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PRODUCTIVITY AND OUTPUT

CANADA'S economic prospects may be epitomized by considering how great our national output may become over the next generation. We have referred to the environment in the world and particularly in North America which will stimulate and mould our economic development. We have considered the likely growth in our population, in sources of energy and several varieties of raw materials. We have examined in some detail the prospects for particular industries. We wish now to consider the total output that our growing labour force in this environment may be able to wrest from the resources at our command. How productive will Canadian workers be?

The growth in the average capacity of members of the labour force to produce goods and services implies rising standards of living and the possibility of improved welfare for all. Of course the price of progress is adjustment. Adjustments are always painful for some. But policies should be directed at easing the pain of adjustment rather than at thwarting progress. We argue at several points in this report for flexible policies that permit grasping of new opportunities and that assist those who must find new work or new places to live.

There have been instances in some countries of marked resistance — occasionally violent resistance — to the introduction of techniques and machines that enhance workers' ability to turn raw materials into goods. However, in our discussions with labour organizations in Canada we were impressed with the positive character of their attitude towards measures for improving productivity. There was, naturally and rightly, apprehension over the adjustment problems these measures entail, but the concern was to facilitate adjustment and thus earn the fruits of progress. We are most appreciative of the several very helpful submissions on productivity that we received from labour organizations.

The Productivity of Labour

The ratio of total output to the input of labour is usually referred to as the productivity of labour. This is, to some extent, a misnomer inasmuch as the ratio reflects as much the suitability and abundance of the materials and tools used by labour as the initiative, energy and skill of workers. The term is in common use, however, and we too shall use it in spite of its ambiguity.

We do not wish here to enter into technical details as to how the ratio has been defined for the purposes of our work nor into the difficulties of measuring the productivity of labour in individual industries and groups of industries. These matters are considered in some detail in the study *Output, Labour and Capital in the Canadian Economy* that will be published under our auspices. We should like, however, to offer a brief explanation of the meaning of the concept and to consider the principal factors which increase labour productivity.

The technical difficulties of measuring the ratio of output to input of labour arise largely from the lack of homogeneity of output and of labour input. If one could imagine an industry in which only one kind of output, say coal of a given grade, was produced in a single operation by labourers of equal skill, then provided that the effectiveness of workers did not vary from hour to hour, probably all would agree that a suitable measure of the productivity of labour would be the ratio of tons of coal produced to the number of man-hours utilized in its production. But there are no industries producing in a single operation only one kind of output of unchanging quality. Nor are there industries employing only one grade of worker whose effectiveness does not vary within the day or within the week. The measure of labour productivity with which we have worked is the ratio of the Gross Domestic Product* of an industry in a year to the number of man-hours employed in the industry in that year, with no distinction drawn between hours worked in regular time and overtime, for example, and with no distinction between the hours contributed by production workers and managerial staff. This measure is a compromise with the technical difficulties we referred to, but as such is like a very great many measures in economics. It may be added that we are not alone in having made this particular style of compromise in measuring labour productivity. The character of the indicator — Gross Domestic Product per man-hour — leads to certain technical difficulties in interpreting its changes. We shall refer to one or two of these below, but we wish first to discuss several broader influences that affect the ratio of output to labour input, however that ratio is measured.

The attitudes and skills of workers are major factors affecting the productivity of labour. Over the decades there has been a continuing improvement in the average number of years of schooling of the labour force. This has made it possible for workers to adapt to the employment needs of a technical age. While there remains and probably always will remain a great many tasks to be done that do not require great skill or even the ability to read and write, it is nevertheless true that our increasingly complicated technology requires skilled workers. Along with the steady improvements in the education and training of the labour force there has been an improvement in medical standards and physical well-

* This term is defined on page 316.

being of the working population. This has, of course, effects on productivity that are independent of attitudes and skills, but physical well-being undoubtedly contributes to a more energetic approach to the daily round. Offsetting this in some degree at least is perhaps an increase in the tensions of modern life adversely affecting general mental well-being.

There are, of course, continuing changes in working conditions that affect workers' attitudes and mental states. On the one hand, the development of modern industry has tended to replace the craftsman who fashioned his product from start to finish with the line worker who contributes but a few operations to the total job. Similarly we may recall that in earlier times there was less dissociation of management and workers than appears to be the case today. Enterprises were smaller and accordingly the individual worker could relate his contribution to the welfare of the enterprise as a whole rather more readily. More often than now, merit rather than seniority was the criterion for promotion. In like vein it may be remarked that a man's work formerly occupied much more of his day than is now the case and that consequently if he were to realize himself it would have to be at his work. Today, the worker toils fewer hours, can have many outside interests, and work becomes mainly a means permitting the cultivation of these interests. On the other hand, one can exaggerate the effects of the replacement of the craftsman. Individual craftsmen were never a large proportion of the total labour force, and the requirements for the exercise of skill in modern production are very large indeed. While in modern times we have indeed witnessed a conflict between management and other workers, a conflict that reflected their increasing dissociation in large industrial concerns, there is hopeful prospect that the future of labour-management relations will be characterized by increasing co-operation based on mature recognition from both groups that the success of an enterprise depends alike on the contributions of each. It is possible to exaggerate, too, the argument that the increasing diversity of men's activities affects adversely their productivity. The very shortening of the work day and work week must have reduced fatigue and boredom and so enhanced productivity. Moreover, if the increase in leisure has permitted men to cultivate other interests, it has also increased their demands for the goods and services required by those interests. Since work provides the means of acquiring cars and golf clubs, cottages and gardens, the stimulus to work hard and effectively is not necessarily dulled but likely sharpened by the reduction in the proportions of the day, week, year and lifetime spent on the job.

It is not easy to separate the myriad strands in the tangle of men's attitudes. Moreover, their attitudes are not unrelated to their skills. We feel that men are as acquisitive as ever they were and we know that they demand more complicated goods in greater abundance to satisfy their wants. We know too that they want more time for leisure. In considerable degree men get more because they want more, because they are willing to work and save for more and because they are willing to acquire the requisite skills.

Ranking equally with skills and attitudes of workers in determining their productivity are the resources and tools at their disposal. The skill, acquisitiveness and love of farming of the western wheat grower would avail him little if he did not have suitable soil and climate for the cultivation of his crop. Without rich ores bearing nickel, copper, iron and uranium, without our great forests, without the western tracts saturated with oil and gas, without the mighty pounding of our waterfalls, we could not have our great natural resource and primary manufacturing industries. It is in these industries that productivity is highest in Canada. It is productivity in these industries above all that lifts our national average. But though nature has blessed us with many rich endowments, including an energizing climate, she has placed obstacles in our way. The great Shield in which so much of our natural wealth is stored, severs east from west. To build and maintain our vital national lines of communication over this rugged barrier we have had to divert capital investment which, if it could have been spared for other applications, would have added enormously to our productive capacity. Nature has not been niggardly, however. Canadians, on this account alone, are, and may expect to be, highly productive.

To acquire tools with which to work, it is necessary to save. Instead of using income to command goods for consumption, part of current income must be used to finance the production of tools if the nation's stock of capital equipment is to grow. By the standards of many other countries, Canadians are willing savers. Moreover, for many reasons, not the least of which is the attractiveness of our natural resources, other countries, particularly Great Britain and the United States have been willing to transfer saving to us enabling us to import capital. Accordingly we have been from time to time substantial importers of capital. Thus by dint of domestic saving and the import of capital we have accumulated the structures, the machinery and the transportation facilities which contribute so much to our productivity. In this year of writing, 1957, Canadians are just pausing to reflect upon one of the great investment booms in our history. This recent accumulation of capital has already stimulated output per man-hour and we doubt that the full measure of increase in productivity from this source has yet been realized.

In commenting upon some of the basic determinants of the productivity of labour we have referred to the attitudes and skills of workers and the stock of capital, natural and produced. Special mention should be made of the creative skill of the inventor and the daring skill of the innovator. The inventor and the innovator are key workers in a growing economy. By "inventors" we mean the Alexander Graham Bells and the Thomas Edisons, of course, but we also mean the host of those of lesser fame who conceive new ways of doing old tasks, new devices, new tools and the many minor adaptations and improvements that make men's efforts more productive. The creative skills of the scientist, pure and applied, and of the alert, thoughtful man on the job are, in the interests of improving productivity, greatly to be prized and cultivated. In addition to the creative work of our scientists, engineers and technical workers, Canadians have been fortunate to have been able to import advances made in other countries and adapt them to our purposes.

The gains in productivity offered by the inventor would be still-born however if it were not for the innovator. It takes the enterprising spirit and executive ability of the innovator to breathe life into the offerings of the creative worker. It is he who decides to risk trying the untried. If productivity gains are to be made new endeavours must be launched, new techniques introduced and new equipment tested. We have our share of entrepreneurial talent in Canada and there are many here willing to risk their savings to offer it financial support. It must be recorded, though, that we have benefited greatly from the willingness of foreign entrepreneurs to launch and conduct enterprises in Canada.

Energetic, skilful, creative men and women working on rich natural resources with adequate tools and supported by adventurous business leaders with executive ability will produce a high and rising level of output per man-hour. This is the summing up of our comments on broad determinants of the ratio of output to labour input. When touching upon the measurement of productivity earlier we indicated that technical features of any measure would need to be considered in interpreting it. We wish now to refer very briefly to certain technical features of the measure we have adopted.

The measure of output used in the record of productivity in the various industries in Canada which was prepared for us is termed Gross Domestic Product (at factor cost).* Unfortunately there were no direct estimates of this measure of output available for any year except 1949. The procedure used to obtain figures for other years was to multiply the 1949 figure for each industry by the most suitable index of that industry's production (based on 1949) that could be had. Since the procedure was carried through in considerable industrial detail, these estimates of output and the corresponding estimates of output per man-hour have been used by the authors of several of the studies prepared for us.

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* *Gross Domestic Product at market prices* differs from the more familiar concept "Gross National Product at market prices" only in that the former excludes foreign earnings of residents of Canada and includes earnings in Canada of non-residents, while the latter includes all income earned by residents and excludes all income earned by non-residents. *Gross Domestic Product at factor cost* is Gross Domestic Product at market prices less the amount of indirect taxes minus subsidies as these two items are defined in the National Accounts.

The procedure described above may be used in connection with industries that market goods or services having well-defined prices. These industries make up the agricultural and business sectors as defined in our work. In the remaining part of the economy, described as the "government and community services" sector, the very concept of output is clouded by the nature of the activities carried on and by the fact that they do not ordinarily yield a product or service that sells in the market place for a price. Accordingly the current value of output produced in this sector is reckoned very largely as the total of the wages and salaries paid. The corresponding constant-dollar value is customarily computed by dividing this current value of output by an index of wage and salary rates. If this estimate of output is then divided by the input of labour the ratio will be constant from year to year except for the effects of changes in the composition of the labour force employed in this sector. We have thought it necessary to go into this technical matter in at least this much detail so as to make it clear that there are very difficult conceptual problems involved in measuring the productivity of labour in the government and community services sector of the economy. If the exigencies of statistical practice require us to equate the percentage changes in the real value of Gross Domestic Product to percentage changes in the labour force employed in this sector, no one should conclude that we think the improvements in labour productivity, conceived in a general way, will be confined to the industrial part of the economy.

Turning once again briefly to measures of industrial productivity we wish to explain that productivity as we are defining it may change because of shifts in the composition of output within an industry and because of shifts in employment and output among industries within a group of industries. Since outputs and labour inputs of an industry are not homogeneous, it is possible for the ratio of output to labour input to increase even though there may have been no change in the ability of the industry to produce any particular good in its list of products. If as between two periods the only change which takes place in an industry is a change in the proportions in which various commodities are produced, the ratio of (the constant dollar value of) output to the input of man-hours will be changed. If the shift in product composition results only in using the same input of man-hours to produce a larger proportion of goods with a relatively high value of output in constant dollars, then productivity in that industry must be shown to have increased. Such a shift in product composition would ordinarily also involve a change in the composition of the labour hours employed. Similarly, if one is considering labour productivity in the industrial sector of the economy as a whole, shifts in output and employment among the constituent industries will raise productivity if there is a shift of activity to industries which have a higher value of output per man-hour.

There are other technical matters to be taken into account in interpreting the statistics of output per man-hour, but this is not the place to discuss them.* We turn now to the principal broad considerations that underlie our forecasts of productivity. We shall refer specifically to the productivity of labour in the agricultural and business sectors of the economy.

Considerations Underlying Our Forecasts of Productivity

The ratio of output to labour input is like a wide lens directing into the picture the multifarious features of the economic scene. The range of influences on the productivity of labour is enormous; it is a summary statistic *par excellence*. This fact explains the difficulty of the concept but it also explains its usefulness. It is necessary to bring views of diverse aspects of economic life into focus. The concept of productivity helps us to do this and that is why we have found it useful. We wish to discuss briefly now the main views of our prospects which are focussed in our forecast of the productivity of labour.

We have given prominent place to skills and attitudes of workers as important determinants of labour productivity. We do not believe that we have reached the limit to the improvement in the general level of education of the population and the members of the labour force. Indeed, in making our forecasts of the size of the labour force we made allowance for a lengthening of the average period of schooling. We are aware, as we indicate later in this report, that Canada could use more technically trained men and women and that we could perhaps use more effectively such of these persons as are now in the labour force. We believe that the challenge to our educational system at each of its various levels will evoke a response that will be reflected in the rate of increase of labour productivity.

The influences that play upon men's attitudes to their work are devious and complicated. We are not rash enough to think we can judge these matters definitively or that we can forecast their course confidently. We are, however, hopeful that the maturing of labour-management relations will contribute to the growth of productivity. When we look back a quarter century or more at the history of these relations in Canada, we are struck by how far they have advanced. Unionism, of course, is not new but it is only in quite recent times that it has taken its place as a major economic institution. It took time for this to happen, for this new institution to win its place in our economic structure. No doubt labour-management relations in Canada still share in the imperfections of an imperfect world. From time to time there are strikes and lockouts. But fortunately negotiation and compromise are by far the more usual methods of settling labour contracts. Sometimes, too, in labour negotiations insufficient regard is paid

* We refer the interested reader to the appendices to Chap. 5 of *Output, Labour and Capital in the Canadian Economy.*

by one or other or both of the parties to the general good or to the interests of Canadians as consumers. But business and labour leaders, on the whole, would seem to show as much sense of public responsibility as any of the other estates of the realm. Short-sighted and anachronistic attitudes and practices persist in some quarters. Ill-timed or heedless introduction of new techniques is one example; the wastefulness of feather-bedding practices is another. But it is fortunate for Canada that our labour leaders generally realize the importance for the common welfare of technological change and rising productivity and that most of our management personnel show concern over the human implications of business decisions. The cardinal fact, it seems to us, about recent progress in labour-management relations is that the main principles of unionism, of collective bargaining and negotiation, have by now been almost universally accepted. We hope that in the years ahead these relations will be characterized by an even greater measure of mutual respect and public responsibility.

We have emphasized the contribution that a rich endowment of natural resources makes to a high level of productivity. Changing technology and patterns of demand alter the degree of prominence of various resources. We cannot forecast the revolutionary changes in resource requirements of the future, although undoubtedly there will be some. But we do know that Canada possesses in abundance an array of resources that are now in great demand and that seem likely to remain so. We are optimistic, as has been indicated in several previous chapters, that exploration in the field and in the laboratory will reveal new supplies of basic materials and new uses for them. Levels of productivity in Canada are now highest in the natural resource industries and in the primary manufacturing industries closely allied with them. We look for a very rapid rate of increase in the level of productivity in most of these industries, which when combined with their growing relative importance will contribute markedly to an increase in output per man-hour in the business sector as a whole.

The tools and equipment men work with and the techniques they employ in using them are as important in maintaining and raising the level of output per man-hour as the natural resources to which they are applied. The amount of industrial capital per worker has shown a secular rise though this rise has not been continuous; a series of annual figures reflects changes in the degree of unemployment as well as changes in the stock of capital. From 1949 to 1955, however, industrial capital per worker has increased, we estimate, by about one-third. We have mentioned earlier our surmise that the recent capital boom indicated by this figure has not yet had its full impact on labour productivity. It is not likely that the very intensive rate of capital formation of recent years will be maintained in every year in the next quarter century. The accumulation of capital does not proceed in that way; rather, periods of accumulation tend to be followed by periods when the newly acquired equipment and structures are absorbed and brought to full use. There will no doubt be waves in the rate of capital formation in the future. Nevertheless, it is our judgment that capital per worker in Canada will be very much higher a generation from now than it is today and that this accumulation will induce a continuing rise in productivity.

Not only will the quantity of industrial capital increase, however; its composition will change in response to the demands of a developing technology. The very growth of the economy with its attendant increase in opportunities for large-scale production will alter the equipment required and the techniques used, and as we have remarked in the chapter on secondary industry, these developments will contribute to the rise in productivity.

"Automation" in industry will unquestionably bring changes in equipment and technique that will improve productivity. It is a popular conception — and not necessarily an incorrect one — that nothing new is implied in the term "automation". If one views the matter broadly, automation merely denotes the current or latest stages in the now lengthy historical record of the development and evolution of mechanization. No examination of this record will disclose a point where mechanization ended and automation began.

Yet automation deserves a more distinctive meaning than this. If the timing of its origin is in doubt, we are nevertheless aware that it represents something new. The study *Probable Effects of Increasing Mechanization in Industry,* prepared for us by the Canadian Congress of Labour, quoted several writers who have identified its new qualities. One speaks of its "essential characteristic" being "the integration of machines with one another" — the notion, therefore, of an entire process, rather than merely an operation or series of separate operations being performed mechanically. Another speaks of "automatic feedback control", and this too is commonly a distinguishing feature of automation, in which mechanisms are used to dictate and control the operations of other machines or mechanisms.

These opinions on the meaning of automation produce opposing views on its implications. Those who say there is nothing new but the name itself are reassuring: automation is a part of industrial evolution and there is nothing in the history of that evolution to justify apprehension for the future. Conversely, those opinions which rest upon automation's new qualities see in it the potential for revolutionary change, holding out the promise of great strides in the raising of our productivity levels but harbouring the threat of serious adjustment problems. Since future productivity trends are an important determinant in the preparation of our forecasts this apparent conflict needs further comment.

Examples can readily be cited to show the spectacular accomplishments of automation. It has made new products possible: for example, in modern oil refining techniques or the production of polyethelene. The use of computers by the Department of National Health and Welfare makes possible the preparation, signing and checking of some three million monthly Family Allowance cheques in the equivalent of less than 300 man-days where, by old methods, 16,000 man-days would be required. In addition to their labour-saving aspect, the use of computers can bring important by-products: the speed with which data can be processed and the detail in which they can be organized and analyzed — these are invaluable aids to business operation and planning.

But important as the achievements of automation are, both in fact and in portent, they need to be given perspective alongside its limitations. To date at least, automated techniques are best suited to continuous flow processes, as in the handling of liquids, gases or electrical energy, or to large-volume production of standardized items, such as the manufacture of automotive engines or printed electrical circuits. These are likely to be large-scale enterprises, able to employ the mechanisms for long periods at high rates of capacity and thus able to justify heavy capital outlays. Less suited to the new techniques are processes that involve periodic model or styling changes as in the production of automotive bodies or in the garment industries. And while we are hesitant to suggest limits to automation, particularly over the longer term, there are areas where progress will likely be slow or negligible. Forestry, fishing, construction, transportation, many of the personal services and most of the professional services are cases in point. Here in Canada, our relatively small market may be a limiting factor insofar as this results in smaller-scale production units, though here the problems diminish with our growth. Moreover, where our plants are large but where production of a given line must be in short runs, the impediments to automatic control are receding with the development of "job-shop" automation wherein changing instructions may be fed to machines by means of servo-mechanisms, previously coded tapes or cards or contour-following devices. Finally, our rate of progress in this field may be retarded for lack of trained personnel. We have already discussed the up-grading of skills which will be necessary to meet the future requirements of our economy as it grows in scale and technical complexity. Nowhere is the need more apparent than in the field of automation.

In all, we expect these various factors to limit and retard automation. Thus we do not look for a sharp break from the development trends which innovations have given us in the past. But this view relates to the aggregates: the effects of automation on our national product, on over-all productivity and total employment will be gradual. It is at the level of the individual worker, firm or industry that automation has already begun and will continue to transform and revolutionize existing practices. It is here that the human problems of displacement and dislocation arise.

They must be recognized. A general raising of living standards is a sound objective but it carries with it social responsibilities to minimize and alleviate the costs that will inevitably fall on some. Governments share part of this responsibility: the displaced worker has a vastly greater chance of obtaining employment in a healthy, growing economy than in a faltering one and government policies must be directed toward this end. Management has a share in this responsibility: typically, after the decision to introduce automation, considerable periods of time are required to investigate, plan, design and install the new equipment. There should be a counterpart plan for the employees who will be affected — programmes for retraining, either for the new skills that will be required or for alternative employment in the organization. Unions, too, have a responsibility: to preserve the requisite conditions of flexibility, to assist and co-operate in the retraining programmes.

What emerges from this brief discussion, then, is that the probable effects of automation lie somewhere between the conflicting evolutionary and revolutionary viewpoints mentioned earlier. Where automation is adopted, its impact will be quite sharp but problems relating to the structure and type of many industries, to cost considerations, to the size of our markets and the availability of the required skilled personnel (which may have cost implications), these problems can be expected to retard its progress. They suggest a gradual rate of adoption of automated techniques.

We recognize that serious adjustment problems will arise and we wish to emphasize that responsibility for these problems must be accepted as a part of the process of automation. In the broad context relating to industrial activity generally, we are inclined to think less in terms of impact and more in terms of the pattern of technical change as we have known it. And in the past, we have needed constant technical change merely to sustain a moderately rising rate of productivity.

Before concluding these remarks on the broad considerations which underlie our forecasts of productivity, let us refer in a fairly precise way to the rates of increase of industrial productivity that have been experienced in North America in recent decades. We have arranged in Table 16.1 estimates of average compound rates of increase in output per man-hour in agriculture and in business in Canada and the United States.

Productivity in agriculture is lower than in the business sector, but its rate of increase has often been considerably higher. Agricultural productivity is subject to the vagaries of the weather; in Canada, in particular, there is a very close correlation between the level of agricultural labour productivity and the size of the grain crop. Even allowing for the bountiful crops of some of the post-war years, however, the revolutionary changes in agriculture in the last decade — the withdrawal of surplus farm labour to the cities and towns, the mechanization of the farm, the adoption of new techniques of raising crops and rearing livestock — all of these are reflected in the extraordinarily high rates of increase in farm productivity both in Canada and in the United States since the end of the War, with the rate in Canada being substantially higher than that attained in the United States.

Table 16.1

RATES OF INCREASE IN PRODUCTIVITY CANADA AND THE UNITED STATES

(per cent per annum)

Periods	Agricultural sector		Business sector	
	Canada	U.S.	Canada	U.S.
1910-55	—	1.95	—	2.11
1926-47	0.60	2.14	1.71	1.55
1926-55	2.24	2.92	1.91	3.00
1947-49	2.75	7.40	1.78	3.65
1947-53	8.82	4.57	2.35	3.32
1949-53	11.23	3.23	2.64	3.17
1949-55	7.54	4.05	2.68	2.96
1951-53	3.78	3.92	3.24	2.62
1951-55	2.85	4.84	3.01	2.56
1953-55	0.51	5.78	2.76	2.50

The figures in the table are the average compound rates of increase implied by the productivity figures pertaining to the terminal years shown in the stub.

The Canadian figures are based on our estimates of Gross Domestic Product at factor cost (in 1949 dollars) per man-hour. These estimates are given in Wm. C. Hood and Anthony Scott, *Output, Labour and Capital in the Canadian Economy*, 1957, a study for the Commission, Chap. 5, Table 5.6, p. 212 and Chap. 5, Appendix F, p. 398.

The United States figures are based on estimates of Gross National Product at market prices (in 1947 dollars) per man-hour. These estimates may be found in *Productivity, Prices and Income*, materials prepared for the Joint Economic Committee, 85th Congress, 1st Session, 1957, Table 5, p. 91. They are revisions of comparable figures quoted in Chap. 5 of *Output, Labour and Capital in the Canadian Economy.*

In the business sector as in the agricultural, depression and war held back gains in productivity. On the whole, therefore, the rates of increase of productivity have been higher in the post-war years than they were on the average over the years preceding 1946, going back as far as our data will allow. In the United States the rate of increase of labour productivity in the business sector from the period 1909-11 to the period 1946-48 was 1.88 per cent compounded annually, whereas from 1946-48 to 1954-56 it was about 2.75 per cent. In Canada from 1926-28 to 1946-48 the rate of increase was 1.7 per cent whereas from 1946-48 to 1953-55 it was 2.3 per cent. As may be seen from the table there were some post-war years in which, in both countries, the rates of increase were very much in excess of 3 per cent.

These then are the broad considerations we have taken into account in making our forecasts of productivity. We shall state our forecasts now and then proceed to describe the forecasts of output which they, along with forecasts of the labour force and hours of work, imply.

As mentioned already in the chapter on agriculture, we have forecast that output per man-hour in agriculture will increase at an average rate of 3 per cent compounded annually until 1970 and for the next ten years until 1980 at an average rate of 2.5 per cent compounded annually. Since it seems that the mechanical revolution that has been taking place in Canadian farming is not yet complete, we are assuming that productivity in agriculture will continue to increase over the next 15 years at a high rate, although not so remarkably as has been the case during the past decade. There will of course be other technological advances made in agriculture, and for that reason we are also assuming a substantial rise in productivity during the last ten years of the period under consideration. But in our opinion the rate of increase will be somewhat lower partly because mechanization will already have advanced very far and partly because the production of meat, which will become relatively more important towards the end of the forecast period, cannot be mechanized to the same extent as grain growing.

For the business sector of the economy we predict that output per man-hour will increase at a rate somewhere between 2.5 per cent and 3.25 per cent compounded annually. These guesses are optimistic and may prove to be unjustifiably so. Our optimism is rooted, however, in our reflections on past and prospective developments relating to the skills and attitudes of workers, discoveries of resources, capital formation and the invention and adoption of new techniques of production. We have chosen to tie our assumptions about future productivity gains to the figures of the post-war period partly because it seemed natural to expect that future experience (under the assumptions of no major wars and no major depressions) would probably approximate more closely the experience of the recent past than that of earlier periods and partly because recent statistics are more reliable.

The Forecasts of Output

Having presented our forecasts of the size of the labour force in an earlier chapter, and of labour productivity in this, we are now in a position to describe our predictions of total output. The actual arithmetical operations of combining the projections of the number of workers with those of productivity are simple enough. Those members of the labour force who are actually at work, working the average number of hours per week or per year will each produce output at the rate indicated by the projected figure of productivity. The formula then is: workers times average hours worked by a man in a year, times output per man-hour. The output figure resulting from this computation is, technically, Gross Domestic Product at factor cost, and to it certain adjustments have to be made to convert to the more familiar figure Gross National Product at market prices.

We have made forecasts of Gross Domestic Product separately for three sectors of the economy and we shall describe these first. The sectors are the ones referred to earlier in this chapter: government and community services (embracing activities in the fields of health, education and community service as well as the administration and defence functions of government); agriculture; and business (including government business enterprises and private non-agricultural concerns).

We have sought to forecast the potential level of output in each of several years between now and 1980. In other words, we have considered what the level of output might be in a particular year if the economy were "fully employed" in that year. We recognize that in every year we may expect to experience a seasonal variation in employment; and, accordingly, we have defined our criterion of full employment in terms of the proportion of the labour force employed on the average through the year. Somewhat arbitrarily we have decided to designate the labour force as fully employed if on the average through the year at least 97 per cent of the members have jobs, and we have calculated what the yearly levels of output may be if exactly this annual average percentage of the labour force were employed. It so happens that over the years 1951 through 1955 the average level of unemployment was approximately 3 per cent of the labour force.

Hours of work, both in agriculture and in the business sector of the economy, have been declining and we expect these trends to continue. Average hours of work per week per man in agriculture are predicted to fall from 55.3 in 1955 to 43.75 in 1980 and, in business, to fall from 41.3 in 1955 to 34.3 in 1980. The farmer's working hours have to be adapted to nature's routines and cycles. Cows have to be milked on Sunday as well as on Monday. In the face of this it is not easy to shorten the farmer's working hours, but great gains in this respect have been made and we feel more will be made. In the business world there are already substantial numbers of persons who work less than 40 hours a week and who enjoy annual holidays. In our calculations we have allowed for a decline in the number of hours worked per day and in the number of days worked per week. We have allowed for an extention of the average annual holiday period, and we have recognized that there may be an increase in the amount of part-time work associated with the employment of women and older workers generally. On the other hand we have had to allow for a normal amount of overtime and for the fact that the practice of holding two jobs is spreading. It may help to put our forecast in focus if we remark that if a man works 49 weeks in the year, five days each working week, and eight hours less two 20-minute coffee breaks each day, he will work the number of hours a year we have forecast for 1980.

