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DALHOUSIE UNIVERSITY BULLETIN
ON PUBLIC AFFAIRS

XIII

The Impact of the War on the
Maritime Economy

BY

B. S. and M. S. KEIRSTEAD



HALIFAX, N. S.
The Imperial Publishing Company, Limited
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FOREWARD

The Institute of Public Affairs at Dalhousie University has, as one of its main objectives, research in the governmental and economic problems of the Maritime region. It has in the years before the war sponsored a number of studies on the economic welfare of the Maritimes. At an early stage of the present conflict the Institute conceived the need for a thorough and comprehensive enquiry into the changes which the war would have on the economic and social structure of the region. Professor Keirstead, then of the University of New Brunswick, and a number of other scholars were entrusted with the task. As a result of their efforts there will be brought out in the near future a report of several hundred pages which contains a wealth of hitherto unpublished data and of searching analysis and is accompanied by numerous statistical tables. The report, it is hoped, will furnish important information on which post war policies can be based.

For those who are interested in the subject of the inquiry but might not find the time to study the full report, this bulletin has been written by Professor and Mrs. Keirstead. It summarizes the main findings of the report and may help to clarify thinking on the future of the Maritimes.

L. RICHTER

Institute of Public Affairs
Dalhousie University
March 1944

PREFATORY NOTE

In 1940 the Dalhousie University Institute of Public Affairs initiated an inquiry into the war-time changes of the Maritime economy, and I was asked to conduct the research. This year we bring the study to a close, because, though we recognize that there may yet be important events of warmaking and peacemaking that will impinge on the Maritimes, if it is to serve to help people to make up their minds about future policy, it is time our findings were made public. Though we mention policy we do not mean that this BULLETIN is an attempt to advocate any specific policies of an economic or social sort. It is an effort to present the facts as we have seen them in the course of our inquiry. It is based on—and is in part a resumé of—a much longer volume on the same subject. Since the longer volume might be regarded as of limited appeal and interest to the general reader we have tried to put the gist of it into compressed form. The results may be a bit patchy and dull. If so, we can only plead the difficulty of the task.

We have not attempted to indicate herein the sources of and authorities for our data. These, the interested reader will find fully set out in the documentation of the main study.

Though I am personally responsible for the conduct of the main study and hence for the basic material of which this BULLETIN is a digest, the writing of the present publication has been largely done by my wife, and hence it appears under our joint names.

Montreal, 1943

B. S. KEIRSTEAD

The Impact of the War on the Maritime Economy

THE WAR STIMULUS

In 1942 Prime Minister MacKenzie King declared that since the beginning of the war Canada had undergone an industrial revolution, and the truth of his statement is growing ever more apparent to the people of Canada. The impact of this revolution, like that of an earthquake, was greatest in the centre, but it has stirred and changed the economic and social life of the country from coast to coast. In the Maritimes the shock has been tempered by distance from the centre and other regional peculiarities, but its effects have been of the same general nature.

Since 1939 Canadian national income has increased by an estimated \$2,537,051,000, an increase of about 59%. This increase has been generated by the spending of government and industry on war supplies and new capital on an ever-increasing scale. From the first slow-moving process of production on the principle of comparative advantage—when it was thought, before the fall of France, that Canada's main contribution to the Allies would be certain raw materials, foodstuffs, and some few manufactured goods for which the country was specially well equipped—through the desperate period of *ad hoc* production after France fell, and the British Commonwealth stood alone, when Canada began to produce goods previously thought impracticable in quantities previously deemed impossible, to the latter stage of the war when Russia and the U. S. A. became involved and it became possible once again to organize Canada's war production on a long-range, comprehensive basis—throughout these changing phases of the war, Canada's production has proceeded at an ever-accelerating rate, with a corresponding increase in the national income. The present tremendous industrial production of goods, from machine guns, trucks, ammunition, explosives to tanks, aeroplanes and ships, and the greatly increased production of hogs, butter and other staples, has come in large part from the employment of resources previously unemployed, or underemployed, so that much of the increase in income is being spent by people who before the war were below the margin of decent subsistence. Their consumption has expanded and rightly so, but had the consumption of other income groups remained the same or increased, the scarcity of goods and the competitive bidding of consumers would have driven up prices, and a violent inflation would have occurred, with its attendant inequitable and disastrous results. To prevent this the Government instituted a rigorous system of fiscal and monetary control. By

means of sharp increases in taxation, public borrowing on a large scale supported by considerable social pressure, and direct restriction of supply by means of rationing, it has succeeded to a very remarkable degree in keeping prices down and keeping them steady. The effect has been to redistribute the social income in favour of the lower income groups.

Similarly on the production side, the government has exerted increasing pressure on the disposition and employment of capital and raw and processed materials and the labour supply. By means of priority controls, licensing of new industries, subcontracting by the government on an "educative" basis, such stimulus has been given to war and allied industries that very great and significant shifts in the balance of production have taken place, such as the shift, for example, in the relation of manufacturing as compared with the extractive industries, the former now representing a much greater proportion of total industry than before the war. Through National Selective Service, direct appeal, social pressure, the labour supply is directed into similar channels. Further, within the categories of manufacturing and extractive industries respectively, there have been important changes. In certain of the heavy industries there have been extraordinary advances, such as shipbuilding, and metal refining; also in some of the most intricate manufacturing processes such as the production of machine tools and parts, motors, and in the chemical and engineering industries. Mining, other than coal mining, has advanced more than agriculture, and in agriculture itself the emphasis has shifted from grain staples to hogs and dairy products. Thus, under the external stimulus of war demand and the internal stimulus of government, a two-fold change has taken place in Canadian economic structure: a vast expansion of industrial capacity and of national income has been accompanied by an equally momentous shift in the balance of production and the distribution of income. The industrial worker, unemployed in the pre-war years, has gained the most; the agricultural classes have improved their standard of living, though many, notably the western grain growers have suffered a reduction in their relative if not in their absolute position; the more skilled workers have gained, though the differential between them and the unemployed has been reduced; white collar workers and many salaried professional men such as teachers and civil servants have lost ground both relatively and absolutely; and some diminution has been felt by income groups of \$5,000 and over.

The same stimuli and similar effects have been felt in the Maritimes, but modified and changed by distance from the industrial centre and other characteristics peculiar to the Maritime region. These characteristics we may now briefly note.

REGIONAL CHARACTERISTICS

The Maritimes have their own peculiar geographical characteristics, and their economic and industrial type of development has grown up largely on the basis of those geographical characteristics. Their inheritance is a soil and climate favorable to forestation and certain kinds of agriculture; they are environed by the sea. They lie as it were, as the back door of the Dominion, but are themselves the gateway opening to the Atlantic sea-lanes, to Britain, to Europe and the theatres of war.

Prince Edward Island is a truly agricultural province, and her whole economy depends on the cultivation and export of potatoes to the U. S. A., other provinces of Canada and to Britain, and of seed potatoes to South America. For this she is peculiarly fitted by the possession of a slightly acid, soft clayey soil, based on an area of carboniferous sediment.

New Brunswick is primarily a forest province, her climate and soil being again peculiarly favorable to the natural growth and natural reforestation of mixed hardwood and softwood trees, and on this her industry is and always has been based. The original export staple was white pine which was unfortunately exploited and almost cut out. Then timber and boards became her chief export. Secondary processing industries grew up, first in the form of saw mills, later in the wooden ship building industry, the wood-working, and finally the pulp and paper industry. On this basic resource depends the commercial, agricultural and industrial economy of the province. Even the small farmer, growing enough merely to feed himself and his family, depends as a general rule on his woodlot for cash income. Generally speaking, the agricultural population of the province is poor and backward, with the notable exceptions of the Saint John river valley market gardening, the Sussex dairy farming area, and the potato belt of Carleton and Victoria Counties. The mass production methods of the industrial revolution have hardly touched the New Brunswick farmer, nor has he tried or been much encouraged to make use of the latest discoveries in agricultural science.

