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# EFFECTS OF THE WAR ON ECONOMIC AND SOCIAL LIFE IN FINLAND

# ECONOMIC AND SOCIAL HISTORY OF THE WORLD WAR

James T. Shotwell, Ph.D., LL.D., General Editor.

TRANSLATED AND ABRIDGED SERIES

## EFFECTS OF THE WAR ON ECONOMIC AND SOCIAL LIFE IN FINLAND

#### BY

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#### EDITOR'S PREFACE

In the autumn of 1914, when the scientific study of the effects of war upon modern life passed suddenly from theory to history, the Division of Economics and History of the Carnegie Endowment for International Peace proposed to adjust the program of its researches to the new and altered problems which the war presented. The existing program, which had been prepared as the result of a conference of economists held at Berne in 1911, and which dealt with the facts then at hand, had just begun to show the quality of its contributions; but for many reasons it could no longer be followed out. A plan was therefore drawn up at the request of the Director of the Division in which it was proposed, by means of an historical survey, to attempt to measure the economic cost of the war and the displacement which it was causing in the processes of civilization. Such an 'Economic and Social History of the World War,' it was felt, if undertaken by men of judicial temper and adequate training, might ultimately, by reason of its scientific obligations to truth, furnish data for the forming of sound public opinion, and thus contribute fundamentally toward the aims of an institution dedicated to the cause of international peace.

The need for such an analysis, conceived and executed in the spirit of historical research, was increasingly obvious as the war developed, releasing complex forces of national life not only for the vast process of destruction, but also for the stimulation of new capacities for production. This new economic activity, which under normal conditions of peace might have been a gain to society, and the surprising capacity exhibited by the belligerent nations for enduring long and increasing loss-often while presenting the outward semblance of new prosperity—made necessary a reconsideration of the whole field of war economics. A double obligation was therefore placed upon the Division of Economics and History. It was obliged to concentrate its work upon the problem thus presented, and to study it as a whole; in other words, to apply to it the tests and disciplines of history. Just as the war itself was a single event, though penetrating by seemingly unconnected ways to the remotest parts of the world, so the analysis of it must be developed according to a plan at once all embracing and yet adjustable to the practical limits of the available data.

During the actual progress of the war, however, the execution of this plan for a scientific and objective study of war economics proved impossible in any large and authoritative way. Incidental studies and surveys of portions of the field could be made and were made under the direction of the Division, but it was impossible to undertake a general history for obvious reasons. In the first place, an authoritative statement of the resources of belligerents bore directly on the conduct of armies in the field. The result was to remove as far as possible from scrutiny those data of the economic life of the countries at war which would ordinarily, in time of peace, be readily available for investigation. In addition to this difficulty of consulting documents, collaborators competent to deal with them were for the most part called into national service in the belligerent countries and so were unavailable for research. The plan for a war history was therefore postponed until conditions should arise which would make possible not only access to essential documents, but also the cooperation of economists, historians, and men of affairs in the nations chiefly concerned, whose joint work would not be misunderstood either in purpose or in content.

Upon the termination of the war, the Endowment once more took up the original plan, and it was found with but slight modification to be applicable to the situation. Work was begun in the summer and autumn of 1919. In the first place, a final conference of the Advisory Board of Economists of the Division of Economics and History was held in Paris, which limited itself to planning a series of short preliminary surveys of special fields. Since, however, the purely preliminary character of such studies was further emphasized by the fact that they were directed more especially toward those problems which were then fronting Europe as questions of urgency, it was considered best not to treat them as part of the general survey, but rather as of contemporary value in the period of war settlement. It was clear that not only could no general program be laid down a priori by this conference as a whole, but that a new and more highly specialized research organization than that already existing would be needed to undertake the Economic and Social History of the War, one based more upon national grounds in the first instance, and less upon purely international cooperation. Until the facts of national history could be ascertained, it would be impossible to proceed with comparative analysis; and the different national histories were themselves of almost baffling intricacy and variety. Consequently the former European Committee of Research was dissolved, and in its place it was decided to erect an Editorial Board in each of the larger countries and to nominate special editors in the smaller ones, who should concentrate, for the present at least, upon their own economic and social war history.

The nomination of these boards by the General Editor was the first step taken in every country where the work has begun. And if any justification was needed for the plan of the Endowment, it at once may be found in the lists of those, distinguished in scholarship or in public affairs, who have accepted the responsibility of editorship. This responsibility is by no means light, involving as it does, the adaptation of the general editorial plan to the varying demands of national circumstances or methods of work; and the measure of success attained is due to the generous and earnest coöperation of those in charge in each country.

Once the editorial organization was established there could be little doubt as to the first step which should be taken in each instance toward the actual preparation of the history. Without documents there can be no history. The essential records of the war, local as well as central, have therefore to be preserved and to be made available for research in so far as is compatible with public interest. But this archival task is a very great one, belonging of right to the governments and other owners of historical sources and not to the historian or economist who proposes to use them. It is an obligation of ownership; for all such documents are public trust. The collaborators on this section of the war history, therefore, working within their own field as researchers, could only survey the situation as they found it and report their findings in the form of guides or manuals; and perhaps, by stimulating a comparison of methods, help to further the adoption of those found to be most practical. In every country, therefore, this was the point of departure for actual work; although special monographs have not been written in every instance.

The first stage of the work upon the war history, dealing with little more than the externals of archives, seemed for a while to exhaust the possibilities of research, and had the plan of the history been limited to research based upon official documents, little more could have been done, for once documents have been labelled 'secret' few government officials can be found with sufficient courage or initiative to break open the seal. Thus vast masses of source material essential for the historian were effectively placed beyond his reach, although much of it was quite harmless from any point of view. While war conditions thus continued to hamper research, and were likely to do so for many years to come, some alternative had to be found.

Fortunately, such an alternative was at hand in the narrative, amply supported by documentary evidence, of those who had played some part in the conduct of affairs during the war, or who, as close observers in privileged positions, were able to record from first or at least second-hand knowledge the economic history of different phases of the Great War, and of its effect upon society. Thus a series of monographs was planned consisting for the most part of unofficial yet authoritative statements, descriptive or historical, which may best be described as about half-way between memoirs and blue-books. These monographs make up the main body of the work assigned so far. They are not limited to contemporary war-time studies; for the economic history of the war must deal with a longer period than that of the actual fighting. It must cover the years of 'deflation' as well, at least sufficiently to secure some fairer measure of the economic displacement than is possible in purely contemporary judgments.

With this phase of the work, the editorial problems assumed a new aspect. The series of monographs had to be planned primarily with regard to the availability of contributors, rather than of source material as in the case of most histories; for the contributors themselves controlled the sources. This in turn involved a new attitude toward those two ideals which historians have sought to emphasize, consistency and objectivity. In order to bring out the chief contribution of each writer it was impossible to keep within narrowly logical outlines; facts would have to be repeated in different settings and seen from different angles, and sections included which do not lie within the strict limits of history; and absolute objectivity could not be obtained in every part. Under the stress of controversy or apology, partial views would here and there find their expression. But these views are in some instances an intrinsic part of the history itself, contemporary measurements of facts as significant as the facts with which they deal. Moreover, the work as a whole is planned to furnish its own corrective; and where it does not, others will.

In addition to the monographic treatment of source material, a number of studies by specialists are already in preparation, dealing with technical or limited subjects, historical or statistical. These monographs also partake to some extent of the nature of first-hand material, registering as they do the data of history close enough to the source to permit verification in ways impossible later. But they also belong to that constructive process by which history passes from analysis to synthesis. The process is a long and difficult one, however, and work upon it has only just begun. To quote an apt characterization, in the first stages a history like this one is only 'picking cotton.' The tangled threads of events have still to be woven into the pattern of history; and for this creative and constructive work different plans and organizations may be needed.

In a work which is the product of so complex and varied cooperation as this, it is impossible to indicate in any but a most general way the apportionment of responsibility of editors and authors for the contents of the different monographs. For the plan of the History as a whole and its effective execution the General Editor is responsible; but the arrangement of the detailed programs of study has been largely the work of the different Editorial Boards and divisional editors, who have also read the manuscripts prepared under their direction. The acceptance of a monograph in this series, however, does not commit the editors to the opinions or conclusions of the authors. Like other editors, they are asked to vouch for the scientific merit, the appropriateness, and usefulness of the volumes admitted to the series; but the authors are naturally free to make their individual contributions in their own way. In like manner, the publication of the monographs does not commit the Endowment to agreement with any specific conclusions which may be expressed therein. The responsibility of the Endowment is to History itself—an obligation not to avoid but to secure and preserve variant narratives and points of view, in so far as they are essential for the understanding of the war as a whole.

The present volume, although small in size, deals with one of the most interesting aspects of the economic history of the War. The effect of the World War upon Finland is not quite paralleled in the history of any other European country. It reflects the unique quality of the country itself, of its people, its industries, and its political and social heritage. In these pages Dr. H. Harmaja has drawn the outlines of a complicated situation with such clarity and directness as to disguise the full measure of research which underlies his pres-

entation. The student of Finnish history or of the economics of Scandinavia and the Baltic region will find, however, in the original Finnish text a great deal of the detail upon which the calculations are based. Moreover, in the Finnish volume there is a homely story of intimate local data which had perforce to be omitted from the general volume.

To Dr. Harmaja and to the Kansantaloudellinen Yhdistys the Carnegie Endowment is indebted for their generous cooperation in the presentation of this text. As the volume is, also, the last number of the series of northern European monographs which have been prepared under the editorship of Professor Harald Westergaard, it is but fitting to recall the extent to which the Economic and Social History of the World War is indebted to his constant interest and support, contributing to the cause of peace as he has done since the foundation of the Endowment the high distinction of a master of his science and the keen and ready interest in all sound measures that make for a better international understanding.

J. T. S.

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#### CHAPTER I

#### INTRODUCTION

Among the countries whose national career was materially altered by the Great War was Finland. The liberation of Finland from a political dependence on Russia lasting over a century and her declaration of independence occurred during the War and in direct connection with the upheavals which were one result of the War. New paths simultaneously opened for the economic and social development of the country. The War thus marked an important turning point in the history of the Finns.

In the Middle Ages, Finland fell under the sway of her western neighbor, Sweden. Constant wars with Russia, however, ended, in 1809, in her separation from Sweden and her attachment to Russia as an autonomous state. Sheltered in this special position, Finland made great progress in the nineteenth century, politically, economically, and socially. A national culture based on the Finnish language budded and flourished; a strong tide of national consciousness awoke and gradually spread in ever wider circles. In spite of difficult climatic and geographical conditions, Finland thus achieved a not inconsiderable prosperity, both intellectually and materially.

This steady progress was interrupted at the turn of the century. Already a movement had arisen in Russia for a restriction of the political rights of Finland and a closer assimilation. This movement gained the support of Russia's ruling element at the end of the nineteenth century; and in various ways attempts began to be made to carry out plans for a Russification of Finland. These efforts were obstinately opposed by the Finns, and grave political conflicts resulted. Up to then there had in general been friendly feelings between Finns and Russians; but such plans for Russification worked above all to bring about a complete change. In wide circles Finland's attitude toward Russia became more and more inimical, and the effects of this were felt in many different fields.

When the Great War broke out, the position of Finland was a peculiar one. Though officially classed with the combatant countries, the last of her national military formations had been disbanded by Russia in the first years of this century. She took no part in hostilities directly, and was in many respects a neutral state. But the heavy losses sustained by Russia seemed after a time to give Finland a new political opportunity. Numbers of Finnish youths, especially hostile to the attempts to Russify their country, hastened to Germany to fight as volunteers; and, widely, the hope awoke that the Great War would bring Finland more liberty than she had lately enjoyed. After the collapse of the imperial régime early in 1917, a movement for Finnish independence, very largely supported, began to come out into the open. And when, as the revolutionary movement continued, the state of Russia became ever more chaotic, Finland decided to free herself. On December 6, 1917, the Diet, in conformity with government action, proclaimed Finland a sovereign state.

The proclamation of independence led almost at once to the recognition of the new state by many governments; and even Russia, which had declared its willingness to support the principle of national self-determination, was naturally obliged to accede. Nevertheless, the Russian army and naval detachments stationed in Finland were not withdrawn, and in actual fact Finland remained in a state of occupation by Russia. At the end of January, 1918, with Russian assistance, a Red revolution was engineered in Finland, the intention being to bring her into the newly created Union of Socialist Soviet Republics. The outcome was an armed struggle of a dual nature. In part it aimed to expel the Russians and deliver the country from alien rule, in which respect it was a war of liberation. But, in part, it was also a revolt against Finland's lawful government and the entire political and social system of the country. It was started by Finnish workers, with Russian help; and thus the fighting assumed the character of a civil war. Soon after the outbreak of this revolt, almost all the southern half of the country fell into the hands of the rebels. Simultaneously, however, the White formations in the north and east were gradually being organized into a regular army, which, led partly by ex-officers, partly by Finnish volunteers, returned from Germany, soon moved southward. Help also came from Germany in the form of a special expeditionary force. In a few weeks the revolt was subdued, the Russians driven over the frontier, and actual fighting ended in the beginning of May, 1918.

Finland was thus the scene of military operations for only three months. Yet these brief operations had wrought material destruction

#### INTRODUCTION

in many different ways, and socially were felt for long. They added themselves both economically and socially to the effects of the Great War itself. And in the following pages we shall review war-time events in Finland from the standpoint of their economic and social effects.

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#### CHAPTER II

#### GENERAL ECONOMIC CONDITIONS

THE area of Finland before the Great War was comparatively large, viz., 377,000 square kilometers, and extended from the Baltic almost to the Arctic Sea. It thus exceeded the area of many great nations.

A considerable part of Finland, however, is either wholly unadapted to economic exploitation or is, in this respect, of very little value. An area of over 44,000 square kilometers is covered by water. Other large areas, about one-third of the whole, consist of swamps, marshes, and hilly country.

But for the most part the country is covered with forest, for the growth of which the poor soil is well adapted. The rate of growth is slow, but the forest area is extensive, and the lumber industry can avail itself of river channels, water power, and the opportunities provided by the waterways for cheap transport. There is a lack of valuable minerals. Few ores have been discovered; the only noteworthy exception is the Outokumpu copper area. But good building stone is extremely plentiful, and includes both granites and limestone.

Soil and climate are on the whole not well adapted to agriculture. Unfavorable conditions make farming costs heavy, and many important crops do not thrive at all. Nevertheless, really fertile soil is not wholly lacking and the area of comparatively fertile land is large. In the southwest and southern coastal areas in particular, but also in other parts of the country, conditions for farming are often fairly good, midsummer being about as warm as in the Danish islands and considerably warmer than on the western coasts of Great Britain. This warm period, however, is shorter, and the winter much colder than in the said areas, to say nothing of the climate of the far north of Finland. Large parts of the country are so barren and rocky as to offer little nourishment for vegetation. The conditions for dairy farming are good, even in the north and in the marshlands.

For purposes of industry nature provides large quantities of timber, but relatively little other raw material. Power is available in the form of wood fuel and the numerous rapids. The total water power for industrial purposes, at nine months' mean water, is estimated by experts at over 1,300,000 h-p. But this means considerable preliminary outlay, and large quantities of coal have had to be bought from abroad to meet the present demand for fuel in industry.

Communications are hampered by the long distances, but, as said, the waterways give cheap transport. If frozen lakes and inlets halt navigation, they make road transport easier. But the snowfall is heavy, especially in the north.

The gifts of nature to Finland are not, it is true, especially abundant, but in certain fields working conditions are moderately favorable, and in a few fields, good.

#### CHAPTER III

#### **POPULATION**

THE extensive territory possessed by the Finns is sparsely inhabited. The three-million mark was not passed until 1908–1909. And even then population figures included persons who had emigrated and possibly names of the dead still appearing in the parish registers. Poll-tax figures gave a total of only 2,900,000.

As this population is spread over a wide extent, its density in 1910, omitting water areas, was as low as 9.4 per square kilometer. If we exclude the Province of Oulu in the north, the figure is almost twice as high. In South Finland certain districts are comparable in density with Central Europe; but on the whole Finland must be regarded as one of the most thinly populated countries in Europe. Thus, it is as though nature had intended that she should rely for her livelihood chiefly on agriculture and forestry, and on industries based on these.

As a result of the increase in population caused by the excess of births over deaths, the density figure has steadily risen. During the period 1909–1913 the rate of natural increase averaged 40,400 per year, but tended to decline, owing to the slower rise in the death rate as compared with the falling birth rate.

Emigration also played its part. From 1909 to 1913 an average of 15,000 Finns annually took out passports and sought work in countries outside Europe. Some returned, but no exact figures exist. Immigration into Finland has always been small. Yet the natural rate of increase was so rapid that the loss due to emigration failed in general to equal 39 per cent of it.

Census returns for 1910 show that those of working age, i.e., between the ages of 15 and 60, numbered 570 per thousand and those between 20 and 60, 479 per thousand. The percentage of those of working age has increased with the falling birth rate; but the number of those over 60 has also increased. In general, however, the average, in age-classes, has developed favorably.

In 1910, the number of Finns supported by agriculture was 1,937,200, or 66.3 per cent of the total; by industries, 357,200, or 12.2; by transport work, 84,400, or 2.9; by commerce, the figures

were 64,600, or 2.2; by the public service, 69,800, or 2.4; and by other means, 408,000, or 14 per cent. But it should be made clear that agriculture also includes those dependent for their livelihood on lumbering, hunting, and fishing. It also includes a considerable number engaged in farm work, who at times seek work elsewhere, and others who, in some cases, lack definite occupation. Thus, the total for agriculture has been made larger than it actually is. Relatively, it is further affected by the fact that rural families are usually larger than town families, and that members of farmers' families are generally classed in the statistics as agricultural workers, even though they have some part-time special trade.

In any case, agriculture was the chief means of livelihood, even though it may not have provided a full living for more than about two-thirds of the population.

During the War, Finland was the scene of hostilities for a brief period only; furthermore, only a small number of Finns took part in the War outside the country. Consequently, the effect of the War on population figures was not nearly as disastrous as it was in combatant countries. Nevertheless, the War did mean marked changes.

At its very beginning, emigration ceased almost entirely owing to restricted sea traffic, closed frontiers, and the like.

Passport figures show that during the war years, emigration averaged 4,102 annually, or about 12 per 10,000. The pre-war average was 50 per 10,000. Emigrants being usually individuals in their working prime, this decline in emigration was a considerable advantage.

In the birth rate, there was a fairly steady fall both before and during the War. A slight rise occurred in 1917, but in 1918 the rate dropped below the pre-war level. Thus, from 26.9 per thousand in 1914 it fell to 23.8 in 1918. The death rate, which had been falling, began to rise. In 1914 it was 15.6 per thousand, or lower than ever before; after which it rose until in the year of the revolt it reached 28.5. The average for the five-year period rose in consequence to 18.8, as compared with 16.4 for 1909–1913. The chief cause of this was obviously the War, and primarily events during the revolt. The deaths in 1917, viz., 59,000, were already an increase. But in 1918 they totaled over 95,000, compared with total births of less than 80,000.

In 1919 the births, nearly 64,000, were still below normal, and,

owing to increased sickness due to the lack of food, deaths numbered almost 63,000. In 1920 the birth rate recovered almost its 1914 level. But a steady decline then set in which left the average for 1919–1922 at 23.1 per thousand, and for 1923–1927, 22.3. The death rate, which in 1919 was 18.9 per thousand, or not much below the birth rate in that year, declined during the next few years, but irregularly. The average for 1919–1922 was 15.8 and for 1923–1927, 14.1. Thus, the surplus of births continued large, and the population increased.

This increase was helped by the scant emigration. The average for 1919–1922 was almost the same as for the war years. In 1923 there was a marked increase; but a decline then set in which brought the average for the period 1923–1927 to less than half of the corresponding pre-war figure.

#### CHAPTER IV

#### AGRICULTURE

#### Conditions before the War.

BOTH before and after the War agriculture was the most important means of livelihood in Finland. And the data available go back even to the period of Swedish rule.

Land under the plow increased greatly during the latter half of the last century, and, much more rapidly than population. At the same time, however, the area of natural pasture decreased. In 1910 the percentage of plowed area seeded in grain was 40.8, oats accounting for over half, and rye for 12.9 per cent. If we add to this the area devoted to peas, beans, vetch, and potatoes, we obtain a total of 45.1 per cent. The percentage for clover and grass was nearly the same, or about 40 per cent. Fallow land added 12.5 per cent. Compared with earlier times, the use of plowland for grass crops had considerably increased.

The economic significance of the different crops is best revealed by the size of the annual harvests. The official figures are, apparently, somewhat too low. But, for the five-year period 1909–1913, wheat gave an average yield of 40,000 deci-tons; rye, 2,590,000; barley, 1,040,000; oats, 3,450,000; mixed crops, 140,000; peas and beans, 70,000; potatoes, 4,290,000; and turnips and other root crops, 1,850,000.

In addition, there was also an average of 20.89 million deci-tons of hay and .01 million deci-tons of flax and hemp. The growing of some grains was declining before the War. Fodder crops were increasing. And the most marked trend was toward dairy farming.

This had been evident since the late sixties, when frosts destroyed the grain, a danger to which fodder crops, and consequently dairy farming, was not exposed.

For centuries the amount of live stock kept has been an excellent gauge of the economic position of Finland's rural population. Under normal conditions there has been a yearly increase. But the increase has not been even, and *pro rata* with population. During the latter

<sup>1</sup> The deci-ton is one-tenth of the metric ton.

half of the nineteenth century cattle increased rapidly, until by 1900 those over two years old totaled 1,146,000 head. Yet even so the rate of increase was less than the population increase. The annual average for 1909–1913, in horses over three years old, was 296,000, and in cattle over two years old, 1,182,000. In the number of sheep a downward tendency was apparent on the whole. In 1910 the total was 1,329,700 head. Pigs in the same year numbered 422,300. Reindeer stocks were put at 127,400 head, almost what the figure had been ten years before. The care of stock animals had also steadily improved, with corresponding effects on their size, weight, and productive capacity. In 1913, 13,900,000 kilos of butter were produced and 2,100,000 kilos of cheese; and dairying was on the increase.

#### The War Years.

In agriculture the effects of the War were far-reaching. The rise in food prices, naturally, benefited farmers. But great difficulties were experienced in moving and exporting farm produce, and in obtaining the necessities for farming.

Farmers who were more or less self-supporting did not feel these difficulties seriously. But when the scarcity of many agricultural products had developed into a veritable food crisis the War began to make itself felt in ever widening circles among the farmers in their turn. Nineteen fourteen could hardly be regarded as an actual war year for agriculture. But as 1914 cannot in other respects be excluded from the war period, it has been found best to base the following table on the years 1914–1918. The size of the harvest during the said years was as follows (figures denote millions of deci-tons):

	1914	<i>1915</i>	1916	1917	1918
Wheat	0.05	0.07	0.07	0.06	0.06
Rye	2.79	2.78	2.44	2.20	2.13
Barley	0.91	1.06	1.03	0.95	0.97
Oats	8.31	4.04	3.73	3.18	3.25
Mixed crops	0.13	0.12	0.10	0.08	0.06
Peas and beans	0.07	0.09	0.08	0.07	0.07
Potatoes	4.36	4.78	4.57	4.45	4.55
Turnips and other ro	o <b>t</b>				
crops	1.67	1.96	1.49	1.15	1.15

Certain crops in 1917 and 1918 were smaller than usual owing to the Revolt.

Wheat growing increased during 1914 and 1915, then slightly declined. The rye harvests, of far greater importance, were larger. But here, too, a decline followed. The average for 1914–1919, 2.47 million deci-tons, fell below that for 1909–1913, which was 2.59 million deci-tons. Barley averaged slightly below 1909–1913. Oats were rather better; 3,450,000 deci-tons being the 1909–1913 average. Potatoes, too, exceeded their pre-war average one of 4,290,000 deci-tons. War-time conditions clearly affected turnips and other root crops, the totals being much below those before the War. Cereals were so much more in demand that less plowland than before could be devoted to fodder.

The 1914 hay harvest showed little change. But in the fine summer of 1917 the total yield was only 19,700,000 deci-tons as compared with 23,700,000 in 1916; and even in 1918 the harvest was still only 20,300,000 deci-tons. Flax and hemp fell slightly during the war years.

The story is also told by the import figures for fertilizers and agricultural machinery. In 1914 imports of fertilizers fell to about one-half of the total for 1913, stopped altogether until 1918, and the high figure for 1918, 3.1 million marks, was due chiefly to the fall in the mark. Similarly, imports of agricultural machinery in the first war years fell to almost nothing. But compared with previous years, the domestic output, after a decline in 1915, increased steadily. Only in 1917 and 1918 did agricultural machinery again begin to be imported in any quantity. And even in these years the value of the home product also rose appreciably. Exports remained very small, ceasing altogether in 1918.

The interruption in the supply of important agricultural imports naturally had a bad effect on farming.

During the War, both the military and the civilian population were compelled in many ways to draw upon the country's live stock, for the annual increment was insufficient, and inroads on the living capital were unavoidable.

The figures for the war years, limited to horses over three years old and cattle over two, are these: in 1914, horses, 294,300, cattle, 1,167,100; 1915, horses, 287,900, cattle, 1,149,800; 1916, 275,600,

and 1,111,000; 1917, 270,600, and 1,106,300; and 1918, 262,400, and 1,076,300.

There was a steady downward tendency. As compared with the period 1909–1913 these figures show a decline of 5.6 and 4.7 per cent, respectively.

Dairying was at first not visibly affected by the War. On the contrary, with the great increase in the demand for milk products, the business increased. But the fodder shortage, and the unsettled times toward the end of the War also made themselves felt.

During the war years the production of butter and cheese was, in millions of kilos: 1914, 13.5 and 2.5; 1915, 12.1 and 1.9; 1916, 12.6 and 1.8; 1917, 10.3 and 2.1; 1918, 6.1 and 0.9.

During the war years higher prices compensated farmers for decreased crops, and even yielded a good profit, except where production was blocked. Money flowed more freely than before, with the resultant economic betterment. Yet in few cases did the actual means of production profit permanently. Only those farms which paid off earlier loans from the abundant earnings during the War gained lastingly. Farmers who sought to procure new plowland, buildings, or equipment were deterred by the alarmingly high war-time prices. And at the same time the diminishing returns from lumbering, due to the stagnation in the sawmilling industry meant a lessened source of income for the farmer.

A decision reached by the Diet in the summer of 1918, permitting tenants of leased holdings to buy them from the landlord at pre-war prices, laid a considerable burden on landowners. But the increase in the number of small but independent farmers added new life to agriculture.

### Developments after the War.

When the War ended, stocks of grain and other foods had become very low, and in many places were wholly gone. Special demands were, consequently, made on the farmers, and new avenues of production opened to them. The largest possible harvests had to be taken from the soil, and at the earliest moment. But, save for decreases in fallow land, the aggregate cultivated area remained unaltered, and appreciable changes did not begin to appear for some years.

The average harvests, in deci-tons, for the periods 1919-1922 and

1923-1927, the first representing the immediate post-war period and the second a period in which economic conditions had had time to become stable, were as follows: wheat, 130,000 and 240,000; rye, 2,570,000 and 3,000,000; barley, 1,220,000 and 1,310,000; oats, 4,460,000 and 5,370,000; mixed cereals, 110,000 and 130,000; peas, beans, and vetch, 110,000 and 140,000; potatoes, 5,430,000 and 6,860,000; turnips and other root crops, 2,200,000 and 4,590,-000.

