

1919.
NEW ZEALAND.

BOARD OF TRADE

(THIRD ANNUAL REPORT OF THE).

Presented to both Houses of the General Assembly in accordance with Section 11 of the Cost of Living Act, 1915.

To the Right Honourable William Ferguson Massey, P.C., President, Board of Trade.

WE have the honour to present the third annual report of the Board for the year ending 31st March, 1919. (In cases where action was nearing completion in respect of certain subjects dealt with, the steps taken have been brought up to date.)

As was the case last year, the work of the Board for the period under review has consisted mainly in inquiries into matters affecting the cost of living, and especially upon questions relating to the supply, demand, or price of commodities, and into complaints that the prices of particular classes of goods are unreasonably high. Special attention was paid during the year to the importation, sale, and distribution of petrol; to a scheme for the standardization of footwear; to the placing of restrictions on the export of timber; and to a comprehensive inquiry into the coal industry. These matters are dealt with in detail later on in this report.

Two hundred and sixty complaints were received regarding the high prices of commodities. These complaints were investigated and, wherever in the opinion of the Board it was deemed desirable, adjustments of prices have been made. In addition the Board received eighty-one deputations and examined 242 witnesses.

A wide range of commodities has been under the control of the Board, and no upward movement in prices has been sanctioned without full investigation. In addition to fifty-seven main grocery items comprising household essentials, the Board has kept control of manufacturers' prices in grocery lines, such as soap, condensed milk, sugar, candles, jams, matches, baking-powder, canned meats, &c.

The prices of bacon, wheat, flour, bread, bran, pollard, hides and skins, and petrol have been fixed by Order in Council; and, by arrangement with the federated sawmillers throughout the Dominion, no increase in the price of timber has been made since the 1st November, 1918. Detailed references to these commodities will be found later in this report.

Generally speaking, the applications made by merchants and tradespeople for increases in prices have been well founded, but in a few instances the Board has refused to grant such applications where, after close investigation of the evidence and balance-sheets submitted, the circumstances did not appear to warrant the granting of the increases. The consumers' interests have been closely watched by the Board in dealing with prices.

SECTION I.—TRANSACTIONS OF THE BOARD.

WHEAT, FLOUR, AND BREAD.

On the 1st April, 1918, the price of good milling-wheat was governed and its distribution among mills controlled under an Order in Council gazetted on the 22nd December, 1917.

Under this scheme of control (full details of which were published in Appendix B of last year's report) the Government became the purchasers from the farmers of good milling-wheat at the following scale of prices:—

A. Good milling-wheat grown in the South Island:—

1. Sold for delivery free on board at the nearest port—
 - (a.) In January, February, or March, 1918, 5s. 10d. per bushel.
 - (b.) In April, 1918, 5s. 10½d. per bushel.
 - (c.) In May, 1918, 5s. 11d. per bushel.
 - (d.) In June, 1918, 5s. 11½d. per bushel.
 - (e.) In July, 1918, 6s. per bushel.
 - (f.) In August, 1918, 6s. 0½d. per bushel.
 - (g.) In or after September, 1918, 6s. 1d. per bushel.
2. Sold for delivery otherwise than free on board at the nearest port—
A price equivalent as regards the seller to the prices aforesaid.

B. Good milling-wheat grown in the North Island :—

1. Sold for delivery free on board at the nearest port, being Wellington, Wanganui, New Plymouth, Napier, Gisborne, or Auckland—

The same price as that of good milling-wheat grown in the South Island and sold for delivery free on board at the nearest port, with an addition of 4d. per bushel.

2. Sold for delivery otherwise than free on board at the ports aforesaid—

A price equivalent as regards the seller to the price aforesaid

The wheat was resold to the millers at 1½d. per bushel in excess of the above prices, and each mill was limited to a quantity based on a consideration of its trade during the previous three years. The quantity of New Zealand wheat so handled was 4,925,162 bushels. It became evident during the year that there was not sufficient New-Zealand-grown wheat of suitable quality to supply the Dominion's consumption of flour. Accordingly, on the 13th June, 1918, the Board submitted a report to you recommending the purchase of 2,000,000 bushels of wheat in Australia. This recommendation was agreed to by the Government, and it was determined to entrust the negotiations with the Australian Wheat Board to Mr. A. Shirlcliffe, of the Canterbury Farmers' Co-operative Association, Timaru. While Mr. Shirlcliffe was in Australia a census was taken in New Zealand of the winter sowing of wheat for next season, and this showed that it was not safe to rely on more than 200,000 acres being sown. On the 16th July, 1918, a cable was received from Mr. Shirlcliffe stating that the Australian Wheat Board offered the New Zealand Government 2,000,000 or 4,000,000 bushels at 5s. 7½d. per bushel f.o.b. Williamstown. After consultation with the Acting Prime Minister and the Acting President of the Board it was resolved to cable to Mr. Shirlcliffe to complete the purchase of 2,000,000 bushels, and to secure an option over a further 2,000,000 bushels at the same price, the option to remain open for as long a period as it was possible to arrange. The Australian Wheat Board granted an option expiring on the 12th August, 1918. By this date it was known that the total acreage under wheat in New Zealand for the 1919-20 season would be approximately 200,000 acres. Estimating the yield from this area at the average of the last ten years—namely, 28 bushels per acre—the yield could be expected to amount to 5,600,000 bushels. As New Zealand requires for all purposes approximately 7,000,000 bushels, it seemed probable there would be a shortage during 1919-20, and to provide against this contingency the option already referred to was duly exercised. Formal contracts covering these two purchases were made with the Australian Government, under which the New Zealand Government undertook to pay for the wheat against each shipment in exchange for shipping documents, and to lift at least 1,000,000 bushels every six months from the 1st August, 1918. No charges are to be made by the Australian Government for interest, insurance, or storage. The shipping arrangements in connection with the lifting of the wheat, and its sale to and distribution among New Zealand millers, was placed in the hands of the Wheat Controller (Mr. W. G. McDonald).

Like the previous purchase made personally by the Hon. W. D. S. MacDonald, Minister of Agriculture and Acting President of the Board of Trade, this purchase of 4,000,000 bushels compares more than favourably with those made by other countries. The Australian Wheat Board did not endeavour to extract from New Zealand the highest price they could have obtained on account of the conditions in New Zealand. Our necessities were such that, had the Australian Wheat Board demanded a higher price, New Zealand would have been compelled to pay. As both the purchase by the Hon. Mr. MacDonald (at 5s. 6d. per bushel, sacks in) and the purchase effected by Mr. Shirlcliffe (at 5s. 7½d. per bushel, sacks in) have been adversely criticized, it is only fair to state that Australia was able to obtain from South Africa 6s. 9d. per bushel, from the United States 6s. 4d. (sacks extra), and sales were effected to other countries as high as 7s. 3d. per bushel f.o.b. Williamstown. Recently the Press reported sales of second-quality Australian wheat to Japan at 5s. 7½d. f.o.b. New Zealand millers acknowledge that the quality supplied under the Minister's purchase was the finest that ever came to New Zealand, and that the quality at present being supplied is but little inferior, the inferiority being due to the vagaries of the season.

The control, sale, and distribution of both Australian and New Zealand wheat have entailed no expense whatever to the Government.

PRICES OF WHEAT, 1918-19 CROP.

From November, 1917, to April, 1918, the Board was in constant communication with the Government and the wheatgrowers as to the price of wheat to be fixed for the 1918-19 crop, and eventually an arrangement was come to between the growers and the Government at a conference held in Christchurch on the 9th April, presided over by the Hon. W. D. S. MacDonald, that the Government should guarantee 6s. 4d. minimum with an open market. Had this offer resulted in a sufficient area being grown that could reasonably be relied on to satisfy New Zealand's requirements on the experience of prior years there would have been no necessity to exercise the option over the second 2,000,000 million bushels of Australian wheat. In December, in view of the fact that the Government were purchasers of Australian wheat, and intended to control the price of flour and bread, it was impossible to give effect to the exact terms of the arrangement made with the farmers, and consequently the Government determined to take over the crop from the farmers at a fixed price of 6s. 6d. per bushel f.o.b., allowing the usual increments of ½d. per bushel per month from May to October, and to continue the scheme of control through the Wheat Control Office, which had worked satisfactorily during the previous year. The scheme as gazetted on the 25th February, 1919, is in all respects, with the exception of price, identical with the scheme published as an appendix to last year's report, and therefore is not repeated here. The Government has been criticized for this departure from the arrangement made in April, as it is alleged that, had the original offer been adhered to, producers would have got considerably more than 6s. 6d. per bushel for their wheat. While it is true that the April arrangement was not strictly adhered to, growers of wheat did not suffer thereby. The season turned out to be a phenomenal one, and the yield per acre one of the highest on record. As

most of the wheat grown was of a Tuscan variety, farmers would probably have found a difficulty in disposing of it at exceeding 6s. 4d., the minimum guaranteed by the Government. Furthermore, the price at which Australian wheat could be landed in Auckland (approximately 6s. 5d.) would have determined in a free market the price of New Zealand wheat f.o.b. Lyttelton, for clearly the southern millers could not have afforded to have given, under open-market conditions, more than the equivalent of this price f.o.b. southern ports and have competed successfully with the Auckland millers in the disposal of their flour. On the assumption that the Australian wheat could be landed in Auckland at 6s. 5d., the equivalent price f.o.b. southern ports for New Zealand wheat would not have exceeded 5s. 11d. to 6s. 1d., according as to whether the Auckland purchasers were able to buy over line or through store. If purchases could be made over line the price of southern wheat would not have exceeded 5s. 11d., if through store 6s. 1d. If allowance is made for the duty on Australian wheat it would raise the New Zealand price by approximately 6d.; therefore it is clear that the Government paid the New Zealand farmer the full market value for his wheat.

FLOUR AND BREAD.

The fact that wheat-prices rose, in comparison with last year, by 8d. per bushel necessitated an adjustment of flour and bread prices. Consequently, in February, 1919, the Board reported to the Government as follows:—

“(1.) The decision of the Government to pay the farmer 6s. 6d. per bushel for good milling-wheat for the current season raises the price of wheat to the miller by 8d. per bushel, as last year's price was 5s. 10d. per bushel.

“(2.) Bran and pollard, being by-products necessarily created during the process of milling, a reasonable price for flour can only be determined after taking into consideration the prices obtainable for the by-products.

“(3.) Assume that on the average 48 bushels of wheat produce 2,000 lb. of flour, 500 lb. of bran, 300 lb. of pollard, 80 lb. of waste: then on last year's prices as fixed by *Gazette* of the 16th April, 1918, the miller obtained for his manufactured products the following gross return per 48 bushel of wheat:—

	£	s.	d.
2,000 lb. flour	15	10	0 (f.o.b. South)
500 lb. bran at £5 10s. per ton	1	7	6
300 lb. pollard at £7 10s. per ton	1	2	6
	18	0	0
Less 2½ per cent. discount	0	9	0
	£17	11	0

“(4.) It is assumed that the prices fixed last year were reasonable; and this year the following increase must be faced:—

	£	s.	d.
(a.) Increase in price of wheat, 8d. per bushel	1	12	0 per ton.
(b.) Increase in price of sacks, from 10½d. to 1s. 5d.—fifteen sacks being required per ton of manufactured product	0	8	2
“ In addition to these items, which are certain, the millers claim—			
(c.) Increase in wages and salaries payable by miller	0	5	0
(d.) Increase in interest and insurance proportionate to increase in value of wheat and manufactured products	0	1	10
(e.) Increase in price of coal, oil, belting, twine, silks, repairs, and renewals (estimated).. .. .	0	3	0
	£2	10	0

“(5.) These increases would justify the following prices: Flour, £18 per ton; bran, £6 per ton; pollard, £8 per ton: and would give the miller a return per ton of manufactured product—

	£	s.	d.
2,000 lb. of flour	18	0	0
500 lb. bran at £6 per ton	1	10	0
300 lb. pollard at £8 per ton	1	4	0
	20	14	0
Less 2½ per cent. discount	0	10	9
	£20	3	9

“(6.) To put the millers on the same footing as last year a ton of manufactured product should realize £17 11s. (last year's return), plus £2 10s. (increase cost): total, £20 1s.; so in the suggested prices the miller would be 2s. 9d. per ton better off.

“(7.) In the North Island the above prices would be increased by the cost of transit, approximately £1 per ton.

“(8.) A rise of £1 5s. per ton of flour justifies the bakers in increasing the price of the 4 lb. loaf by ½d. Therefore a rise of £2 10s. will increase the present bread-prices throughout New Zealand by 1d. The bread-prices at present range from 10d. to 1s., according to locality, and in the main centres are as follows: Auckland, 11d.; Wellington, 11d.; Christchurch, 10d.; Dunedin, 10d.

“(9.) If as a matter of policy it is held to be undesirable to allow bread-prices to increase, then in the opinion of the Board the best plan to adopt is to subsidize the miller. As New Zealand uses

It should be noted that the whole of the 1918-19 Cuban crop of *raw* sugar, involving from three and three-quarter to four million tons, has been purchased on behalf of the Allies on the following terms :

For delivery to America, £27 8s. 9d. per ton, cost and freight.

For shipment to the United Kingdom, France, and Italy, £25 13s. 4d. per ton f.o.b. Cuba.

Reviewing all the circumstances, the Board considers that the agreement effected is decidedly in the interests of consumers in New Zealand, ensuring, as has been pointed out, sugar being supplied at a price cheaper than in any other country in the world. The price agreed upon by the company has meant a sacrifice by it on New Zealand's consumption of £400,000 for the year as compared with New South Wales. As was the case last year, no complaints were made to the Board regarding sugar-prices.

TIMBER.

As a result of representations that had been made regarding the difficulty experienced by users of timber in New Zealand in obtaining their necessary supplies, the Government decided upon the policy of restriction of the export of timber in order to ensure that the export should be limited to the quantity produced in excess of that required for use within the Dominion. For the purpose of carrying out this policy, regulations were issued and published in the *Gazette* of the 6th August, 1918 (see Appendix A). The administration of these regulations was entrusted to the Board of Trade, the Commissioner of State Forests being the Minister charged with carrying the regulations into effect, and provision was made for the appointment of an advisory committee to assist the Board. An advisory committee consisting of four representatives of the sawmillers, two representatives of the timber-merchants, two representatives of the building trade, and one representative of white-pine users, was therefore duly appointed. It is due largely to the public-spirited manner in which this committee has dealt with all matters submitted to it, and to its sound advice, that the Board has been able to administer these regulations to the satisfaction generally of all parties concerned.

These regulations were based on the principle that the quota for Dominion use out of a sawmill's production should be allotted to each mill, and that export should be allowed of the quantity produced in excess of that quota. Provision was also made by which any sawmill or group of sawmills might supply to the New Zealand market quantities of timber in excess of its Dominion quota, and that by agreement, subject to the approval of the Minister, other sawmillers nominated by them might, to the extent of such excessive supply, be relieved of their obligation to supply timber to the New Zealand market. This provision was made in order to afford sawmillers an opportunity of arranging between themselves as to the particular mills from which the Dominion supplies should be obtained, subject, of course, to the right of the Minister to decline to agree to any arrangement that would result in causing a shortage of timber in any particular locality. This anticipation was not realized, however, as a number of non-exporting mills endeavoured to use their exporting rights, which they had no intention of exercising, to obtain from exporting sawmillers some monetary payment. Instances were brought under the notice of the Board in which the rights of sawmillers to obtain exporting permits were offered to the highest bidder among the exporting millers. With a view to overcoming this difficulty the regulations were in February last amended (see Appendix B) by excluding the provision relating to transfer of permits by agreement among sawmillers, and substituting therefor power to the Minister to cancel any permits not exercised within a given time and reallocate the quantities for export to sawmills whose exporting-rights were insufficient to permit of their conducting their business. In reallocating these cancelled permits special consideration is given to those sawmills so situated geographically as to be unable to place timber on the New Zealand market at payable prices, and also to those operating on Crown leaseholds that are being cleared for farming purposes. In the latter case it is recognized that the milling of the bush provides a certain amount of income by way of royalty towards the clearing and grassing of the land, and at the same time removes from the land the big trees, with the result that a cleaner burn is subsequently obtained.

Statistics collected by the Board show that there are at present operating in New Zealand 277 sawmills. Complete returns of output for the year ended 31st March, 1918, have been obtained, and these produce the following figures :—

Kind.	Total produced.	Sold in New Zealand.	Exported.
	Sup. ft.	Sup. ft.	Sup. ft.
Rimu	111,318,579	88,875,298	27,583,235
White-pine	63,136,665	36,260,400	31,455,704
Kauri	21,835,023	19,552,692	10,454,494
Totara	13,387,038	13,518,126	57,337
Matai	11,930,040	12,374,501	493,964
Beech	4,466,116	3,663,578	916,094
Taraire	228,377	146,743	..
<i>Pinus insignis</i>	1,501,274	1,476,929	..
Totals	227,803,112	171,868,267	70,960,828

(NOTE.—Apparent discrepancies in this table, especially in regard to kauri, are due to stocks in hand.)