The only large industrial development of the province is pulp and paper, there being two establishments which compare with the large concerns of Ontario and Quebec. Large scale and complex as are the later processes in this industry, the basic process, the cut itself, does not lend itself to mass production methods; it remains essentially an operation dependent on the strength and skill of individual men. Only God can make a tree, and only man can cut it down, assisted by a few rudimentary tools such as axes and saws.

The chief resource of Nova Scotia is not so much the land over which it extends, but the sea which almost encircles it. All the provinces of

this corner of Canada are maritime, as their name implies, but Nova Scotia is sea-faring to the core. Its commerce, its industry, its agriculture, its history have been moulded by the seas as surely as its coastline. One of the chief industries is fishing, and it has been highly resistant to large scale highly centralized methods, whether cooperative or monopolistic. The size of the catch still depends, for the most part, on the strength, skill and luck of individual fishermen. Apple growing, notably in the famous Annapolis Valley is the only large scale agricultural industry; for the rest agriculture is mainly of the type noticed in New Brunswick of the small owner-cultivator with woodlot attached. Manufacturing, however, is on a different footing owing to one great natural asset which has made Nova Scotia different from the other Maritime provinces; namely, the coal fields of Cape Breton, happily situated within a short waterhaul of the Wabana iron ore deposits, and with ready access to the St. Lawrence water route to central Canada. Out of this combination has developed the production of steam coal on a large scale and a great heavy steel industry. This industry fed the railways of Canada when they were being built, and provided coal for the ships leaving Maritime ports. During the Great War of 1914-18 it met the need for steam coal for warships and merchantmen making up convoys in Halifax, and for heavy steel used in shipbuilding and armaments. In the post-war years both industries were dealt a heavy blow by the development of the internal combustion engine, and of oil and oil-derivative fuels. They suffered in consequence a decline in demand for their products, and felt the general depression keenly. Nevertheless, though losing ground to their Ontario competitors, they continued to develop, and with the outbreak of the present war resumed their historic rôle as prime providers of the sinews of war. This major industry has led to a greater variety of miscellaneous manufacturing on a smaller scale in this province than in the sister provinces.

The iron and steel and the pulp and paper industries constitute the only big processing industries in which the Maritimes have special advantages, and large as they are, these industries represent only a fraction of the total Maritime industry. The balance of it is extractive industry and manufacturing on a small scale in which the provinces have no special advantages. For these provinces never developed a dense population; settlers in really large numbers were attracted to the richer agricultural land of central Canada and the prairies. From the big markets thus established, Maritime industry was separated by a long rail haul and consequent high transportation costs. It catered therefore mainly to the local Maritime market, and its processing industries were thereby restricted both in variety and scale. Restricted they still remain, and one of their more difficult problems is to find the capital which would enable them to operate

by the most efficient large scale methods. As a result, instead of the concentrations of large scale industry found in the central provinces of Canada, with their reserves of skilled labour and managerial experience, one finds in the Maritime Provinces fishing, lumbering and agriculture as already indicated, and a few small scale industries like biscuits and confectionery—based originally on the West Indian sugar trade—cotton and woollen yarn and cloth, owing its development to the humid atmosphere which is peculiarly helpful to the easy manipulation of the threads (another gift of the sea) and boots and shoes (one of the earlier small processing industries catering to the local market which has survived, owing no doubt to the fact that it is profitable on a comparatively small scale). And there is further a population that, having owed its livelihood for centuries to its individual skills, and lived for the most part in small communities with a minimum of external or internal organization and authority, has developed a character which is highly individualistic, unusually inimical to regimentation, attached with a remarkable thoroughness to its native soil, and imbued with the conservatism that goes with geographical and spiritual isolation.

It is one of the curiosities of the Canadian scene that these people in this economic setting has its habitation on what is in effect the Maginot line of the Dominion. For the Maritime Provinces, together with Newfoundland, constitute a natural bridgehead for any invader of the North American continent. They have a three-fold strength. They command the approach to central Canada through the St. Lawrence. They flank the sea approaches to the great industrial seaboard of the United States. They possess in St. John and Halifax, the only ice free ports in the Dominion, and the latter's magnificent harbour furnishes the perfect site for the embarkation and reception of vessels of any and every size, of pleasure, commerce or of war. It is for this reason that historically, Nova Scotia and its sister provinces were the site of struggle between the French and the English not simply for control of the codfisheries but for control of defense posts, and later, a matter of eager concern on the part of the British government anxious to settle the area with soldiers and United Empire Loyalists, so as to ensure the unimpeachable loyalty of this bulwark of British security across the seas. The defense of these provinces together with that of Newfoundland is a condition of the successful defense of Canada, and their defense along with that of the West Indies is a condition of the successful defense of the United States. Economically they may be on the periphery, but strategically they are in the front line.

WAR-TIME EXPANSION IN THE MARITIMES

Even from such a bird's eye summary it is not difficult to anticipate what sort of effects a great war would be likely to have on the Maritimes.

Liverpool

Capital
lack

NB

One would expect to find great activity in construction for defense works, and troop accommodation; improvements in transportation, communications and port facilities; great increases in freights carried; a big development of the iron and steel industry and industries based on it, and great stimulus to the retail distributive trades. On the other hand one would not expect much purely industrial expansion, i.e. the development of new capital equipment in manufacturing industry. These expectations are borne out by an analysis of the statistics available, and by detailed on-the-spot examination of the Maritime scene, both of which methods were pursued throughout this study.

In fact, when war came and invasion threatened, the Maritimes, as the prime strategic area of Canada, became the site of defence works and troop concentrations, but the production of weapons and materials of war was centred in the area where industry already enjoyed every advantage of scale, efficiency, concentration and skill, namely, the central provinces of the Dominion.

The stimulus of the war to the economic life of the Maritimes is perhaps most vividly apparent from the figures for income—the Maritime regional income (or the total incomes of all persons in the Maritime region) seen side by side with figures for the national income for Canada as a whole.

It will be seen from the table below that the proportionate rise in income has been almost the same for the Maritimes as for Canada as a whole.

NATIONAL INCOME PAYMENTS TO INDIVIDUALS, 1938-1942 (000 Omitted)

	1938	1939	1940	1941	1942	Percentage Increase 1942 over 1938 All Provinces
P. E. I.	22,482	24,053	26,925	30,295	34,735	
N. S.	158,383	165,704	188,917	225,906	270,971	66 % ✓
N. B.	117,920	119,327	135,335	166,342	189,574	
Canada.	4,121,486	4,324,429	4,923,041	5,852,291	6,861,480	67.5%

This marked economic advance may be further observed in figures showing bank debits to individual accounts, building permits, and employment, all of which furnish useful indices of the economic trend. All show a similar rise, roughly equal to that for Canada as a whole.

If, however, we now examine the figures for percentage increases in business activity we find a marked difference in the rate of increase as between the Dominion and the Maritimes, the latter being appreciably and increasingly slower than the Dominion rate. There is here what looks like a discrepancy, or at least a striking contrast, the Maritime

income having increased at a rate equal to that for Canada as a whole, whilst Maritime business activity increased at a rate falling continuously and increasingly behind that of the Dominion. The explanation of this is probably two-fold: the Maritimes as a primary defence area have received large concentrations of troops with their dependents and income payments have consequently been increased more than in proportion to local business and industrial activity; in the second place, wages in the Maritimes were abnormally low, as compared with those of industrial central Canada, and war-time wage increases have been more than in proportion to increased employment and business activity.