To this must be added an average annual crop of 23.49 million decitons of hay during the period 1919–1922, 29.01 million decitons during the period 1923–1927, and, respectively, .014, and .015 million decitons of flax and hemp.

In fact post-war agriculture followed, on the whole, its former course. Rye, of great importance to Finland, yielded more per hectare. The average for 1919–1922 was still only about the same as before the War, but the average for 1923–1927, 3 million deci-tons, is 15.8 per cent above that of 1909–1913. Barley harvests were larger than in the last pre-war period. The average for 1923–1927, was 26 per cent greater. The area devoted to oats increased considerably after the War, as did the yield per hectare. During the period 1919–1922 a yearly increase occurred. And during 1925–1927 all former figures were exceeded; in 1927 with a record crop of 6.33 million deci-tons. The average for 1923–1927 was 55.7 per cent above that for 1909–1913. Mixed crops increased little during 1919–1922; but subsequent harvests exceeded the pre-war figures in spite of reduced areas.

All cultivated crops thus improved except mixed cereals. The increase was largest in wheat; but much more important was the increase in rye and oats.

As developments varied with the different crops, the best way to obtain a comprehensive view of the results is to reduce all harvests to fodder units in accordance with the statistical system followed in comparing agricultural returns. We here find that the greatest increase after the War was in the cultivation of sown hay, the figures being 130.2 per cent higher. Straw and root crops also increased. The total increase was one of 44 per cent over the pre-war total. And the increase in population was so small that it takes little from these figures.

After the War farming tended more and more to become inten-

sive. This is most clearly apparent in the increased domestic output of agricultural machinery, the value of which has risen almost yearly. Imports of agricultural machinery have also increased, though fluctuatingly. Imports and home products averaged in value, in terms of present currency, for the five-year period 1923–1927, 26.6 per cent above the figures for 1913. There was also a large increase in imports of fertilizers after the War, owing to the need of compensating for the neglect of the soil during the war years. The home production has also grown, the use of fertilizers having in all increased several times over.

The first task of stock raisers after the War was to repair the ravages it caused. This was soon done. Where in 1919–1922 the number of horses over three years old had averaged 308,900, in 1923–1927 it averaged 334,000. And in the case of cattle over two years old the increase was from 1,204,300 to 1,309,500. Even by 1920 the totals exceeded the pre-war figures. The average for horses in 1919–1922 was 11 per cent higher than that of war-time, and that for cattle 7.3 per cent. The average for 1923–1927 exceeded that of 1909–1913 by 13.3 per cent for horses, and for cattle, by 11.2.

As for other live stock, sheep numbered more than 1,703,600 in 1920, a percentage 28.1 higher than that of 1910. From then onward, however, there was a yearly decline until by 1927 the total was again little higher than that of 1910.

In the number of pigs there was little change until the years 1926-1927, when the 1910 level, 422,300 head, had again been about regained.

The figure for reindeer declined greatly during the War, and, while it has been increasing since, in 1927 it was still only 48.2 per cent of the total in 1910. Poultry farming developed rapidly.

If we reduce the total live stock to cattle units, the figures for 1927 correspond to 2,480,000, an increase over 1910 of 6.8 per cent. This increase approximates to the increase in population. But if we regard the rural population separately, cattle stocks show a slight increase, in spite of the tendency toward industrialization evident in many forms.

After 1919 dairy farming advanced steadily. The average output of butter during 1919-1922 and 1923-1927 was, respectively,

9,000,000 and 17,400,000 kilos. For cheese the figures were 2,400,-000 and 4,500,000 kilos. As regards cheese, the average for 1923-1927 increased over that for 1909-1913 by 164.7 per cent. In the case of butter the increase was 37 per cent. Sales of milk also grew. Moreover, the principle of cooperation continued to gain ground; only a very small share of the total output came from private dairies.

#### Agricultural Profits.

Data obtained by the Board of Agriculture show that in the agricultural years 1912–1913 and 1913–1914 the net profits invested averaged 4.2 and 4.7 per cent, respectively. Compared with the prevailing rates of interest, the yield was modest, but not too low. Economically, the most profitable were the small farms with an equivalent of less than 10 hectares of plowland. Farms of 50–100 hectares yielded, area for area, not even a third of that from small farms.

During the War, rising prices, and the decline in the value of money, greatly increased farm profits. In 1914–1915 the net gain was still only 4.4 per cent; but in 1917–1918 it was 39.3, and in 1918–1919 it was 36. Considering the current prices of farm land the gain was naturally smaller, but, even on that basis, certain calculations show that in 1918–1919 it was as high as 12.5 per cent. As before, too, the small farms showed best.

After the War, profits began to fall, but compared with the immediate pre-war period they were still high, especially in the case of small farms. The net gains were 9.3 per cent, as late as 1921–1922. But in the period 1923–1927 they were again 4.4 per cent. Finnish agriculture has enjoyed a fair measure of tariff protection since the War. But, even so, its profits have left much to be desired.

The purpose of the grain tariff was to make the newly independent country as self-supporting as possible and obviate the need for outside help in bad times. The gravity of the difficulties which can arise from a stoppage of grain imports had been brought home to the nation. And the effort toward self-support has been crowned with a fair measure of success. Only about half the grain needed for home consumption was home grown before the War. But the ratio has since risen to about two-thirds.

#### The Fisheries.

Finland's coast line on the Gulfs of Finland and Bothnia is a long one, the total length being about 1,646 kilometers; and there are also innumerable islands along its shores, many of them large. The lakes in this "land of a thousand lakes" number between 35,000 and 40,000. Naturally, therefore, fishing has become a means of livelihood of great importance for a large part of the population.

Fishermen, however, entirely dependent on their catches are now rarely to be found. In 1901 households whose chief means of support comprised fishing, hunting, and reindeer-breeding totaled only 4,380, or only 0.9 per cent of the total rural population. They lived chiefly on the seacoast or the shores of Lake Ladoga; and most of them also farmed. Only 39 per cent were wholly without plowland.

Sea fishing and lake fishing differ little in Finland; and fish migrate less in these waters than in those of the great seas. Consequently, fishing is generally carried on with the fisherman's home as a base, and with modest equipment. Only Baltic herring as a rule are sought in open waters.

But in sea fishing the Baltic herring (Clupea membras) comes first. It sometimes accounts for 80 per cent or more of the sea catch. The size of the total annual catch varies a good deal, with corresponding effects on exports of fish, which, before the War, went chiefly to Russia. During 1909–1913 the annual average was 18.6 million kilos, and the average exports about 8.5 million kilos. Home consumption was meanwhile so large that more fish were imported than exported, the annual excess averaging 3.1 million kilos. Imports consisted chiefly of pickled herring and fresh fish. During 1909–1913 the value of fish exports averaged 5.2 million marks, in the currency of that time, and imports, 4.2 millions.

As movements at sea were greatly restricted during the War, catches declined, especially at first. Later, the food shortage directly demanded an increased activity; and, in 1917 and 1918, the former level had almost been regained. At the same time, exports of fish, which, during the early part of the War, were practically the same as before, declined until by 1918 they were down to about one million kilos. Imports of fish declined immediately; and not until 1918, when food was urgently needed, did they revive to approximately their former figures. Thus, fish exports had exceeded imports con-

siderably during the early war years, but the balance was later reversed. And as fish prices had risen greatly the cost to the country was appreciable.

Even for a year or more after the end of the War, the importance of fishing in the national economy remained undiminished; and the total catch of Baltic herring rose above the pre-war level. Subsequently, the annual catch tended to decline, though fluctuatingly. The total annual catch for 1923-1927 was about the same as before the War. But the importance of fish in the foreign trade of Finland had altered considerably. Where, in 1919, imports were still high owing to the food shortage, and exports very small, in 1920 imports declined greatly and rose slowly thereafter, bringing the average for 1923-1927 to 7.3 million kilos per year, a much smaller amount than the pre-war total. The decrease from 1909-1913 was 36.9 per cent and was due to the almost complete cessation of imports of fresh fish. During the same period fish exports fell very low, averaging only 1.4 million kilos or about one-sixth of the pre-war exports. The excess of imports over exports during this period averaged 16.1 million marks a year, as compared with an average excess of exports before the War of one million (former) marks, so that, from the point of view of the balance of trade, since the War fishing has shown considerably poorer results than before it.

#### CHAPTER V

#### INDUSTRY

#### Conditions before the War.

DURING the latter half of the nineteenth century a tendency toward industrialization began to be apparent in various forms in the economic life of Finland. This tendency has continued with accumulated momentum during the present century, and industry competes with growing success with the old traditional chief means of livelihood, agriculture.

Statistics relating to industry have been collected for a very long time, but the earlier statistics are neither adequate nor sufficiently consistent. In 1909, however, a material alteration was made in the system; handicrafts were separated from industry proper, and statistics gained thereby.

Places of employment, that is, mills, factories, workshops, and the like rose steadily before the War. Between 1909 and 1913 they increased from 2,007 to 2,460.

Lumbering and wood-milling industries naturally came first, and they have continued to outdistance competitors. The next largest group comprises foodstuffs and luxuries. Third, come the stone, clay, glass, charcoal, and peat industries. In economic significance, the paper industries are extremely important; but the number of individual mills is not very large. Nevertheless, their increase was fairly rapid during the period 1909-1913, or from 112 to 134. Machine shops also stood high. Once relatively few, they, too, increased rapidly. The textile industries, formerly on a par with the machine shops in number of establishments, declined slightly. But some textile mills are of considerable size. Smelting works and metal refineries are rather few, but have been increasing. Other increases occurred in the leather and fur industries, and in the waterworks, lighting, and power plants. The number of factories for the treatment of tar, oil, rubber, etc., remained fairly constant before the War, as did the chemical industries. Other industries do not call for special mention.

As the above figures show, considerable expansion was taking

place. This is borne out by the appreciable increase in the number of workers during the pre-war years. Their distribution among the different industries was, in 1913, as follows: mining, 200; smelting and metal refining, 3,500; machine shops, 12,100; fine mechanical work, 100; the stone, clay, glass, charcoal, and peat industries, 10,800; chemicals, 900; tar, oil, rubber, etc., 450; leather and furs, 2,900; textiles, 14,900; paper, 12,400; lumbering and wood milling, 34,100; foodstuffs and luxuries, 9,500; waterworks, lighting, and power, 1,300; the graphic industries, 3,500; and industries not otherwise included, 100.

The above figures help to reveal the importance to Finland of its lumber and paper industries even in 1913. During the period 1909–1913 lumbering and wood milling employed on an average almost one-third of all industrial labor, and the tendency was for this to increase.

The power employed also increased during the said period, especially in the paper industries, in which the rate of increase between 1909 and 1913 was 31.7 per cent. In the wood-milling industries the increase was still greater, or 53.9 per cent. The result was a total increase of 39.3 per cent over 1909.

An increase also occurred in the value of the raw material used. Part of it may be due to improved statistical methods, but real progress was obviously made in several branches, particularly in wood milling, foodstuffs and luxuries, and textiles; in the last, the value of the raw material used more than doubled within these years. Among the smaller industries, the smelting works and metal refineries, the value of the raw materials was almost three times that of the beginning of the period. The total in 1909 in all industries was 169.7 million marks. In 1913 this figure had risen to 395.6 millions.

The gross value of production shows a similarly rapid rise during these years. The 1909–1913 average for lumbering and wood-milling industries was 144,300,000 marks; in 1913 alone it was 171,200,000. For foodstuffs and luxuries the figures were, respectively, 118,600,000 and 134,700,000; for paper they were, 87,900,000 and 101,400,000; for textiles, 75,200,000 and 94,200,000; machine shops, 36,900,000 and 51,600,000; smelting works and metal refineries, 25,200,000 and 32,100,000; and leather and furs, 22,900,000 and 30,600,000.

Thus the wood-milling industries also led before the War in gross

value of production. But the foodstuffs and luxuries group was not far behind, though the increase was smaller. A rapid increase was evident, too, in the case of the paper industries. Among the older industries an appreciable rise occurred in the machine shops. The textile industries likewise made considerable progress.

As the value of output increased steadily in practically every industry, the aggregate gross value of production rose from 463.7 million marks in 1909 to 682.9 millions in 1913.

#### The War Years.

The exceptional conditions of the war years affected industries in many ways. In several, work was halted, or at least greatly hampered, by the difficulty of obtaining foreign raw materials. Markets, too, were closed for some commodities in so far as communications were suspended or made hazardous, while the demand was materially altered by the War. Many industries attained new significance when the military authorities began to rely on them. Employment in those which supplied munitions soon increased after the outbreak of the War.

One result of the new conditions after the War was a great reduction in the number of lumber mills. Of 756 in 1914, only 465 were left in 1918. The falling off was still greater in the case of foodstuffs and luxuries, one from 475 to 284. Appreciable reductions also occurred in the stone, clay, glass, charcoal, and peat group, and in the graphic industries. The leather industry grew; the number of establishments more than doubled, due to contracts for army boots and other supplies for Russia. Increases also occurred in the case of textiles and machinery, also owing to army contracts.

Industrial fluctuations during the War are reflected in the average number of workers employed. Thus lumber and wood workers fell to less than half the total for 1914. In the foodstuffs and luxuries industries the decline was 38.7 per cent; and an appreciable decline was evident also in the stone, clay, glass, charcoal, and peat industries. Machine workers almost doubled. But in the year of the Revolt they decreased again to approximately their pre-war number. Employees in chemical works about doubled and leather and fur workers almost doubled.

The power used in machine shops increased during the war years by 63 per cent. Much more was also used by many other industries. But in lumber milling, the foodstuffs and luxuries industries, and in certain others less power was used.

Figures for the value of the raw materials used rose rapidly, owing in part to increased activity in some industries. But as time went on this was due more and more to the rise in prices caused by the scarcity of commodities and the falling value of money. Thus the value of the raw material used in machine shops, which averaged about 10.8 million marks in former currency during the last prewar five-year period, rose in 1916 to over 90 million marks, but declined again in 1918, the year of the Revolt, owing to the disturbed labor conditions. The value of the raw material used rose in the leather and fur industry from 19.7 million marks in 1914 to 105 million marks in 1918. A considerable rise also occurred in the case of the paper industry, in this case from 48.6 millions in 1914 to 121 millions in 1917. In lumber and woodworking there was a decline to one-half of the last pre-war figures.

Statistics showing the gross value of production are largely affected by the changes in the value of money and in prices, and a comparison of the figures alone gives no correct view of actual developments. In the chemical industry the gross value of production multiplied by eight during the War. In the case of machinery, the corresponding figures multiplied by four, and for the smelting and refining works they multiplied by almost four. In leather and furs the gross value of production increased about five and a half times between 1914 and 1918. Foodstuffs and luxuries, despite restricted output, doubled the value of their production. The aggregate gross value of production in all industries in 1914 was 621.6 million marks. In 1915 there was only a slight increase. But in 1916 the figure rose suddenly to 1,325.1 millions, and for 1917 the figures are, nominally, still higher, viz., 1,478.8 millions. It is obvious, however, that such rises do not denote an equal rise in output during these years, when all productive activity was seriously disturbed by revolutionary unrest and the Red Revolt. They are chiefly an indication of the rise in prices.

In 1918 industry was largely stagnant. Many industrial workers joined the rebels and were later interned in prison camps, with a corresponding loss to available labor. For this reason alone, many factories had temporarily to close down or greatly restrict production. But there were also other sources of difficulty. To suppress the

Revolt it had been necessary to call in German aid, the result being that relations with the Entente Powers were suspended, with consequent results both for raw material, supplies, and markets for Finnish products.

Thus 1918 came to stand for the low mark in Finnish industry both during the War and immediately after it.

#### Post-War Developments.

With the end of the War and a promised return to normal, Finland's industries revived rapidly. New opportunities were fully exploited. In 1919–1922 the number of places of employment increased. The latest pre-war figure was nearly reached in 1919, and the rise continued. In 1922 they numbered 3,294. In four years there was an increase of 1,080, or nearly half the total in 1918.

The increase was greatest in lumbering which had stagnated during the War. The new mills opened during the space of four years added 54.2 per cent of the total in 1918. Textile mills increased by 45 per cent, and paper mills by nearly 30 per cent. On the other hand, the foodstuffs and luxuries industries grew slowly, due to the continued scarcity of food; and the pre-war level was not reached until 1922.

The number of workers similarly increased. In 1919 the total was still below the war-time and pre-war totals, but by 1922 the total was 132,800 or 52,600 above that of 1918. Lumber workers more than doubled in a few years, and there were also large increases in textile and paper workers.

The power used likewise increased, especially in lumber milling when, between 1918 and 1922, the total horse power grew by 71.1 per cent. Leather and furs and chemicals also used much more. In other leading industries developments were more or less irregular until 1922, when a more rapid increase began. Not until that year did the total horse power used, 354,500, greatly exceed the maximum, 292,300, during the War. The total for 1922 was 29.4 per cent greater than that of 1918.

An analysis of developments in the value of the raw material used is made difficult by the rapid changes in the value of the mark, which were greatest in 1919 and 1920. Increase in the value of raw material during these years, in each case over 100 per cent, cannot be wholly due to increased output. In 1921 the increase was slower,

but the rapid expansion of industry in 1922 registered an aggregate total of 4,300 million, more than ten times the last pre-war figure. Lumbering and paper contributed most. In the former, in these years the increase was almost fivefold, the 1922 total being over 1,000 million. The total for paper increased fourfold. There were also large increases in other branches.

In the gross value of production the rise was still more rapid, or from 2,800 million in 1919 to over 8,000 million in 1922. Again, too, lumbering and paper stood first, though foodstuffs and luxuries also began to approach their mark. In the textiles the increase was similarly rapid.

The results were naturally largely due to the fine market for Finnish exports. But, in part, the high figures were due to the continued fall in the mark, a thing of great benefit to exporters. Industry could thus resume the activity seen in many branches before, and, above all, during the War. It was, of course, slowed up by certain things, and particularly by the Revolt.

In industry as elsewhere actual stabilization came during the following years, when the value of the mark remained fairly constant and conditions in general had settled. To see the War's effects on Finland's industries one must study the five-year period 1923-1927 and compare this with 1909-1913.

The number of industrial places of employment increased during these years as before, though the rate was not quite steady. By 1927 the total had become 3,789. The totals for 1909 and 1910 were only a little over 2,000, and the 1913 figure, 2,460. If we compare the averages for the two periods the increase is 1,233, or 56.2 per cent.

There was almost the same increase in the number of workers. Before the War it was over 100,000. The average for 1909–1913 was 95,800. And for 1923–1927 it was 146,500. A particularly large increase occurred in 1927, when the total reached 159,100.

Power used increased even more, or to an average of 437,000 as compared with 217,500 h-p. The paper industry used slightly under 200,000, and lumbering and wood milling 115,800 h-p.

The value of the raw material used rose greatly in 1927, or to 6,600 million, of which lumbering accounted for about a third, the foodstuffs and luxuries group, and paper coming next. Compared with the corresponding figures for the last pre-war period, the increase would be enormous, even if not due chiefly to the altered value

of the mark and rises in prices due to other factors. As the 1909 total was a little under 170 millions and that of 1913 less than 400 millions, both in former currency, the rise to the 1927 total seems, indeed, great.

Still more striking, however, was the rapid rise in the gross value of post-war production. The average for the period 1909-1913 was 567.8 million marks in former currency, and that for 1923-1927, in present marks, was 10,400 millions. It is to be noted that the rise was especially sharp toward the end of the five-year period, the total for 1927 being 12,400 millions. Of the grand total, over a quarter was provided by lumbering and wood milling. The paper industry also made marked progress. The machine shops more than doubled the gross value of their output, over the last pre-war period. Textiles having increased during the War, mostly retained their previous level in value, except in 1927, when it rose by 15 per cent over that of 1926. Compared with 1913, textiles also show an increase of 63.1 per cent in power used, and of 46.7 per cent in the number of workers. Leather increased its gross value of production in 1927 to over 500 millions. Similarly, the stone, clay, glass, charcoal, and peat industries developed rapidly, the total here, too, exceeding 500 millions.

Between 1909 and 1913 the Finnish textile industry turned out an average of 8,000 gross of sewing cotton per year. For the period 1923–1927 the figure was 25,000 gross. Finished lumber varied between 737,000 and 801,000 standards in the years 1909–1911, rose to over 1,000,000 standards in 1923, and, in 1927, to almost 1,500,000. Mechanical pulp increased in output by 75.9 per cent; paper by 67.8, and chemical pulp by 253.1 per cent, or from an average of 113,000 tons to one of 399,000.

### The Handicrafts.

As already mentioned, handicrafts were omitted from foregoing industrial statistics.

In 1913 and 1923 the number of handicraft establishments were, respectively, as follows: In 1913 there were 1,599 workshops for the metal handicrafts. In 1923 there were 1,788. The corresponding figures for articles of stone, clay, and glass were, respectively, 200 and 553; for leather and fur they were 2,361 and 3,426; for textiles, 2,406 and 3,717; for paper and cardboard, 157 and 197; for wood-

enware, 791 and 1,268; for foodstuffs and luxuries, 3,678 and 3,137; for other things, 358 and 491. The respective totals were 11,550 and 14,577.

As will be seen, the number of such working centers in Finland was about four to five times as great as the number of factories, etc. But most handicraft establishments are very small. In 1913 the number of paid workers was only 19,646, and in 1923, when the number of establishments was much greater, only 16,102. In most branches there was a decrease, but the number of apprentices decreased still more—from 2,552 in 1913 to 1,341 in 1923. New legislation and economic conditions have led to restrictions in many trades. The number of trained handicraftsmen is also decreasing accordingly.

In the value of output, in 1913, the handicrafts establishments producing foodstuffs and luxuries totaled 16.2 million marks; textiles, 14.3 millions; and leather, furs, and the like, 11.6 millions. In all other branches the value of output was smaller. The figures for 1923 are naturally very much higher, because of the depreciated value of the mark; but the actual output considerably declined, especially in foodstuffs and luxuries. An appreciable rise is apparent only in the production of articles of wood. In 1923 when the total value of industrial production was 9,200 millions, that of the handicrafts was less than 500 millions.

#### Economic Results.

As for the profits of industry, in 1914, and before the War, a survey was made of 172 of the country's largest enterprises, or 77.5 per cent of those with a share capital of at least 100,000 marks, a capital fairly large at that time. For the five-year period 1898–1902 the average dividend was 4.93 per cent, and 4.18 for 1903–1907. Adding earnings transferred to reserves, the total average profits were 7.94 and 7.04 per cent, respectively. Compared with prevailing rates of interest the yield was extremely modest and tended to decline. Between the second period and the War, profits do not appear to have risen, and the average dividend would probably be about 4 per cent.

Since the War two surveys have been made. By the Federation of Finnish Industries information was collected from twenty-two industrial concerns, including some of the largest, particularly in the metal and textile branches. Their capital totaled 583.7 millions in 1927, or over one-sixth of the aggregate industrial capital of the country. In the case of metal works the proportion was almost one-third, and in that of textiles more than four-fifths, so that for them at least the data obtained were fairly representative. Profits earned before the War were thus between 6 and 10 per cent, and in some cases appreciably more. After the War they do not appear to have declined; rather the reverse. The average for 1909–1913 was 12.2 per cent of the total capital, and for 1923–1927, 15 per cent. In a few cases only were profits lower than before the War. Admittedly, however, the results are largely colored by the change in the value of the mark. Book capital values were slow to follow the movement in the value of currency, and many firms appeared, therefore, to be earning higher profits than they actually were.

The second survey was based on balance-sheet data collected by the Bank of Finland. This survey covers seventy-nine companies, with an aggregate capital of about half the total for all Finnish industrial companies. The average net profit for 1925–1927 was, apparently, 9 per cent. But, in this case, too, for the above and other increases, the figure is too high.

Further information is also given by taxation returns. They, likewise, are almost certainly unreliable. But they show pretty clearly that many industrial firms achieved fairly good results, though others did not. The results were measurably influenced by the tariff protection enjoyed by industry both before and after the War, whereas raw materials and the like have usually been exempt from duties. Even on machinery for industrial purposes the duties have not been burdensome. And the general trend has been the growing importance of industry in Finland since the War, with agriculture making great progress also.

#### CHAPTER VI

### **COMMUNICATIONS**

#### Navigation.

THE Finns have been sailors from time immemorial, both on sea and on the lakes. True, few of Finland's rivers are navigable; and as the inlets and lakes freeze in winter, navigation in these waters is interrupted for a great part of the year. But overseas communications have been maintained by Finnish vessels since the eighteenth century. Shipbuilding, particularly the building of sailing vessels, has at times been very active. And with the increase in the merchant fleet, navigation has become an important factor in the national life. Since the nineties winter traffic has been maintained with the aid of icebreakers.

In 1913 Finland possessed 540 steamships, large and small, and 3,077 sailing vessels. Their total tonnage was, respectively, 76,600, and 356,100. The sailing vessels were mostly small, and Finnish shippards did not begin to build steamships of any size until recent times. The total tonnage leaving Finland's ports in 1913 was 3,400,000. And the proportion of foreign tonnage was very high.

The War naturally caused great disturbances. Sea traffic was blockaded, and vessels were lost. In the summer of 1914 no Finnish shipowners had the slightest idea of the impending danger, and vessels were left, on the declaration of war, within easy reach of the enemy, chiefly in harbors on the German Baltic. These were, of course, immediately interned. Thus forty sailing vessels, of 14,300 tons, at once fell into enemy hands. Five steamers were also seized, with an aggregate tonnage of 5,300. The total value of such vessels was about 15.5 million marks, over half of it being in steam tonnage.

The Finnish merchant fleet suffered many other losses during the War, seventeen steamships and twenty-one sailing vessels by mine and gunfire. The loss in tonnage was put at 68,000, having a value of 66,800,000 marks. Twenty-three ships were sunk during Germany's intensive campaign of 1917. Taking the size and value of the merchant fleet in 1916 as a measure, the total loss by every action

was about 14.4 per cent in tonnage and 21.6 in value. To this must be added minor losses in 1918, chiefly due to the seizure of small vessels in East Finland ports by revolutionaries fleeing to Russia. These losses were in part counterbalanced by advantages derived from the use of Russian vessels seized by Finland, until such vessels were surrendered to their owners. But Finnish shipowners suffered other and heavy money loss because of the appropriation of their vessels by Russia for the naval service, on grounds given in an illegal Russian decree. These losses have been estimated at more than 100 million marks.

But, in spite of all, the size of the merchant fleet increased considerably during the War. In 1914 Finland possessed 564 steam and motor vessels, and 3,257 sailing ships. In 1915 the corresponding figures were 571 and 3,528. In 1916 they were 639 and 3,792; in 1917, 668 and 4,003; and in 1918, 864 and 4,284.

As for sea traffic as estimated by the tonnage leaving Finnish ports in 1914 the figures were 2,100,000; in 1915, 1,000,000; in 1916, 1,400,000; in 1917, 800,000; and in 1918, 600,000. For the same years arriving tonnage totaled 1,100,000, 700,000, 600,000, 300,000, and 600,000.

The stagnation in freights after the War was also clearly apparent in Finland. Both the total of active vessels and the aggregate tonnage fell markedly. The number of vessels, 5,358 in 1919, had dropped, in 1920, to 4,905.

In the period 1923-1927 the decline continued almost without a break. The aggregate tonnage in 1927 was 530,400. But compared with the period 1909-1913 this was an increase of 34 per cent, in spite of the heavy losses during the War. The outgoing tonnage in 1927 was roughly 4,500,000, though the export trade was growing much more quickly than the import.

