

Non Fiscal Measures

Some non-fiscal aspects of government policy either in commission or omission are equally important in shaping income distribution. One of the most important of these is price control. There is no economic event which alters the structure of income distribution more rapidly than an inflationary boom. Entrepreneurs and property owners—generally the highest income classes—and marginal workers, workers who might otherwise not be employed—generally the lowest

income classes—receive a more than proportionate increase in income. The great middle group of established wage and salary earners receive a less than proportionate increase. Community savings are greatly inflated not only because of the disproportionate swelling of incomes at savable-income levels, but also because of the great reduction in dis-savings at the lowest income levels. Price control may do more than income taxes or family allowances in assuring a more equitable distribution of income.

The Population of Canada in 1971

H. LUKIN ROBINSON

THE population of Canada is getting older. The birth rate is going down. The death rate is also going down, but not as fast as the birth rate. There are the three basic trends in the field of population and vital statistics at the present time.

What will happen if these trends continue? In the spring of 1946, the Dominion Bureau of Statistics published Bulletin F-4, "The Future Population of Canada," in which estimates of the population up to 1971 are presented. Briefly, it estimated that the population of Canada, (9 provinces exclusive of the Territories) will increase from 11,490,000 in 1941 to 12,943,000 in 1951, to 13,963,000 in 1961 and to 14,606,000 in 1971. That is, in the present decade it will increase by 1,450,000, in the next decade by 1,020,000 and in the following decade by 643,000. "If the trend towards smaller families continues, and no large scale immigration occurs, the population will reach a maximum of about 15 million towards the turn of the century, and thereafter will begin to decline." (p.32).

When the birth rate falls more quickly than the death rate, the rate of natural increase goes down. This article will deal briefly first with the growth of the Canadian population, and then discuss the age-distribution of the population as it will be in 1971, compared to 1941 and 1911.

In estimating the future population, estimates must be made of the deaths by which the present population will be reduced, and of the births by which it will be replaced. Estimates of the future deaths can be made with reasonable confidence; estimates of future births are a good deal more shaky, and should be taken with a grain of salt. Apart from migration, the main error of the estimates is likely to be in the young population which will be under 25 years in 1971. The estimates for these age groups should be considered as approximations only, subject to a wide margin of error. The actual number in 1971 may well be as much as 750,000 higher or lower and it would be a case of luck if the difference turned out to be less than 250,000. These are errors of 5 to 15% of the estimated population under 25 years, and of 2 to 5% of the population as a whole.

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II

Elements of population growth in the past and in the future are shown in Table I.

TABLE I—Elements of Population Growth, Canada, 1901-1971

Nine Provinces, exclusive of the Territories (in thousands)				
	Population at Beginning of Decade	Increase No.	Of which Natural Increase %	
1901.....	5,324
1911.....	7,192	1,868	35.1	21.1
1921.....	8,776	1,584	22.0	18.8
1931.....	10,363	1,587	18.1	16.9
1941.....	11,490	1,127	10.9	12.0
Estimates:				
1951.....	12,943	1,453	12.6
1961.....	13,963	1,020	7.9
1971.....	14,606	643	4.6

Natural Increase and Migration, 1901-41

	Natural	Immigra- tion	Emigra- tion	Net Migra- tion
1901-11	1,121	1,814	1,067	+747
1911-21	1,350	1,595	1,361	+234
1921-31	1,485	1,198	1,096	+102
1931-41	1,242	150	265	-115

Source

Proceedings of the Standing Committee on Immigration and Labour of the Senate of Canada, Session of 1946, p. 261.

Decreases (1901-21) in the population of the Territories have been added to immigration, and increases (1921-41) have been added to emigration.

It is clear, first of all, that the rate of population growth has slowed down enormously since the turn of the century. In the ten years 1901-11, under the stimulus of favourable world conditions and continued railway development, the Canadian economy expanded rapidly. Over 1,800,000 immigrants came to Canada, and though emigration was also large, there was a net balance of immigrants which increased the population by 14%

Together with the high rate of natural increase, the population increased by 35%, the highest rate in Canada's history. In contrast, during the ten years 1931-41, the rate of natural increase had fallen to 12%—the economic depression contributed heavily to lowering the birth rate—and there was a net emigration of 115,000. The population grew by only 11%.

Table 1 also shows that in the past migration has played a very important part in the growth of the Canadian population. Because the number of immigrants whom we have kept in Canada seems relatively small, it is often thought that they have not helped much in our growth. However, it cannot be assumed that the people who left are the same as those who came. Nor can it be assumed that they were displaced or "forced out" by the competition of the immigrants, even though they were usually willing to work for less and live at a lower standard. Most emigrants from Canada have gone to the United States, and it is reasonable to think that many of them would have left even if there had been no immigration. In fact, if Canada had not been growing, the attraction of the United States might well have been greater. Moreover, while in Canada, the immigrants had children; coming as they did mostly from countries with high birth rates, they contributed a great deal to the natural increase of the population.