The labour force employed in agriculture we expect will continue to decline as it has done in the post-war period; but because it has already declined very substantially, and because there will be a relative switch in agricultural pursuits from grain growing to the more labour-intensive livestock farming, we anticipate that the rate of decline will be retarded. We think that employment in the government and community services sector may double in the next twenty-five years with employment in the field of health alone increasing somewhat less than threefold. If our forecasts prove approximately correct, then employment in the business sector will also nearly double.

The relations of employment and productivity to output — Gross Domestic Product at factor cost — in each sector according to our forecasts are exhibited in Table 16.2. It will be noted that in spite of the decline in employment and hours of work in agriculture we expect output in this sector to rise perhaps 25 per cent by 1980. In the government and

Table 16.2

THE FORECASTS OF GROSS DOMESTIC PRODUCT BY SECTORS

(based on the assumption of net immigration of 75,000 per annum)

	1955	1965	1970	1975	1980
Agriculture					
Employment	100	93	91	90.6	90
Average weekly hours of work per man	100	88	85	82	79
Gross Domestic Product per man-hour	100	118	137	155	175
Gross Domestic Product	100	97	106	115	124
Government and community services					
Employment	100	137	156	176	199
Gross Domestic Product per man-hour	100	103	103	103	103
Gross Domestic Product	100	142	161	182	206
Business					
Employment	100	132	152	173	194
Average weekly hours of work per man	100	91	89	86	83
Gross Domestic Product per man-hour (lower forecast)	100	128	145	164	185
Gross Domestic Product per man-hour (higher forecast)	100	138	162	190	222
Gross Domestic Product (lower forecast)	100	154	195	242	298
Gross Domestic Product (higher forecast)	100	168	218	280	358

Index numbers are based on 1955.

For each sector and for each year, the index number of Gross Domestic Product is, apart from rounding, the result of multiplying the indexes of employment, productivity, and where applicable average weekly hours of work.

In this table indexes of Gross Domestic Product are based on figures of Gross Domestic Product measured at factor cost in 1949 dollars.

SOURCE: Adapted from Wm. C. Hood and Anthony Scott, *Output Labour and Capital in the Canadian Economy*, 1957, a study for the Commission, Chap. 5, Appendix A, p. 348A.

community services sector, the doubling of employment will be matched by a doubling of output. (We have explained earlier the considerations underlying the lack of change in Gross Domestic Product per man in this sector; the trivial difference that is shown is purely technical and of no concern to us here.) In the business sector, the decline in hours will be more than offset by the increase in employment and the increase in productivity. Gross Domestic Product at factor cost in this sector will rise in the order of 3 to 3½ times, in our view.

Our forecasts of Gross National Product at market prices are shown in Table 16.3.

Table 16. 3

FORECASTS OF THE GROSS NATIONAL PRODUCT

(billions of constant 1955 dollars)

	Assumed net immigration		
	50,000 per annum	75,000 per annum	100,000 per annum
Productivity factor 2½%[a]			
1965	38.0	38.7	39.5
1970	46.7	48.0	49.3
1975	56.3	58.2	60.2
1980	67.7	70.3	73.0
Productivity factor 3¼%[a]			
1965	40.2	41.1	41.8
1970	50.9	52.4	53.9
1975	63.5	65.7	67.9
1980	78.9	82.0	85.2
Average of the above			
1965	39.1	39.9	40.7
1970	48.8	50.2	51.6
1975	59.9	62.0	64.0
1980	73.3	76.1	79.1

NOTE: In 1955, the Gross National Product was $26.8 billion.

a Assumed rate of productivity increase per annum for the business sector.

SOURCE: Adapted from Wm. C. Hood and Anthony Scott, *Output Labour and Capital in the Canadian Economy*, 1957, a study for the Commission, Chap. 5, Appendix A, p. 348A.

We need not go into detail here concerning the adjustments necessary to convert Gross Domestic Product at factor cost to Gross National Product at market prices. The interested reader may consult Chapter 5 of *Output, Labour and Capital in the Canadian Economy*. The adjustments require the addition of an estimate of indirect taxes less certain subsidies in the economy, the addition of interest and dividends received from abroad and the subtraction of interest and dividends paid to foreigners.

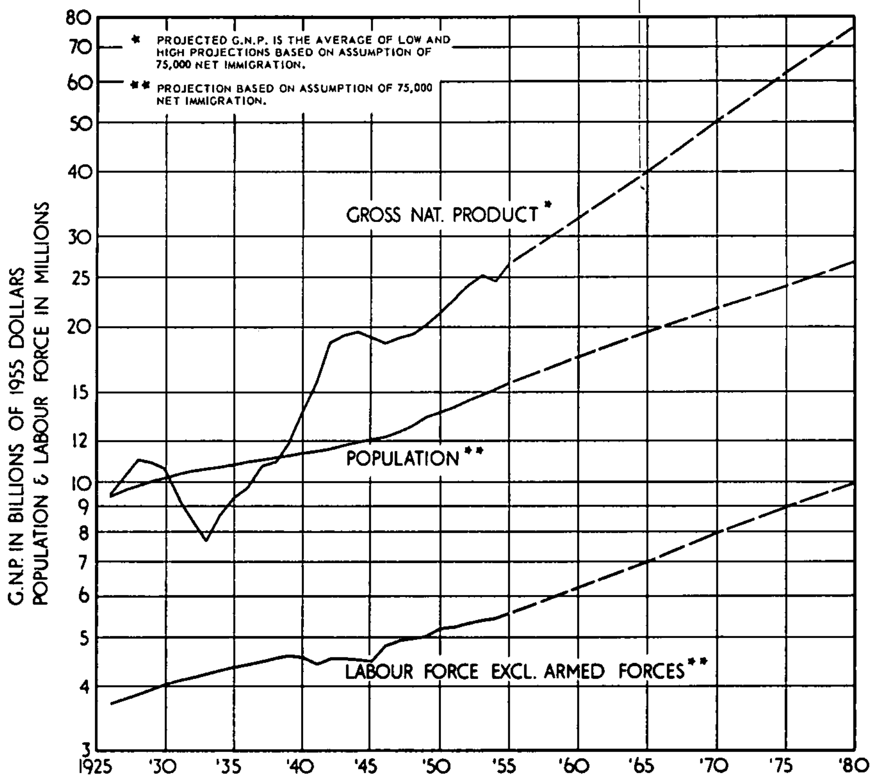
If net immigration averages 75,000 per annum and if the rate of productivity increase in the private business sector of the economy hews to the midpoint of the range we have chosen, the Gross National Product in 1980 will amount to approximately $76 billion in terms of 1955 dollars. If, however, net immigration on the average runs at only 50,000 per

Chart 16.1

GROSS NATIONAL PRODUCT —— POPULATION AND LABOUR FORCE

SEMI-LOGARITHMIC SCALE

1926-1980



annum, and if the rate of productivity increase in the business sector hugs the lower edge of the range, Gross National Product in 1980 will amount to $68 billion. If, on the other hand, net immigration runs on the average at 100,000 per annum, and if the rate of productivity increase is as high as 3.25 per cent per annum in the business sector of the economy, Gross National Product in constant dollar terms will reach $85 billion by 1980. There is thus a margin of error of somewhat over 10 per cent on either side of our median forecast. In general, it seems possible that Gross National Product may triple in real terms over the next quarter century. The chart on the previous page shows the anticipated growth of the Gross National Product together with that of the population and the labour force.

Table 16.4 indicates the estimated growth of per capita Gross National Product from 1955 to 1980. To deduce from these estimates what the growth is likely to be in per capita personal disposable income would necessitate making a number of assumptions about the tax structure which might or might not prove accurate. The estimates in this table, however, are consistent with the conclusion reached in the study made for us on *Consumption Expenditures in Canada* that by 1980 the average Canadian, after paying income tax, will have about two-thirds again as much net income for his own use as he had in 1955.

Table 16. 4

FORECASTS OF PER CAPITA GROSS NATIONAL PRODUCT, ASSUMED NET IMMIGRATION — 75,000 PER ANNUM

(average between the high and low projections, 1955 dollars)

	Per capita Gross National Product	
	Dollars	Index (1955=100)
1955	1,714	100
1965	2,044	119
1970	2,320	135
1975	2,584	151
1980	2,859	167

SOURCE: Adapted from Wm. C. Hood and Anthony Scott, *Output Labour and Capital in the Canadian Economy*, 1957, a study for the Commission, Chap. 4, Appendix A, Table 4A.3, pp. 341-343 and Chap. 5, Appendix A p. 348.

We should like in conclusion to offer some final remarks on the interpretation of our forecast. We have tried to forecast the *potential* levels of output that may be achieved if the economy is fully employed. Full employment has been defined as a condition in which on the average through a year at least 97 per cent of the members of the labour force have jobs. Perhaps our objective can best be described as follows. Picture the graph of Canadian real output as it may actually be realized over the next twenty-five years. This graph will be generally rising but it will also show moderate upswings and downswings in economic activity. We assume that it will not show major downswings such as that following 1929 or be affected by the outbreak of global war. Picture further now, a line across this chart through the levels of yearly output produced when the annual average percentage of the labour force employed is 97 per cent. Our forecast of real output is to be interpreted as a forecast of the value of output for the years 1965, 1970, 1975 and 1980 as measured along this line. We do not attempt to forecast whether the year 1965 for example will be a year of boom or recession. We only attempt to forecast what might be the level of output in that year if 97 per cent of the labour force is employed on the average. We do, indeed, present our forecasts as ranges of alternatives; but each alternative pertains to a fully employed economy. The range reflects our uncertainty as to what the capacity of the fully employed economy will be.

While we have concentrated on the general trend of potential output over the next twenty-five years, we are under no illusions that development will occur precisely along this line of trend through our projections. In some years the average proportion of the labour force employed will be greater than 97 per cent; in some years it may be significantly less. Nor will productivity increases occur at a constant annual rate. In short, we believe real output will swing around this trend of potential output, in some years rising above it and in other years falling below it. But there is reason for confidence that these swings will not be wide ones.

17

THE CHANGING STRUCTURE OF THE CANADIAN ECONOMY

WHAT IS THE prospective structure of the Canadian economy? How may future changes differ from those which took place during the first and second quarters of this century? In earlier chapters of our report many of the parts of Canadian economic life have already been examined, each part considered somewhat in isolation from others and from the whole. In Chapter 16, we brought these pieces together into forecasts of the prospective "size" of the Canadian economy and the over-all growth in productivity. Now we summarize and collate our views on the "shape" or "form" of the economy. First we review some of the general influences which have changed the structure in the past, and consider the imprint of such broad forces on the future character of Canadian economic activity. Then we deal specifically with trends in the distribution of expenditure, of Canadian output and of employment among various industries.

The changing structure of an economy is of great interest because it determines many of a country's economic problems and imposes limitations on policies aimed at their solution. Canadians have achieved a high standard of living partly because of their good opportunities and effort, but this level of economic attainment has involved a continuous process of adapting Canadian economic life to changing circumstances provided by world markets and the available Canadian resources. Such a process of adaptation requires a shifting of the location and occupations of people, and a reshaping of the employment of a nation's stock of real capital, with all the economic and social problems involved. Or to take a more specific example, in the past comparatively large proportions of Canadian manpower and resources were devoted to agricultural production for export to British and European markets; thus variations in nature's bounty and in world market conditions in agricultural products imposed substantial instabilities on the incomes of many Canadians. The smaller role which such activities now play in Canada's over-all production means that these particular sources of instability are less important today than they once were, but the new shape of the economy poses other problems, such as massive requirements for social capital and for large investments to exploit the newer resource industries.

Changes in the size and in the structure of an economy are obviously related, with the precise relationships varying from country to country. The central problems of long-range economic forecasting are to relate the parts to each other and to the whole. In the forecasting work carried out for the Commission, predictions for the total output and for various kinds of expenditure, output and employment were made somewhat separately and simultaneously. Efforts were made at reconciliation but, of necessity, these could not all be conclusive. However, an important feature of the work was that those concerned with the over-all forecasts took account of the changing structure of the economy, while the forecasts for particular sectors reflect — and are reflected in — the over-all forecasts, and have been related to one another. Thus, the distribution of expenditure, output and employment on which we report in this chapter has been related, although perhaps somewhat imperfectly, to the views on the aggregate growth of the economy on which we have reported in Chapter 16.

The Main Forces Changing the Structure of the Canadian Economy

While the Canadian economy today has much in common with that of three decades ago, the structure has been pushed and pulled by world and Canadian developments during the past thirty years and thus has a somewhat different face now than in the past. The main forces bringing about the structural changes have been the alterations in relative economic size of various industrial countries in the world, the growth of governmental activities in Canada, the increased size of the Canadian economy itself, the widespread appetite throughout the world for forestry and mineral materials, the Great Depression and the Second World War. It is widely recognized that the over-all economic growth of the United States and the Soviet Union has been greater than that of the United Kingdom and the countries of Western Europe during the last 30 years and that Canada has attained a distinctly higher rank as a world power. Unsettled international political arrangements imply larger defence budgets than were common in the 1920's and Canada's more important status places on us obligations for military preparedness far beyond anything which we had previously experienced under peacetime conditions. Among the proportionately most enlarged industries in Canada are some concerned greatly with the production of defence equipment such as aircraft and electronics. The relatively more rapid growth of the United States has meant a stronger pull over the years toward a North American orientation of Canada's trade and production arrangements but one which has of course been shaped in various ways by public policy.

Quite apart from increased commitments for defence, there has been a more than proportionate growth in the size of governmental operations in Canada with governments attempting more active policies aimed at the "economic and social welfare" of the community. This trend is found in all industrial countries. By providing a certain modicum of security of income to individuals and regions such governmental activities have influenced the patterns of expenditure by Canadians, encouraging longer-term commitments such as the purchase of housing and durable consumer goods, and encouraging a broader participation in the market for something more than a minimum quality of food, housing and clothing.

The scope of Canadian economic life has been broadened somewhat over the past three decades. While Canada is still greatly dependent on export markets for a small number of staple commodities, it is slightly less dependent on exports than it was three decades ago; also it is much further from being "a one commodity" country than in the late 1920's. Perhaps the most important of the discoveries has been the post-war development of large petroleum resources in Western Canada, a change which has already overcome a large part of the energy deficiency of the Canadian economy. The increase in the economic size of Canada along with the rapid growth of production of some of the newer export staples have provided some additional competitive strength to manufacturing industries in Canada, so that the country has become more of an industrial and urban nation than it was three decades ago.

The Great Depression of the 1930's and the Second World War continued long after they were over to influence Canada's economic experience. From 1930 to 1945 the accumulation of many forms of social and industrial capital equipment was rather severely restrained in Canada (as in the United States), so that, on a per capita basis, we probably ended the Second World War with a much smaller stock of many forms of capital equipment than we had in the late 1920's; that is, with deficiencies in our stock of houses, roads, hospitals, schools, factories and so on. The same situation applied respecting durable consumer goods. The most distinctive feature of our experience since the end of the War has been the extremely large proportion of a large and expanding national output which we have devoted to the accumulation of capital equipment and durable consumer goods; we believe that a part of this expenditure has been due to the processes of catching up on the deficiencies in our stock of capital. The Great Depression and the War had another most important influence on the Canadian economy; through abnormally low levels of imports, limited investment programmes, special intergovernmental financial arrangements of the War and post-war years and inflation, the relative burden of Canada's external indebtedness was greatly reduced. Despite all of the real costs of the Great Depression and of the Second World War, and the continued burdens of defence, Canadians have had distinctly higher levels of material comfort as well as greater leisure during the first half of the 1950's than was experienced during the late 1920's.

What of the future? What general influences are expected to shape the economy? Are the trends likely to be somewhat different than in the past?

We have assumed that social, political and economic organization in Canada will not be fundamentally different from what they now are, for to assume otherwise is to fly in the face of our history and to launch into a topological nightmare in which one has no guideposts. We have also assumed that there will be no global war. Accordingly, and partly reflecting recent experience in the world, it appears likely that the over-all economic growth in the United States will be greater than in the United Kingdom and Western Europe, but the widening of the gap in economic power between these two industrial areas will be much less in the future than it was during the past 30 years. We have earlier indicated a comparatively rapid growth in the economic size of Canada and thus a belief in some further elevation of Canada in international economic stature, but Canada's place in the constellation of world power will not be essentially different from what it now is. We project the defence budget as a decreasing fraction of Canada's Gross National Product. Also, the shift of Canadian external trade toward a North American orientation is expected to be slower than it was during the past three decades.

The presently known mineral and forest resources and the potentialities of further additions to knowledge of our mineral wealth, together with the attractive market opportunities for mineral and forest products, imply a further rapid growth in the resource industries and a corresponding stimulus to over-all Canadian economic growth. However, Canadians must guard against overrating the strength of their position in forest and mineral products; for most of such commodities, there are many closely competitive sources in other parts of the world. The already high degree of exploitation of the cheapest hydro-electric power facilities in Canada and the smaller attraction of processing of some of the new mineral products (petroleum and iron ore) close to the sources of the minerals and hydro-power imply a somewhat less rapid growth in the primary manufacturing activities in Canada than has taken place in the past. Our expectation of rapid growth in the size of the Canadian economy, if realized, ought to provide opportunities for the continued improvement in the competitive position of many, but not all, secondary manufacturing industries, and some substitution of domestic for imported products. The unfavourable export market outlook for Canada's agricultural products suggests a proportionate decline in agricultural output. Though the backlogs of requirements of social and industrial capital are in the process of being overcome, a high rate of economic growth will require and encourage high average levels of investment expenditure; however, the growth in construction activity will not be comparable to that in national output, unless there is a demand in Canada for significantly higher standards of housing and social capital facilities.

Canadians appear likely to become, even more than now, a rich people, with more leisure, living in a predominantly urban society. The riches and leisure mean rapid growth in demands for recreational and hobby equipment, for travel and education, for better qualities of food and clothing, for more household equipment. The contrast of these riches and the poverty of much of the world will probably place increasing responsibilities on us for aid to the less fortunate.

The Distribution of National Expenditure and the Structure of Canada's Foreign Trade

The structure of the Canadian economy has depended and will continue to depend to a great extent on the pattern of expenditure followed by Canadian businesses and individuals. For example, a shift in consumer expenditure from housing to automobiles and to home appliances implies a more rapid growth for the Canadian automobile and home appliance industries than for the construction of residential housing. A shift in world demand from foods to industrial materials will be reflected in a more rapid growth in the Canadian resource industries than in Canadian agriculture. Thus we feel it appropriate to begin the more detailed summary of the past and prospective shape of the Canadian economy with the distribution of expenditure on final goods and services coming available in Canada. This will be done by considering the main categories of the Gross National Expenditure, the total of which is equal by definition to the Gross National Product; the latter was forecast in total in the previous chapter.

Glancing back we see that the biggest changes in the distribution of Canada's Gross National Expenditure among the main components has been a more than proportionate growth in governmental demand and less than proportionate growth in personal or consumer demand for goods and services. See Table 17.1 and Chart 17.I. From the period 1927 to 1929 to the period 1953 to 1955 the governmental share of the Gross National Expenditure increased from 10.3 per cent to 17.9 per cent, while personal expenditure declined from 72.0 per cent to 63.3 per cent. Perhaps more significant, however, we find that both the proportion of Canada's output which was exported and the proportion of the goods and services used in Canada which was imported have declined, but in roughly the same degree. Thus, the net annual current import surplus in Canada's national accounts was proportionately about the same in the late 1920's and between 1953 and 1955. The record on the share of the Gross National Expenditure devoted to investment is somewhat mixed partly because the fraction has varied widely over time and partly because the prices of investment goods have behaved somewhat differently from the general price level. In current dollars the investment share in national expenditure was somewhat larger between 1953 and 1955 than it was between 1927 and 1929; in constant dollars there was apparently a slight decline in the share. However, the proportionate change in investment appears to be much smaller than in governmental or personal expenditure and smaller than the proportionate decline in exports and imports.

Table 17.1

THE DIVISION OF GROSS NATIONAL EXPENDITURE

(averages for selected years 1926-55; forecasts for 1980)

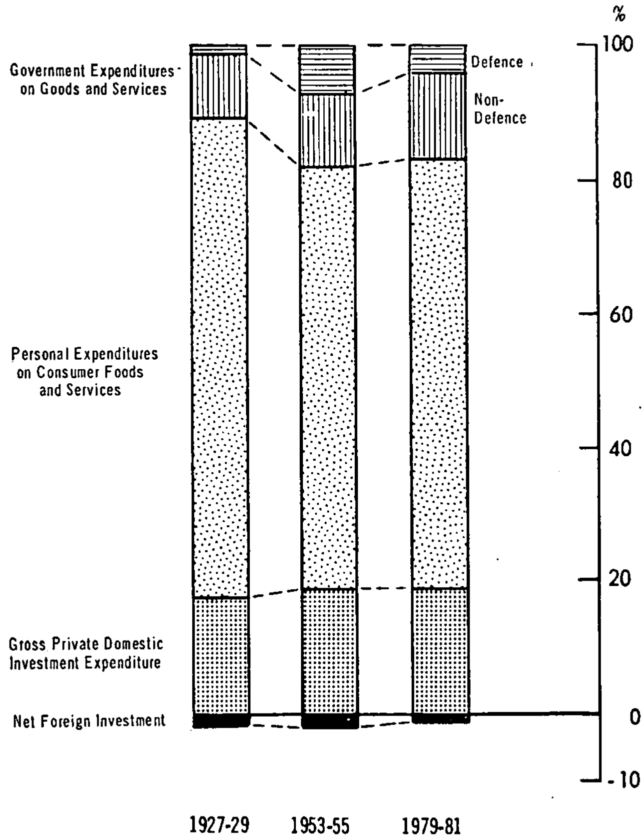
	Billions of current dollars					Billions of 1955 dollars 1979-81		
	1927-29	1937-39	1947-49	1950-52	1953-55	Low	Middle	High
Personal expenditure on consumer goods and services	4.30	3.83	10.08	13.22	15.94	45.1	49.1	52.8
Government expenditure on goods and services	.61	.71	1.83	3.27	4.51	11.9	12.7	13.7
Private fixed domestic investment	1.01	.62	2.59	3.76	4.92	12.8	14.2	15.7
Investment in inventories and error of estimate	.16	.14	.57	.95	.32	1.0	1.2	1.3
Exports less imports	— .12	.13	.20	— .23	— .51	— .5	—1.0	—1.5
Total	5.97	5.43	15.28	20.97	25.18	70.3	76.2	82.0
Government current non-defence expenditure	.43	.49	1.06	1.32	1.64	6.3	6.8	7.4
Government non-defence investment expenditure	.16	.17	.50	.80	1.07	2.7	2.9	3.1
Government defence expenditure	.02	.05	.27	1.15	1.80	2.9	3.0	3.2
New residential construction	.23	.17	.63	.79	1.23	2.3	2.6	2.9
New non-residential construction	.40	.18	.77	1.28	1.71	3.5	4.0	4.6
New machinery and equipment	.38	.27	1.19	1.69	1.98	7.0	7.6	8.2
Exports of goods and services	1.67	1.46	3.90	4.95	5.43	13.1	14.1	15.1
Imports of goods and services	1.79	1.33	3.70	5.18	5.95	13.6	15.1	16.6
	Per cent							
Personal expenditure on consumer goods and services	72.0	70.5	66.0	63.0	63.3	64.2	64.3	64.4
Government expenditure on goods and services	10.3	13.1	12.0	15.6	17.9	16.8	16.7	16.7
Private fixed domestic investment	17.0	11.4	17.0	17.9	19.5	18.2	18.6	19.2
Investment in inventories and error of estimate	2.7	2.5	3.7	4.6	1.3	1.4	1.7	1.6
Exports less imports	— 2.0	2.5	1.3	— 1.1	— 2.0	— .7	—1.3	—1.8
Government current non-defence expenditure	7.2	9.1	7.0	6.3	6.5	8.9	8.9	9.0
Government non-defence investment expenditure	2.7	3.1	3.2	3.8	4.3	3.8	3.8	3.8
Government defence expenditure	.3	.9	1.8	5.5	7.1	4.1	3.9	3.9
New residential construction	3.9	3.2	4.1	3.8	4.9	3.3	3.4	3.5
New non-residential construction	6.7	3.2	5.1	6.1	6.8	5.0	5.2	5.6
New machinery and equipment	6.4	5.0	7.8	8.1	7.8	10.0	10.0	10.0
Exports of goods and services	28.0	27.0	25.5	23.6	21.6	18.6	18.5	18.4
Imports of goods and services	30.0	24.5	24.2	24.7	23.6	19.3	19.8	20.2

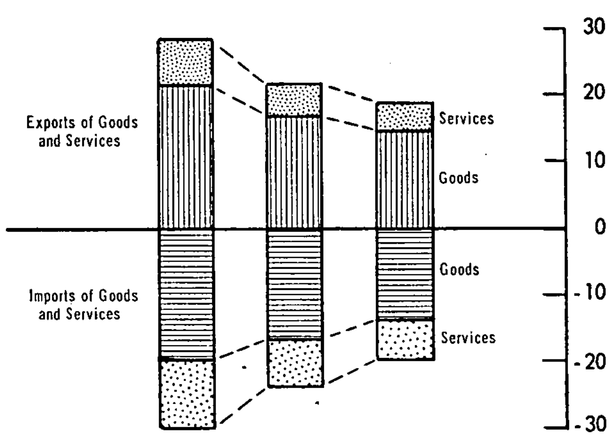
NOTE: Detail does not always add to total because of rounding.

SOURCE: Wm. C. Hood and Anthony Scott, *Output, Labour and Capital in the Canadian Economy*, 1957, a study for the Commission, Chap. 7, Table 7.4, p. 318.

Chart 17.1

VARIOUS CLASSES OF EXPENDITURE AS PERCENT OF GROSS NATIONAL EXPENDITURE





SOURCE: Table 17.1

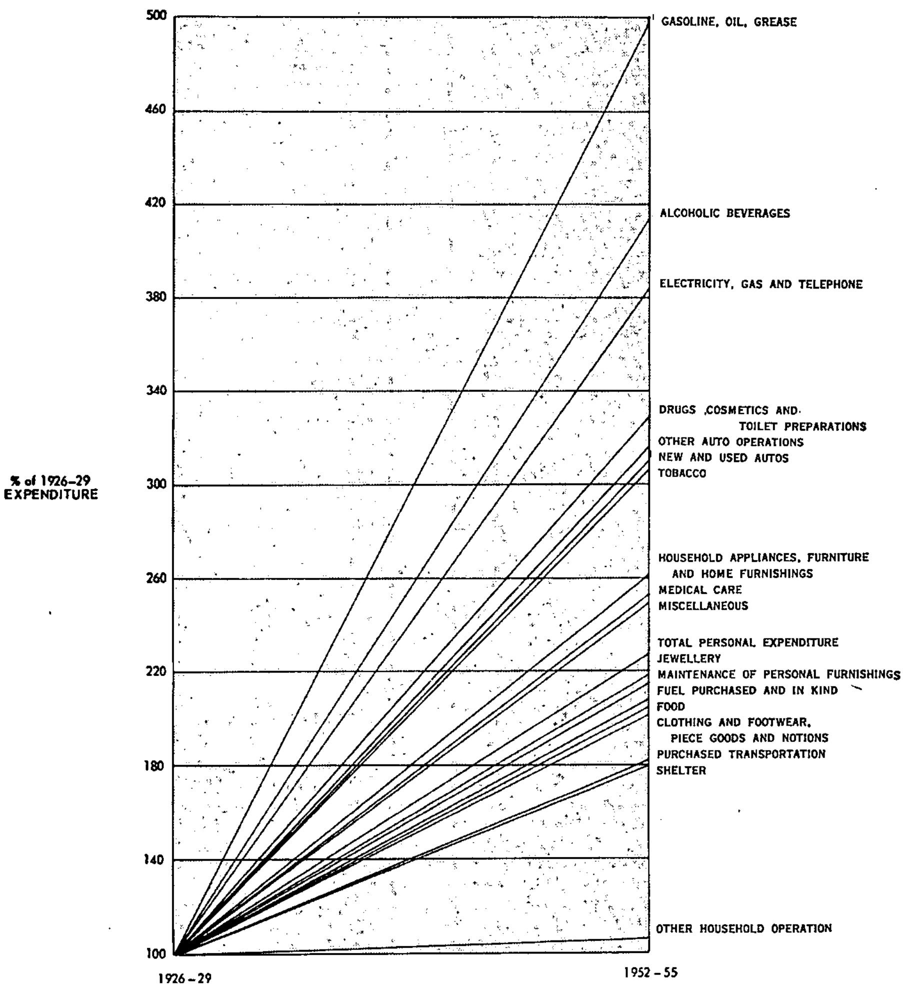
a) *Government and Personal Expenditures*

We will comment briefly on the trends in government and personal expenditure and more fully on investment expenditure and Canada's foreign trade. The comparatively rapid growth in government expenditure on goods and services is due primarily to the enormous increase in expenditure on defence — from about 0.3 per cent of Gross National Expenditure between 1927 and 1929 to 7.1 per cent between 1953 and 1955. The growth in government expenditure on goods and services has been accompanied by increased taxation, which in turn is the main reason for the proportionate decline in consumption expenditures between the late 1920's and recent years. Non-defence investment expenditures by governments account for slightly higher fractions of national output in recent years compared with the late 1920's, but this trend must be partly imputed to the abnormally high investment programme in recent years due to the sudden upsurge of population growth, the exceptionally high urbanization of the population and the backlog of requirements of social capital with which we started the post-war years. Of course, in addition to the increased share of governments in the total expenditure on goods and services, there have been enormous increases in net transfer payments from governments to the public, including such items as interest on the non-productive elements of the national debt, family allowances, old-age pensions, veterans' allowances, and medical programmes. Collectively such net transfers amounted to about 3.8 per cent of the Gross National Expenditure in 1928 and 1929 and to about 8.4 per cent between 1953 and 1955. Under these schemes governments acquire funds from the community (mainly through taxation) and transfer them back to the public, with only a minor and incidental expenditure by governments on goods and services.