Compared with her other national earnings, Finland's gross income from her merchant fleet, about 400 million marks a year, is not a large factor. But it has tended to grow.

# Railroad Traffic.

Finnish railroads have largely been built for the State. The first was opened in 1862. At the end of 1913 the total mileage, in kilometers, was 3,914, only 354 being in private hands.

The passengers carried, in 1913, numbered 12,900,000, and the freight tonnage was 4,900,000. Since 1909 each had risen by about one-third. Nearly half the freight total consisted of lumber and timber, with only a small amount of farm produce.

During war years there was much change, due in part to the disturbed sea traffic, in part to altered conditions of production and, in large degree, to military operations. At first passenger traffic continued to be fairly active, while freights fell considerably, but in 1915 a rise began, and the total freight tonnage for 1916 was 6,200,000. During the months of unrest and revolt, in 1917 and 1918, traffic declined, or was held up altogether. The percentage of farm produce carried grew, while lumber and other industrial freights declined. During the war years munitions naturally figured largely, and transit traffic on the Tornio-St. Petersburg line, formerly very small, increased greatly after the sea routes had become unsafe. Thus, in 1914-1916 and chiefly in 1916, 132,900 tons of freight were sent by rail from Tornio to Russia, and 46,100—more than half of this in 1915—in the opposite direction. As pre-war freights had totaled only some 2,000 tons a year or even less, the reason for the increase was obvious. But in 1917 such freights declined, above all those sent to Finland, and in 1918 little remained. It should also be noted that Russia sent much to the Western Powers by Finnish railroads and through Finnish ports. And she tried hard to keep her communications open, in spite of the dangers on sea.

For the railroads this meant increased receipts, though they were kept down by the retention of old freight tariffs; this, too, in spite of the fall in the value of money. Not until March, 1916, were ratios raised even slightly. The Government also benefited from the increased traffic by the temporary taxes which it began to impose.

After the War, conditions gradually returned to normal. Even during the War, railroad construction had continued; and it now became a problem of prime importance to independent Finland. In 1919, 119 kilometers were added on the state lines, and, by the end of 1927, 381 kilometers. Traffic grew rapidly. In the period 1923–1927 the average of passengers carried was 117 per cent greater than it had been in 1909–1913, and freight had increased by 116 per cent. In passenger traffic the use of the third class had increased, with a corresponding decline in the second and first class. In freights

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the percentage of farm produce had dropped a little, and that of lumber had increased from 46.9 per cent of the total, before the War, to 55.8 per cent. Other manufactured goods declined from 29.7 per cent to 25.3. The transport of wood fuel was steadily falling, and more paper products were being carried.

### CHAPTER VII

### TRADE

### Its Historical Development.

Even at a most primitive stage of civilization, the people of Finland must have had to procure from abroad certain essential commodities which the country itself did not produce. We have evidence of such trade relations with other countries in the many discoveries of ornaments and weapons from countries obviously remote, and of old foreign coins dating from the early Middle Ages, sometimes even from the days of the Roman Empire. As economic life developed, the demand for foreign products increased and at last became general. Thus foreign foodstuffs and luxuries have been consumed in Finland on a large scale, and imports of many of the means of production, especially machinery and raw materials, have also increased notably. To be able to purchase them, Finland has exported its own products, at first chiefly furs, and, later, forest products, timber and tar in particular. More recently, the production of many farm and manufactured products, chiefly Finnish raw material, but likewise things made from imports, increased to such an extent that they, too, began to be exported.

The average value of Finnish imports for the five-year period 1909-1913 and for 1913 was in millions of marks:

Goods intended for productive purposes, raw materials and partly finished goods: 136.9 and 158.8; machinery, transport materials, etc., 38.8 and 52.2. Totals, 175.7 and 211.0.

Goods intended for consumption, and finished manufactures, 82.7 and 91.0; foodstuffs and luxuries, 173.8 and 193.4. Totals, 256.5 and 284.4.

The figures show a general rise, especially in imports of machinery, means of transport, etc.

The average value of Finnish exports in millions of marks, reexports excluded, for the five-year period 1909–1913 and for 1913 was: agriculture, dairy farming, hunting, fishing, etc., 60.1 and 69.3; forestry and lumber, 174.8 and 228.9; paper products, 57.6 and 71.6; textiles, 8.7 and 9.4; leather goods, 4.7 and 4.7; metals, 6.1 and 7.6; mineral products, 4.5 and 6.2; tobacco, 1.1 and 1.4; other industries, 2.1 and 2.3; other exports, 0.3 and 0.4. Totals, 320.0 and 401.8.

Before the War, exports were increasing steadily each year. Between 1909 and 1913 the value of exports of forest products and lumber rose by 64.3 per cent, and of paper products by 67.7.

Farm produce was imported to an annual value for the period 1909–1913 of over 100,000,000 marks, and farming necessities to a value of from 15 to 20 millions. At the same time such exports totaled only from 45 to 60 millions; the proportion of farming necessities being very small. Thus the net imports here amounted to from 75 to 90 millions. The national economy of Finland had therefore become decidedly dependent on the regular supply of foreign agricultural produce and necessities. But, as the prices of such imports declined slightly during this five-year period while the prices obtained for agricultural exports rose, the annual trade deficit was less than it might have been.

In manufactured goods the case is very different. The value of exports in Finland's most important industry, lumbering and woodworking, rose yearly, with imports almost nil. The rise was due in part to rising prices. The still greater increase, however, in the value of exported paper products was due almost entirely to increased volume. In the sphere of manufactures chiefly for home demand, the excess of imports over exports was heavy, especially in metal goods and textiles.

In 1909–1913 wood products and derivatives represented, in value, 72.6 per cent of the export total, which shows how extremely uniform the country's exports had become. During the same period the value of exports of farm produce made up only 18.8 per cent. Such exports were chiefly butter, milk, meat, and live animals. Most milk was sent to Russia, and butter to England, Germany, and Denmark.

When politically dominant, Russia had gradually become very important in Finland's foreign trade. Imports from Russia, chiefly grain, during the latter half of the nineteenth century made up nearly half the total; but from the eighties onward they were falling; and in the period 1909–1913 they were only 29.3 per cent of the whole. Finland's exports to Russia had also been increased by different means until at times they were half the total, or more than

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half. But a decline had begun, and one more rapid than that of imports from Russia; and in 1909-1913 the value of exports to Russia excluding reëxports had dropped to only 28.1 per cent of the total. This was due in great measure to the fact that the earlier customs rebates on Finnish goods had been frequently reduced, and that Russian government contracts were no longer being given to Finnish factories. Economically, this meant serious losses to Finland. As regards future political relations their effect was quite otherwise. Attempts had been made at one time by Russia to attach Finland—whose foreign trade had tended westward toward Sweden, even after their political severance—as closely as possible, economically, to herself, an attachment that would have strengthened the political tie with Russia. With the same intent, projects had frequently been broached by certain Russian circles, since the end of the last century, for the abolition of the separate customs, monetary, and postal systems of Finland, for the purpose of weakening her special autonomous position and increasing her economic dependence on Russia. Yet it was during these same decades that trade relations between them relatively declined, thus alienating Finland to that extent and appreciably assisting in the coming political separation, which, when it came, marked an almost complete break in trade relations.

Before the War, Germany was acquiring an even greater importance in Finland's grain import market. A plan was therefore drawn up in Russia for the imposition of duties on grain brought to Finland from other countries. This was discussed by the Diet in the spring of 1914 and strongly opposed on the grounds that the proposed duties would mean a considerable burden on consumers and on the entire national economy. Nevertheless, an imperial decree, following the so-called principle of imperial legislation, which was in direct conflict with the Constitution of Finland, was promulgated in July, 1914, providing for the immediate enforcement of grain duties. As the War broke out immediately afterward, the only effect of this illegal decree was that the country was stocked with duty-free grain quickly brought in by dealers during the time of waiting, which grain subsequently came in very useful.

Before the War, trade relations had also been developing more rapidly with other countries, and thus Finland had economically become less and less dependent on Russia.

In these years there was a large excess of imports. During the last five-year period before the War, the adverse trade balance had averaged over 112,000,000 marks annually, or more than 35 per cent of the value of the exports. The value of imports had also steadily tended to exceed exports during the preceding decades. This was due in considerable measure, not only to the usual factors, but also to the use of capital borrowed from abroad for railroad construction, the capital resources of the country itself being inadequate. By these means Finland's economic development had been speeded up appreciably. Another factor, peculiar to Finnish conditions, was the existence of extensive Russian villa colonies, mostly near the Russian frontier, in Carelia, which, especially in summer, used large quantities of various home and imported products, and meant an important source of income for the local population. Further, during the period of Russian domination, Russian military detachments were quartered on the country, and they also bought largely of local supplies. Finland's balance of payments, it is true, was decisively affected by the balance of trade; and this still remained unfavorable, but not as unfavorable as it would have seemed had the existence of other factors been unknown.

Before the War the balance of payments had not been officially determined, and the task now seems impossible. Nevertheless, even in the lack of official figures, the unfavorable nature of the balance can be established and also the reasons for it.

Internal trade was actively developing before the War, but we have little consistent data, save for the coöperative stores. Of these there were 525 at the end of 1913. The total sales of the Central (wholesale) Coöperative Society then amounted to 23,000,000 marks. The number of joint-stock companies in Finland in 1913 totaled 3,071, with an aggregate share capital of 693,600,000 marks.

#### The War Years.

Owing to disturbances in communications both imports and exports fell off at the beginning of the War; demand and supply altered greatly; and this was further affected by various government measures, of which more later. Lumber exports almost ceased, a heavy blow to Finland.

In the war years, imports, in millions of marks, were as follows:

(a)	Goods intended for pro- ductive purposes, raw materials and partly	1914	1915	1916	1917	1918
	finished goods  Machinery, transport	111.5	199.3	374.6	414.5	96.6
	material, etc.	41.6	31.5	73.5	102.7	42.0
	Total	153.1	230.8	448.1	517.2	138.6
(b)	Goods intended for consumption, and other					
	finished manufactures	65.2	65.7	140.2	348.0	102.3
	Foodstuffs and luxuries	161.9	281.9	374.5	366.7	263.7
	Total	227.1	347.6	514.7	714.7	366.0
	Total imports	380.2	578.4	962.8	1231.9	504.6

As will be seen the fall in every group was considerable in the first war year, for the rise in prices in many branches had not yet had time to affect the figures much. The fall is consequently due to the abrupt fall in the quantities imported.

By 1915 new transport routes had been organized. The belief that the War would soon be over and therefore that all buying could be postponed, gradually faded away. The rise apparent in the value of imports was further, and largely, due to the rising prices, especially noticeable by then in many agricultural products.

In 1916 war-time market conditions are much more evident: the rise in the value of imported goods destined for productive purposes, machinery, transport materials, etc., still more was due to activity in the munitions industry, an activity apparent also in other returns; but a considerable part was also played by rising prices and the falling value of money.

The unsettled conditions in 1917 did much to hamper trade, but, as the Finnish mark fell, commodity prices rose.

In 1918, the year of the Revolt, traffic was almost at a standstill, and imports of raw materials, machinery, and partly finished goods failed to reach even pre-war figures, in spite of the high price level. And the total value of imports returned almost to the 1913 figure.

The relative proportions of the different classes of goods included in imports altered a good deal during the War. Thus the proportion of foodstuffs and luxuries increased at first, owing to high prices, but declined later, until in 1918 the enormous rise in prices caused by the food shortage again raised the percentage figure. The average for the war years, 59.3 per cent, is the same as the figure for 1909–1913.

While the prices of agricultural products rose sharply, the prices of most manufactured goods tended to fall. The conditions of supply and demand were different, and also the conditions of production.

The value of exports, excluding reëxports, reached the following totals in millions of marks:

•	1914	1915	1916	1917	1918
Agriculture, dairy farming,	•				
fishing, etc.	64.9	70.1	68.3	49.6	21.7
Forestry and lumbering	119.7	37.7	74.6	79.0	52.8
Paper products	66.0	93.8	253.7	217.0	98.2
Textiles	12.0	16.5	24.9	32.8	1.6
Leather goods	5.2	3.9	1.0	1.1	1.1
Metal manufactures	6.1	22.8	51.1	32.4	8.4
Mineral products	4.4	2.5	3.8	3.4	2.1
Tobacco	0.4	0.2	0.2	0.6	0.0
Other industries	3.4	8.3	20.2	23.7	2.7
Other exports	0.1	0.1	0.1	0.0	1.0
Total	282.2	255.9	497.9	439.6	189.6

As will be seen, the decline during the first war years was due almost entirely to the stagnation in the market for lumber and woodenware. Whereas this group of exports averaged as much as 54.6 per cent of the total before the War, its percentage had fallen by 1914 to 42.4; and the following year was down to 14.8 per cent of the export figures, even when these had otherwise diminished. But in 1918, when the total exports were very small, the combined proportion of exports in this group and in the paper industries group gave 79.6 per cent of the total, a higher proportion than before the War. Prices of goods of the latter type were favorably affected by the War. Among other exports we note the increase in metal and textile goods, the result in large measure of war contracts;

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and goods were manufactured for army use, which, in some cases apparently, were not reported.

After communications with all other countries except Russia had become increasingly difficult, and even dangerous, owing to dislocation of sea traffic, trade with Russia, which proceeded by rail, naturally gained in importance. In 1915 imports from Russia had risen to 66.1 per cent, and in 1916 they were 61.8 of the total. But in 1918, after the political tie had been broken and in reality a state of war existed, they dwindled to insignificance. Exports to Russia grew so great during the War that very little was left for other countries; but in 1918 Russia's share shrank almost to nothing, while trade with other countries gradually revived, that is, trade with the Central Powers. Relations with the Western Powers were mostly in abeyance.

As exports were still relatively smaller than imports during the war years, the balance of trade was very unfavorable. Only in 1916 was the value of exports even half that of imports; and at the end of the War exports were only 37.6 per cent.

Finland's balance of payments, therefore, always extremely dependent upon the balance of trade, showed a great deficit; and the effect on the value of the mark was vital.

At home the War brought conditions widely different from those of peace. On trade, previously free in principle, all kinds of restrictions were now imposed, as also on the activities of business firms. This, while hindering trade, provided various opportunities for making profit. War-time conditions also compelled individual business men to unite, at times; and here, too, the effects were pronounced. The coöperative stores prospered. They increased until at the end of 1918 they numbered 723; and in that year the total sales of the Central Wholesale Society were 107,700,000 marks, though this was largely owing to the rise in prices. Much capital was invested during the War in new companies. In 1918, 4,726 joint-stock concerns were entered in the Trade Register, with an aggregate share capital of 1,780,600,000 marks. During 1917 and 1918 such capital almost doubled.

#### The Post-War Period.

The difficulties which had hampered foreign trade during the War were by no means eliminated at its end. Both export and import

trade were long dependent on all kinds of exceptional factors. On the one hand, many commodities were very scarce, with an intense demand; and, on the other, it was very hard to arrange payments. Political, and often purely military, views continued largely to influence the course of international trade; and there was much conflict.

In trade immediately after the War, we find an appreciable rise. By 1919 the total imports amounted to upward of 2,500,000,000 marks, and in 1920 they were over 3,600,000,000. Naturally, this was due in large measure to the lower value of the mark, which was then rapidly falling, and to the correspondingly higher prices. But the volume of imports was also very large. The stocks depleted in 1918 had quickly to be made good; and, consequently, large quantities of raw materials and partly finished products were imported. Great quantities of goods for consumption were needed, especially in 1919, when they were more than 60 per cent of the total imports. In 1920, however, owing to the more rapid rise in imports for productive purposes, the percentage sank to 50. The turn in the general economic situation which occurred in 1920 led to a decrease of imports of raw materials and of partly finished goods. In 1920 the total was 1,248,600,000 marks; in 1921, 834,400,000. The value of imports of machinery, transport materials, etc., also declined in 1921, and again in 1922. On the other hand, imports of foodstuffs and luxuries increased appreciably in 1921, with little decrease in 1922.

Export figures reveal a much steadier course; but here, too, the effects of the depreciation of the currency are apparent. Immediately after the War the demand for forestry and timber products became very keen abroad, the same applying to paper products. Accordingly, the value of these commodities rose very high. During the War large stocks had accumulated, for it was impossible to sell them. In 1919 forest and timber exports had a value of 558,800,000 marks, and paper products, one of 218,800,000. Together, they made up 91.4 per cent of the total, one of 850,600,000 marks. In 1920 exports of timber products rose to 1,642,000,000 marks, and of paper products to 1,080,700,000. As the total value of agricultural, dairy farming, hunting and fishing exports, etc., was 111,-100,000 marks, the proportion of the former groups was 94 per cent of the total. In 1921 the ratio changed appreciably. The value

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of exports of agricultural produce exceeded 500,000,000 marks and their percentage, 16.4; while the value of forestry and lumber exports slightly declined. In paper products there was a small increase. In 1922 forestry and lumber exports rose considerably, their value totaling over 2,300,000,000; exports of paper products exceeded 1,400,000,000. Exports of farm produce remained at their former level and were comparatively small. Both imports and exports returned to normal in the following years, when the value of the mark was stabilized and prices were consequently steadier.

The average value of Finnish imports for the five-year period 1923-1927 and for 1927 was in millions of marks:

Goods intended for productive purposes, raw materials and partly finished goods: 1,785.7 and 2,163.2, respectively; machinery, transport materials, etc., 795.5 and 1,201.9. Totals, 2,581.2 and 3,365.1.

Goods intended for consumption and other manufactured goods, 1,153.1 and 1,482.6. Foodstuffs and luxuries, 1,643.5 and 1,538.2. Totals, 2,796.6 and 3,020.8.

These figures are much higher than earlier ones. Especially large was the increase in the value of imports of both raw materials and unfinished goods and machinery, transport material, etc. The trend in consumption goods is not as clear, due in part to the poor crops in 1923, which increased imports of foodstuffs and luxuries. On the other hand, increased home production in agriculture exerted a contrary influence. The total effect in 1923–1927 was to reduce the percentage of consumption imports to 52 in stabilized marks. The corresponding pre-war percentage was 59.3, a considerable decrease which at the same time meant an increase in the proportion of goods for productive purposes.

The average value of Finnish exports in millions of marks, reexports excluded, for the five-year period 1923–1927 and for 1927 was: agriculture, dairy farming, hunting, fishing, etc., 618.1 and 733.6; forestry and lumber, 3,088.9 and 3,721.0; paper products, 1,481.2 and 1,677.9; textiles, 18.3 and 15.9; leather goods, 9.3 and 2.1; metals, 31.1 and 33.9; mineral products, 19.5 and 24.3; other industries, 66.8 and 69.3; other exports, 7.8 and 8.5. Totals, 5,341.0 and 6,286.5.

Thus the value of exports had also appreciably risen, especially lumber and paper products. Their relative importance had likewise grown, while the proportion of agricultural produce, though tending to increase, was still rather small. The industries using wood as a basic material together provided 85.6 per cent of the total. Export production was therefore even more one-sided than before.

After the War the development of export trade was materially affected by the small trade turnover between Finland and Russia. During 1923-1927 commodities to a total value of 241,900,000 marks were annually exported to Russia. Compared with pre-war figures this is significant. If we express the value of these post-war exports in terms of the pre-war wholesale index, we find them to have fallen, as compared with 1909-1913, by 76.1 per cent. Imports from Russia show a relatively greater decline during 1923-1927, the average being 165,600,000 marks or about 11.7 per cent of the corresponding pre-war imports. The decrease in Russia's share of Finland's foreign trade, after their political separation, can be judged from the fact that, in value, Russia had at one time taken almost half of Finland's total exports; and it also meant the end of her economic dependence on Russia, into which Finland had been led when politically dependent. This had been hastened by the policy Russia had chosen to follow before the War, and the severance of all relations toward its end made it inevitable. Yet so decisive a change in trade relations between two neighboring countries was more than anyone could have foreseen.

With the decline in trade with Russia, trade with other countries increased correspondingly. Potential new markets for Finnish exports were found; and Finland's buying was distributed over an ever wider range of countries. Immediately after the War both agricultural produce and materials for agriculture had largely to be imported owing to the great decline in food stocks; but within a few years crops had increased to such an extent that imports of agricultural produce could be appreciably reduced. Imports of materials for agriculture continued to grow; and, thanks to them, Finnish agriculture gained in strength. If we take 100 as representing imports in 1909–1913, the average for the period 1923–1927 works out at 80 in respect of agricultural produce, and 186 in respect of materials for agriculture. These figures show that the War worked a marked change in Finland's national economy.

The balance of trade consequently became very favorable after the War. During the period 1923-1927 the aggregate value of imports exactly balanced that of exports; the annual average, if we TRADE 41

include among imports the Central Statistical Office's estimate for contraband, was 5,341,000,000 marks. In some years the balance of trade even showed a surplus in favor of Finland, a considerable change from conditions before the War.

In the balance of payments, the balance of trade is the most important item, furnishing about 90 per cent of the total on each side. Thus the balance of payments also became very favorable. Only in 1923, when crops failed, did a deficit occur. In all other years up to 1927, the balance of payments showed a surplus, in certain years a large one, as for instance in 1922, when it was almost 500,000,000 marks. Calculations show that, in the national economy, income has, on the whole, sufficed to cover expenditure. This is all the more gratifying as capital investments, in both machinery and raw materials, have been responsible for a larger proportion of imports than before, yet have really added little to Finland's indebtedness to other countries.

Domestic trade has also greatly increased since the War. Many different statistics show the number of new enterprises of various types, and their activities. Joint-stock companies grew till in 1927 they totaled over 9,000, almost three times as many as before the War. Coöperative societies also increased yearly, to a total of 5,397 in 1927. Their capital resources which, owing to inflation, had melted to almost nothing during the war years grew again and, in terms of gold, gradually resumed pre-war level.

The same can be said of the savings invested in the insurance companies. Such savings had, in actual fact, lost all value during the War; but the activity of new business had restored them by 1923–1927 to their former figures.

### CHAPTER VIII

### MONEY AND FINANCIAL INSTITUTIONS

## Early Developments.

An important feature in the great system of reforms inaugurated in Finland in the beginning of the 1860's, was the creation of a separate monetary system, one not based on the Russian ruble. It had gradually been brought into circulation during preceding decades, and had replaced Swedish money in private trade as well as official payments. In 1860 a national unit, the silver mark, and its hundredth part, the penni, were adopted. In 1877 a change was made to the gold standard; the gold value of the mark being fixed at exactly that of the French franc of that time. Small payments were made in token coins, larger sums were paid almost entirely in the notes issued by the Bank of Finland, which had been founded in 1811, and had made it its chief task to maintain the stability of the financial conditions of the country. Later the right to issue notes was centered in this bank; and this privilege, till then possessed by certain private banks, was withdrawn from them.

According to regulations of the Bank of Finland in force before the War, the total amount of notes in circulation might not exceed the Bank's cover by more than 40,000,000 marks. Cover included the Bank's metal reserves and minted silver coin, the uncontested claims of the Bank on its foreign correspondents, the bills payable abroad held by the Bank, and the bonds, coupons, and notes in terms of foreign currency in its possession. As liabilities, along with its circulation, were listed drafts on the Bank in terms of Finnish currency, other liabilities payable on demand, and the undrawn balances of cash credits granted to clients. In cases of absolute necessity, the note issue might temporarily be increased by 10,000,000 marks. Such a measure, however, was to be submitted to the Diet for approval, and was valid only from one Diet to the next.

The last balance sheet issued by the Bank of Finland before the War, one of July 23, 1914, gives its capital as 25,000,000 marks, reserves as 68,200,000, and unexpended profits as 18,700,000. Liabilities payable on demand totaled 143,600,000, including notes in

circulation to the extent of 112,200,000. The assets of the Bank included the cover for the note issue, altogether 153,300,000 marks, of which 41,400,000 was made up of the gold reserve, 21,900,000 of foreign bonds, 78,300,000 of credit balances held by the Bank's foreign correspondents, 9,400,000 of bills in foreign currency, and the rest of Finnish silver coin, foreign banknotes and coupons. Internal assets consisted of bills to a value of 70,500,000 marks, mortgage loans of 23,400,000, and cash credits of 3,900,000. Other assets totaled 4,400,000. Assets and liabilities thus balanced at 255,500,-000 marks. As the cover for the note issue totaled 153,300,000 marks and the Bank was entitled to exceed this by 40 million marks, the total right of issue was 193,300,000 marks. Notes in circulation, again, totaled 112,200,000 marks and other slight liabilities and the undrawn balances of cash credits, 35,000,000, leaving a note reserve of 46,100,000 marks. As the latter sum exceeded the additional right of issue, it followed that the whole note issue was covered, with an ample margin, and that from this point of view the position of the Bank was very strong.

The rates of interest charged by the Bank had been reduced ½ per cent on March 31, 1913, bringing its lowest discount rate for commercial bills not exceeding three months to 5 per cent.

Private banks, the first of which had been founded in Finland in the sixties, had numbered thirteen by 1914. In their nature, they were commercial and industrial banks, which granted mostly short-term credit. Of the capital at their disposal only a small proportion was their own share capital; most of the business done by them depended on the deposits received from the public. At the end of 1913 these deposits aggregated 656,200,000 marks.

Savings banks, which had been established in most communities and numbered over 400, held deposits aggregating 301.5 million marks, exclusive of the 8,900,000 in the Postal Savings Bank. Small deposits had also been intrusted to the mortgage banks and coöperative credit societies, or rural banks. Of the total deposits, the commercial or joint-stock banks held over two-thirds before the War, and savings banks nearly a third. Deposits in the other institutions were of very little account in the total.

A considerable amount of capital had also accumulated with the insurance companies and benefit funds or was invested in the joint-stock companies and various coöperative societies. The funds and

the private capital of the insurance companies totaled 210,300,000 marks at the end of 1913. On the same date resources in the benefit funds totaled 7,500,000 and the private funds of the coöperative societies, 13,900,000. The aggregate share capital of the joint-stock companies was 693,600,000. Thus the total was 2,100,000,000. Especially noteworthy just at that time was the increase in bank deposits and in the funds of the insurance companies. Thus, here too, the country was financially sound, and investments in the different institutions increased steadily.

Previous to this, much financial unrest had been caused by the inclusion in Russia's program for Russification of a demand for the reintroduction of the Russian ruble into Finland as legal tender. In the currency manifesto issued in 1890 it had been decreed that Russian money must be accepted as legal tender in all official payments in Finland. This, however, had made little trouble in actual practice. After Russia had adopted the gold standard and stabilized her monetary system, Finland's acceptance of rubles at par for taxes, for railroad, postal and telegraph payments, etc., had not resulted in real loss, yet, in the continued campaign for Russification, there was an ever present threat to Finland's national monetary system, even though the danger appeared remote.

### The First War Years.

When the War broke out, Finland's finances entered upon a new phase which was ultimately to be of fateful significance to them. Disturbances began at once. The public, fearing for the safety of its money, rushed to withdraw its bank deposits. During August those of the commercial banks decreased by 21,600,000 marks, and about 8,000,000 was withdrawn from the savings banks. But it gradually became plain that money was no safer at home; and, before long, new queues formed to redeposit. This first anxiety worked no lasting injury to Finnish financial and credit conditions. A much greater dislocation of business was caused by the interruption of civilian traffic during mobilization; and a decree was issued on August 7 which extended time bills due for protest. A moratorium was widely but vainly demanded on all payments.