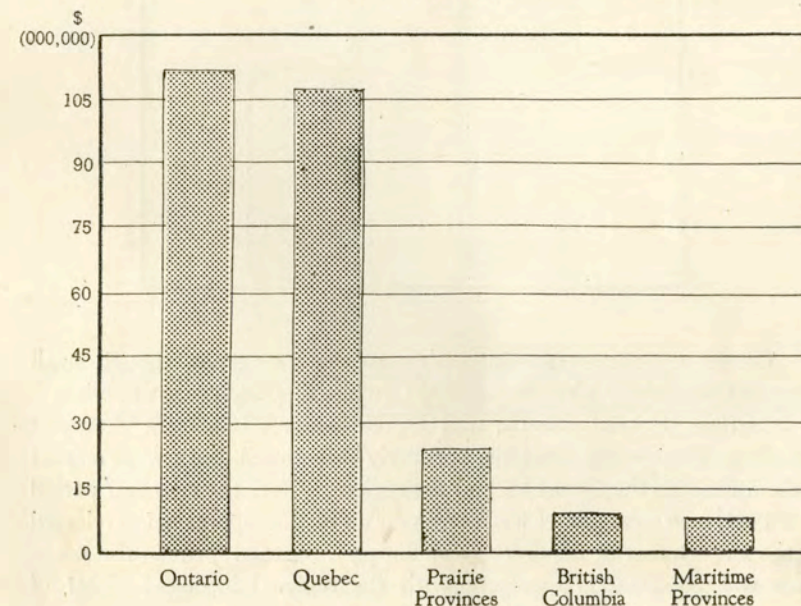
PERCENTAGE INCREASE IN BUSINESS ACTIVITY OVER 1939

	Canada (approximately)	Maritimes (approximately)
1940.	19	18
1941.	57	47.5
1942.	85	61

WAR CONTRACTS

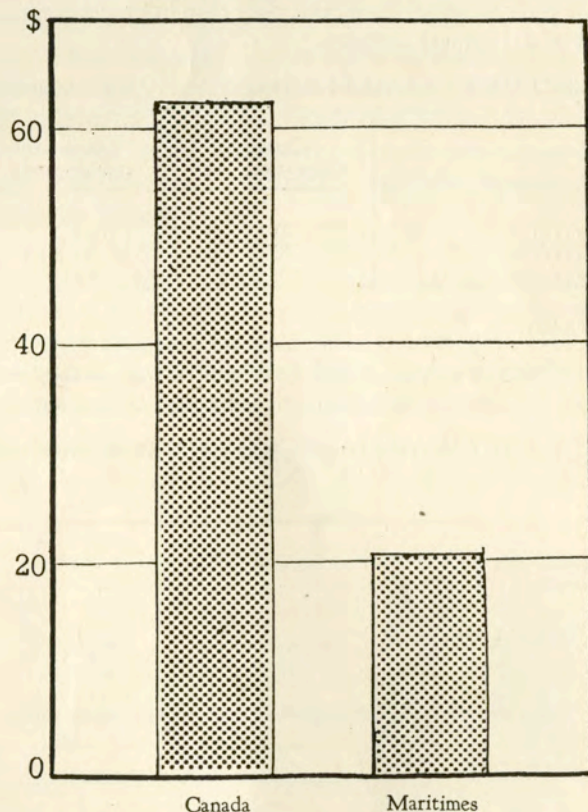
The tendency we have noted and which was already marked in pre-war days, for big accumulations of capital to concentrate in central

CHART I. CAPITAL ASSISTANCE TO INDUSTRY BY PROVINCES TO END OF 1940.



Canada, has been greatly aggravated by the war. The charts below show the concentration of capital assistance and government spending in central Canada as compared with the Maritimes and the western provinces. Government investment in big industry has naturally and rightly gone where big industry was already most profitably established.

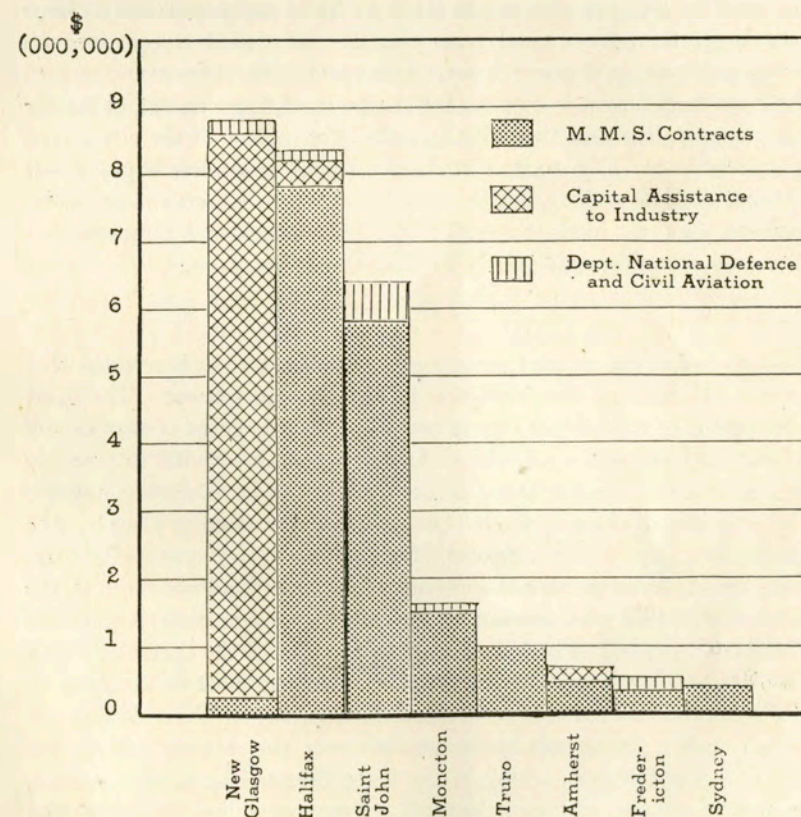
CHART II. M. M. S. CONTRACTS (Including Amendments) TO JULY, 1942.
Per Capita.



Dominion government war orders to the Maritimes, though small compared with those placed in central Canada, were significant in relation to Maritime regional income, and represented an important economic stimulus. They were, however, peculiarly distributed, both with respect to the industries they went to, and the regions. Over the two year period 1939-1941, (after August of the latter year no further figures being released by the Department of Munitions and Supply), the total spent in the Maritimes was \$56,000,000 (compare with the regional income in 1941 of

\$309,000,000); 51% of this or \$29,000,000 went for construction, and one-half of this again went into defence works, viz. the construction of airfields, roads, accommodation, earthworks, fortifications, the great bulk of which is of temporary use and value only. Of this spending a very high proportion went in wages to labor, and only a small proportion to the purchase of materials. The stimulus to Maritime manufacturing industry was therefore not nearly so great as might at first be supposed.¹ Further, since districts suitable as airfields and camps, etc., are few, the spending was highly concentrated in a small number of areas. The chart below reveals this concentration and indicates that probably only in Halifax, Saint John and New Glasgow did Dominion government war spending of itself constitute an important economic stimulus.

CHART III. DISTRIBUTION OF TOTAL CONTRACTS IN MARITIMES
BY DISTRICTS TO JULY, 1941¹



1. The multiplier effects of spending the wage dollar would be widely diffused, because of the number of manufactured articles which are imported by consumers in the Maritimes.

Significant though the spending of the Department of Munitions and Supply has been in the Maritimes as a stimulus to economic activity, perhaps the various troop concentrations, have, through their spending and that of their dependents, and of all those engaged in catering to their needs, proved even more important. For this sort of stimulus, like physical motion, communicates itself to adjacent economic groups; spending in one area, starts people in that area spending beyond that area in another second one, then that again starts up greater economic activity in a third area, and so on until the original stimulus is felt, though only perhaps mildly and spasmodically, in the remotest parts of the provinces. Thus Truro has gained by the proximity of Debert Camp, Moncton by the establishment of the R.C.A.F. station, the Sussex area and Fredericton by the presence of large bodies of soldiers; Saint John by her permanent fortress troops and the constant flux of incoming and outgoing troops. Halifax, as is well known, has accreted to itself an additional population as large as or larger than its original peace-time one; stationed troops, men on leave, men coming in or going by sea, all the vast numbers of men and women who have been drawn in to cater for the needs of these troops, or merely as relatives to live near them, have swelled the income of the city, given an unprecedented fillip to its distributive trades, and—less happy result—overstrained its welfare, health, educational and social services generally. Similarly, the great increase in rail traffic, both freight and passenger, has acted as a stimulus, particularly in Truro and Moncton.