Though they represent a smaller fraction of total national expenditures, by any measure personal expenditures on consumer goods and services were absolutely much higher in recent years than they were in the late 1920's. In the study of *Consumption Expenditures in Canada* prepared for us, it is estimated that per capita personal expenditures on final goods and services, corrected for changes in price levels, were roughly 45 per cent higher between 1952 and 1955 than between 1926 and 1929; at the same time the average hours of work by the labour force declined substantially. Within personal expenditure we find some wide differences in the rate of growth of particular categories (see Chart 17.II) higher than average growth having taken place in expenditure on automobiles, alcoholic beverages, automobile operation, household appliances and furniture, tobacco, electric, gas and telephone service, medical services, drugs and cosmetics. The proportion of personal budgets declined for shelter, clothing, food, fuel, purchased transportation services and domestic service. In a rough statistical way these trends suggest changes in the fabric of Canadian life which reflect higher average real incomes,

Chart 17. II

CANADA: INCREASE IN VARIOUS TYPES OF CONSUMPTION EXPENDITURE 1926-29 to 1952-55
(Based on data in constant (1949) dollars)



SOURCE: D. W. Slater, *Consumption Expenditures in Canada*, 1957, a study for the Commission, Chap. 2, p. 23.

greater leisure, urban life, the mobility provided by the private automobile and expensiveness of labour such as for domestic service.

b) *Investment Expenditures*

Because of the central role played by the accumulation of capital goods in the economic growth of a nation we wish to report at slightly greater length on investment expenditure in Canada. The stock of capital may be likened to a lake system, with the productive capacity of a nation dependent on the level and characteristics of the various reservoirs. In the processes of production and with the passage of time capital is consumed or used up; this is commonly identified as depreciation of capital goods. On the other side of our hydraulic analog, a process of addition to the stock of capital takes place, as new houses and factories and roads are built. It is these gross additions to the stock that we call "gross investment expenditures". Canadians have fairly satisfactory data on investment expenditure for many years; they have somewhat less satisfactory estimates of capital consumption or depreciation; but hitherto there has been no systematic study of the stock of capital itself in Canada, that is of its size and composition and age structure and relationships to output. Because we believed that the size and characteristic of the stock would be helpful information for our task as well as of general interest to economic research in Canada, we have had a special study made of this matter; this is set out in Chapter 6 of the study, *Output, Labour and Capital in the Canadian Economy.*

A nation's capital consists of the productive skills of its people, as well as the structures, machines, inventories of raw materials and goods in various stages of manufacture. It is on the predominantly inanimate forms of capital which we focus here, but this should not be taken as a slur on human capital. Indeed, we believe that individual and collective investments by people to develop and exercise their own skills and talents are most important ways in which economic progress and human dignity may be combined. Another type of capital which we put aside at the moment consists of that stock of durable goods owned by households, such items as refrigerators, stoves, automobiles, outboard motors and fishing rods which are the property of private individuals. These instruments comprise an amazingly large proportion of the total stock of productive instruments in economies like ours and trends in personal expenditure suggest that a comparatively rapid accumulation of such items continues to take place. Such goods are partly a way of attaining economic growth but are to a considerable extent a product of and an object of the growth. Instruments and inventories which are used directly or indirectly in the productive processes are much more clearly 'engines of economic progress' than are consumer durables, and it is the former with which our study is mainly concerned.

Even when we put aside capital in the forms of personal skills, consumer durables, inventories and natural resources, we are impressed with the size of the stock of capital required for our economy. See Table 17.2. The study prepared for us indicates that the stock of fixed capital amounted to almost $78 billion (in 1949 dollars) at the end of 1955, compared with a national output of final goods and services of about $21.6 billion (in 1949 dollars). Of this stock, about $41 billion consisted of industrial capital, that is of machinery, equipment and structures used directly in the processes of non-governmental production activity in Canada. In the economic literature on the subject, reference is often made to capital-output ratios; in non-technical language these refer to the dollars' worth of capital of certain kinds used per dollars' worth of output. The study prepared for us indicates that, at the end of 1955, Canadians used $1.1 worth of machinery and $1.4 worth of structures per $1 worth of final industrial output. Another $21.7 billion of Canada's stock of fixed capital consists of housing, and about $15.0 billion may be called social capital; the latter refers to the accumulation of roads, schools, government buildings and equipment, experimental farms, and such like. The stock of capital is also extremely large compared with the annual gross additions to the stock. In recent years, Canadians have devoted a large fraction of their annual output to gross investment in fixed capital, almost 24 per cent between 1953 and 1955, yet the gross additions amounted to only about six per cent of the stock of fixed capital which existed at the end of 1955.

Table 17.2

SELECTED ITEMS—STOCK OF CAPITAL, INVESTMENT EXPENDITURES AND CAPITAL—OUTPUT RATIOS

(millions of 1949 dollars)

Item	Gross stock, 1955		Gross expenditures on additions average 1953-55	Gross expenditures on additions in 1953-55 as % of G.N.E.	Capital-output ratio in 1955
Industrial capital	(millions of 1949 dollars)				(1949 $)
Machinery and equipment	17,310		1,623	7.8	1.1
Structures	23,827		1,277	6.8	1.4
Total		41,137			2.7
Housing		21,742	955	4.9	n/a
Social capital					
Machinery and equipment	1,601				
Buildings	7,115				
Roads and other engineering	6,298				
Total		15,014	827	4.3	n/a
Total fixed capital		77,893	4,682	23.8	

SOURCE: Wm. C. Hood and Anthony Scott, *Output, Labour and Capital in the Canadian Economy*, 1957, a study for the Commission, Chap. 6.

Investment in fixed industrial capital in Canada was at a high level in the late 1920's and since the end of the Second World War, though somewhat higher in the more recent than in the earlier period. Also, of this investment, a somewhat larger fraction took the form of machinery and equipment in the later period, and thus a smaller fraction as structures. See Table 17.1. What trends may be imputed to these observations? First, a part of the investment in industrial capital since the end of the Second World War should be viewed as catching up on a backlog, of replenishing the stock of capital. During the Great Depression and during the Second World War, investment in industrial fixed capital was at an unusually low level; however, population growth continued. Thus by the end of the War the per capita stock of industrial capital in Canada was less than in the late 1920's. Second, fragmentary data indicate that there has been a long-run trend of decline in the over-all fixed capital-output ratio for Canadian 'industry', but this in part reflects the substitution of social capital such as roads for industrial capital, such as railroad structures. See Table 17.3. Thus, though the over-all fixed capital-output ratio for industry was lower at the end of 1955 than in 1929, this does not mean that Canada had a marked deficiency of industrial capital at the end of 1955. Third, the decline in the over-all fixed capital-output ratio for industry has been concentrated in structures; indeed the machinery and equipment to output ratios were considerably higher at the end of 1955 than in 1929. We believe the more rapid growth in private investment expenditures on machinery and equipment than in private investment in non-residential structures reflects a long-run change in the character of the industrial capital stock in Canada, a trend which we expect to continue. This trend has to some extent been encouraged by the more rapid increases in the prices of structures than of machinery and equipment, which in turn reflects the comparative difficulty of attaining increases in productivity in the construction industries; this is discussed more fully in the study of *The Construction Industry* prepared for us.

Investment expenditure on additions to business and to agricultural inventories were considered separately. The available evidence suggests that the ratio of business inventories to business output has been fairly constant on the average in successive periods of full employment, in the vicinity of 50 per cent. The value of business inventories of all kinds amounted to more than $10 billion at the end of 1955. There has been a slight decline in the ratio of such inventories to output since the 1920's, reflecting improvements in transportation and inventory handling and controls, but the change is quite small. The relative stability in the ratio indicates that, though additions to business inventories may account for widely varying proportions of the Gross National Expenditure between one year and the next, such additions on the average have tended to grow at about the same rate as business output. Additions to agricultural inventories have also varied widely according to crop and market conditions, but on the average they have tended to grow along with agricultural output.

Table 17.3

TRENDS IN THE RATIOS OF THE STOCK OF INDUSTRIAL CAPITAL TO GROSS DOMESTIC OUTPUT

(1949 dollars)

Year	Structures	Machinery and equipment	Total
1929	2.2	0.8	3.0
1933	3.2	1.2	4.7
1939	2.2	0.7	3.0
1945	1.6	0.6	2.2
1950	1.4	0.9	2.3
1955	1.4	1.1	2.5
(1980)	(1.3)	(1.4)	(2.7)

SOURCE: Wm. C. Hood and Anthony Scott, *Output, Labour and Capital in the Canadian Economy*, 1957, a study for the Commission, Chap. 6, Table 6.13, p. 285.

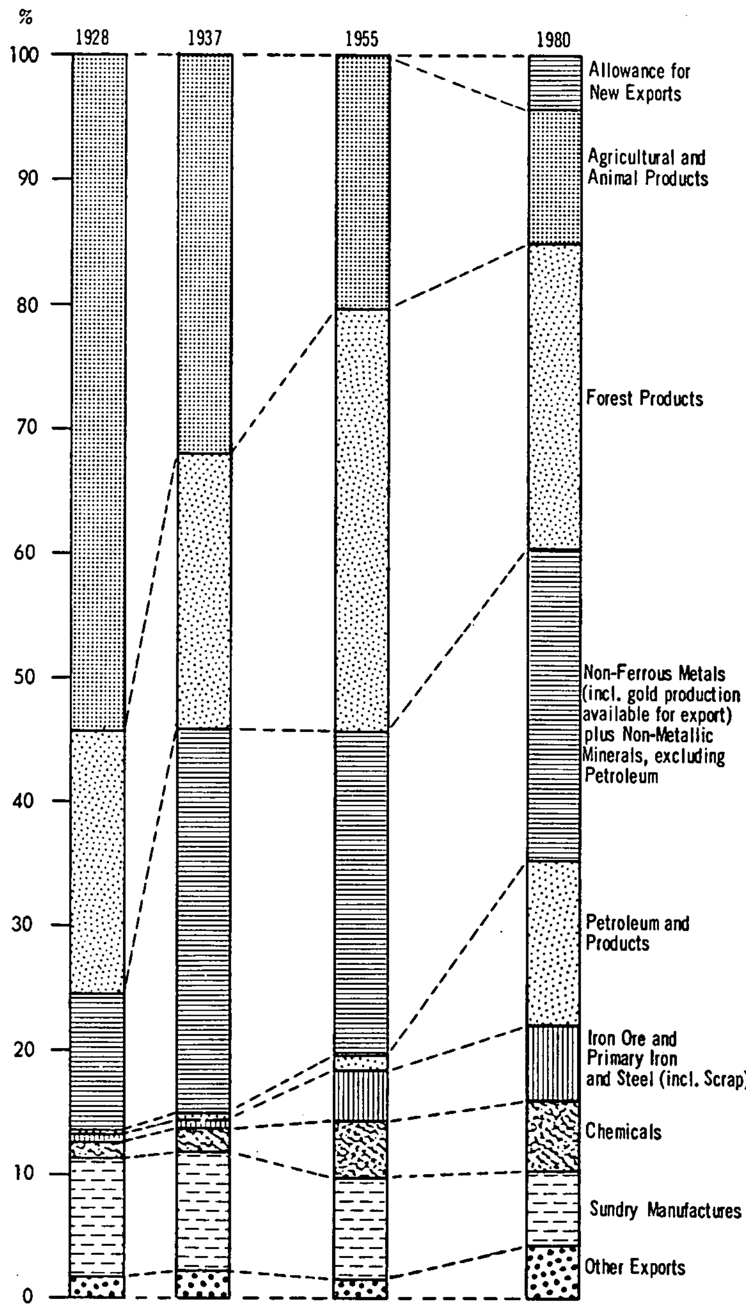
We have treated investment in Housing and Social Capital in a separate chapter of our report. Both of these forms of investment have accounted for larger fractions of our national output of final goods and services in recent years (1953-55) than in the late 1920's; but both types of investment appear to have been abnormally high in recent years due to the efforts at catching up on accumulations of capital requirements. Long-run trends are difficult to identify for social capital because of the substitutions which have taken place between industrial and social capital formation, but for housing there is considerable evidence of a long-run trend of decline in the proportion of the national expenditure devoted by Canadians to providing and maintaining their shelter.

c) *Canada's Foreign Trade*

The relative decline in the size of Canada's foreign trade deserves special comment because of the central place which has been given to export staples and to the 'openness of the economy' in much of the country's economic literature and in discussions of public policy. The decline has been moderate; on the export side it mainly reflects the smaller shares of Canada's output which are exported as agricultural products to the United Kingdom and Western Europe. See Charts 17.III and 17.IV. On the import side the changes are more complex, but part of the decline is proximately due to the reduction in the ratio to national output of Canada's indebtedness to foreigners, to the discoveries of petroleum in Canada, and to a significant replacement of imported goods by Canadian manufacturers. See Charts 17.V and 17.VI. Both on the import and export side of Canada's trade, the smaller relative size of the trade is mainly on British and European account; for goods and services taken

Chart 17. III

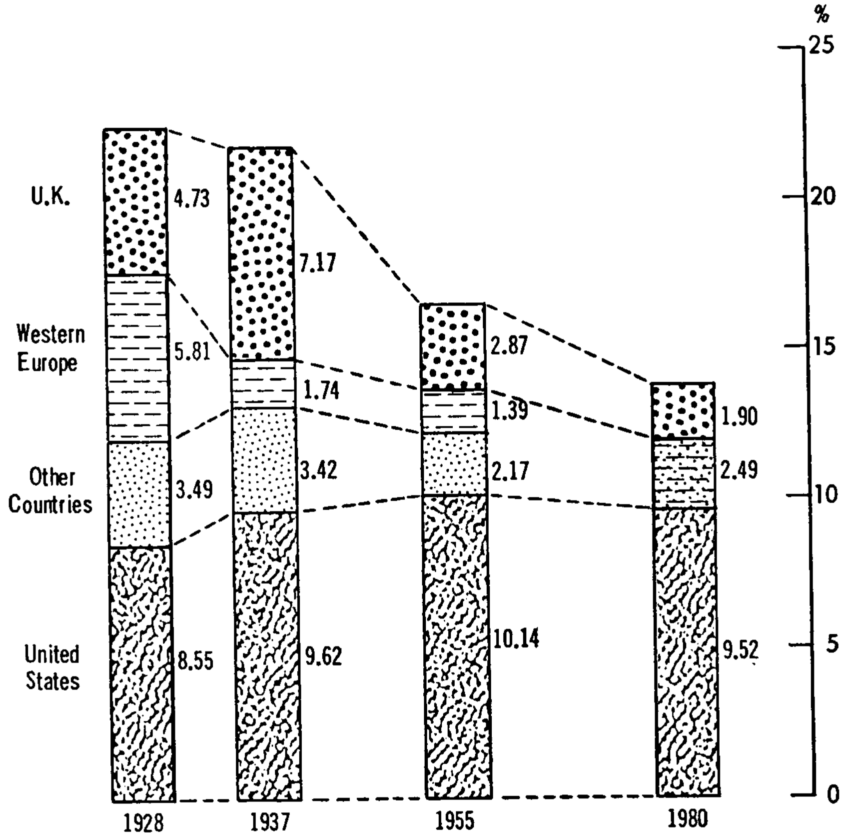
COMPOSITION OF EXPORTS – PERCENT OF TOTAL MERCHANDISE EXPORTS, INCLUDING GOLD



SOURCE: Roger V. Anderson, *The Future of Canada's Export Trade*, 1957, a study for the Commission, Chap. 1, Table 1, p. 8, and Chap. 6, pp. 104-5.

Chart 17. IV

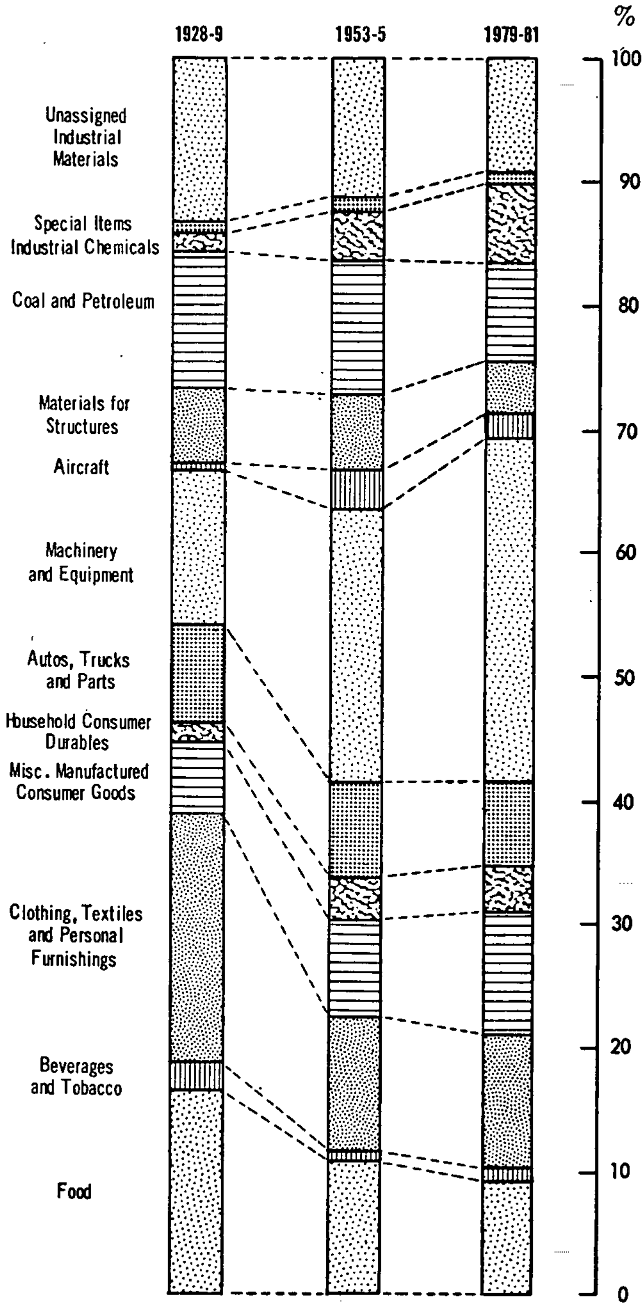
GEOGRAPHICAL DISTRIBUTION OF CANADIAN MERCHANDISE EXPORTS—EXPORTS TO VARIOUS AREAS AS % OF GROSS NATIONAL EXPENDITURE



SOURCE: Roger V. Anderson, *The Future of Canada's Export Trade*, 1957, a study for the Commission.

Chart 17. V

CANADA: COMPOSITION OF MERCHANDISE IMPORTS–
EACH CLASS AS % OF TOTAL MERCHANDISE IMPORTS

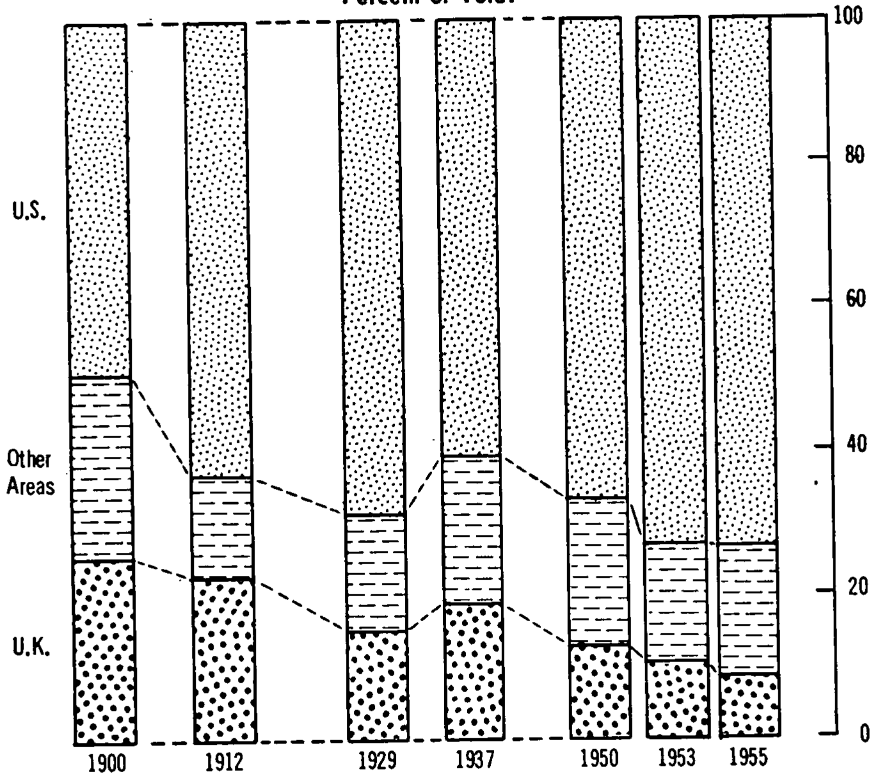


SOURCE: D. W. Slater, *Canada's Imports*, 1957, a study for the Commission, Chap. 2, Chart VI, p. 18 and Chap. 5, Table 32, p. 97.

Chart 17.VI

CANADA: GEOGRAPHICAL DISTRIBUTION OF MERCHANDISE IMPORTS

Percent of Total



SOURCE: D. W. Slater, *Canada's Imports*, 1957, a study for the Commission, Chap. 2, Table 6, p. 29.

together, imports from and exports to the United States have been about as high a proportion of the Canadian Gross National Expenditure between 1953 and 1955 as they were between 1927 and 1929.

The reasons for the relative decline of Canada's foreign trade are quite complex. We have discussed the environment of world trade in earlier chapters of our report and we have had prepared separate studies of *The Future of Canada's Export Trade, Canada - United States Economic Relations, Canadian Commercial Policy* and *Canada's Imports*. Part of the explanation of the decline must lie in the relative decrease in world demand for Canada's agricultural products, but this has been at least partly offset by the rapid growth in world demand for industrial materials of mineral and forest origin. There can be little doubt, however, that given less agricultural protectionism than is now rampant in the world, Canada's exports of agricultural products would be larger than they have been in recent years and probably the ratio of Canada's over-all exports to national output would also be larger.

We do not believe that increased relative expensiveness of Canada's imports nor increase in Canada's restrictions on foreign trade have brought about the relative decline in the country's international economic dealings. The long-run changes in Canada's terms of trade have been slight, but they have been favourable to an enlarged rather than a smaller foreign trade. Canadian restrictions on trade have increased and decreased over the last three decades, but they have been less in recent years than in the later 1920's, and thus favourable to an enlarged trade. A large abnormal reduction in the relative size of Canada's international indebtedness took place during the War and early post-war years, associated mainly with the special inter-governmental financial arrangements of war and reconstruction; this is part of the explanation of the smaller size of Canada's foreign trade in goods and services in recent years compared with the late 1920's but it is a condition which was non-recurring. We believe that changes in the internal structure of Canadian demand have not altered the relative size of Canada's foreign trade significantly. Some such changes, including the comparatively rapid growth in the demand for services like wholesaling and retailing, and the growth of governmental expenditures have tended to reduce the relative size of Canada's international trade; however, other changes in the structure of demand have offset these influences, such factors as the shifts in private non-residential investment toward machinery and equipment and of consumer demand from textiles to durable household goods.

We believe that an important part of the explanation of the decline in the size of Canada's foreign trade lies in the improvement in the comparative cost position of import-competing industries in Canada. Some of these improvements may be regarded as fortuitous unpredictable events, such as the discovery since the end of the War of large resources of petroleum in Western Canada and the wartime developments of Canadian production of rubber. These have resulted in a large replacement of imports by Canadian production, accompanied by a shift of resources from other, including export, alternatives to import - replacing industries. Some of the developments may be treated as by-products of the newer export staples in Canada, such as the refining of minerals and the manufacture of pulp and paper products, which provide both raw materials and markets for some parts of the rapidly growing Canadian chemical industry; this is one of the more important areas of manufacture in which imports have been replaced by domestic manufacture. But a substantial part of the import-replacement and the shift of resources toward Canadian manufacturing activity for the domestic market rather than the production of export commodities must be regarded as a general by-product of, but a contributor to, the growth in the size of the Canadian market, a growth which has provided opportunities for more economical production of many products in Canada, including such items as primary iron and steel products, automobiles and some household appliances. However, we should emphasize the close substitution possibilities between many kinds of Canadian and imported products; if Canada's agricultural exports had done somewhat better in world markets, Canadians would have imported some of the goods, particularly manufactured goods, which they have instead produced.

d) *Prospective Distribution of Expenditure*

With this background, we turn now to the slippery task of forecasting the distribution of the Gross National Expenditure and of Canada's position in the world economy. The general assumptions of the forecasting work have been set out earlier. A synopsis of our expectations about the distribution of Gross National Expenditure among the main components in the vicinity of 1980 has been included in Table 17.1. These forecasts are in 1955 dollars; with some exceptions they assume that the structure of prices applicable to each of the broad classes of expenditure will not change.

The forecasts suggest that shares in the Gross National Expenditure devoted to governmental and to private investment expenditure will decrease very slightly from the levels of 1953-55, and that personal expenditures on consumer goods and services will increase a shade. The proportionate size of both exports and imports of goods and services are expected to decrease, but with the decrease in the foreign trade ratios being slightly larger for imports than for exports; thus, the net foreign investment in Canada, as measured in the national expenditure accounts, is expected to diminish somewhat as a fraction of the Gross National Expenditure.

The smaller proportion of the national output which it is expected will be used for governmental purposes primarily reflects the assumption of a decrease in the share of the national output devoted to government defence expenditure. Current non-defence expenditure by the combined levels of government are expected to increase more rapidly than the Gross National Expenditure. Civilian employment by the Federal Government and by the provincial governments is expected to increase more rapidly than the total population, with municipal employment increasing about in proportion with the increase in total population; this reflects the gradual extension of government services which has been going on in Canada and in other industrialized countries during the past half century and which we expect will continue into the future. Also, it is assumed that the remuneration of government employees will rise at the same rate as output per man-year in the business sector of the economy; when governments and business are bidding for the same kinds of skills, the differentials in rates of pay between them cannot change too radically. In an earlier chapter we have set out estimates of requirements for social capital; these correspond roughly to government non-defence investment expenditure. In Table 17.1 we suggest that such spending may account for a slightly smaller proportion of the Gross National Expenditure around 1980 than they have between 1953 and 1955. In part this fractional decline in share is due to the recent high base of government investment from which the projections were made. In part it reflects the way in which the estimates of social capital requirements were made, in which only moderate allowances for increased standards of adequacy were assumed. Canadians may wish somewhat larger than the assumed proportions of their higher standard of living to take the form of improved hospitals, schools, universities, highways, parks, art facilities, museums and so on, in which case a somewhat larger fraction of the national output will be devoted to governmental investment expenditure than is indicated in Table 17.1. Also, in the immediate future public investment may require as large or even a larger proportion of the national output than it did between 1953 and 1955 to take care of existing backlogs and the continued upsurge of Canada's population.

Investment in fixed industrial capital is highly variable over time and as yet the knowledge of economists does not permit predictions to which high degrees of confidence can be attached. We believe that as a long-run average, the share of the national output devoted to gross investment in fixed industrial capital in the vicinity of 1980 will not be very different from that of 1953-55, though a slight increase in the fraction is more likely than a decline. Also we believe that of this investment a larger part will consist of machinery and equipment and a smaller part of structures. The basis of these forecasts is set out in Chapter 6 of the study prepared for us on *Output, Labour and Capital in the Canadian Economy*. A rapid growth in output requires a rapid growth in the stock of capital and thus the assignment of a large fraction of the national output to investment. Though the over-all capital-output ratio for Canada declined between the late 1920's and 1955, the trend in recent years has been reversed, in part because Canadian output has grown up to the stock of railroad and other communication facilities which existed in the 1920's, and in part because of the intensified use of machinery and equipment in industrial processes. The relatively larger share of the stock of capital which it is expected will take the form of machinery and equipment, itself encourages an increase in the share of national output devoted to gross investment expenditure. In production processes, machinery and equipment are used up more quickly than structures. Thus the higher the fraction of the capital stock as machinery and equipment, the higher the annual gross investment required. The numbers set out in Table 17.1 reflect these views, suggesting that private industrial investment in structures may be a slightly smaller fraction of the aggregate national output in 1979-81 than they were between 1953 and 1955, while private industrial investment in machinery and equipment may be a significantly larger fraction.