As the operations of practically the whole of the sawmills have been restricted during the war period owing to the lack of suitable labour, it is certain that the output will materially increase in the near future when, as a result of demobilization, the men return to their former occupations. This increased output will, however, to a large extent be met by the increased consumption in the erection of buildings.

The regulations were applied to the various kinds of timber as follows :—

WHITE-PINE.

Immediately after the regulations were gazetted a return was called for, from each sawmill showing the names of persons to whom quantities of white-pine in excess of 50,000 ft. had been supplied during the twelve months ended 31st March, 1918. Upon receipt of these returns a communication was addressed to each of the white-pine users so disclosed, requesting information as to the estimated requirements of white-pine for the ensuing twelve months. These figures showed the total anticipated Dominion consumption for the twelve months ending 31st July, 1919, to be 36,535,000 ft., comprised as follows: Butter-boxes, 9,941,000 ft.; cheese-crates, 9,323,000 ft.; casks, 4,379,000 ft.; general, 12,892,000 ft. This total quantity represented approximately 60 per cent. of the total estimated output, and on this basis the restrictions were put into operation as from the 1st December, 1918, each sawmill being required to supply to the New Zealand market 60 per cent. of its total output, subject to arrangement between the sawmillers as previously referred to. The effect of fixing the quota on a percentage basis was to restrict the output of each sawmill to a quantity 66 per cent. in excess of the quantity from that mill that could be disposed of in New Zealand: *e.g.*, to justify the production of 100,000 ft. New Zealand orders for 60,000 ft. must be in sight.

At a later date the Board were advised that it was not the policy of the Government to delay the cutting of white-pine from land that was suitable for agricultural purposes, as it was desired as far as possible to assist progressive settlement. In order to meet this position and at the same time to ensure that there would be no shortage of supplies for the New Zealand market it was decided that the system of fixing the quota of white-pine be altered, and that each sawmill be allotted a definite quantity that must be supplied out of its production to the New Zealand market, a permit to export being given for all timber produced in excess of that quantity.

As a result of the enforcement of the regulations the difficulty previously experienced in obtaining supplies of white-pine for Dominion use has disappeared, and inquiries recently instituted disclose that the whole of the white-pine users are at present holding full stocks.

With a view to conserving for itself supplies of white-pine for butter-boxes, &c., the Northern Dairy Association, which represents practically the whole of the dairy companies in the Auckland District, is at present negotiating for the purchase of suitable blocks of timber, and proposes to install its own sawmilling and boxmaking plant.

Experiments with a view to discovering a substitute for white-pine for butter-boxes are continually being made, and several proposals have been brought under the notice of the Board. A box has recently been patented by an Auckland sawmiller, built of white-pine veneer, which it is claimed contains only about one-eighth of the quantity of white-pine at present used in each box, and which can be produced somewhat more cheaply than the price at present ruling for butter-boxes. The Dairy Division of the Department of Agriculture are conducting practical tests to prove its suitability or otherwise for the export trade.

RIMU.

The restrictions on export were applied to rimu as from the 1st April last, the quota for Dominion use for the three months from 1st April to 30th June, 1919, being fixed at 75 per cent. of the total quantity of rimu produced. Statistics that had been collected indicated that the New Zealand market would consume this percentage of the output for that period. The effect of fixing the quota on this percentage basis was that as production increased the quantity available for export would also increase. The following returns compiled by the Customs Department for the years ending 31st December in each case show that the export of rimu has been increasing at an alarming rate :—

Year.	Quantity Exported in Feet.					
1913	..	..	..	..	..	8,515,000
1914	..	..	..	..	..	13,007,000
1915	..	..	..	..	..	14,195,000
1916	..	..	..	..	..	15,312,000
1917	..	..	..	..	..	22,167,000
1918	..	..	..	..	..	30,391,000

(NOTE.—The export during 1913 would be affected by the strike.)

In view of the position as disclosed by these figures, it was decided that the basis of fixing the export quota should be altered, and as a result, for the period from 1st July, 1919, to 31st March, 1920, the amount for export from the whole of the mills in New Zealand has been fixed at a definite quantity, this quantity being allocated by the Board among the various exporting mills. The exportable quantity will be reduced each succeeding year. Increased production will therefore mean an increase in the amount available for use in New Zealand. There is at present a very keen demand for building-timber, and any increased output can be absorbed by the New Zealand market. Inquiries recently made indicate that in some localities the production of timber is not sufficient to supply local requirements. Although permits have been issued in accordance with the Board's allocation of exporting-rights, a special condition is attached in all cases reserving the right to the Board to cancel permits in the event of any local shortage existing. The Board is therefore in a position to ensure that the full requirements of the Dominion for building-timber will be met, provided that the

demand is not in excess of the production. The possibility of increasing production is wholly dependent on the supply of suitable labour, and sawmillers are at present experiencing the greatest difficulty in securing such labour; in a number of cases it has not yet been possible for mills to recommence operations that were discontinued when labour was withdrawn for the Expeditionary Force.

KAURI AND BEECH.

In the matter of exporting-rights, kauri and beech are being dealt with on the same basis as rimu.

TOTARA.

A market is available in New Zealand for the whole of this kind of timber produced, and no permits for export have been or will be granted.

MATAI.

The restrictions on the export of matai apply only to heart, for the whole of which New Zealand offers a market. The poorer classes of matai find no market in New Zealand, and consequently no restriction has been placed on the export.

PRICE.

In imposing a restriction on the export it was also considered necessary to limit the price that could be demanded for timber sold in New Zealand, and action was taken by the Board accordingly under the powers vested in it by the Cost of Living Act, 1915. An investigation into the sawmillers' costs of production showed that, so far as the sawmiller was concerned, no undue profits were being made, and an undertaking was given by the sawmillers, through their representatives on the advisory committee, that the prices ruling on the 1st November, 1918, would not be increased without the Board's consent. This arrangement still continues in operation. Competition resulting from the restriction of export and consequent increase in supplies on the New Zealand market will tend to prevent any undue increases in prices.

COAL.

The shortage of supplies and comparative high price of this commodity resulted in many complaints being made to the Board. Whilst the distribution of available supplies was attended to by the Coal Boards set up by the Government, the Board of Trade dealt with complaints as to prices. Grave labour unrest seriously threatened supplies, and an industrial crisis was averted only by action being taken by Cabinet in granting increased wages to the miners. Following allegations as to exploitation and profiteering in the industry, the Board in September last was authorized and empowered by Warrant issued by His Excellency the Governor-General under section 6 of the Cost of Living Act, 1915, to inquire into and report upon the following matters:—

- (1.) The present cost of the production and distribution of coal in New Zealand.
- (2.) Any increases in the cost of such production or distribution since the commencement of the present war, and the causes of such increases.
- (3.) Whether the profits made in the production and distribution of coal are fair and reasonable.
- (4.) Whether the selling-prices of coal are fair and reasonable.
- (5.) Whether increased economy or efficiency can be obtained in the production and distribution of coal, and, if so, in what respects and in what manner.
- (6.) All other matters affecting the supply or price of coal.
- (7.) The increases since the commencement of the present war in the cost of living so far as such increases affect men engaged in the production of coal, distinguishing between increases, if any, prior to and subsequent to the industrial agreements made in the coal industry in the year 1917.
- (8.) The increases since the commencement of the present war in the earnings of men engaged in the production of coal, distinguishing between increases, if any, prior to and subsequent to the said industrial agreements.

The Board held sittings at Auckland, Huntly, Glen Massey, Wellington, Christchurch, Dunedin, Invercargill, Nightcaps, Kaitangata, Greymouth, Runanga, Blackball, Westport, Denniston, Millerton, and Ngakawau, and heard evidence from 112 witnesses, comprising coal-mine owners, managers and secretaries of coal companies, mine-managers, coal-merchants, dealers, and mine-workers. Considerable evidence was also taken regarding the cost-of-living side of the inquiry from storekeepers and other tradesmen in the mining districts relative to changes in prices of commodities. The taking of the evidence was completed on the 28th January last, and the Board completed its report on the 20th May. This report has already been published, and will be presented to Parliament in due course. A summary of the chief findings and recommendations of the Board upon the order of reference submitted to it is as follows:—

REFERENCE NO. 1.—THE PRESENT COST OF THE PRODUCTION AND DISTRIBUTION OF COAL IN NEW ZEALAND.

(i.) The cost of production is analysed in Chapter II, pages 24–31, of the Coal Report,* and the chief data summarized in Tables 16 to 24.

The average cost of production at the mines of coal from all the principal collieries of the Dominion for the year 1917–18, taking into account the different outputs of the several mines, was approximately

* The chapters and tables indicated in this section of the report relate to chapters and tables in the Coal Report, H. 44A.

15s. 4d. per ton. This does not include the cost of railway haulage from the mine to port of shipment in the case of those mines (on the West Coast and in North Auckland) which reckon this cost in when fixing their selling-prices.

Of this cost about 7s. 1d., or 46 per cent., was paid directly to manual labour employed in and about the mines.

The cost of producing bituminous coal was about 17s. per ton, the labour cost being nearly 7s. 3d., or about 42 per cent. of the total; of semi-bituminous, 14s. 5d., including a labour-cost of 8s. 2d., or nearly 57 per cent.; of brown coal, 13s. 1d., the labour-charge being 8s., or nearly 60 per cent. of the total cost.

(ii.) The cost of distribution of coal at the time of the inquiry (September to January, 1918-19) is estimated for the chief centres in Chapter III, pages 38, 44, 48, 52, and 54 (see in particular Tables 35, 36, 38, 42, 43, 46, 47, 48, 54-56, 58, 63, 65, and 70, and their immediate context).

The freight-charges vary according to the distances. The costs per ton of retailing the standard household coals were as set forth in Table 88.

Table 88.—*Distributing-costs of Standard House Coals, 1918.*

Centre.	Railage or Freight.		Wholesalers' Gross Profit		Retailers' Gross Profit.	
	s.	d.	s.	d.	s.	d.
Auckland	7	11	6	9	7	9
Wellington	9	7	2	5	15	0
Christchurch (i)	15	0	4	6	12	6
" (ii)	13	6	3	0	11	0
" (iii)	5	9	5	3	9	0
Dunedin	6	7	..	..	9	0
Invercargill	6	0	..	..	9	6

The gross profits are analysed in the text into their constituent parts—bagging and loading, delivery into yard, yard expenses, delivery to consumer, overhead and other expenses, net profits.

REFERENCE NO. 2. ANY INCREASE IN THE COST OF SUCH PRODUCTION AND DISTRIBUTION SINCE THE COMMENCEMENT OF THE PRESENT WAR, AND THE CAUSES OF SUCH INCREASES.

(i.) *Increase in the Cost of Production of Coal, 1913-14 to 1917-18.*

The average mining-cost per ton increased at every one of the principal mines except at one, where abnormal and increasingly favourable working-conditions ruled. The total cost of production per ton of coal mined at all the mines, giving returns for every year of the period 1913-18 inclusive, increased about 41 per cent., or 4s. 10d. per ton.

Taking into account the cost at all the mines, whether giving returns for all the earlier years of the period or not, the increase in the cost of production was about 31 per cent., or 3s. 7d., a ton. This latter figure underestimates the actual rise in the cost of production of all coal produced over the period.

The cost of mining bituminous coal at all mines giving data for every year increased about 43 per cent., or by 5s. 5d. a ton; at all the mines from which exact particulars were obtained, by 40 per cent., or 4s. 9d.

The corresponding increases in the mining-costs of semi-bituminous coals were 13 per cent. or 1s. 6d. a ton, and 31 per cent. or 3s. 5d. a ton. The mine showing a decrease in the cost during the period was one producing semi-bituminous coal.

The corresponding increases for brown-coal production were 70 per cent., or 8s. 4d. a ton, and 25 per cent. or 2s. 7d. a ton. Certain new brown-coal mines came into operation after the beginning of the period under review.

The analysis of cost of production is shown in Chapter II, pages 24-31 (see Tables 15 to 24 and context).

The increases in the cost of production have been made up of increases in every separate item of cost, and have been caused by rises in the prices of materials and the labour necessary, increased taxation, and diminished output due to a reduction in the number of mine workers, the smaller output increasing the share of standing charges for each ton raised. In the case of a few mines industrial disputes and a slight falling-off in the output per miner have tended to increase cost.

The cost of production per ton due to the wages of manual labour in and about the mines increased at those mines giving returns for every year of the period by 31 per cent., or 1s. 10d. a ton—that is, by an amount equal to 38 per cent. of the increase in the total cost of production. If account be taken of the labour-cost per ton of all coal concerning which exact particulars were given, whether produced at mines giving returns over the whole period or not, the increase in the labour-cost is 20 per cent., or 1s. 2d. a ton, an amount equal to 33 per cent. of the increase in the total cost of production. The increase in the labour-cost of production of all coal mined in New Zealand during 1913-18 may be estimated at a little more than a third of the increase in the total cost of production at the mines.

The changes in the cost of stores and materials per ton of coal raised ranged from a decrease of about 2d. at one mine to an increase of 1s. 8d. at another. The corresponding range for maintenance and renewals was 11d. decrease to 1s. 9½d. increase: for rates and taxes, 2d. decrease (State mine)

to 1s. 9½d. increase; for administration, 11½d. decrease to 1s. 1½d. increase; for royalties and rents, 4½d. decrease to 3d. increase; and for depreciation and sinking-fund charges (actually made), 1s. 2d. decrease to 8½d. increase.

The relation of lost time to cost of production and output is discussed on pages 31–34.

(ii.) *Increase in the Cost of Distribution of Coal, 1913–14 to 1918.*

This cost has increased everywhere as regards both costs of transport and the costs of conducting wholesale and retail businesses.

Chapter III, section 1 (ii), pages 36–7, deals with changes in transport-costs since 1913. Railage has increased 21 per cent. The general increase in shipping-rates cannot be so definitely measured by a percentage, because of the unequal distribution over the various routes of the particular increases. New Zealand coastal rates advanced from 42 per cent. to 55 per cent.; Newcastle rates by about 52 per cent., on the average. (A recent rise—March, 1919—of 3s. 6d. per ton, or over 21 per cent., on the rates from Newcastle to the chief ports has not been included in this estimate.) The increased cost of transport has been caused by rises in the prices of bunker coal, labour, stores, victualling, and the general costs of working ships. The increased cost per ton of working coal-ships in the New Zealand coastal trade between 1914 and 1918 amounted to nearly 50 per cent.

Dealers' costs have increased because siding and yard rents, the wages of carters and yardmen, the price of sacks, of horse-feed, of repairs and renewals, of gear, and general expenses have all risen, some of them very considerably; and also to a large extent because the shortage in the supplies of coal, necessitating delivery in small lots, has greatly increased the cost of delivery per ton to the consumer. Table 70A (p. 55) shows the amount of the increase in the cost of distribution of standard household coals during the period 1913–18 at the largest centres, distinguishing between transport, wholesale, and retail increased charges. The detailed estimates of the increases are summarized in Tables 37, 39–42, 44–45, 47, 49, 51–53, 56–57, 59–62, and 66–69, and their context.

REFERENCE NO. 3.—WHETHER THE PROFITS MADE IN THE PRODUCTION AND DISTRIBUTION OF COAL ARE FAIR AND REASONABLE.

(i.) *Profits in Production.* (See Chapter IV, Section 1, pp. 56–61.)

The annual average differences between the average selling-price per ton and the average cost per ton to the several mining companies over the whole period range from a loss of 1s. 11d. to a gain of 1s. 10d. (See Table 73, p. 57.) In four cases out of thirteen principal collieries there was a loss on the average; in two cases the average profit was less than 6d.; in two cases between 6d. and 1s.; in four cases between 1s. and 1s. 3d.; and in the other case 1s. 9–93d.

If the increase in the average selling-price for the industry as a whole be calculated from the available data in the same manner as the increase in the cost of production it is found that the selling-price of those mines for which data is available over the whole period 1913–18 increased, when due allowance has been made for relative outputs, by 36 per cent.—i.e., from about 14s. 3d. to 19s. 5d. per ton. This figure is to be compared with that showing the increase in total cost of production—viz., 37 per cent.*

When we compare the selling-prices of all coals for which exact details were available in each year, whether from collieries working over the whole period or not, the increase in selling-price is 22 per cent. This figure, however, as in the case of cost of production, does not give a true measure of the change of the price of all coals, since the selling-prices and cost of the mines for which exact particulars were not available for 1913 were on the average lower than those of the mines providing data for that year. This figure was lower during 1914–15–16 than in 1913. In 1916–17 it rose 11 per cent. above the 1913 level, and in 1917–18 22 per cent. The selling-price of bituminous coal increased 35 per cent. (3s. 2d.) during the period, though the cost rose 40 per cent.; that of semi-bituminous coal rose 34 per cent. (5s. 7d.), or slightly more than its cost; that of brown coal 22 per cent. (2s. 7d.), as against a rise of 25 per cent. in cost. The increase in the price of brown coal for 1917–18 when compared with 1913–14 (a better basis of comparison in view of the incomplete data for brown-coal mines for 1913) is 30 per cent. (3s. 1d.), the corresponding increase in cost of production being 31 per cent.