After the outbreak of the War, notes were presented at the Bank of Finland for redemption in gold; but these demands, unusual in Finland, did not continue for long, especially as everyone was limited to 100 marks a day. However, though on July 23 the gold reserve of the Bank of Finland had totaled 41,400,000 marks, three weeks later it was down to 41,000,000. But then it began to increase again. On September 15 it was 42,700,000, and at the end of October it reached a high point of 43,000,000, a rise due to the fact that the Russian Government had exchanged the sums received from Finland, in lieu of military service, for Finnish notes, of which large amounts were needed for various military purposes.

To be on the safe side, the authorities of the Bank of Finland had already proposed that gold payments should be suspended. But a failure to agree with the Russian authorities regarding the needed formalities postponed the final decision till the following spring. A decree meant to be temporary was promulgated on April 11, 1915. And the transfer to paper currency thus made was to remain in force for many years. This, however, was not looked for at the time, and the suspension of the gold redemption clause did not affect the value of the currency, as it certainly would have had it been guessed what a vital period in Finland's finances was ahead.

Meanwhile, there had been time for marked changes in Finnish business life. The first years had passed away. The banks which, on the outbreak of war, had suffered runs, had had to borrow from the Bank of Finland, partly in the form of loans, partly in the form of rediscounted bills. The internal credits granted by the Bank, which had increased by about 30 per cent in two weeks, had again been appreciably reduced by a material increase, on August 3, in the official discount rate. The lowest rate was then made 7 per cent, or 2 per cent above that before the War. And this proved sufficient to check the demand for credit.

Before long, too, business began to improve. Several industrial firms obtained profitable war contracts from Russia. For this and to maintain the troops quartered in Finland, Russia needed large sums in Finnish marks, which were obtained by ruble exchange. When the War began such exchange was slightly below ruble par, or 264 marks per 100, instead of 266.67. But as the ruble was falling abroad, the Bank of Finland followed foreign rates, and, by the end of July, was quoting 245. Objecting to this, Russia put pressure on the Bank, which again raised the ruble rate. The War, seemingly, promised to be short, and the loss small. On August 8, 252 marks

was made the rate, and on August 19, 256, a rate which the large offers of rubles did not justify; but it was maintained for nearly a year. By an order of August 12, banks and other financial institutions were also forbidden to quote rates lower than those of the Bank of Finland.

This arbitrary rate became a heavy burden on both the Bank of Finland and the entire Finnish financial system. The value of the mark was made to depend on that of the ruble, which continued to fall abroad. The unduly high ruble rate also led the Bank of Finland to increase its note issue and thus reduced the mark's domestic purchasing power.

The War likewise worked a further change. The Bank of Finland began to grant credits to the Government, which had rarely borrowed in this way before. Previously, the Bank had merely carried very small holdings of government bonds in terms of foreign currency; at the end of 1913, for instance, they corresponded to not more than 0.5 per cent of the total cover. But one result of the War was to cause the withdrawal from the Postal Savings Bank of large deposits, which forced it to sell bonds to the value of 5,800,000 marks, through the Treasury, to the Bank of Finland. Such bonds were to be repurchased at the same price by the end of 1915, at the latest. As these bonds were in terms of foreign currency, they could be included in the cover for the note issue, and thus the right of the Bank to issue notes was therefore not impaired by their purchase. During the ensuing period, credit of this nature was resorted to in increasing measure, as the Government, in spite of the abundance of money in circulation, had no opportunity to borrow directly from the public; and it was hostile to such a government policy. But, with the aid of the Bank of Finland, in 1915 the Government succeeded in raising an internal loan of 30 million marks, of which one-third was not on the market until 1916.

Though the note issue increased, the demand for money failed to keep pace, owing to greatly reduced imports and decreasing business. The Bank was thus able to lower its discount rate, on January 9, 1915, by ½ per cent. In the spring it was authorized to grant, at its discretion, reduced interest rates to lumber firms, whose position, owing to export difficulties, was precarious. Money, in spite of government credits, constantly became easier. In June, 1916, rediscounts by banks had ceased to exist; and nearly three years were to

elapse before the private banks again had cause to rediscount bills. During most of 1915 the ruble rate was maintained at 256 marks per 100. Not until Russia had sustained great reverses, and the value of its currency abroad had declined accordingly, did the Bank of Finland lower its rate, and then only to 250. Even so, the Russian governor-general acted at once as did the commandant of the St. Petersburg military area. But they could do nothing, and the Bank succeeded in again lowering the exchange rate, this time to 246. In mid-September the Russian Council of Ministers appointed a committee to deal with the question. This committee finally, and with the approval of the Council of Ministers, concluded that a fixed rate need not be set in ruble exchange; the Finnish currency needed by the Russian Government was to be procured by raising loans in Finland and not by selling rubles. Meanwhile, the ruble had continued to fall. It stood at 220 at the year end, and even exceeded the value set on rubles in other countries. Moreover, they were offered to the Bank of Finland in great quantities owing to the fact that fortification works were being carried out on an extended scale, and Finnish exports to Russia had increased, while imports from Russia had greatly decreased. As the demand for rubles was small, the Bank exchanged them for other foreign currency and bought bonds in rubles. But most of them were deposited in Russian banks. At the end of 1915 the Bank's ruble holdings already exceeded 200,000,000 marks in value. The excessively high ruble rate had occasioned the Bank a loss of 35,700,000 marks, which meant a loss for the year's operations in general. And the mark continued to drop, though less rapidly than the ruble.

In 1916 there were marked fluctuations. On the whole the ruble declined, but the victories gained by Russia in the summer caused a temporary improvement. And then toward the end of the year there was a new and rapid fall.

In 1916, too, Russian influence on Finnish finances began to be felt in another way. After Russia's decision to procure the Finnish marks she needed by borrowing, in July the Bank of Finland discounted bills to the value of 100,000,000 marks made out in marks and rubles at par, repayable in twelve months in either currency at the option of the holder, with a discount rate of 5 per cent. As these credits were also in terms of foreign currency they were valid as cover for the note issue. Of the bills thus discounted the Bank of

Finland sold nearly half to a number of joint-stock banks and to two savings banks, 56,200,000 marks remaining as its own share of the loan. Owing to certain preliminary advances, in marks, that had been made to Russia, the Bank was able to use the rubles held by it, for the present credit.

In September an agreement was made to grant a new "currency loan" of 100,000,000 marks, and the joint-stock banks underwrote nearly a third, leaving 69,000,000 marks as the share of the Bank of Finland.

The holdings of the Bank in rubles had also increased appreciably during the early part of the year. The "currency loans" helped to reduce them in July; but thereafter they again increased. In one year the Bank had devoted 28,000,000 rubles to the purchase of other foreign currency; but operations in currency were placed under special restrictions in Russia, and the Bank could no longer use this method of getting rid of part of its ruble holdings. Thus, at the year end, they were 11,400,000 more than they had been in 1915. The increase, however, thanks to the currency loans, was much less than that of 1915. In 1916 the fall in rubles occasioned the Bank of Finland a total exchange loss of 19,700,000 marks. In addition, 2,800,000 marks had to be written off the book value of the bonds held by the Bank, in terms of rubles. These losses absorbed nearly the whole of the Bank's profits for 1916, leaving only 4,200,000 as the net profit.

The effect of the great increase in the note issue was, again, an easing of the money market. In spite of the increased government borrowings, internal credits granted by the Bank grew less, and the note reserve increased. It was, consequently, possible, on May 18, 1916, to reduce discount rates by ½ per cent and thus return to those ruling at the outbreak of the War. These remained in force for nearly three years, or up to the beginning of 1919. In spite, however, of the reduced rates, loans from the Bank to private borrowers declined, a minimum of 43,400,000 marks being reached at the end of September. At the same time, the credit balances of private clients at the Bank increased, until, in the summer, they exceeded 150,000,000. But, in the autumn, they began to decline again. The note reserve increased fairly evenly throughout the year, reaching 85,900,000 marks before Christmas. The amount of notes in circulation increased from 231,600,000 to 421,300,000. Thus

notes in circulation were nearly four times the total before the War. In 1916 the value of the Finnish mark followed, in general, that of the ruble, and so fell a little. From 30.1 per cent in Stockholm at the beginning of the year, the exchange loss on the mark had risen in December to 33.1 per cent. To the mark, therefore, 1916 was not particularly disastrous.

In 1917, the year of the Revolution, the effect of political events on the mark was great. At the beginning of the year rubles were bought at 214, and not until April did the rate drop slightly, to 206. After the political situation had abruptly changed, the Bank of Finland was able gradually to lower the rate until, in November, it was down to 100; and in December quotations were abandoned altogether. Nevertheless, the Bank's ruble assets increased considerably during 1917, and in October were 274,900,000 marks. This was due in part to the fact that the Russian Government had continued to exchange rubles for marks, to a certain extent. The Russian military authorities insisted on the retention of such exchange facilities. But private individuals were restricted at first to 200 rubles per day, then to 100, then to 50, and finally to 10; and, at most, such business was trifling. The Bank's ruble assets were further increased by the action of the Government, which had begun to deposit still larger amounts in its current account.

As Finnish currency was needed to pay the local Russian forces and for like requirements, in 1917 the Bank granted successive new currency loans of 100,000,000 marks, the first at the end of January, the second at the beginning of May; and the joint-stock banks, which were then well stocked with money, assumed a part of all such loans. Of their total, 400,000,000 marks, the Bank held 305,500,000. When the time for repayment came, instead of paying, Russia renewed them for one year, at 5½ per cent.

The Russians, however, wanted much larger amounts of Finnish currency. On their requests being refused, the Russian Government offered to pay in the currency of other countries, at a favorable exchange. And, on this basis, the Bank agreed on July 26 to turn over marks to a total value of £17,000,000, in exchange for sterling and dollars at 10 per cent above par. This foreign currency Russia was to be entitled to repurchase at the same rate, within five years. The Bank consequently sold 284,600,000 marks to Russia, receiving in return 6,100,000 pounds sterling and \$20,000,000. Compared with

all other exchange arrangements with Russia this operation was extremely favorable to Finland.

In 1917 the credit granted by the Bank to the Government increased appreciably. In February government bills were discounted for the first time during the War; and by the end of March such credits had reached 20,000,000 marks. But in April this was repaid. Later the State received another 30,000,000 against bills for current expenditure and 20,000,000 for the purchase of grain from Russia, for which the joint-stock banks also lent 40,000,000 marks. Moreover, in September, the Bank of Finland provided 1,000,000 marks of a new bank loan to the State. These obligations were redeemed at the end of the year. Two years before the State had raised a loan by issuing bonds. The Bank of Finland had underwritten 11,000,000 of it; and, when it fell due, the Government decided to pay it by means of a new short-term loan, part of which was used for other purposes. Of the latter loan the Bank held 31,200,000 marks in new bonds, at the end of the year. The value of these bonds, purchased subject to conditions of resale, had increased during the year by 8,800,000. The Government also sold to the Bank 21,300,-000 rubles, from its current account, for 32,300,000 marks, engaging to repurchase them at the same price. The rubles thus obtained could be added to the cover for the note issue, and the transaction was consequently of no detriment in that respect.

During 1917 the note issue increased as rapidly as in 1916, or from 421,300,000 to 764,500,000. Compared with the immediate pre-war period, the increase was thus nearly seven-fold. This was due chiefly to the surrender of Finnish marks to Russia, and in part to the credits granted to the Government. Naturally, the increase of the note issue lowered the value of the mark, although it had been strengthened by the fall in the ruble rate in Finland. The political disturbances of 1917 probably had an adverse effect on mark quotations abroad. In December, when Finland declared itself an independent State, the value of the mark also improved considerably. The Stockholm quotation rose to 41.38, a depreciation of 42.5 per cent.

At best, the year had, financially, been a very trying one. The fall in ruble exchange meant a loss of 158,900,000 marks, and bondholdings declined in value by 6,500,000 marks. Thus, for the Bank of Finland, the year closed with a loss of 90,900,000. In this loss

were engulfed its reserve profits, the entire reserve fund, assets corresponding to the value of the Bank's real estate and equipment, and even part of its capital, which fell from 25,000,000 to only 4,700,000. Thus the cover for the note issue declined below the total sight liabilities, and necessitated a reorganization on some new basis.

The finances of Finland, when she achieved independence, were in a very bad state; and during the next few months, while the rebellion kept the whole social edifice on the verge of disaster, they were to fall into still worse straits.

When, toward the end of January, the rebels came to power both in the capital and in most of South Finland, they at once seized the head office of the Bank and such of its branches as were within their grasp. In the head office they broke open the directors' safe, obtained the keys, opened some of the vaults by force, and the ready cash fell into their hands. The gold reserves and most of the securities had been moved to one of the branch offices in the interior, so these were consequently saved. The rebels also failed to secure the use of the credit balances of the Bank abroad. But they had possessed themselves of the printing-press of the Bank, with a supply of notes in a half-finished state; and they began to print them, using the signatures of the lawful officials, and issuing altogether 77,300,000 marks of such tender. About the same amount of genuine notes was used to finance the rebellion, chiefly for the maintenance and wages of the Red army. After its defeat, the escaping leaders took with them 12,000,000 marks. When, later, on April 14, 1918, the directors of the Bank were again in possession, the Bank was found to have sustained a loss of 116,400,000. The public further suffered owing to the circulation of the illegal notes, which the Diet decided should mean a loss to those who held them. Only a small amount, in one-mark notes, was redeemed. When urged to do so, the public surrendered illegal notes to the value of about 44,000,000.

These serious losses, crowning those directly occasioned by the Russians, made it impossible for the Bank to clear up the situation unaided. Before the balance for 1917 was struck, a task delayed by the rebellion until the following summer, the State had to extend the Bank's right to issue notes, and help make good losses of political origin. The best way of doing the latter was found to be the surrender of state bonds to the Bank, which was simultaneously authorized to include among its cover for the note issue state bonds in

terms of Finnish currency. On July 27, 1918, Section 18 of the Bank's charter was amended to read that the uncovered right of issue was raised to 200,000,000 marks, and Finnish state bonds and other obligations in terms of Finnish currency were temporarily included in the cover for the note issue. By these means a balance sheet for the preceding year was ultimately arrived at.

The Bank needed, however, direct assistance before its position could be regarded as safe. In 1917 a bill for this purpose had been submitted to the Diet, one to raise a state loan of 200,000,000, the intention being to enable the Government to buy rubles from the Bank and thus strengthen its position. After the rebellion this sum was no longer deemed sufficient; and in a new bill the Government asked and received authority to issue a state bond loan of 350,000,-000, which, under certain conditions, was to be turned over to the Bank. Of the means thus acquired, 116,200,000 went to the writing off of losses caused by the rebellion, 165,000,000 to make good losses due to the fall in the mark, and 68,800,000 to cover losses arising from the depreciation of ruble bonds, and for claims in rubles. As rates of interest were rising, it was hoped that the public would buy the above-mentioned bonds. Early in 1919 the interest on them was raised from 4½ to 6 per cent, subject to the right of the Government to convert the loan after the lapse of five years.

In 1918 the Bank's finances were closely linked with the State's in other ways. When an internal loan of 120,000,000 marks was raised, the joint-stock banks underwrote nearly the whole of it on condition that they be allowed to sell the bonds to the Bank of Finland, on their undertaking to redeem them within a specific period. Considerable blocks of these bonds were accordingly transferred to the Bank.

Direct borrowings by the Government from the Bank also increased appreciably. Government bills alone totaled 185,000,000 at the year end. The Government furthermore borrowed by means of overdrafts on its current account. Thus at the end of 1918, its total indebtedness to the Bank was 331,000,000, excluding the bonds made over to it, to strengthen the Bank's position. As all government obligations in terms of Finnish currency were eligible as cover for the note issue, the credits granted to the Government did not reduce the note reserve.

The note issue, however, continued to increase rapidly as a result

of these measures, and by the year end reached 1,156,200,000. This was due in part to an increase in local bank loans, which had led to rediscounting by the joint-stock banks. But the main causes were the losses due to the rebellion and the mounting credits to the Government. The note issue was 9.3 times higher at the end of 1918, than before the War, which meant inflation on a large scale.

Yet the foreign value of the Finnish mark fell little during the rebellion year. After a fall in the summer, a rise set in; and December showed an average depreciation, as compared with the Swedish crown, of just 46.1 per cent.

In the assets of the joint-stock banks and other private financial institutions there was an increase, during the first war period, that was relatively steady. Insurance and other fixed investments grew little. But soon bank deposits and the capital stock of joint-stock companies began to grow rapidly. As inflation proceeded, bank deposits increased still more. At the end of 1916 they were already more than 1,000,000,000. In 1917 they were more than 1,800,000,-000; and at the end of 1918 they were 2,687,500,000, or almost four times their total at the end of the first war year. The increase in savings banks deposits was not quite as rapid; they rose from 315,300,000 at the end of 1914 to 772,200,000 at the end of 1918. If we add the deposits in mortgage institutions, in the Postal Savings Bank, in the coöperative credit funds and the savings funds opened by the cooperative societies, in these years the total for the above period was an increase from slightly over 1,000,000,000 to over 3,500 millions. Moreover, the funds of the insurance companies rose from 222,700,000 marks to 342,000,000, and the aggregate share capital of the joint-stock companies increased from 722,700,-000 marks to 1,780,600,000. But obviously all this was largely the effect of inflation.

The financial activity during the war years is also shown by the business done in the Helsingfors Stock Exchange. When it was opened in 1912, its business volume was very small, or about 2,000,000 a year. In 1915 the turnover exceeded 4,000,000, chiefly in bank shares, with industrial shares beginning to be dealt in. But in 1916 there was an upward leap. Industries were making new profits, and the turnover of such stocks was 114,700,000 marks. An increase of trading in bank stocks brought the total to 190,200,000. In 1917 the total was 294,300,000, over half being industrial. As for 1918,

when the value of the mark fell greatly, there was a turnover in each group of about 400,000,000. The total, 923,000,000, has never since been exceeded. This was due in part to the new opportunities for gains offered by the War, but was given a special impetus by the seeming increase in the value of all real property caused by the depreciation of the mark. This was largely regarded as true, and not merely nominal, profit, as most of it was.

## The Post-War Years.

While the note issue continued to expand yearly, and the value of the mark abroad to deteriorate, its internal purchasing power naturally declined, and, as it happened, more rapidly. Prices rose, the cost of living increased, and it became necessary repeatedly to raise wages. All economic conditions were gradually swept from their former firm foundations.

From the beginning of the War onward, attempts had been made to halt such developments. While price increases were fought by restrictions on trade and the distribution of commodities, steps had early been taken to maintain the value of the currency. The exportation of money, securities, etc., was forbidden. Finnish financial institutions were not allowed to pay claims to subjects of enemy states. By the end of 1916 the purchase of foreign currency was concentrated in the Bank of Finland, which, in this respect, was placed under Russian control. And decrees were promulgated authorizing Russian inspections of the operations of the Bank. But these had no legal foundation in Finland, and, as it turned out, little significance in practice; and, in 1917, they became a dead letter.

After the end of Russian rule and the rebellion, when it became possible at last to organize national conditions in accordance with the interests of the country, an act was passed on May 27, 1918, which restricted dealings in currency to the Bank of Finland, the joint-stock banks, and such private individuals as received special permission to do so.

The authority given to the Government to impose such restrictions was subsequently prolonged from the end of April, 1919, to the end of October. Thereafter, the currency market was freed of all restrictions for over one and a half months. Then restrictions were again invoked by a law of December 18, and remained in force until

the end of March, 1920. In connection with more detailed rules governing the sale of currency, a special Currency Council, consisting of six members, was attached to the Ministry of Finance. This council was also given the final decision on import licenses, when conditions were becoming stricter than they had been. With the renewal of currency-sale restrictions, the value of the mark, which had been falling rapidly in 1919, especially in its latter half, began to rise. In December, 1919, exchange at Stockholm was so low as to mean a loss of 79.8 per cent, whereas in March, 1920, it was back to about the level of the previous August. The effects of the restrictions were, however, greatly reduced by numerous evasions; and after the balance of trade had improved it no longer seemed necessary to renew them. On October 28, 1920, they were abolished, save for certain rules governing business procedure. By then the foreign value of the mark had again been progressively falling, the same applying to its domestic purchasing power, the fall being especially great, as before, during the autumn. Its depreciation in Finland was clearly apparent in the rising cost of living. Calculations made by the Statistical Department of the Board of Social Affairs gave an index of 819.4 in January, 1920, taking the pre-war level as 100. By December the index was 1,103.2, in spite of the fact that increases in house rents were being artificially restricted.

During 1919, however, the Bank of Finland's currency circulation had been considerably reduced. Beginning with a total of 1,156,200,000, on August 23 it was only 958,800,000. Owing to the subsequent rapid increase in the loans granted by the Bank, toward the end of the year the note issue rose again, almost to the level of 1918. Meanwhile the Bank of Finland had raised its discount rate, on January 7, 1919, from 5 to 6 per cent. At the same time it had abolished the special privileges granted to lumber firms. But, as the demand for credit continued to increase, on November 17, the rate was made 7 per cent. On March 22, with the increase of business and the demand for money, the minimum rate was made 8 per cent. And as, even then, rediscounts by the joint-stock banks increased, on November 9, it was made 9 per cent. Government bills were excepted. For all others the rule was that only genuine commercial paper was rediscounted. The average discount rate, which had been around 5 per cent during 1917-1918, the years of financial plenty, rose to 6.10 per cent in 1919 and to 7.91 per cent in 1920. This was much higher even than the contemporary high rates in many other countries.

The foreign business of the Bank of Finland was a source of much difficulty during these years. When Finland and Russia parted, the Bank was still in possession of the \$20,000,000 and the £6,100,000 conditionally surrendered to it in return for Finnish marks. There were then no markets for the chief exports of the country, lumber and paper. At the same time the need of food and other commodities was such that even the last reserve could not have been withheld. Consequently, the Bank's supply of foreign currency declined rapidly and, during 1919, almost went to nothing. In July it made an arrangement with fifteen lumber firms by which the latter undertook to surrender to it half the foreign currency obtained by them through sales, at a rate 1 per cent below the Bank's selling quotations. The Bank, for its own part, was to advance money to these firms on bills made out in sterling. As these bills could be included in the cover for the note issue, the Bank's right to issue notes was not curtailed. The agreement was advantageous to both parties, and the Bank's supply of foreign currency increased.

Government borrowings from the Bank remained persistently high during these years, and, in June, 1920, reached a maximum of 474,300,000 marks. In addition the Bank then held almost a like amount in government bonds.

After the losses on the Bank's ruble holdings had gradually been written off, its operations began to be highly profitable, owing particularly to the extra gains from the sale of foreign currency. In 1919 its net earnings were 118,100,000, and in 1920, 75,100,000. Thus the Bank was once more able to stand on its own feet, and its profits were sufficient to allow some portion of them to be diverted to various government uses.

The economic crisis especially evident in the latter part of 1920 played havoc with efforts to raise the value of the mark. The market for Finland's chief export products closed altogether in 1921. The unfavorable balance of trade therefrom naturally reduced the mark further. As the currency needed to pay for Finland's imports was procured by selling marks abroad, the excessive supply forced quotations lower. And, on September 15, 1921, the mark reached low point in Stockholm, 5.25 Swedish crowns buying 100.

This fall in the value of the mark stimulated trade. Exporters

could make profitable sales. The internal price level, as shown by the fluctuations in the cost-of-living index, did not rise nearly as much as the mark's foreign value fell; consequently, wages and other production costs were relatively low compared with the prices obtained for exports. Exports therefore began to boom toward the end of the year and the supply of foreign currency increased. The value of the mark rose, accordingly, to the middle of November. And a new decline at the end of the year seemed to be due to political causes.

The fall in the value of money was primarily a result of the increase in the note issue, which continued in 1921. One appreciable influence was the borrowing by the State, whose short-term indebtedness consisted chiefly of bills discounted directly by the State. The commercial banks had also rediscounted large amounts of government paper at the Bank of Finland. In the latter half of the year, however, this discounting stopped. The maximum amount of government short-term liabilities, 479,700,000 marks, was reached on February 15, 1921, but during the year this fell to less than half. The Bank likewise held a considerable amount in government bonds, a maximum of 520,900,000 being reached at the year end.

The note issue grew. But the limit on such issues still seemed inadequate to the apparent needs of trade. When the Government repaid its borrowings from the Bank, the note issue declined. As the money market was very stringent, a decrease of notes in circulation seemed undesirable, especially to leading economic circles. The repayment of government debts was, therefore, interrupted; and the surplus assets of the Government were deposited in various banks, including the Bank of Finland, but not at call, so that they had not to be included, as sight liabilities, in the note issue. At the same time steps were taken so to amend the Bank's charter as to free it from being forced to reduce note issues on the repayment of government obligations. On December 30 an Act for the Amendment of Section 18 of the Charter of the Bank was passed which fixed the maximum note issue at 1,500,000,000 over and above the gold reserve and the Bank's uncontested claims on foreign debtors. At the same time it was decreed that the margin by which the note issue exceeded the said resources must be covered by domestic bills made out for periods not exceeding three months, and indorsed by at least two persons or firms of good financial standing. Further, other bonds or obligations made over by the Government which were in the possession of the Bank on the entry into force of this Act were to be valid as cover. It was also enacted that, should circumstances so demand, the President of the Republic could legalize a further issue of notes, for a specified period, up to a total of 100,000,000 marks. It thus became possible to reissue notes which returned to the Bank through the redemption of government liabilities by discounting bills.

The intention of the measure was not to increase the note issue. In fact it was a measure based only on an imperial decree. And it was taken in 1915, when the Bank had ceased to redeem its notes in gold. But, as it was a measure taken without consulting the Diet, it was illegal. To remedy this, a special law was passed on May 27, 1921, which temporarily absolved the Bank from the duty, imposed on it by the Bank of Finland's Statute of 1877 and by its own charter, of redeeming its notes in gold. At the same time it was enacted that, so long as this measure was in force, the notes of the Bank of Finland were legal tender at their face value for all payments. Thus a legal basis was created for the existing practice.

Following this the Finnish money market, very tight in 1921, became appreciably easier. This was due especially to the increased supply of foreign currency from exports and the simultaneous rise of the mark. The Bank of Finland gradually accumulated large holdings of foreign currency, and bills decreased appreciably. The bank rate was reduced on October 17, 1922, by 1 per cent, bringing the lowest discount rate to 8 per cent. The changes that had occurred in the situation had reduced the amount of notes in circulation, which had already tended temporarily to decrease, so much that 1922 became a turning point in the period of inflation.

This relatively favorable phase did not last long. The demand for credit rapidly increased, and the poor crops in 1923 also had a bad effect. Further, for reasons of financial policy it did not seem advisable to maintain the Bank rate at its existing level. It was therefore raised, on September 13, 1923, to 9 per cent. Soon afterward the situation appeared to improve, and with October a return was made to 8 per cent. But before the year end, when the harvest had been found unsatisfactory and deposits decreased, the Bank of Finland took the extreme step of raising the rate to 10 per cent. This high rate, however, was only maintained till March 6, 1924, when it was again reduced to 9.