There are a number of important elaborations and qualifications to these forecasts. Investment expenditures are not simply a matter of providing a minimum capital requirement for a growing output; they are encouraged and facilitated by the growth of output and the climate of aspiration and enterprise. Our views on prospective levels of investment in industrial fixed capital reflect our judgment that the vigour of private investment processes in Canada in the future will be as great as they have been in our past. The predictions must be tempered or qualified in at least one important respect; we are likely to experience in the future as in the past a fairly wide variability in investment expenditures. It is inherent in the nature of capital equipment that replacements and additions to the stock can be accelerated or postponed depending on the age structure and other relationships of the existing stock to current output, the pace of economic growth and the fluctuations from optimism to pessimism through which the community periodically goes.

Prospective investment in residential housing was dealt with in an earlier chapter along with social capital. The available evidence suggests that as a long-run trend, Canadians, like Americans, have devoted, and will continue to devote, smaller proportions of their growing incomes to providing shelter. Even so, the per capita real expenditures on shelter have been increasing in absolute terms. Thus, the forecasts of investment in housing reflect the growth, age structure, family formation and location of the Canadian population and make a moderate allowance for improvement in the average quality of Canadian housing. Nevertheless, the proportion of Canada's national product devoted to gross investment in new residential housing is expected to be somewhat smaller in 1979-81 than it was between 1953 and 1955. Like industrial investment in fixed capital, investment in residential housing will undoubtedly vary widely during the next twenty-five years depending on rates of family formation, urbanization and increases in income; our studies of the age-structure of the Canadian population suggest that the construction of houses may be a little below the average in the next few years but above the average for a period beginning about 1965.

These trends in investment in housing and social capital and in industrial fixed capital should be reviewed carefully as more evidence becomes available, for they have very important implications for the Canadian economy. If the trends turn out to be as we suggest, that is, of a smaller fraction of the national output devoted to structures and a larger fraction to machinery and equipment, then a less rapid growth may be expected in the Canadian construction industries and a more rapid growth in Canadian production and imports of machinery and equipment. Flows of savings have to be adjusted to the changing character of investment activity. The likely variability of investment expenditure imposes major problems of maintaining stability of the Canadian economy.

For business inventories it is our view that further improvements in transportation and in materials-handling and inventory-control facilities may provide some economies, but the long-run decline in the average ratio of such inventories to business output is liable to be fairly small. Thus we expect that, on the average, roughly the same proportion of the national output will be devoted to additions to business inventories in the future as between 1953 and 1955. On the average, agricultural inventories will continue to grow, but slowly, because we expect a rather small increase in agricultural output; these inventories will likely have a wide variation from year to year.

Our forecasts suggest that consumption will account for a slightly larger fraction of total national expenditures on final goods and services in 1980 than they have in recent years; this contrasts quite sharply with the decline of the fraction during the past three decades. The difference is primarily due to the assumptions and expectations of a less rapid growth in government expenditures in the future than occurred during the past three decades, which in turn implies a less rapid increase in the net tax burdens imposed on the private sectors of the community. If our projections of government expenditure turn out to be under-estimates, our estimates of total consumption expenditure will correspondingly be excessive. The relative size of depreciation allowances, undistributed corporation profits and of personal saving also bear on the ratio of consumption to Gross National Expenditure. The available evidence suggests that depreciation allowances may increase somewhat more quickly than the Gross National Expenditure, mainly because of the gradual shift in the form of the stock of capital from structures to machinery and equipment and that undistributed corporate profits will increase more or less in step with Gross National Expenditure. As to personal savings, there is some uncertainty and substantial year to year fluctuation; but the Canadian and American evidence indicates little long-run change in the ratio of such savings to personal disposable income in the past. We see no good reason for thinking that the trend of the ratio will be different in the future.

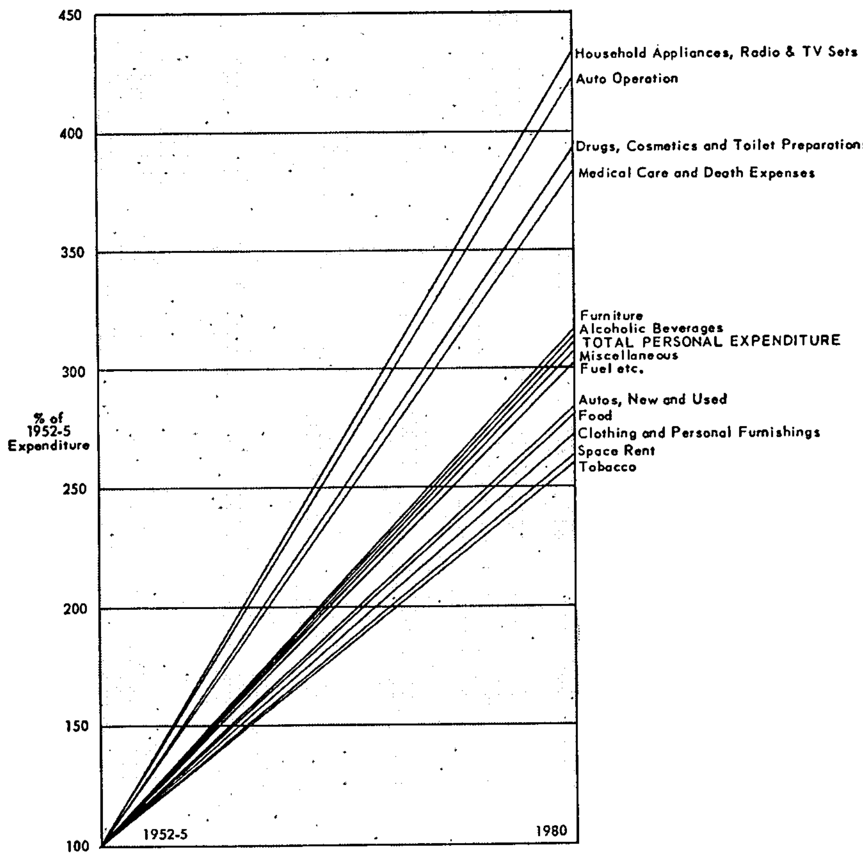
The combination of a decline in the fraction of the national output devoted to government expenditures on goods and services, of a slight increase in the fraction which is deducted as business savings, and a stability in the ratio of personal saving to personal disposable income imply an increase in personal expenditure at about the same rate as the Gross National Expenditure. On a per capita basis, in terms of 1955 dollars, this means roughly a two-thirds increase from the present levels of consumption, to which we should add the reminder of a continued decrease in average hours of work as discussed in Chapter 16.

How will the proportion of Canada's expenditure devoted to consumption be distributed among various kinds of goods and services? See Chart 17.VII. It appears likely that the fraction devoted to expenditure on food, tobacco, clothing, shelter, fuel, household supplies and personal care will be smaller in the future than they have been in recent years. For food, the absolute level of per capita expenditure is expected to increase considerably even though the quantity of food consumed per person does not change very much. On the other hand, it seems probable that the fraction of Canadian personal budgets devoted to the purchase and maintenance of household durables, automobiles and hobby and recreational equipment and to medical care, travel, electric, gas and telephone services and university education will increase. These are trends which must be reviewed as more experience accumulates, but they are of considerable importance to the structure of the economy. If smaller proportions of our incomes are devoted to food and shelter and clothing, it follows that less than average rates of growth will result, other things being equal, in Canadian agriculture and housebuilding and the manufacture of clothing. Higher than average increases in expenditure on various kinds of durable goods provide better opportunities for economies of large-scale production in the manufacture of such items in Canada. Rapidly expanding demands for medical care impose strains on the available facilities.

Both for exports and for imports of goods and services our projections suggest a continuation of the long-run decline in the size of Canada's foreign trade, compared with national output. One may reasonably ask why such a relative shrinkage of foreign trade is expected and, more important, about the consistency of our views on the growth in Canada's foreign trade and gross national output. As we explained earlier in our report, there is not much prospect of large reductions in the levels of protection of agricultural and secondary manufacturing industry through-

Chart 17.VII

PROJECTIONS OF DISTRIBUTIONS OF TOTAL PERSONAL EXPENDITURE ON CONSUMER GOODS AND SERVICES IN 1949 DOLLARS



SOURCE: D. W. Slater, *Consumption Expenditures in Canada*, 1957, a study for the Commission, Chap. 4, Table 26, pp. 74-75.

out the world, and therefore a quite limited growth is expected in the external demands for the products of Canada's agricultural and secondary manufacturing industries. There are favourable opportunities for Canadian exports of industrial materials, particularly to the United States but also to the other industrial areas of the world. The available and foreseeable supplies of mineral and forest products in Canada together with these market opportunities imply a rapid growth of exports of such products from Canada, but probably not a sufficient growth to sustain the present over-all ratio of exports to Canada's Gross National Expenditure. We do not treat this as a serious limitation on rapid Canadian economic growth mainly because of our belief that significant further improvements in the world competitive position of Canada's import-competing industries will take place.

As to the structure of exports (see Chart 17.III), the future list will probably be dominated by a number of important staples of the present day — pulp and paper, lumber, non-ferrous metals, and asbestos. The big changes are likely to be the relative growth in exports of crude petroleum, natural gas, and iron ore, and the continued decline of the proportion due to agricultural and animal products. A guess as to the future geographical distribution of Canada's exports is even more hazardous than one concerned with the commodity composition of the trade. It appears much more likely that the proportion flowing to the United States would increase than decrease, with that flowing to the United Kingdom and Western Europe probably decreasing.

As to imports, the past trend of change in the structure appears likely to continue. (See Chart 17.V). Mainly because of the rapid growth expected in Canadian demands, an even larger share of the imports will probably take the form of machinery and equipment, durable consumer goods, miscellaneous manufactured consumer goods and parts and components for the manufacture of such goods in Canada. Smaller fractions of Canada's imports will likely be due to food, textiles, fuels, tobacco and alcoholic beverages and materials for structures. Partly because of the decline in the ratio of merchandise imports to Gross National Expenditure and partly because of the smaller part of those imports due to fuels, payments to foreigners for freight and shipping services will likely increase less rapidly than the Gross National Expenditure. Higher incomes and an intensive growth in business activity will encourage continued rapid increases in payments to foreigners for tourist and travel and for business services. Also the servicing of Canada's present indebtedness to foreigners together with a continued growth of Canada's gross liabilities imply much larger payments of interest and dividends to foreigners than took place between 1953 and 1955, though the long-run average growth in such payments may be somewhat less than that of Canada's gross national output.

The Distribution of Output

We turn now to the distribution of output among the various industries or sectors of the Canadian economy. It will be recalled that the difference between Gross Domestic Product and Gross National Product is a small one, the former measuring the output of factors of production domiciled in Canada and the latter measuring the output of factors owned by Canadian residents. Because of difficulties in interpreting the output from housing and of the military personnel in Canada we will put these items aside for the moment and concern ourselves with the division of total output exclusive of these services.

Partly on statistical grounds and partly reflecting economic relationships, the distribution of output is somewhat imperfectly meshed with the distribution of expenditures on final goods and services. At the present stage of statistical development in Canada it is not always possible to bridge the gap between the output of industries and the flow of products to final users. Even if this were possible the trends in the distribution of output would not be completely reflected in the demands for, and expenditures on, various goods. For example, a somewhat more rapid increase may take place in the Canadian output of secondary manufacturing industry than in the over-all demand for manufactured products in Canada if substitutions of Canadian produced for imported goods takes place.

We have summarized the historic record of the distribution of the Gross Domestic Product among the main industry sectors in Table 17.4 and in Chart 17.VIII. During the last three decades the outstanding changes in the distribution of output have been a large decrease in the fraction due to agriculture and the large increases due to the resource industries and to primary and secondary manufacturing. Comparing 1953 to 1955 with 1927 to 1929, the proportion of Canada's output originating in agriculture has decreased from 23.4 per cent to 12.7 per cent. Between the same periods output originating in the resource industries, primary manufacturing and secondary manufacturing considered together has increased from 28.2 per cent to 38.9 per cent of the total. Smaller proportionate changes in output have taken place in other sectors with declines being found for transportation, storage and communication and for trade, finance and services; modest increases are due to the construction industries and to civilian government and community services.

The large proportionate decline in the output of Canadian agriculture reflects the comparatively unfavourable growth in the world demand for Canadian agricultural products, the modest growth in the per capita volumes of food consumed in Canada, and the comparative attractiveness of non-agricultural employments for men and capital in Canada. These and other factors affecting Canada's agricultural industries were discussed in Chapter 8 and are treated even more fully in the study *Progress and Prospects of Canadian Agriculture.*

Table 17.4

INDUSTRIAL DISTRIBUTION OF GROSS DOMESTIC PRODUCT (EXCLUDING RESIDENTIAL RENTS AND G.D.P. ARISING IN ARMED FORCES SECTOR)

(averages for selected years 1926-55; forecast for 1980)

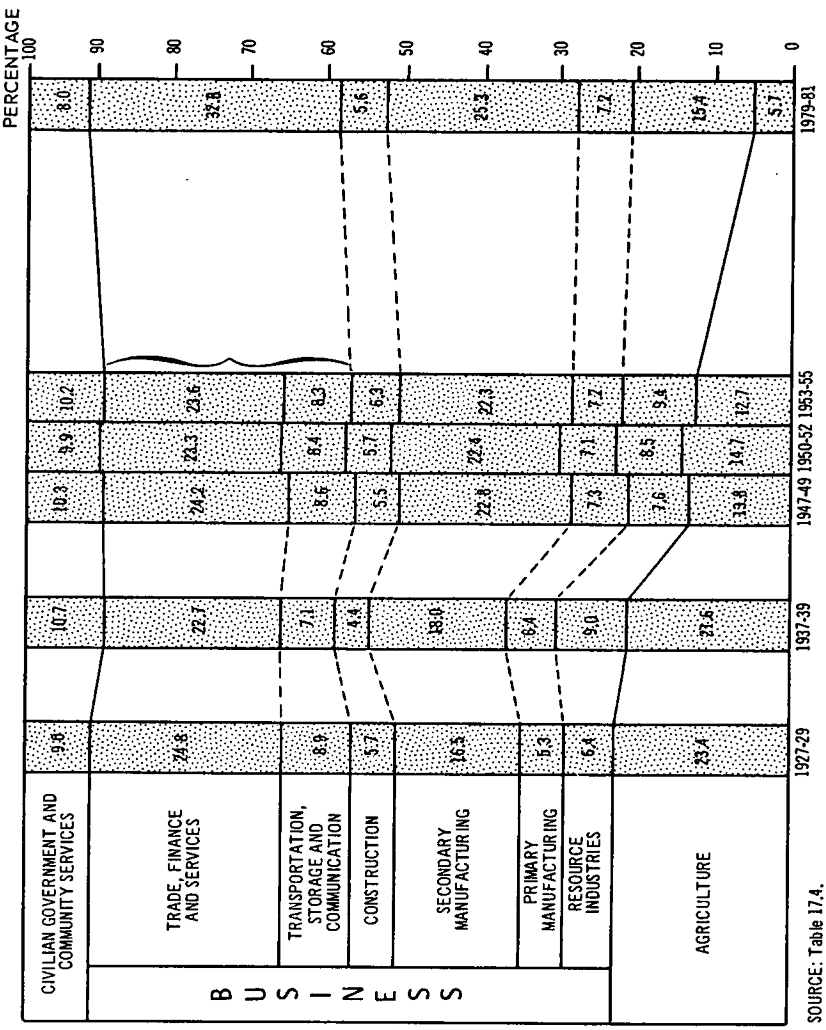
	1927–29	1937–39	1947–49	1950–52	1953–55	1979–81
Billions of 1949 dollars						
Agriculture	2.01	1.85	1.89	2.32	2.22	2.91
Resource industries	.55	.77	1.04	1.34	1.64	7.85
Total manufacturing	1.87	2.09	4.12	4.67	5.13	16.60
Primary manufacturing	.45	.55	1.00	1.13	1.25	3.70
Secondary manufacturing	1.42	1.54	3.12	3.54	3.88	12.90
Construction	.49	.38	.75	.91	1.10	2.85
Transportation, trade and services, etc.	2.88	2.56	4.49	5.01	5.57	16.72
Transportation, storage and communication	.76	.61	1.18	1.33	1.44	
Trade, finance and services	2.12	1.95	3.31	3.68	4.13	
Business	5.80	5.80	10.40	11.93	13.45	44.02
Civilian government and community services	.78	.92	1.41	1.57	1.77	4.08
Total	8.58	8.57	13.70	15.82	17.44	51.00
Per cent						
Agriculture	23.4	21.6	13.8	14.7	12.7	5.7
Resource industries	6.4	9.0	7.6	8.5	9.4	15.4
Total manufacturing	21.8	24.4	30.1	29.5	29.5	32.5
Primary manufacturing	5.3	6.4	7.3	7.1	7.2	7.2
Secondary manufacturing	16.5	18.0	22.8	22.4	22.3	25.3
Construction	5.7	4.4	5.5	5.7	6.3	5.6
Transportation, trade and services, etc.	33.7	29.8	32.8	31.7	31.9	32.8
Transportation, storage and communication	8.9	7.1	8.6	8.4	8.3	
Trade, finance and services	24.8	22.7	24.2	23.3	23.6	
Business	67.6	67.7	75.9	75.4	77.1	86.3
Civilian government and community services	9.0	10.7	10.3	9.9	10.2	8.0

NOTE: Detail does not always add to totals because of rounding.

SOURCE: Wm. C. Hood and Anthony Scott, *Output, Labour and Capital in the Canadian Economy*, 1957, a study for the Commission, Chap. 7, Table 7.2, p. 315.

Chart 17. VIII

INDUSTRIAL DISTRIBUTION OF GROSS DOMESTIC PRODUCT (Excluding residential rents and G.D.P. arising in armed forces sector)



SOURCE: Table 17.4.

The comparatively rapid growth in the resource industries and in primary manufacturing represents a new phase in the long history of export staples based on abundant natural resources, a history which began with cod fish and furs and which has centred successively on timber, lumber, meat and cheese, wheat and now minerals and forest products. We pointed out in the summary of Canada's external trade that the outstanding development in exports over the past thirty years has been the decline in exports of food to the United Kingdom and Western Europe, and the expansion of exports of mineral and forest products to the industrial nations of the world, but particularly to the United States. This has been encouraged by the comparatively favourable developments in the world demand for industrial materials, in turn due to a comparatively rapid increase in the total consumption of such items, to growing scarcities in the production of some of these items in the industrial areas themselves and to the much more favourable treatment of imports of such items than of agricultural commodities in the commercial policy of the industrial nations of the world. The rapid growth of these industries has also been based on the under-exploited natural resources which existed in the late 1920's and the additions to our knowledge of minerals since that time. Of very great importance in the development of primary manufacturing has been the availability of large sources of cheap hydro-electric energy; in recent years about one-half of all the electrical energy consumed in Canada has been used in the production of pulp and paper and the refining of minerals. The resource industries and primary manufacturing are also capital-intensive and the availability of world financial resources and a comparative cheapening of capital goods has provided part of the stimulus to the rapid increase in output in these industries.

The comparatively large and rapid increase in the proportion of Canadian output due to secondary manufacturing industries is one of the outstanding changes in the shape of the Canadian economy during the last three decades and one of the most difficult to appraise. We have devoted a chapter of our report to these industries, and a general study and a series of specialized studies on secondary manufacturing were prepared for us. It is tempting to view the rapid growth of secondary manufacturing in Canada as mainly reflecting an improvement on a competitive position of Canadian industries vis-à-vis alternative sources of supply and thus to treat the growth of Canadian output as largely a substitution of Canadian for foreign produced goods. We believe that this argument has some merit but that other factors have also made major contributions to the growth in secondary manufacturing.

For the typical industry in the secondary manufacturing sector imports capture a slightly smaller share of the Canadian market now (1953-55) than they did in the late 1920's. For a number of industries including primary iron and steel, chemicals, autos, auto parts, synthetic textiles, and petroleum manufactures, the declines in import shares of the Canadian market have been quite substantial. However, a large part of the more than proportionate growth in secondary manufacturing must be imputed to the comparatively rapid increase in the Canadian demand for manufactured goods rather than to a replacement of imported by domestic commodities. Many kinds of activity have been transferred from the home and service sectors to the manufacturing sectors of the economy. The demand for durable consumer goods and for machinery and equipment have grown more rapidly than the total national expenditure. The comparatively large increase in secondary manufacturing in the Canadian national output parallels similar developments in the United States and in other industrial areas where there has been little net substitution of imported for domestic goods.

In view of the popular notion of rapid growth of government activities in the community, it is somewhat surprising to find the slight increase in the proportion of the national output attributable to government and community services. These data greatly underestimate the over-all growth of government in the community, as the rapidly expanding parts of governmental activities have been military expenditures and transfer payments, neither of which is reflected in government output. The slight proportionate increase in the contribution of the construction industry to Canadian national output reflects the temporarily high expenditures on structures in recent years and should not, therefore, be looked upon as a guide to long-run trends in the distribution of output in the economy.

Somewhat surprising has been the decline in the proportion of output due to transportation, storage and communication industries, in view of the expectation that increased economic specialization associated with economic growth would involve a relative growth in the exchange and moving about of commodities. We have discussed the transportation industries at some length in a separate chapter, and a special study has been prepared for us on the subject. The decline in their share of national output is attributable to a number of influences, including the growing up of Canada to its railroad network, the comparatively rapid increase in manufacturing production compared with the aggregate output of bulk commodities and thus to a relative growth in the traffic movements which have high value to transportation cost ratios, the substitution of private automobile and private truck transport for that provided by the business sector, and improvements in materials-handling and inventory-control systems.

Somewhat unexpectedly we find that the share of national output due to trade, finance and (private) services considered together has also declined slightly as a fraction of the national output. As was pointed out in our discussion of the service industries, the consumption of services in Canada and in other industrial countries has been progressively inhibited by their increasing relative expensiveness, which in turn reflects the lower than average increase in productivity in such industries and the necessity of paying comparable wages in the service industries to those in the economy as a whole. Indeed, in view of the increasing relative costs of typical operations in the trade, finance, and private service sectors, it is perhaps more surprising that the proportion of the output due to these sectors has continued to be so high; this must be imputed to the very strong growth in the effective demand for such services in the country.

Whereas the average output of the economy is expected to increase by about 190 per cent, between 1953-55 and 1979-81, agricultural output is likely to increase by barely 30 per cent, output of the resource industries by 375 per cent and of secondary manufacturing by 230 per cent. Thus the proportion of output due to agriculture is expected to decrease very sharply, that due to the resource industries to increase greatly, with a substantial increase in the proportion due to secondary manufacturing (though a somewhat less rapid relative growth than was experienced during the last thirty years). See Table 17.4 and Chart 17.VIII. Smaller proportionate changes are due to other sectors, declines being expected for construction, increases for transport, trade and services considered as a whole, and declines in the share due to government and community services. The comparatively large decline in government output is partly due to a statistical quirk in the valuation of government services, which is explained fully in our study, *Output, Labour and Capital in the Canadian Economy*; if the valuation of various kinds of output were made with the structure of prices which will probably exist by 1980, the government proportion would probably show a trend of increase.

The expected decline in agriculture's share of the national output is based on a comparatively unfavourable long-run outlook for exports of agricultural products, and a limited increase in the per capita Canadian demand for food in the forms in which it is prepared by the agricultural industry. Certain sectors of agriculture have much more favourable prospects than others, the more rapidly expanding will likely include the production of livestock and of certain fruits and vegetables; less optimistic prospects exist for wheat production and for some dairy products.

A quite startlingly rapid growth is in prospect for output for the resource industries. This is due to continued favourable market opportunities abroad, particularly in the United States, and to the large increments which have taken place in our knowledge of available resources during the past ten years and the confidence with which further increments are expected. The most important of these additions is likely to be in petroleum, but iron ore also promises big gains. However, for many other minerals, substantial increases in knowledge of our resources have taken place; such developments as the Lynn Lake in nickel, and Manitouwadge in other base metals immediately spring to mind. Collectively the minerals have become, and are likely to become even more, the central staples of Canada's specialization in the world economy. In the chapter on forestry we reviewed the extraordinarily rapid growth in the past thirty years; our expectation is of a less rapid growth in the future, partly because of a slower rate of increase in the consumption of newsprint, the advanced stage already reached in the substitution of paper for other materials such as jute and cotton, and the comparative improvement in the supplies of wood resources in other parts of the North American economy. While Canada's forest resources are capable of sustaining larger annual cuttings than are now made, we are approaching somewhat more closely the limits in cutting accessible forest areas without substantially higher investment.

Another difference from the past experience is that the future prospects are for primary manufacturing to grow about as rapidly as total output, whereas that sector had previously grown more rapidly. Essentially this means that the pulp and paper industries and the refining of minerals are expected to grow more slowly than in the past. It was the combination of natural resources, high transportation costs of the rawest forms of materials and the abundance of hydro-electric energy which provided the basis for the phenomenal increases in primary manufacturing in the past. Processing of the newer staples, such as petroleum, natural gas, iron ore and uranium is much less oriented toward the sources of the minerals and toward hydro-electric power installations than was that of the older staples of aluminum, copper, nickel, zinc, woodpulp and newsprint.

The somewhat slower increase expected in the proportion of the national output due to secondary manufacturing than in the past also requires comment. This view is based in part on experience of advanced industrial countries, which shows that after a certain point of increase in economic wealth, a trend of more than proportionate growth in the demand for manufactures than for total output loses some of its "steam". As we have indicated in the chapter on secondary industries, it is our expectation that the Canadian demand for manufactured goods will grow not very much more rapidly than Gross National Expenditure in the future. The trend also reflects the view that Canada is unlikely to find export markets for a greatly enlarged share of its output from secondary manufacturing industries. However we believe that modest improvement in the relative cost position of our secondary industry is likely to take place; thus we expect that imports of manufactures will increase somewhat less rapidly than the Canadian demand for manufactures, and hence Canadian *output* of such products will increase a little more rapidly than Canadian demand. The less than proportionate growth expected in output of the construction industries is attributable to a gradual shift in the stock of capital from structures to machinery and equipment, to the extraordinarily high base (1953-55) from which the projections are made, and to the modest improvements projected in Canadian standards of housing and social capital. The expected output of the transportation, trade and services* sectors, considered together is a residual estimate, not entirely comparable with the forecasts in the earlier chapters on transportation and the service industries. However we believe that the slight increase in the proportion of Canadian output due to the transportation, trade and services* sectors shown in Table 17.4 is fairly realistic; there appears to be a strong trend of increase in Canadian demand for the output of these sectors, so that output may grow rapidly in spite of the increasing relative expensiveness of their output.

The Distribution of Employment and Capital Requirements by Industries

We turn now to the distribution of employment among the main sectors of the economy. Already, in Chapter 16, we have recorded our judgment on the division of employment among three main sectors of the economy, agriculture, business, and government and community services. In addition to some slight further treatment of these broad groups, we wish here to record some views on the division of employment within the business sector among the resource industries, primary and secondary manufacturing, construction, and transport, storage, communication, trade, finance and services. More details on these sectors and of various industries within them are found in the special studies prepared for the Commission, some of the results of which are presented in the earlier chapters of this report.**

We have placed summary data on the past trends and the prospects for the distribution of employment in Table 17.5 and Chart 17.IX. During the past three decades there has been an extremely large decrease in the proportion of Canada's employed labour force found in agriculture, and a large and rapid growth in the proportion working in trade, finance and services and in secondary manufacturing. A smaller change absolutely, but proportionately a large one, has been the increase in the employment in government and community services. Smaller changes took place in the proportions employed in other sectors, increases being found for construction and primary manufacturing and decreases in transport, storage and communication and for the resource industries.

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* Other than community services.

**There are two minor inconsistencies in the distribution of employment as presented here and as found in the special studies. First, the forecast of employment in agriculture, as we have already noted in Chapter 8, does not tally exactly with the forecast contained in the study prepared for us on *Progress and Prospects of Canadian Agriculture*. Secondly, the classification of employment used in the study on *The Service Industries* and adopted in Chapter 13 differs from that used here. In the earlier chapter, the service industries included what have been called government and community services in this chapter, but in addition covered trade, finance, and personal services and also those professional services which are carried on outside the framework of government and public institutions. The latter items have been included in the business sector in the forecast of aggregate output and in the discussion of the distribution of employment in this chapter.