If the properly weighted average selling-price be compared with the corresponding average cost of production for the mines giving returns for the years 1913–18 the margins between cost and price are 9d. and 10d. a ton for 1913 and 1918 respectively, or 5·6 and 4·5 per cent. of the cost of production. A comparison of the similar margins for all mines giving data, whether over the whole period or not, shows a reduction from 9d. to 5d. a ton, the latter representing 2·2 per cent. of the average cost.

Table 75A (p. 58) summarizes the chief facts regarding average cost of production, selling-prices, and profits per ton for the coal-mining industry as a whole, 1913–18.

The mining companies have not increased their gains from the industry during the war period relatively to their costs. It is further to be noted that in many cases certain charges are not sufficiently provided for in their costs.

Of the twelve principal coal-mining companies the highest average annual dividend for the last six years is 10 per cent. (earned by a company which for seventeen years, 1880–97, paid no dividend at all); the lowest average is nil. Of the twelve, two paid an average dividend of from 7½ to 10 per cent.; two from 5 to 7½ per cent.; four of from 2½ to 5 per cent.; one paid below 2½ per cent.; and three paid no dividend during the period.

* The comparison is with the increase of 37 per cent., not that of 41 per cent. (see p. 26), since the mining companies have to pay out of their selling-prices the cost of haulage from mines to shipping-ports.

The average rate of dividend paid during the period, weighted according to the relative sizes of the capitals of the different companies, was 4·8 per cent.

The average rate of total gains made by the companies—that is, including undivided as well as divided profits—was 5·1 per cent. Out of this the industry has to provide interest to the shareholders, and a large part of the insurance, depreciation, and sinking-fund charges.

The general conclusion is that the rate of profit made in the production of coal, taking the industry as a whole, is unduly low.

A large amount of capital invested in coal-mining in New Zealand in the past has been lost without making any returns to the owners.

(ii.) *Profits in Distribution.* (See Chapter IV, Section 2, pp. 61–2.)

It is assumed that the question of the reasonableness of distributors' profits refers to coal-dealing in existing conditions and with the present methods of distribution.

The general conclusion is that, except in the case of those dealers who are engaged in the retail trade on a large scale, the difference between the cost of coal to the dealers and the price received by them affords but a mere living to those engaged in it. The profits of the retail dealers cannot be assessed as exactly as those of the mining companies, because of the mixed nature of the business conducted by them, but the evidence does not support the charge that they are unreasonably high. Estimates of the net profits per ton at the several centres are given in Chapter III, Tables 38, 41, 46–47, 54, 56, 62, and 70, and context.

Profits in the transport of coal appear to be higher than in mining or retail distribution. For the period 1914–17 the profit earned on the carriage of coal in certain typical parts of the New Zealand coastal trade appears to have ranged from 1s. to 1s. 3d. a ton, from which depreciation, sinking fund, and periodical overhaul charges have to be deducted. These profits would have been much higher if the shipping in question had availed itself of the many opportunities for much more profitable work abroad during the war period. Higher margins of profit were undoubtedly earned by foreign-owned shipping carrying coal to the Dominion.

REFERENCE NO. 4.—WHETHER THE SELLING-PRICES OF COAL ARE FAIR AND REASONABLE.

This question has already been answered in the last section. There is no doubt that the price of coal could have been raised much higher than it actually was during the last two winters, in view of the competition of consumers for the diminished supplies, but for the influence of public opinion, the action of the local Coal Committees set up by the Ministry of Munitions and Supplies, and the pressure in certain cases brought to bear by some of the leading colliery-owners and large distributors upon the general body of retailers in the direction of discouraging proposed increases in retail prices. In many cases the smaller dealers largely dependent upon coal suffered considerably through prices not rising sufficiently to return them working-expenses.

REFERENCE NO. 5.—WHETHER INCREASED ECONOMY OR EFFICIENCY CAN BE OBTAINED IN THE PRODUCTION AND DISTRIBUTION OF COAL, AND, IF SO, IN WHAT MANNER.

As this question has been discussed in sections 2, 3, and 4 of this chapter, pages 86–90, it is not necessary to repeat the recommendations specified there.

REFERENCE NO. 6.—ALL OTHER MATTERS AFFECTING THE SUPPLY OR PRICE OF COAL.

These also have been included in an earlier section of this chapter. Without undue repetition we should like to emphasize here—

- (i.) The necessity for State encouragement of scientific research and its application to the problem of coal-mining and the utilization of the small coals of the Dominion. A much fuller advantage may be taken of the work done and the advice given by the State Geological Department, and the University colleges should receive generous financial assistance in the development of research.
- (ii.) The equal importance of an improvement in the industrial organization of labour at the mines and in its general social environment, particularly in respect of housing and better educational facilities.
- (iii.) Systematic technical education in the domestic use of coal so as to diminish considerably the present great waste due to ignorance of the possibilities of small and mixed coals, and of the proper methods of stoking ovens and grates.
- (iv.) Discouraging every form of inflation of the currency, which inevitably leads to rising prices at the expense of the poorer members of the community.

REFERENCE NO. 7.—THE INCREASES SINCE THE COMMENCEMENT OF THE WAR IN THE COST OF LIVING SO FAR AS SUCH INCREASES AFFECT MEN ENGAGED IN THE PRODUCTION OF COAL, DISTINGUISHING BETWEEN INCREASES, IF ANY, PRIOR TO AND SUBSEQUENT TO THE INDUSTRIAL AGREEMENTS MADE IN THE COAL INDUSTRY IN THE YEAR 1917.

This section of the inquiry presented special difficulties, which, owing to the abnormal character of the period during which the Board was conducting its investigations—i.e., the period of the influenza epidemic—we were not in a position altogether to overcome. (See Chapter VI, section 1, p. 77.)

From the data at its disposal the Board estimates the increase in the "expenditure on living" at the minefields from 1913 to about September, 1918, to be about 35 per cent. at the most. Table 87 shows how this increase is distributed over the five standard classes of expenditure.

A more intensive investigation is necessary.

The chief factors tending to counterbalance the rise in the cost of living have been the increases in the rates of wages to mine workers, which, together with improvements in the conditions of their work, increased opportunities of employment, and in some cases a longer working-year, have resulted in substantial additions to their actual annual earnings. In the case of many of the underground workers the additional earnings have fully compensated for the rise in the cost of living even at the pre-war standard, although the adjustments made in the rates of pay by means of the bonuses granted in 1916 and 1917 (as well as in 1918) lagged behind the increases in their expenditure (see Chapter VI, section 4, pp. 79-80). In other cases, and particularly in the case of the surfacemen on day wages, the increases in actual earnings do not appear to have fully compensated for the increased expenditure necessitated by living at the pre-war standard.

Other compensating factors, such as any increase in actual family earnings as distinguished from individual earnings, it was not possible to determine statistically from the available material.

We take the view that the order of reference does not require us to express our opinion upon the question whether wages-rates ought to be raised whenever and because the cost of living increases.

REFERENCE NO. 8.—THE INCREASES SINCE THE COMMENCEMENT OF THE PRESENT WAR IN THE EARNINGS OF THE MEN ENGAGED IN THE PRODUCTION OF COAL, DISTINGUISHING BETWEEN INCREASES, IF ANY, PRIOR TO AND SUBSEQUENT TO THE SAID AGREEMENTS.

Up to September, 1918, the rates of pay to miners (hewers) had increased by $17\frac{1}{2}$ per cent. by two bonuses, one of 10 per cent. in the first half of 1916 and the other of $7\frac{1}{2}$ per cent. about the middle of 1917; all other workers in and about the mines received two bonuses each of 10 per cent. at the same time. From September to October, 1918, miners received 25 per cent. increase on the 1914 rates of pay, and other workers 30 per cent.

Mine workers generally, as explained in Chapter V, section 3, pages 65-6, have received increased actual earnings beyond the increases in the rates of pay. The increase in labour-cost of production has been already stated in this summary (see p. 92). Underground workers' earnings have increased in some cases beyond 50 per cent., and the average increase cannot be far from 30 per cent. as between 1913 and 1918. These increases have been due not only to the increase in the rates, but also to the fact that the mine-work has during the war been concentrated largely on those parts of the mines where the conditions of production are most favourable to a high output per worker, and that more time in the year has been put in by workers in many cases.

The increase in the wages actually earned by surface workers does not exceed the increase in their rates of pay to such a degree as in the case of miners, but earnings in excess of the increased rates are the rule.

The increases in miners' actual earnings have a very close connection with the increases in the rates of pay provided for by the industrial agreements of 1916 and 1917; these were followed in most cases by a more than proportionate increase in actual earnings, the whole of which, however, as pointed out above, cannot be ascribed to the increased rates alone. (For the several factors bearing upon actual earnings see Chapter V, section 2, pp. 63-5.)

While the mine-worker's income has increased, his expenditure on tools and other necessities used in the mine, which he provides wholly or in part, has increased by at least £10 a year. His cost of living has also increased (see last section).

The "real wages" of the mine-worker as defined and discussed in Chapter V, pages 69-76, had increased very little, if at all, by September, 1918, unless the unknown factor, family earnings, had increased. The effect of the third bonus then granted should be to increase them beyond their level in 1913-14.

It is to be noted that these results, like those in respect of profits, are generalizations or averages true of the mass, and that there are to be found within the period particular cases, both of individuals and mines, showing considerable divergency on either side from the average.

The Board was of opinion after careful consideration that some form of nationalization was urgently needed as an essential step towards relieving the shortcomings of long standing, effecting improvements of a positive kind, and avoiding evils that threatened to turn the industry out of the course of healthy and sane development, and recommended the immediate institution of a Dominion Coal Board (for development and conservation) consisting of representatives of (1) the existing coal-mining companies, (2) employees of these companies, (3) the Crown.

In making this recommendation the Board hoped to achieve by reorganization of the industry—

- (1.) The introduction of economies in the cost of producing the output of coal;
- (2.) The conservation of the coal resources of the Dominion, with due regard to the most equitable distribution of the available supplies as between present and future needs; the systematic and easy development and expansion of the industry to satisfy the growing requirements of the community;
- (3.) The concentration of the industry at any given time in the most profitable fields;
- (4.) The removal of the causes of labour unrest; subsidiary to this is the institution of proper housing for mine-workers;
- (5.) The inauguration of an efficient system of distribution;
- (6.) The regulation of coal-prices in the interests of consumers.

In order to provide suitable housing-conditions on the mining-fields the Board recommended that the Coal Board should be empowered to impose a levy of 3d. per ton on all coal raised in the Dominion, to be supplemented by a duty of 3d. per ton on all imported coal, for the purpose of providing interest and sinking-fund charges for loans to build houses and provide suitable means of recreation for mine-workers on recognized town-planning lines. The Board was satisfied that the value and probable duration of the industry warranted this step being taken on most of the fields, and that the fund so provided would prove sufficient for the purpose.

STANDARDIZATION OF FOOTWEAR.

Considerable time and attention was given to the scheme for the standardization of footwear. The Board had in view a scheme under which, as far as possible, boots could be produced in New Zealand from New-Zealand-made leather and retailed to the public at a minimum cost, and at prices that the Board of Trade could guarantee did not allow of any undue profits being made at any stage in the production and distribution. The suggestion for standardization was first mooted in a letter to the Right Hon. the Prime Minister, dated 23rd April, 1918, from the Central Efficiency Committee of the New Zealand Boot-manufacturers' Association, in which the committee stated that it was prepared to co-operate in any way with the Board of Trade in the regulation of prices in the boot trade. The letter further stated that the New Zealand boot-manufacturers had full particulars of the English scheme, and that, with the Efficiency Committee's assistance, if a similar scheme were undertaken in New Zealand, many of the mistakes made in England could be avoided here. This communication synchronized with the Government's announced intention that the Board of Trade would consider the standardization of footwear in New Zealand with a view to a reduction of prices.

Briefly put, the progress of the scheme for the period under review may be summarized as follows: The Board of Trade at various times met the Efficiency Committee and eventually asked the committee to select from among the boot-manufacturers of New Zealand some person who could act as adviser to the Board. The committee selected their then secretary, Mr. C. J. Ward, who was accordingly appointed to act as official adviser to the Board in any scheme for standardization and regulation of prices of footwear.

The Efficiency Committee recommended that samples of the boots it was proposed to standardize should be exhibited in the main centres. The drawing-up of the specifications and approval of same by the expert and the Board took a considerable time, and on its completion Mr. Ward attended with the samples at the main centres and explained to manufacturers as far as possible in detail the objects of the proposed scheme. When the ultimate prices to the consumer were under discussion it was pointed out both by the manufacturers and the retailers that it would be impossible to arrive at prices whilst leather-prices were constantly fluctuating, and as a result of a conference with tanners it was considered necessary for the Board to recommend that the Government fix the price of hides and skins in order to ensure the successful working of the scheme. The Board accordingly recommended that the export of hides should be allowed only with the consent of the Minister of Customs, on terms and conditions set out in the Order in Council published in the appendix to this report. The Board's recommendation that the Government should fix prices for the respective grades and qualities of hides and calf-skins at approximately the same prices as those ruling under the Imperial Government purchase was approved. It was confidently expected that as a result of this fixation of price both leather and boot prices could be stabilized.

The samples of footwear prepared from the specifications of the Board's expert were submitted to manufacturers in each centre and criticism invited, together with alternative samples. A further conference was held with the Central Efficiency Committee with a view to agreeing to a final range of samples covering men's, women's, and children's footwear, and this committee submitted in detail costings of the proposed samples under the following heads: Upper material; bottom material; labour; findings; overhead charges.

Following this meeting the Board came to the conclusion, after receiving full reports from its expert, that the prices submitted by the Central Efficiency Committee were unreasonable and would stultify the scheme. Accordingly the Board so reported to the Acting-President (Hon. W. D. S. MacDonald), and advised that tenders be called for the manufacture of a range of samples to be selected by the Board; but on submission to the Solicitor-General for his opinion as to whether the Board had power to take this action it was advised that further legislation would be necessary. The Board proposes, therefore, to ask for further legislative power to enable it to carry out the scheme to which so much time and attention has been given; but in the meantime it proposes to try a scheme whereby manufacturers who are willing to make standardized boots will receive a license from the Board to do so provided they conform with the terms and conditions fixed by the Board.

GROCERIES CONTROL OF PRICES.

The scheme devised for restricting increases in the prices of groceries has worked satisfactorily throughout the period. As was stated in last year's report, owing to the frequent and extraordinary fluctuations in prices that occurred, which were due to war conditions and were quite beyond the control of the merchants concerned, it was decided that the policy of fixing prices by *Gazette* notice should not be adopted, but that no increase in the prices of groceries dealt with would be made by merchants without the consent of the Board. Of the fifty-seven commodities controlled, forty-two were altered in price—some commodities, such as carbonate of soda, cornflour, and tobacco being altered four times. The fluctuations were both downward and upward, but every increase was closely scrutinized by the Board before the increase was authorized. The increases have taken place chiefly in the price of imported articles, due to outside causes over which the merchants have no

control. The manufacturers and packers of such lines as pearl-barley, condensed milk, jam, honey, treacle, golden syrup, Edmonds' baking-powder, starch, soap, candles, matches, canned fruits, and canned meats have been required, before raising prices, to submit full particulars to the Board to justify the increases proposed, and it is pleasing to be able to record that this scheme has worked without friction.

PETROL.

The scheme devised in July, 1918, for the equitable distribution of petrol, rationing if necessary, and fixation of price according to locality, worked well during a period of crisis. The Order in Council setting out the full scheme was published in the last annual report of the Board. From July to December, 1918, owing to insufficient supplies reaching the Dominion, great care had to be exercised in the distribution of petrol so as to conserve its use for essential needs. The administration of the regulations as to distribution was placed in the hands of the Department of Munitions and Supplies, and it is due to the officers of the Department to say that they carried out this difficult work with a minimum of friction.

In December last supplies of petrol coming to hand were such as to warrant the suspension of the regulations relating to quantities of petrol to be held by distributors and consumers, and action was taken accordingly. The Board feels that the step taken both in respect to distribution and restriction of price has given widespread satisfaction to consumers throughout the Dominion.

BACON AND HAMS.

The control of bacon and hams has continued. Up to February last an Order in Council fixed the maximum price of bacon and hams when sold by the manufacturers at the standard prices ruling on the 1st December, 1917. In consequence of complaints received that retailers were charging high prices as compared with the wholesale price, it was decided to fix the maximum retail price of bacon at 1s. 6d. per pound, save that when cut into rashers the retailers might add a sum not exceeding 1d. per pound to the above price. Provision was also made empowering the Board to authorize the retailer to exceed the above prices in cases in which by reason of the remoteness of the premises of the retailer from the source of supply, or by reason of any other special circumstances, the Board was satisfied that the above prices might reasonably be increased.

POTATOES.