Various influences were then at work on the value of the mark,

the chief being the economic development of the country itself, and the demand for the mark abroad for reasons of speculation. Importers bought abroad on credit, and exporters sold against advance payments, borrowing abroad at the same time on short notice. Thus large stocks of foreign currency accumulated at home, and the Bank of Finland was able to influence exchanges decisively. Its aim was to raise the value of the mark steadily. At first any considerable rise was opposed; but when it began to appear that a state of balance could be achieved between its internal and its foreign value, if its foreign value were to be permitted to rise a little more, the Bank ceased to intervene. Many foreign owners of Finnish marks, however, began to exchange them for foreign currency, and finally the Bank, after having kept the exchanges stable for half a year, had to refrain from giving further support, and let exchange rates rise. In November alone about 160,000,000 in marks was exchanged for foreign currency, and the Bank of Finland then raised exchange rates, or, in other words, allowed the mark to deteriorate.

Direct loans to the public by the Bank declined considerably during 1923, while rediscounts continued to rise, until at the beginning of October they were almost 500,000,000.

Early in 1924 the Bank began, with the aid of certain banks abroad, to increase its stock of foreign currency, and by this means to support the mark. As the balance of trade had been favorable, and also the balance of payments, it became possible to keep the mark stable, even though its purchasing power declined somewhat toward the year end. This was due to a general rise in prices, and not direct evidence of any depreciation. On the contrary it was possible by then to see that the value of the mark could be stabilized at a new level of about 40 to the dollar.

In November, 1924, the Diet representatives in the administration of the Bank appointed a committee to consider a return to the gold standard. This was a definite sign that the War's disturbances in the value of the mark were now over.

The committee submitted its report in April, 1925, in which it laid down the possibilities for a return to gold and its own recommendations as to the method. The controlling conditions were to be these: The note issue was not to be increased to satisfy government needs. The balance of payments should remain undisturbed for a fairly long time. And the credit balances of Finland abroad should

be large enough to preclude any fear of disturbance in the exchanges in the event of a temporarily increased demand for foreign currency or an exceptionally small inflow. To insure this the position of the Bank of Finland must be strengthened. The mark was to be devaluated to the contemporary real value of the paper mark; and the name of the monetary unit was to be kept. The Government could redeem its bonds in the possession of the Bank, and revalue the gold reserve in terms of the new mark, thus increasing the basic capital of the Bank, strengthening the position of the Bank in other ways, and amending the provisions relating to the note issue to bring the redemption of notes into conformity with the principles of gold exchange. These recommendations were subsequently approved by the Diet representatives who were bank directors, by the Government, and by the Diet. On December 21, 1925, the President of the Republic approved the new monetary law and the necessary amendments to the Bank of Finland's charter.

The stabilization of the mark was effected by fixing the dollar rate at 39.70, which had been maintained for some time, as the new gold value of the mark. Against this it was argued that it made the new unit very small and consequently unpractical; but it was considered better to avoid awakening unrest among the people, who feared that a transfer to a larger unit might cause a rise in prices. According to the new law, gold coins of 100 and 200 marks were to be minted; of these, the former was to contain 3<sup>15</sup>/<sub>19</sub> grams and the latter, 7<sup>11</sup>/<sub>19</sub> grams of fine gold with ½0 copper. Imports and exports of gold were declared to be free. And similarly any private individual could freely have his gold minted for him through the Bank of Finland.

In consequence of the reform the gold reserve of the Bank rose from its former book value of 43,300,000 to 331,600,000. Its capital was raised from 100,000,000 to 500,000,000 by transferring to it funds at disposal from previous years, and part of the profits for the preceding year. The government bonds in Finnish currency held by the Bank, to a value of 338,700,000, were to be redeemed in foreign currency before the end of 1928.

Regarding the Bank's right to issue notes, the Diet deemed it best to put the maximum limit at 1,200 million marks, and the validity of government bonds and certain obligations as cover was nullified. The only additional cover allowed consisted of internal and

foreign bills, foreign bonds quoted on foreign stock exchanges, matured coupons in terms of foreign currency, and foreign banknotes. The Bank's own notes were to be redeemed at the discretion of the Bank either in Finnish gold coin or unminted gold, or in checks payable in foreign gold currency. Its notes were declared to be legal tender for all payments. They were to be redeemed under the terms of the new law, irrespective of when they had been issued; and, in making good obligations contracted in Finnish marks, the mark was to have the value accorded to it by the new law irrespective of the date on which the obligation was incurred. At the same time the provisions in certain laws and statutes for the payment of salaries, wages, pensions, etc., on a sliding scale were abolished.

After the devaluation was carried out the Bank of Finland developed steadily, and without noteworthy disturbances. No difficulties were experienced in keeping the exchange value of the mark stable. The Bank's funds grew, and at the end of 1927 consisted of 500,-000,000 in capital and 240,500,000 of reserves. Its operations yielded good profits, but these were devoted at first to strengthening the Bank's own position. Several times the bank rate was successively reduced, until a new era began in 1928. The joint-stock banks were also prospering along with business in general. After the War, deposits in the various institutions continued to increase, which was natural enough in view of the depreciation of the mark. But the aggregate increase was no longer as rapid as during the War. The greatest part of the new deposits found their way to the joint-stock banks, yet the increase was relatively more rapid in the savings banks, it being in their case 52.1 per cent in the years 1919-1922. The most rapid increases of all were in the coöperative society deposits; but the total amount of these was of no financial importance.

After economic conditions had time to settle during the immediate post-war period, deposits made further gains during the five-year period 1923–1927; those of the savings banks increasing from 1,586,200,000 to 3,105,800,000; while joint-stock bank deposits rose from 4,056,200,000 to 6,070,600,000.

A powerful increase was also apparent after the War in the assets of other institutions. The aggregate share capital of all joint-stock companies, which in 1919 amounted to 2,648,900,000, had risen three years later to 4,446,000,000. The country was becoming accustomed to the altered value of money and was reorganizing the

finances of companies accordingly. After the mark had been stabilized at its new value, the aggregate share capital continued to rise, and at the end of 1927 had reached 6,486,100,000. The funds of the insurance companies also increased appreciably, from 395,600,000 in 1919, to 1,343,100,000 by the end of 1927. A relatively greater increase, in the same years, occurred in the private funds of certain cooperative societies, which rose from 84,500,000 to 571,400,000. If we add to these the assets of the benefit and pensions funds, in which the growth was also considerable, and the funds of the Bank of Finland, we find the aggregate capital invested in the above forms to have increased from 10,704,300,000 in 1922 to 19,279,600,000 in 1927. The increase seems great, but actually it was largely due to the gradual transition to the new scale of values. If post-war and pre-war capital are compared in terms of the same currency, the latter will really be found to be slightly less. Most of that accumulated by savers was transferred to debtors, and only by degrees did new capital accumulate.

Of the War's economic effect on Finland, the great change in her financial conditions, a change subsequently made permanent, was obviously the deepest and most far-reaching. The disturbances caused by it, however, were not felt as much in productive activity as in the vital changes in the property and income conditions of certain classes, which, by no fault of their own, were called upon to endure heavy sacrifices.

Business on the Stock Exchange continued to be active during post-war years. As before, it dealt largely in banking and industrial shares. The turnover in 1919 was 664,000,000 and in 1920, 686,-200,000. Then, in 1921, with a change in market conditions, the turnover fell to less than a third of this. By 1924 it was down to 112,300,000. Then another rise began, especially rapid in 1927, when the turnover reached 735,500,000, thus approaching once more the figure for the last war year. For the most part, in these years the interest of the buying public still centered on banking shares; but as business on the Exchange grew more active, industrial shares also came into favor.

### CHAPTER IX

#### PROBLEMS OF FOOD SUPPLY

### The First War Years.

WITH the increasing industrialization of Finland in the nineteenth century, Finnish agriculture grew gradually less able to satisfy domestic demands for cereals. True, in earlier times, grain had had to be imported in quantity when crops failed; but in ordinary circumstances grain had been exported, even as late as the nineteenth century. After dairy farming had won a high place and many workers had been drawn into the industries, into transport work, commerce, etc., grain began to be imported, even in ordinary years; and not only wheat, always hard to grow well in Finland, but also rye. For both geographical and political reasons, as we have seen, grain was bought chiefly from Russia. Thus Finland gradually became largely dependent on imported grain, at one time taking nearly half its supply from Russia. Then, later, imports from Germany began to increase.

What would happen if this grain supply were to be interrupted was a question that, in Finland, had been very little considered before the War. That imports from both Russia and other countries would be interrupted for any length of time was not thought possible; and anxiety seemed superfluous. Former wars had generally been short; so could any future war be long enough wholly to halt trade with other countries? And even had the danger to the food supply been grasped in time, the Finnish authorities would have had little chance to act before the War. For the matter was closely related to military problems. These were altogether in Russian hands. And then such a matter would not have seemed particularly urgent. The Finnish Government, too, was controlled by Russians or Russianized Finns, and for future and distant problems they had little time or inclination.

Thus the summer of 1914 found Finland quite unprepared. The manifold measures which became essential after the outbreak of war had hardly been envisaged. No provision had been made, save for mobilization, the transport and quartering of troops, and the like.

Consequently, the economic measures were either imitations of those taken in Russia or experiments attempted after merely tentative essays at grasping their consequences. Thus the effects of the War turned out to be dire for Finland; and the gravest were not apparent until almost its end.

When it broke out, its economic consequences began to be felt very soon in the higher market prices that were asked, the reason being the increased demand and the diminished sources of foreign supplies. And the public usually submitted without demur. But, as prices continued to rise, the authorities intervened. As early as August 14, 1914, the Governor-General, regardless of legal forms, issued a "Compulsory Order for the Fixing of Maximum Prices for Provisions." This new form of war-time decree, the very terms of which were strange, empowered the governors of provinces to decide on what such maximum prices should be.

The result was a wide divergence between maximum prices in different districts, which, in part, was natural. But the divergences were soon found to be excessive. And to assure greater homogeneity, the Government later fixed maximum prices, which were to be countrywide.

In the summer of 1916 the Provisions Committee of the Senate undertook to set such maximum prices for foodstuffs; and a special committee, appointed to combat the rise in prices of essential commodities, fixed prices for industrial products and necessities. Owing, however, to their great number it was impossible to be specific in all cases; and general orders were also issued calling for moderate prices and imposing penalties for infractions.

All this was done at the instance of the authorities and without the support of actual legislation. The Diet was not even convened during the first war years, and, consequently, no legal authority was asked for the Government's various measures, to say nothing of actual laws. This had very destructive effects on the efficiency of the food policy followed during the early part of the War, as the lack of legal foundation for the Government's measures greatly impeded their execution.

At first the rigors of war-time conditions led people to respect such maximum prices without much regard to their legality. Later, however, grown accustomed to "compulsory orders," the majority either evaded or directly disobeyed them. Naturally, too, one effect of maximum prices became apparent. Whenever they were fixed higher than was called for by the laws of supply and demand, prices went up. Where they were made too low, the commodity disappeared from the market, and reappeared in illicit trading.

When illicit trading was found to be widespread, to stop it, the Government issued orders forbidding the transport of the commodities in question. The railway authorities, in particular, had to see to it that commodities were transported only in directions which the Government thought desirable. Special rules were also issued regulating trade in the foodstuffs of most importance. Even in 1914 trade in butter was fettered by a number of such regulations. In 1916 milk, cheese, and the making of cheese were subjected to similar restrictions; then sugar, meat, manufactures of leather and footwear; and, finally, in 1917, the manufacture and sale of woolens and matches. For such control of trade the authorities tried to depend on the business circles concerned; these formed central organizations in their own areas to support the system of restriction. In this way were created a number of organizations in the domain of foodstuffs, and also, in some cases, coöperative associations, which were best able to deal with commodities subjected to restrictions. Such organizations existed in the milk trade, etc. In the meat trade, in which joint organizations already existed, special cattle-selling associations were formed which continued after the War, and, in connection with these, a central meat committee.

The food policy followed in Finland during the War was materially influenced by certain important commodities purchased from Russia. The supply of these continued at first without serious hindrance, but gradually their transport became increasingly difficult, as the available rolling stock, owing to the pressure on war-time traffic, became inadequate. For this reason special measures had to be taken to insure their supply. In the autumn of 1915 the leading importers founded a Finnish Central Committee to organize the import of foodstuffs from Russia. It sent its agents to Russia to procure goods there in the name of the Finnish Senate. The official nature of the organization greatly helped in securing the needed freight cars. The respective importing firms arranged the purchases on their own behalf. The Central Committee merely apportioned the cars among them. Later, however, after grain trading had been put in the hands of food commissioners appointed by the Russian Minis-

try of Agriculture, and a specific production area designated for each consumption group, to get grain became more and more difficult. For this reason the Finnish import firms established, at the end of 1916, a joint central organization for the carrying on of the said import trade, under the name of the Food Import Association of Finland, Ltd., which was immediately joined by eighty-four wholesale firms. The Finnish Central Committee was then abolished. The Food Import Association managed the grain trade during the following years, and continued to do so even after the supplies of Russian grain, owing to the severance of the political connection, had entirely ceased.

As considerable stocks of grain had been accumulated in Finland before the War, and had helped to tide over the first war period, there was no question of any food crisis then. Yet the food-supply policy followed in Finland during the early war years cannot be regarded as having been suited to its purpose. And the results obtained were, in many respects, unsatisfactory.

As measures for preventing a food crisis were governed only by immediate demands, only those methods were adopted which presumably would prevent immoderate rises in prices, and speculation based thereon. If the public had been sympathetic, these government efforts might have given fair results. But "compulsory orders" read very queerly; and, further, the Government's policy was an ill-founded one. As it believed that the War would not last long, it took no farsighted measures for continuous and possibly increased domestic production of foodstuffs. The maximum prices imposed, and the like, could not produce such effects; on the contrary, they were calculated to quench any desire of the farmers to increase their output.

Nor were the Government's measures very effective. By the end of 1915 hard rye bread had risen by 171.4 per cent; semolina, by 143.8; barley groats, by 114.3; rice groats, by 106.3; oats groats, by 87.5; and fresh fat pork, by 121 per cent. Milk prices, too, had risen considerably. Between June, 1914, and December, 1915, the average prices of 36 different commodities in Helsingfors had increased 53 per cent; and 21 other localities reported an average increase of 42 per cent for the same food staples. As the rise in the cost of living continued and it grew plain that no reliance could be placed on the supply of grain from Russia, it became obvious that a real food crisis threatened. Owing to transport difficulties, the sup-

plies of wood fuel for the centers of consumption had also become inadequate. Stocks of other staples, like coffee and sugar, declined and their prices rose. All tended to aggravate the public unrest.

## The Years of the Revolution and the Revolt.

Deficiencies in the food supply made evident in the first war years led people of public spirit to plan measures by which private citizens could themselves meet the impending crisis. With no Diet sitting, it was impossible to organize properly such vital matters, and the only way that gave any hope of results was communal and municipal activity. The lead was taken by the head of one of Finland's life insurance companies, the Suomi, Mr. W. A. Lavonius, who, in a series of articles and in other ways began to draw general attention to the danger lying in the ever increasing obstacles to the grain supply. In the spring of 1916 there were conferences for joint measures by which municipalities and rural communes could add their own cereal imports to those made by business firms. The idea did not, however, find favor with those institutions, banks, for instance, which would have had to finance these operations. It was alleged that the risk attached to grain imports unfitted such projects for their coöperation. Mr. Lavonius' own insurance company was alone prepared to give financial support. And thus the mobilization of Finnish forces to meet the food problem was postponed for nearly a year.

Early in 1917, just before the outbreak of the Russian revolution, a new attempt was made to combat famine by concentrated action. In March an Intercommunal Provisions Committee was formed, chiefly to aid the Government in the organization of a system of restrictions on the distribution and hoarding of provisions. The Committee subsequently submitted a proposal for a basic foodrestriction law. The plan was to turn over grain stocks to the State, together with their drafts for all forms and regulations needed. A rent-restriction law was also drafted. Another body which took part in this planning and drafting work was the Commission of Agricultural Producers, which meanwhile had likewise been founded. It drafted proposals for the organization of the meat trade and the making and marketing of cheese. In this way it was hoped that, in the inevitable restrictions, the interests of consumers and producers both could be taken into account.

Already, however, the control of things had passed into new

hands. The revolution in Russia had transferred the governing power to the Finnish authorities. One of the first measures taken by the new Senate was the appointment of a special Government Food Commissioner. A government bill was laid before the Diet, and on June 2, the Government was given authority to create a food-restriction system.

On June 8, 1917, a statute was passed incorporating the State's own agencies for the work. A special Food Department was founded. To assist it the Central Provisions Committee was created. It was to handle the questions of greatest importance, and special committees of experts were attached to it, for farm produce four, and for industrial products five. The Central Provisions Committee could, further, draw upon the information gained by the Intercommunal Provisions Committee and the central organization of the Agricultural Producers. The committees of experts were made up of representatives of organizations and of the chief business firms concerned, and no salaries were paid. For each province a Provincial Committee was to be appointed as a central agency, and in each commune and municipality a special Provisions Committee. The Election Committees were ordered to assist the Provisions Committees in case of need. Further, special inspectors for the meat trade and for the grain taken over by the State were appointed. The governors of provinces were given important parts in the execution of the food restrictions already in the Food Restriction Law; and the former monopoly organizations and the State Butter Control Station were detailed to help in the same task. For educational work in food-supply questions a State Domestic Economy Board was appointed, which in many ways worked on problems of food supply.

Somewhat earlier an act to make legal the taking over of foodgrain stocks had been promulgated, together with rules governing the consumption of such grain. Wheat, rye, and barley were subjected to seizure, and the sale of such grain was intrusted to the Food Import Association. Consumers' households were divided into self-contained and "card" households, with differing privileges. Bread cards came into use and grain was rationed. Thus in the summer of 1917 an actual war-time food policy was finally instituted in Finland, primarily for the regular bread cereals. For oats were still to be subjected to the same restrictions.

As in the confiscation of cereal stocks farmers suffered, they were

naturally against the measure; and the Government sought, through the agricultural organizations, to make opinion more favorable to these new and unprecedented steps. In the summer of 1917 a special working program for farmers was approved, aimed to increase the production of foodstuffs. Farmers were exhorted to plant all the potatoes, turnips, swedes, barley, oats, spring rye, and peas that they could, to clear new land, and to put fallow and meadowland under the plow. Adequately high prices were promised for the autumn crops, and even in early summer the former maximum prices for foodstuff were appreciably raised. It looked, therefore, as if the farmers and the Government could work together, and the hope grew that the food crisis could thus be solved.

The revolution year of 1917, however, was far from auspicious for the joint efforts needed. Strikes had been expressly forbidden during the preceding years, owing to the War, and wages had not been raised in proportion to the rise in prices. As the revolutionary movement gave the workers unrestricted freedom of action, the result was a powerful labor movement both in politics and in the tradeunions. The organization of labor, previously limited almost entirely to town dwellers and industrial workers, also began rapidly to gain ground among agricultural laborers. From the spring of 1917 onward this led to frequent strikes, calculated largely to frustrate that increase in grain growing which was of such extreme importance to the whole country. To say nothing of the strike troubles, which often developed into open riots, for many farmers it became impossible even to attempt to add to their plowland, as it was highly uncertain whether they would be able to care for their existing tillage; even the farmers themselves were prevented from working in their own fields when a strike had been called. Summer weather conditions were favorable, and the harvest prospects would have been good but for the human coefficient.

The Government also tried to buy grain abroad, both in Russia and America. It contracted with Russia for grain to a value of 60,000,000 marks; and from America it decided to buy much more. Butter and cheese stocks were also accumulated for the coming winter and the local government authorities were advised to create their own stores of potatoes, butter, salt meat, and salt fish. This program was partly realized. But, in spite of the contracts, no grain was obtained from Russia, which meant a great deficit. The measures taken

for collecting home supplies of food were greatly hampered by the riots at the end of the summer, the government stores of butter and cheese being plundered by the rioters and divided among consumers, directly.

Thus the handling of food supplies could not continue on its former basis. The Food Commissioner resigned; the post could not be permanently filled for some months; and the situation became ever worse, as the supply of grain was wholly uncertain and in other ways things had become difficult to control.

The Intercommunal Provisions Committee now came forward with its own proposals. To replace the Food Department, at the end of 1917, a special central agency, a Provisions Board, was created, and the most important committees of experts were attached to it. W. A. Lavonius was made its head. And he at once instituted speedy measures for the organization of food supplies.

Included in the working program of the new Board were a careful inventory of existing provision stocks; the widest use of card rationing; the gathering and giving out of all possible information; a special system of railway inspections; speedy punishment for breaches of the Provisions Law; the stimulation of grain growing by help in opening up new land, by government distribution of fertilizer, farming machinery and implements, by an early fixing of stateguaranteed minimum prices for the next harvest; the stimulation of imports by arranging for exports of matches, paper, metal and cotton goods, and other commodities in return for imports of grain, strong fodders, and the essential raw materials for industry: the taking over of oil supplies and the regulation of the sale of Finnish industrial products. Work on this program was begun at the end of the year. Stock taking and food seizures began together. The system of card rationing was improved. On December 21 sugar stocks were taken over. At the year end an inventory was ordered of all stocks of cereals, strong fodder, potatoes, potato flour, butter, meat, fat pork and lard, sugar, soap, coffee, tea, syrup, candles, illuminating oils, and salt. It was made at once; and forthwith all stocks of the above, with the exception of potatoes, coffee, and tea, were confiscated. To fill out such supplies with imports from abroad, measures were taken to organize exports to certain countries, as foreign trade was then based wholly on the exchange of commodities. And the Senate appointed two committees on exports.

When, however, only a beginning had been made, almost everything was halted by the rebellion which broke out at the end of January and the transfer of power in South Finland to the revolutionaries. Only in the north, held by the "White" Government, could this food-supply program be followed, and there a temporary Provisions Board was created to carry it out. A permanent result was the enlargement of the authority of the Provincial Committees by intrusting to them the collection of the country's grain supplies. Owing to the low stocks, bread rations had also to be materially reduced in "White Finland." Where the rebels held power, the control of food was in the hands of temporary authorities appointed by them, who tried to procure grain from Russia, but with poor success. The crisis was consequently acute, especially in the capital. Actual starvation had to be faced for some time by those forced to depend wholly on the authorities.

After the rebellion had been put down, the Provisions Board resumed its work, but Mr. Lavonius resigned. The Board was subsequently made a special department of the Senate, and Senator H. G. Paloheimo, who, as an industrialist and farmer on a large scale, enjoyed the special confidence of producers, was made its head. To act as an advisory board of experts, a special Production Committee was formed. In general the system worked out by the Provisions Board was followed, together with ideas originating in the Intercommunal Provisions Committee and the Provisions Board. The system of restrictions was extended by the taking over of milk, butter, and meat; and control was made more rigorous. Railroad transport of foodstuffs was closely supervised, and all other transport and trade in foodstuffs was controlled, detectives being used. The number of Provincial Committees, now called Provisions Bureaus, was increased and their powers enlarged.

A law was passed in July, 1918, to prevent speculation in those commodities which were without maximum prices. And, to insure efficiency, the power to prosecute in cases of breaches of the food laws was transferred to the Provisions Department of the Senate.

Special importance was attached to increasing production. In order to induce farmers to enlarge their plowland, despite the high cost, the Government undertook to pay fixed minimum prices for the grain harvests of 1919 and 1920; and in the case of new land this guaranty was extended to 1921 and 1922. For land broken in 1918

an added bonus was promised in the form of larger food rations during the following winter. As an increased production of foodstuffs was also extremely important to manufacturers, all landowners were assured by law of the right to include in their own farm households the households of all people in their service, even though the members of such households were not doing farm work and even lived in other localities. At the same time the cultivation of land was made compulsory under penalty of temporary dispossession; the Provisions Committees were empowered to take over neglected land for cultivation by the State, or by the local authorities or for leasing to private individuals. To increase the growing of sugar beets, the Government undertook to pay annually, for raw sugar made therefrom, up to July 1, 1922, 10 marks per kilo, and to buy in quantity up to 6,000,000 kilos. In consequence, farmers in South Finland began to grow sugar beets and a Finnish sugar factory was established.

## Food Restrictions after the War.

It was to be long after the War before the food supply had again become quite normal in Finland. The available stocks had been quite consumed and at first neither enough grain nor the requisites for growing it could be obtained from abroad. Thus the war-time restrictions had to be maintained for some years afterward.

Meanwhile, questions of food control had been vested in the Food Ministry, into which the Provisions Department of the Senate had now developed. Its heads were still agriculturalists. But this temporary government office had swelled into a relatively large institution as new food restrictions had gradually been imposed. Subsequently, a special Trade Department, with wide powers, was added to it. And the duties formerly intrusted to the Food Import Association were now intrusted to the State Grain Office.

In 1919, after a general survey of the field of agriculture, it was made legal for farmers to retain all grain exceeding a given amount per hectare, provided that they undertook to keep their farm households self-sustaining.

Trade relations with the Entente Powers had now been resumed, the supply of foodstuffs had considerably improved, and a gradual repeal of food restrictions could begin. In January, 1919, coffee was freed from control; in February, pork; in March, salt Baltic herring, peas, potatoes, potato flour, and green fodder; in April, to-bacco; and in May, butter and cheese. Before long the end came for other restrictions, save for those on grain and sugar, which remained until 1921. The Food Ministry was abolished in the spring of 1921 and its duties were transferred to the Ministry of Trade and Industry. And April 1 saw the end of the law of 1920, on which the last restrictions were based. They had, latterly, been relatively light, yet the public disliked them no less than before, and obedience to them, in most places, left much to be desired. During the war years the idea had become widely current that it mattered little whether they were obeyed or not. Many who in general avoided breaking laws took a similar attitude toward the same war-time restrictions on alcohol, which was subsequently embodied in the Prohibition Law of 1917.

Food restrictions were, of course, a necessity and doubtless helped to ward off distress and actual famine, yet the errors of application led to regrettable social evils, and one deplorable inheritance was a decline in respect for the law. It has been manifest in various forms of lawlessness and violence for which no effective remedy has since been discovered. Naturally, other causes have also contributed; but fundamentally they, too, seem to have grown out of the same thing.

## CHAPTER X

### HOUSING CONDITIONS

#### General.

Owing in part to climatic conditions, in part to widespread poverty, housing conditions in Finland have differed considerably from those of western countries. Most families in town and country are housed in small dwellings which have few rooms. And in other respects, they would fail to satisfy higher demands.

Exact figures are available only for certain periods, and are adequate only in case of municipal areas. A detailed rural survey was made in 1901 by the Sub-Committee on the Landless Population. It showed that, of the total rural population, 28 per cent lived in one-room dwellings, and 26.5 per cent in houses of two. More than 8 per cent lacked separate dwellings and lodged with others. Half such lodgers were single, but there were also families, and many large ones. The percentage of this poorest element has fallen since, but before the War it was still large.

The average number per room was 2.4 persons in the country at large, and, in some places, a good deal more. True, the living-rooms of farmhouses are generally of fair size, and in the daytime the people do most of their work outside. But housing conditions were very bad, especially among the farm laborers. Among workers' families who had separate dwellings, 94.5 per cent had only one or two rooms. Things were bad, too, for the factory hands. But overcrowding was worst among rural industrial workers, where, in some areas, the average per room was at least three. Furthermore, the temporary accommodations of the forestry workers and lumbermen in backwoods areas were in many respects unsuitable; and, for brief periods, dozens of men were forced to live in the same room.

### The First War Years.

During the war years housing conditions grew worse. Many Russian soldiers were quartered on the country, with inadequate barracks, and they had sometimes to be billeted on private families. War refugees also came to Finland, especially after western Russia

had become a war zone. The housing demand became acute, particularly in the towns. At the same time, in the towns, only a few new houses were built, partly because of uncertainty as to the future, and partly because the prevailing wage rates and cost of building materials seemed exorbitant, and only temporary. They must fall after the War. Thus, by the end of 1916, an acute crisis arose, which, especially in the capital, was severely felt.