TRANSPORTATION

Most of us are aware from personal experience and observation that the war has strained transportation facilities to the utmost. The great development of railway activity is both an economic effect of war stimuli and in itself a secondary stimulus to further economic activity, in precisely the same way as are the troop concentrations we have already noticed.

Some idea of the magnitude of expansion that has taken place may be derived from the revenue figures of the Canadian National Railway, which System operates all but some sixty-five miles of all mainlines in the Maritimes. In 1938 gross revenue for the Atlantic (or Maritime) Region was \$17,910,560; in 1942 it had risen to \$48,000,000, and the operating deficit of \$3,500,000 shown in 1938 had been converted in 1942 to a surplus of \$10,502,000. In the latter year twelve million tons of freight and three and one-half million passengers were handled over this region, and in the New Glasgow Division, taking in the Cape Breton Island railway lines, the average net tons of freight handled per day per mile of road increased from 1,334 tons in 1938 to 4,216 in 1942, despite the handicaps of heavy grades and curvatures.

Not only was this vast increase achieved, but it was achieved at much lower cost than before the war. This was due largely to foresight on the part of the railway system, which at the start of the war estimated what additions and improvements would be necessary to cope with the coming demands on railroad facilities, particularly in the Maritimes. Some \$7,500,000 was expended on capital account on the Atlantic region alone, which represented extensions to passing tracks; new terminal yards and extensions to others; new erecting shop at Moncton; centralized traffic control; main line coaling plants; new turntables; new engine terminal facilities at Halifax and extensions to other enginehouse terminals; new water tanks, etc.² In the ports of Saint John and Halifax 8,000 tons a day are being handled as against 3,000 tons before the war, which affords an index not only of freight carried to these ports, but of freight being turned over in them.

At this point we may note the very considerable developments which have been made by these ports, motivated almost entirely by the war stimulus. Halifax has built a new drydock, and introduced the "lighter" system in Bedford Basin to speed up the loading and unloading of cargo. In pre-war days she enjoyed the reputation of being the slowest port in the world to get a ship "turned round", but by the decasualization of dock labour, she has now to some extent systematized her handling of cargoes, and speeded it up. Saint John has also built a new dock, and a new dock for marine repairs. In Pictou, where there were two small permanent slips belonging to the old Pictou Foundry Company, four new temporary slips have been built large enough to take standard merchant ships and two more were in process of building in 1942.

So far we have considered Maritime economic expansion generally, trying to form some estimate of the magnitude and nature of the increase. We may now attempt to form some estimate of the incidence or distribution of this increase between the various industries. For this purpose, carloading figures³ afford one of the most valuable indices. These are given in tabular form below. It will be seen that the increase in freight loaded was considerably greater for Canada as a whole than for the Maritimes. (Table (a)). Freight loaded did, however, increase by about 33½% in the Maritimes; at first the manner of the increase was the levelling out of tonnage over the year, the seasonal low of winter rising continuously nearer the higher summer level. (Table (b)). Later an absolute increase for all months is evident. The pre-war seasonal fluctuation in carloadings, high in summer and low in winter, was, of course, due to the nature of

2. W. U. Appleton, Vice-President, Atlantic Region, C.N.R., in Industrial and Tourist Special Edition of the *Post-Record*, Sydney.

3. Carloading figures represent freight loaded in the Maritimes, as distinguished from freight handled, i.e. loaded and unloaded.

*Port of
Halifax
improve*

the products loaded in these provinces, which were predominantly agricultural and forest products. Owing to the war, steel products and general manufacturing have advanced very greatly in relation to agricultural products, and having no seasonal variation, they have had the effect of levelling off the seasonal loading figures.

A number of interesting facts emerge from the figures. The chief increase for Prince Edward Island has been in animal products; in Nova Scotia, manufacturing; in New Brunswick, forest products. For all provinces taken together, total manufacturing. A significant shift in production is revealed by the figures for animal products, when we compare them with those for agriculture generally: whereas the latter have made moderate gains in Prince Edward Island and New Brunswick, and actually a 25% loss in Nova Scotia⁴, animal products have risen by 50%, 33% and 55% respectively, a change which is the more remarkable when we remember that animal products did not form an important category of railway freight in the Maritimes before the war. It is, of course, to be explained largely by the Dominion and provincial governments' policy of encouraging animal production, especially hogs and beef cattle, and is attributable to governmental inspiration as well as market demand.

A further interesting development emerges from the figures of the increases being made in steel and forest products as contrasted with general manufacturing—expectation of probable results is confirmed by examination of actual data.

TABLE (a)
CARLOADINGS

	Total freight loaded		Percentage increase	
	Canada	Maritimes	Canada	Maritimes
1939.....	\$62,790,592	\$ 9,172,000	..	1
1942.....	91,864,796	12,433,000	50	33½

TABLE (b)
MARITIMES—MONTHLY AVERAGE
(in tons)

	Summer high	Winter low
1937.....	1,100,000	700,000
1938.....	825,000	630,000
1939.....	1,000,000	575,000
1940.....	1,100,000	850,000
1941.....	1,100,000	900,000
1942.....	1,200,000	1,100,000

4. Representing the decline in apple shipments.

TABLE (c)
PERCENTAGE ADVANCE 1942 OVER 1939

	P. E. I.	N. S.	N. B.
Manufacturing.....	50	75	53
Forest Products.....	..	50	133
Animal Products.....	50	33	55
Agricultural Products (total).....	50	-25	25
Mining Products.....	..	20	1
Steel Products.....	..	139	..

A CLASSIFICATION OF INDUSTRY

We see then how in general the war has stimulated the industries in which the Maritimes have special advantages, and the activities such as construction and shipping which are natural to their special defence position. Our study shows that Dominion War Contracts and all other war demands, alike, have stimulated construction for defence, shipping and transport services, that steel production and steel manufactures and shipbuilding have increased enormously as have products of wood, and that in agriculture the special war demands for meat and dairy produce have won precedence over (cereals, apples and root crops.) On the other hand the Maritimes have not participated to any extent in the industrial revolution to which the Prime Minister referred. Lacking the general } NB

- ① location advantages for mixed manufacturing, such as plentiful power,
- ② managerial experience and a supply of skilled labour and established large
- ③ scale plant, they could scarcely expect and certainly did not receive any appreciable quantity of the new plant and equipment that have so enormously expanded Canada's manufacturing. Likewise their industry has not been diversified as has the industry of the central provinces. The existing Maritime plant, with but few additions and changes, is being used—more intensively, it is true—in extracting and carrying out the basic productive processes in working up coal, iron and wood products; but, though these basic processes are now directed towards purposes of war, they are not essentially different from pre-war production. This contrasts with the variegated development of new processes in engineering, chemical, machine tool and motor industries in the central provinces. } NB

So far we have been viewing the general magnitude of the war impetus and the relative weight of its impact on the different industries. We wish now to examine in more detail the specific war-time effects in each of the chief industries.

As a starting point, and in so complex a matter we have to be rather arbitrary as to where we start, we may distinguish two general classes

the products loaded in these provinces, which were predominantly agricultural and forest products. Owing to the war, steel products and general manufacturing have advanced very greatly in relation to agricultural products, and having no seasonal variation, they have had the effect of levelling off the seasonal loading figures.

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Steel Products.....	..	139	..