On the 10th February, 1918, an Order in Council was gazetted prohibiting the export of potatoes. This action was apparently taken by the Department of Agriculture. Early in April the Prime Minister requested the Board to inquire into the price and supply of potatoes, and accordingly the Board was supplied by the Agricultural Department with statistics as to the position of the potato crop to ascertain whether the continuation of the embargo was warranted. These showed that potatoes were in short supply, and that the crops were not too promising. At this time (April, 1918) the main crop was not being dug. The quotations for prices wholesale were as follows: Melbourne, £13 10s. per ton; Sydney, up to £20 per ton; Lyttelton, up to £8 per ton; Auckland, up to £11 per ton; and all Dominion markets showed a tendency to rise. It appeared evident to the Board that if the embargo were removed the Dominion markets would reach prohibitive prices in sympathy with the Sydney market; and, furthermore, it appeared likely, from evidence available, that a shortage would ensue in the Dominion towards the end of the year; and as growers were obtaining from £7 to £7 10s. per ton f.o.b. Lyttelton, it was deemed advisable at that time not to remove the embargo. The Board took evidence in Auckland in March, 1919, and in Christchurch on the 3rd May last, and the general consensus of opinion was that, although there would be plenty of potatoes available for June and July, there would not be sufficient supplies later on available if unrestricted export were allowed. Later in the month, when digging was fairly forward, the Board decided on the statistics then available to recommend the raising of the embargo until the end of June, and later recommended that export be allowed up to the end of July.

FISH.

Very few complaints were received from consumers in connection with the price or the supply of fish. The Board has kept in close touch with the fishing industry throughout New Zealand. It is expected that now the war is over suitable equipment, which was most difficult to secure during the war period, will be available, thus ensuring larger supplies of fish. The freeing of the trawlers engaged in mine-sweeping operations will also materially increase supplies, and consequently it is expected that in some markets the prices to the general consumer will be reduced.

During the year a Commission was set up, under section 6 of the Cost of Living Act, 1915, to inquire into and report upon the following matters:—

- (1.) As to whether the price charged to the public for fish in Auckland is reasonable.
- (2.) As to whether the trawling-area of the Hauraki Gulf should be further restricted or further extended, and the reasons for the finding.
- (3.) Whether any limit has been imposed on fishermen, on their catches of fish, and the reason for such limit, if any.
- (4.) Whether it is possible to avoid taking fish below the size or weight prescribed by the Fishery Regulations in trawl-nets having a mesh of the prescribed size, and, if not, whether the size of mesh should be made larger; and, further, whether it should be made lawful to sell any undersized fish which may be taken in the authorized nets.

The Board of Trade delegated its powers in this connection to Messrs. C. C. Cutten, Magistrate, of Auckland (Chairman), J. H. Bradney, and T. Long.

The inquiry was duly held and a separate report issued.

MILK.

With few exceptions little trouble was experienced in connection with milk-prices throughout the Dominion. Changes in price have taken place in most of the centres in consequence of the high prices ruling for butter-fat supplied to cheese, butter, and dried-milk factories. Orders in Council were gazetted fixing the maximum retail price at Wanganui, Wellington, Hutt, and Petone at 5½d. per quart. Later in the year a further increase of ½d. took place, making milk 6d. per quart, and even at this price supplies have not been adequate, especially in Auckland and in Wellington. In the former city the drought experienced in the late summer was responsible for a shortage of feed, and in Wellington supplies could only be secured at heavy expense and from farms far removed from the city. In Wellington the control of the milk trade is now in the hands of the Wellington City Council, therefore the Order in Council fixing the price of milk in Wellington has been revoked. The local experiment is being closely watched by the Board, which is working in co-operation with the Council authorities. Recently a block system of delivery was inaugurated, and this will undoubtedly save the expense and waste connected with the old method of delivery whereby several milkmen were engaged in supplying milk to one street. As long as the present prices obtain for butter-fat used in the manufacture of cheese, butter, glaxo, and condensed milk the Board sees little prospect of milk-prices being reduced to the New Zealand consumer.

CEMENT.

During September of last year an investigation into prices ruling for cement was asked for by several complainants, and these complaints were subsequently supported by a common resolution passed by various City and Borough Councils. The resolution read as follows: "That as a matter of the very greatest national importance this Council unanimously urge upon the Government the necessity of closely looking into the manufacture and carriage of cement, as we honestly believe that it can be made available to consumers at a very much lower cost than at present prevailing."

Before the war the average price of cement to the consumer was about £3 15s. per ton in Auckland, a price arrived at by acute competition. At this price the cement companies showed that they were certainly not doing well, one company at least being unable to pay dividends for a long period. In addition to the companies in active operation a new company had large cement-works in course of erection. After arranging for a capital of approximately £467,000 the company went into liquidation before the works were completed. Two other North Island companies had expended £300,000 altogether in plant and machinery, and in the South a large amount of capital was also invested. The Board found that the position at the date of inquiry (September, 1918) was that the existing mills were capable of producing much greater quantities of Portland cement than there was demand for, and some mills therefore had to close down.

Since the beginning of the war sales have fallen off materially. The reasons for this are probably as follows: Government and public bodies have curtailed public works to a minimum; not many buildings of a residential nature are being gone on with, and the principal activity in the building line has been in new business premises, hospitals, and freezing-works extensions. As a result the cement-making plants are not working to their full capacity, and this in itself has considerably increased the per-ton cost of production.

Since July, 1914, when the price was £3 15s. per ton, substantial increases have taken place in manufacturing-costs, amounting to quite as much as the rise in the selling-price of cement. These increases are approximately as follows (per ton of cement): Coal, 5s. to 6s.; bags, 5s. to 6s.; labour, 2s.; freights, 2s. to 6s.; stores and renewals, including explosives, gypsum, flints, castings, tubes, &c., 5s. to 6s.; say, a total of £1 2s. to £1 3s. per ton of cement.

The increase of the selling-price to £4 16s. per ton did not therefore appear unreasonable to the Board, and compared favourably with the Australian price of about £4 19s. per ton.

A further complaint was made that the various cement companies agreed amongst themselves regarding districts in which sales should be made. From the evidence taken by the Board it appeared this position was forced upon the companies owing to difficulty in obtaining shipping to carry on regular services to some of the ports. South Island mills supply the North Island whenever freights will allow—as, for instance, Wellington, Wanganui, and New Plymouth; but it was shown that freights from the southern ports to Napier and Gisborne were eagerly competed for by produce-merchants, and it was therefore more expedient for the Auckland mills to supply these ports owing to regular steamers offering. Sales were seldom made in Dunedin by the North Island mills, as the local mill could supply all demands; but as far south as Timaru and Hokitika quotations were given and sales made where practicable by North Island mills. Expediency was found to be the chief factor in the mills refraining from overlapping in distribution.

SECTION II.—CONTROL OF TRADE AND INDUSTRY.

Under section 6 (g) of the Cost of Living Act the Board is empowered to advise the Governor as to how "the trade, industry, and commerce of New Zealand can be best encouraged, developed, and protected." Now that the war has been brought to a successful termination it seems appropriate to the Board, in conformity with the powers conferred upon it by this section, to discuss the broad outline of a policy for the encouragement, development, and protection of New Zealand's trade and commerce, and to endeavour to define the limits within which the Government should control industry. There are discernible in the discussion on this question two distinct schools of thought—one school advocates an extension of Governmental interference with industry, and another school urges that Governmental interference with trade should immediately cease. There is a consensus of opinion, however, that

some measure of control should continue through the difficult reconstruction period until such time as trade and industry attain normal conditions. The Board proposes to discuss the question as to what extent the Government control of industry should become part of our permanent economic policy, and what are the lessons to be learned through our experience of Government control of trade and industry during the war.

Governmental control of industry during the war period can be appropriately considered under three distinct heads—(a) Administrative control, (b) rationing, (c) price regulation.

(a.) ADMINISTRATIVE CONTROL.

All belligerent countries during the war were driven to some measure of administrative control in order to provide as speedily as possible for the munitionment of the fighting forces—that is, to provide munitions for the armies in the field, food and clothing for the fighting forces and the civilian population behind the lines, and the needed transport to effect the above purposes. With these objects in view administrative control took various forms. For example, in Great Britain the Government established national factories, controlled privately owned factories, and made special monetary concessions to enable private factories to extend their operations. The underlying motive of these extensions of State activity was the urgent necessity to force the productive factors of industry—capital, directive ability, and labour—forthwith into the production of those things on which the national safety depended, without waiting for the operation of the law of supply and demand which would ultimately have provided these requisities, but perhaps not with the necessary speed, and in this case time was the essence of the contract.

In the case of New Zealand the Government's main interference was in—

- (a.) Acting as intermediary for the Imperial Government in the purchase of our main products, such functions being undertaken by the Imperial Supplies Department;
- (b.) Its encouragement of wheat-production, and its control of the sale and distribution of wheat among the various mills;
- (c.) And, less directly, in its various prohibitions of export with a view to controlling the destination of various products and of preventing the home market from being denuded of supplies, as in the case of the establishment of the Butter Equalization Fund and the regulations imposing restrictions on the export of timber.

The necessity of acting as intermediary for the Imperial Government will cease when the Imperial Government is no longer the main purchaser of our primary products, and this trade should then revert to normal conditions through the channels that existed in pre-war days, or through new channels inaugurated by the initiative of the industries concerned.

The control of wheat-growing and gristing is on a different footing, and it is a question of policy as to whether direct Governmental control should continue in its present form—guaranteeing a price in advance to growers and controlling the distribution and profit in manufacturing, a scheme which eliminates every element of speculation, exploitation, and profiteering— or whether it would be safe to rely for our main food product on the unimpeded operation of the law of supply and demand.

The Board is of opinion that, as the present scheme has worked satisfactorily, and at no cost to the Government, it should be continued at least during the period of reconstruction.

(b.) RATIONING.

In the sense used in this paragraph “rationing” includes all forms of Governmental interference with the distribution of goods, whether between different industries, between different firms in the same industry, or between different consumers, and whether the procedure adopted is an embargo upon certain uses, as was done, for example, in the case of petrol and coal, or a system of priority permits, as was done in the case of shipping-space.

Whether rationing is to find a place as part of our permanent peace policy is intimately bound up with the question of price-control. Ordinarily, if prices are determined by the law of supply and demand, everybody buys for every purpose as much of a thing as he can afford—that is, as much as he wants at the price—and this process exhausts the whole supply. Prices which are determined in free competition on the open market tend to secure an equilibrium between production and consumption. If competition is free the price fluctuates, being sometimes higher, sometimes lower, than the equilibrium price. When the swing of the pendulum sends the price so high that consumption is checked, those producers who have not got rid of their product cut the price, as they fear the danger of having their product left on their hands. When the price becomes lower than the equilibrium price, consumers will try to obtain more than there is to be had, and bid against each other for the supply. The distribution of the commodity between different industries, between different firms in the same industry, or between different consumers is automatically regulated by the price. But if prices are not regulated by the law of supply and demand, but are limited by a price-fixing authority in such a way that at the legalized price the quantity of the commodity demanded exceeds the quantity offered for sale, then rationing is essential. Different considerations apply where the price of the commodity is determined under monopoly control, but where there is no monopoly, if the price-fixing authority forbids sellers to charge prices as high as the free play of the market would bring about, it necessarily follows that at the price actually fixed there is not enough of the commodity to go round among those people who want to buy it—that is, there is a shortage. When there is a shortage of a commodity under such circumstances—i.e., a price fixed lower than the market price—if nothing further is done distribution will be the sport of accident or the result of favouritism, or importunity, or preference through being earliest on the scene; or the price regulation will be evaded by surreptitious means, hard to detect, and the law brought into disrepute. Distribution by these means would result in

chaos and public contempt for the law, and in order to avoid these evils some system of rationing must be introduced.

A system of rationing to be effective and fair must provide for—

- (a.) The rationing of material among different forms of industry ;
- (b.) The rationing of material that is allowed to a particular industry among the businesses and firms engaged in that industry, so that none of them is treated unfairly relatively to the rest ; and
- (c.) The rationing of the finished product among ultimate consumers, so that all may be placed on an equal footing.

The difficulties of working out such a scheme in detail would be extraordinarily great, and the war experience of New Zealand would furnish a most inadequate guide. The third part of the scheme—namely, the rationing of the ultimate consumers—provided the necessity for rationing was supported by strong public opinion, need not present insuperable difficulties, as the war experience in Great Britain proved, where rationing of staple articles of food was carried out much more satisfactorily than was anticipated.

But on what principle would the State ration material among competing firms in the same industry ? If the principle usually adopted during the war were applied—i.e., taking as a basis the comparative consumption of material rationed during a given year, as was done in the case of wheat supplied to the various flour-mills for gristing—it would mean stagnation in the industry and loss of efficiency, as no firm would be able to increase its output, and hence the incentive to increased effort would be lost and the industry frozen into rigid immobility.

The difficulties would be enormously greater in rationing material among different industries. During the war Government action in Great Britain, for example, aimed at securing material for those industries which it regarded as of the greatest national importance, and the rationing authority prohibited the use of material in certain industries and allotted the material to industries which it regarded as essential for perfecting the country's war effort. The rationing authority had thus a definite standard to work by—namely, what industries were most important to war efficiency. Everything was subordinated to this relatively simple end. Food, munitions, and the support of the armed forces took precedence over everything else. Even then difficulties arose : for example, the allocation of steel between shipping and munitions plants, and between naval and mercantile construction. But in peace-time there is no relatively simple aim to guide the rationing authority, as the problem would be how to supply the ever-changing needs of the civilian population. Obviously, in peace-time the supply is directed to satisfy the total demand of the population for necessities, comforts, and luxuries, and those things are produced which are most demanded and which will yield the greatest sum of satisfaction. How can any Government Department decide what those things are ? Even if it could come to a just decision to-day, by to-morrow the demand would probably change. It is not easy to see how this obstacle to a permanent policy of rationing material among the various industries of the country can be satisfactorily overcome.

Serious and perplexing as the problems presented above are, nevertheless they must be faced and answered if prices are to be controlled by authority in such a way that the demand at the fixed price is in excess of the supply, for the alternative is wild confusion. If, however, prices are not to be controlled in this sense rationing is unnecessary. The choice, therefore, between adopting and rejecting rationing as a permanent peace policy depends upon whether or not it is desirable to fix prices at a lower level than the free play of the market would establish, as the price-fixing authority must either fix the same price as would be established by the free play of the market or it must fix a different price. In the former case its work would be superfluous, and in the latter case its price would be wrong unless it could show that the market is not free and open, and that therefore the true market price cannot be established without its intervention. The Board is not concerned at present with the results that would follow if the fixed price was higher than the market price, except to point out that in this event the price-fixing authority would need to devise a scheme for dealing with the surplus. What we are concerned with are the results that follow if a price is fixed lower than the market price—or, in other words, at a level that induces demand to exceed supply.

(c.) PRICE-REGULATION.

The main object of price-fixing during the war was the prevention of "exploitation and profiteering." The persons restrained by the regulations were not in general monopolists. Their opportunity to make large profits was not created by restrictive action on their part—that is, there was no rigging of the markets ; commodities were not withheld from sale with the object of creating an artificial scarcity ; sellers did not even exercise foresight by laying in stocks. The opportunity came mainly by chance. Traders happened to possess at a particular time during the war stocks of goods for which there was a sudden demand, or a sudden shortage of supply brought about by the changing conditions of the war. Had no restrictive action been taken by the State these people would have been in the position to make enormous profits. Even when maximum prices were fixed they sometimes made larger profits than usual. Nevertheless the limitation of price meant that at the legal price the demand was in excess of the supply. Is price-control of this character desirable as a permanent peace policy ?

Prices are divisible into two main classes—(a) Competitive prices, (b) monopoly prices.

Competitive Prices.

Under conditions of competitive trade, when abnormal profits are being made in any industry or business, more capital and enterprise tends to flow into that industry or business. The output is thereby increased and on account of the increased output prices fall and profits are reduced to

normal. High price performs a twofold function: on the one hand it stimulates production, on the other it conduces to economy in consumption. Where competition exists to the full extent, price, distribution, and profits regulate themselves. Taking good years and bad years together, exploitation and profiteering cannot exist if competition is free and unimpeded—that is to say, when it is possible for capital and labour to flow quickly into industries whose prices are rising.

Any general permanent policy of anti-profiteering price-regulation applied to ordinary competitive trade would act differentially against those industries whose profits fluctuate. They would be deprived in their good years of part of their profits, and would receive no help in their period of bad fortune. Hence in the long-run capital and enterprise would tend to desert such industries for industries in which the profits were more nearly the same every year.

But there is no reason to suppose that industries in which the profits are fluctuating are socially less desirable than others. Consequently this arbitrary diversion of production from the channels into which economic forces would tend to direct it would almost certainly involve a misdirection of effort and a real loss to the community.