The estimates presented in "The Future Population of Canada" are based on the assumption that there will be no migration in the future. This assumption is necessary because no reliable estimate for the future can be made. If there is no migration, the growth of the population will depend on natural increase alone. It is expected that the rate of natural increase will fall from 12-13% in 1941-51 to about 8% in 1951-61 and to 4-5% in 1961-71. The annual rate in 1971 is estimated at 2.8 per 1,000 population, compared to 13.0 per 1,000 in 1926-30 and 13.7 per 1,000 in 1941-45. It is

easy to see why in the following thirty years the population is expected to increase by less than half a million.

III

We have seen that the population increased by 4,298,000, or 60%, from 1911 to 1941. From 1941 to 1971, it is estimated to increase by 3,116,000, or 27%. However, this increase will be very unevenly distributed among the different age groups; in fact the estimates show that the younger age groups will be smaller in the future than they are now. This is illustrated by the chart on the cover, and is also shown in Table 2, which summarizes the figures in six principal age groups.

TABLE 2—Population of Canada by Principal Age Groups, 1911, 1941 and 1971

Nine Provinces, exclusive of the Territories,
(in thousands)

Per cent	% Change			% Change	
	1911	1941	1911-41	1971	1941-71
0-9....	1,676	2,094	24.9	1,951	-6.8
10-19....	1,386	2,219	60.1	2,154	-2.9
20-39....	2,394	3,595	50.2	4,433	23.3
40-59....	1,222	2,410	97.2	3,851	59.8
60-74....	405	930	129.6	1,659	78.4
75....	109	242	122.0	558	130.6
Total....	7,192	11,490	59.8	14,606	27.1

Percentage Distribution

0-9....	23.3	18.2	13.4
10-19....	19.3	19.3	14.7
20-39....	33.3	31.3	30.3
40-59....	17.0	21.0	26.4
60-74....	5.6	8.1	11.4
75....	1.5	2.1	3.8
Total....	100.0	100.0	100.0

According to the estimates, the population in the age group 0-9 years will decrease by 7% from 1941 to 1971, and in the age group 10-19 years it will decrease by 3%. All the age groups from 20 years up show an increase. But the proportional increase rises sharply from age

group to age group. In the age group 20-39 years the increase will be 23%, in the age group 40-59 years it will be 59% and in the age groups 60 years and over it will be 89%.

As a result of these changes, the age distribution of the population in 1971 will be quite different from what it was in 1941, and even more from what it was in 1911. The young age groups, 0-19 years, will be a much smaller proportion of the total—28% in 1971 compared to 38% in 1941 and 43% in 1911. The young adult age group, 20-39 years, will remain about the same. The next adult age group, 40-59 years, increased from 15% in 1911 to 21% in 1941 and will increase to 26% in 1971. In the older age groups, 60 years and over, the increases are as follows: from 7% of the population in 1911 to 10% in 1941, and to 15% in 1971. The average age of the population as a whole was 26.8 years in 1911 and 30.4 years in 1941, an increase of 3.6 years. The average age of the estimated population in 1971 will be 35.6 years, an increase of 5.2 years.

Thus, the population has been getting older, and will continue to do so.

IV

Perhaps the most important point of view from which to discuss the ageing of the population is the heavier burden which old age pensions and the care of the aged generally will involve. Our society is changing. From a country of pioneers, traders and farmers, Canada has become highly industrialized and urbanized. Less than 25% of the Canadian population now live on farms, and over 60% of the non-farm population live in cities of 10,000 people and over. It is a commonplace that in such a society, the care of the aged cannot, without causing widespread and severe hardship, be left to individual effort—either to the earlier foresight and savings of the old people themselves or to the resources of their relatives. The collective resources of society are required.

Taking the age limits of the working population as 15 and 65 years, the ratio of the population in retirement to the working population was as 1 to 9.8 in 1941 and will be as 1 to 6.6 in 1971. This would mean an increase in the burden of old age of 48%. It may reasonably be hoped, however, that 25 years from now, few people will work before they are 20 and after they are 60. The ratio of the population in retirement to the population of working age in 1971 would then be as 1 to 3.7. This would mean an increase in the burden of 165% from the present ratio of 1 to 9.8. The actual increase will no doubt be somewhere between these two limits.

It must not be thought that this increase would mean an intolerable or even a particularly heavy burden. In the first place, Canada's productive capacity can be expected to increase and our standards of living to rise. We will have a larger pie out of which to share.