A CLASSIFICATION OF INDUSTRY

We see then how in general the war has stimulated the industries in which the Maritimes have special advantages, and the activities such as construction and shipping which are natural to their special defence position. Our study shows that Dominion War Contracts and all other war demands, alike, have stimulated construction for defence, shipping and transport services, that steel production and steel manufactures and shipbuilding have increased enormously as have products of wood, and that in agriculture the special war demands for meat and dairy produce have won precedence over cereals, apples and root crops. On the other hand the Maritimes have not participated to any extent in the industrial revolution to which the Prime Minister referred. Lacking the general } NB
 ① location advantages for mixed manufacturing, such as plentiful power,
 ② managerial experience and a supply of skilled labour and established large
 ③ scale plant, they could scarcely expect and certainly did not receive any appreciable quantity of the new plant and equipment that have so enormously expanded Canada's manufacturing. Likewise their industry has not been diversified as has the industry of the central provinces. The existing Maritime plant, with but few additions and changes, is being used—more intensively, it is true—in extracting and carrying out the basic productive processes in working up coal, iron and wood products; but, though these basic processes are now directed towards purposes of war, they are not essentially different from pre-war production. This contrasts with the variegated development of new processes in engineering, chemical, machine tool and motor industries in the central provinces. } NB

So far we have been viewing the general magnitude of the war impetus and the relative weight of its impact on the different industries. We wish now to examine in more detail the specific war-time effects in each of the chief industries.

As a starting point, and in so complex a matter we have to be rather arbitrary as to where we start, we may distinguish two general classes

or categories of industry, divided according to how they have been affected by war-time changes in employment. There are in the first class the industries to which labour has flowed during the four years of war. For want of a better word we could call this group the "labour accretion" industries. The other group, to be called by contrast the "labour depletion" industries, is made up of those from which, over the four years of war labour has flowed away. About this classification it should be noted that in almost all industries the first effect of the war was to stimulate production and increase employment, the increase coming from employment of the previously unemployed and by working fulltime where previously only parttime work was offered. But as the war went on and the reserve of unemployment was fully used up and enlistments to the Armed Forces took more and more young men, further increases in employment in some industries could only come from the labour force in other industries. National Selective Service, with its proper regard for key war industries, and the way the wage ceiling fixed relative wages, both combined to draw men from one type of employment regarded as less essential for war to the more essential type of employment. Thus we find industries like steel and shipbuilding that have steadily increased employment over the four years of war, another group, like pulp and paper and textiles that increased employment until about 1941 and then either lost employment or were unable to make any other increases in spite of great need, and a third group like lumbering, fishing and most agriculture, that lost men all through the period. Both the second and third group we join together in the labour depletion class, because on balance their problems both now and after the war will be much the same. Now the advantage of this classification is that it enables us when assessing the effects of war on industry, to make certain judgments about the immediate post-war situation. When we examine the labour accretion group, industry by industry, we shall ask, what are the chances of this group maintaining their present level of employment after the war? Then when we come to the second group we can ask, has the war led to changes in these industries such that they can absorb more or less employment after the war? When they had to get along with less labour than they needed, did they succeed in devising schemes to economize on labour so that after the war they will not need to employ as many men as before per unit of output? To what extent can these war-time labour-starved industries take up the slack of employment that will undoubtedly arise when the direct war industries have to reduce their employment?

The overall increase in employment in the Maritimes is very hard to measure. The statistical index of employment shows an industrial increase of around 70%, but this does not include certain industries like

agriculture and, of course, is exclusive of men in the armed service. Our estimates, admittedly approximate, run something as follows:

INCREASES IN EMPLOYMENT IN THE MARITIMES, 1939-1943	
Steel and steel fabrication.....	7,500
Shipbuilding, boatbuilding and marine repair.....	6,300
Transportation services.....	5,000
Distribution, Trade and other services.....	16,000
Armed Services.....	80,000
Total, Labour Accretion Group.....	115,000
*Pulp and Paper.....	300
*Lumbering.....	1,800
*Mixed Manufacturing.....	4,000
*Construction.....	8,000
*Total increase in industries which gained in employment in early war years, and thereafter lost or failed to gain further.....	14,000
*Increase from 1939-41 only.	
Total Gain in Employment: Industry and Trade.....	50,000
Armed Forces.....	80,000
Total.....	130,000

Clearly these estimates are on the low side for the total employment increase is only about three-quarters what it should be according to the employment index. But an agreement of 75%, considering the difference in the way the estimates are made, is probably sufficient to justify our use of the estimates, except the figure of 16,000 for trade and services which is a pure guess, almost certainly too low.

It is impossible to say exactly where these 150,000 came from. Perhaps as much as three-quarters to four-fifths came from people not previously employed, the industrial unemployed, women and young persons. The balance, however, must have come from the farms and fishing villages that have lost population during the war years. This estimate would agree pretty closely with an independent estimate that as many as 25,000 male farm workers have left the rural areas. Thus, though all our estimates are admittedly rough, the general agreement of the independent estimates would support their approximate validity. Without making higher claims for them than this, let us accept them as a working hypothesis and go on to inquire as to whether the war-time effects on the individual industries have been such as to increase or decrease employment opportunities after the war.

PRIMARY AND SECONDARY EMPLOYMENT

Now there is a difference to be observed between the new employment in such activities as aircraft assembly or shipbuilding and that in

trade and services, or the manufacture of civilian goods. The first is primary, in the sense that it is the direct creation of war demand for the equipment and supply of the Armed Forces of ourselves and our Allies. But when men are employed in increased numbers in steel-making, they have more income to spend on various goods and services and so more people are employed on the *secondary level* to meet this increased demand. Thus of the new war employment, the men in munitions, steel, construction, shipbuilding, etc., as well as the armed forces, constitute the primary war employment. Also some of the new employment in transport and other services as well as in the manufacture of soldiers' clothing would be primary. But much of the increased employment in trade and distribution and other services and some of the increased employment in general manufacturing would be secondary, depending on the increased demand from the spending of wages of the new employment at the primary stage.

After the war, it is clear, the secondary employment will be maintained or not depending on what happens on the primary level. If all the returned soldiers are taken into employment, if all the men from munitions and other occupations at the primary level either remain there or are absorbed into alternative occupations, then their spending will remain high and so secondary employment will also be maintained. But if there is large scale unemployment, particularly in what is called the construction goods industries, if returned soldiers and war workers don't find peace-time work, then there will be additional unemployment on the secondary level. Consequently in what follows we concentrate our attention on the basic industries which afford employment to the Maritime people. If they can absorb the men seeking for jobs when the war is over, the secondary employment will take care of itself. If not, then general unemployment will develop. We turn then to the consideration of the war's effects on the major labour accretion group at the primary stage of war employment, the group of industries based on coal and iron or the heavy industries.

THE HEAVY INDUSTRIES:—IRON, STEEL AND SHIPBUILDING

There has been a tremendous increase in the steel capacity of the world during the war years and the Maritimes have had an important share of Canada's part of this expansion. Much of the world expansion has been in steel alloys and armour steels. In basic steel, in which the Nova Scotia industry is most interested, the world expansion has been less great, so that though the new alloy furnaces and rolling mill at Sydney may be found unprofitable to operate after the war, the main product may not be unduly affected by the increase of world capacity.

The expansion in the Maritime industry can be measured by the increase in employment and capital as shown in the following table.

WAR-TIME EXPANSION OF MARITIME STEEL AND STEEL-USING INDUSTRY. 1938-1942

Establishment	Increase in Capacity of Plant	Nature of Increase	Increase in Employment
Sydney—basic steel.....	25-40%	Open hearth and blast furnaces, rolling mill.	3500-5400
Trenton—New Glasgow—Basic Steel and Eastern Car.	100%	Shellfilling plant, machinery.	1300-3300
Halifax Shipyards—marine repair, shipbuilding.	50%	Machine shops, machinery, ships, repair dock.	375-2300
Pictou Foundry Machine—Foundation of Canada Ltd. Shipbuilding.	Several hundred per cent	Six temporary slips, machine shops.	50-1600
Saint John Drydock Marine repair. Shipbuilding.	10% in 1942 more since.	Machine shops, two slipways, small drydock.	300-1300
Canada Car Aircraft Division, Amherst.	All new plant.	Machine shops, Assembly sheds, power units.	2800

In so far as these are producers of munitions, demand for their product will probably be negligible after the war. The original product of New Glasgow and Trenton was, however, railway cars and rails and parts, and fishplate, and since production of these has been kept at a minimum during the war, there should be a lively demand for them with the coming of peace.