Broadly speaking, we therefore conclude that permanent Government control over the price of commodities produced under competitive conditions is not necessary as a preventive of profiteering and exploitation, because for competitive industries as a whole, good times and bad times being taken together, competitive conditions are themselves an adequate preventive, while from the standpoint of the public such regulations hamper production. Moreover, this type of price-control, for the reason set forth in the preceding section, would force the Government to undertake the enormously difficult task of rationing in peace-time. Hence, in the opinion of the Board, the case against a permanent policy of price-fixing in competitive industries is conclusive. The Board discusses in later chapters the policy to be adopted to keep competition free and open, but during the reconstruction period that now exists it may not be possible to keep trade and industry on a competitive basis, and consequently other considerations apply.

The Board therefore proposes to lay down the principles that should guide any authority entrusted with price-fixing powers during this period. These have been admirably summarized by the Committee of Price-fixing appointed by the American Economic Association (*American Economic Review Supplement*, March, 1919). Certain adjustments have been made in the text to fit New Zealand conditions.

(1.) Any conclusions which may be urged in regard to price-fixing in war-time should not be interpreted as necessarily applying to peace conditions.

(2.) In any case where price-fixing is justified the price should be high enough to call forth, in so far as the price can affect production, a prompt and adequate supply, but not higher than necessary to accomplish that end. It is not necessary that it should cover the cost of production of those producers who are especially inefficient or who are producing under especially unfavourable conditions, unless a sufficient supply cannot be obtained from other producers at the price fixed.

(3.) Where large quantities of any commodity are required by the Government for its own purposes the buying should be unified, even if such unified buying should result in something like price-fixing by a single buying agency. In this case the principle involved in clause 2 should be adhered to.

(4.) The price should be agreed upon after a conference with all parties who have a legitimate interest, including purchasers or their representatives, as well as the dealers and distributors or their representatives, and the price should as accurately as possible conform to the general principles set out in clause 2.

(5.) Prices under competitive conditions perform important functions. A rising price for a product tends to increase production and to check consumption; labour and capital in the long-run flow into those industries where prices are rising faster than costs, and away from those industries where prices are falling faster than costs. This is the main way in which an industry is guided and controlled under a system of free enterprise. When competition exists to the full extent—that is to say, when it is possible for labour and capital to flow quickly into industries where prices are rising—price-fixing is not as a rule called for. The occasion for price-fixing arises—

(a.) When there is a sudden increase in the demand so great that for the time being producers cannot meet it, even if they may be able and willing to start further production at once. This is usually brought about when the Government enters the market.

(b.) When the stock is so limited that, even though the demand may not be sudden, it cannot be met for some months to come—as, for example, when there is a shortage in some staple crop like wheat between harvests, or when replenishment of the supply is imperilled by an interruption in transport, due to strikes or other conditions.

(c.) In both these cases the demand for price-fixing is justified by the consideration that high prices will not benefit producers of commodities, but those who either by accident or design have them in their possession, and therefore make a purely speculative middleman's profit. If prices are fixed, some other agencies must usually be provided for controlling distribution—that is, for doing what changes of market prices would do automatically. Hence arises the need under these conditions for some form of rationing. Short of rationing, however, various indirect methods may be used to control consumption. Moral and social pressures may be applied to consumers to restrict consumption of scant supplies. Regulation by Order in Council may be used to repress non-essential industries. The Government may use its control over coal, transport, and basic raw materials to encourage needed industries and restrict those less needed. Banks, under the direction of the Minister of Finance, may be instructed to restrict credits to non-essential industries and to extend credits readily to those most needed.

(6.) In fixing prices of a given commodity careful examination should be made of the relation of the market for the given commodity to the market for its substitutes, and of the possibility that it may be necessary to fix the price of substitutes in order to maintain the most advantageous relation between consumption of a given commodity and the consumption of its substitute.

Monopoly Prices.

The Board desires to emphasize that what it has urged in the preceding section relates solely to permanent price-control over commodities which are produced under competitive conditions, and in which, therefore, artificial limitation of price would cause the demand at the fixed price to be in excess of the supply. In industries subject to monopoly control there is no tendency for prices to be brought down to a level that yields only a normal profit. On the contrary, unless the State intervenes, the monopolist, if he chooses, has the power to fix prices at a level which yields him abnormal profits. Hence monopoly prices can be regulated by State action without creating a situation in which the demand at the regulated price will exceed the supply, and consequently if prices are fixed by regulation for goods under monopoly control the difficult problem of rationing need not be considered. Consequently, where a monopoly exists there is a strong case for State regulation of price, and, as the tendency to combination and monopoly has been stimulated by the experience of the war, monopolistic control is likely to extend more widely over industry in future than it extended in the past, and the field open for Government intervention will be correspondingly increased. The general conclusion is therefore warranted that, while in competitive industries a policy of price-control ought not in any circumstances to be continued as a permanent policy, in monopolistic industries price-control is essential in the public interests. In this case, or in case the production, distribution, or sale of any commodity is so concentrated in private hands as to give a substantial control over prices, the Government should fix prices, due regard being paid to the cost of production, maintenance of an adequate supply, and the prevention of unnecessary waste.

SECTION III.—ENDS TO BE ACHIEVED.

The ends to be achieved by Government control of industry are twofold: (a) To keep alive competitive industry; (b) to control monopoly. The policies that will accomplish one object will automatically accomplish the other. Owing to the complexity of economic phenomena no one simple remedy can be applied. The remedies that will be suggested by the Board will also accomplish the solution of the cost-of-living problem, so far as such a problem can be solved by a country by legislative action independent of the action taken by the rest of the countries of the civilized world to control monetary standards. This feature of the problem is discussed later in the report.

But it may be urged that it is neither desirable nor practicable to keep alive competitive industry, as the trend of economic development is towards a state of society where capital is concentrated in some form of trust organization and competition eliminated.

Competition in all forms is sometimes condemned on account of the waste that results from excessive or unfair competition, but the waste can be diminished by co-operation in production and distribution, such co-operation resulting in more effective competition. Moreover, as pointed out earlier, competition is the best regulator of prices and profits. In general it results in increased production, as it evokes effort, initiative, and efficiency; but this is not free competition as preached by the old school of individualists. The State, we take it, is entitled to regulate conditions under which competition should be carried on, and then, having prescribed the conditions, should act as referee and see fair play, so that the winning of the game should result from increased efficiency and not by the use of the club.

While it may be true that in most industries increase in transport facilities and rapid communication tends to an increase in the size of business units, it does not necessarily follow that the trust form of business organization is inevitable, as history proves conclusively that most of the trusts have come into existence not as the result of increased efficiency in production or distribution, but as the result of the abuse of power and privilege. Independent concerns have been clubbed out of existence by unfair methods of competition, and when competitors have been eliminated the trust has exploited the producer by forcing down prices, and the consumer by raising prices. The trust has thus made its profits by the imposition of a double levy on the community. Moreover, a trust has certain inherent disadvantages. Its control is highly centralized; there is often a lack of individual initiative in subordinate positions; there are usually expensive overhead charges, and frequently the higher positions are awarded not as the result of merit but as the result of nepotism. These disadvantages will be made manifest just in proportion as the State succeeds in preventing monopoly-power from being acquired or maintained save on the basis of increased efficiency.

For these reasons the Board is of opinion that there is an economic limit, different in various industries, to the effective size of the business unit, and that if regulation of competition is boldly faced by the State the greater number of industries will continue to be carried on by independent concerns, and that wise statesmanship should aim at preventing the growth of monopolies, and not wait to find a remedy when the evil has grown to a gigantic size. Sound economic policy, therefore, should have as its objective true freedom of trade, but this must not necessarily be taken to mean free trade as that term is usually applied.

SECTION IV.—POLICIES SUGGESTED.

The following policies have at various times been suggested as complete remedies for the prevention or control of monopolies, and each has its particular adherents and defenders :—

- (a.) Limitation of size of business unit.
- (b.) Limitation of profits.
- (c.) Publicity.
- (d.) Legislative regulation and administrative supervision of competition.
- (e.) State competition.
- (f.) Nationalization.
- (g.) State regulation of price.

The Board is of opinion, as previously stated, that no one remedy is a panacea for all the evils of monopoly, but that each has a more or less limited or extended sphere of usefulness. We propose to discuss shortly each of these suggested remedies.

(a.) LIMITATION OF SIZE OF BUSINESS UNIT.

This idea has already, to some extent, found legislative expression in New Zealand in the regulations requiring meat-exporters to take out licenses, the intention being that the licensing authority will not issue a license to any combination which has grown so large as to be able to control the whole market. It is doubtful, however, whether this policy is not fundamentally unsound, as a monopoly may be gained and held on the sole basis of superior economic efficiency. Moreover, the policy seems illogical in that it implies that although a business unit has to compete it must not compete so successfully as to drive its competitors out of business, even though this results from superior business methods. The aim should be to prevent unfair competition by securing a fair field and no favour; and a policy with this objective would not attack the big business *per se*, but would impose on the big business the burden of proving that its size really represents a net community gain. "The ideal condition, to my thinking," declares Professor Wyman, of Harvard, "is to have monopoly where that is the more effective form, and competition where that is the natural thing."

(b.) LIMITATION OF PROFITS.

The power to limit profits is necessary as an integral part of the control of prices, to which reference will be made later; but, without careful safeguarding, a policy of profit-limitation would tend to inefficiency, as no incentive would remain to increase profits by the introduction of improvements in production or distribution. Moreover, the policy might be partially defeated by nepotism or extravagant managerial expenses. The principle, however, has been recognized under the legislation passed last session. The War Legislation and Statute Law Amendment Act, 1918, section 21, provides as follows :—

"21. (1.) This section shall be read with and form part of the Regulation of Trade and Commerce Act, 1914 (in this section referred to as the principal Act).

"(2.) Every person commits an offence against this section who either as principal or agent sells or supplies, or offers for sale or supply, in New Zealand any goods at a price which is unreasonably high if the opportunity of obtaining such price in New Zealand arises by reason of the existence, present or past, of a war in which His Majesty is engaged, or by reason of a scarcity of such goods in New Zealand caused by war conditions, present or past.

"(3.) For the purposes of this section the price of any goods shall be deemed to be unreasonably high if it produces more than a fair and reasonable rate of commercial profit to the person selling or supplying, or offering to sell or supply, the goods, or to his principal.

"(4.) A fair and reasonable rate of commercial profit is for the purposes of this section such rate as would have been fair and reasonable on similar goods prior to the fourth day of August, nineteen hundred and fourteen, with a fair and reasonable addition for war conditions of freight charges and business expenses.

"(5.) Every person commits an offence against this section who being in possession of goods for mercantile purposes hoards and refuses to sell, or make available for sale, such goods, if such hoarding or refusal raises, or tends to raise, the cost of other similar goods to the public.

"(6.) Every person who is guilty of an offence against this section is liable on summary conviction to a penalty not exceeding in the case of an individual two hundred pounds and in the case of an incorporated company one thousand pounds.

"(7.) This section shall continue in force so long as the principal Act remains in force and no longer."

The weakness of this section was the failure to provide any machinery clauses for the detection of profits in excess of the profits obtaining in 1914.

(c.) PUBLICITY.

There is a growing conviction in the public mind that the State should insist that industry should be conducted on a basis of complete publicity, except in so far as paramount interests make publicity undesirable in exceptional cases. The State is entitled to full knowledge of the facts concerning industries, as there is no industry that has not received, or is not now receiving, benefits, directly or indirectly, from the State. If industry is carried on to serve the public, not merely for the personal profit of those who supply the capital for it, the community has the right to satisfy itself that the service is faithfully discharged. Unless there is complete publicity in regard to profits and costs it is impossible to form any judgment either of the reasonableness of the prices charged or of

the claims to remuneration of the different parties engaged in production. Naturally, discretion is necessary as to the use that is made of the information supplied, but, as Professor E. Cannan, of the London School of Economics, stated before the Sankey Coal Commission in London recently, "It is high time we dropped the notion that trade is a kind of war in which everything must be kept secret for fear of information being conveyed to the enemy. It ought to be regarded as a co-operation among friends, none the less friendly because they bargain or even haggle."

There is no reason why the same publicity should not be demanded from privately conducted concerns as is now freely and openly supplied by State trading concerns. Furthermore, there is no reason why from information supplied to a Department of the Government regular reports on the cost of production in different industries should not be issued, which would enable the public to check prices of the commodities dealt in. Publicity would thus be a safeguard against economic abuses. If it is the case, as is often alleged, that profits in most industries are inconsiderable, that fact ought to be known in the interests both of the investing public and of industrial peace. If they are excessive, that fact should be known in the interests of consumers. Fear of publicity will often be sufficient to check exploitation, profiteering, and unfair competition, in the same way as lighting in our streets is often the best policeman. Moreover, the disclosure of high profits would stimulate competition and direct capital and enterprise to that industry. It is suggested that the Board of Trade, strengthened as recommended later in this report, should have the following powers:—

- (a.) To call for any information which may be deemed expedient from any person, firm, or company, failure to supply which should be made a continuing offence and an appropriate penalty imposed. The Cost of Living Act, 1915, read in conjunction with the Commission of Inquiry Act, appears to confer this power on the Board at present, but the penalty for failing to provide the information is merely a fine of £20.
- (b.) To confer with any Department of the Government and examine any records, documents, or papers in its possession.
- (c.) To publish such information as in the public interest it deems advisable.

(d.) LEGISLATIVE REGULATION AND CONTROL OF COMPETITION.

The legal regulation and control of competition should aim at maintaining competition in regard to price, quality, or efficiency of service, in order to ensure that monopoly will come into existence only as the result of superior efficiency and not by the abuse of power. Unfair methods of competition should be declared illegal, and it is suggested that the Board of Trade should be empowered to prevent business firms from using unfair methods in commerce, and for this purpose should be endowed with complete powers of investigation. The policy here advocated would draw a clear line of demarcation between the ordinary trade policy of increasing business by superiority of output, cheapness of price, or facilities of service, and an endeavour to crush rivals out of existence by devices the general character of which is summed up in a dictum of the Supreme Court of the United States in the Standard Oil case, 1911. The dictum refers to "those contracts or acts which have not been entered into or performed for the legitimate purpose of reasonably forwarding personal interest and developing trade, but on the contrary are of such a nature as to give rise to the inference or presumption that they have been entered into or done with the intent to do wrong to the general public and to limit the rights of individuals." For example, a refusal to sell goods to others for cash, either absolutely or except at a price so high as to justify the reasonable belief that the seller desires to discriminate against an actual or an intending buyer as compared with other buyers, or upon terms or conditions which express or imply that the buyer shall not buy from any one but the seller or parties indicated by him, or shall not resell except at a price and upon terms and conditions as dictated by the seller, would come within the dictum referred to.

The cost of investigation should be borne by the Government, not as at present by the person injured, as the object would be primarily to protect the public and not to determine individual rights. The Board should have power to take action on its own initiative as well as on complaints by any member of the public, or by direction of the Government. It would be a mistake, however, to attempt to define in the enacting statute what specific acts would amount to unfair competition. The power of definition should be left to the Board, as unfair competition may take forms so numerous that its prohibition by statute should be in general terms, in order that the Board, guided by its administrative experience, may progressively defeat the perverse ingenuity of those individuals who may seek to render the law nugatory.

There are specific evils which need to be dealt with by ancillary legislation:—

- (a.) The abuse of patent rights. This is a subject which requires a detailed study, but some suggestions may be offered:—
 - (1.) The advisability of forfeiting patent rights which have been bought up simply to be pigeonholed.
 - (2.) The advisability of enacting that the Government should have the right to purchase any patent at appraised valuation.
 - (3.) The advisability of enacting that patent rights should be granted only on the condition that the use of the patent should be free to any one on payment to the owner of a reasonable royalty, to be determined by a special committee or board.
- (b.) The Board should be empowered to constantly watch the operation of any tariff designed to protect local industries, as under the shelter of the tariff wall combines may be formed to exploit the home consumer by charging higher prices than are warranted by the duty imposed.

(e.) STATE COMPETITION.

The principle of State competition in trade and industry has been recognized in New Zealand by the working of the State coal-mines in competition with privately owned mines, and by the establishment of Life, Accident, and Fire Insurance Departments in competition with privately operated concerns; but it seems advisable to the Board that legislative authority should be conferred on the Government to engage more extensively in trading where it is impossible by other means effectively to control prices. The policy of State competition, however, has a limited application. It is sometimes a forerunner of complete nationalization of industry. When this is the object of State competition it will probably be found more expedient to nationalize the industry at once. If in particular cases nationalization is not desirable, monopoly can still be controlled by State regulation of prices, this remedy involving a less serious extension of the sphere of public responsibility. In regard to its efficacy as a means of controlling monopoly, its opponents urge that State management is relatively inefficient as compared with private management. Theoretically this argument is unsound, as most big businesses are now managed by a body of servants, and if the State is willing to pay for skilled management the same price as is paid by private concerns, there seems to be no reason in theory why it should not be able to secure the same service. There is the danger, however, that if the State engages in business it would be expected to pay higher prices to producers for raw materials, or to charge lower prices to consumers, or to do both these and still show a profit, and this in competition with private businesses highly organized which may already be in control of the market and which may be conducted with efficiency. In spite of this objection, however, the power to engage in competition should be conferred by legislation, as the fear that the power may be exercised may often restrict monopolies from extracting the highest possible price.