Exactly the same causes that increased prices, a great demand and small supply, caused rents to increase. And the Government took similar measures to stop it. On December 27, 1915, a "compulsory order" forbade house owners either to give notice to tenants or to raise rents; the result being that, whenever a dwelling became vacant, the new tenant was asked to pay largely for the transfer of the lease or the drafting of a new one. But it had no effect on the housing crisis.

#### Restrictions.

On June 2, 1917, a law was passed applying to certain kinds of property during the exceptional circumstances of the War. This law empowered the Senate to fix the maximum rents for dwellings and to regulate leases in other respects. This was the beginning of a comprehensive system of rent restrictions. House Rent Committees were established in the municipalities and the rural communes. The new restrictions were applied to all towns, and to certain other thickly populated areas. Rents had to be approved by the House Rent Committees, and they decided whether there was adequate reason for the termination of dwelling leases, or for refusals to renew them. They also mediated in disputes as to leases and apartment rentals, in cases where official approval was not legally required. Later, they were made to act as house agents and compel the surrender of dwellings not properly leased.

The task of controlling housing conditions during the months of the Revolt was difficult. Later, after the Provisions Law had been enacted, it was possible to begin to reorganize on a new basis; and, on November 26, the Government decided definitely as to rent restrictions.

In September and October, 1919, a new law was passed, and new orders were issued. But as they did not hold after the spring of 1921, another Rent Restriction Law was then passed, to apply for the following year. In the spring of 1922, another, a Rent Speculation Law, followed it, and it applied up to June 1, 1924. Then all rent restrictions ended.

As to the execution of these laws and government decisions based on them, in the case of applications by landlords for the right to terminate house leases, they were generally refused, especially in the large towns. As to house rents, they, as prescribed in 1917, were fixed by adding to a reasonable and normal rent a fair share of the owner's increased expenses for administration and repairs. In a law enacted in 1918 rent restrictions were extended to shops, workshops, other industrial premises, institutions of public utility, and rooms leased by educational and cultural associations. It was first intended that rents should, on the whole, be left unchanged; but in 1919 landlords were empowered to raise them, by 50 per cent, in the case of dwellings, and by 100 per cent in the case of business premises, as compared with rents for the term beginning June 1, 1917. If greater increases were demanded, these must be referred to a Rent Committee. Corresponding, but somewhat complicated, additions were also made in interest charges, etc. And the Rent Committee likewise decided as to additional charges, such as those for light and heat, etc. But, because of the complexity of the law, different committees interpreted its provisions in different ways. And, to reach fair rent adjustments, in Helsingfors, for instance, a special table was approved, in which floor areas and the various conveniences were taken into account. For a great part of the municipal areas the increase was under 50 per cent.

Up to 1917, rents declined in two port towns when sea traffic had come to a standstill. In many other coast towns and population centers inland they had remained unaltered; but in most places they had risen at least 10 per cent; in some places more; in a few, they had at least doubled. The rise in rents of small dwellings was less than the average, in certain districts; in others, greater. In the largest, the average rent increase from the beginning of the War to 1920 was between 100 and 150 per cent. These are the figures for dwellings of not more than three rooms and a kitchen. Figures are lacking for larger houses.

Rent-restriction measures were aimed chiefly at old leases. For new leases the restrictions were usually much milder. Even by 1915 landlords had been forbidden to keep dwellings empty. In the rules issued in 1917-1918 new leases were not mentioned at all, nor did House Rent Committees interfere, on the basis of the 1919 law, with future rents in the case of new leases. As for dwellings kept empty for longer than a month, control was difficult. The committees did not attempt it. And the effectiveness of the system suffered accordingly. Little, too, was done by the committees in house-agency business.

As for the general effect of their labors, many committees believed they had helped to prevent exorbitant rents and needless evictions. Others felt that restrictions had increased the acuteness of the housing crisis. Others were unable to discern any effect at all. And some felt that new building had been held back.

## Building.

House building, at any rate, greatly decreased during the War. Whereas, in the towns, 3,669 new dwellings had been completed in 1912, and 3,589 in 1913, the corresponding figure for 1914 was only 1,674, and in 1915 it was only 757. The total for 1916 was 343, or about one-tenth of what it had been in 1912. For 1917 it was 432; for 1918, 362; and for 1919, 477. It was only in 1920 that new building really began. In the towns, in that year, 1,316 new dwellings were constructed; in 1921, 1,526; in 1922, 2,406; in 1923, 3,082; in 1924, 3,314; in 1925, 3,991; in 1926, 5,270; and in 1927, 7,323. The latter figures greatly exceed those of pre-war years; and in 1928 5,000 new houses were built in Helsingfors alone. The deficit of the war years was therefore soon made good.

Again, of houses completed before the War, nearly half had only one room. But, by the years 1923–1925, these were only 16 per cent of the total; although, later, they again increased. The proportion of dwellings of two to three rooms became higher than ever before. Before the War, dwellings of only three rooms or less made up 82 per cent of the total; and later there was a return to the same percentage. But the increased use of three-room dwellings should be specially mentioned.

The increased building reduced the average number of persons per room. As compared with 173 per 100 rooms at the end of 1920, at the end of 1928, in the capital, there were only 150, and in other towns an average of 163.

Building, too, was materially stimulated by state help. From 1920

to 1926 government loans made possible 6,438 new dwellings, containing 15,190 rooms, in the towns and thickly populated centers. The majority of such houses, of which over a third were built in Helsingfors, were constructed by building associations of a public nature.

The State also helped to promote the improvement of housing conditions among rural laborers by granting loans to rural communes. In all, from 1922 to 1925, 13,500,000 marks were so loaned, chiefly in the indigent areas of North and East Finland, but later, too, in other communes. Houses built for farm laborers generally had two or three rooms, and were built partly on freehold, partly on leased land.

In the economic advancement, so apparent after the War, the improvement in housing conditions has been outstanding. And help was also given in 1925 by a rent law which stabilized new leasing conditions.

### CHAPTER XI

#### COMMERCIAL POLICY

### Under Russian Rule.

During the War the Government also took measures to secure and protect the national interests in trade and commerce. These measures led gradually to a detailed system of restrictions on trade.

Finland's foreign trade before the War had been controlled almost wholly by Russia. In consequence this tariff policy had been little altered for many decades.

After the outbreak of the War, too, Russian decrees as to foreign trade also applied to Finland. In the rules thus imposed military considerations dominated. The exporting of many things was naturally forbidden. Others could be exported solely to Allied and neutral countries, by special permission and subject to certain conditions. During the War many changes were made. Imports from enemy countries were generally forbidden, though there were exceptions. As regards other imports, certificates of origin had to be shown; and such certificates were, later on, also demanded for such imports as were permitted from enemy countries, to avoid the paying of double duties. But to apply these rules in practice proved to be very difficult, as Russian consuls abroad did not always know which goods could be imported by Finland and Russia both. In consequence the Finnish Government authorized the Customs Board to investigate the origin of imports in case of doubt. This left much margin for discretion, and the supply of many things of great importance for Finland was facilitated.

As the War had made overseas communications extremely difficult, and transport via Sweden had become highly important, many rules were issued to cover the latter. Others were issued that enumerated commodities which must be demanded in exchange for exports, as a condition for the granting of export licenses. Special arrangements governed the exchange of goods between Russia and Great Britain via Finland.

In all of the above measures the interests of Russia and, specifically, those of national defense were put first, with little regard for Finland's vital interest. And, as Finland's places of highest authority were held by Russians or Russianized Finns, Finnish points of view were given little heed when matters affecting the Empire were being decided. Thus the commercial policy followed during the first war years was mostly the adaptation of Russian trade policy measures to Finland, and not a Finnish national trade policy.

After the Russian revolution had helped to give Finns control in Finland, things changed. Nevertheless, in that troubled time, one could not thoroughly reorganize economic conditions. In the spring of 1917 Russia decreased her orders for munitions from Finland and ended them altogether, later in the summer. This made it much easier for Finnish industry to serve the needs of Finland herself, and not Russia's military aims. But only when Finland had proclaimed her independence was it possible for her to solve problems of economic policy wholly in accordance with her own interests.

## The Beginnings of a National Commercial Policy.

The system of exchange of commodities then played a large part in international trade, and it seemed impossible for Finland to procure the commodities she needed without resorting to a similar system. This meant almost complete state control of trade. Soon, therefore, preparations for this were under way.

In December, 1917, a foreign trade committee was appointed, and, a little later, a second committee, to plan an organization to which the control of foreign trade could be intrusted. Early in 1918 a third committee was appointed to draft a program of future commercial policy, primarily to arrange for trade treaties and the application of the principle of exchange in Finland's foreign trade. But, before this could be done, the rebellion, breaking out at the end of January, 1918, created entirely new conditions. For the time, here as elsewhere, everything was governed by the demands imposed by the Revolt.

At the end of February, 1918, the commander in chief of the White army appointed a special Staff of Engineers, whose task was to concentrate the country's technical resources, in coöperation with the army command. This Staff of Engineers, stationed at Vaasa, the temporary White capital, was to give additional help to the army's technical organizations and the like, and to take charge of all substantial contracts for materials both at home and abroad. For

the same purpose a special Contract Bureau was established in connection with the Finnish Legation at Stockholm, which was closely to coöperate with the Staff of Engineers and those industrial institutions selected to manufacture munitions. The said Staff comprised six sections—for machinery, building, telephones and telegraphs, electricity, industry, and business and contracts. Their duty was, at first, to supply the army with the necessary technical appliances. But, at the same time, they took over supplying the munitions factories with imported raw materials. For this purpose, stores of exchange commodities were accumulated at home. Very soon, too, the Staff of Engineers, among whom were efficient technical experts and experienced business men, began to furnish the Government with advice regarding foreign trade in industrial products; and from that it was but a step to plans for the development of the country's economic defense.

The assistance given by the German army to the Finnish forces had the added result of establishing a close economic contact with Germany. On March 7, 1918, a temporary trade treaty was concluded on the basis of the most-favored-nation category. But with this was coupled a tariff agreement which was of most advantage to Germany. It permitted her factory products to enter Finland on a pre-war tariff basis, and Finland was not allowed to increase her protective duties. German merchants and manufacturers were permitted to operate in Finland on the same terms as the Finns themselves, and Germans were also to be allowed to own real estate and other property in Finland.

These provisions, which were in part one of the conditions of German military aid, meant grave risks to future economic development of Finland. Indeed, Germany even demanded the right to control Finland's foreign trade for the duration of the War in order thus to keep goods from reaching Great Britain. On May 29 Finland concluded an agreement, almost identical in vital matters, with Austro-Hungary.

These agreements, however, were to be short-lived, and of little import. After the defeat of the Central Powers they were no longer maintained, and, by the Treaty of Versailles, they were repealed.

In March, 1918, at Vaasa, a conference of the representatives of trade and industry took up the question of domestic trade. As recommended, a special Trade Commission was established at the Berlin Legation to look after matters of commercial policy between Finland and Germany. The conference further deemed it advisable that a second and special state agency to direct export and import trade be created in Finland itself, in coöperation with the voluntary organizations working in the spheres of trade and industry. The direction of economic activity remained, however, for the time being in the hands of the Staff of Engineers. Its primary task was to learn what stocks of commercial and industrial commodities were already in the country, and to take the initiative in both putting them to use and in creating new branches of production.

# The Trade and Industry Commission.

At the beginning of April, 1918, it was found that this could not satisfactorily be done until there was a special government office for the purpose. It was decided, therefore, on April 3, to create a Trade and Industry Commission; and, on April 16, its working program and internal organization were approved. The Commission had (1) to superintend trade and industry, export and import trade, and the utilization of means of transport and foreign currency in the possession of private individuals; (2) to propose measures and supply information on questions connected with the above; and (3) to act as an executive authority within the limits accorded it. The chairman and members of the Commission were to be chosen from the leading representatives of industry, trade, banking, and agriculture, and the interests of consumers were also to be regarded.

As the work of the Commission increased, new subsections were created: first a Supplies Office, to take charge of commodities that had been taken over, and to ascertain both the needs of the country and the quantity of supplies available; and, second, a License Bureau to deal provisionally with export or import applications. And other bureaus were added to deal with commodities subjected to restrictions and their distribution, the purchase of raw materials, added requirements and substitutes, etc.

The Commission was given authority to demand detailed inventories of all stocks of commodities and, with the aid of state officers, to inspect shops, warehouses, storehouses, etc., of recalcitrant persons or those suspected of having submitted false returns, and also scrutinize their records. It could grant sales and distribution permits in the case of confiscated goods, with the exception of foodstuffs,

for which a separate agency existed. For the retail distribution of commodities, the Commission was entitled to use the Provisions Committees. Persons failing to obey the orders of the Commission were liable to the withdrawal of their sales or distribution permits. Further, the Commission could forbid the transport, sale, and utilization of commodities until explicit orders had been issued by the Government. On the basis of special authority in each individual case it could order private firms to manufacture goods of vital public need, but must purchase such goods at a price which gave a reasonable profit. It was required to control the use of the goods it took over, and, in case of need, to order other goods to be supplied in compensation. And it could also deny the right of private transport, if such transport utilities were of public need.

In a few weeks marked changes were made in the Commission's organization. To insure confidential coöperation with various elements among the people, at the end of May a meeting of representatives of business organizations was called at Helsingfors to discuss the Commission's future operations. As was there recommended, a general council was established to act with the Commission and decide on matters of greatest importance. Of the members of this council, nineteen represented different branches of industry; five, commerce; two, coöperative societies; two, navigation; one, banking; and six, agriculture. It handled most of the business of the Commission, though the actual work was done by a smaller executive committee.

Later, various bureaus were grouped about the Commission—first a Chemicals Bureau, to deal with certain products of the chemical industries, for which substitutes had to be procured, and a Research and Test Bureau for the same; then a Motor License Bureau to control the use of liquid fuels. For the metals branch a Metals Bureau was set up, followed by corresponding special bureaus for rubber, asbestos, leather and leather goods, textiles, medical supplies, and electricity—even bureaus of statistics, printing, and of law, for the prosecution of cases of breaches of the Commission's rules.

Most of the work, however, fell upon the License Bureau. In seven months in 1918 it registered no less than 15,793 applications for import licenses, and granted 12,599. In 1919 it granted 31,131, out of 40,059. Of export licenses in 1918 it granted 2,742, out of 4,012;

and, in 1919, of 4,198 applications for licenses but 14.4 per cent were refused.

The Commission's restrictions applied first to export trade. Imports from the Scandinavian countries, so far as goods could be obtained, were allowed to continue unchecked for the time. Attempts to purchase goods abroad were then confined almost entirely to provisions and other essentials, so there was no reason for restrictions. Exports, however, were subjected to the most stringent control. As early as February 1, 1918, a License Committee had been appointed which at first handled export measures under war-time regulations. On April 3 the Government issued an order from Vaasa expressly forbidding the export of goods without special and individual permission. Soon, too, the control of exports was transferred to the Trade and Industry Commission.

# Agreements for the Exchange of Commodities.

As it was not known at first how large commodity stocks in the country were, permission to export such goods, when not produced in the country itself, or produced only in insufficient quantity, was granted solely on condition that other goods, into which a corresponding quantity of the exported product entered as raw material, should be imported in exchange, or, in certain cases, in exchange for foodstuffs. Later, however, definite agreements regarding exchange of commodities were concluded with certain other countries. In June, 1918, a temporary exchange agreement was made with Denmark. In this agreement both countries granted each other's subjects the same rights and privileges in the case of trade and the like as were enjoyed by the subjects of the two respective countries, with the exception of certain special provisos and taxes which applied to all aliens. Both countries also accorded one another most-favored-nation rights, in so far as no agreement concluded with a third party should place restrictions on the imports or exports of either party. The express intention of the exchange agreement was to give Finland food supplies from Denmark, in exchange for Finnish products and for supplies left in Finland from the time of Russian rule. Thus the list of exchange products on the part of Denmark included only various foodstuffs, while the Finnish list included tar, turpentine and plywood, useful metals, rubber, resin, textiles, etc. Exchange

goods were divided into five classes and the exchange accounts were to be kept on the basis of officially quoted prices. But Denmark was not particularly interested in the exchange principle, and, for other reasons, too, this exchange of goods failed to achieve much. Indeed, Finland possessed little of the commodities for which imports could be obtained. And in May, 1919, the agreement was dissolved, and Finland's arrears of exchange commodities allowed to lapse.

On August 10, 1918, an exchange agreement was concluded with Sweden. In addition to actual export and import commodities, this agreement covered the exchange of transit goods which had been held up in both countries after the Russian revolution. But in the case of Sweden, too, in practice the exchange principle was really given little attention. It turned out to be difficult to learn, early enough, the other party's view of the exchange balance on any specific date. And in May, 1919, this agreement also was ended.

## The System of Prohibitions.

Great difficulties had arisen in the above attempts to trade owing to the fact that Finland, which possessed very little of value with which to barter, used what she had to obtain things essential to her national existence. Such commodities were, however, scarce everywhere. To avoid imports of commodities of secondary importance, and a detriment to the balance of trade, imports of unnecessary goods had to be prevented, and even the prices of imports carefully considered. Restrictions were further necessary to protect national industries from foreign, especially German, competition. As it was impossible to raise import duties, a measure which would also have blocked all detailed control of imports, stricter methods had to be adopted. Imports were forbidden.

On June 21, 1918, on the recommendation of the Commission, the Senate prohibited all imports for which permission had not been specially granted by the Department of Trade and Industry. Applications must be made to the Commission; and, when applications soon became many, it was given the power of decision. Only in case of a refusal could an applicant appeal to the Department. In the case of imports of foodstuffs and materials needed for the national defense, the Commission was instructed to grant import licenses direct. This was not quite consistent.

Import licenses were granted, at first, only for goods regarded as nationally essential, and above all of value in domestic production. Such permits were granted in general only to Finnish subjects and to aliens who paid taxes on businesses registered in the country.

To avoid competition in foreign markets both imports and exports were concentrated as much as possible. The Commission did not trade on its own behalf, it permitted business firms to do the buying and selling. But they had to join export and import associations, of which many were being formed. Concentration of imports was vital because Germany granted export licenses for certain important goods only when they were destined for the Finnish Government or for associations under its control; a further condition attached to some commodities was that their distribution in Finland was to be supervised by the Government. Every reliable firm in the respective line of trade was entitled to become a member of the associations. They had to pledge themselves to observe the rules laid down. And, when granting import licenses, the Commission had a chance to pledge the associations themselves. This helped to keep down speculation and undue increases in prices.

In the case of exports, prohibitions were laid only on Finland's most important exports, lumber, paper, and pulp, which, it was hoped, might be used as exchange commodities. But this hope was vain. Later on, sales of export commodities were also concentrated by the creation of the Sawmill-Owners Sales Association and the Central Office of the Paper Industries. At that time there was an active demand for paper in Great Britain. High prices were likewise obtained in the Ukraine, while, from the Ukraine, sugar and possibly other foodstuffs were available in exchange. Germany, however, would permit the transport of such goods only on condition that she was given paper. The sale of paper was consequently postponed until the autumn to enable an exchange agreement based on sugar and paper to be concluded with the Ukraine. But the most favorable moment had by then been missed. After her defeat Germany did not regard herself as bound to take the paper she had ordered; and of the consignments intended for the Ukraine only one-tenth had been sent when trade with the Ukraine also ended.

Even in the case of lumber, poor results were obtained, despite the heavy war demand. In Germany private individuals were not allowed to build; and orders for the Army declined greatly toward the end of the summer. Germany's lumber imports were thus restricted and prices kept down. By the middle of December, she had purchased merely about 50,000 standards, of which only two-fifths had been shipped. As Finland had unsold stocks totaling about 1,000,000 standards, the percentage of export was insignificant.

In exercising the right of guardian over Finland's foreign trade, Germany also kept a sharp control over the transport of goods, whether in countries wrested from Russia, or in neutral ships. She thus prevented the export of things that she was unwilling to see leave Finland. In some cases she would give a permit only on the surrender of an appreciable part of the export to Germany. When goods were sent to neutral countries or goods imported from Germany, or even from Sweden, proof was demanded that these goods would not be reëxported. Exporters and importers had to pledge themselves, and the penalty was a fine of five times the value of the goods.

This was no foreign-trade policy that could be satisfactory, especially to business men. And, as the supply of foreign goods declined and exports remained small, it looked as if the pressure exerted by Germany was preventing the supply of commodities. Obviously, the measures applied at that time caused a good deal of delay; ships fully loaded had sometimes to wait for weeks before the formalities connected with their departure had been settled. Of the import licenses, good for three months, granted in the late summer of 1918, from 70 to 80 per cent remained unused, or had to be renewed. The generally favorable attitude toward the restrictions system and toward Germany, who had helped to crush Finland's Revolt, began to change and, after the War, dissatisfaction gradually became open. Merchants began to demand a complete change, though this was impossible; for stocks were everywhere very low, and the transition to normal conditions would take much time.

The end of 1918 and the beginning of 1919 form a kind of turning point in Finland's trade policy. As the shortage in commodities was acute, speedy measures were taken to revive imports by granting import licenses as freely as possible, especially those for essentials. At that time, however, the Baltic was blockaded by the Entente Powers, and Finland had no trade agreements with them. Her scant store of commodities consequently shrank still more. Prices rose. And it was impossible to get export trade really moving.

## Trade Relations with the Entente Powers.

At the end of 1918 hasty preparations were made to establish trade relations with the Western Powers, with a view particularly to obtaining foodstuffs, raw materials, and such necessities. By the end of December a quantity of essential foodstuffs for immediate needs had already been obtained. But actual trade did not begin until February, 1919. To start it an Inter-Allied Trade Committee was organized in Helsingfors, and both import and export trade were put under its control. As was usually the case in war-time trade, the permit provisions affecting different commodities varied in accordance with their importance. Some were placed on a free list, and for others the formalities were simple; but as for the rest, different rules applied according to the country of origin. In the case of imports from Great Britain, the United States, France, and Italy, the above committee granted the necessary permission. In the case of imports from Scandinavia, the Inter-Allied Trade Committees in the countries in question gave permission to export when they received word that Finland had given permission to import the goods. And as for imports from other neutral or Allied countries the license granted by the Helsingfors Committee was subjected to the approval of the Blockade Commission in London. Importers had to give guaranties that goods imported would be kept within the country and sold to reliable persons; these guaranties had to have an added warrant from the Trade and Industry Commission, on behalf of the Finnish Government. Corresponding guaranties were given in trade with neutral countries. In the following March there was published a list of the goods which could be imported from Allied countries without reëxport guaranties. Goods were allowed export to the four Western Powers on the strength of certificates of origin issued by the British consul in Helsingfors; but for exports to other countries the consent of the Inter-Allied Trade Commission was required. Trade with Germany was wholly forbidden at first; later, Germany was allowed to export goods to neutral countries; and, via Scandinavia, some share of these was obtained by Finland.

The application of these rules led to delays of weeks, or even of a month or more, before licenses were granted; and there were also inspections of goods, and negotiations with the authorities in the exporting country. As things were then, however, a continuation of the restrictions system was the only proper course.

It was regarded as important that none but the most essential goods should be purchased abroad until exports had begun to revive. But thereafter, the right to import goods was to be extended as much as possible and certain important consumption articles, chiefly textiles and leather goods, trade in which was not restricted by the Western Powers, were to be altogether freed. Export prohibitions were to be kept in force only as long as, and in so far as, they were necessary for foreign-trade relations.

Imports, therefore, continued to increase, but exports remained trifling. Much foreign currency was consequently needed for payments to other countries; as there was little demand abroad for Finnish marks, the exchange rose considerably. When the fall in the foreign value of the mark began to assume alarming proportions, in March, 1919, a Currency Committee was appointed to settle upon the principles to be adopted in granting permits to purchase foreign currency, and to deal with questions connected with its purchase in quantity. This committee ruled that import licenses were not to be granted that would allow of the import of any commodity over and above the amount imported in 1913; in which calculation the licenses already granted were to be included. Not even the possession of the necessary foreign currency was to be a ground for exception. The effect was to deprive the licensing authority of the Trade and Industry Commission of all value. Imports continued, however, on the basis of the licenses previously granted. Licenses to import foodstuffs were given at the same time in accordance with the directions of the Food Minister, and this was not strictly consistent.

As matters were, importers who had succeeded in obtaining import licenses had an advantage over others, as they were assured of a market for their goods even though the price was high. It was not therefore necessary for them to buy in the cheapest market. The domestic factories, too, in the absence of foreign competition, could raise their prices, which because of the fall in the value of money all along the line they frequently had to do. As the political situation was still uncertain, with a chance that the War might continue, efforts were made to increase imports. There was a fear, too, lest Germany, after solving her worst difficulties, would appear in the world

market as a buyer and cause prices to rise. And the international situation in general made it seem wisest to keep the system of prohibitions in force.

# Measures To Keep Down Prices.

As the maximum prices early imposed under Russian rule had no legal foundation, they lost all effect after Russian rule had ended. Owing, however, to the exceptional circumstances which prevailed in this country after the revolution, actual laws could not be passed until the summer of 1918. But a Law for the Prevention of Exorbitant Prices came into force on July 27.

The enforcement of this law was intrusted to the Trade and Industry Commission, which was to be aided by the police and public prosecutors. But the work of enforcement made it plain that the law was not sufficiently effective, especially as many authorities proved to be very unwilling to help bring offenders to justice.

In its efforts to stabilize prices the Commission's chief endeavor was to concentrate and control trade in every possible detail; to say precisely through the hands of how many middlemen a commodity might pass on its way from producer to consumer, and what profit each was entitled to receive for his share in the process. At the time in this field abuses were rampant in the shape of "chain dealing," one wholesale merchant selling goods to another wholesaler, or one retailer to another retailer, and each adding to the price. To stop this, dealers were allowed to move goods only when final distribution was thereby assisted. These abuses had become especially obvious in the textile trade in the autumn of 1918, prices almost trebling before the fabric reached the ultimate buyer. The attempts to concentrate the import trade were intended to prevent importers' competing in foreign markets, with resulting higher prices. When import licenses were granted, a watch was kept that the goods were bought abroad at a reasonable price, and, thereafter, the Trade and Industry Commission controlled the sales prices of the import associations. Wholesale merchants were required to guarantee that they would be satisfied with a maximum profit of 10 per cent and had further to secure a guaranty from the retailer that he would limit his profit to 20 per cent. But this meant, the more the seller paid the bigger his profit, contrary to all ordinary principles of trade.

And all the License Bureau could do was scrutinize buying prices as carefully as possible, on the chance of being able to punish offenders under the Speculation Law, and deprive them of their import licenses.

Following the same principle, attempts were made to regulate prices in the domestic factories. In November, 1918, they were forbidden to raise prices except by permission of the Commission.

Price regulation was also applied to farm produce which, of course, had been subject to maximum prices since 1914. In October, 1918, the Senate fixed maximum prices for hides and leather; in November, for cotton textiles, and very soon, for tobacco and coal oil. From the farmer's point of view, the prices of all of these were highly important; for, under price regulation, foodstuffs were no longer subject to the laws of supply and demand.