Table 17.5

INDUSTRIAL DISTRIBUTION OF THE CIVILIAN EMPLOYED LABOUR FORCE

(averages for selected years 1926-55; forecast for 1980)

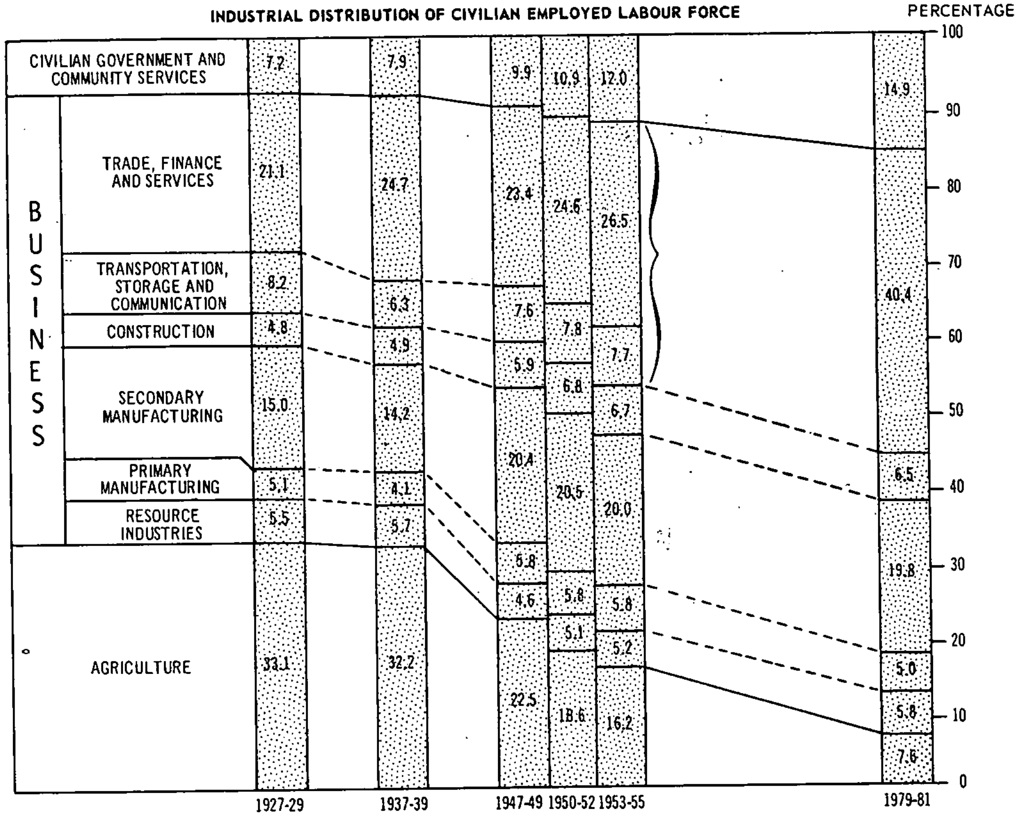
	1927–29	1937–39	1947–49	1950–52	1953–55	1979–81
Thousands						
Agriculture	1,217	1,274	1,099	948	849	735
Resource industries	202	227	223	259	273	555
Total manufacturing	740	729	1,285	1,339	1,354	2,393
Primary manufacturing	188	164	283	293	304	486
Secondary manufacturing	552	565	1,002	1,046	1,050	1,907
Construction	175	194	288	344	351	625
Transportation, trade and services, etc.	1,076	1,231	1,514	1,648	1,798	3,890
Transportation, storage and communication	301	249	371	400	406	
Trade, finance and services	775	982	1,143	1,248	1,392	
Business	2,193	2,382	3,309	3,589	3,775	7,463
Civilian government and community services	263	313	484	556	631	1,439
Total	3,675	3,969	4,893	5,093	5,256	9,637
Per cent						
Agriculture	33.1	33.2	22.5	18.6	16.2	7.6
Resource industries	5.5	5.7	4.6	5.1	5.2	5.8
Total manufacturing	20.1	18.3	26.2	26.3	25.8	24.8
Primary manufacturing	5.1	4.1	5.8	5.8	5.8	5.0
Secondary manufacturing	15.0	14.2	20.4	20.5	20.0	19.8
Construction	4.8	4.9	5.9	6.8	6.7	6.5
Transportation, trade and services, etc.	29.3	31.0	31.0	32.4	34.2	40.4
Transportation, storage and communication	8.2	6.3	7.6	7.8	7.7	
Trade, finance and services	21.1	24.7	23.4	24.6	26.5	
Business	59.7	59.9	67.6	70.5	71.8	77.5
Civilian government and community services	7.2	7.9	9.9	10.9	12.0	14.9

NOTE: Detail does not always add to totals because of rounding.

SOURCE: Wm. C. Hood and Anthony Scott, *Output, Labour and Capital in the Canadian Economy*, 1957, a study for the Commission, Chap. 7, Table 7.1, p. 311

Chart 17. IX

INDUSTRIAL DISTRIBUTION OF CIVILIAN EMPLOYED LABOUR FORCE



SOURCE: Table 17.5.

The extremely large decline in the percentage of Canada's labour force employed in agriculture is mainly due to the sharp decline in the portion of Canada's output originating in agriculture, but mechanization and changes in the structure of agriculture have also contributed. Since 1940, but mainly since 1945, there has been a phenomenal mechanization of Canadian agriculture, which is very largely a substitution of capital for labour in the process of agricultural production. Also a fairly large part of employment — or perhaps more appropriately, underemployment — in the subsistence parts of Canadian agriculture has been met by people moving off the farm, with farms being abandoned or consolidated into larger farm enterprises. Much remains to be accomplished in this regard, but past experience suggests that the problem is amenable to solution, given continued prosperity, patience, and encouragement.

The comparatively rapid growth in employment in trade, finance and (private) services reflects the strength of demand of Canadians for such services. The lower than average increases in productivity in these industries have meant increasing relative cost of such services, but the demand has been such as to sustain output; to do so in the face of the lower than average increase in productivity implies that the labour force employed in these sectors must increase more rapidly than the rate of increase of output of the sectors, which is precisely what we observe. The increase which has taken place in the proportion of Canada's labour force employed in secondary manufacturing is primarily due to the increased proportion of Canadian output derived from this sector; the rate of increase in productivity is about the average for the economy as a whole. Of course, within the sector, there have been widely differing combinations of increases in output, employment and productivity; at one extreme, we have noticed chemicals, for which there have been fairly modest increases in employment considering the phenomenal rate of growth of output; at the other extreme, we have seen a comparatively rapid growth in employment in textiles despite slow growth in output, reflecting the smaller than average increases in productivity in the primary textile industries. These comments are not meant as a praise for some industries and criticism of others; the results are largely inherent in the nature of the production processes. In some industries it may take exceptionally good management and great efforts to make any significant gains in productivity; in other industries large productivity increases may be found despite poor management.

The larger percentage of the labour force employed in the civilian, government and community services sector is a more accurate measure of the changing importance of the government than the trend in the sector's fraction of total output, because of the statistical conventions in counting government output. Of course, both are serious under-estimates of the growing over-all importance of government activities in the community because they exclude military activities and the greatly enlarged transfer activities of governments. The decline of the percentage of the labour force employed in the resource industries and in primary manufacturing took place in spite of the comparatively rapid increases in output of these sectors, revealing the much above-average increases in productivity in such industries. In contrast, the increase in the proportion of the labour force employed in construction was greater than the corresponding change in the distribution of output, showing the smaller than average increases in productivity in the construction industries, a trend with which we have dealt at some length earlier.

The major changes in the distribution of employment which we expect in the future are to some extent a continuation of the past trends. A further large decrease in the proportion of the labour force employed in agriculture is expected, and a further large increase in the service activities in the broadest sense, including government and community services, transport, trade and services. Smaller changes are expected in the proportion of total employment accounted for by other sectors, declines appearing likely in construction, secondary manufacturing and primary manufacturing and slight increases in the resource industries.

The expectations are based on our judgments on the prospects for output and productivity in the various sectors. For agriculture, the share of total output is expected to continue to decline sharply, while increases in productivity at somewhat higher rates than the average for the economy as a whole are expected. For services, despite the low rate of increase in productivity, we believe that Canadians will wish to take larger proportions of their incomes as services and that processes of production will make more intensive use of many kinds of services. Thus we believe that the fraction of the broad service package in total output will increase slightly; to produce this output with the smaller than average increase in productivity will require a much larger proportion of the labour force than are now employed in the "service" sectors. The slight decline expected in the percentage of the labour force employed in secondary manufacturing reflects our belief that the output of this sector will increase somewhat more than proportionately to total output but that the rate of increase of productivity in the sector will be slightly higher than the average for the economy. This in turn is partly a reflection of our belief that the higher than average productivity parts of secondary manufacturing will experience a more rapid growth in output than the lower productivity portions of the sector, and that the associated shifts in the labour force within secondary manufacturing will contribute to the over-all increases in productivity of the sector. The slight decline in the proportion of the labour force employed in primary manufacturing incorporates our judgment that this sector will not account for a larger share of total output, but that higher than average increases in productivity will continue to be experienced. The slight increase in the proportion of the labour force employed in the resource industries is based on our expectation of high rates of increase in productivity in this sector, as the projected growth in the share of the labour force employed in the resource industries is minute compared with the expected increase in the sector's share of the national output. The slight decline expected in the proportion of the labour force employed in construction is due to our view that construction will account for a significantly smaller share of the national output; the rate of increase in productivity in the industry is likely to be somewhat below that experienced in the economy as a whole.

Despite the pioneering study in the measurement of the stock of capital which was undertaken for us, we are not able to form as firm views about the distribution of capital requirements as for labour; but a number of points of vital interest to the Canadian economy emerge. First, broadly speaking capital-output and labour-output ratios are inverses of one another. The industries of higher than average productivity are typically those of higher than average capital-intensity; for example, the resource industries and primary manufacturing. Conversely, the industries of less than average productivity are typically those of less than average capital-intensity. Those sectors which have experienced higher than average increases in productivity are usually those in which new investment per man has been higher than average; industries in which increases in productivity have been less than average are also those in which less than average increases in capital per man have taken place. The correspondence is by no means perfect, but it is not a bad generalization. Second, capital requirements are going to be very heavy in those industries which combine high rates of increase in output and high rates of increase in productivity, and are going to be small in those industries in which we find low rates of increase in output and low rates of increase in productivity. Our expectations about the combinations of growth in output and in productivity suggest that the proportion of the total capital accumulation required by the resource industries and primary manufacturing will become even larger than they have been in recent years, and that the share required by the secondary manufacturing will increase slightly. The proportions of the total capital stock required by the service industries in the broadest sense and by construction may decline slightly, and the fraction required by agriculture will probably decrease greatly. However, in absolute terms the ratio of capital to labour will tend to increase in all sectors of the economy.

Some Possible Economic Problems Associated with the Changing Structure of the Economy

Our review of the changing structure of the Canadian economy suggests a number of situations which may pose economic and social problems for Canada. Among these possibilities we include the problems of rapid structural adjustments, the incidence of externally generated business fluctuations on Canadian incomes, variations in investment expenditure in

Canada and certain features of Canada's balance of international payments. At the outset we must express our confidence that the problems of structural readjustment of the Canadian economy are not likely to be overwhelmingly difficult to handle. This is partly because the economic system has a high capacity for successful adjustment, provided that close to full-employment conditions are maintained and provided that a fairly substantial rate of over-all economic growth continues. Our confidence is partly based also on the prospect of gradual structural change. Changes and problems there will be and needs for adjustments in public policy, but we ought to be able to take them in our stride.

During the next quarter century fairly large net transfers of manpower and capital among industries and areas are likely. Very few sectors or areas will experience absolute declines in output and employment; thus the transfers will largely take the form of more rapid growth of some sectors and areas of the economy than of others. Also these changes will be gradual and will be facilitated by the normal retirement of people from the labour force and their replacement by new entrants, and by the wearing out and replacement of existing capital equipment. However, even under the most favourable circumstances relative transfers of resources involve some social problems. The density of population in some areas may diminish quite sharply, imposing additional real burdens of providing adequate schooling, medical services and transportation facilities. In other areas, particularly metropolitan urban centres, rapid increases in population impose tremendous strains in providing the additional social capital facilities in short periods of time. In the nature of things, transfers of resources often impose large burdens of cost on small segments of the community but yield gains which although proportionately small to the great mass of the people, do in the aggregate outweigh the costs of adjustment. But the uneven distribution of costs and gains will pose problems of assistance and compensation, problems which in many cases should be met by public policy.

One of the classical Canadian problems has been the sensitivity of the Canadian economy to external business fluctuations, particularly those originating in the United States, the United Kingdom and Western Europe. This sensitivity to foreign business fluctuations arises from the size and nature of Canada's international specialization and the closeness of social and financial ties between Canada and the main industrial areas of the world. While we expect a small decrease in the openness of the Canadian economy and some gradual changes in the internal structure of the economy, we do not believe that any fundamental change is likely in the sensitivity of Canadian business conditions to fluctuations in the United States and Western Europe. Thus Canada's traditional problem of having to cope with cyclical fluctuations of external origin is likely to be a continuing one in the future. We believe that fluctuations in economic activity in industrial areas of the world will be smaller in the future than they have been during the past three decades, and thus the magnitude of Canada's problems of this origin ought also to be smaller. In a later chapter we comment on the policies which Canada may pursue for dealing with such problems as they arise.

We have commented earlier on the extraordinary boom in real investment activity which has taken place in Canada and in other countries since the end of the War. Canadians and Americans have a distinctly better stock of capital equipment now than they had at the end of the War, a stock which is larger per capita, of distinctly lower average age and higher productivity. Because of the size and quality of the existing stock, replacement of capital instruments may be somewhat limited in the next few years, and this is one of the possible causes of cyclical fluctuations in over-all economic activity. We draw attention to these possibilities primarily because they may impose disproportionate burdens of adjustment on certain segments of the Canadian economy, such as the construction industry and those manufacturing industries which produce durable capital equipment. The possibility of replacement cycles in consumer durable goods also exists though economists do not yet have very precise ideas about the causes, consequences and offsets to replacement cycles. We mention these cycles as possible problem areas, and ones for which careful continued study will be required during the next few years. Such cycles influence the need for, and nature of, government policy concerned with fluctuations in the level of economic activity, on which we comment in a later chapter.

Another area in which problems might arise, or where symptoms of economic or social difficulties might show, is in Canada's balance of international payments. The problems might be of a long-run nature such as would arise from the sustained loss of an important export market or an excessive burden of external debt; or they could be shorter-run problems, emanating from temporarily excessive rates of domestic investment or fluctuations in business activity in other countries. In recent years, many Canadians have shown some concern over Canada's international trading position. During the past three years, Canada on the average has had a deficit on current international accounts of some $835 million per annum. The average deficit with the United States has run at about $1,160 million per annum while there has been an average surplus on current account with the United Kingdom and with other countries of approximately $325 million. In 1956 the total deficit on current account was about $1,370 million while the deficit with the United States was $1,640 million; the corresponding figures for the present year may be somewhat higher still.

These recent deficits have been exceptionally large, primarily reflecting the phenomenally high rates of private and public investment activity which have been carried on in Canada in these years. We have not encountered any serious difficulty in covering these deficits so far; they have, of course, been met by an inflow of foreign capital, mainly from the United States, but with substantial amounts from the United Kingdom and Western Europe. Indeed to a considerable extent the current deficits are themselves an adjustment to the inflow of foreign capital, which, by stimulating or facilitating investment expenditure tends to encourage Canadian imports and discourage Canadian exports of goods and services; this current deficit is related to the discount on United States dollars in terms of Canadian currency. If the rate of inflow of foreign capital were to decline substantially, we would expect the exchange rate for the Canadian dollar to decline also. This, in turn, should tend to stimulate exports and discourage imports. Furthermore, a reduction in the rate of capital inflow would involve a reduction in the rates of real investment expenditure in Canada and some decrease in our imports of capital goods. As a result of these and other parallel influences, equilibrium should be restored, though, of course, an extremely rapid reduction in the rate of capital inflow could pose substantial short-run strains of unemployment on important segments of the Canadian economy.

As we have said, the substantial deficits in recent years have been offset by heavy capital inflows, but this situation is not entirely an unmixed blessing. We have been able to achieve phenomenal rates of investment. The exchange rate for the Canadian dollar has been very strong, so strong in fact that during 1957 it sold as high as a six per cent premium above the United States dollar. This tends to make imports abnormally high and tends to reduce Canadian exports; that is, it tends to encourage an abnormal replacement of Canadian production by imports and to curtail the incomes of certain Canadian export industries. Much of this is the necessary consequence of the exceptionally high rates of domestic investment activity in Canada, for much of the manpower and resources to carry out this investment activity must be squeezed out of other employments in Canada. However, there is the possibility of too rapid a rate of expansion, particularly of some of the resources sectors, a possibility of distortion of the even growth of the economy as a whole and temporary over-capacity of some production facilities.

Furthermore a large part of the capital inflow into Canada has gone into equity investments in Canadian subsidiaries of foreign companies. The implications of the dominant position which subsidiaries hold in certain key Canadian industries are discussed in the next chapter. We may simply note here that while we have been extremely prosperous in recent years, to some extent at least our good fortune is being paid for not in terms of exports; nor through a reduction in exchange reserves; nor by a drop in the exchange rate; nor by a shortage of capital for investment; but in the increased ownership and control of Canadian resources by residents of other countries.

Turning to the longer-run possibilities of balance of payments problems, some people may be concerned about the cost of servicing the increased amount of foreign capital which has been invested in Canada; others may be interested in the prospective size or regional distribution of our current balance on international transactions. Much of the new foreign investment which has occurred in Canada has gone into enterprises which are designed either to increase our exports or to reduce our imports. Much of it is in forms that will only have to be serviced if these ventures turn out to be profitable. For these and other reasons we do not expect the increased cost of servicing the foreign investment which has been made here in recent years to present too difficult a problem.

Does it appear likely that Canadians will experience an over-all long-run balance of payments problem in the form of a troublesome excess of imports of goods and services over exports? In the past we have been fortunate to escape unfavourable long-term structural disequilibrium in our balance of international payments. In this century we have not had a sustained "sterling problem" nor a "United States dollar problem" in anything like the way in which the sterling area has had a "dollar problem". Nor have Canadians experienced a sustained loss of export opportunities in anything like the degree faced by the Japanese after the development of artificial fibres or encountered by Chile after industrial nations perfected the synthetic fixation of atmospheric nitrogen. Since 1900 various Canadian exports have experienced setbacks, but we have been fortunate to have these offset almost simultaneously by new export opportunities or by the development of replacements for imports. A notable exception was the Great Depression of the 1930's, but that piece of economic folly reflected much more than the problems of structural adjustment.

As to the future, our studies suggest that imports like exports of goods and services are expected to continue to decline as a proportion of the Gross National Expenditure. Any forecast of the balance between current sales and purchases of goods and services from foreigners must be treated with great caution, because the balance is relatively small and because small proportionate differences in the forecasts of either exports or imports make a large proportionate difference to the balance between them. It does appear likely, however, that the relative size of Canada's excess of imports over exports to the Gross National Expenditure and thus the net size of the capital inflows into Canada will gradually diminish,* though fairly wide fluctuations from one year to another are to be expected. This decline, together with the breadth of the base of present-day Canadian economic activity, the close substitution possibilities between imports and Canadian production and the continued confidence of foreign investors in Canada, suggest that Canadians are not likely to face a *major* unfavourable long-run structural problem of adjusting their over-all balance of payments.

* Compared with the average level between 1952 and 1955.

Apart from the size of the total deficit on current account, there is its geographical imbalance. The changes which have occurred in the pattern of our trade since the late 1920's, but particularly during the post-war period, have reduced the relative, if not the absolute, magnitude of the imbalance in our bilateral accounts. But even so there is a question as to whether Canada can continue indefinitely to earn substantial surpluses in her dealings with countries overseas for use in settling deficits with the United States. A sound and complete system of multilateral trade based on currency convertibility and non-discrimination can be established and maintained if there is equilibrium in the over-all trade and payments of each of the major trading nations of the world. In such circumstances there would be no cause for concern about Canada's balance with individual countries or regions. But such conditions do not prevail today. Canada may intermittently or persistently lose attractive trading opportunities because some countries feel that they must limit imports from dollar areas. In view of this we think a better international balancing in the pattern of our trade would be desirable if it could be achieved without adding materially to costs.

We have mentioned the very extensive development and expansion of the resource industries in recent years, which should result in a substantial increase in the future in the volume of our exports to the United States, especially of industrial raw materials. This should have the effect of reducing the present imbalance in our trade with that country. If we could widen our access to United States markets obviously the imbalance would be narrowed further. The only other course for us to take would be to reduce our imports from the United States and instead either to increase the share of imports from overseas countries or to look to domestic sources for a greater proportion of our requirements.

In many lines imports from the United States enjoy real advantages in the Canadian market compared with imports from other countries. By and large, Canadian industry is not only established on the North American model but, of equal importance, we are accustomed to North American standards of service, delivery and salesmanship. This quite understandably is particularly true of those important parts of Canadian industry which are controlled by United States parent companies. Canadians are also accustomed to North American styles and are susceptible to United States advertising and merchandising techniques so that there is a strong preference for some United States consumer goods. In addition to these disadvantages, overseas suppliers of our requirements find that business is highly competitive in Canada in most lines, more so than in other countries and the total potential market here is relatively small. Nevertheless and despite the considerable difficulties which have been cited, there should be room in the Canadian market for some increase in imports from the United Kingdom, Western Europe and other countries. Since the end of the War, efforts have been made not only by the Government but also by private bodies in Canada to encourage imports from these areas; and such efforts deserve support. But their success must ultimately depend on whether goods attractive to Canadian purchasers can be made available at prices and under conditions which will be competitive.

Elsewhere in this report, some suggestions are presented for strengthening the competitive position of Canadian secondary manufacturing. If these suggestions are adopted we believe these manufacturing industries would be in a better position to compete successfully in the domestic market with their United States competitors. This, in turn, should tend to reduce imports from that source and hence to improve our present unfavourable balance on current account with the United States.

Finally, we would note that Canada may face short-run balance-of-payments problems in the future, since Canadian exports of goods and services vary with foreign business conditions. Decreases in exports decrease Canadian incomes and thus imports; balance-of-payments deficits arise if the imports are not curtailed sufficiently. Canadians may follow an aggressive policy of stabilization of income, employment and prices in the face of these externally generated fluctuations; however, if the Canadian policy of stabilization is much more vigorous than that of our major trading partners, it would tend to produce balance-of-payments deficits in periods of declining exports. This is but one more example of the way in which the structure of the Canadian economy can raise economic problems and imposes some limitations on Canadian economic policy.

18

DOMESTIC SAVING AND FOREIGN INVESTMENT IN CANADA

IN THE LAST CHAPTER, in discussing the division of Gross National Expenditure, we reviewed briefly the record of capital formation in Canada and offered our forecast of the annual rate of investment in capital goods that may be expected in the period around 1980. In this chapter we shall first remark on the ways in which this capital investment has been financed in the past and may be financed in the future. We shall make one or two suggestions concerning the channeling of saving into investment through the domestic capital market. Most of this chapter, however, will be devoted to a discussion of foreign investment in Canada.

Perhaps the most striking fact in the record of the distribution of saving is the preponderant role of business saving. Undistributed corporation profits and allowances for depreciation and depletion comprised over half (54 per cent, to be precise) of total saving (or investment) in Canada in the years 1953 to 1955. In this same period, personal saving and government saving* each accounted for about one-fifth of the total while the inflow of capital associated with the deficit in the current account of the balance of payments amounted to nearly one-tenth. These proportions were about the same in the 1927 to 1929 period; the only differences are that business saving was then a slightly larger and government saving a slightly smaller proportion of the total. Personal saving and the current account deficit were almost precisely the same proportions of total saving then as in the later years.

Some detail on the sources of saving is shown in Table 18.1 entitled The Division of Saving. It will be noted that personal saving has, since the mid-twenties, been a remarkably stable proportion of total saving. Government saving, reflecting budget surpluses and non-defence investment expenditures has varied rather more in relation to total saving. Business saving and the balance on the international current account have however, been the most volatile sources of saving. Canadians had a surplus in the current account of the balance of payments in 18 of the 30 years ending with 1955.

* We define government saving as government surplus as reported in the National Accounts plus government non-defence investment expenditures.

Table 18.1

THE DIVISION OF SAVING
AVERAGES FOR SELECTED YEARS 1926-55; FORECASTS FOR 1979-81

	Billions of current dollars					Billions of 1955 dollars		
						1979-81		
	1927-29	1937-39	1947-49	1950-52	1953-55	Low	Middle	High
Personal saving	.30	.21	.81	1.19	1.29	2.8	3.0	3.2
Undistributed corporation profits	.23	.20	.67	.74	.76	2.2	2.5	2.8
Depreciation allowances and similar business costs	.66	.59	1.28	1.89	2.65	8.4	9.1	9.8
Net bad debt losses of corporations	—.01	—.02	.07	.01	—.02			
Total gross business saving	.87	.76	1.88	2.62	3.39	10.6	11.6	12.6
Government receipts less expendituress	.04	—.07	.65	.66	.09	— .1	— .2	— .3
Government non-defence investment expenditure	.16	.17	.50	.80	1.07	2.7	2.9	3.1
Total government saving	.21	.17	1.15	1.46	1.17	2.6	2.7	2.8
Imports less exports of goods and services	.12	— .13	— .20	.23	.51	.5	1.0	1.5
Error of estimate	— .02	—	.02	.01	— .04			
Total saving	1.47	.93	3.66	5.51	6.32	16.5	18.3	20.1
	Per cent							
Personal saving	20.2	22.2	22.2	21.5	20.4	16.9	16.4	15.9
Undistributed corporation profits	15.7	21.6	18.4	13.5	12.0	13.3	13.7	13.9
Depreciation allowances and similar business costs	44.6	63.5	34.9	34.3	42.0	50.9	49.7	48.7
Net bad debt losses of corporations	—1.1	—3.0	—1.9	.2	— .3			
Total gross business saving	59.2	82.1	51.4	47.6	53.7	64.2	63.4	62.7
Government receipts less expenditures	3.2	—8.1	17.9	12.0	1.5	— .6	—1.1	—1.5
Government non-defence investment expenditure	11.0	18.3	13.5	14.5	17.0	16.4	15.9	15.4
Total government saving	14.2	10.2	31.4	26.5	18.5	15.8	14.8	13.9
Imports less exports of goods and services	8.1	—14.6	—5.6	4.1	8.2	3.1	5.5	7.5
Error of estimate	—1.7	.1	.6	.3	— .7			

Note: Detail does not always add to total because of rounding.

SOURCE: Wm. C. Hood and Anthony Scott, *Output, Labour and Capital in the Canadian Economy*, 1957, a study for the Commission, Chap. 7, Table 7.5, p. 323

As compared with the 1953-55 period, we anticipate that business saving may be a substantially larger proportion of all saving and that each of the other three main sources of saving may account for somewhat smaller proportions. The major change in business saving is expected through increases in depreciation allowances rather than undistributed profits. This increased weight of depreciation allowances is expected to arise from the greater importance of machinery and equipment relative to structures in the stock of capital, since depreciation reserves against machinery and equipment are likely to be built up more rapidly than those against structures.

Government saving is expected to be a slightly smaller proportion of total saving in 1980 than in the years 1953-55. This is mainly because government capital expenditures, as discussed in Chapter 15 and as elaborated in the study *Housing and Social Capital,* while expected to increase substantially, are not expected to increase as rapidly as Gross National Expenditure. Government non-capital expenditures on goods and services for civilian use on the other hand, are expected to increase much more rapidly than Gross National Expenditure and hence, making reasonable assumptions concerning budgetary practices, it appears likely that the three levels of government will collectively run a small deficit expressed in national accounting terms.

Personal saving is that part of personal income left after paying income taxes and after paying for purchases of consumers' goods and services. Personal income after taxes we expect to be about the same percentage of Gross National Product in 1980 as in 1953-55; the claims of business against Gross National Product represented by business saving will be a higher percentage, but the claims of government represented by government saving and government spending on non-capital goods will be a lower percentage. However, though we expect that in 1980 the ratio of personal saving to income after taxes will be at about its long-run average, this implies that it will be below its value in 1953-55. Personal saving will therefore be a somewhat smaller proportion of Gross National Expenditure and of total saving.

The difference between exports and imports is relatively small and correspondingly difficult to forecast. A very small proportionate difference in the forecast of either exports or imports makes a very significant proportionate difference in the forecast of the balance of imports over exports. It is likely that a generation from now the current account of the balance of payments will in some years show a deficit and in some years a surplus; the forecast shown above should be interpreted as implying that a relatively small deficit may be more common than a surplus, and that such deficits will be a smaller proportion of total saving than deficits on the current account are today. Of course foreign contributions to the total of saving arise also from the retained earnings and depreciation allowances of foreign-owned concerns operating in Canada and these are offset to some extent by similar investments of Canadian-owned concerns abroad. We shall refer to these matters more fully later in this chapter.