(f.) NATIONALIZATION (AND DEMOCRATIC MANAGEMENT).

Nationalization implies public ownership, but not necessarily public management (see Report on Coal Industry, H.—44A, page 86). It is not a policy that can be applied indiscriminately. Whether or not it can be applied at all is a question of expediency in each particular case, but in some industries a *prima facie* case already exists for nationalization in some form or another. These are—

- (a.) Transport, including such subsidiary services as control of the waterfront.
- (b.) Industries which vitally affect the health of the community—for instance, flour-milling and milk-supply.
- (c.) Industries which progressively exhaust the national resources—for example, coal, timber, and possibly oil.
- (d.) Where monopoly cannot adequately be controlled by price-regulation. Experience will decide when this occurs. Where the choice is between nationalization and price-control the issue depends on the practicability of the latter method.

Nationalization should provide in any future case that the employees have a voice in directing the business policy and management of the industry nationalized, as the Board believes that this is the way which promises most for the alleviation of industrial strife and misunderstandings, as it will tend to provide better conditions for the worker and an improvement in his status. For, as the late President Roosevelt points out in his last book—"The Foes of our own Household"—"the present system is an attempt to combine political democracy with industrial autocracy," and that this attempt is the root cause of labour dissatisfaction and unrest. Safeguards must be taken, however, to ensure efficiency, encourage initiative, enterprise, and resourceful management, and to accumulate out of the profits of the industry a fund adequate to its future development, so that it will not become a burden on the other industries of the Dominion.

The Board should therefore be given powers, as a result of inquiry or investigation into any trade, industry, or business, to recommend nationalization, and when the Board is of opinion that nationalization is desirable it should thereupon prepare a scheme of nationalization for submission to Parliament.

(g.) FIXATION OF PRICE.

The practicability of price-fixing has been demonstrated by actual experience during the last four years, but the Board points out that what is now recommended is not an attempt to fix prices generally, but only an attempt to fix prices where, without State regulation, they would be fixed by monopoly in its own interests. The precise form that fixation should take should not be specifically defined, as the Board should have the power to fix (a) a straight-out price, (b) a maximum price, (c) a minimum price, (d) a sliding-scale price; (e) or power to call upon a monopoly to revise its scale of prices; (f) the power to appoint an officer to attend any meeting of traders where price-fixation in the trade is under discussion.

The point at which price-fixation takes place should be left to the discretion of the Board. Whatever prices are fixed should allow a fair return to capital, but in this connection it may be difficult to determine what should be allowed as capital. Should it be (a) subscribed capital, (b) the cost of plant-replacement, or (c) the market value of shares?

These difficulties must be faced, but need not prove insuperable, as by a careful detailed study by the aid of accountants the Board should be able to achieve a reasonable compromise between the various parties concerned—the shareholders, the producers, the employees, and the consumers. The fixation of price need not necessarily weaken the incentive to increase efficiency, as the question of limitation of profits does not necessarily arise; for so long as the controlled article is sold at not exceeding the fixed price monopoly can retain any profit it makes, subject to income-tax, and a

continuous readjustment of the incidence of taxation. Moreover, there are few cases where monopoly is in exclusive possession of the market, and competitors should be protected against extinction by the monopoly selling for a period below the cost of production in order that it may afterwards recoup itself by increased prices. Nor would the Board be bound to guarantee profits in the price fixed, but to make reasonable profits possible provided the business concerned maintained a fair standard of efficiency.

Fixation of prices goes hand in hand with (a) publicity, (b) public regulation of competition, and these three policies the Board specially stresses as providing an adequate means for protecting the public against what is loosely termed "exploitation and profiteering."

SECTION V.—RECOMMENDATIONS.

In giving effect to the policies herein outlined, the Board recommends that a Department of Industries and Commerce be established consisting of—(1) A Minister of Industries and Commerce; (2) a Board of Trade; (3) a Secretary of Industries and Commerce; (4) a Secretary to the Board, and a staff adequate to perform the economic and accountancy work that would necessarily be involved.

The power should also be given to the Board of Trade to call to its assistance, with the consent of the Minister, such experts as in particular investigations it deems advisable.

The questions to be dealt with involve exceedingly complex business situations which require the advice and assistance of the best minds procurable, and the problems presented for solution are fundamentally questions of practical business affairs, and the decisions given may be very far-reaching in their effects.

Power should also be given to the Board—

- (a.) To investigate the organization and business conduct of industry, especially protected industries already in existence;
- (b.) To require annual and special reports from businesses and industries;
- (c.) To investigate and make recommendations, and in suitable cases to enforce recommendations where infringements of the Commercial Trusts Act are alleged.
- (d.) To investigate trade conditions in and with other countries, particularly in regard to the operation of monopolies and trusts;
- (e.) To determine and prevent unfair methods of competition;
- (f.) To bring about improvements in the methods of accounting used by businesses, particularly with respect to accurate and uniform methods of cost-accounting.

This feature is stressed, as many of the investigations already conducted show that a large percentage of the business community, particularly the small businesses, have a very inadequate knowledge either of costs of production or of selling-costs. Many businesses keep their books in such a way that they are not able to supply the Board with even the simplest of facts concerning their operations. Proper development of cost-accounting methods is essential to the obtaining of information of any real value. Statistics based on estimates are apt to be misleading and are therefore dangerous, yet with the methods in use in business at the present time these must be used. Proper accounting even for the small manufacturer or business is of vital importance. It is necessary for his success that he knows on what particular article he is making a fair profit, or a narrow margin, or losing money. Uniform methods of cost-accounting, however, do not mean uniform costs, nor the standardization of costs by the adoption of arbitrary charges. To assist the Board in improving accountancy methods the Board should have power to utilize the services of an advisory committee of accountants.

- (g.) To investigate and report upon trade associations and control their activities.

The activities of these trade associations are of a varied character, and many of them are of great benefit not only to the trade concerned, but to the general public; nevertheless their activities have sometimes involved them in practices that would be condemned as unfair competition.

The Board should report to the Minister in Charge from time to time and, with his consent, publish such reports. At the beginning of the session its reports should be laid on the table of the House, but decisions in any matters relating to unfair competition should be made public during the recess, and as early as possible after being arrived at.

The Board of Trade in its administration of the powers herein sought to be conferred upon it should endeavour to secure the co-operation of the business community, and should secure this co-operation by constant insistence upon the observance of appropriate standards of commercial morality. It should constantly keep before the minds of the business community the ideal that the reward the business community receives from the public should be appropriate to the service it renders to the public.

In its enforcement of these standards the Board should seek to understand and make allowance for the difficulties of particular problems; to see both sides of every case; to protect men in the furtherance of legitimate self-interest by reasonable and fair methods, and at the same time to keep

the channels of competition free and open to all, so that the man with small capital may engage in business in competition with powerful rivals, assured that he may operate his business in competition with his rivals free from harassment and intimidation, and be given a fair opportunity to work out his business problems with such efficiency, industry, and intelligence as he may possess.

Part of the work of the Department of Industries and Commerce should be particularly the development of new industries, and for these purposes and under proper safeguards the Department should be empowered to make advances to proposed undertakings by way of loan, or to take shares, or become partners, or afford such other encouragement as it may deem expedient. In the exercise of this power it might be made a condition precedent to financial assistance being given to an industry that it should be conducted on particular lines—that labour should be given a voice in its management; that the conditions relating to employment should be such as to conduce to the social uplifting and to the moral welfare of the workers.

By direction of the Hon. W. D. S. MacDonald, Acting President of the Board during the absence from New Zealand of the Right Hon. W. F. Massey to attend the Peace Conference, the Board has had prepared a Bill embodying the recommendations herein set forth.

SECTION VI.—COST OF LIVING.

Even if the recommendations mentioned in the preceding sections are carried into effect they will not prevent fluctuations in the general level of prices, and therefore will not alone solve the cost-of-living problem. The problem of the rise in the cost of living has two aspects:—

- (1.) The number of units of value—*i.e.*, purchasing-power—in the yearly income; and
- (2.) The quantity of things in general each unit will buy.

An inquiry into the former of these is strictly part of the problem of the distribution of the national annual dividend. The latter is the real cost-of-living problem.

It is not proposed to discuss at length the problem of the distribution of wealth further than to point out the relative fixity of the number of units of purchasing-power of the incomes of various classes of the community. A rough analysis of the various classes of income-receivers in the community, classified according to the relative fixity of their incomes, and therefore according to the effect produced upon them by changes in the quantity of things in general each unit of income will buy, is as follows:—

- (a.) Classes with fixed incomes.
- (b.) Classes with slowly changing incomes.
- (c.) Classes with incomes mobile.

Given a fall in the purchasing-power of each unit, those persons with fixed incomes will lose by a decrease in the purchasing-power of each unit; those classes whose incomes respond slowly to change will suffer for some time at all events, and continue to suffer until their incomes are adjusted in such a manner as to neutralize decreases in the purchasing-power of the unit, while those whose incomes are mobile—*i.e.*, respond readily to the change in the purchasing-power—will gain at the expense of all other classes.

The first class is composed of all those persons drawing incomes from investments, whether such investments are in the form of Government bonds, mortgages, debentures, or other security with fixed interest charges; persons whose salaries are fixed by statute, as, for example, Supreme Court Judges, Cabinet Ministers, members of Parliament, the higher classes of the Civil servants, the professional classes whose charges are fixed by custom; and all annuitants and pensioners, including old-age pensioners and military pensioners.

The second class comprises the great majority of Civil servants, most wage-earners whose wages do not automatically follow prices, but lag behind the general price-level.

The third class comprises those whose incomes are obtained directly from the sale of commodities, comprising in the main the commercial and farming sections of the community, as their costs do not rise or fall commensurate with prices on account of the fact that, as a whole, part of their costs consist of fixed interest and rent charges.

Neither a stable high price-level nor a stable low price-level is disadvantageous to the community as a whole, but the change from one level to another, inasmuch as it automatically transfers purchasing-power from one section of the community to another, generates social friction, industrial unrest, and a sense of injustice, as the history of price-movements in the past amply demonstrates. During the last century price-movements have been most carefully recorded, and show many ups and downs. The most complete statistics, those of Sauerbeck, are for England. Between 1789 and 1909 prices rose rapidly, the index numbers for the respective years being 85 and 161—that is to say, the price of “things in general” practically doubled in twenty years. Between 1809 and 1849 prices fell from 161 to 64, a reduction of about three-fifths. (The index numbers for these periods are Jevons’s.) Between 1849 and 1873 prices, measured by Sauerbeck’s index numbers, rose from 74 to 111—that is, by about one-half. Between 1873 and 1896 prices fell from 111 to 61 (Sauerbeck’s index numbers), a drop of approximately 46 per cent. From 1896 to August, 1914, was a period of rising prices, the increase being approximately 35 per cent. in England and 50 per cent. in the United States. From August, 1914, to date the upward movement has been most marked, as the following table will show,

the comparisons being made between July, 1914, and various dates on which the last statistics are available in the respective countries :

Country.	Comparison between July, 1914, and	Increase per Cent.
South Africa	February, 1919	35
New Zealand	May, 1919	42
India	November, 1918	51
Australia	April, 1919	45
Spain	April-September, 1918	51
United States	February, 1919	69
Canada	March, 1919	76
Denmark	January, 1919	86
Holland (Amsterdam)	December, 1918	103
United Kingdom	May, 1919	107
Switzerland	March, 1919	139
France (Paris)	January, 1919	148
Portugal (Lisbon)	May, 1918	151
France (other towns)	December, 1918	160
Italy	September, 1918	167
Norway	December, 1918	175
Sweden	February, 1919	234

This table has been furnished to the Board by the Government Statistician, and, although it deals with the retail prices of foods, it can be taken as indicating approximately the rise in the general price-level.

The conditions created by the war have been dominant factors in the rise of prices since August, 1914. The first effect of the declaration of war by Germany was a speculative rise. As pointed out by Professor Irving Fisher in his forthcoming volume, "Stabilizing the Dollar in Purchasing-power: the Way to Stabilize the Price-level without fixing Individual Prices"—a manuscript copy of which has been kindly sent by the author to the Hon. W. D. S. MacDonald, the Acting President of the Board—"sudden and arbitrary speculative 'mark-up' prices usually accompany war, and the mark-up in 1914, like most others, was temporary. It reached its maximum in the United States in September, 1914. As soon as it became clear that market conditions would not justify it (and this became clear after about a month) speculators were forced to reduce prices again, and until near the close of 1915 no great rise in prices occurred in the United States. From the close of 1915, however, the rise has been far more rapid than before. The rise before the war, between 1896 and 1914, great as it was, amounted in the aggregate in the United States to only one-fifth of 1 per cent. per month; in England to still less; whereas during the war the rise amounted to $1\frac{1}{2}$ per cent. per month in the United States, and to much more in many other countries—in Germany and Austria to 3 per cent. per month, and in Russia apparently to 4 or 5 per cent. per month. To these German and Russian rates there is no parallel among the records of index numbers which have been computed. If before the war we could become excited over a continued average up-grade of one-fifth of 1 per cent. per month, we may partially understand some of the Russian economic unrest with an uphill movement more than twenty times as steep, and probably still steeper under Bolshevism. As yet the evidence is not all in, but the index number of wholesale prices of the United States Bureau of Labour rose 107 per cent. between 1914 (before the war) and November, 1918. Retail prices in the United States rose 79 per cent., in England 133 per cent., in France approximately 120 per cent. It is fair to say that the war doubled prices in the United States, Canada, England, and trebled them on the Continent of Europe; while in Russia it multiplied them by perhaps ten. The result is that the problem of the price-level is throughout the world perhaps the greatest economic problem which the war has left." Later in the same volume Professor Fisher states that, although the data covering the war period are so meagre that it is impossible to express the relation in exact figures, we may still arrange the different countries in the approximate order in which their prices have risen. This order of ascending prices is—India, Australia, New Zealand, United States, Canada, Japan, Sweden, Switzerland, Denmark, Italy, Holland, England, Norway, France, Germany, Austria, and Russia.

The real cost-of-living problem arises from the fact that the quantity of things in general each unit of value will buy varies with every increase in the total supply of money relative to things in general. The unit of value—i.e., the sovereign or the pound sterling—if it were a perfect measure of value, should remain constant in purchasing-power, just as the yard measure remains constant in length, the lb. constant in weight, or the pint constant in quantity; but under our present monetary system each unit of value increases or decreases in purchasing-power with every increase or decrease in the quantity of money, and creates the same confusion in industry, trade, commerce, social relationships, and contractual obligations as would be created if a yard measure were to be increased or decreased in length according to the number of yard measures in existence, or if a pound (avoirdupois) were to increase or decrease in weight according to the number of lb. weights in existence.

On account of the fact that changes occur in the purchasing-power of the unit of value, the price of things in general—i.e., the value of everything—seems to increase or decrease in a most mysterious manner, and it makes the task of calculating the national dividend and its equitable distribution almost incapable of performance. For, after all our price statistics of things in general have been

obtained, it is necessary to enter on another and more difficult calculation—namely, how these prices have been affected by changes in the quantity of money—as difficult an operation as the attempt to measure changes in temperature with a thermometer whose scale contracts as the mercury expands and expands as the mercury contracts.

The unit of value should be the measure of exchange values. It should not alter those values, and yet with every increase in the total available supply of things in general relative to the supply of money the purchasing-power of each unit of value appreciates or increases in terms of things in general, and as the total available supply of things in general will be increased by developments that bring the forces of nature more effectively under man's control, such as an increase in the efficiency of the people individually or an increase in their collective efficiency, either through mechanical inventions or through improvements in business organization, the classes referred to in the foregoing sections will find their relative positions altered, some for the better, some for the worse, by every increase in the money supply and by every improvement in science, invention, education, or even by the bounty of nature.

The purchasing-power of money, or increase or decrease in the cost of living, or increase or decrease in the value of the sovereign depends exclusively on five factors:—

- (1.) The quantity of money in circulation.
- (2.) The velocity of its circulation.
- (3.) The quantity of bank deposits subject to cheque.
- (4.) The velocity of deposit circulation.
- (5.) The volume of trade.

In other words, the general level of prices is determined by the relation between the volume of the circulating media (the first four factors) and the quantity of commodities (the fifth factor) or the volume of trade. These five factors are the proximate cause of changes in the purchasing-power of the unit of value, and therefore in the general price-levels. An increase in either of the first four factors—the fifth remaining constant—lessens the purchasing-power of the unit of value and raises the general price-level, and a decrease raises the purchasing-power of the unit of value and lowers the general price-level; while an increase in the fifth factor—the other factors remaining constant—will raise the purchasing-power of the unit of value and depress or lower the general price-level, and an increase will have the reverse effect. Each factor depends on numerous antecedent causes, but they do not depend on each other, except that deposits subject to cheque depend on money in circulation, the two normally varying in unison; the velocity of circulation both of money and of deposits tends to increase with an increase in the volume of trade; and any two or more of the five factors may be influenced by a common cause or causes. For example, the growing density of population has tended to increase all the five factors. The purchasing-power of the sovereign and the price-level are the result of these five causes normally varying directly with the quantity of money, provided that the velocity of circulation and the volume of trade remain unchanged. It follows, therefore, from this, that a rise in the price of any particular commodity must be accompanied by a fall in the price of some other commodity or commodities, unless there is an increase in one of the first four factors or a decrease in the fifth. Rises in wages since 1896, as a means of meeting increases in the cost of living, have proved illusory, not because of any vicious circle, but because since that date the currency or circulating medium has expanded faster than the volume of trade, which has resulted in the general level of prices constantly rising and the purchasing-power of the sovereign constantly falling. But for this circumstance the rise in wages would have inevitably resulted in a redistribution of the national dividend, giving a greater share to labour and a smaller share to other classes in the community. The proposal that wages should be regulated by the cost of living needs careful examination with reference to (a) normal circumstances, (b) such exceptional circumstances as we have experienced during the war period, and will continue to experience in the reconstruction period after the resumption of peace.