Maritime shipbuilding has been one of the most spectacular activities of the war, but in this case as in that of steel, it must be remembered that world shipbuilding, and world cargo capacity have expanded enormously. In the field of merchant shipping, the Maritimes cannot hope to compete with Britain in the post-war years, unless they receive a Federal subsidy. If—as is talked of in Britain—there is rationalization of the shipping industry, either by government or by industry itself through further trustification, and Great Britain makes a bid to recapture her former position as the leading shipbuilding country of the world, even a Federal subsidy would do little to relieve the competitive situation of the Maritimes. Present indications are that at least some naval shipbuilding will continue in Canada and that a small share of this will go to the Maritimes. The one or two Maritime shipyards equipped to produce ships of war must, of course, depend for the maintenance or expansion of their production after the war on Federal Government policy with regard to the navy, and the extent to which this navy is maintained or built up will in turn depend on world economic and military policy in the post-war period.

Steel

Shipbuilding

4000
1200
1300
1000
800
1400
10,000

Coal

It is idle to discuss the steel industries, however, without some consideration of the coal industry of Nova Scotia, which is basic to them. It presents a situation of great complexity with obvious and serious problems. The Cape Breton mines produce at an average rate of about 4,000,000 tons a year, and it has been calculated⁵ that they are capable of a net yield of about one billion tons of coal on a profitable basis, which at a rate of 5,000,000 tons a year, would give a probable life to the mines of about 200 years. This calculation depends however on the *status quo* being preserved, a matter of considerable doubt, as can be seen from a review of present economic conditions in Cape Breton and the mainland mines.

Production has risen as high as 7,000,000 during the period of war demand, but dropped as low as 3,500,000 tons during the depression. Of this production in a typical peace-time year about 75% goes to the Quebec market, and 25% to the Maritimes, the bulk of the latter to the C.N.R. and the steel plant at Sydney. The Quebec quota can only be maintained in competition with British and American coal by means of a federal subsidy paid to the railways equal to the difference in cost between the water haulage *via* the St. Lawrence and rail haulage, which amounts to as much as \$2 a ton. This weakness of the industry is aggravated by the fact that during this war, as during the last, Cape Breton coal is diverted in such large quantities from the Quebec market to use by the railways, steel plants and ships of the Maritimes that Quebec has to find a substitute supply,⁶ and when the war is over, and Cape Breton coal again seeks entry to the Quebec market, it will no doubt find difficulty in doing so, as in the previous post-war period. A further threat to the industry which was felt after the last war, that of competition from hydro-electric power, is not likely to be serious this time, since there has been much improvement in the generation of electricity from steam, and similarly improvements in furnaces both for commercial and domestic use have rendered the competition of oil as a coal substitute much less menacing to the industry.

On top of difficult marketing problems, the Maritime coal industry has serious production problems. It is a high-cost industry, owing mainly to three causes: drillings are long and deep; mechanisation not adequate; and labour stoppages too frequent. These factors appear to be intimately bound up together. Thus, though there are technical difficulties involved in the distance from the face of the coal seam to the pithead, ventilation at great depth, the maintenance of adequate stratacover or "roof" in submarine workings, and great haulage distance, all these can be met and

5. F. W. and R. Heath Gray, "The Transactions of the Mining and Metallurgical Institute," Vol. 44, 1941, pp. 289-300.

6. In 1942 only 1½ million tons was available for export to Quebec, after supplying Maritime demand, and only half could be sent by ship, owing to the necessity of convoying in the St. Lawrence.

resolved, as long as the cost remains low enough to make mining profitable. Also mechanical devices could be extended if labour would accept them, but the Dominion Coal Company assert that the men have opposed them through their trade union. This opposition, like that of the frequent labour stoppages, can only be fully understood when the sad, embittered history of the Cape Breton mines and miners is read, for wages are not low, but the highest of all industrial wages in the Maritimes. Long though the potential life of the mines may be on paper, the industry does in fact depend on a wasting asset,⁷ with a precarious and fluctuating market; men must work at great distances from the pithead, under the ground and under the sea; when times are bad, they are thrown out of work and little is done to keep them alive and nothing to preserve their morale; their numbers are increasing, and mining can scarcely sustain them, so that increased mechanisation would aggravate the tendency to under-employment or unemployment. With varying degrees of clarity the miners see the future in the instant; sense, perhaps, rather than estimate the slow but certain decay of their traditional source of livelihood, and the failure of the company or anyone else to provide any alternative employment for them; their past history is dark with hostilities between themselves and management and the general public; their future clouded with fear. With these groups as with many other striking workers, it may be observed that the "forgotten" men of depression days make themselves bitterly and often unfairly remembered in days of national crisis by driving a hard and even "unpatriotic" bargain.

On this industry depends the steel industry of Nova Scotia, and the mammoth concern of DOSCO or Dominion Steel and Coal Corporation. For this industry the low cost of its ore is offset by the comparatively high cost of its coal, and also the industry failed to develop a dependent and varied engineering industry such as exists in Germany, Great Britain, the United States and Ontario. This deprives the industry of flexibility; it is primarily dependent on two or three main types of demand, railway equipment, steel wire and structural steel. The war, as we have seen, has added a little to its flexibility, giving it rolling mills, additional electric furnace capacity for light alloy steels. But much of the new war-time equipment will not be adaptable to post-war needs. Of course one cannot foresee post-war demand, but with the increase in world capacity it would be optimistic to assume that the Maritime industry would feel much stimulus from European reconstruction. On the other hand, even with a minimum of protection, the Maritime industry should get a good share of Canadian reconstruction and the proposals made by the C.N.R. to the

7. This is more emphatically true of the mainland mines, where technical difficulties are greater, and the mines nearer the margin of profitable production.

remedial flex brit

NB

Post-war

Committee on Reconstruction suggest a big scale programme of railroad refitting and development. Thus the optimistic view that the steel industry can continue to operate after the war at something better than its 1939 rate of operation (the best of peace-time years) can be taken if we assume that government accepts as part of its reconstruction policy a programme for the railways such as the C.N.R. proposed. Failing the adoption of such a programme the steel industry will relapse into stagnation.

But even if basic steel is able to carry on at a high level of employment, we must expect the direct munitions production, the aircraft division and the shipbuilding to decline about to nothing, and in this group we should have to expect unemployment of about 8,000 persons. These will be added to returned men from the Armed Services. We have now to inquire what chances there are of their employment in other industries.

FOREST INDUSTRIES

We need not, however, anticipate an employment absorption problem of as much as 90,000 men, i.e. 80,000 from the Armed Forces and nearly 10,000 from primary war industry. Many of the new workers are women who will marry or for other reasons may not want to remain in employment. Many of the returned men—and there are, unhappily, casualties to be allowed for—will not seek immediate employment; they will be going back to the schools and universities they left to go to war. Others will want to go to other parts of Canada. Some will want to stay in the Armed Forces for some years at any rate, especially if Canadian troops are used in policing central Europe. A fair estimate of the number requiring more or less immediate employment would be 40,000 persons. To what extent can these be absorbed in the other leading industries of the Maritimes, forest industry, the fisheries, agriculture?

