



THE ROYAL BANK OF CANADA

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THERE is no more interesting subject for consideration than population, and many experts would have us believe there is none more important to nations and the world. Some, fanatical on the subject, insist that unless something is done to change current downward trends, the future of the human race will be shrouded in sorrow, and the poet's vision of earth's last man not all a figment of the imagination. It can be said, at least, that these prophets of doom are not thinking of themselves, because the most pessimistic estimate of population decadence leaves the earth quite well populated for thousands of years.

Among fears held by other people is that of a crowded world. The present population of the earth is approximately 2,000 millions. Although several authorities agree on the figure, it is no more than a good approximation, because it never happens that there is up-to-date information for every country in the same year. Qualified persons agree that an estimate of 1,009 millions for 1845 is as well founded as a guess can be made. Upon this estimate it can be calculated that between 1845 and 1914 the average annual increase of the world's inhabitants was at a rate that would double the population in less than a century.

The so-called white race is estimated to have increased from 150 millions in 1770 to 635 millions in 1938. This vast increase parallels the growth in applied science and the industrial revolution. In fact, the population increase is probably a direct effect of science and the machine, aided by improvements in sanitation and advances in medicine which have prolonged the life span.

If humanity increased for another 250 years at the same rate as it apparently increased from 1900 to 1920 it would reach 10 billions. There are authorities on the subject who say that it would then have exceeded the best practicable population, and would also have reached about the maximum population that the earth is able to sustain. However, the picture at this time is one of collective plenty, and, gloomy forebodings to the contrary, the human race is still a long way from starvation.

Population crises of the past have been caused by various factors. Migrations have been started by diverse causes — such as when Scottish crofters were

being evicted and driven overseas; or when English agricultural labourers were being compelled to seek refuge from starvation wages and the poorhouse; or when the potato crop failed in Ireland and famine stalked through the land. Economists have always been impressed with the thought that there are two opposing forces to be reckoned with, on the one side the growth of the people, and on the other the limited supply of raw materials available to satisfy their wants. While the population has been increasing, though with reduced momentum, the land area of the earth remains unchanged. However, it is not lack of essentials of life which has brought about the change from an increasing trend of population. There are new habits and attitudes accompanying the spread of education and the rise in living standards. It is not just accident that the generations which have seen a decrease in the rate of population increase have been generations which saw extraordinary improvements in general welfare, leaving very few people untouched. In Western Europe and in the Americas, where youths attain greater age before marrying, and where the birth rate is rapidly declining, standards of living are relatively very high. In these same countries barriers have been raised by law against immigration from countries where the standards of living are lower. It is obvious why these high living standard countries remain under-populated as compared with the teeming regions of Asia or the agricultural sections of Central and Eastern Europe.

This problem of population has worried all countries at some time, and many countries repeatedly. The discussions flare up in times of crises, and die down when the crises are past. For instance, an Act was passed in England during the war of 1806, granting tax exemptions to the fathers of more than two children, but this was repealed immediately Napoleon had been safely imprisoned on St. Helena. There will be a tendency for problems of population revealed by this war to be sidetracked as soon as the Axis is defeated. This will be true not only of Canada but of the world generally.

As matters now stand it is impossible to appraise the social and economic effects of the change in population trend within the democratic nations between the wars, because complete statistics will not be known until this war's end. To anyone who is curious on the

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subject, however, there are several by-ways for attractive theoretical speculation. For instance, what principle lies behind a country's density of population? There are two kinds of heavily populated areas: (1) the rice-producing countries and (2) the industrial countries. Rice, which is capable of providing more food per acre than any other crop, requires a warm, damp climate, and it has been the rule that wherever rice was introduced into lands with such a climate population has become dense. This may have something to do with the innovation of rice growing in such tropical countries as the Dominican Republic, sparsely populated and eagerly looking for suitable settlers. Industrial countries, on the other hand, lie mostly in temperate regions, where the climate is stimulating. Changes brought about by developments in industry have affected the birth rate. In the handicraft age children were an economic asset, as they were in a purely agricultural age. In cities of the machine age children are an economic liability. The artisans have higher living standards than formerly and people are loath to burden themselves with anything that will drag them down the economic scale.

