers of commerce, ship owners' associations, and other interested parties. Money is borrowed for necessary improvements, usually at low rates, for the harbor trust is authorized to collect port and dock charges from vessels utilizing the facilities given, and this power makes the security good, at least in the case of a port sure to have large traffic. Sometimes money is borrowed from the municipality itself. In any case, money needed in excess of what has been collected in previous years from traffic, is borrowed, and must be paid back out of future collections. There are no stockholders, and, therefore, there is no attempt to make a profit above a fair interest and

¹ Described in Smith, *The Organization of Ocean Commerce*, Philadelphia (Publications of the University of Pennsylvania), 1905, pp. 129, 130.

² *Ibid.*

sinking fund. Indeed, a private corporation authorized to collect tolls from all the shipping of a port, for the sake of dividends to stockholders, would, unless strictly regulated, be an intolerable monopoly.

But the British system of harbor control does make the traffic pay for the facilities required, and is in so far consistent with the economic principles so wisely applied to British trade and commerce generally. There is no attempt to encourage trade which is not nationally profitable, by partly supporting it, *i.e.* by providing free harbor facilities at public expense and, therefore, at the expense of other lines of economic activity, any more than there is the attempt to interfere with nationally profitable trade by high tariff duties. The public trust unites responsibility with direct action. It furthers efficiency, economy, and lowness of rates, but it does not subsidize.

The function of maintaining lighthouses, however, almost of necessity devolves upon a central government. No city or private corporation is in a position to perform this function and make the traffic benefited pay for the service provided, since much of the benefit will be received by vessels which have no occasion to visit the particular city or to come within reach of the particular corporation. The British government, therefore, maintains the lighthouses, but collects "light dues" in return, amounting to about \$2,500,000 yearly, from vessels entering English harbors. These dues pay the entire yearly cost of maintaining the lighthouses and about \$250,000 a year besides.¹ Here, also, is no policy of subsidizing, no attempt

¹ Johnson, *Ocean and Inland Water Transportation*, p. 262. If the slight charge above yearly cost is criticised, it should be remembered that a reasonable return on investment is not an improper aim.

to foster one industry at the taxpayers' expense, or to encourage an undue and uneconomical geographical division of labor.

§ 6

The Improvement of Rivers

The responsibility for the improvement of rivers, like that for the improvement of harbors, has rested, in the United States, chiefly with the Federal government. The work done has included the removal of obstructions to navigation, the deepening of channels by dredging, the construction of revetments, and the development of slack water navigation by the building of locks and dams to maintain a navigable depth. Improvements of this sort have been carried out, to some extent, on most of the navigable rivers of the country. But the appropriations of Congress for these purposes have not always been wisely made, nor has the distribution of improvements throughout the country been influenced solely by commercial or economic considerations.

Let us notice one or two typical instances of Federal activity in river improving. To improve the Mississippi river, the government has spent, in all, more than \$90,000,000.¹ Of this amount, \$15,000,000 has been spent on the 200 mile stretch between the mouths of the Missouri and Ohio rivers.² But the traffic on this stretch of the river, including that of St. Louis (which is located between these points near the Missouri), has steadily decreased. In 1880, upwards of a million tons

¹ The Report of the Commissioner of Corporations on *Transportation by Water in the United States*, 1909, Part I, p. 47, gives \$97,685,920.

² The facts and figures in this and the next paragraph are taken chiefly from an article by Herbert Bruce Fuller, in the *Century Magazine*, January, 1913, pp. 386-395, entitled "American Waterways and the Pork Barrel."

of freight were shipped from St. Louis. In 1900, the amount aggregated only 245,000 tons, and in 1911, only 191,965 tons. Is it safe to assume that there has been so much saving in the expense of carrying this traffic, as compared with what it would have cost to carry it by rail, or to carry it on the unimproved river, as to compensate for the money sunk? Would those who have used this section of the river have been willing to invest, jointly, the \$15,000,000, in order to have the better navigation conditions which that investment has made possible?

If there remains any doubt in this case that money has been unwisely spent, there can be no doubt in other cases that public funds have been wasted for the sake of returns to private interests and to limited territories, almost incomparably less than the general loss. The Big Sandy river is a tributary of the Ohio river. The Big Sandy and its two branches or tributaries, the Tug and Levisa rivers, lie in Kentucky and West Virginia. On their improvement, the Federal government has spent, in all, about \$1,700,000. Excluding timber, which can be and commonly is floated down-stream, the average yearly traffic on these rivers is about 2000 tons. Reckoning interest on this \$1,700,000 as only \$40,000, or less than 2½ per cent a year, the annual cost to the United States of providing facilities for this traffic is \$20 per ton a year. Adding \$20,000 a year for maintenance, we have a cost of \$30 a ton.