In the second place, our burden in 1971 will be no greater than the burden which some countries have to carry now, and much less than the burden they will have to carry in the future. In France, the census of 1936 showed that the ratio of the population 65 years old and over to the working population 15-64 years was as 1 to 6.6. In England and Wales, taking the estimates for 1939, the ratio was as 1 to 7.7. In 1970, according to the estimates of "The Future Population of Europe and the Soviet Union," the ratio will be as 1 to 4.6 in France, and as 1 to 4.5 in England and Wales. Taking the narrower age limits of 20-59 years for the working population, the ratio in both countries will be as 1 to 2.6. These ratios mean a burden of old age more than twice as great as Canada's present burden, and about 40% greater than the estimated burden for 1971.

Finally, where the birth rate is falling, the heavier burden of old age will be partly offset by the smaller number of children. In Canada, if the age limits remain the same, the working population will be a larger proportion of the

total in 1971 than in 1941. If the age limits are reduced, the working population would fall from 66% of the total in 1941 to 57% in 1971. The proportion of the population below 20 years in 1971 would be the same as that below 15 years in 1941, and the proportion of the population in retirement would increase from 7% in 1941 to 15% in 1971. It need hardly be emphasized, however, that the support of people in old age presents a very different social problem from that of bringing up children. The growing burden of old age may well be one of the causes of the fall of the birth rate.

V

There is another point of view from which the ageing of the population can be discussed, namely its effect on the death rate. Though the probability of death at each age will continue to go down, the death rate in 1971 is likely to be higher than it is now—10.5 per 1,000 population compared to 9.8 per 1,000 in 1941-45.

From age 30 or so on, the probability of dying increases by about 10% with each year of life. The death rate for the age group 75 years and over is more than one hundred times as high as for the age group 10-14 years, where the rate is lowest, about sixty times as high for the age group 20-39 years, and about four times as high as for the age group 60-74 years. It follows that the age distribution of the population is a key factor in determining the general death rate for the population as a whole. The ageing of the population will cause the general death rate to rise.

Suppose that the death rates at each age were to be the same in 1971 as they are now. With the age distribution of the population as it will then be, the general death rate in 1971 would be 13.0 per 1,000. The ageing of the population by itself would thus raise the death rate by 33%.

But the probability of death at each age will on the average be about 20% lower in 1971 than it is now. In the

younger age groups, up to age 40, it is expected to be about 40% lower. In the older age groups, from 60 years up, in which the majority of deaths in Canada now occur, it is expected to be about 10% lower. Only because the probability of death at each age will be lower than it is now, will the death rate go up by only 8%.

The conclusion is important. It is incorrect to judge the progress of public health and general living conditions by the continuing decline of the death rate. The decline is most unlikely to continue. Our low death rate of to-day, particularly the very low death rates of the Prairie Provinces, is partly due to the high proportion of young people in our population. The combined effect of the long-term fall of the birth rate and the survival of a greater proportion of people into the older age groups will be to cut this proportion down. The ageing of the population is in part a result of the progress of public health and general living conditions.

To meet the needs of the population of the future, the emphasis of public health will have to be changed. The causes of death which affect mainly children and young people have been greatly reduced. The four communicable diseases, for example—diphtheria, scarlet fever, measles and whooping cough—have been very nearly wiped out. Tuberculosis, which strikes mainly between the ages of 15 and 50, is also much lower than it used to be, though there is still a long way to go. On the other hand, the causes of death which affect mainly old people have not been reduced. Thus, cancer, nephritis, diseases of the heart and of the arteries now account for a substantially larger proportion of all deaths than formerly. The next phase in the progress of medicine and public health will be to attack and to reduce the death rate of the population in the upper age groups.

But that is only part of the work. If people are going to live longer, they should also live more healthily—and

happily. Public health will have to concern itself more and more with working conditions and accident prevention, with housing and the elimination of slums, with parks and playgrounds and adequate recreation. Health services, probably on an insurance basis, will be extended to cover the whole population. Their effectiveness will be judged in the light of the old saying: An ounce of prevention is worth a pound of cure.

VI

The average standard of living in Canada is high in comparison with that in most other countries of the world. The productive capacity of our economy is enormous. The increase in this productive capacity which took place during the war, and which is being further added to in the post-war years, has not yet been fully translated into higher standards of living for the Canadian people. Nevertheless, this is essential if prosperity and full employment are to be maintained.

Incomes and employment are the result of spending. Generally speaking, spending can be divided into consumer spending and investment spending.