But, in the general shortage, speculation constantly spread, and seemed to call for fixed prices in many fields. On the Commission's recommendation, in October, the Senate set up a Costs Bureau, and with it a Committee on Costs, comprising representatives of trade, industry, farming, and the consumer. The new Bureau prepared price-fixing questions for decision by the Commission, suggested prices for confiscated commodities, furnished reports, etc. The general decisions of the Bureau and Council went for approval to the Board of the Commission. Later, the Bureau was left fairly free to deal with questions of day to day prices; but firms affected by its decisions had the right of appeal to the Board. And, in time, gradually, merchants began of their own accord to bring their price problems to either the Costs Bureau or the legal department of the Commission.

After March, 1919, importers were permitted to take their goods from the Customs only after they had agreed with the Costs Bureau as to the profit they were to be allowed to make. This system was applied to goods of which there was a shortage, and which were consequently unaffected by price competition. This restriction worked well in restraining foreign buying by importers.

## The Organization of Production.

Owing to the obstacles to foreign trade, a great lack of various materials was soon felt in industry and elsewhere. Thus it became

important to inventory existing supplies, and to see that they were distributed as fairly as possible.

In April, 1918, this was done for wool stocks available for use in industry; and, later, the sale and transport of wool and hair was made contingent on a permit from the Commission. It became a question of taking over all wool by the State; and the Commission sought to keep wool producers, when taking their wool to the mills, from receiving more of the produce than was absolutely needed by themselves or their families. The remainder must be reported to the Commission for distribution to consumers. The same method was adopted in the case of hides, which were also to be a state monopoly, though here the plan failed. In 1918 there was a great shortage of coal oil, stocks having fallen very low; and the allotting of oil to farms was arranged for, in part, through the Provisions Committees, and in part through certain wholesale firms. Lubricants, leather, and various metals were also distributed to factories and workshops by the respective Bureaus of the Commission. The sale of junk and waste was handled by the Import Association.

Due regard was likewise given to the buying resources of the country. Imports of finished products were restricted, and direct import prohibitions were issued in the case of things manufactured in Finland itself, providing the price was not more than from 10 to 20 per cent higher than the price of similar foreign articles on the Finnish market. Import licenses were refused for things which, it was hoped, could be made in adequate quantities in Finland, even though this level of production had not yet been reached.

But, inevitably, the dearth of commodities intensified; and the result was the production of various substitutes, both to satisfy the home demand, and, to some extent, to exchange for foreign products. The Staff of Engineers had already taken up this task, and it played an important part.

To meet the shortage of copper and procure exchange material, in March, 1918, measures were taken to reopen the Outokumpu copper mines. A railway was speedily laid from the mines to an adjoining waterway, and in six months ore was being sent to Germany. But copper was also urgently needed for Finland's chemical pulp mills, and, their needs coming first, exports were still small when the War ended.

With a view both to the needs of the domestic paper mills and soap factories, and to the procuring of exchange material, in the summer of 1918 a plan for the gathering of resin on a large scale was launched. But it failed to answer expectations. The price of resin and its prepared product rose so high that the paper mills were able to procure them much cheaper from abroad. Even as exchange material resin proved to be of little current value, for after the War Germany would no longer buy it. But the Government avoided a loss by raising the duty on it and, consequently, increasing its price in Finland.

In another attempt to obtain exchange commodities, the tar and turpentine industry was stimulated by organized educational work on the part of the Government.

In the spring of 1918 what little petroleum remained had to be reserved for farm machinery and nothing was left for lighting. Calcium carbide was substituted, the Commission undertaking to arrange for a supply of it and for suitable lamps. Its quantity sale was, conditionally, left to private firms. The card system was adopted for its distribution. But the lamps procured were not always satisfactory, nor the supply of carbide adequate; and thus only the worst of the shortage of illuminants could be so remedied.

Caustic soda and calcium chloride had been made for Russia during the War in factories at Kajaani and Varkaus; and they were still made, at first only for army needs. But during 1919 the industry grew until the output began to suffice for the country's needs.

To support the soap and bone-meal industries, restrictions were placed on the collection and sale of bones. Distribution was intrusted to the respective factories. And only such factories as could extract the fat from bones were allowed to operate.

Owing to the general shortage of oil, measures were taken to utilize a species of small sea fish, a sort otherwise worthless. Fishermen began to take them off Vironlahti, in the Gulf of Finland, to extract oil themselves.

Several attempts were made to utilize cellulose as food for man and beast, especially as fodder for army horses. But when the supply of provisions from abroad improved beyond previous hopes, this went no further. Fodder made from straw-pulp, however, continued to be used for some time. The commodity crisis brought many attempts to start new forms of production, but none of them reached any lasting value. And failure was due in part, to an attitude of mind, especially in business circles, which opposed all restrictions, and all business enterprise by the State as soon as the War was really over.

## The Ending of Restrictions.

The ending of all exceptional measures was generally expected with the return of peace. And, as large supplies of electrical materials had been imported, in their case restrictions were abolished in January, 1919. Restrictions on trade in metals were also made easier. In February, scrap metals and waste products, except bones, were released. Textiles were freed in part. The buying-license system was abolished and replaced by an order defining the quantity of thread, cloth, and articles of clothing which could be sold at any one time to one customer without a buying and transport license. Attempts were made in the summer to ease the restrictions on wholesale trade in this field; but the general buying and transport permits then issued had soon to be revoked. Not until the year end was it possible to abolish all textile-trade restrictions. The monopoly and sale restrictions in the case of resin were abolished in March; and trade in toilet soaps, rubber goods, and carbide was freed, as was tobacco, early in April. Hides had their turn in May; and, in June, leather, oils, and fats. Notice of the ending of the agreement for the manufacture of carbide was also given in June, the supply of petrol having begun to improve.

Thus, during 1919, domestic trade was largely liberated from its war fetters. It was impossible as yet to free foreign trade to the same extent, though here, too, plans had already been made for a modification of restrictions. One obstacle was a desire to support the Finnish mark. It was feared that the release of exports would have the effect of speedily exhausting the stocks of export products, the mark being very low and Finnish products consequently cheap for foreign buyers. In May, 1919, every kind of lumber was freed from export prohibitions, but not paper and paper products. And this was as far as the Government was prepared to go in the release of foreign trade. As regards imports, restrictions were tightened in the beginning of June, and permits were confined to provisions, raw mate-

rials, and auxiliary products. In September, however, there were many releases in import trade; the total comprising about one-third of the listings in the customs tariff. After the Inter-Allied Trade Committee had ceased to exist, in July, the approval of applications for import licenses was simplified and import trade rapidly increased. Imports in 1919 were much smaller than in peace times, but very large compared with the exports of 1919. The value of the mark continued to fall, and imports failed to cheapen though the world was again at peace. This disproportion between exports and imports long continued and had marked effects on the course of monetary affairs.

In 1919 what might be called the actual war-time trade policy was ended, and as various branches of trade were set free, the respective offices of the Trade and Industry Commission could also be wound up. But, in business circles, the demand grew that the Commission itself should be abolished. And, in October, the Government decided to transfer its powers to a permanent government office, the Board of Trade and Industry. But for the time being the sales and consumption regulations imposed by the Commission remained in force, unless previously abolished.

The Trade Section of the Board of Trade and Industry continued to handle the remaining restrictions in 1920. Its operations, however, were greatly limited by the Currency Council appointed in connection with the Ministry of Finance at the end of 1919; for on its decisions import licenses were wholly dependent. In order to raise the value of the mark imports were rigorously restricted; and the imports volume in 1920 was less than 60 per cent of that of 1913. The value of imports, however, owing to prices being almost double what they were in 1919, was very high. Export commodity prices had also risen, yet the total value of exports was much below that of imports; and exports amounted to about 70 per cent of their prewar volume. The balance of trade was not notably worse than the pre-war balance, but payments were wholly unorganized, the value of the mark, consequently, continued to fall, and Finland gained little by the fall in world prices at the turn of 1920–1921. On February 2, 1921, however, by the advice of the Economic Council most of the country's foreign trade, or all export trade except grain, sugar, and ships, and all import trade except wheat, sugar, tobacco,

and luxury articles were freed. Imports of the latter were only to be permitted when the Government had been authorized to raise the duties on them. On February 15, 1921, the extra Trade Section of the Board of Trade and Industry was abolished. The Government's former powers to restrict were abrogated on April 1, save for trade with Russia, Esthonia, and Latvia; and as late as March, 1922, the Government was authorized, up to the end of 1922, to restrict or forbid exports of commodities, securities, and means of payment, and to issue orders regulating their sale and transport to other countries, in so far as the safeguarding of the public interest might be necessary. By such authority exporting to Russia was allowed only on permission by the Trade Department of the Ministry of Trade and Industry. But such trade, as shown elsewhere, was trifling.

Thus the system of restrictions was abolished piecemeal, and the release from it was generally hailed with satisfaction. At the same time, more permanent trade agreements were made with the different foreign Powers, but they were no longer connected with war-time trade policy; they were the real fruits of a budding foreign policy, self-directed by a new and independent nation, and helped greatly in the rapid growth of Finland's foreign trade during the years that followed.

## CHAPTER XII

## PUBLIC FINANCE

## Previous Developments in State Finances.

When Finland became autonomous in 1809 it had to take over and organize its own finances. Its expenditures were very small, but the means available were not abundant. Part of the revenue came from state lands, but most of it was collected as a land tax. Compared with it other taxation revenue was at first of very little importance.

After the Crimean War a new phase of Finland's economic life began. Many measures, chief among which was the improvement of communications, were taken to develop the various branches of trade and production; and one important task became the raising of the standard of popular education. For the construction of state railroads loans were raised abroad, a thing rarely resorted to before. A national army was then created, based on conscription, and, to support it, the taxes on spirits and malt liquors were increased. But most of the constantly growing expenditures were met by the ever growing revenue from Finland's high import duties. In 1888 the fiscal duties were even raised a little. In the course of time, the relative importance of the land tax continued to decline. As the permanent sources of revenue generally covered expenditures, the country borrowed only for special purposes, like railroad building. The loans needed were obtained abroad, often on very favorable terms. And even half the cost of railroad building was met from taxes.

The size of the sums involved in the state finances before the War and the various purposes for which they were used may be judged from the figures for 1909–1913 and for 1913 alone. They are in millions of marks. In 1909–1913 the maintenance of Finland's Civil List absorbed an average of 0.4; in 1913 alone, also 0.4. For the Diet the corresponding figures were, respectively, 0.7 and 0.7; for government institutions, 2.8 and 3.1; the law, 5.2 and 5.4; home affairs, 13.9 and 15.3; the Treasury, 3.7 and 4.0; Cameral Department, 5.0 and 5.9; military expenditures, 10.2 and 14.2; religion and education, 17.8 and 21.0; agriculture, 7.3 and 7.8; communica-

tions, 47.1 and 51.1; trade and industry, 6.6 and 7.5; Chancellery of the Economics Department of the Senate, 0.7 and 0.8; miscellaneous, 5.8 and 8.0; pensions and public grants, 5.3 and 5.6; public debt, 8.3 and 8.0. Totals, 140.8 and 158.8.

The trend of expenditures was upward. In 1909 the total had been only 122,800,000 marks; and the rise was largely due to the annual increase in expenditures for the public communications. They were then almost one-third of the total. But, to counterbalance this, could be set the revenue from the state railways, the post office, etc., which left a net profit. That is, the largest actual item of expenditure was that for religion and education. Next in order came home affairs, and the army. And the latter expenditures became irregular after the Finnish national army was disbanded. They consisted, then, of gradually increasing annual payments to the Russian Treasury.

The percentages for the different items alter considerably if we include extraordinary expenditure. In 1909 there were 54,100,000 marks, of which 30,100,000 went for communications, and 20,500,000 for Russia's military purposes. In 1910 and 1911 extraordinary expenditures remained in the neighborhood of 18,000,000, devoted almost entirely to communications. In 1913 the corresponding figure was 25,300,000, again chiefly for communications.

The chief sources of state revenue, in millions of marks, for the 1909–1913 average and for 1913 alone, were these: state lands and forests, 15.0 and 17.8; railroads, 49.7 and 58.6; buildings, canals, etc., 3.3 and 3.2; direct taxes, 6.4 and 6.5; indirect taxes: (a) customs duties, 53.6 and 58.3; (b) excise duties, 12.3 and 14.0; miscellaneous duties: (a) stamp duties, 3.8 and 4.1; (b) other taxes, 1.2 and 1.3; fees and charges, 10.2 and 11.5; miscellaneous revenue, 5.8 and 6.0; extraordinary revenue, 8.1 and 0.01; revenue not included in budget, 1.0 and 1.1. Totals, 170.4 and 182.4.

Customs duties were thus the source of revenue on which the state finances was largely based. The net profit from the railroads was rather small; in comparison, the net yield from the state lands and forests was relatively large. Thus the burden of taxation was borne chiefly by consumers of various luxuries, while landowners in certain areas were also called upon to bear, in the shape of the land tax, a fairly heavy burden.

#### The War Years.

The outbreak of war made itself felt directly in a decline in customs revenue. In general, however, the changes during the first war years did not go deep. They were seen most clearly toward the end of the War, after the increased prices had swelled many branches of expenditure, and had also, through certain types of revenue, increased the balance-sheet totals. This was likewise true of local government finance.

Keeping roughly to the order followed in the state accounts, we find that government expenditures during the five war years, 1914-1918, were, in millions of marks, as follows: Civil List, (1914) 0.5, (1915) 0.5, (1916) 0.5, (1917) 0.4, (1918) 0.3; Diet, 0.7, 0.2, 0.1, 2.1, 2.2; chief branches of administration, 3.2, 3.3, 3.3, 3.9, 7.6; judicial system, 5.7, 6.0, 6.5, 9.4, 38.4; civil authorities: (medical) 5.7, 5.4, 7.0, 11.1, 20.0; (provincial administration) 4.4, 4.6, 4.8, 7.4, 10.2; (police) 3.9, 4.0, 4.3, 7.3, 12.5; (other civil authorities) 1.0, 1.0, 1.3, 2.1, 4.4; customs, 3.5, 3.1, 3.3, 6.5, 8.1; Treasury, 0.6, 0.6, 0.5, 0.7, 0.7; military expenditures, 15.2, 16.2, 17.2, 0.2, 122.2; education: (school board and high schools) 6.4, 6.5, 6.7, 8.4, 13.1; (teachers' colleges and elementary schools) 7.6, 7.0, 7.6, 18.7, 32.3; (university, etc.) 5.4, 5.1, 5.3, 7.0, 11.1; agriculture: (Board of Survey) 2.2, 2.1, 2.1, 2.2, 2.8; (Board of Agriculture) 5.4, 5.0, 5.3, 6.5, 6.9; (Board of Forestry) 5.5, 5.5, 14.0, 32.0, 18.6; (Board of Colonization) 0.3, 0.3, 0.3, 0.4, 2.2; communications: (state railroads) 41.6, 49.6, 74.5, 156.1, 149.0; (post office) 7.7, 7.9, 8.4, 13.5, 17.9; (canals, roads, waterways, and telegraphs) 3.2, 3.0, 3.2, 4.1, 14.0; trade and industry: (Board of Industry, etc.) 4.1, 3.1, 3.4, 4.3, 10.1; (vocational training) 1.9, 1.9, 1.9, 2.2, 2.7; (social administration) 1.9, 1.8, 17.1, 9.8, 2.4; (official newspapers, etc.) 5.8, 4.0, 5.0, 8.6, 27.2; pensions and grants in aid, 5.6, 5.7, 5.8, 6.2, 8.7; public debt, 8.0, 8.0, 9.9, 16.8, 43.7; extraordinary expenditures, 28.0, 35.8, 47.9, 123.8, 449.4; expenditures not included in budget, and grants to funds, 1.0, 2.3, 0.9, 16.1, 46.5. Totals, 186.0, 199.5, 268.1, 487.8, 1,085.2.

The sudden rise in judicial expenditures was due, at first, to the increased cost of prison maintenance owing to higher food prices; and, later, to the great number of persons detained after the crushing of the Revolt in 1918.

State railway expenditures increased greatly owing to rising commodity prices and heavier traffic. The public debt grew after the country had become independent, above all because the fall in the value of the mark called for materially larger expenditures.

During the first war years, only small amounts of the extraordinary state expenditures came from war-time conditions. Such items included 5,000,000 marks in 1914 for a strategical railroad, about 2,000,000 marks for the purchase of sites for barracks, etc. Leaving out of account the railway mentioned above, direct war costs averaged only from 2,000,000 to 3,000,000 marks during the first war years. In 1917 there was an item of 4,300,000 for expenditures necessitated by the Government's food policy; in 1918 this had grown to 24,500,000; and even in 1919 it was still as much as 14,700,000. Actual military expenditures, which increased steadily during 1914-1916, were almost nothing in the revolutionary year of 1917. After that, however, came the heavy cost of establishing a national defense organization. In addition, 300,000,000 marks were spent in 1918 for the restoration of order, while additional grants totaling 124,600,000 marks were included for the same purpose in the budgets for 1919-1921. Further expenditure of like character included nearly 24,500,000 marks in 1919 for national defense. And, in all, 46,000,000 went for the same purpose between 1923 and 1927. In 1920, 130,000,000 were also paid as compensation for damages to property during the Revolt.

The revenue collected by the State during the same five years shows a parallel increase. It was, in millions of marks, as follows: from state property: (lands and forests) (1914) 18.1, (1915) 13.2, (1916) 24.0, (1917) 47.6, (1918) 34.2; (state railroads) 58.5, 81.8, 111.6, 146.4, 127.5; (buildings, canals, etc.) 2.8, 2.1, 4.3, 2.8, 2.5; direct taxes, 6.9, 6.8, 9.1, 145.2, 213.9; indirect taxes: (customs duties) 46.2, 42.1, 45.6, 33.6, 16.6; (excise duties) 12.9, 4.2, 20.3, 13.3, 0.2; stamp duties, 3.8, 4.8, 8.7, 17.2, 30.7; other taxes, 1.2, 23.3, 62.6, 11.1, 1.8; fees and charges, 10.8, 10.0, 11.4, 14.3, 26.8; miscellaneous revenue, 6.6, 5.9, 6.3, 8.3, 16.1; extraordinary revenue, 0.6, 0.01, 0.2, 76.4, 686.9; revenue not included in the budget and transfers from funds, 1.3, 5.7, 4.0, 3.8, 95.0. Totals, 169.7, 199.9, 308.1, 520.0, 1,252.2.

Revenue from direct taxes, which had previously been a small

part of the total, was largely augmented from a new war-time tax on large incomes. Special taxes were also imposed on alcoholic liquors, and on both passenger and freight traffic by railroad. Nevertheless, when, in 1918, expenditures suddenly increased owing to the rebellion, and most sources of revenue declined, recourse had to be had to extraordinary revenue, chiefly borrowings. But a large part of the expenditures at that time were investments of an economic nature, and the balance sheet ultimately showed an appreciable surplus.

In any case, the state finances were for a time in a critical condition; and, owing to the Revolt, the budget for 1918 was not ready until the calendar year was over.

## The Post-War Period.

The difficulties in state finances were very great after the War. The duties of the State increased with the country's independence; and as prices rose they called for an ever larger money outlay, whereas revenue was relatively hard to secure. For some time, therefore, the Government had to borrow a good deal.

The organization of a national defense greatly increased military expenditures, fairly small before the War. In 1919 a little over 200,000,000 went to this; and, in 1922, nearly 300,000,000, the four-year average being 263,500,000. Railway expenditures grew rapidly as the mark fell. In 1921 they already exceeded 400,000,000, though railroad revenue had also increased. Much went to the public debt, which was well over 200,000,000. Thus the total state expenditures, a little over 1,000,000,000 in 1918, were approaching 3,500,000,000 in 1923.

State revenue was slightly below that for 1919 and 1920; but, in 1921, revenue increased so much that there was a year-end surplus. Direct taxation, which had grown more important by the end of the War, gave relatively good results during these years, the yield both for 1921 and 1922 being about 500,000,000. Still greater, however, was the yield in customs duties, which, in 1922, totaled nearly 800,000,000. As railway revenue also increased, and the same was true of most branches of revenue, in a few years the state finances were on a solid basis.

Developments were still more favorable when the transition-period troubles after the War had been overcome.

The ordinary expenditures of the State, in millions of marks, for the 1923–1927 average, and for 1927 alone, were, respectively: President of the Republic, 1.9 and 2.0. The corresponding figures were, for the Diet, 9.4 and 13.8; for administrative agencies, 14.6 and 6.9; Chancellery of State Council, 10.3 and 11.5; Ministry of Foreign Affairs, 25.6 and 30.9; Ministry of Justice, 88.1 and 103.0; Ministry of the Interior, 190.7 and 233.1; Ministry of Finance, 52.8 and 57.2; Ministry of Defense, 373.5 and 411.1; Ministry of Education, 356.4 and 426.0; Ministry of Agriculture, 256.7 and 278.4; Ministry of Communications, 780.7 and 899.8; Ministry of Trade and Industry, 52.3 and 57.9; Ministry of Social Affairs, 33.3 and 47.1; miscellaneous and public expenditures, 88.8 and 48.1; pensions and public grants, 64.6 and 86.7; public debt, 312.4 and 508.7; state industrial enterprises, 76.9 and 107.1. Totals, 2,789.0 and 3,329.3.

The marked increases are largely due to the general transfer to new values, after the stabilization of the mark. Leaving unregarded the increased expenditure on communications, the largest items of expenditure were those for national defense and education, each of which averaged about 13 per cent of the total. In the case of the first, much basic work had to be done in connection with defense matters after Finland became independent. Educational expenditures were greatly influenced by the enactment of the Compulsory Education Law.

The chief sources of state revenue, in millions of marks for the 1923-1927 average, and for 1927 alone were these: state lands and forests, 272.2 and 341.0; railroads, 724.3 and 836.2; buildings, canals, etc., 177.4 and 261.0; direct taxes, 450.7 and 485.3; indirect taxes: (a) customs duties, 1,104.6 and 1,227.2; (b) excise duties, 182.4 and 197.0; miscellaneous duties: (a) stamp duties, 171.4 and 228.9; (b) other taxes, 13.7 and 15.1; fees and charges, 156.2 and 193.7; miscellaneous revenue, 120.9 and 122.5; extraordinary revenue, 349.0 and 64.6; revenue not included in budget, 31.1 and 13.6. Totals, 3,753.9 and 3,986.1.

The total revenue thus considerably exceeded expenditure during the same years, with large resulting surpluses, and these were extremely useful, particularly in the handling of the State's various business enterprises.

If we compare the state revenue before and after the War in terms

of gold, we find that it increased nearly threefold. In direct taxation, the increase was ninefold; in customs revenue, 169 per cent. The expansion of the State's finances is everywhere evident. Of the extremely grave difficulties in which they were involved toward the end of the War and immediately afterward, almost no traces were left. The above gold-basis comparison shows that the State's economic expansion was also in part real and not merely one due to the depreciation of the currency.

#### Local Government Finances.

In public finance, communal finance is also important. But, for Finland's communal activity, complete sets of figures are available only for a few years.

During the period 1910-1912 the average expenditures of the rural communes totaled as follows, in millions of pre-war marks: local administration, judicial, and police system, 1.2; education, 11.1; sanitation and medical care, 1.0; poor relief, 6.9; construction work, new buildings, and land, 3.8; roads, bridges, quays, ferries, stage service, and inns, 6.5; interest and commission on loans, 1.2; repayment of loans, 1.9; other expenditures, 1.2. Total, 34.8.

As the above figures show, education accounted for almost onethird, and poor relief one-fifth of the total expenditure of the rural communes. Roads, bridges, etc., also constituted an important item of expenditure.

Taking the average for the period 1910-1912, the chief sources of revenue of the rural communes, in millions of marks, were as follows: income tax, 13.1; assessment unit charges and similar taxes, 8.4; interest, 0.7; repayment of loans granted by communes, 0.9; state subsidies, 4.9; other revenue, 2.1. Total, 30.1. Annual borrowings, 5.0.

During the War the rural communes suffered from certain military burdens, which fell, indeed, chiefly on individuals, but also affected communal finances.

Such communes and those living in them were required, during Russian rule, to billet Russian soldiers without compensation. In districts where large bodies of troops were assembled, the rural communes had to assign their public buildings, such as schools, parish halls, and the like, for use as barracks, etc., and in addition to lease houses from private persons and associations. Houses were some-

times left half ruined, and many communes had to pay heavily to repair them. For the requisitioning of horses and cattle the Russians sometimes paid compensation, but usually in rubles and often after long intervals, during which the ruble had fallen in value, and sometimes nothing whatever was paid. So, ultimately, the communes began to pay such compensation. Some communes, again, voluntarily bought up a certain number of horses and cattle and turned them over to the military authorities, although they received less than they had paid. Among additional burdens were the military hospitals and the extensive fortification works, to which Finnish laborers were often assigned from outside communes. And, when they were poor men, their communes felt called upon to make them some compensation, usually in food and traveling expenses.

In 1916 such expenses meant a total cost to the rural communes of 2,600,000 marks, and, in 1917, 3,600,000. But, owing to the ending of Russian rule, the cost in 1918 was only 1,300,000. It may be said, however, that the corresponding expense for the municipalities was much higher, totaling 2,000,000 in 1914 and rising to 5,500,000 in 1917, after which it fell in 1918 to 2,100,000. Together, the rural communes and municipalities were put to an expenditure of 24,400,000 by Russia's army.

In the case of the municipalities, before the War their expenses were growing yearly. In 1913 they had reached a total of 58,700,000. Like the communes, they spent the most on education and poor relief. But construction and maintenance of roads, markets, bridges, etc., also cost heavily. Expenditures were largely met from the regular sources of revenue, which, in 1913, totaled 45,700,000. But loans were also resorted to. In the same year they had reached a total of 131,300,000. But they were offset by assets totaling 267,900,000.

During the first war years, municipal expenditures changed little. But in 1916 they were 71,100,000. Toward the end of the War they were rising rapidly, being, in 1918, almost 200,000,000. Regular municipal revenue failed to rise at the same rate, and necessitated increased borrowing; and, by 1918, the total municipal debt had mounted to 331,700,000.

After the War, municipal finances steadily expanded, due both to the depreciated mark and to growing activities. The total revenue in 1919 was over 200,000,000, or almost twice that of 1918. By 1927 the total expenditures were 864,000,000 and ordinary revenue

nearly 731,000,000. The total of municipal indebtedness had, perforce, also grown steadily. In 1927 it was 1,221,000,000. But by then the assets of the municipalities were more than four times their liabilities, being valued at nearly 4,493,000,000 marks. Even after reducing marks to their pre-war gold basis, we find municipal expenditures increased 92.2 per cent by 1927; ordinary revenue, 108.7; liabilities, 21.4; and assets, 143.3 per cent. On the basis of the purchasing power of the mark, the showing is much better. Thus, in spite of the enactment of a Compulsory Education Law and other increased expenditures, the developments in municipal finances were relatively favorable. This was due in great part to the marked growth in taxable income. Wage earnings of town dwellers, above all, increased.

## CHAPTER XIII

#### LABOR

## Agricultural Labor.

When most of the population are chiefly engaged in agriculture, their living conditions are highly important. Finland's independent farmers have from the beginning been the country's backbone. The large estates, numerous only in a few districts, have had no appreciable influence. As landownership conditions became stabilized and the cultivated area increased, the number of economically dependent families who worked for landowners increased with it. They form a separate agricultural laborer class. Many families leased land and established small farms or torppas, capable, as a rule, of providing a modest living, rent being paid either in work or money. Such torppas have been an important factor in Finnish agriculture. Their legal standing was somewhat indefinite up to 1909, when the new single-chamber Diet passed a land-rent law for their protection and materially helped to stabilize the economic and social position of their holders. In 1912 such torppas numbered more than 55,000.