In normal circumstances the proposal would only secure a part of what is wanted, and that part could better be obtained by making wages vary with the prosperity of an industry, for a rise in the cost of living always means, in normal circumstances, a rise in prices generally; and a rise in the price of the output of a particular industry would mean an increase in that industry's general prosperity. Consequently a sliding scale of wages, based on the prosperity of an industry, secures ordinarily a rise of wages concurrent with the rise in the cost of living; and it may secure more than this—namely, a rise in wages when there may be no increase in the cost of living, though there may be an increase in the prosperity of a particular industry. Thus prices might fall all round in consequence of greater productivity, and wages, if based on a sliding scale with the cost of living, would then mean a fall, whereas as a matter of fact an industry might be more profitable because of enlarged output due to greater productivity, and might more than make up for the fall in prices.

In the exceptional circumstances of reconstruction it may be necessary to provide for some direct variation of wages with the rise in the cost of living. It is difficult, if not impossible, to forecast what will be the course of prices during the next few years. Will the general price-level decline, or will it advance, or will there be fluctuations more or less violent? Some competent authorities hold that prices will undoubtedly decline. This they say will be due not so much to the removal of the war demand for goods and services—since the gap created by the removal of this war demand will probably be filled to a substantial extent by demands arising from the desire to make up for the limited consumption during the war, by making up the leeway in repairs and renewals, by replacements necessitated by the damage of the war, and by the reaccumulation of the world's stocks—as by the return to more normal conditions in the matter of the currency and the financing of businesses. This is dealt with in a later section.

It is impossible to say now to what level prices will subside, or how long it will take to reach that level; much depends upon the financial policies of the various Governments of the world, and

upon the extent to which the financing of industry by banks may be carried under Government support. Again, gold circulating currency may be restored or it may not. If it is restored prices will reach a lower level than if it is not restored, because a much larger volume of purchasing-power can be maintained when all the gold is in the reserve than when part of it is circulating as currency, and, as pointed out previously, the level of prices largely depends on the volume of purchasing-power. But whatever the action of Governments it is probable that a fall in prices, which may be delayed for some years, is bound to be experienced. This being so, it is evident that the money wages that can only just be paid at first would soon become an impossibly heavy charge unless something occurred to render the amount left for wages, after payment of capital, much greater than it was before the war. If, as pointed out by Professor Chapman in "Labour and Capital after the War," the problem in industrial organization is approached by the employers and employees in an open-minded way, with a desire to minimize as much as possible any real or seeming conflict of interest, and with the object of increasing the yield of the industries of the country, productivity will be raised to a substantial extent. Productivity may not be raised rapidly, however, though whole-hearted effort on the part of the employers and employees to improve the efficiency of the industry will certainly yield eventually far more comfortable real incomes for the latter than they had before the war. This matter of money wages in the exceptional period of reconstruction requires most careful consideration, and eventually industry by industry, because the war bonuses have varied greatly from industry to industry.

In our last annual report we attempted tentatively to show the concurrent movement in the volume of the circulating media and in the volume of trade or business, and we discussed the question as to whether both had increased at the same rate. For this purpose it is necessary in some way to measure the growth of trade, and, although this cannot be done with any high degree of accuracy, a rough approximation can probably be made through the study of certain statistics which typify business activity and growth. The statistics used to measure business should, however, exclude prices. The indices of business growth and activity should be expressed in units other than monetary units. Among the items selected for measuring the movements of business in general, because they are factors that enter into the manufacture of many goods of first-rate importance, are coal, wheat, mineral oils, the number of passengers and tons of freight carried on the railways, the tonnage of vessels entered and cleared at New Zealand ports, the consumption of sugar and tea, and the production of wool, frozen meat, butter, cheese, hides, skins, tallow, and flax. As each of these has its own peculiar bias, an index number has been constructed including them all, and this number represents in a rough way the growth of business in general. The index numbers are as follow:—

Growth of Trade in New Zealand, 1909 to 1918.

Year.	Index Number.	Year.	Index Number.
1909	1000	1914	1278
1910	1082	1915	1321
1911	1034	1916	1311
1912	1020	1917	1119
1913	1134	1918	1161

This table shows the steady growth in business up to the end of 1913 as compared with 1909, amounting to 13·4 per cent. During 1914, five months of which we were at war, the increase over 1909 rose to 27·8 per cent. The volume of business reached its maximum in 1915, showing an increase over the base year of 32·1 per cent.; thereafter there was a steady decline to 1917, the volume of business falling in that year to lower than what it was in the year immediately preceding the war. The year 1918, however, shows a recovery.

In order to institute a comparison with figures relating to prices let us take 1914 as the base year, and we find that the volume of business in 1915 increased 3 per cent.; in 1916 the increase was only 1·6 per cent.; in 1917 there was a drop of 13·6 per cent.; and in 1918 9·2 per cent.; the respective index numbers being—

Year.	Per Cent.
1914	100
1915	103
1916	101·6
1917	86·4
1918	90·9

The Government Statistician's figures show a rise in food-prices during the same period of 42 per cent., a percentage which in all probability is exceeded by other commodities. We therefore find during the war period that there has been a decrease in the volume of trade concurrent with an increase in general prices, and a comparison of these figures gives a rough indication of the degree to which the currency has been inflated in New Zealand.

Figures are not available showing the actual volume of money in circulation during the period. Notes in circulation have, however, increased as follows:—

Year.	Index Number.	Year.	Index Number.
1910	1000	1915	1750
1911	1032	1916	2490
1912	1054	1917	3328
1913	1030	1918	3854
1914	1229		

If the year 1914 is taken as the base the increase up to the end of 1918 amounted to 214 per cent. The percentage increase in the volume of money in circulation is lower than this figure, as part of the note issue replaced gold coins which before the war were in circulation and which since the war have gradually been withdrawn. The bulk of the business of New Zealand, however, is effected not by cash—i.e., coin or notes—but by means of bank deposits subject to cheque. Bank deposits (including the figures for the Post Office and private savings-banks, but excluding the interest-bearing deposits of trading banks) increased considerably, as shown by the following table:—

Table showing the Yearly Totals of Deposits, together with a Series of Index Numbers on the Figures for the Year 1910, which are equated to 1000.

Year.	Amount in Thousands. £	Index Number.	Year.	Amount in Thousands. £	Index Number.
1910 ..	30,109	1000	1915 ..	44,285	1471
1911 ..	33,443	1111	1916 ..	52,771	1753
1912 ..	33,299	1106	1917 ..	61,067	2028
1913 ..	34,092	1132	1918 ..	67,990	2258
1914 ..	37,836	1257			

If 1914 is taken as the base the increase in deposit currency up to the end of 1918 amounted to 80 per cent.

Thus, concurrently with a decrease in the volume of business on the one hand amounting to 9.2 per cent., there was on the other hand an increase in note-circulation amounting to 214 per cent., and an increase in deposits subject to cheque of 80 per cent., and these changes in the relationship that exists between volume of business and currency (in its widest sense) found expression in a general rise in prices.

The statistics on which the figures are based have been compiled by the Government Statistician at the request of the Board, and are shown in Appendix C.

Rise in Prices.

As the expansion of the currency—including in this term not only monetary currency proper but bank deposits subject to cheque and their respective velocities of circulation—has in the Board's opinion been the most important factor in raising the general level of prices, we propose to trace the processes of inflation that have undoubtedly taken place during the war period.

From the above table it will be seen that the note currency increased by 214 per cent., and deposit currency by 80 per cent., and these increases were brought about mainly through the machinery of banking and credit. This requires a little explanation. The amount standing to the credit of depositors in banks constitutes the rights of those depositors to consume goods and services, and these rights may be termed *general purchasing-power* which may be exercised at any time by the depositors. Banks, however, relying on the improbability of these rights being exercised to any great extent at one time, conduct a profitable business by transferring them temporarily to others against merchandise and other security, keeping a small reserve in legal tender currency for the satisfaction of those depositors who may desire it. Depositors draw on their accounts by cheque—that is, they exercise their rights to general purchasing-power continually from day to day—but the persons to whom they transfer these rights usually retransfer them to the same or some other bank. In business parlance cheques drawn on a bank are usually paid in by the holders to the credit of their accounts in the same or some other bank without the use of coin or other legal tender currency.

The claims of depositors may thus be satisfied to practically any extent and used as purchasing-power for a multitude of transactions, provided they do not take the form of demands for currency, without obliging the banks as a whole to reduce their loans or investments. Subject to the same proviso the banks may create fresh rights in favour of borrowers to an extent limited only by the amount of security which may be offered and their own discretion. The cheques drawn on a bank in virtue of these loans will be paid in by the holders to their accounts in the same and other banks, and the only change in the aggregate position of the banks will be an enlargement of their loans on the one side, balanced by the enlargement of their deposits on the other.

The probability that currency will be demanded is always present, and for this reason banks, under normal conditions, work with a constant eye to the necessity of keeping their small reserve of currency up to the ratio of their deposits which they consider compatible with safety. This consideration operates in normal times as a check on the undue expansion of loans, which must lead to diminution of the ratio of reserve of currency to deposits, either by a fall in the former or a rise in the latter.

In normal times the only legal tender currency is gold. The amount of loans is therefore more or less strictly limited by the amount of gold available.

But immediately on the outbreak of the war the Banking Amendment Act, 1914, was passed. This Act gave power to the Governor-General in Council by Proclamation to declare bank-notes payable on demand legal tender on condition that the Governor-General in Council was satisfied—

- (a) In the case of a bank having its head office situated in New Zealand, that as between the bank and its creditors the assets of the bank exceeded its liabilities by at least the amount of its paid-up capital;
- (b) In the case of a bank having its office situated outside New Zealand, that as between the bank and its creditors the assets of the bank within New Zealand exceeded its liabilities.

The period during which such notes were to remain legal tender was to be fixed in the Proclamation, and the Act authorized the Finance Minister, at any time within six months after the expiry of the period limited in the Proclamation, on being satisfied that a bank-note covered by the Proclamation had been duly presented for payment at the bank issuing the same and had not been paid, to pay the sum in gold to any *bona fide* holder, not being a bank, who might present the same for payment at the Treasury.

By Proclamation dated 3rd December, 1917, the period during which bank-notes were to be legal tender was extended until the 31st December, 1922. By the Finance Act, 1916, power was conferred on the Governor-General in Council to make regulations suspending, altering, or varying the terms, conditions, or restrictions relating to the issue of bank-notes; altering the amount of reserve of coin, bullion, and public securities required to be held in New Zealand by banks; and providing for the issue of 10s. notes. By virtue of the provisions of this Act the Governor-General in Council by regulation provided that the limit of the note-issue of any bank should be the total amount of coin, bullion, and public securities held by that bank in New Zealand, and that this limit could be extended by the Minister of Finance by an amount equal to the public securities held by that bank in the United Kingdom, provided such public securities were hypothecated to the Crown by way of a first charge to cover the Crown's liability to redeem in gold as set out above. The term "public securities" was defined as meaning the public securities of the Government of New Zealand, or of the United Kingdom, or of the Commonwealth Government, or of any of the Australian States.

The effect of this legislation was immediately apparent in an expanding paper currency, as the table dealing with note-circulation quoted above shows—that is, 214 per cent.—while at the same time there was a decreasing volume of trade to be financed. This paper currency, backed with the Government guarantee eventually to redeem in gold, enabled the banks to extend their loans to a considerable extent without apprehension of being unable to meet their obligations in legal tender. Under these circumstances, and in response to the urgent appeals of the Government for funds on attractive terms, the public and the banks have naturally taken advantage of the facilities open to them to subscribe largely to Government loans. The figures in the above tables show that both notes in circulation and deposits subject to cheque outstripped the legitimate requirements of business, and the extent to which they outstripped these requirements measures the amount of general purchasing-power which the Government obtained without the public effecting economies in consumption. This amount is paper money unrepresented by commodities, and spread over commodities actually consumed could have but one effect—an increase in their price.

The employment of deposits for this purpose has been supplemented by loans on security of various kinds, including bonds of the Government loans—the public securities mentioned above—of which each issue provided the holders with a means of borrowing to subscribe to others. Further, the banks themselves have been large subscribers, the mechanism of banking rendering it possible for them thus to supplement their customers' loans to an almost indefinite extent by direct loans of their own.

The accumulative effect of all these operations has been to create and place in the hands of the Government an enormous fund of purchasing-power without effective compulsion on the public to limit their own purchasing-power to more than a relatively moderate extent, though a considerable restriction of expenditure has doubtless been effected by voluntary effort.

Armed with this purchasing-power the Government has entered into competition with the public for the acquisition of goods and services necessary for the war, with the inevitable result of a general and formidable rise in prices. This has in turn reacted on the amount of purchasing-power required by the Government, so that it has been necessary to raise further sums as the war has proceeded and the system has become more and more costly.

These facts are essentially similar to those which would have been produced if, to the extent of the additional purchasing-power employed, the Government had issued inconvertible currency notes in payment for the goods and services required instead of raising the amount by loan. The Government would in this case have incurred, in place of the obligations maturing at fixed dates, which it has incurred in respect of loans, an indeterminate obligation in respect of the currency notes, without having to support the charge for interest for the benefit of banks and others. The currency notes would have been to a large extent deposited in banks, while the residue would have remained in circulation, just as under the system adopted the sums paid out by the Government were paid in again to a large extent to the banks, while a considerable amount of currency notes is in the hands of the public.

These conditions imply a departure from the gold standard of prices, and the substitution for it of an arbitrary standard which fluctuates to the extent to which inflated purchasing-power is effectively being employed.

Now, it is essential during the reconstruction period, if we wish to avoid the chaos that has overtaken the economic life of Russia and is threatening to overtake the economic life of other countries in Europe, that a solution be found to the problem of the depreciation in the purchasing-power of the sovereign, or the continual rise of the general level of prices, or the cost-of-living problem, as these terms are merely different expressions of the same economic phenomena.

Indeed, the problem of the currency is the greatest problem that has been left to us by the war, and already in Great Britain and the United States official committees are at work to devise means to overcome the currency difficulties that will arise during the next few months. The Committee in Great Britain, known as the Cunliffe Committee, was appointed as early as January, 1918, and its first interim report, dated August, 1918, has already been published.

Many remedies have been proposed as a solution of the cost-of-living problem. These have been ably summarized by Professor Irving Fisher in his forthcoming volume, already referred to—namely, "Stabilizing the Dollar in Purchasing-power," &c., a few of which in some places have already

been adopted. This summary is as follows: Parcel-post; farm loan facilities; workmen's compensation; other forms of social insurance; Government ownership of public utilities; socialism of every variety; reduction of human disease and disability; prohibition; the "simple life," including abandonment of social obligations and "emigration" to a different part of town; housekeepers' market clubs; municipal slaughterhouses; State bakeries and butcher-shops; tram freight service; co-operative selling by farmers; utilization of empty city lots; municipal markets; scientific management; reduction of middlemen; co-operation; profit-sharing; publicity as to prices and profits; the single tax; better supervision of weights and measures; use of bulk goods instead of package goods; use of "cash and carry" system instead of "telephone and deliver"; repeal of taxes on consumption; reduction of railway rates—namely, on vegetables, fruit, and fresh fish; a tax on export commodities (the idea being that the tax will keep the local price lower than the export price by the amount of the tax); municipal selling of potatoes, fish, &c., at cost; laws against speculation and monopoly; price-fixing; regulation of cold-storage plants; granting of subsidies to cold-storage plants; trade-unionism; the destruction of trade-unions; inflation; elastic currency; bimetalism; sliding scale of wages based on cost of living; disarmament.

In discussing these so-called remedies which have either been proposed or adopted in places Professor Fisher states that most of them are excellent in themselves but are irrelevant to the problem under consideration—that is, they would not tend in the least to stabilize the price-level and the purchasing-power of money. They might help the people to endure the high cost of living, but would not reduce or prevent it. Some of the proposals may be important to the sum of human happiness, but they are quoted by Professor Fisher with a view to showing in what direction people tend to think when the problem of the high cost of living is mentioned. The fact that such proposals are mostly concerned with economy and efficiency in the production, distribution, and consumption of goods shows that little thought is ordinarily given to the other side of the market—that is, to the monetary aspect of the question.