Apart from the funds that are re-invested in the businesses in which they are earned, saving flows from savers to investors through the capital market. The efficient functioning of the capital market is therefore of vital importance to the performance and in particular to the growth of the economy. Recognizing this, we arranged for a study of the capital market in Canada to be prepared. This study, which will be entitled *Financing of Economic Activity in Canada,* will contain new statistics on financial flows in Canada for the years 1946 to 1954 which are a logical supplement to the data in the National Accounts already published by the Dominion Bureau of Statistics. The National Accounts show for each of four "sectors" of the economy (persons, business, government and the "rest of the world"), the balance of saving relative to investment. This balance for any sector, if positive, represents the amount of that sector's current income that has been used for acquiring financial assets or existing real assets from other sectors. In the capital market study, the National Transactions Accounts show these balances for a larger number of sectors and, for each, show separately its annual net increases in financial assets and liabilities of which several classes are distinguished.*

It is not to be anticipated that serious, fundamental deficiencies in our financial system will be uncovered in the study, *Financing of Economic Activity in Canada.* As we have shown, the fact is that the Canadian economy in the last decade has been able to produce and distribute an immense and rapidly increasing flow of goods and services. This could not have been accomplished if the financial machinery were not working well. If there are features of the capital market which are not wholly satisfactory they are decidedly of the second order of importance. But we have some apprehensions. We have mentioned one in relation to municipal finance in Chapter 15 and in Appendix I. Later in this chapter we shall mention some that are related to foreign investment. Before doing so it seems appropriate to repeat something that we said in our Preliminary Report relative to the working of the domestic capital market.

There does appear to be an inadequate supply of Canadian capital which can be readily mobilized for large-scale projects requiring a concentration of equity capital on which no immediate return may be expected. In this connection it was suggested to us by some responsible witnesses that the legislation restricting the kind of investments which may be made

* The ways in which economic activity is financed in Canada will be reviewed and assessed on the basis of these data and much of the information in the study we have mentioned. However, the study is not expected to be completed for some months and we cannot therefore draw upon the analysis and appraisal of the capital market which it will contain to the extent we would have wished. This part of our report in consequence is more restricted than we had planned originally.

by life insurance companies and by trustees should be changed to allow more funds from those sources to be made available for investment in equities. Other equally responsible people expressed the view that trustees and institutions in a trustee position must pursue cautious policies in their investment programmes and that changes in existing legislation are not needed. Quite obviously it is the direct responsibility of trustees and of the managements of life insurance companies to decide how their funds should be invested and it may be that the policies of these companies are more significant than legislation in determining how much of their savings is invested in equities. We believe, however, that some greater degree of flexibility in the legislation governing investments by trustees and by life insurance companies would be desirable in order to allow trustees and the managements of life insurance companies more freedom in exercising their judgment in the field of investments generally. In particular, we propose that:

(a) The restrictions in the various provincial trustee acts upon the powers of trustees to invest in equities should be re-examined and modified.

(b) The limitation of 3 per cent on investments of life insurance companies which come under the so-called basket clause should be raised.

(c) The 15 per cent limitation on investments of life insurance companies in common stocks might also be raised.

(d) The regulation respecting the valuation of common stock investments by life insurance companies should be changed to provide that any market depreciation below cost or book value may be amortized over a period of years as compared with the present requirements whereby any decline in market value of securities must be written off each year as it occurs.

But even if changes along the above lines were made, it would not be possible for trustees and life insurance companies, even if they wished to do so, to provide all or even a substantial proportion of the capital which will be needed for equity financing in the years to come. If, therefore, Canadians are to invest in new large-scale ventures, it may be necessary to devise new mechanisms for concentrating available venture capital and for spreading the risks more widely. (Indeed the whole question of the rate of savings in Canada should be given careful study in view of the large potential demands for capital that lie ahead.) It seems clear that in addition a continued inflow of foreign capital will be needed for such purposes, particularly in periods of rapid expansion.

A fuller knowledge of the strengths and weaknesses of the Canadian capital market must await completion of the study on *Financing of Economic Activity in Canada*. However, in Chapter 20 we shall make observations on the limitations, some ineradicable others not, of the capital market as the place in which monetary controls are initiated and through which they must operate. The remainder of this chapter will be devoted to a discussion of foreign investment in Canada.

Canada has never been able to provide enough capital from its own resources to finance the growth and development of the country. Indeed, one of the first and most important problems facing Sir John A. MacDonald and his colleagues was the raising of funds abroad to build the Canadian Pacific Railway. The growth of the country, at any stage in its history, would have been much slower without large supplies of capital from foreign countries, principally from the United Kingdom and the United States. All our periods of great economic activity and expansion in peacetime have been characterized by heavy inflows of capital from abroad; in periods of economic stagnation, we have been importing very little capital. Canada has always been a debtor nation. And it is therefore appropriate that the Commission should have spent some time in considering the question of foreign investment in Canada including its implications both in economic and political terms.

In the late nineteenth century, most of the foreign investment in this country came from the United Kingdom. Most of it was concentrated in the railways, in financing the requirements of government at all levels and in the construction of basic utilities. Also, most of it was in the form of debt rather than in equities.* In these respects, foreign investment in Canada prior to, say, 1914, was very similar to foreign investment in the United States during the same period. In both countries, the majority of this investment was paid back during and after the First World War. (In the United States, the repayment process started prior to 1914; in Canada it began somewhat later.) In more recent years, however, the patterns have changed remarkably with the growth and spread of Canadian subsidiaries of American and other foreign companies. In the 1920's with the development of the newsprint and mining industries, foreign capital began to be invested in Canada in the form of equities rather than debt. It was during the 1920's moreover, that the most important form of investment began to be direct investment in Canadian industry** mostly in Canadian subsidiary companies of foreign-owned

* Debt is a fixed monetary claim such as represented by bonds or mortgages while equities are variable proprietary claims such as those arising from the ownership of stocks and shares.

** Direct investment refers to the investment in or retention of earnings by concerns which are effectively controlled by non-residents. These include all concerns in Canada which are known to have 50 per cent or more of their voting stock held in one country outside Canada. In addition, in a few instances, concerns are included where it is known that effective control is held by a parent firm with less than 50 per cent of the stock. In effect this category includes all known cases of unincorporated branches of foreign companies in Canada and all wholly-owned subsidiaries, together with a number of concerns with a parent company outside of Canada which holds less than all of the capital stock. In addition, there is a relatively small number of Canadian companies included in cases where more than one-half of their capital stock is owned in a single country outside of Canada where there is no parent concern. These exceptional cases are confined to instances where control is believed to rest with non-residents.

concerns. Also during this period, the relative importance of United Kingdom investment declined rapidly while that of American investment increased. These trends have become even more pronounced since the end of the last War as will be seen from the following table:

Table 18. 2

FOREIGN INVESTMENT IN CANADA
1926 TO 1955

	1926 Billions	%	1945 Billions	%	1955 Billions	%	Percentage increase 1926 to 1945 %	1945 to 1955 %
Foreign long-term capital invested in Canada:								
United Kingdom..	2.64	44	1.75	25	2.35	18	—50	34
United States.....	3.19	53	4.99	70	10.29	76	56	106
Others..........	.17	3	.35	5	.83	6	106	137
Total......	6.00	100%	7.09	100%	13.47	100%	18	90
Foreign direct investment in Canada:								
United States.....	1.4	78	2.3	85	6.5	84	64	182
Others..........	.4	22	.4	15	1.2	16	—	20
Total......	1.8	100%	2.7	100%	7.7	100%	50	185
Type of foreign investment in Canada:								
Debt............	3.4	57	3.3	46	4.0	30	— 3	21
Equity..........	2.6	43	3.8	54	9.5	70	46	150
Total......	6.0	100%	7.1	100%	13.5	100%	18	90

SOURCE: Based on Irving Brecher and S. S. Reisman, *Canada—United States Economic Relations*, 1957, a study for the Commission, Chap. 6, Table 19, p. 92.

In the ten years since the War, the total amount of United States investment in Canada has more than doubled. The increase has been very largely in the form of direct investment and is represented in the main by equity holdings. It should be noted furthermore that the figures shown in the table are based upon the book value of the investments. If it were possible to establish the real value or the market value of United States direct investments in Canada, the increase since the War would almost certainly be many times greater than the amount shown in the table for 1955. If, in addition, the very substantial increases which have taken place in the last two years were taken into account, the total of United States investment in Canada at the present time and the increase in the total since the end of the War would be even greater still.

During the same period Canada's foreign assets, including long-term investments in other countries, have also been increasing. Such assets amounted to $6.9 billion in 1955, nearly double the corresponding figure in 1945. A substantial part of the total, however, is in the form of government loans and advances and government holdings of gold and foreign exchange. Canada's direct investments in other countries amounted to $1.6 billion at the end of 1954 but this includes investments by Canadian companies which themselves are controlled by foreigners. More complete statistics of Canada's investments in other countries and of foreign investment in Canada are contained in the study, *Canada-United States Economic Relations.*

There are several ways of looking at the contribution made by non-residents to the financing of investment in Canada. One approach is to show the extent to which Canada has drawn on the resources of other countries, on balance, and to compare this with total investment in Canada. This "net use of foreign resources" may be measured by the deficit in Canada's international transactions, plus undistributed profits of corporations controlled by non-residents minus undistributed profits of Canadian-controlled enterprises abroad. Another approach is to show the "gross use of foreign financial resources" and to compare this with total investment in Canada. The "gross use of foreign financial resources" may be defined as new capital of foreign origin supplied to enterprises and governments in Canada.* In both of these approaches the use of foreign resources and investment in Canada may be measured with or without taking depreciation allowances into account. For our immediate purpose we shall exclude depreciation allowances from the estimates.

According to estimates published by the Dominion Bureau of Statistics, the net use of foreign resources as a percentage of total capital investment in Canada was about 25 per cent in the five years 1926 to 1930. Similar estimates are not available for the years 1931 to 1945. For the four years 1946 to 1949 there was a net capital outflow mainly due to large government loans to the United Kingdom and other countries for reconstruction after the War. The net use of foreign resources as a percentage of total capital investment in Canada in the five years 1950 to 1954 was 13 per cent. A tentative estimate of the corresponding percentage for 1956 is about 33 1/3 per cent. The corresponding estimates of the Dominion Bureau of Statistics of the percentage of the gross use of foreign resources to total capital investment were about 50 per cent in the five years 1926 to 1930: 21 per cent for the four years 1946 to 1949; 33 per cent for the seven years 1950 to 1956, with the percentage for 1956 being tentatively estimated at about 40 per cent.

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* More precisely, this measure covers the inflow of long-term foreign capital plus the non-resident share of undistributed profits of foreign-controlled enterprises in Canada. Among the movements disregarded are the foreign funds supplied to Canadian capital markets as a result of security trading, and also resident and non-resident capital outflows from Canada.("Gross use of foreign financial resources", as used here, is equivalent to the measure "direct foreign financing" used by D.B.S.)

These few statistics and percentages will be sufficient to show the very important part which foreign capital has played in Canada's most recent periods of great economic expansion. A very considerable part of this foreign investment is in the form of direct investment in equities, whereas a much larger proportion of domestic investment is in such things as houses and highways and farms and railroads which are not likely to appreciate in value to the same extent. Furthermore, there is a snowballing effect about investments in equities. If a substantial part of earnings are retained and re-invested, the original investment tends to increase at a relatively fast rate.

A big part of the foreign investment in Canada is concentrated in subsidiary companies controlled by non-residents in the resource and manufacturing industries. These are the industries which have been growing at a fast rate and which may be expected to continue to grow at a faster rate than the economy as a whole. It follows that the value and importance of the foreign investments which have been made in these industries should also continue to increase at a relatively fast rate, quite apart from any new inflows of foreign capital. Well over half of the increase in United States direct investments in Canada since the War is accounted for by the expansion of companies which were controlled by United States interests at the beginning of the period, and most of this increase was due to the retention of earnings by the companies in question.[1] The retention and reinvestment of earnings, plus amounts set aside for depreciation and depletion, ensures the rapid growth of existing companies and particularly the larger ones which are well entrenched, well financed and which hold dominant positions in their respective industries. In many of Canada's fastest growing industries the principal companies, the ones which hold the dominating positions, are controlled by non-residents. This concentration in certain key industries and in large companies wielding extensive influence is the most important factor to be considered in connection with foreign investment in Canada.

A distinction should be noted between non-resident ownership and non-resident control. In some cases there may be a wide diffusion of ownership and no one group may hold a controlling position. In other cases one group or one parent company may control the operations of a Canadian subsidiary company through ownership of a subtantial percentage of its shares. It follows that the percentage of non-resident control in certain companies and of certain industries may in some cases be higher than the percentage of non-resident ownership of such companies and in such industries.[2] The tendency for a few large companies to predominate in many industries is much the same in Canada as it is in the United States and the growth of large companies in Canada is often linked with the growth of their parent companies in the United States. In this way control by non-residents including United States parent companies of a relatively few large Canadian companies may carry with it a dominating influence over the operations of a whole industry.

The more important Canadian industries in which a relatively few companies controlled by non-residents have a dominating influence include the oil and gas industry, some sections of the mining, smelting and refining industry (for example aluminum, iron ore and asbestos) some sections of the chemical industry and at least three of the more important secondary manufacturing industries, namely automobiles, electrical apparatus and supplies and rubber products. This list includes several of the industries which have been expanding and developing most rapidly in recent years and some of the industries which we believe have the greatest prospects for continued growth over the next quarter century. Three examples of spectacular developments during the last few years, each of which have been financed very largely with American capital are the tremendous program of oil and gas development in Western Canada, the Kitimat aluminum project in British Columbia and the extraction of iron ore in Labrador and New Quebec. As we said in earlier chapters, we predict considerable further expansion in each of these industries over the next twenty-five years.

In the pulp and paper industry, ownership and control is more widely diffused. The nine largest companies account for 55 per cent to 60 per cent of the total production of this industry and of these nine, three are controlled by non-residents. This is only part of the picture, however, because in addition many of the medium-sized companies in the industry are controlled by non-residents. At the beginning of 1954, 55 per cent of the total capital employed in the industry was controlled by non-residents and this percentage may have risen somewhat since then through the purchase of a number of formerly Canadian-owned companies by foreign interests. There are, of course, many other industries of great importance in which the amount and influence of foreign capital is of much less significance. These include the primary iron and steel, food processing, textiles, transportation, public utilities and construction industries. The extent of foreign investment in agriculture is negligible. More than four-fifths of the capital invested in the chartered banks is Canadian. In other financial institutions such as the insurance companies and the loan and finance companies, the extent of foreign ownership and control is considerable but not dominant. Detailed statistics of non-resident ownership and of non-resident control in various industries are set forth in *Canada-United States Economic Relations*. "The extent of non-resident control has increased with the growth of Canadian industry. No other nation as highly industrialized as Canada has such a large proportion of industry controlled by non-resident concerns."[3]

This in rough outline is the statistical picture of foreign investments in Canada which we propose to examine and discuss. Before doing so, it may be helpful to review some of the reasons why foreign capital has been attracted to Canada and to emphasize the great benefits which we have derived from this. Canada has always welcomed the investment of foreign capital because without it our rate of growth would necessarily have been much slower. One of the principal determinants of growth of the Canadian economy has been the development of our resource industries including forest products, mining, smelting and refining, oil and gas and hydro-electric power. These industries have all required larger amounts of capital than Canadians have been able to provide themselves. Even today when Canadians are enjoying the highest standard of living in their history and when the volume of savings is also very high, Canada just does not have enough large pools of capital available to finance large projects on which, in some cases, no return may be expected for some considerable time.

But the mere fact that Canada has been willing to borrow abroad and has always welcomed the investment of foreign capital here would not by itself have been enough to attract an inflow of capital to this country. Nor would the availability of rich and plentiful resources and opportunities for growth. Fortunately in addition the "investment climate" in Canada has been favourable. Canada has had a long tradition of freedom for the flow of capital and income across its borders. Canada has also had a long history of orderly and responsible government. Moreover, a hard-working people with a strong desire for material advancement, a skilled labour force, a well developed educational system, adequate transportation and other social-capital facilities, reasonably stable economic and social conditions and positive encouragement by all levels of government have all helped to make this country an attractive outlet for private foreign capital. This has been stimulated and encouraged by the similarity in political institutions, language and social customs with the main capital exporting countries of the past century, namely the United Kingdom and the United States; as well as Canada's proximity to the United States which has been the predominant source of foreign capital in more recent times. Furthermore there is, of course, the basic fact that opportunities for profit are great in Canada and the risks involved are relatively small.

As we have intimated, Canada still does not have the kinds of large capital pools concentrated in the hands of a single or a very few enterprises which are needed for many investment projects undertaken in a modern industrial state. Furthermore, and of at least equal importance, many Canadian investment undertakings require not only substantial outlays of capital but also an advanced technology and access to research facilities, specialized entrepreneurial and management skills; assured markets for a major part of the output; and the efficiency and the reduction in the element of risk which is associated with large vertically integrated enterprises. Non-residents, and especially Americans in more recent years, have been able to provide this combination of money, technology, skills and markets, without which the Canadian economy would have been developed much more slowly and less efficiently. In some few cases Canadian capital and Canadian entrepreneurs have been associated with Americans in such undertakings. An example of this is the very considerable development of the Iron Ore Company of Canada in the Quebec-Labrador area, which the Commission stopped off to see on its way from Goose Bay, Labrador to Sept-Iles, Que., in the summer of 1956. This project, while spear-headed by Canadians, was made possible only because of the inclusion in the venture of a group of American steel companies who contributed not only a large part of the capital and technical knowledge which was needed but also provided an assured market for the ore to be produced.

But this example of a development project in which both Canadians and Americans participated is something of an exception. More often such projects are financed entirely by non-residents who control the enterprise completely. The explanation which is often given is that Canadians as investors are too timid and are unwilling to undertake large projects which require a great deal of capital. It is quite true, as we have said, that Canadians have had insufficient capital to undertake alone many of the larger projects which have been developed in recent years. But this does not mean they have been unwilling to participate in such ventures. In fact quite the opposite is true. Furthermore, it should be stressed that risk-taking by investors is a relative concept. Investment undertakings which would entail a considerable element of risk for Canadians are often a routine operation for large non-resident corporations. The Canadian venture, large though it may be by Canadian standards, is typically only a small part of the non-residents' global operations. Furthermore, as we have noted, the non-resident corporation may be expected to have the ancillary facilities including technology, skills and markets, in the abundant quantities which are required to reduce the risks involved to more or less negligible proportions.

There are other and more positive factors which encourage Americans and Europeans to invest their capital in Canada in addition to those which have been mentioned. The United States economy has developed to the point where it is generating large amounts of savings and there are many Americans, including those responsible for managing large American corporations, who are looking outside the borders of the United States for investment opportunities which promise a higher return on capital than could be obtained if it were employed at home. Many European investors may believe that Canada is a relatively safer place to invest than their own countries.

The motive for foreign direct investment in Canadian resource industries has been a twofold one, partly the opportunity for profits and partly, and in some cases more importantly, the desire to develop and guarantee sources of supply of materials in which the United States and world needs are, or promise to be, greater than can be supplied from existing sources. In certain cases the United States Government has encouraged direct investment in Canada in connection with its programme of stockpiling strategic metals. In most instances comparative costs of production have been a principal consideration in deciding to develop resources in Canada rather than elsewhere. In others Canada has been selected in preference to cheaper alternative sources because of the more favourable "investment climate" here and because of our proximity to the United States.

The motive for direct investment by non-residents in Canadian secondary manufacturing industries has been to expand the parent companies' operations into the Canadian market in the most desirable way. There are a number of reasons in the case of manufactured goods why it is preferable for a foreign parent corporation to establish a Canadian subsidiary rather than to supply the Canadian market through exports. The Canadian tariff has been an important factor historically, and in some periods the dominant factor, in encouraging foreign companies to locate in Canada. Some years ago the desire to take advantage of preferential access to the markets of the Commonwealth was an important factor in the location or expansion of foreign-owned subsidiary companies in Canada. In this way the "Empire content" requirements of the commercial and tariff policies of Commonwealth countries could be met. In the post-war period extensive dollar import restrictions imposed by Commonwealth countries have reduced very considerably this advantage which was formerly enjoyed by Canadian concerns. In this respect tariff considerations are now of less importance in attracting foreign manufacturers to establish subsidiaries in Canada. However, and despite the reduction in the level of protection since the War, the Canadian tariff is still important in encouraging American and other foreign companies to supply the Canadian market from plants in Canada rather than from larger and often more economic plants in the United States. Moreover, in some cases the structure of the tariff influences the extent and the nature of the manufacturing operations that are carried on in this country by Canadian subsidiaries of foreign firms.

Taxation considerations, not only in Canada but in the United States as well, have also played a part in helping to attract foreign investment to Canada. Probably the most important of these have been special United States income tax concessions designed to encourage Americans to explore for gas and oil, not only in the United States but in other countries of the world as well. These have given many Americans a material incentive to come to Canada and explore here for oil and gas.

Canadian tax laws which give each new mine a three year period of exemption from taxation, and in addition provide generous depreciation and depletion allowances, have helped encourage American (and other) investment in the mining industry. The absence of a capital gains tax in Canada has been a factor of great importance. Still another, but one that is less important, is the fact that Canadian corporation income tax rates have been lower than those prevailing in the United States, especially during the Korean War, when there was an excess profits tax in the United States. Canadian succession duties have also been a factor, and a number of family-owned companies have been sold to foreign concerns in order to obtain the funds with which to pay such levies.

The comparison is often made between Canada at this stage of her development with the United States of, let us say, 50 years ago and the assumption made that the Canadian economy will, like the American, mature to the point where it could supply all its own capital requirements. To a degree, this comparison is a valid one and we would certainly predict that Canada will be able to meet an increasing proportion of her own capital requirements in the years to come. We should point out, however, that over the last 50 years, income tax and succession duty rates have been rising. In former times in the United States it was relatively easier for private sources of investment funds to be accumulated than it is today in Canada when income tax and succession duty rates are high. Although the ever-widening sphere of public investment has partly compensated for the diminishing ability to accumulate large personal savings, private funds will continue to be of importance in financing business activities and their relative scarcity in this country will continue to encourage investment from abroad. And quite apart from new capital inflows is the more or less automatic growth of existing foreign investments in Canadian subsidiaries through the retention and reinvestment of earnings. Moreover, comparisons with the United States of, say, 50 years ago often overlook the fact that most of the foreign investment in that country was in the form of bonds which did not automatically increase and appreciate in value and which were subject to repatriation. The same conditions do not apply to foreign direct investment in Canada today.

Finally, in recent years the flow of foreign capital into Canada seems to have had a snowballing effect. Each new development undertaken creates new investment opportunities. Canada's economy since 1945 has been expanding at a rapid rate and faster than in the United States. Much of this foreign capital flowing to Canada today, including much of it that is being furnished by Americans, is coming here to take advantage of this phenomenal rate of growth and of the great opportunities for further expansion and development in the years ahead.

These, then, are some of the very real and substantial reasons why foreign capital is being invested in Canada in such considerable amounts and in such important ways. The considerations and the benefits which non-residents obtain by investing their capital profitably in Canada are obvious. The advantages of such investment to Canadians are equally clear; the search for profits through direct investments by foreign concerns has directly influenced the rate of economic growth and industrial diversification in Canada and the standard of living of Canadians. The development of our resources, of facilities for processing them and of Canadian manufacturing industries has been stimulated by the activities of non-resident corporations in their energetic search for supplies and their pursuit of markets. Without these contacts with foreign corporations much of this development would have taken place more slowly, if at all, and at higher cost.

Connections with a parent or affiliated company in the United States or abroad often mean advantages which could not be duplicated by a purely Canadian enterprise or could be duplicated only at considerably greater cost. Availability of capital is important but so too, as we have said, are technology, research, product development, technical and managerial personnel, training facilities, access to markets, access to sources of supplies and accumulated experience over the whole range of business activity. The point about access to markets bears constant repetition and continued emphasis. Most of the output of many of Canada's basic industries cannot be consumed at home and must be exported. In such circumstances the assured market which foreign parent companies can often provide to their Canadian subsidiaries may be imperative to offset the heavy risks which otherwise would be inherent in the large-scale capital investment required to develop these industries.

The benefits of foreign investment that we have mentioned are very real and tangible. It is more difficult to state in similarly precise terms what the dangers are in the present situation and what conflicts might occur between the interests of Canadians and the interests of the foreign owners of wholly-owned subsidiaries of foreign companies operating in Canada. In the course of the Commission's hearings, concern was expressed over the extent to which our productive resources are controlled by non-residents, mostly Americans. Many Canadians are worried about such a large degree of economic decision-making being in the hands of non-residents or in the hands of Canadian companies controlled by non-residents. This concern has arisen because of the concentration of foreign ownership in certain industries, because of the fact that most of it is centred in one country, the United States, and because most of it is in the form of equities which, in the ordinary course of events, are never likely to be repatriated. Some people think it is foolish to worry too much about the possible dangers of foreign investment in this country. However, the contrary opinions on this subject which we have mentioned do in fact exist and if a period of political or economic instability should occur, they might develop into demands for restrictive or discriminatory action of an extreme kind, the consequences of which would be unfortunate for all concerned.

At the root of Canadian concern about foreign investment is undoubtedly a basic, traditional sense of insecurity vis-a-vis our friendly, albeit our much larger and more powerful neighbour, the United States. There is concern that as the position of American capital in the dynamic resource and manufacturing sectors becomes ever more dominant, our economy will inevitably become more and more integrated with that of the United States. Behind this is the fear that continuing integration might lead to economic domination by the United States and eventually to the loss of our political independence. This fear of domination by the United States affects to some extent the political climate of life in Canada today. Therefore it is a factor which has some bearing upon "the probable economic development of Canada and the problems to which such development apears likely to give rise".

Undoubtedly there could be circumstances where the best interests of Canada might not be exactly the same as the best interests of the shareholders of a foreign parent company with subsidiaries in Canada and also perhaps throughout the world. For example, in the oil industry the same large international companies, or their affiliates and subsidiaries, which broadly speaking dominate the producing, refining and marketing sections of the Canadian industry, are the principal suppliers of crude oil to the large market centred in Montreal, and are important suppliers in most areas of the United States. The immediate and continuing interest of the Canadian subsidiaries of these companies, and indeed of Canada, is to find increasing markets for Canadian oil in the United States, or, failing that, perhaps in the Montreal area. Without growing markets a large part of the oil being discovered in Western Canada would have to be "shut in" perhaps for some considerable period. The importance and the immediacy of this problem of markets for the oil industry in Canada is clear enough to Canadians. Quite understandably, it may appear somewhat less important and less immediate to those in other countries who control the situation and who have world-wide interests to consider. In other industries, in mining or forest products, for example, the interests of the Canadian subsidiary and of the foreign parent may not always be the same in considering possible expansion of operations. Often, alternative claims for expansion in other countries must also be considered by the management of the parent company before a decision is arrived at.

Again, conflicts of interest might arise in the setting of prices on shipments between Canadian subsidiaries and their parent companies. For example, where Canadian subsidiaries supply raw materials to the parent company, it is possible that the price they charge might be too low. Alternatively, Canadian subsidiaries might be required to pay too high a price for materials, equipment and other goods purchased from their foreign parent companies or too high charges for administration, research and other services. The officials of both divisions of the Department of National Revenue attempt to ensure that these things do not happen and that the Canadian treasury does not lose revenue through inappropriate valuations of subsidiary-parent company transactions. But it is not always easy to establish fair prices in such inter-company arrangements which are difficult to investigate and police.

In some cases Canadian subsidiaries of foreign companies may be restricted as to the sources of their supplies, materials and equipment; they may be expected to purchase their requirements from their parent companies or from the sources which supply such parent companies, particularly in purchases of machinery and equipment. Sometimes it is said that price considerations notwithstanding, Canadian subsidiaries often buy equipment manufactured in the United States instead of comparable equipment manufactured in Canada or in other countries. Such purchasing policies may sometimes be laid down officially but perhaps more often it is a matter of free choice on the part of the personnel of the Canadian subsidiary who may be trained to do things in the same way as they are done in the factories of their American parent company. This strong bias in favour of United States suppliers is real and should not be underestimated.

In some cases, Canadian subsidiaries of United States parent companies are permitted to export their products to the markets of Commonwealth countries because of preferential tariffs, but are prohibited from competing with their parent companies in the other markets of the world. In most cases, there may be little possibility of Canadian companies being able to compete successfully with much larger American companies including their own parent concerns but this may not always be so.