There had also grown up another large class—poor agricultural laborers who lived in cottages to which either no land, or only a small patch, was attached. In 1912 they totaled over 95,000. Again, an important element in farm labor had, from of old, been made up of farm servants, paid yearly wages, the master-and-servant relation being regulated by old statutes. In 1910 such farm servants on full board numbered almost 66,000. In addition there were over 14,000 farm servants and laborers who boarded themselves. The total number of day laborers was estimated to be more than 210,000; but a large part of them were those cottagers who had separate dwellings and a small patch of land; and they, in many cases, were also employed in wood cutting, lumbering, and the like. Of the farm help receiving board, by far the most were women; and, compared with other farm-labor classes, in general they were fairly young. They usually received a good deal of their pay in farm produce. Converting everything into pre-war money, in 1914, the annual wages of male farm servants, according to Board of Agriculture statistics,

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were about 313 marks and those of women, 186. The average annual wages of a laborer who boarded himself was 626 marks. Day laborers in regular employment generally received their food from the farm, and earned an average daily wage of 2.16 marks in summer and 1.28 marks in winter. In general, too, they were given pasturage for a cow, a patch of hay, etc., and most day laborers with families owned cows, pigs, sheep, and poultry.

But there was one serious defect, the poor housing accommodation, especially that provided by employers. Large numbers of laborers lived together in the principal farmhouse room; and only a few had private or semiprivate rooms. Some laborers' families had their own houses on their own land. But more than a third lived on leased land, and more still lived in rented dwellings.

On all this the War at first had little effect. True, money wages actually rose. But, with the falling value of money, the rise was small. Real wage increases did not come until near the end of the War. In 1917 the wages of male farm servants averaged 696 marks, excluding food, and 1,034 marks in 1918. The corresponding wages for female farm servants were 393 and 557 marks, respectively. However, just at that time, the mark was falling very rapidly. And, as the earnings of many farm workers included various foodstuffs, they were much better off during the food crisis than those wholly dependent on cash wages.

The new land-lease law, put into effect on October 15, 1918, meant much to many farm workers; for, as already said, it entitled the holders of torppas and cottage plots to buy the land leased by them, and at its pre-war price. As the price of land had multiplied several times over during the War on account of the fall in the mark, the new law was of proportionate benefit to tenants. The purchase price was paid to the landowner by the Government in interest-bearing bonds, to be repaid by the purchasers of torppa holdings within thirty-seven, and of cottage plots within twenty-one, years. The opportunity thus held out was speedily seized by tenant farmers—by about 50,000 within two years. The survey authorities carried out their part of the work with great dispatch and soon the number of Finland's independent farms, thanks to the liberation of the torppas, had more than doubled. This, at any rate, was one great economic and social advance, and it grew directly out of the agitating events of the war period. How it has increased agricultural production since the War has already been dealt with, as has also the betterment in rural housing conditions, especially among this newly independent torppa class.

## The Industrial Worker.

With the growing industrialization of Finland, industrial labor has also become of high importance. Before the War such workers already numbered more than 100,000, and they were steadily increasing. They lived under unfavorable conditions. Many workrooms were unsatisfactory, hours were long, and wages low. Marked efforts for improvement were being made, both through legislation and by the workers themselves. And, at that time, the chief effort was one to reduce the hours of work.

By 1900 hours had been considerably reduced. The usual working day appears to have been from ten to twelve hours, except on shift work, in which a twelve-hour day was the rule, until 1907. Several paper mills then adopted the three-shift system, though only for two or three years. In 1909 almost 49.4 per cent of all workers had a 57-60 hour week. The next largest group, 37.1 per cent, worked 48-57 hours; 11.5 per cent, more than 60 hours, and only 2 per cent worked a maximum of 48 hours. Hours were usually longest in the small establishments. In the large factories the day was mostly nine hours, or a little longer, or a 54-60 hour week. These hours had been fixed in agreements between employers and employees, and had been influenced to some extent by labor conflicts, as the workers attached much weight to a reduction in hours. Not till 1908 was legislation brought to bear, when a law was enacted fixing the maximum hours in bakeries at 48 hours a week. Restrictions previously placed on child labor were of no great importance; and industry was little affected by certain limitations imposed on night work.

Just before the War working hours were appreciably reduced by an agreement between workers and employers, but labor conflicts preceded it. A greater reduction occurred after the revolution of 1917. About forty factories, chiefly paper and pulp mills, lighting and power transmission works, brickworks, etc., granted an eighthour day, though many returned to the two-shift system. In 1917, too, the Eight Hour Day Law was passed, for political power was now in the hands of the Left. A number of amendments were made LABOR 109

in 1918; but in all essentials the eight-hour day then became general, with a shorter day on Saturdays. In 1925-1927 the average week was one of 46.5 hours, a reduction of about 18 per cent.

In the matter of wages, as nearly as they can be calculated, in 1911 they averaged 937 marks a year; in 1912, 954; in 1913, 1,009, the three-year average being 967. For 1925–1927 the average, in pre-war value, was about 1,284. In some industries, such as skilled metal working, the building trades, etc., there were increases in real wages of about 20 per cent. But in the wages of sawmill workers and others there was a decline.

The average wages of farm workers, including those fed by their employers and those who boarded themselves, which had changed little before the War, or risen slightly after it, began to rise, at first slowly, then more sharply, especially in the case of workers who boarded themselves, their earnings being directly affected by the rise in food prices. Taking the 1914 level as 100, the 1918 average works out at 330 for men and 299 for women fed by their employers, and 445 and 407, respectively, for workers who fed themselves. As the value of money continued to fall, agricultural wages rose still more rapidly, the index mounting in two years to over 1,000. With the gradual stabilization of prices, the index for male workers fed by their employers averaged 1,306 in 1923–1927 and for female workers, 1,338, the corresponding indices for workers who fed themselves being 1,218 and 1,207. There has also been an upward trend since 1924.

As for brain workers, the earnings of civil servants had, in the lowest categories, risen roughly with the rise in the cost of living, but in the highest classes the rise was much smaller. Salaries paid by municipalities and communes made, in general, a better showing.

Unemployment, evident in nearly all Finnish towns during the winter of 1908–1909, had in some cases amounted to a severe crisis. But after the winter of 1912–1913 it had been inconsiderable, except in 1914, just after the outbreak of the War, and it did not reappear on any real scale, after the industrial activity caused by the War, until the summer of 1917, when Finnish war work for Russia diminished and then ceased altogether. The number of unemployed was then about 20,000. After the Revolt the supply of male labor failed to exceed the demand for several years; among female workers, however, unemployment was fairly widespread, and necessitated certain

special measures. General unemployment did not reappear until the winter of 1924-1925. On the whole, the post-war period was one of marked activity.

## Labor Conflicts.

When industrial labor had begun to organize in the latter part of the nineteenth century, labor conflicts like those in the leading industrial countries began to occur in Finland. Strikes were at first few, and the employers won. But, later, as economic conditions improved, the workers also had their victories. During the troubled years 1906 and 1907 there had been many conflicts; in 1907 there were 176, affecting over 20,000 workers. Then there were several years of comparative calm. In 1912 the number of workers affected by strikes or lockouts was over 11,000, and the working days lost exceeded 529,000. In 1914 there were thirty-seven stoppages of work, involving over 6,200 workers, and a loss of 376,000 working days.

After that there was a cessation of strikes; for, on account of the War, the Russian authorities forbade them. Soon, too, labor conditions were such that there was less reason than before for conflicts. Many industries secured abundant contracts, and large numbers of workers found employment on fortification works, etc., where relatively high wages were paid. But in no case, owing to the above prohibition, would workers have dared to go on strike. And they did not, even when real wages began to fall, with the falling mark and the rising cost of living. Thus, during the first years of war, Finland had not a single labor conflict.

But this was more than made up for, with the change of conditions after the Russian revolution. As said, Russian orders for war materials had ceased, and the extensive fortification work had been brought to an end. This meant unemployment and disaffected workers. But what chiefly inspired the spreading of strikes was the powerful sense of liberation felt among the workers after the overthrow of the Russian Government. As strikes had been forbidden during the preceding years, new opportunities to force through various demands were seized with especial enthusiasm. There was a demand for the general adoption of the eight-hour day. The rise in food prices also meant demands for higher wages. A new feature, too, was that the strike movement widely affected the farm laborer, and

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at one of farming's busiest seasons, the spring sowing. The movement was especially strong among the large estates; and the farm workers began it. In such parts of the country they were numerous. And, before long, their example was being largely followed elsewhere. In 1917, 483 strikes occurred, affecting 3,623 employers and 139,812 workers, and involving a loss of nearly 1,500,000 working days. Of grim import, too, was the fact, already mentioned, that at a time of food crisis, when the future was already threatening enough, many strikes, sometimes accompanied by violence, gravely interfered with and diminished the harvests, which, owing to fine weather conditions, would otherwise have been very good. Many strikes also interfered with the lumbering operations of early summer, when such work can alone be done. Here, about 266,000 days were lost in seventy-three strikes.

The labor conflicts of 1917 aimed to shorten the working day, and to do it by law. But before the Eight Hour Day Law could be definitely brought into force, the workers "brought all wheels to a standstill" in what is known as the "November strike"; and a little later, in January, a Red revolutionary movement was in full swing.

The November strike began on the night of November 13, 1917, after the Speaker of the Diet had refused to submit a motion that the enactment of certain laws should be hastened. That same evening a Workers' Revolutionary Central Council was formed which called a general strike for midnight. The demands made were primarily for cheaper food, the ending of unemployment, the promulgation of the above laws passed by the Diet, and the enforcement of other reforms in future. A few essential services were allowed to function. But only Social-Democratic newspapers were permitted to appear. A little later the Helsingfors banks were closed, the Bank of Finland closing all its offices. With the aid of Russian military forces, pressure was brought to bear on the Diet, and decisions were even made by the Diet to pass the desired laws. With no other actual gains, the strike was ended on November 19. During its course there was much bloodshed, and a heavy property loss.

The mills, factories, etc., which had to close down were mostly in the towns. Of 951 which made reports, only 342 were in rural sections. In the textile industries, 62.4 per cent of all mills were affected; in the graphic arts, 61.7 per cent; and in the metal trades, 59 per cent. In the case of "foodstuffs and luxuries," however, the

percentage was only 19.7. For the most part, work ceased altogether during the strike, but the case varied for different factories. The number of employees affected was 84,394, of which 70,559 were engaged in actual production. The total number of working days lost was 496,210. The metal and paper industries suffered most. Cases of damage to property were most frequently outside the towns. The majority occurred in the textile and graphic industries. And most personal violence was seen in the metal industries, and the paper and lumber mills. In many cases outsiders were the culprits.

The November strike had on the whole little effect on labor conditions afterward, which, in 91.4 per cent of the establishments concerned, remained unaltered. In a few, wages were raised, and in others hours were reduced. But the strike was a prelude to that graver measurement of strength which began a little more than two months later, at the instance of the same elements which had provoked the strike itself.

On January 26, 1918, a definite revolutionary movement broke out; and by the following day it was spreading. The Workers' Executive Committee gave notice that authority had been taken over by the organized workers and their agencies. But, at about the same time, the White forces organized themselves in North Finland. And, after several conflicts, the revolutionary movement itself was crushed in April. Meanwhile, however, industry had sustained serious material losses. The Revolt compelled 1,062 mills and factories, chiefly in towns, to close down. With the exception of the provinces of Kuopio and Vaasa, the number closed was greater than during the November strike.

The southern districts naturally suffered more than the north. The percentage of stoppages in the leather and fur industry was 66.4; in the case of metals, 64.2; in the textiles, 63. Production had ceased in 35 establishments before the Revolt, most of them lumber mills and the like; and with the outbreak of the rebellion 48 establishments had closed down altogether. Until the end of it, work was entirely at a standstill in another 779 establishments, though for varying periods; in the majority for a few weeks only, but in many for as much as 16 weeks. The stoppages, too, were longer in South Finland than in the north, where the troubles were put down much sooner. The number of establishments which had only to restrict operations was 200; while 49 establishments went on

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as usual, but were indirectly affected in various ways. The number of workers in the establishments affected was 76,406, or considerably fewer than were involved in the November strike, due, apparently, to an appreciable drop in the number of workers in many factories and mills, on the ending of war orders. And the prevailing unrest did not encourage new enterprises.

On February 2, 1918, the percentage of workers unemployed was 45.1; and by the end of May it was 61.9 per cent. The total working days lost numbered 1,620,000 in the rural districts, and 1,660,000 in the towns, the time lost being greatest in the paper, metal, lumber, and textile industries. Mills and factories were requisitioned either for productive purposes or as storehouses, barracks, etc. Thus 125 were commandeered, and, in some, work was continued under the guidance of their lawful owners, subject to control by a delegate. There were cases where there was little interference with the ordinary management. But, in such cases, it was impossible to resume work on the previous scale, and the number of workers fluctuated greatly. No value was attached to previous agreements between employers and employees.

Personal violence by workers was reported by 197 establishments, requisitions and robberies by 421, and damage to property by 256. The part played by actual employees in these was small; they were mostly the work of outsiders, or occurred as the result of military operations.

The value of the property damaged or requisitioned was estimated at 53,900,000 marks, divided almost exactly between town and country. The heaviest losses were sustained by the wood-milling and the textile industries. To add to the direct damage done, industry suffered indirectly by the compulsory decrease in output. This loss, in the case of 601 establishments, was put at 65,800,000 marks. And, again, the paper and metal industries suffered most. The losses, direct and indirect, entailed by interrupted output totaled 119,700,000, of which the share of the paper industry was 30,200,000. Losses of wages amounting to 24,700,000 were reported by 564 establishments. During the Revolt, demands were likewise made for payment in full, and were agreed to by 188 establishments, which paid for 85,991 days in all.

In consequence of the rebellion, wages were raised in 153 establishments, but in 114 of these the hours were increased. Only in rare

cases were wages or hours reduced. The terms of employment remained unaltered in 660 establishments, or 68.5 per cent of the total. After the rebellion, many had to close down for a time owing either to a lack of skilled workers, or of raw material or fuel. In very many cases this was a direct outcome of the insurrection. While, however, there was thus a lack of skilled labor, on the other hand, unemployment became evident in many branches of industry. One reason for this was the closing of the Russian market owing to the interruption of communications.

After the rebellion had been stamped out, the general labor situation altered appreciably. During 1918 there were only six labor conflicts, and these were small.

But this did not last long. In 1919 there were 39 stoppages of work, involving over 4,000 workers and a loss of over 160,000 working days; and, in 1920, there were 146 stoppages, affecting 21,000 workers, with a loss of 450,000 working days. Thus the highest prewar figures were again being reached. But, in the following years, conflicts diminished, stoppages in 1924 numbering only 31. In 1927 there were 79, with a loss of 1,500,000 working days. But most of these conflicts ended in compromises, or in many cases the employers' terms were accepted. In few cases did the workers succeed in enforcing their demands.

Characteristic of labor conditions in Finland is the fact that collective agreements have rarely been adopted. The workers have often demanded their adoption, under threat of a strike. But the communist element has gained great power in the trade-unions; and employers have preferred not to negotiate with it. Here Finnish labor conditions differ from those in the Scandinavian countries, where, in parallel industries, collective agreements are generally in use.

## The Standard of Living.

Much is told of the degree of economic prosperity enjoyed by the great mass of the people by the consumption figures for the various foodstuffs during the past few decades. As some of these foods are consumed both by man and beast, it is hard to know exactly how much was consumed by man; and, in the case of others, the possibilities lying in smuggled goods introduce a little uncertainty. But the trend is clear enough.

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In 1909-1913 the average annual consumption per capita, in kilos, was, for wheat, 55.2; in 1913 alone it was 63.3. For rye, the corresponding figures were 185.9 and 187.7. For barley, they were 29.3 and 28.1; for oats, 99.4 and 105.1; and for potatoes, 120.2 and 115.1. Annual consumption was affected by the size of the harvests and fluctuations in the prices of imported foods; and unconsumed stocks varied, of course, in different years. Obviously, however, the consumption of wheat increased, a sure sign of a rise in the standard of living. On the other hand, the consumption of rye appears to have varied for casual reasons, and of barley also. There was an increased consumption of oats which, in Finland, are used chiefly as fodder. The consumption of potatoes fluctuated greatly in accordance with the size of the harvests.

Coming to luxuries, and including sugar, in 1909–1913 the average annual per capita consumption, in kilos, was, for coffee, 4.2. In 1913 alone it was 4. The corresponding figures for tea were 0.05 and 0.04; for sugar, 14.5 and 14.8; and for tobacco, 1.4 and 1.3.

The consumption of alcoholic liquors was relatively small at that time. The average annual consumption per capita during 1909—1913 was 2.1 liters of distilled spirits, 11.2 liters of malt liquors, and less than 1 liter of wines and liqueurs. In terms of pure alcohol the average consumption was less than in other civilized countries.

The effect of the War on food consumption may be seen from the following figures. The average annual per capita consumption was, for wheat, in 1914, 48.9; in 1915, 45.9; in 1916, 74; in 1917, 8.6; and in 1918, 1.9. For rye, for the same years, the corresponding figures were 149.9, 174.6, 157.6, 61, 57.4; for barley, 21.9, 27, 25.7, 22.7, 22.8; for oats, 87.8, 104.2, 93.7, 76.6, 78.9; and for potatoes, 116.5, 127.3, 116.6, 113, 148.

The increase in the consumption of wheat in 1916 and the sharp decline in the following years stand out. Consumption in 1918 was only 3.4 per cent of what it averaged in 1909–1913. The consumption of rye, too, declined toward the end of the War to little more than a third of the pre-war figure. It can be seen how serious the food shortage actually was. More potatoes were eaten at the end of the War because of lack of cereals.

The consumption of luxuries was greatly affected by the War. The average total, per annum, in kilos, was, for coffee, in 1914, 3.1; in 1915, 4; in 1916, 2.1; in 1917, 1.7; and in 1918, 0.2. For tea, the

figures for the corresponding years were 0.04, 0.05, 0.1, 0.1, 0.01; for sugar, 13.6, 14.1, 15.1, 7.1, 1; and for tobacco, 1.5, 1.9, 2.2, 1.4, 0.4.

At first people could feel at ease about such "luxuries"; more sugar appears to have been used in 1916 than before the War; and tobacco was used in quantity. Indeed, tobacco did not begin to be scarce until 1918. As for coffee and sugar, in 1918 consumption declined to a fraction of what it had been. The scarcity of such things was made worse by the simultaneous shortage of staple foods.

The war years also brought about a great change in the consumption of alcohol. In Russia, immediately after the outbreak of the War, the sale of spirits was suppressed. In consequence, the retail sale and serving of spirits was also suspended in Finland; and, by an administrative decree, in November, 1914, the sale of liquors containing more than 2½ per cent of alcohol was largely prohibited. First-class restaurants alone were allowed to serve stronger liquors, and to serve them only with food. Breweries alone, too, were permitted to sell malt liquors direct. Later, the sale of medicines containing alcohol was restricted; and heavy taxes were imposed on the selling of liquors. In consequence, their consumption diminished enormously; in 1915 the average per head was as little as 0.7 liter, and in 1918, 0.04. The consumption of wines, always small, declined still further, averaging 0.2 liter per head for most of the War. On the other hand, the consumption of malt liquors decreased little at first. In 1916 the average rose slightly, or to 12.2 liters per head; but the supply then began to diminish, and, in 1918, the average was only 4.0 liters. Converted into 100 per cent alcohol, war-time consumption works out as follows: in the form of spirits, 0.24 liter; in that of wine, 0.03; malt liquors, 0.18; or, altogether, 0.45 liter per head per year. Thus consumption was not quite one-third of what it had been just before the War.

Afterward, there was an evening-up in the consumption of foodstuffs, and, of course, an increase. Some 33.4 kilos of wheat was the per capita consumption in 1919, a figure fairly large. But the average for 1920 was not quite 20 kilos; and it was some time before the last pre-war averages were attained. The fluctuations in the case of rye were less; but the quantities remained below the pre-war level. Clearly, too, much less grain was being used for fodder than before the War. The barley figures are about the same as pre-war figures, LABOR 117

though a shade higher. The consumption of oats showed a steady yearly increase. Potatoes, however, showed the greatest gain, the average for the period 1923–1927 being 39.9 per cent higher than the average for 1909–1913.

The consumption of luxuries, too, regained the pre-war level relatively soon, though certain changes are apparent. Within a few years coffee had again reached its pre-war level; so had sugar. And its use continued to increase, after prices had come down and the duty had been reduced. The consumption of tobacco remained smaller than before the War. All in all, consumption statistics bear out the evidence available in a number of forms that there was an improvement in the standard of living of the great mass of the population.

## Savings.

An improvement in the economic position of the masses is further revealed by their savings, which show that income has tended to exceed essential expenditures. Savings directly invested in improvements in the saver's own farm, or in extensions to buildings, etc., or in the development of industrial plant, cannot be shown by definite figures. But it is obvious that the economic expansion that has occurred in Finland after the War has been made possible largely by such savings.

The growth of deposits in various financial institutions shows an accumulation of new capital after the War, and that savings have been made by the masses. Another proof of this last is the powerful growth of workers' building societies and the wide extension in the business of those savings banks which, founded by the workers themselves, find their clients solely among the working class.

## CHAPTER XIV

# GENERAL SURVEY OF THE EFFECTS OF THE WAR

#### Losses.

Many of the losses sustained by Finland because of the War and the Revolt have already been dealt with. Many, however, were of the sort that cannot be calculated in detail. We have estimated those sustained by the Finnish merchant fleet at over 167,000,000 marks; those suffered by the municipalities and rural communes, due to Russia's war billeting and the like, at 24,400,000; the direct losses inflicted on industry by the November strike and the rebellion at more than 54,000,000; and the indirect losses, in the shape of decreased production, at 75,000,000. As to similar losses sustained by agriculture no definite figures are available; but, when the question of compensation was being dealt with, the Government laid before the Diet estimates which gave a total loss through fortification works, billeting, and the destruction of standing timber of 42,800,-000 marks; losses due to the rebellion, of 230,700,000; and sundry other losses totaling 23,600,000. Thus the aggregate estimated war losses amounted to more than 600,000,000 marks, in the currency of that time, excluding losses not estimated. Nor does this total include the cost of the military operations of 1918.

## The Peace of Dorpat.

When, at the end of 1917, Finland had proclaimed its independence, and the rebellion which broke out soon afterward had created a state of war with Russia, it was more than two years until a peace footing could really be restored, by the Treaty of Dorpat. And while, in one way, it merely confirmed the actual situation, and included only a few new features, in another way, or economically, the importance of the Treaty was great, indeed.

By a new delimiting of the frontiers in the north, Finland received territorial additions of 10,470 square kilometers, exclusive of water areas. The new territory, that of Petsamo (Petchenga), had less than 1,500 inhabitants. But it carried Finland's northern boundary to the Arctic Ocean, and thus opened new doors there.

By Article 22, the property of the Russian State and of state institutions was transferred without compensation to Finland. Similarly, the property of the Finnish State and its institutions in Russia passed to Russia. As each owned much in the territory of the other, Article 22 meant very large transfers of property. In Russia, Finland owned the Valkeasaari—St. Petersburg Railway, of some 32 kilometers, including valuable land, buildings, and rolling stock. In Finland there were valuable areas, including forests, which had belonged to Russia; and these, together with the Russian telegraph service and the Russian war supplies seized by the Finnish forces, became the property of Finland.

There was also a mutual cancellation of state debts and obligations and the debts of state institutions, including those of the Bank of Finland to Russia, which were large. It was likewise agreed that neither party was to make any claim on the other for war compensation, and that Finland would not participate in the cost of the War to Russia. Neither party was to be responsible for any state debts or other obligations incurred by the other. But details are uncalled for here. Enough that the provisions of the Treaty gave Finland large areas of land and other added wealth, and created a foundation for independent activity in the various spheres of economic and social life.

## The National Wealth.

We come now to what can be said of the general effects of the War on Finland's national wealth. In 1909 tax calculations estimated the cash value of private property in Finland at something over 5,000,000,000 marks. After the War the Head of the Chief Statistical Office put the value of both public and private property, before the War, at 11,000,000,000. Allowing for the altered scale of values a corresponding calculation, about 1920, gave a total of about 30,000,000,000 marks.

Later, Dr. K. T. Jutila estimated the value of Finnish agricultural real estate, in 1922, at 32,000,000,000, and, in 1931, Dr. O. W. Willandt put it, including crops and forest areas, at 49,300,000,000. Considering that agricultural production has increased by 44 per cent in terms of fodder units since the War, and considering,

too, the increase in the value of Finland's forests, the rise in the total value of rural real estate cannot be regarded as excessive.

National wealth can also be roughly estimated by the total of its property insured against fire. This total, at the end of 1927, amounted to 57,900,000,000 marks. If to this we add 18,300,000,000 marks, as representing, according to Dr. Willandt, the value of lands, crops, and forests, we arrive at a grand total of 76,200,000,000; and to this there should properly be further added the value of municipal property not agricultural and not in the form of insured buildings.

The value of the merchant fleet, at the end of 1927, was put officially at 535,500,000. State property in 1907, including railroads and forest areas, had been estimated at 920,200,000. In 1922 the estimate in the paper currency of the period was 11,150,600,000; and much would have been added in the next two years. The value of municipal property at the end of 1927 was some 4,000,000,000 marks.

On the other hand, we must also set down Finland's net indebtedness to other countries. By Dr. A. E. Tudeer, of the Bank of Finland, this was held to be, in 1927, 3,400,000,000 marks. But a final accounting would in that year put the national wealth of Finland at not less than 100,000,000,000.

## CHAPTER XV

#### CONCLUSION

Ir may be said, then, that during its first years, the War shook Finland's national finances, and even caused direct losses. But at the same time it had a highly vitalizing effect on many branches of business activity.

After the Russian revolution, however, economic conditions changed greatly. Production was impeded by constant strikes. And the situation became still worse on the outbreak of the rebellion in Finland, in which many prosperous areas became a fighting ground and suffered accordingly. A large number of lives were lost. The end of the rebellion meant the incarceration of many workers when continued productive activity was urgently necessary. And there were heavy money losses on both sides. The public finances, already seriously disturbed, fell into such difficulties that obligations could only be met by an extensive recourse to the Bank of Finland. Some years passed, indeed, before things were once more and finally in order. Inflation, it is true, while it deprived many of most of what they had, helped to get production under way again, by freeing both farmers and industrialists from their former burden of debt. But the basis of economic activity so created was not a healthy one; and the expansion of enterprise was too rapid for a continuously sound development of the country.

Yet the attainment of political independence, made possible by the War, stimulated forces inherent in the national organism and threw open opportunities for the promotion of the interests of Finland as a separate and sovereign State. After the new economic foundation had been consolidated, production again speedily increased. By degrees, money capital, almost swallowed up by inflation, also grew in its turn, until the former level was reached and passed. As public finances expanded, expenditure could be met by taxation, and without using credit for other than productive investments.

The revolutionary movement left a number of serious scars on the body politic. It was deemed necessary thereafter to do much toward

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improving the conditions of the poorer classes, by transforming tenant farmers into independent landowners, by protective labor legislation, and by improvements in housing conditions. Finland has therefore seen much social betterment, and this has also contributed to the economic advancement of the nation. The heavy sacrifices which the War demanded of her were the price of her liberation, and weighed much less heavily than they would have if they had not played their part in the achievement of this high aim.

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