Average railroad charges in the United States are considerably less than one cent per ton mile.¹ For low grade freight (the only kind which makes much use of

¹ Statistics of Railways in the United States, Interstate Commerce Commission, 1910, p. 59.

inland waterways) going long distances, railroad charges average very much less than this, probably markedly less than a half cent. The facilities provided by the government on the above mentioned three rivers would, therefore, have to reduce the transportation cost upon them to zero, in order that the construction or investment by the government should be proved worth while, unless the traffic benefited moved an average distance of over 6000 miles. For even at zero cost of carriage, each ton carried one mile would secure a saving of but one-half a cent. And unless it were carried 6000 miles, the total saving would not amount to the \$30 interest and maintenance cost.

What is the reason for the numerous appropriations of this sort made by our government? A partial explanation may be found in the current American practice of donating to commerce the improvements made, and letting the general public bear the burden in indirect and, therefore, hardly realized taxation. Commercial interests are the more ready to plead for comparatively useless dredgings, revetments, and canalizations, because, however small the benefits are, they reap these benefits, and because, however heavy the cost is, others mainly bear it. Any reform which goes to the root of the evil must espouse the principle of making those contribute most to the fixed charges and maintenance costs of navigation improvements, who chiefly use those improvements and to whom their benefits chiefly go.

A further partial explanation is suggested by noting the distribution, throughout the country, of money appropriated for waterways. In the general River and Harbor Act of 1910, appropriations were received by 296 congressional districts in the United States, out of a

total of 391,¹ in other words, by over three-fourths of such districts. Apparently the appropriations were given to nearly every district in which there was a stream or harbor offering any excuse for expenditure. This River and Harbor Act illustrates what has been called the "pork barrel" system of waterway development.

The difficulty is one which seems to apply generally to the activities of a democratic government. A despotic or aristocratic government is based on the privilege of special persons or classes. It governs largely in the interest of legally privileged classes. It insures to those classes, political and economic privileges maintained at the expense of others. Such a government was that of France before the Revolution. Such is that of Russia to-day. In the case of a popular government and an intelligent people, privilege is probably less excessive, and its forms less obnoxious. But there may still be, especially if the government carries on industrial functions or interferes at all with the natural laws of trade, the privilege which comes from bargaining. One class wants a special kind of tariff law, adverse to the public interest. Another class desires legislation subversive of currency stability, also contrary to the general welfare. The representatives of each, in Congress, may support the desires of the other, in return for counter support.

The evil shows itself most of all, perhaps, through the influence exerted by localities or by special interests in different localities. We have noted this particularly in the case of the protective tariff.² And just as, in the case of the tariff, congressional representatives from

¹ Fuller, *American Waterways and the Pork Barrel*, *loc. cit.*

² Chapter VI (of Part II), § 6.

different states and districts desire, each, to get or keep a high tariff for the goods produced in his district, whatever the effect on the common-weal, and sometimes inconsistently with their party platforms, so these representatives desire appropriations of money to improve waterways, each for his own district, even though the cost to the country as a whole far exceeds the benefit, and even though each district suffers more from its forced contributions to improvements in other districts, than it gains. There is, consequently, a process of "log-rolling," so-called, in which A votes for B's project in return for support of his own; and the ultimate result is an appropriation or set of appropriations having no consistency and involving general loss.

Each Congressman thus acting, feels that he is gaining favor with his constituents. The persons interested in local waterway constructions make representations to him regarding the importance of them. He feels that the people of his district are not concerned primarily in having him act the part of a wise and conscientious legislator, careful not to waste the nation's resources, but that they are concerned rather in having him "do something" for them. If he succeeds in getting what is desired, the newspapers of the district publish the fact that, through his influence, Congress has been led to appropriate a sum to improve navigation on the local stream or to deepen the local harbor. The fault is not alone that of the Congressman who, under such circumstances, does the thing which he believes his constituents desire, but is also largely the fault of those constituents themselves, whose selfish local interests overshadow in their minds the greater interests of the nation of which they are a part, and whose limited intelligence will not let them see

that the system practised is likely, in the end, to hurt more than to help even their own welfare.