The trouble with most of the remedies suggested above is that they deal with the volume of trade and leave uncontrolled and unchecked the means of exchange: in other words, as long as no effort is made to adjust the volume of the medium of exchange to the amount of business that has to be done, it is impossible to control the general price-level, or prevent fluctuations in the purchasing-power of the sovereign, or solve the cost-of-living problem. That control of the general price-level by standardization of the purchasing-power of the monetary unit of value, the sovereign, is the way out of the economic labyrinth has been suggested by many economists—notably President Woodrow Wilson, Alfred Marshall, Simon Newcomb, Alfred Russell Wallace, A. C. Pigou, and other writers; and this solution is being advocated by Professor Irving Fisher with a brilliancy of statement and wealth of statistical reasoning that has attracted world-wide recognition. The plan proposed by Professor Irving Fisher is briefly as follows:

- (1.) To refrain from putting gold coins again into circulation, and to substitute gold certificates entitling the holder on any date to sovereigns of gold bullion of such weight as may be officially declared to constitute a sovereign for that date.
- (2.) To retain free coinage—that is, to be more exact, the unrestricted deposit of gold and the unrestricted redemption of certificates.
- (3.) To designate an ideal composite or "goods-sovereign," consisting of a representative assortment of commodities worth at the outset a gold sovereign of the present weight, and to establish an index number for recording at stated times the market price of this ideal "goods-sovereign" in terms of the gold-bullion sovereign.
- (4.) To adjust the weight of the sovereign (that is, the actual bullion sovereign) at stated intervals, each adjustment to be proportionate to the recorded deviation of the index number from par.
- (5.) To impose a small "brassage" fee, and provide that no one change in the bullion sovereign weight shall exceed that fee.

The crux of the plan lies in the provision for adjusting the weight of the gold-bullion sovereign. Its significance is that to keep the sovereign—the unit measure of value—from shrinking in value it should be made to grow in weight, thus recognizing that a depreciated sovereign is a short-weight sovereign; and, reversely, to keep the sovereign from growing in value it should be made to shrink in weight, thus recognizing that an appreciated sovereign is an overweight sovereign: in other words, to keep the price-level of things in general from rising or falling, to make the price of gold fall or rise.

The plan assumes, of course, that a sound banking system is retained or created, as without such a system the effect of the stabilization plan would be quite lost. The plan depends absolutely for its workability upon the possibility of computing a reasonably accurate index number measuring the rise and fall in the general level of prices or changes in the cost of living, or changes in the purchasing-power of the unit of value. This task is not beyond the skill of our Statistician's Department. In fact, as far as it goes, the index numbers published by the Government Statistician are, in the Board's opinion, based upon more satisfactory data than any which have been obtained in similar investigations in other parts of the world with the exception of Australia, which follows the same method of computation.

So hopeful does Professor Irving Fisher's suggested remedy appear to the Board that we earnestly recommend it to the serious attention of the Government.

W. G. McDONALD,	} Members of the Board.
J. R. HART,	
P. HALLY,	

J. W. COLLINS, Secretary.

31st July, 1919.

APPENDICES

APPENDIX A.

TIMBER REGULATIONS.

[(*Gazette*, 6th August, 1918.)]

PART I.—GENERAL.

1. THE regulations contained in this Schedule may be cited as the Timber Regulations.

2 In these regulations—

“Board of Trade” or “Board” means the Board of Trade established under the Cost of Living Act, 1915:

“Minister in Charge” or “Minister” means a member of the Executive Council for the time being charged by the Governor-General with the administration of these regulations:

“Sawmill” means a mill at which sawn timber is produced from the log.

3. For the assistance of the Minister in Charge and the Board of Trade in the exercise of the powers and authorities conferred by these regulations there may be appointed an advisory committee, to be known as the Timber Industry Committee, which shall consist of such representatives of persons engaged in the business of sawmilling or of exporting timber from New Zealand, or in any business depending upon a supply of timber, as the Minister in Charge, on the recommendation of the Board of Trade, may from time to time appoint to hold office during his pleasure.

4. The owner or manager of every sawmill shall, within twenty-eight days after the publication of these regulations in the *Gazette*, furnish to the Board of Trade particulars as to—

(a.) The name and address of the owner of the mill;

(b.) The location of the mill; and

(c.) The names, addresses, and businesses of all persons who, since the 31st day of March, 1917, have obtained from the sawmill not less than 50,000 superficial feet of sawn timber.

PART II.—EXPORTATION OF TIMBER.

5. (1.) The Minister in Charge may from time to time determine, with respect to any sawmill, the minimum quantity of sawn timber of any kind or grade produced in that sawmill that may be required for use in New Zealand in any period. Such quantity may be fixed either definitely as a specified amount of timber, or indefinitely as a fractional part of the output from the mill of timber of the kind or grade referred to.

(2.) The quantity so determined by the Minister for any period in respect of any sawmill may from time to time be increased or reduced by him.

(3.) Notice of the quantity so fixed with respect to any sawmill, and of any increase or reduction thereof, shall be forthwith given to the proprietor or manager of that sawmill by the Minister or the Board of Trade.

(4.) In fixing with respect to any sawmill or sawmills [the minimum quantity (if any) of sawn timber required to be reserved pursuant to these regulations for use in New Zealand, the Minister may have regard to the terms of any agreement between the owners of any sawmills that, in consideration of the terms of the agreement, the whole or any specified portion of the timber that may be required for use in New Zealand from the mills owned by the parties to the agreement shall be produced in one or more specified mills to the exclusion or partial exclusion of other specified mills.

(5.) A breach of any such agreement shall not constitute a breach of these regulations, but on such breach being proved to the satisfaction of the Minister he shall forthwith adjust, in such manner as he deems equitable, the quantities of timber to be reserved for use in New Zealand from the several sawmills affected by the agreement.

6. After a notice with respect to timber of any kind or grade has been given under the last preceding clause of these regulations with respect to any sawmill, it shall not be lawful for any person (whether a sawmiller or not) to export sawn timber of that kind or grade produced at that sawmill (whether before or after the delivery of that notice)—

(a.) Except pursuant to a permit to export such timber issued by a Collector of Customs pursuant to the provisions of these regulations in that behalf; and

(b.) Unless at the date of shipment the minimum quantity of such timber as fixed for the period including the date of shipment and for all preceding periods has been disposed of by the sawmiller or some other person for use in New Zealand at a price not exceeding such maximum price (if any) as may for the time being be fixed under the provisions in that behalf of the Regulation of Trade and Commerce Act, 1914, or is reserved for use in New Zealand and is available for sale at such price, or unless security has been given to the satisfaction of the Minister that such minimum quantity will be so reserved as aforesaid.

7. (1.) Every person who proposes to export any timber after the commencement of this Order in Council shall apply to the Collector of Customs at the port of shipment for a permit to export such timber, and shall furnish to the Collector—

(a.) Particulars as to the kind and grade of timber proposed to be exported;

(b.) Particulars as to the sawmill at which the timber was produced, or, in cases where application for a permit is made before the timber has been actually produced, particulars as to the sawmill at which such timber is to be produced;

- (c.) Particulars as to the minimum quantity (if any) of timber of the same kind or grade as the timber proposed to be exported, fixed with respect to the sawmill at which such timber was or is to be produced, for the period comprising the date of shipment, and for all preceding periods;
 - (d.) A declaration under the Customs Act, 1913, that the minimum quantity or minimum quantities so fixed have been disposed of, or have been duly reserved for use in New Zealand, at a price not exceeding the maximum price (if any) for the time being fixed under the Regulation of Trade and Commerce Act, 1914, or that security has been duly given to the satisfaction of the Minister in Charge for the reservation of such minimum quantity or minimum quantities as aforesaid; and
 - (e.) Such other particulars as may be required to satisfy the Collector that the timber proposed to be exported may be lawfully exported pursuant to these regulations.
- (2.) On any application for the issue of a permit under this regulation the Collector of Customs shall issue the same if he is of opinion that the provisions of these regulations have been complied with, and not otherwise.
8. (1.) Every person carrying on business as a sawmiller or as an exporter of sawn timber, and every person requiring supplies of sawn timber for the purposes of any business carried on by him, shall from time to time make to the Minister in Charge, or to the Board of Trade, such returns as to his business as the Minister or Board of Trade may from time to time require for the purposes of this Order in Council, such returns to be verified by statutory declaration if and so far as the Minister or the Board so requires.
- (2.) Without limiting the generality of the foregoing provisions of this regulation, the Minister or the Board of Trade may require any sawmiller or exporter of sawn timber, or any person requiring supplies of sawn timber for the purposes of his business as aforesaid, to furnish returns as to his business for any period subsequent to the 31st day of March, 1915.
9. The Minister in Charge may from time to time, by notice in the *Gazette*, exempt any kind or grade of timber from the operation of these regulations, and may in like manner revoke any such notice.

PART III.—WAR REGULATIONS.

10. Every person shall be guilty of an offence, and shall be liable under the War Regulations Act, 1914, accordingly, who—
- (a.) Fails to make any return or to furnish any particulars required from him pursuant to these regulations;
 - (b.) Makes any such return which is false in any respect; or
 - (c.) Makes any false representation for the purpose of obtaining a permit under these regulations.

APPENDIX B.

AMENDMENT OF TIMBER REGULATIONS.

(*Gazette*, 20th February, 1919.)

1. In these regulations "the principal regulations" mean the hereinbefore-recited regulations of the 6th day of August, 1918.
2. (1.) Before finally determining with respect to any sawmill the quantity of sawn timber of any kind or grade required for use in New Zealand in any period, pursuant to clause 5 of the principal regulations, the Minister, or the Board by the direction of the Minister, may give to the proprietor or manager of the sawmill a provisional notice setting forth—
- (a.) The quantity of such timber proposed to be required for use in New Zealand; and
 - (b.) The quantity of such timber proposed to be made available for export from New Zealand.
- (2.) A notice under the last preceding subclause shall require the proprietor or manager of the sawmill to which it relates to furnish to the Board within fourteen days, or such longer period as may be appointed in that behalf, particulars as to the quantity of timber (being the production of the sawmill during the period to which the notice relates) that is intended to be exported.
- (3.) On receipt of such particulars, or if such particulars are not received by the Board within the time limited in that behalf, the Minister shall proceed to determine, with respect to the several sawmills affected, the quantity of timber required to be reserved for use in New Zealand pursuant to clause 5 of the principal regulations, and in such determination shall have regard to the returns furnished under this clause.
3. (1.) As soon as practicable after the Minister has fixed, with respect to any sawmill, the quantity of sawn timber of any kind or grade that may be required for use in New Zealand in any period, the Board of Trade may issue a permit authorizing the export from New Zealand of any sawn timber produced at the sawmill during that period in excess of the quantity so required for use in New Zealand.
- (2.) A permit under this clause may authorize the export of a definite quantity of timber, or may authorize in general terms the export of a specified percentage of the timber produced at the sawmill during the period to which the permit relates.
- (3.) The Board may, if it thinks fit, on the issue of any permit as aforesaid, or at any time thereafter, fix a period within which the same must be exercised, and if the permit is not exercised within

the period so appointed, or within such extended period as the Board may allow in that behalf, the Board may, if it thinks fit, cancel the permit.

(4.) On the cancellation of any permit as aforesaid the Minister may make such adjustment (if any) as he thinks fit with respect to the quantities of timber required to be reserved for use in New Zealand from other sawmills.

4. After a notice has been given fixing the quantity of timber of any kind or grade required to be reserved from any sawmill for use in New Zealand, it shall not be lawful for any person (whether a sawmiller or not) to export sawn timber of that kind or grade, being the production of that sawmill (whether produced before or after the delivery of the notice), except pursuant to a permit issued in that behalf by the Board of Trade.

5. (1.) Every person who, after the commencement of this Order in Council, proposes to export any timber of a kind or grade to which a notice under the principal regulations applies shall produce to the Collector of Customs at the port of shipment the permit to export such timber, and shall furnish to the Collector—

(a.) Particulars as to the quantity, kind, and grade of timber proposed to be exported ;

(b.) Particulars as to the sawmill at which the timber was produced ; and

(c.) A declaration under the Customs Act, 1913, that the proposed export is in conformity with the Timber Regulations and with the permit of the Board of Trade.

(2.) The Collector of Customs shall thereupon endorse on the permit particulars as to the quantity, kind, and grade of timber exported, the date of the shipment, the name and address of the shipper and the name of the vessel, and shall then return the permit to the shipper.

6. All permits heretofore issued by a Collector of Customs under the principal regulations and before the commencement of this Order in Council shall be deemed for all purposes to have been issued by the Board of Trade under these regulations.

7. Clauses 6 and 7 of the principal regulations are hereby revoked.

APPENDIX C.

GROWTH OF BUSINESS—INDEX NUMBERS, 1909–1918.

Year.	Railway Passengers.		Railway Freights.		Shipping, Outwards.		Shipping, Inwards.		Coal-production.		Wheat-production.		Sugar imported.		Tea imported.		General Index No.
	Number.	Index.	Tons.	Index.	Tonnage.	Index.	Tonnage.	Index.	Tons.	Index.	Bushels.	Index.	Cwt.	Index.	Lb.	Index.	
1909	11,141,142	1000	5,490,018	1000	13,228,484	1000	13,212,609	1000	1,911,247	1000	8,661,100	1000	999,810	1000	7,302,310	1000	1000
1910	11,200,613	1005	5,863,674	1068	13,457,189	1017	13,470,927	1020	2,197,362	1150	8,290,221	957	1,019,480	1020	7,586,816	1039	1082
1911	11,891,134	1067	5,887,908	1072	13,703,173	1036	13,749,032	1041	2,066,073	1081	7,261,138	838	1,092,108	1092	8,071,471	1105	1034
1912	13,123,879	1178	6,246,128	1138	14,307,664	1082	14,304,289	1083	2,177,615	1139	5,179,626	598	1,202,062	1202	7,683,804	1052	1120
1913	13,355,893	1199	6,019,633	1096	13,202,600	998	13,244,622	1002	1,888,005	989	5,231,700	604	1,215,477	1216	7,068,566	968	1134
1914	13,565,772	1218	6,453,472	1175	14,115,850	1067	14,117,812	1069	2,275,614	1191	6,644,336	767	929,327	930	9,951,774	1363	1278
1915	14,201,506	1275	6,370,945	1160	12,668,510	958	12,693,107	961	2,208,624	1156	7,108,360	821	1,257,235	1258	9,150,139	1253	1321
1916	14,173,115	1272	6,239,172	1136	11,332,473	857	11,497,346	870	2,257,135	1181	5,083,277	587	1,199,385	1200	7,982,195	1093	1311
1917	11,408,156	1024	5,742,968	1046	9,642,097	729	9,671,745	732	2,068,419	1082	6,807,536	786	1,317,557	1318	9,478,460	1298	1119
1918	11,374,521	1021	5,611,739	1022	8,455,175	639	8,335,013	631	2,034,250	1064	*	*	987,346	988	9,692,163	1327	1161

Year.	All Mineral Oils imported.		Wool exported.		Frozen Meat exported.		Butter exported.		Cheese exported.		Hides and Skins (Calf and other) exported.		Tallow exported.		Phormium and Tow exported.		General Index No.
	Gallons.	Index.	Lb.	Index.	Cwt.	Index.	Cwt.	Index.	Cwt.	Index.	Number.	Index.	Cwt.	Index.	Tons.	Index.	
1909	6,126,364	1000	189,683,703	1000	2,572,604	1000	321,108	1000	400,607	1000	333,804	1000	484,160	1000	17,292	1000	1000
1910	7,889,223	1288	204,368,957	1077	2,654,196	1032	356,535	1110	451,915	1128	293,670	880	520,180	1074	25,146	1454	1082
1911	9,238,314	1508	169,424,811	893	2,250,565	875	302,387	942	439,174	1096	283,401	849	413,120	853	20,649	1194	1034
1912	10,128,878	1653	188,361,790	993	2,573,238	1000	378,117	1178	577,070	1440	313,563	939	470,900	973	22,029	1274	1120
1913	8,794,719	1436	186,533,036	984	2,578,693	1002	372,258	1159	611,663	1527	348,794	1045	454,860	939	34,391	1989	1134
1914	12,909,716	2107	220,472,898	1162	3,229,973	1255	434,067	1352	863,776	2156	412,822	1237	490,300	1013	23,928	1384	1278
1915	14,194,744	2317	196,570,114	1036	3,591,260	1396	420,144	1308	817,256	2040	516,799	1548	535,260	1106	26,685	1543	1321
1916	16,543,060	2700	185,506,859	978	3,326,045	1293	358,632	1117	949,416	2370	510,936	1531	449,440	928	32,252	1865	1311
1917	13,816,966	2255	178,274,486	940	2,446,945	951	254,397	792	885,743	2211	237,906	713	251,980	520	26,016	1505	1119
1918	16,620,033	2713	108,724,575	573	2,036,904	792	431,023	1342	883,430	2205	320,832	961	328,420	678	26,982	1560	1161

* Not yet available.

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