One other consequence of the relationship which exists between Canadian subsidiaries and their parent companies in the United States presents itself occasionally in wage negotiations. There have been cases where the employers have been represented not by officials of the Canadian subsidiary but by representatives of the management of the American parent company. At the same time, the employees have been represented, not by the heads of their Canadian local union, but by senior officers of their international union with headquarters in the United States. In these circumstances, suspicion may well arise that the negotiators are more interested in setting precedents for impending wage negotiations in the United States than they are with the immediate problems of the Canadian subsidiary and its employees.

It would be unfair to overstress these unfavourable operating patterns. There are so many real advantages to Canada arising from the activities of foreign-controlled companies in this country that conflicts or potential conflicts between the interests of Canada and those of the foreign owners seem somewhat small and unimportant by comparison. Moreover, these conflicts of interests would be more the exception than the rule. Nevertheless there can be occasions when the activities of foreign-controlled companies in Canada may not be conducted entirely from the standpoint of the best interests of our economy.

We have stated that the real concern about foreign investment in Canada is not so much about its aggregate amount as about the fact that its concentration in direct investment in subsidiary companies confers upon non-residents a large measure of economic control over some of our most important industries and industrial activities. We do not suggest that this control is, or is likely to be, used maliciously to damage Canadian interests or that it is being employed in a way which flouts the wishes of our people and our governments. Nevertheless a situation does exist in some sectors of the economy where legitimate Canadian interests may be overlooked or disregarded. The non-resident owners of the larger companies which have a dominating influence may not in all cases be aware of the Canadian point of view.

In attempting to suggest reasonable and realistic objectives respecting foreign investment and the operations of Canadian subsidiaries of foreign companies, the Commission is aware that it is treading on somewhat treacherous and uncertain ground. It is important that Canada should not discourage foreign capital by unfair discriminatory action and that the free movement of interest and dividends to foreign investors should not be interfered with by currency restrictions. Measures such as these would damage our national reputation for good faith and fairness in dealing with foreign investors who have placed their capital in Canada and could well result in a slowing down in the rate of foreign investment in the future and thus in the rate of our economic activity and expansion. At the same time we should not be unmindful of the reasons which have led to such substantial foreign investment being made in Canada including the expectations of investors that their investments here will appreciate in value very considerably in the years to come. We are in a reasonably strong position, therefore, to state the objectives and wishes of Canadians in this matter without fear that by so doing we shall precipitate a flight of capital from Canada or a drying up of further inflows — providing we are fair and reasonable about the way we go about it.

In the light of these various considerations, we believe the main objectives of Canadians in this matter should be: first, to see a larger share of foreign capital invested in the form of bonds and mortgages, which do not involve control of large sectors of the economy; secondly, to see that the part of foreign investment which is invested in the resource and manufacturing industries is associated in some degree with Canadian capital and Canadian interests; and, thirdly, to ensure that control of the Canadian banks and other financial institutions is retained in Canada. We shall propose more detailed objectives respecting the operations of foreign concerns which do business in Canada through the medium of Canadian subsidiary companies, unincorporated branches, Western Hemisphere Trade Corporations, etc. Our purpose in doing so is to ensure that such concerns are aware of and susceptible to Canadian influences and opinions when they make decisions respecting their policies and activities in Canada. We believe Canadians should have more tangible assurance than they now have that the people who are responsible for the management of such foreign-owned concerns will, whenever reasonably possible, make decisions that are in the best interests of Canada; that such concerns in effect become more "Canadian" in outlook. We do not suggest by this the development of a narrow nationalistic outlook; nor that the concerns in question should be restricted in their access to their parent companies and to all the benefits and advantages they obtain as a result. The following specific suggestions respecting desirable objectives for the operations of such foreign-owned concerns would not have these effects; we believe they would be of benefit to all concerned:

(1) wherever possible, such concerns should employ Canadians in senior management and technical positions, should retain Canadian engineering and other professional and service personnel, and should do their purchasing of supplies, materials and equipment in this country;

(2) they should publish their financial statements and make full disclosure of the results of their Canadian operations;

(3) they should include on their boards of directors a number of independent Canadians and they should sell an appreciable interest in their equity stock to Canadians.*

It does not appear that the first of these desired objectives involves much of a problem. By and large, Canadian subsidiaries of foreign companies do employ Canadians in senior management and technical positions whenever they can find qualified men to fill them. In fact, in recent years, a number of the better known foreign-controlled companies have appointed Canadians to their top executive positions. Furthermore, many people who have come from abroad to manage Canadian subsidiaries of foreign companies have settled here permanently and have become useful and helpful Canadian citizens in every sense of the term. It is also true that a great many of these concerns do, in fact, purchase their requirements in Canada whenever it is economically possible for them to do so. We believe such policies are desirable in themselves. They encourage the development of Canadian management and technical talent, they stimulate employment and they are good for the economy as a whole.

* We have in mind something of the order of 20 per cent to 25 per cent.

The second objective is that foreign-owned concerns should publish or make available their financial statements showing the results of their operations in Canada. If these concerns, more particularly the larger ones, were owned in Canada, they would be required to supply copies of their financial statements to Canadian shareholders and in this way, if there were more than just a few shareholders, these statements would be made public. Generally speaking the parent concerns publish their own statements in considerable detail in their own countries. It is not unreasonable therefore that Canadians should wish similar information about the activities of the subsidiaries in this country. Indeed, it is our opinion that the community at large is entitled to be interested in the financial results of the operations of the larger foreign-owned concerns operating in this country, since in many cases these operations have a direct bearing upon economic activity and the level of employment. We do not propose that foreign-owned concerns operating in Canada should be forced to publish their financial statements, but we believe it might well be in their best interests to do so voluntarily. Such a step should improve the public relations of such concerns and should allay unjustified suspicions about their operations and activities in Canada.

The third objective is that Canadian subsidiaries of foreign companies (particularly the larger well established ones) should sell some part of their equity stock to Canadians and include a number of independent Canadians on their boards of directors. A number of companies have adopted this policy and have said that it has worked out well and to their advantage. Certainly we see no reason why, if the Canadians selected as directors were able and conscientious men, the adoption of such a policy would not work out to everyone's advantage. In addition to the fact that the public would have some assurance that broad Canadian interest would not be lost sight of in the everyday discussion and decision of company policies, the companies in question would be better informed of Canadian views and attitudes. Both in the case of long-range company planning and in decisions concerning day-to-day operations, such Canadian directors would not be likely to forget the broader interests of the nation.

The sale to Canadians of some portion of the equity shares of Canadian subsidiaries of foreign companies would, of course, be advantageous in itself because it would provide greater opportunities for Canadians to invest their savings in growing sectors of economic activity in their country. Moreover, it would make Canadians more aware of the important role of these companies in our economy and at the same time it would encourage these companies to take into account the wishes of their Canadian shareholders. But the two proposals — that independent Canadians should be appointed to the boards of directors of such companies and that some portion of the equity shares be sold to Canadians — are directly related; they complement each other and neither one would be nearly as effective by itself. The influence which independent Canadian directors could wield in discussions about company policies would not be of great importance unless they represented a group of the company's shareholders. In fact, without this representation to support them, the position of such directors would be little more than that of employees or paid advisors to the foreign parent company. Similarly, a loose group of Canadian shareholders could hardly expect their views to be effectively listened to without forceful and intelligent representation.

The proposal that Canadian subsidiaries of foreign companies should appoint independent Canadians to their boards of directors and sell stock to Canadians is, of course, not a new one. But fewer companies than one might have expected have done anything about it. It seems to us that on the whole those Canadian subsidiaries of foreign companies which have adopted the policies we are suggesting have made a greater contribution to the Canadian economy in many ways than others that have not such policies. Those that have done so appear to be more interested and aggressive in developing their Canadian operations and to be more aware of Canadian problems and viewpoints. There is no way in which we can prove this general proposition scientifically — but it is a definite impression we have gained as a result of our travels, hearings and discussions.

Some foreign owners of Canadian subsidiary companies say that changes on the lines we have proposed might make things more complicated for them; that they could no longer operate their Canadian subsidiaries in just the same way as their various branches throughout the United States and other countries; that the separate interests of minority Canadian shareholders would have to be remembered when it came to setting prices on inter-company transactions, deciding dividend policies and so on. In fact, they say that it is simpler for them to continue their operations and arrangements in Canada in the way they are at present; there is no material incentive for them to do otherwise. There is some validity in this from the standpoint of the management of the foreign parent companies. And we doubt if there will be a widespread change in present policies — even though such changes may be thought desirable by Canadians — unless incentives are provided for this purpose. We believe, however, that such incentives could be given by some relatively minor changes in our tax laws and that they would be effective in bringing about the changes we have been discussing.

In Chapter 12 it was suggested that additional or special depreciation allowances might be granted to the secondary manufacturing industries (or to companies in all industries) in order to encourage them to keep their equipment and factory buildings modern and up-to-date. Another suggestion set forth in Appendix H is that companies in the oil and gas industries should be allowed to deduct the full amount of their property acquisition costs in addition to their exploration and development expenditures. It was suggested also that companies in these latter industries should continue to be granted an allowance for depletion and that it might be computed on a more favourable basis than the present one, or that, alternatively, they should be charged a lower rate of tax on profits earned in the production side of their activities. These suggestions for new and special tax concessions were put forward primarily with the objective of assisting Canadian companies and Canadian businesses to compete successfully with their much larger competitors in other countries whose financial resources and research facilities in many cases far surpass what is available in Canada. With this in mind and if these suggestions for new and special tax concessions are accepted, it would be reasonable, in the opinion of the Commission, to make them conditional in their application to foreign-owned Canadian subsidiaries upon such companies selling some part of their equity stock to Canadians and appointing some independent Canadians to their boards of directors. Unincorporated branches of foreign concerns and Western Hemisphere Trade Corporations doing business in Canada would have the option of incorporating their businesses under Canadian laws and qualifying for the new and special tax concessions which have been suggested or of continuing to enjoy whatever advantages they are at present entitled to under their existing forms of organization. This, incidentally, would tend to offset the advantages which certain foreign oil concerns operating in Canada through the medium of Western Hemisphere Trade Corporations enjoy at present vis-a-vis Canadian oil operators.

Another step which might be taken in the field of tax policy would be a further revision of the withholding taxes on dividends and interest payable to non-residents. The rate of withholding tax on dividends paid to non-residents is 15 per cent, except in the case of wholly-owned subsidiary companies. Until quite recently the rate was 5 per cent provided not less than 95 per cent of the shares of a Canadian company were held by a foreign parent. It was alleged that this differential discouraged the sale to Canadians of any appreciable proportion of the shares of Canadian companies controlled by foreigners. In order to meet this objection, the tax treaty with the United States has been amended to provide that the lower 5 per cent rate of withholding tax will apply in future to dividends and interest payable by Canadian subsidiaries of foreign companies even though such companies hold less than a 95 per cent interest in the Canadian company concerned. An arrangement that might be considerably more effective would be to charge a higher rate of withholding tax on dividends paid to non-residents by Canadian companies unless an appreciable percentage of the equity stock of such companies is held by Canadian investors. If for example the rate of withholding tax were made the same, i.e., 15 per cent, as that charged to all other non-residents who receive income from Canada, it could hardly be said to be discriminatory. The incentive of a lower rate could be offered to those companies which complied with the objectives we have listed.

The granting of applications for mining rights, oil leases and timber limits is the responsibility of the provinces under the Canadian constitution. With this in mind, the Commission suggests that provincial governments might well consider requiring foreign applicants for such rights in future to incorporate under Canadian laws and to take in Canadian partners. We suggest that the Federal Government take similar action with respect to the Northwest Territories and the Yukon.

There is one area in which we feel that stronger action should be taken. We believe it to be most important that Canadian control be maintained of our principal financial institutions — the chartered banks and life insurance companies which are incorporated in Canada. At the present time, the share of foreign ownership of the stocks of the Canadian chartered banks and of the life insurance companies incorporated under Canadian law is not particularly large. These institutions form the very core of our financial and business system and together they control a considerable proportion of the personal savings of Canadians. Moreover, it is through the banks that monetary policies are carried through and implemented. In a comparatively small country such as Canada it is desirable if monetary policy is to work smoothly and effectively that there should be a reasonably close and preferably a somewhat informal relationship between the officials of the central bank, on the one hand, and the officials of the commercial banks on the other. Such close and personal contacts and the mutual confidence which they should inspire could be removed, and the role of the banks and insurance companies in financing economic activity in Canada might be adversely affected, if control of these important institutions were in the hands of non-residents with major interests in other countries to consider. Such people might not have quite the same sympathetic understanding of, or interest in, the problems which from time to time beset the even flow of the Canadian economy. The Commission suggests that appropriate action be taken to prevent any substantial measure of control of these institutions from coming into the possession of non-residents. One way in which this might be accomplished would be to provide by statute that any shares in such institutions which in the future are acquired by non-residents of Canada would be ineligible to vote (we do not think it would be fair, however, for this restriction to be applied to existing non-resident holders of such shares). Alternative and perhaps more desirable ways of achieving the objective of keeping control in Canada of the chartered banks and life insurance companies which are incorporated in this country will no doubt occur to the officials who are responsible for supervising the operations of these institutions and to others. We believe firmly in the importance of the objective but we are not wedded to any particular method of achieving it.

One criticism of our proposal that a substantial portion of the equity in foreign-controlled companies in Canada be sold to Canadians is that a large portion of these shares would probably find their way eventually into the hands of non-residents, particularly Americans. American investors, both individual and institutional, have in the past bought Canadian equities on a large scale, and it is claimed that if 20 per cent or 25 per cent of the shares of a Canadian subsidiary company were sold in Canada it would not be very long before the majority of these would be held by non-residents rather than by Canadians. Some people think that if this should happen most of the advantages accruing from the policies we have suggested would be lost. With this we would agree; in our view it is important that an appreciable percentage of the shares of Canadian subsidiaries of foreign companies — we suggest 20 per cent to 25 per cent — be held by Canadian nationals or by *bona fide* residents of Canada. Therefore, if the amendments to the tax laws we have suggested are approved, we would suggest that the proposed incentives should be applicable only if the required percentage of shares is actually held or beneficially owned by nationals or *bona fide* residents of this country. The issue of shares transferable only to Canadians or residents of Canada or shares which lose voting rights on transfer to non-residents would create some difficulties, but we believe these would be more than offset by the advantages which would accrue in the long run not only for Canadians but for the companies concerned.

Some people have suggested that there is not enough capital in Canada available for investment to take up all the shares that might be offered in this way by all Canadian subsidiaries of foreign companies doing business in this country. This is quite true if this should happen all at once. But the changes which would be wrought by the kind of measures we have been suggesting would take place only gradually and over a period of years. They are not something which would happen suddenly or over night. In fact a waiting period could be provided for in amendments to the tax laws which would defer the application of the proposed incentives for a year or two or even longer and thus defer the time when action need be taken by the companies concerned. What is needed to begin with is to create the kind of climate, including an emphasis in the taxing statutes and in official attitudes, which would encourage the changes which we contemplate. There should be no compulsion and we would not expect the companies concerned to act with undue speed. The volume of Canadian savings available for investment has been increasing rapidly in recent years and we expect this trend to continue. A large part of Canadian savings has been invested in fixed interest obligations. As stated previously, we believe that non-residents should be encouraged to channel a somewhat larger share of their investment in this country into this type of financing, in government and corporate bonds and in mortgages on real estate, and that tax provisions should not restrict the flow of foreign capital for these purposes in any way. If this should happen a larger share of Canadian savings should become available for investment in equities. Under these circumstances, we see no reason why Canadians should not ultimately be able to find the capital which would be needed or how, in the process, the Canadian economy should be upset in any way.

There would of course be many other problems and difficulties to be considered and overcome in connection with the various proposals we have made in this chapter. In some cases when the proposals were worked out in detail it might prove necessary to modify them to some extent or to provide for exceptions. For example, it might be desirable to make exceptions in special cases for new ventures whose sponsors considered it would be unwise to invite public participation because of the uncertainties involved, and also perhaps in the case of some Canadian subsidiaries of foreign concerns which for one reason or another might not be able, or should not be encouraged, to sell shares to the public. Undoubtedly there would be difficulties such as these, but we do not believe they would be insuperable.

As we said in our *Preliminary Report* most people, including most foreign investors, are aware of the discussion which has been going on in Canada about the subject of foreign investment and the very real concern about its implications which is felt by many people in this country. Despite the tremendous contributions which foreign capital — and the management and technological skills and the access to markets that has come with it — has made and will continue to make to the development of our country, we do not believe Canadians will cease to be concerned about this matter unless something is done to make Canadian voices more strongly and effectively heard in some vitally important sectors of our economy in which non-residents exercise a large measure of control. In our view there are definite limits as to what should be done about this matter, and compulsion and discrimination should certainly not be countenanced. But to do nothing would be to acquiesce in seeing an increasing measure of control of the Canadian economy pass into the hands of non-residents and to run the risk that at some time in the future a disregard for Canadian aspirations will create demands for action of an extreme nature. After considering the problem long and carefully we have come to the conclusion that the best course both for Canada and for foreign investors with capital in this country will be for us to take action along the very moderate lines we have suggested. We do not believe such action would result in any appreciable slowing down in the rate at which foreign capital will continue to flow into this country. The attractions and the potentialities for profitable investment here are too strong for that to happen.

We do not believe that over the next quarter century Canadians themselves will be able to generate enough savings to finance all the expansion and development which we have forecast. Thus we shall continue to be dependent to some degree upon importations of foreign capital. However, over the next twenty-five year period, this dependence upon foreign resources should decline at least in relative terms, although not necessarily in any steady pattern. In years of very rapid expansion, we shall be relatively more dependent upon foreign capital than we will be in periods when we are not growing so quickly. We would expect that non-resident investment represented by retained earnings of foreign-controlled companies will continue to increase, and this of course is the most important factor in this whole question. But in an average year, twenty-five years from now, the actual inflow of new capital across our border should be relatively much less important than it is today. Nevertheless, it seems to us that the degree of non-resident control in certain areas of the economy will probably tend to increase over the foreseeable future. In all likelihood, foreign investment will continue to be highest in the resource and manufacturing industries, and it will continue to be concentrated in a relatively few companies.

We do believe, however, that any harmful effects and implications of non-resident control would be reduced substantially if the proposals we have made are implemented. In the future, as in the past, non-resident investment will have an important contribution to make to Canada's growth and development as a modern industrial nation. At the same time, the attractions and potentialities of Canadian growth will continue to confer advantages on wise and conscientious foreign investors. It would be a good thing, therefore, for both Canadians and non-residents to remember that each is in a position to benefit enormously from the other if they carry out their mutual obligations in a moderate, responsible, and constructive way; and that failure to develop awareness and understanding of the other's position can only lead to common loss.

19

PROBLEMS OF THE ATLANTIC PROVINCES AND THE NORTH

BECAUSE OF THE great variation in topography, climate and resources over the breadth of our country there is a wide diversity of economic activity in Canada, though some regions are rather more specialized than others. We believe that an increasing variety of goods and services will be produced in Canada and that this increasing diversity will be particularly apparent in some regions heretofore more specialized than most. In the Prairie Provinces for example, the variety of agricultural output will increase, as we suggested in Chapter 8, and the recent discoveries of natural resources hold high promise for new extractive and manufacturing industries based upon them. Similarly at the geographical extremes of the country in British Columbia and in the Atlantic Provinces, new post-war discoveries of minerals have already added to the list of products emanating from these regions.

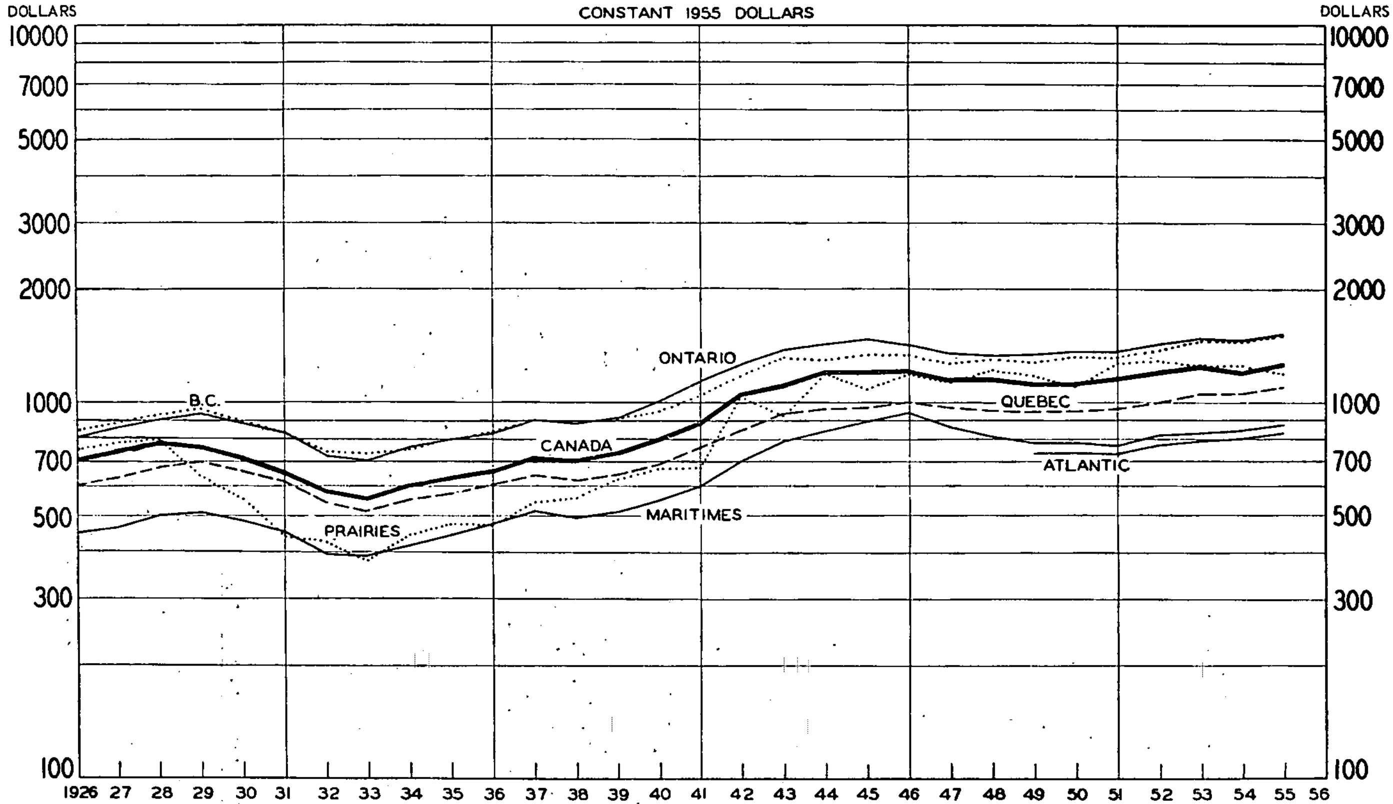
All the regions of Canada have shared in the economic growth of the country. For the last 30 years, this fact is illustrated in Chart 19.I, which is taken from the study prepared for us on *Some Regional Aspects of Canada's Economic Development* and which shows personal income per capita for five regions and for Canada as a whole. It will be noted that as compared with the late 1920's all regions have enjoyed a considerable growth and no region has changed its relative position in respect of personal income per head, very much. While we expect all regions to share in the economic growth we have forecast, particular regional problems of economic development, it appears to us, will tend to be concentrated in the Atlantic Provinces and in the North. In these two regions some special measures of assistance may be required to facilitate their continued economic development. It is these two areas that we shall discuss in this chapter.

The Atlantic Provinces

About 1¾ million Canadians, or over 10 per cent of the total population, live in the Atlantic region. It is well known that the rate of economic progress in the three Maritime Provinces — Nova Scotia, New Brunswick, and Prince Edward Island — has been relatively slow for long periods in the past. However, in the last few decades, these provinces have made substantial progress. Over the past 30 years, for example, real income per capita in the Maritimes has increased at a some-

Chart 19.1

PERSONAL INCOME PER CAPITA BY REGIONS 1926–55



Source: R. D. Howland, *Some Regional Aspects of Canada's Economic Development*, 1958, a study for the Commission, Chart VI.

what higher rate than the average for the other provinces of Canada. Between 1926 (the first year for which figures are available) and 1955, personal income per capita in constant dollars increased by 94 per cent in the Maritimes. This compares with an 80 per cent improvement on the average in the six other provinces. Comparable statistics are not available for Newfoundland prior to 1949, the year she entered Confederation. However, per capita net incomes (including pensions and allowances as well as "earned" incomes) in that province increased by 20 per cent between 1949 and 1955 in constant dollars, which compares with an increase of 12.5 per cent in the same period for Canada as a whole.

However, as shown by Chart 19.I, average incomes in this region have remained below the averages for the rest of Canada. In 1926, for example, the average income per capita in the three Maritime Provinces was 38 per cent below the average for the other six provinces; in 1939 the corresponding percentage was 32 per cent; in 1946 it was 24 per cent; and in 1955, 33 per cent. In 1955, the average income for the Atlantic Provinces, including Newfoundland, was 37 per cent below the average for the other six provinces. This is not to suggest that comparative income statistics are a true reflection of differences in the real standards of living in different parts of Canada. Many people in the Atlantic region would not exchange on any terms their more peaceful way of life and the comparative ease and quiet that goes with it for the noise and bustle and the tenseness which one associates with living in large metropolitan areas like Montreal, Toronto and Vancouver. Furthermore, these comparative figures ignore notable differences in the size of families in the different regions; and figures for income per family can throw almost as much light on average levels of welfare as figures for income per head. When income figures are computed on a per family, rather than per capita, basis, the disparity between the Atlantic region and the rest of Canada is slightly less marked. In 1955 income per family for the Atlantic Provinces was 31 per cent below the average for the other six provinces, compared with a disparity of 37 per cent on a per capita basis. Percentage distributions of non-farm, non-metropolitan families by income groups for the various regions are shown in Chart 19.II. In 1955, average family incomes of people living in metropolitan centres in the three Maritime Provinces were only about 15 per cent below those of average family incomes of city dwellers in the rest of Canada. (The corresponding figure for Newfoundland was 25 per cent.) Similarly, the difference in average family incomes of people engaged in commercial farming in the Atlantic region when compared with average family incomes of people engaged in similar occupations in Ontario, for example, would be less than the disparity in the average per capita figures. The greatest differences in average incomes occur among rural families. People with low incomes who are engaged in subsistence farming combined with part-time fishing and logging exist in every province but they are found more commonly in the Atlantic region. This is one of the main reasons for the continued lag in average incomes per capita in that area as compared with other parts of Canada.

Living standards, lower in the Atlantic Provinces than they are in the rest of Canada, would have been lower still if it had not been for certain policies of the Federal Government. Federal Government transfer payments have played a much more significant role in the increase in personal income per capita in the Atlantic region than has been the case elsewhere in Canada. Such transfer payments account for nearly one-quarter of the increase in personal income per capita which has occurred in the three Maritime Provinces, Nova Scotia, New Brunswick, and Prince Edward Island since 1926. Conversely, the growth of earned income per capita in the Atlantic region has lagged behind the comparable growth in other parts of Canada. This is related to a corresponding lag in the rate of new capital investment in the Atlantic region.

The more detailed figures of capital investment in the Atlantic region show that the lag has been particularly apparent in the productive sectors of the economy, notably the basic resource industries of the area. As shown in Table 19.1 "business investment" per capita and per member of the labour force in the Atlantic region for the period 1954-56 was substantially below the average for Canada, being one-half and three-fifths respectively of the Canadian figure. The figure per member of the labour force is somewhat higher than the per capita figure because of the lower participation of the Atlantic population in the labour force. This lower participation is the result of such factors as the large proportion of the population of the area in the younger and older age groups.

The lower levels of investment per worker are reflected in the lower levels of earned income in the Atlantic region. If the rate of capital investment could be increased the earned income per capita would also increase.