It would seem, then, that a reform which would go to the root of the difficulty must not only insist upon the attempt to charge users rather than taxpayers, for facilities provided, but must also insist that the entire first cost and risk of constructing these facilities shall not fall upon the nation as a whole. If government expenditure rather than private investment is thought to be necessary to improve certain waterways, at least the government expenditure and risk should be partly borne by localities most directly concerned. If such localities will not support certain improvements, themselves, they should not expect the nation to do so. If the nation refuses to bear the burden alone, but insists, always, upon local aid, there will be far less pressure for Federal appropriations, and many wasteful expenditures will be avoided.¹

§ 7

Subsidies to Railroad Building

The subsidizing of transportation, by government, has extended, in the United States (not to mention other countries), to railroads also. The railroads of the United States have, it is true, been built pretty largely with private capital, but they have also received aid from the national government, from many of the states, and even from county and city governments. The states and local governments, in some instances, invested in railroad securities, so enabling the roads to get capital

¹ Cf. Preliminary Report of National Waterways Commission, pp. 10, 20 (Final Report, pp. 81, 87). See also Report of Commissioner of Corporations on *Transportation by Water in the United States*, Part I, pp. 8, 50, for reference to European practice.

which, perhaps, private persons would have been less ready to provide. But the Federal government, in addition to making loans, made very extensive land grants to companies constructing numerous desired lines,¹ chiefly in the less densely settled parts of the country, the West and Southwest. The grants made between 1850 and 1871 turned over to the railroad companies about 159 million acres of the public domain, an area exceeding five states the size of Pennsylvania.² So far as the land grant policy was based on military conditions, we cannot judge it on economic grounds alone. But so far as it can be regarded as a commercial policy, it can be judged in the light of commercial principles.

We shall not, of course, be able to decide, absolutely, whether the land grants and other government aid to the railroads actually decreased the total of national wealth. So to decide, we should have to know not only what has happened, but just what would have happened if business and transportation development had taken its natural course. But we can lay down general principles of usual application, which, in the long run, are apt to be safest to follow.

To begin with, it must be admitted that there is such a thing as undesirable transportation. The labor and capital of a country should be applied in order of pref-

¹ See, on this subject, Haney, *A Congressional History of Railways in the United States*, Vol. II. *The Railway in Congress: 1850-1887*, Madison, Wis. (Democrat Printing Co., State Printer), 1920, Chs. II, III. Also Sanborn, *Congressional Grants of Land in Aid of Railways*, Madison (Bulletin of the University of Wisconsin), 1899, Chs. VI, VII. A good brief account is in Johnson, *American Railway Transportation*, 2d revised edition, New York (Appleton), 1909, Ch. XXII.

² Not including land forfeited by failure to conform to conditions. The granting of the mere rights of way might be regarded as analogous to the granting of farms to actual settlers. But the granting of millions of acres additional cannot be so regarded.

erence to different industries according to their relative importance, according to the relative need for them. In other words, the people should devote their efforts to the lines which pay best. It may be said that the people living in the Middle West and Far West, where railroad building was encouraged by government more than in the East, desired railroads as a means of reaching eastern markets. But the mere existence of railroads leading to markets does not in itself mean greater prosperity, since the benefits so received may be appreciably less than if the same capital were invested in some kind of productive enterprise for immediate local needs. Unless the trade made possible by a railway brings as much wealth and prosperity as could have been had by foregoing the trade and producing more locally, unless, that is, as much of desired wealth is produced by the railway as would be produced were the labor and capital applied instead to the farms and ranches, to building houses, making furniture, etc., the building of the road is not economy for the community. If a railroad when constructed will yield the people of a community a benefit equivalent to what the same investment would yield in another line, then those who receive this benefit can afford to pay, for the use of the railroad, a proper return on the capital invested. If they cannot afford to pay such a return, it must be because they are not receiving a correspondingly valuable service and, therefore, it must be that the capital invested in the railroad is not producing the value which it might have produced if invested otherwise.

If the territory through which a railroad is desired is sparsely settled and would offer but small traffic in proportion to trackage, thus only very partially utilizing

the plant of the railroad, then high charges would be required, in order that the railway plant might pay to the owners the average rate of profit on investment. But high charges may be as serious preventives of reaching markets as absence of railroads leading to markets. If, therefore, only small traffic can be hoped for, it may be truer economy for the territory concerned and the various communities in it, to be more self-sufficient, to depend more exclusively on natural waterways, or to carry goods by using horses and vans, than to build a railroad.

The people of a given section of the country may think that they gain nothing by having an incompletely utilized railroad, if they have to pay, in high freight and passenger rates, interest on its cost. They may not be prepared to patronize such a road, feeling that the service is not worth the charges. Yet if the road is paid for in part by government aid, even though they have to pay the taxes that make the aid possible, they may delude themselves into thinking that they are gainers by having the railroad. Nevertheless, the people are paying for the service rendered just as surely by this method as by the other, and if it is unprofitable for them to pay the amount in the one way, it is unprofitable to pay it in the other. The chief difference is that if government supports the enterprise without receiving any corresponding return, the cost of the service rendered is paid for by the people without any regard to the proportionate benefits received.