The forest industries, including pulp and paper, sawn lumber, shingle and lath mills and woodworking have been the most important group of industries in New Brunswick, playing as we have seen a determining role in the province's economic history, and in the Maritimes as a whole they rank just after agriculture and the heavy industry group as the most important occupation. The pulp and paper industry, moreover, is one that has shown rapid development in the Maritimes and that appears, in spite of power shortages, to enjoy special advantages in these provinces. There is every reason to believe that if the industry is generally healthy the Maritime section of it will be able to enjoy a full share of the business. Thus the crucial question is whether the pulp and paper industry is apt to enjoy a healthy future. Prior to the war there were some who thought that Canadian pulp and paper capacity was overdeveloped, that newsprint demand was failing to expand and that the industry was not in a healthy

position. There was reason for such pessimism, but the war has brought changes. On the production side the technical advances of the war period have developed all sorts of new uses of the product, particularly of wood cellulose, and some by-product utilisation, still more or less experimental, has been worked out. This, both by giving more varied uses for wood pulp which increases demand, and by lowering production costs, should improve the expectation of profitable operation of existing plant. Also on the production side has been the extensive cutting of European forests by the Nazis. How great this has been we do not know, but there is reason to believe that for some years, while the European countries are re-establishing their forests, the European cut will be small, so that the Baltic cut will go largely to the European market. On the demand side, is the fact that the war has cut off England and the United States from European sources of supply and has established Canadian newsprint very firmly in these two great markets. Thus the war has probably put the Canadian industry in a very strong competitive position which should mean, as long as we avoid a general industrial depression and collapse, a very healthy activity in this industry. Because of shortage of forest labour the mills have had to cut production since 1941 to about 80% of capacity. At capacity production the mills might absorb an additional 400-500 men in the Maritime region, and a very much greater force, perhaps 1500 men, in the woods. But the difficulty however, will be to attract men to forestry at the relatively low wage scale now prevailing. Yet it is doubtful if the competitive advantage now enjoyed by the Canadian industry could be maintained if any very great wage increases were paid in the woods. A possible solution of the difficulty lies in improving forestry methods. High wages cannot be paid in the woods if by reason of inaccessibility of merchantable stands, other costs are high. But if the forests were economically used, it is possible high wages could be paid, yet costs per cord of pulpwood kept low. At present in Maritime forests there is some avoidable waste of forest because of poor cutting methods, and no very serious effort has been made to cut the forest so as to keep accessible stands in continuous production. A possible reconstruction scheme in the Maritimes would be a forest development programme, including forest roads, insect and fire protection, and the organization of the cut on a basis of scientific silviculture. There is very little need in the Maritimes, except here and there for river or soil conservation, of artificial reforestation.

The lumber industry, itself, once the mainstay of the Maritime economy, has not had the prosperity it had before the days of the Panama Canal. Long in the doldrums it failed to develop after the last Great War and suffered very acutely during the depression. This war, however, has brought it certain advantages apart from the obvious expansion in

new uses

forests

lumber

8000 workers unemployed

40,000 Maritime

Pulp and paper

output, limited only by shortage of woods labour. The demand for wood, cut and processed in a variety of ways for many new uses, has given the Maritime industry a much greater variety. It has developed plant and skills in precise dimensional cutting and woodworking, in veneers and plywood, and in processing the wood in a multitude of forms. This might lead after the war to the development of plywood, furniture and other wood-using industries in the Maritimes. Moreover the anticipated Dominion housing scheme is estimated to require wood and wood products in such quantity as to provide labour in the Maritime region alone for an additional 2,000 men. Once again the limitations are imposed by shortage of trees of suitable types in accessible stands, a shortage caused partly by insect damage (in the case of veneer woods) and partly by wasteful cutting methods. If we assume a policy of reform in silvicultural methods, and assume, too, the carrying through of the housing project we might expect increased employment in Maritime lumbering and wood-processing industries of 3,000 persons. In addition to this the forest development and conservation programme should give employment to as many as 1,000 to 2,000 men, which, with the pulp and paper possibilities, yields a grand total of possible employment in the Maritime forests and forest-using industries of from 5,500 to 7,000.

THE FISHERIES

The Maritime fisheries, once the very foundation of the regional economy, the source of its being, indeed, have gradually sunk in relative importance, until their value output—about \$13,000,000 in 1937—was by far the smallest of the other major Maritime industries. The industry was a depressed industry at the outbreak of war, with annual money income derived from catching and processing fish in the shore communities averaging less than \$300 per man. Part of the difficulty of the Maritime industry was the low capitalisation. Bigger and better boats are able to range further, to stand out in all weathers and so maintain a steady catch and bring it to shore in good condition. The Maritime industry, highly individualistic, was too much characterised by small and ill-conditioned boats. It was undercapitalised and overmanned. Moreover too little processing was done in the Maritimes. The value of packed and processed fish from the Maritimes was only a little more than one-tenth of the value of the catch, showing that, apart from salt-cured fish, little processing of the catch was attempted. Of course these facts do not of themselves fully account for the depressed condition of the industry. It suffered from a fall in demand in the export markets for salt fish and from the general depression of the 1930's.

The war has led to a great reduction, perhaps 40%, of the labour force engaged in fishing. This is partly accounted for by the demand of the naval and merchant service for sailors, but largely by the much higher wages to be obtained in various war industries than in fishing. This reduction in labour force was accompanied by some potential, rather than real, loss in market for salt fish, for though the Nova Scotia industry did not sell largely to Europe, the Newfoundland catch, which did, came to compete with the Nova Scotia catch in Central and South America. But the reduction in labour force and other war changes have not been on balance a bad thing for the industry. Reduction in manpower has necessitated extension in capital improvements, and a reversal of the typical Nova Scotian attitude of resistance to the introduction of modern fishing craft. Moreover problems of marketing fresh fish and the greater relative importance of the fresh over the salt fish catch has led to an organisation of marketing that has cut across the individualistic pre-war methods. Though prices were rising and access was obtained to high price markets, it was difficult to bring in the catch, process and ship it. The Dominion Government has intervened to improve the labour supply, and to assist in the reequipping of the industry and the marketing of the catch. The results of these changes should be to give the industry a much better chance to afford a decent living to fishermen after the war. But it is unlikely that the industry can absorb any very great quantity of the post-war labour surplus. The shortage of labour is acute now, but since the trend towards higher capitalisation is now perhaps established, it is possible that after the war the industry will use more capital rather than more men. If the catch is improved and the demand is not too upset by the reintroduction of French and Norwegian competition, it may be that more employment will be offered in the shore plants for handling the catch. Thus, though we may look for an improvement in the fisherman's lot, we cannot expect this and a big absorption of labour at the same time. War effects in this industry have been beneficial to welfare, but in a way that is not compatible with any immediate large scale expansion of employment after the war.

AGRICULTURE

The biggest war-time drift of employment has been from agriculture to construction and war industry. Can Maritime agriculture absorb the surplus when it is no longer needed to meet the industrial demands of war?

During the depression the rural population of the Maritimes increased for the first time since the turn of the century. The industrial opportunities of the big cities no longer attracted the young people from the farms

Many, even, drifted back. Though the farm income was low, at least it provided food, fuel and shelter. Thus the farm population increased, while, with low demand for foodstuffs, the cash income decreased. The *per capita* farm income decreased even more abruptly, and great areas of Maritime farm country became subsistence farms, yielding food and fodder for family and livestock, wood for the kitchen stove, and little else. Most Maritime farms were, already, of the mixed subsistence farming type, a few animals, a small tilled area in mixed crops, and a woodlot, the only cash producing section of the farm. As often as not the farmer was also a lumberman, a fisherman or a miner, and it was not usual that such divisions of his labour resulted in very great success as an agriculturalist. There were exceptions: potato growing in Prince Edward Island and Carleton and Victoria counties in New Brunswick; horticulture in the Annapolis and Saint John valleys; dairying around Truro and Sussex; all areas of great specialisation and commercial farming. On this agricultural economy the war has had two principal effects, (a) the draining off of the surplus labour and (b) a changeover in the type of crop. The reduction in labour has, with rising prices for foodstuffs, greatly improved the *per capita* farm income, given the Maritime farmer for the first time in a generation a standard of living comparable to that obtained in industrial occupations of like skill. Labour shortages have also brought about increased mechanisation, particularly in dairy farming, and more intensive, more modern and more scientific methods. This means not only better conditions for the farm population now, but a more promising future after the war.