There are only four factors entering into the increase or decrease of population: (1) the number of babies born, (2) the number of people who die, (3) the number of immigrants, (4) the number of emigrants. The population of a country increases through a rise in the birth rate, a decline in the death rate, or a net addition through migration. Some students of world statistics believe that, particularly since 1920, each rate has received a blow. The birth rate has fallen more rapidly than was expected; the death rate has reached its minimum, and is more than likely to increase a little; immigration to most countries has all but ceased, while western countries are likely losing a little through emigration. In addition, the growth of cities has something to do with a declining birth rate, although the reason is something obscurely biological: young people marry later than they used to; the depression kept young men and women away from the marriage license bureaus. The statistical curve of marriage is almost identical with the curve of business. Then, with a year's interval the birth rate curve follows the curve of marriages. Preparation for war, causing increased business activity, makes more marriages possible and brings about a sudden spurt in the growth of population.

At the other end of the scale are old people. Undoubtedly they give balance and add wisdom to the life of the community, but they also increase the burden on able-bodied workers. Not many old people are self-supporting, nor have they been able to save up enough for their own care. In the past, children have been an insurance against the poverty of old age; on the farm children look after their parents in their old age as a matter of course. A low birth rate means that many elderly people will have no children or grandchildren to support them, even if the younger

people were willing to reduce their own standard of living in order to discharge their filial obligations. At the same time, there will be more old people, because of the reduction of mortality in the higher age brackets by the progress of medical science. The Eighth Census of Canada, taken in 1941, showed that while there were only 1,200 more farm operators reported than 10 years previously, there were 25,000 more over 50 years of age. The census of the total population showed that there were fewer children from birth to 9 years of age than there were in 1931, while there were more persons in every other age group.

The whole problem of population is complicated by numerous movements for self-sufficiency. One trouble plaguing the self-sufficientists is that ordinary people are increasingly counting as necessities for their way of life an amount of goods, domestic and imported, that would have amazed the wealthiest and noblest of former times. Also, self-sufficiency is the surest way to make economic opportunity depend upon ownership of territory, and to bring about war. It gives rise to the fighting slogans: "population pressure, access to raw materials, living space." The German Institution for Business Research published, in February, 1939, a table showing the percentage of self-sufficiency in foodstuffs of the countries of the world, ranging from Great Britain 25 to Argentina 264. Germany stood at 83; United States 91; U.S.S.R. 101; New Zealand 173, and Canada 192. Two months later Hitler declared in reply to President Roosevelt's peace note: "It should not happen that one nation claims so much living space that it cannot get along when there are not even 15 inhabitants to the square kilometer, when other nations are forced to maintain 140 or 200 on the same area."

Besides those who fear that the earth will become over-populated and those who fear that the human race will die out there are eugenists who view with alarm the fertility of the unfit. They are afraid of large families among the poor, with smaller families among the educated and well-to-do. There is no doubt that current statistics show a tendency in that direction, the reproductive index of low income groups being higher than that of well-to-do groups. However, the poor family birth rate, though still higher, is falling faster, with increasing improvement in living standards and broadening education. In Sweden where birth control information is almost universal, it has fallen below the birth rate of the well-to-do group. It may be said, too, that when the upper and lower tenths of the population are eliminated there is not sufficient indication of serious differences in natural ability among the remaining 80 per cent to justify current warnings against their deliberate participation in parenthood; they are neither spectacularly fit nor unfit. In fact, this middle 80 per cent have compensating qualities. They are the much eulogized plain folks, and from their ranks have come most of the really great (in the way of achievement)

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men and women of this age. The social organization of progressive nations, particularly the democracies, is specially conducive to stimulating the natural abilities of persons in all walks of life. They do not seek to have the inferior drop out, but to inspire the better to excel.