Consumer spending forms the largest and most stable element of the total. It is approximately two-thirds of gross national expenditure in a normal peacetime year; in a depression it rises to three-quarters or more. Investment expenditures are made either by business (for plant, equipment and other durable goods, and for inventories), or by government (for public works, for development and conservation of our natural resources, etc.), and they include the balance of exports over imports, or, more accurately, the balance of current receipts over current payments on international account. These are the dynamic elements of gross national expenditure; their fluctuations are mainly responsible for fluctuations in incomes and employment. If, in the long run, investment expenditures do not increase as fast as the productive capacity of our economy, then either

consumer spending must increase to make up the difference or our economy will slow down into low gear. This is the problem of a "mature" economy.

An ageing and eventually declining population has an important bearing on this problem. When the population is growing rapidly, capital will look forward to expanding markets and will see many outlets for profitable investment, especially in a vast and still undeveloped country such as Canada was. On the other hand, when the rate of population growth declines, markets will continue to expand only if purchasing power and standards of living rise. In Canada, the frontier to the west has been closed. We have largely surveyed and are developing our resources to the north. We have become a great industrial nation. Foreign markets and investment may for a time provide an alternative stimulus, but eventually what is exported must be imported, and what is lent must be received in repayment.

Saving means, as Keynes said, "a decision not to have dinner to-day." Investment means a decision to prepare for dinner tomorrow. But if the number of guests is smaller than expected, the cook will be disappointed. The rate of profit from investment in the mature economy of an ageing and eventually declining population cannot be as high as in an expanding one. The proportion of investment spending is likely to become a smaller proportion of the total. Government investment can be increased, but not indefinitely in a system of free enterprise. The level of consumer spending must be raised, not only in proportion to the rise in gross national product and expenditure, but even more than in proportion, in order to make up for the relative decline in investment spending. Incomes and purchasing power in the hands of the people must therefore be greatly increased. At present standards, over a period of years, they are too low to absorb the total of what we will be able to produce. A "high consumption economy" will also tend to be more stable.

To sum up. The present trends in the development of the Canadian population will require important structural changes in our economy. Increasing emphasis will have to be placed on consumption and standards of living, on national health and welfare. The economic history of the thirties showed that such changes were necessary. Our industrial expansion during the war has underlined and strengthened this need.

VII

A few words should be said about migration. We have seen that the estimates of future population were based on the assumption that there would be no migration. This assumption is hardly likely to be fulfilled. Already since 1941, over 130,000 immigrants have come to Canada. The number of emigrants is not accurately known, but it is probably between 80,000 and 100,000. Immigration is a lively subject of discussion at the present time. The prospects may be summed up without undue rashness as follows:

First, a very large number of people now living in Europe would welcome the opportunity of coming to Canada. However, in many European countries the problem of the future population is much more acute and pressing than ours. Also, all countries may wish to distribute the tasks of post-war reconstruction over as large a population as possible. It cannot be taken for granted that freedom of exit would be permitted, especially for educated and skilled young people who would be the most desirable immigrants under a selective Canadian policy. On the other hand, if freedom of exit were permitted, there can be little doubt that a great many immigrants from Europe could be secured during the next ten to fifteen years.

Second, irrespective of the number of immigrants from other countries, there will be the continued attraction of the United States which will result in a balance of emigration to the United States. We speak of the "absorptive

capacity" of our country. This absorptive capacity is really a question of relative standards of living. To the vast majority of the world's peoples, the Canadian standard of living appears extraordinarily high. But to Canadians the standard of living in the United States appears higher still. How large the balance of emigration will be, will depend on the relative economic prosperity and opportunities in the two countries, and on the freedom of entry allowed by the United States. Perhaps steps will also be taken in Canada to prevent emigration, to make it less attractive and at the same time more difficult. It is likely, however, that only the sternest measures by both countries would stop it altogether.

Hence, unless there is substantial immigration, a net emigration from Canada would seem to be highly probable. Other things being equal, the estimates of the future population will be to that extent too high.

Conclusion

The rate of growth of the Canadian population has been slowing down. The estimates of future population show that, in all probability, it will continue to slow down. The population is expected

to increase from 11,490,000 in 1941 to 14,606,000 in 1971. This is an increase of 27%. From 1911 to 1941, the population increased by 60%.

The future population will be made up of a smaller proportion of children and young people, a slightly larger proportion of adults of working age if the working age limits remain the same and a slightly smaller proportion if they are reduced, and a much larger proportion of old people. The death rate will be higher, and the birth rate much lower. The population will be close to its maximum numbers. As it continues to get older, the number of deaths will eventually exceed the number of births, and the population will begin to decline.

An ageing and eventually declining population will carry with it some extremely difficult problems of adjustment, of public health, of the care of the aged, of maintaining high levels of incomes and employment, and of the general tone and progress of our scientific, economic and cultural life. A number of European countries already have to meet these problems now, and Canada will be able to profit by their experience. It is time we began to read the handwriting on the wall.

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