If the assistance is by grants of land, the essential principle of the policy is the same. The public domain belongs to the whole people. It rests with them to give it to settlers, to keep it as forest reserve and for other

purposes, or to secure money revenue by selling it. To contribute it to railroad companies is as much a cost as to contribute the equivalent in money.¹

As a consequence of the land grant policy, capital was diverted to transportation purposes which might have yielded larger returns in agriculture or in manufactures. In so far as the policy had this effect, it lessened rather than increased national prosperity. Because of the land grant policy, also, population tended to be diverted towards the Middle and Far West, while there was still room in the East, South, and Central states. As a result of this diffusion of population, goods were probably carried by rail over longer distances than would have been necessary had population been for a time more concentrated and had its extension westward been more gradual. Had the westward movement, except that by water to the Pacific coast, been slower, a shorter connection could have been kept by the near frontier with the more densely settled parts of the country, and the necessity of long hauls of meagre traffic through undeveloped sections could have been, in part, avoided. It is doubtless true that some sections of the West are exceptionally rich and fertile, as some are exceptionally mountainous or arid. That the former should eventually hold a large population was both unavoidable and desirable. But that the movement westward should have been artificially hastened, at the cost of millions of acres of the public domain, at the cost of diverting labor from other industries into transportation, at the cost of unnecessary distances in transportation, and at the cost of building railroads in advance of traffic, ought not to be too readily taken for granted.

¹ See, however, considerations later in this section, especially in footnote.

As some parts of the country presumably gained by the policy, so other parts probably lost wealth. Many of the eastern farmers, for instance, found themselves disadvantaged by competition with producers of the West. So far as western farmers, by virtue of natural advantages, were able to undersell the farmers of the East, the result was economical and beneficial. But so far as western farmers were, in effect, given bounties, by having transportation provided in part at national expense, the result may very well have been a national loss. If the prosperity of the government-aided western farmer was increased, that of the eastern farmer was decreased. If the value of western land was raised, that of eastern land was lowered.¹

One type of municipal or local aid deserves particular mention. This is aid which is made conditional on the choice of a route through the town or city giving it. Such aid introduces an uneconomical basis (from the social point of view) of calculation into the choice of a route. The route selected is less apt to be the one which, all matters of traffic and expense considered, is most profitable, and, therefore, socially most desirable, but is apt, rather, to be a route favored by the largest promises of local aid.

¹ To the argument that the government so raised the value of the remainder of its own land, it can be answered that it is not the business of a government to depreciate the land of citizens in order to raise the value of public land. If the principle that land rent is largely a social product and belongs mainly to the whole people, were commonly accepted, depreciating some land to raise the value of other land would appear clearly to be uneconomical. It is probable, in the case under discussion, that enough railroads would soon have been built, and that the government, even in the narrow sense here used, lost more than it gained by making the grants.

§ 8

Summary

Let us now briefly restate the principles set forth in this chapter, regarding government interference with and encouragement of transportation. Navigation laws were first considered. These laws attempt to develop the national merchant marine by excluding foreign ships from certain trade. The United States excludes foreign vessels from the coasting trade. Considered from the purely economic viewpoint, these laws are analogous to protection, and for similar reasons they are economically undesirable.

Shipping subsidies are in the nature of bounties. In general it may be said that they are without economic justification. It may be defensible, however, or even desirable, to make definite payments to certain lines of ships, in order to have a claim to vessels as naval reserves. Subsidies may be indirect, as when certain privileges are given to a nation's own merchant vessels, at the taxpayers' expense, which are denied to the ships of other nations. The purpose of discriminating subsidies, direct or indirect, is not so much to increase commerce as to have it carried in vessels of the subsidy-paying country.

Facilities for transportation are frequently provided by government at the taxpayers' expense. These tend to stimulate commerce which is not worth the expense borne, and which could not pay this expense. Such a policy is unfair to the general tax-paying public and violates the principle that those who gain by any facilities should be the ones to pay for them. Such provision of commercial facilities at public expense would have been the carrying out of the plan to allow United States coast-

ing vessels to use the Panama Canal free. Such provision of facilities at public expense is the plan to have the Erie Canal forever free from tolls. Sections of the country, or of the state of New York, which have little or nothing to gain by the creation of these facilities, would have been, or will be, taxed that other sections might use them toll free. The Federal policy of harbor and river improvement is also a policy of subsidizing commerce, and is, therefore, popular with and favored by the interests subsidized. Like the protective tariff policy, the policy of subsidizing water transportation is partly the result of bargaining between representatives of different districts, each trying to get something at the general expense. The British system of a Public Harbor Trust avoids private monopoly of facilities, but makes the traffic using the facilities provided, pay for them.

Land grants to railways, like other aids to water transportation, are indirect subsidies given to commerce, and, as such, are open to objections. The general rule which it is safest for government to follow, is that those who chiefly benefit by facilities provided for commerce should chiefly pay for them, rather than that these facilities should be paid for by the people in general, without regard to proportionate benefits received.