Many people will ask what will be the results of war on all the statisticians' calculations and the theorists' plans. The effect of war might easily be overrated, judging by the past. During the first war population decreased in most of the belligerent countries, and also for Europe as a whole, including neutrals. It is said that the decrease for all Europe from the middle of 1914 to mid-1919 was 12 millions. A little thought will indicate that a declining birth rate is a necessity of wartime, in view of the absence of hundreds of thousands of husbands, or prospective husbands, at far-away battle fronts. Another factor that must be considered is that not all war casualties are increased deaths. We can hardly grasp the fact of 10 million military deaths in the last war. These men were drawn from many nations, and all those nations would naturally have had many millions die in peacetime. In fact, even if there had been no war, the number of people who would have died in peacetime in those 4½ years would have reached 40 millions. The four years' war raised the deaths to 50 millions—an increase of about 25 per cent.

The part played by women in industry during wartime has given rise to exaggerated fears for the post-war period. Of course the potential independence of women, which is fostered by wartime experience, does tend to affect the birth rate. The woman who is able to earn her own living is more critical in her choice of a husband; she may be unwilling to give up her well-paying job to live within the smaller income and lower living standard the average young man can provide. It is largely these factors—the growing emancipation of women, their wider business activities, their demand for greater leisure as their part of better living, and their increasing desire for freedom from the burden of large families, that determine the number of children born. It is easy to estimate that the number of potential mothers twenty years from now will be largely determined by the small number of girls born during the last decade—in Canada there were 56,000 fewer girl children up to nine years of age in 1941 than in 1931. The number of old people will be determined by the high number of persons now between 20 and 50 years of age—in Canada in 1941 there were 588,000 more in these age groups than in 1931.

With all its wide open spaces, of which so much is heard, Canada has a particularly perplexing population problem insistently calling for attention. It is said that European and Oriental dictators do not want swamps and jungles as the prize of conquest, but just such lands as this, rich in natural resources and sparsely occupied. At the 1931 census, Canada had 10,376,786 persons; in 1941 the number had increased to

only 11,506,655. These figures, of course, look larger when we compare them with the 2½ million inhabitants of a century ago, or with the 7 million Canadians in 1911, but not many will argue that they are wholly satisfactory. The diminution in the pace of increase of population, in fact, is disquieting. The excess of births over deaths in the period 1931/41 was 1,169,500, and in the same period 158,562 immigrants were admitted to Canada, a total potential increase of about 1,328,000. Actually, the net increase was only 1,129,869, indicating that, leaving immigrants out of account, Canada failed to hold a part of its natural increase.

The first fact to be faced in regard to Canada's prospects is that, given continuation of the present population trend, Canada might expect to reach a population of only a little over 13 millions by 1951 and 14½ millions by 1961. Past increases were, by decades, ending in the given year: 1911, 34 per cent; 1921, 22 per cent; 1931, 18 per cent; 1941, 11 per cent. In the next ten years, it is predicted, the increase will be 11 per cent, dropping to 9.5 per cent in the decade ending 1961, and 8 per cent by 1971. Expressed in another way, the birth rate in Canada had dropped from 29.3 per thousand in 1921 to 20.3 per thousand in 1939; the rate of natural increase fell from 17.8 per thousand in 1921 to 10.7 per thousand in 1939. Thus, as Canada approached the second world war she had no indication that her population would grow, but rather the evidence of her falling birth rate and halted immigration showed that the favourable conditions which had surrounded her first 70 years of nationhood had disappeared, and she must look to new forces and attractions.

It is not only in actual numbers that the danger is foreshadowed. Taking the period 1900 to 1931 as a base on which to calculate, it is seen that there is likely to be a decline in the proportion of people in the lower, and an increase in the proportion in the upper, age groups:

	<i>Under 20 years</i>	<i>50 years and over</i>
Per cent of population 1931	41.64	16.64
Per cent of population 1971	34.09	25.16

These figures, cold douche though they may be, give some indication of the problem with which Canada must grapple in the post-war period.