The war-time emphasis on dairy and meat products has resulted, as we saw earlier, in a large expansion of these products, which have been expanded to some extent at the expense of other produce. Of the more specialised Maritime crops, fox furs and apples, particularly the latter, have declined, potatoes have shown only a moderate increase. The expansion of dairy output has been limited by labour scarcity, and in some areas the increase in output was sharply restricted on this account. But hog-raising, sheep and beef cattle do not make the same demands on human labour. The increase in herds, the improvement of stock, artificial insemination and better methods of feeding and breeding, all in response to war-time demand, have greatly increased the productivity, the profitability and the potentiality of Maritime agriculture. Moreover, not only is the mixed farm the better for the addition of hogs and sheep for cash income, but the introduction of stock to the highly specialised apple and potato farms is regarded by many experts as a wise step. Beef cattle in particular do not require a large labour force, and they relieve the farmer of complete dependence on a single export crop like apples or potatoes. The Maritimes

are regarded as good livestock country and there is no problem of marketing as the domestic market alone is capable of taking nearly 100% increases in dairy products and certain meats. War-time improvements in local slaughtering conditions are an important contributory reform in the development of a domestic meat industry.

Thus the war-time developments in Maritime agriculture have been beneficial in the sense that they have brought not only a temporary improvement in farm incomes, but have taken the form of permanent improvements in methods and types of crop. There is, in these changes, the promise of a more prosperous agriculture in the post-war era. But this promise will hardly be fulfilled if the farm is regarded as the natural repository for all who cannot find work elsewhere. The very changes that have brought improvement, have lessened the need for agricultural labour, for example by increased mechanisation in dairying, and the possibility of a decent farm income is reduced if that income has got to be spread over eight or ten persons instead of four or five. There will be a temptation, if farming seems more prosperous, to open land settlement colonies and to try to put returned soldiers on the land. The possibilities of development in this direction, however, would not appear to be very great. Successful land settlement requires good land, when once it is cleared, special qualities of skill and patience and sustained governmental assistance until the new land is steadily productive. There is little undeveloped land of such promise in the Maritimes, and there will be few returned soldiers with the skills and aptitudes requisite. Some small development of this sort is possible, but there are probably greater possibilities in cooperative forest community schemes. Naturally some of the farmers' boys now in the Army and in industry will want to go back to the land, and there may be settlement schemes on carefully selected land on a small scale. Maritime agriculture can absorb a considerable number of such men, but any attempt to crowd the farms with the whole unwanted surplus of industry would result in the depression to 1935 level of Maritime agriculture and also a general depression with great unemployment on what we have called the "secondary level." If, as we suspect, upwards of 25,000 have left Maritime farms and rural communities, it is probable that from 5,000 to 10,000 could be reabsorbed to the profit of agriculture, for a real labour shortage now exists. But to attempt to settle many more than that on the land would not solve the unemployment problem—it would fail to sustain the level of secondary employment, and it would force down, once again, the level of farm incomes and welfare below the minimum of decent life.

CONSTRUCTION

If agriculture and fishing together could absorb 10,000 men, and the forest industries and forestry 7,000, there would remain, on the basis

5-10,000

of our estimates about 23,000 requiring immediate post-war employment if the general level of income and production is to be maintained and further unemployment on the secondary level prevented. Maritime miscellaneous manufacturing which we do not propose to examine in this brief account, could not be expected to afford employment opportunities to many. Transportation we have already allowed for in our estimates of the absorption capacity of the steel industry serving the railways. There remains construction. Now construction activity is regarded by economists as the key point in keeping up general economic activity. On the one hand construction stimulates all the supply industries like mining, steel production, the cement industry and the forest industries. On the other hand it is a big employer of labour and so through wage payments it stimulates demand for consumer goods. If, as many believe, Canada adopts a policy of big scale public investment as insurance against post-war depression, much of the spending will be on construction, for roads, bridges, schools, hospitals, universities, houses, civic centres and other works of social importance. The Maritimes have great need of many of these projects. They need houses and slum clearance, consolidated schools, hospitals, community centres, roads. They will certainly receive an allotment, based no doubt partly on population and partly on general need, of whatever sums are spent. Such work may afford employment to as many as 15,000 men,⁸ both directly in construction and indirectly from the stimulus of such construction spending—though we should note here we have already allowed for its indirect effects both in the steel and lumber industries.

Thus there would probably remain in the Maritime area a sizeable surplus of 8,000 men or thereabouts seeking immediate employment after the war. In spite of the improvements the war-time developments have brought to Maritime industries, to the heavy industries, to the forest industries, to fishing and agriculture, improvements which spell an improved standard of living, the Maritimes would be unable to absorb in profitable employment the full post-war surplus. It might be noted that our figure of 8,000 corresponds pretty well with the number of young people who, had they not gone into the Army, would normally, in good times, have migrated from the Maritimes. This surplus could, as in the depression years, stay in the Maritimes, but only, we repeat, at the loss of the improved living standards now possible.

Now in Canada as a whole the war has created new industries and new employment possibilities. The public investment programme will probably be calculated to stimulate full employment over the country

8. The size of this figure will, of course, depend on what the Federal government decides to spend. This is probably the maximum figure.

as a whole. Thus there arises the problem of assisted and directed population transfers. Not only might some of the Maritime surplus require assistance in moving to areas of greater employment possibilities, but, it is clear, within the Maritimes themselves certain transfers will have to be made. Population transfers are dangerous things if not well handled. If on any scale they run the risk both of creating problems in the areas into which the people are moved; they also endanger the continued well-being of the communities from which they come. Given care, imagination and skilled assistance, they are possible to the benefit of both communities, that which receives the population and that from which it comes.

CONCLUSION

The war, we have seen, has stimulated economic activity in all Canada, and the Maritimes have shared the general prosperity engendered by war. The regional income has increased by 60% and this has brought a higher level of welfare to the people, giving full employment at wages, which, in general, approach a reasonable standard of subsistence. But the war-time stimulus has been more marked in construction for defense, in transport, general services where troops are concentrated, and in iron and steel, than in general manufacturing or agriculture, and there has been little development or permanent expansion of Maritime resources and productive capacity. Yet, though the Maritimes have had little share in the sort of industrial expansion characteristic of Ontario and southwestern Quebec, the war-time changes are not entirely ephemeral. In fishing, and more markedly in agriculture, trends towards more highly capitalised and more efficient production methods have been established, and in agriculture a sounder crop programme has been encouraged. As long as these industries escape "labour dumping" after the war they should enjoy some permanent benefits from the war's effects. Steel, too, may not suffer a complete let-down when the war is over, and the forest industries, though like steel depending on a governmental reconstruction programme, should be capable of some expansion.

Yet this optimistic view depends on social and economic policy. If there is failure to make a wise international settlement and no resumption of international trade, if there is failure in Canada itself to carry out sound employment and investment schemes after the war, the general trade stagnation would affect the Maritimes cruelly. Thus the future of the Maritime Provinces is not so much a matter of regional policy and "provincial rights" as it is part of the national and international problem of reconstruction. In the field of Dominion-provincial relations the economic effects of the war have been to show the hollowness of claims for

provincial autonomy. The welfare of Maritime people engaged in agriculture, fishing and manufacturing depends on the prosperity of all Canadians. The condition of the pulp and paper industry depends on the freedom to sell in England and the United States. Steel, coal and forest products will be profitably produced at decent wages in the Maritimes only if a full employment programme of public investment is carried out by a Dominion government with full fiscal authority. This implies a unification of attitude as well as authority in post-war Canada, an acceptance on the part of the people of the Atlantic provinces of their place in the national whole, a realisation that their future is now intimately bound up with that of the Dominion, and a reciprocal realisation on the part of the people of the centre that no country can afford to allow certain regions to suffer economic stagnation, poverty and destitution while other areas are prosperous and comfortable,—for a Federation is no stronger than its weakest province. Unified strength may require the sacrifice of some old prejudices and regional loyalties, just as adequate reconstruction will demand continued economic regulation and high taxes. Yet to secure a prosperous and happy future for a unified Canada, such sacrifices are not heavy, and small indeed compared with those that our young men are making to-day to win for us the freedom and the right to determine such a future for ourselves.

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