The second fact regarding Canada's prospects has reference to the vexed question of immigration. The trend of population in the western world is downward, which means that if Canada decides to seek population through immigration she will be doing so when population is assuming a scarcity value. The drift of the world toward smaller families increases the difficulty of obtaining new Canadians, but it makes the need for positive action that much greater.

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Someone has said that the best stimulus to population is to build a railway between two places that don't yet exist. With one mile of railroad to every 270 persons, Canada occupies first place among nations in per capita railway development. Yet Canada's problem in the years immediately preceding the war was to build up a population which would make already existing railways pay. Instead, the average yearly immigration tumbled from 123,020 in 1921/1930, to 16,281 in 1931/1938. It is obviously unwise to think of immigration in terms of the boom period from the beginning of the century to 1914, when the population of Europe was increasing fast, providing a seemingly inexhaustible reservoir of immigrants. To the falling birth rates must now be added the likely assumption that war, starvation, disease, and the deliberate killing of large numbers of people in the occupied part of the continent may bring about a net loss of population there, still further reducing the prospects of emigration.

However, individuals may argue and debate immigration, but only governments can act. What they do involves policies of making Canada attractive economically, socially and politically. This country must offer freedom, above all, to people who have been under so dire threat and experience of regimentation. It must show a good job of making democracy work.

The third fact regarding post-war population is that nearly a million men will be demobilized from Canada's armed forces, and probably another million persons now engaged in war industries will require a change of job. Not all of these, by any means, are new workers. In fact, seriously thinking men have frequently expressed the opinion that, given adequate government leadership and help during the crucial warplant changeover, Canada may look forward to a satisfactory and speedy transition to peacetime economy. Without drawing too close a parallel, because conditions are so different today, it is interesting to examine the events surrounding the end of the first world war. In the last two years of that war, 185,000 persons were absorbed in industry; large numbers of women were engaged; railroad employees alone jumped 20,000. It might, then, have been expected that at the time of the census in 1921 Canada's working force would have in-

creased much more than the natural increment. It was found, however, that the number employed in 1921 was actually a few thousand less than the peacetime trend would have indicated. So far as the census indicates, there was no cataclysm between 1911 and 1921. If Canada's problem is greater this time than last, her potential is also greater, and it may well be that those who are raising the spectre of fear throughout the country are serving not so much constructive as personal ends.

The fourth consideration to which attention should be given is the thought of some persons, looking at Canada's "great open spaces," that this country could support hundreds of millions of people. They do not take account of the fact that more than half of Canada is described in the Canada Year Book as waste land, and only 550,000 square miles out of 3,500,000 square miles have any agricultural possibilities. Mere presence of available space bears small relation to the possibilities of a new population earning a livelihood. A more reliable criterion is the area of arable land.

A brief presented to the Rowell-Sirois Royal Commission estimated that Canada has not more than 18 million acres of arable land still available for occupancy, and described it as inferior, wooded, and patchy. It will, said the brief, accommodate no more than 250,000 additional people in rural occupations except with a lowering of the living standard. There is wide divergence between this figure and Professor Stephen Leacock's estimate that Canada can maintain 200 million inhabitants. The magnitude of the difference indicates a need for caution and careful planning.

To sum up, then: in common with Western European and American nations, Canada's birth rate and her rate of natural increase are falling; because of this, the difficulty of obtaining immigration from desirable European countries is intensified. The question whether Canada desires immigration, and to what extent and of what kind is one which must be answered by the country's legislators. It involves problems of not only Canadian national importance, but problems relating to our association with the United Nations and with all the world.

THE PRESIDENT, THE DIRECTORS AND THE
OFFICERS OF THE ROYAL BANK OF CANADA
EXTEND BEST WISHES FOR THE NEW YEAR.