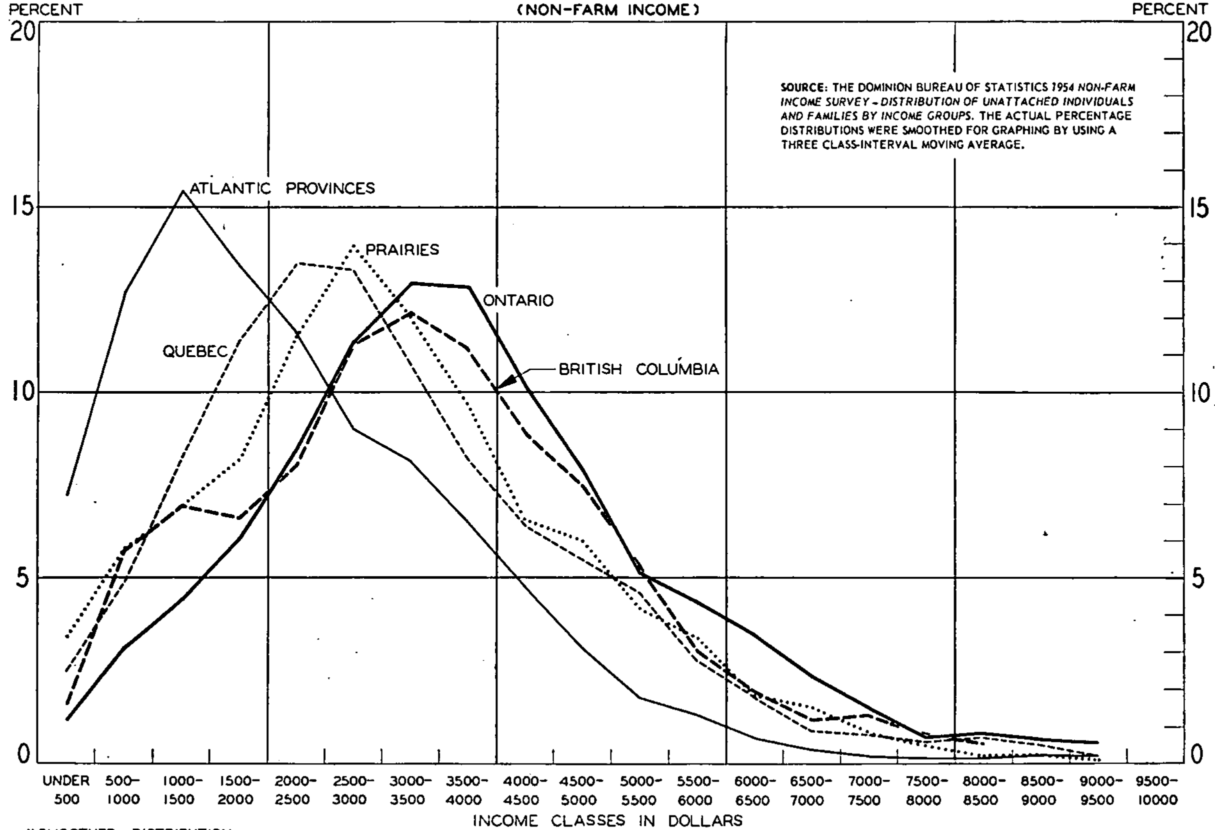
An objective of economic policy should be to integrate and improve the basic economic framework of the Atlantic region, including in particular the transportation facilities of the area with a view to facilitating and encouraging economic growth within the region. This is not likely to be accomplished by a multiplicity of unco-ordinated measures providing aid on an *ad hoc* basis. In fact, in relieving the pressure of immediate problems such aids may tend to prolong the life of industries and activities which may no longer be wholly justified in economic terms — and hence indirectly to stultify or undermine healthy growth in other directions. What is needed we believe is a bold comprehensive and co-ordinated approach to the underlying problems of the region in order to make the best possible use of the resources of the area and to improve transportation and other basic services.

As previously noted, one of the most striking features of the economy of the Atlantic Provinces is the disproportionately large number of people

Chart 19.II

THE DISTRIBUTION* OF NON-METROPOLITAN FAMILIES BY INCOME GROUPS – 1954

(NON-FARM INCOME)



*SMOOTHED DISTRIBUTION.

SOURCE: R. D. Howland, *Some Regional Aspects of Canada's Economic Development*, 1958, a study for the Commission, Chart V.

engaged in marginal activities, subsistence farming, fishing and logging, or some combination of these. Such occupations are the source of the low incomes which seriously affect average earnings in the region. This prevalence of subsistence occupations in the Atlantic Provinces is in part a symptom of more basic problems. Elsewhere in Canada these occupations are often associated with the fringe of the more highly developed and expanding areas. But in the Atlantic Provinces the phenomenon is more closely related to a lag in economic growth and directs attention to one of the main reasons for this lag in economic activity, namely, the relatively slow rate of new capital investment in the Atlantic Provinces.

Table 19.1

INDEX OF AVERAGE NEW INVESTMENT EXPENDITURES 1954-56

(Canada = 100.0)

	Atlantic	Quebec	Ontario	Prairies	British Columbia	Canada
			Per capita			
Primary and construction industries	53.3	57.5	80.6	243.3	80.7	100.0
Manufacturing	35.2	89.2	137.0	61.9	154.2	100.0
Utilities	55.9	84.9	94.4	120.2	187.4	100.0
Trade, finance and commercial services	57.6	73.0	136.5	96.1	110.3	100.0
Sub-total— business investment	50.0	77.1	108.3	133.5	139.2	100.0
Housing		94.9	118.6	94.0	122.6	100.0
Institutions and government departments	69.5	88.7	93.8	124.5	120.7	100.0
Sub-total	69.5	92.0	106.9	108.4	121.7	100.0
Total	57.9	83.1	107.7	123.3	132.1	100.0
		Per member of the labour force				
Primary and construction industries	63.4	58.2	74.0	249.4	85.1	100.0
Manufacturing	41.9	90.3	125.7	63.4	162.6	100.0
Utilities	66.5	86.0	86.6	123.2	197.7	100.0
Trade, finance and commercial services	68.7	74.0	125.3	98.6	116.3	100.0
Sub-total— business investment	59.5	78.1	99.3	136.9	146.8	100.0

SOURCE: Based on data in R.D. Howland, *Some Regional Aspects of Canada's Economic Development*, 1958, a study for the Commission.

The prevalence of subsistence farming, fishing and logging in the region also suggests a widespread inadequate use of the land. We have discussed this subject in Chapter 8 in considering the future prospects of Canadian agriculture. We suggested that if the people and the government of any province are prepared to co-operate, a better system of land use should be worked out, including the provision of credit facilities to finance the consolidation of holdings and of assistance, financial or otherwise, to people who may wish to be relocated and established in other industries. We suggested in our *Preliminary Report* that in implementing such a scheme the needs of the Atlantic Provinces might be given priority and that in the Atlantic region, particular attention should be directed to the forestry potential in the assessment of the best use of the land. This proposal for a better system of land use is now being studied by a Committee of the Senate which was established for this purpose. We are hopeful that the deliberations of this Committee will result in recommendations which when implemented will bring about substantial gains in per capita incomes in the Atlantic region in the years to come. It will be appreciated, of course, that this would have to be a gradual development extending over a considerable period, perhaps a period of 20 to 25 years.

One obvious and highly desirable step in the direction of increasing the role of new capital investment in the region is the development of a more adequate knowledge of the natural resources of the area. Large sections of Newfoundland are as yet unmapped, and although the Geological Survey has mapped the other three provinces of the region more recent techniques have outdated much of this work. Moreover, the scale of much of the mapping was insufficient for purposes of promoting mineral exploration. The early completion of the mapping of the region and a further programme of re-mapping designed as closely as possible to arouse interest in mineral development in the region is highly desirable. Further knowledge of the forestry, fisheries and hydro-power resources should also contribute to an increased interest in these industries.

We received many representations about the inadequacies and the cost of transportation facilities in the region. It was claimed that the benefits originally obtained under the Maritime Freight Rates Act have been largely nullified as a result of the succession of rate increases which have gone into effect since the War. A system of trunk highways was said to be badly needed, in part at least so that highway truck competition may have a deterrent effect upon further rate increases by the railways. But it was claimed that the provinces' share of the costs of the Trans-Canada Highway is beyond their financial competence. It was suggested that a toll road across the State of Maine—in a line between Fredericton, N.B., and Sherbrooke, Quebec,—which might be constructed for perhaps $15 million to $20 million, would reduce the highway distance from the Maritimes to the Montreal market by some 100 miles. An alternative proposal suggested to us was for the Canadian Pacific Railway to introduce a "piggy-back" service on their Montreal-McAdam route at rates which would compare favourably with potential truck competition. It was stated that the ferry services to Prince Edward Island are unsatisfactory and should be replaced by a causeway from Cape Jourimain, N.B. to Borden, P.E.I., which, according to tentative estimates, could be constructed at a cost which if amortized over a period of years would bear favourable comparison with the present annual deficits of the ferries. It was contended that if at the same time the railway service on the Island were replaced by a trucking service operated by the railway and the losses presently incurred were taken into account, this project might have even more in its favour. It was argued that additional port facilities are required at Saint John, Halifax and St. John's, Newfoundland; that greater efforts should be made to persuade Canadian exporters to use these facilities; and that perhaps greater incentives should be offered to them to do so. The submissions which we received in Newfoundland emphasized the great change which has occurred in the direction of the freight traffic of that province since it joined Canada in 1949 and complained that the present services for handling such traffic through Sydney and Port aux Basques have proved completely inadequate. One suggestion that was made for improving the situation was that a new steamship service should be established from Halifax to St. John's, but no estimates were submitted of the costs involved or of the effects which this diversion of through traffic would have upon the revenues of the Newfoundland Railway, on which substantial losses have been incurred. It was made clear to us that perhaps Newfoundland's greatest single need was a greatly expanded system of roads in order to open up the resources of the province and also to establish communication between the centres of population and at least some of the potentially more accessible outports. It was suggested also that there may be a need for improved shipping facilities between Newfoundland and Montreal.

It seems evident that the transportation facilities of the Atlantic region are in need of improvement but it was not possible for us to undertake the kind of detailed study of the problem necessary in order to make positive proposals about the most appropriate measures which should be taken in order to provide solutions. Quite obviously the costs of improving the various services should be carefully estimated and considered, and care should be taken to avoid the introduction of duplicate facilities with consequent increases in total expenditures. It would be unwise to spend large sums on the construction of highways merely for the purpose of forcing a reduction in railway rates by the introduction of highway truck competition and thus increasing the present losses of the railways. It would be equally unwise to insist upon the continuance of unprofitable rail services if, with the construction of road facilities, the present traffic could be handled effectively by trucks and buses. In our *Preliminary Report* we suggested that the whole question of an improved but integrated system of transportation in the Atlantic region should be examined carefully and in detail with proper consideration being given to the costs involved in providing any new facilities and to the losses being incurred in the operation of existing services. We suggested also that such a study should include a re-examination of the present effects of the Maritime Freight Rates Act. A comprehensive study of transportation problems in the Atlantic region was initiated shortly after the publication of our *Preliminary Report*. The results of this study may have far-reaching effects and they will be anticipated with considerable interest.

A more extensive provision of other services should also help to attract private capital into the basic resources of the region. At the moment the provision of power looms large in the province of New Brunswick, where a programme of power development is related to important developments in mineral production and to the expansion of the forest products industry. It seems possible that in the future an integrated interprovincial power development and distribution system will be justified although this may require some measure of subsidy from public funds. If federal assistance is required in connection with any power development programme, we suggest that such programme be related to the needs and requirements of the coal industry in Nova Scotia.

The question of the Nova Scotia coal industry requires special attention because of the importance of the industry to the economy of the province and because of the considerable number of people who are dependent either directly or indirectly upon the industry for their livelihood. Costs of production have been high, and for many years the industry's continued existence has depended largely on subsidies provided by the Federal Government. These subsidies have been designed primarily to promote the sale of Nova Scotia coal in the Montreal and eastern Ontario markets, where 40 per cent of the output of the Nova Scotia mines is sold. For some time the competitive position of Nova Scotia coal in these central Canada markets has been deteriorating, and the markets have been retained only by increases in the rate of subvention. Prospects are that competition in this area from alternative fuels will be intensified, particularly when natural gas becomes available. In addition, it is estimated that when the St. Lawrence Seaway is completed the costs of moving competitive United States coal into the Montreal area will be reduced. Furthermore the outlets for Nova Scotia coal in the Atlantic region itself are declining, in part because of the growing use of imported crude and residual oils and in part because of the dieselization of the railways. These market developments have important implications for future employment in the industry.

With some governmental assistance the principal producers of coal in Nova Scotia are carrying out an extensive programme of mechanization. It is expected that this programme will be completed in 1960. It is estimated that the mechanization of the mines will result in a substantial increase in output per man-hour. This means, according to estimates contained in the study prepared for us on *The Nova Scotia Coal Industry* that if there were no reduction in employment an additional 2 million tons of coal would be produced each year. On the other hand, if production is not increased the services of some 4,000 of the 11,000 mine workers presently employed will not be required.

It is expected that the mechanization programme will lead to lower costs (although its effects may be offset in part at least by increased wages); and to the extent that it does so, the competitive position of the industry will be improved. Despite this, it seems probable that if the basis of the present subsidy remains unchanged, the amounts paid in subsidies would have to be increased considerably before very long if present markets in the Montreal and Eastern Ontario areas are to be maintained. However, the most logical market for Nova Scotia coal would seem to be the Atlantic region. We suggest therefore that the emphasis of the present subsidy arrangements should be modified in order to give priority to the greatest possible use of Nova Scotia coal in this region. We believe that changes in the present subsidy arrangements should include incentives designed to encourage the use of Nova Scotia coal in the generation of thermal power in the Atlantic region. The basis of the present subsidy on overseas shipments might also be reviewed to advantage in view of the marked growth of world trade in coal. But obviously there must be some limit to the amount of assistance which can reasonably be given to any one industry, no matter how important it may be.

There is, then, a need in the Atlantic Provinces for considerable expenditures of capital on basic public facilities designed to encourage development of the resources of the region. These would include, but should not be limited to, the provision or reconstruction of adequate power and co-ordinated transportation services. The cost involved in providing these needed services, however, would seem to be beyond the financial competence of the provincial governments concerned. In view of this, we suggest that the Federal Government agree to contribute a substantial sum for capital projects in the Atlantic area to be spread over a relatively short period of years. The purpose would be to cover the costs of necessary capital investment, some or all of which would normally be the responsibility of the provincial governments. To this special contribution might be added during the specified period some or all of the considerable sums now being spent in one or other of the Atlantic Provinces each year by various departments of the Federal Government on such things as docks and wharves, transportation including ferry and coastal shipping subsidies, the development of marshland areas and the construction of public buildings. The objective would be to co-ordinate all capital expenditures and subsidies in the area other than those on projects which are national in their scope and application such as the proposed land use classification scheme, the Trans-Canada Highway and assistance to people who are unable to make a reasonable living where they are and who wish to be relocated elsewhere. In this way, such capital expenditures, including the proposed capital grants, could be allocated in a co-ordinated manner designed to strengthen the basic economic structure of the area as a whole.

The expenditure of federal funds in this way should of course be made and supervised by an appropriate agency of the Federal Government. With this in mind, we suggest that the Federal Government establish a Capital Projects Commission for the Atlantic Provinces, or some other appropriate agency. We do not suggest that the proposed commission or agency be a permanent addition to the existing governmental machinery. On the contrary, we believe the needed facilities should be provided over a reasonably short period and that the capital expenditures involved should not be regarded as a permanent addition to the revenues of the Atlantic area. Accordingly, we suggest that when the proposed commission or agency is established it be given a limited life and be disbanded at the expiration of that time. However, inasmuch as some of the capital expenditures in question may be self-liquidating in whole or in part, it would be necessary to make provision for the continued administration of projects initiated by the commission or other agency.

The proposed commission or other agency, and the staff which it would require, should first prepare an over-all co-ordinated plan, including a list of priorities in connection with the proposed expenditures. Once this was approved by the Federal Government, the commission or agency referred to should be responsible for the implementation of the proposals, including supervision of the expenditures involved.

If such a plan is to be successful, it would be important to secure the full co-operation and support of the four provincial governments concerned. They, or their advisers, should be asked to make proposals and to suggest priorities for capital expenditures by the proposed commission or other agency. Presumably, the commission or other agency would pay particular attention to projects that might be recommended jointly by the four provincial Premiers with a view to strengthening the economic fabric of the area as a whole. In addition, individual provincial governments might be expected to make recommendations to the commission or other agency respecting projects which might be of particular importance to their own provinces but which might not otherwise benefit the Atlantic area. Final responsibility for determining priorities, however, should rest with the proposed commission or other agency, subject to the approval of the Federal Government.

Although it is considered likely that the most dynamic growth in the Atlantic Provinces will be associated with an increasing efficiency in the primary stages of the resource industries of the region and a continued extension of the processing of these products, there may be a number of other matters which, while of relatively lesser importance, may be handled in a way which would stimulate development in the area. For example, it is suggested that a greater measure of decentralization of government purchasing policies would be beneficial to local areas. This might be particularly true in the case of New Brunswick and Nova Scotia, where the defence forces have considerable establishments. Similarly, if it should prove possible to place a greater number of defence orders with manufacturing concerns in the Atlantic region without substantially adding to costs, the resulting benefits might more than justify the additional effort and perhaps inconvenience involved. Then too, if the railways were able to work out their purchasing programmes more evenly over a longer period, this would be of great benefit to the car manufacturing industry in Nova Scotia and help to stabilize employment in that area.

The adoption of the measures which we have suggested, if vigorously supported by the people of the Atlantic region, would, we believe, result in a higher rate of economic growth in the area. However, whether or not such suggestions are put into force there is bound to be some dislocation of the labour force in the Atlantic region, from time to time, as in other parts of Canada, as workers transfer to more strongly developing sections of the regional economy. This in many instances may entail only a change from one occupation to another. In other instances there may be some movement of workers within an individual province or within the Atlantic region and in some instances beyond the region. The latter movement, it might be noted, would not be any novelty, for over the past 30 years nearly a quarter of a million people have moved from the Atlantic Provinces in search of other occupations and opportunities. There has been an even higher degree of mobility in the Prairie region during this period.

We referred to this question in Chapter 8 in discussing probable developments in the agricultural industry. There is a measure of immobility throughout Canadian agriculture. The continuance of marginal activities relating to agriculture and in part to other affiliated operations such as logging and fishing, is closely associated with low incomes and even poverty. People in such occupations often have few skills which can be readily adjusted to the modern industrial society of the urban centres of Canada. Their reserves of cash are usually limited and in many cases the families of the people concerned tend to be large. In such instances we have suggested that the Federal Government provide assistance, financial or otherwise, not only to consolidate small holdings of land but also to assist people who wish to be relocated.

We have referred to the problems of the Nova Scotia coal industry and in particular to the distinct possibility that the labour force of the industry will be reduced considerably over the next few years. We believe that generous assistance should be provided for the mine workers who may be displaced as a result of the difficulties which we foresee. Special measures will be needed for looking after these people and for re-establishing in other industries those who may be interested in such an alternative. It may be that such measures could be included under the broad national scheme we have referred to for relocating people who may wish to abandon submarginal farms and be re-established in other industries. But the problem of the Nova Scotia coal miners and their families is a particularly difficult one which will require both a sympathetic approach and special treatment. We suggest that on economic grounds alone, having regard to the amount of the present subsidy, there would be every justification for paying the full amount of the transportation costs of all the members of any families who may be willing to move to other parts of Nova Scotia or elsewhere in Canada; for assistance in the provision of housing; and for training for other occupations, possibly in co-operation with industry.

To a considerable extent the dimensions of this problem of occupations and geographic mobility in the Atlantic region will be decided by the general strength of future economic development in the area. If the pace of investment is increased substantially and if there is a reasonable development of diversified occupations the process of adjustment will be much more readily accomplished and will be no more than is normal in Canada. This is highly desirable. If the pace of development, however, does not prove sufficient to facilitate such an adjustment easily, then those who may wish to re-establish themselves in other occupations elsewhere should, we suggest, be assisted in doing so.

The North

Members of the Commission had the privilege of visiting the Yukon and the Mackenzie District of the Northwest Territories in the late summer of 1955. Our first impressions were of the vastness of the area, 40 per cent of the whole land area of Canada, of the distances to be travelled and the difficulties of communication. Edmonton is the jumping off place to the Yukon and the Northwest Territories which we shall refer to as "the North". It is 1,000 miles from Edmonton to Whitehorse, Yukon Territory, and another 200 miles from there to Mayo. It is 500 or 600 miles from Edmonton to Hay River and to Yellowknife which are located on opposite sides of Great Slave Lake. It is another 800 miles from Hay River to Aklavik at the mouth of the Mackenzie River. We visited these places and others in between by airplane in a matter of 10 days. But we were lucky not to have been delayed by bad weather. And if we had travelled in any other way our journey would have taken many months even in summertime. In winter it would have been well nigh impossible.

There is widespread recognition in Canada that the northern reaches of the country, including the northern sections of the provinces as well as the Yukon and Northwest Territories, constitute a new economic frontier. Northern Canada today and tomorrow may be what the West was in the earlier period of our history. It not only offers attraction to those in search of adventure and fortune but it has seen industry become interested in these areas as a long-term source of basic materials. Major developments such as the Kitimat plant of the Aluminum Company in northern British Columbia, the new pulp and paper plants in the northern parts of the Prairie region, and the heavy investment leading to the production of iron ore in the Ungava area of Quebec and Labrador, to note a few examples, are precursors of similar events in the future. The increasing demands for the products of Canada's forests and mines or for special hydro-power resources will probably lead to major developments as transportation and other basic investments are made throughout the northern parts of the country. The exact form these developments will take and the time which will elapse in each instance will be largely determined by the interplay of the forces of supply and demand. The next few decades, however, will transform much of this northern area of Canada.

It is less possible, however, to be satisfied that these dynamic forces of growth will reach beyond the 60° parallel in sufficient strength to ensure the same degree of expansion in the Yukon and Northwest Territories, which for our purposes we have defined as the North. Our hesitation in forecasting such a development in the near term is not based on any reservations about the extent of the resources of these territories. It stems rather from the abundance of the resources of the northern hinterlands of the provinces, from British Columbia to Newfoundland. Where there are comparable resources in these areas, earlier development may be expected for the very reason of their greater proximity to market outlets. Industrial operations in the Yukon and Northwest Territories have been largely limited to those situations where the exceptional quality of the resources have been sufficient to absorb any economic disadvantages of operating in the region and of long-distance transportation to commercial markets.

In some instances other factors besides distance and transportation difficulties may add to the comparative advantage of more southerly developments. One of these is climate. It should be noted, however, that large areas of the Yukon and much of the District of Mackenzie are not subject to the extremely low temperatures that are experienced in northerly areas farther to the east. The average daily mean temperature throughout the five coldest months of the year in Whitehorse for example, is the same as it is in Saskatoon and Winnipeg, although the winter lasts longer in the Yukon than in these Prairie cities. Average winter temperatures in Yellowknife and elsewhere in the Mackenzie District are colder, but again are not as severe as those in the Districts of Franklin or Keewatin or in Northern Labrador.

Much of the expansion of economic activity in the Yukon and Northwest Territories in recent years has been based on the mineral resources of the region. Unlike the Klondike Gold Rush of 1896 in the Yukon which proved highly temporary in nature, most of these activities have expanded substantially over the years. The production of lead, zinc, silver and some cadmium in the Mayo District of the Yukon, for example, exceeded $13½ million in 1954 as compared with less than half a million dollars in 1947. Gold production in Yellowknife of the Northwest Territories has risen over a 15-year period from less than $2 million to some $10 million. Oil production at Norman Wells has fluctuated owing to the exceptional requirements during the Second World War but has become an established industry based on a rising local demand, now amounting to some 350,000 barrels annually. In the meantime mineral explorations in both the Yukon and Northwest Territories have given a measure of buoyancy to the economy of the region as well as further establishing its prospective mineral wealth. As a natural corollary of this increased mining activity, there has been a growth of lumbering and farming in the North, although these activities have been largely restricted to local markets where the price structure reflects the high cost of transporting such goods into the region. Farming in the North can never be at all extensive, not only because of the inhospitable climate, but also because millions of years ago a large part of the Northwest Territories was denuded of its topsoil by glaciation. This lack of topsoil is in distinct contrast with the northern areas of the Soviet Union, which did not undergo the same process of glaciation.[1] The fisheries of the Great Slave Lake, have given rise to some exports in the form of fish fillets to the United States, a development of considerable significance to those in the immediate area.

Much of the more recent development in the Yukon and Northwest Territories has its roots in the general boom in mineral exploration and production in Canada. It also reflects the improvements in transportation and communications which developed during the Second World War and in subsequent years. Wartime activities led to the creation of a number of important roads including the Alaska Highway, which gave the Yukon access to northern Alberta, while the subsequent construction of the Mackenzie Highway provided a further link between the Great Slave Lake area of the Northwest Territories and the Prairie region. The wartime growth of airports and airstrips, and the more recent air servicing of the network of radar stations in the territories, has also made many areas much more accessible as well as providing some stimulation to the economy of the region. There seems to be a strong likelihood that trans-polar air service between Europe and the North American continent, now being inaugurated by four major airlines, will lead to further activity in this direction. This should prove profitable to such communities as Yellowknife and Frobisher Bay which have been selected in the first instance as landing points.

The progress of economic growth in the North, then, if it has tended to be slow over the long period, has accelerated considerably in recent years and the economy has broadened its base far beyond the fur trade, the single staple which dominated life in the North for so many decades. With this growth has come a renewed expansion in the population of the region, although the total number of people living in the area including Indians and Eskimos is still less than one-fifth of one per cent of the population of Canada.

However, between 1941 and 1951 there was a considerable influx into the region while the indigenous Indian and Eskimo populations have also increased numerically. In terms of population the region is making a rapid recovery from the great losses which followed the collapse of the Klondike Gold Rush in the Yukon where population had risen to over 27,000 by 1901, a few thousand more than the present population of the territories as a whole. The population of the region now is almost equally divided between the Indians and Eskimos and Canadians from other parts of the country. The Indians and Eskimos are greatly in the minority in the Yukon, numbering 1,533 and 30 respectively according to the 1951 census, out of a total of 9,096 persons. They are, however, in the majority in the Northwest Territories; there being 3,838 Indians and 6,822 Eskimos out of a total of 16,004. Over 10,000 of the total population of the Northwest Territories are in the District of Mackenzie where conditions are less severe and where economic activity is highest. The great majority of the Eskimos live in the more northerly and easterly Districts of Keewatin and Franklin where they are strongly preponderant.

The prospects of substantial economic development in the Yukon and Northwest Territories in the years to come depend largely on the expansion of mining and the development of oil and gas. There may be some increase in the export of fish and forest products; but most of these other forms of activity, including some further production of farm products, will depend on the growth of mining in the North. One exception to this may be the growth of forestry activities in the Mackenzie valley area.

The pace of further development in mining and in oil and gas will depend in part on the progress of mapping and exploration in the region. Much of the Territories has not yet been surveyed, although this work has been proceeding at a rapid rate in recent years. The wealth of mineral resources already revealed suggests that other deposits of mineral may well be discovered as a result of further exploration which will prove sufficiently rich to offset any disadvantages of such northerly operations. It is recognized, however, that more general growth of mining activity will depend on overcoming the handicap of relative isolation from commercial markets and of providing more adequate and less costly transportation. It was suggested that as the Alaska Highway had led to considerable development in the Yukon, a further network of highways would do more than anything else to encourage further expansion in that area.[2] The emphasis in representations on behalf of the Northwest Territories was on an extension of the railhead from Grimshaw or Waterways, Alberta to the south shore of the Great Slave Lake.[3] Such a railway, it was thought, would have general beneficial effects in most of the Mackenzie District of the Northwest Territories and would lead in particular to the mining of the large base metal deposits held under lease by the Consolidated Mining and Smelting Company at Pine Point in the Hay River area. A further suggestion was made that the extension of the Mackenzie Highway, by the direct benefits which this would bring to already established communities such as Yellowknife, would also provide the basis of extensive and sound development.[4]

The major railway companies have announced that they are making detailed studies of the economics of such an extension of the railhead and it is to be expected that the Federal Government, in whom natural resources of the region are vested, will keep the subject of improved transportation under constant study. The form which future improvements in transportation facilities should take, the timing of such improvements and the costs involved will of course have to be reconciled with probable future demands for minerals and with the claims of other areas.

An immediate problem relates to the precarious position of the Indian and Eskimo population, most of whom are still engaged in the traditional occupations of trapping, hunting and fishing. The resources of the region in this regard do not appear to be adequate to support an expanding population at anything like Canadian standards of living. The problem seems to be particularly acute with Eskimos, for the impact of modern industrial society on them has only recently been felt in any great degree. Many factors including the numerical decline in game and in fur-bearing animals, the introduction of synthetic furs and the vagaries of the fashion world, have resulted in real hardship among many of these people. Their health problems have also claimed more attention partly as a result of increased disabilities. Some of them have found satisfactory employment in connection with various government activities in the region including the defence stations and in a few instances with private industries; but such alternative occupations have absorbed only a relatively small fraction of the total. As a result, relief measures have had to be implemented on a fairly substantial scale even though the Indians and Eskimos have shared, in common with other Canadians, in the improved social welfare services, family allowances, social security payments to the aged, blind and disabled as well as improved health services, which have marked recent Federal Government policies. The problem of providing a satisfactory means of livelihood for the Indians and Eskimos in the North is a very real and difficult one. Relief and social security measures which may be appropriate elsewhere in Canada may prove to be quite unsatisfactory when applied to the native peoples of the North accustomed as they are to a more primitive way of life.

Various Federal Government agencies have been directing efforts to meet these problems. The Indian Affairs Branch of the Department of Citizenship and Immigration in co-operation with other departments has attempted to introduce some stability into the traditional life and economy of the Indians and to supplement present means of livelihood. Among other things, game conservation and management measures have been introduced, equipment, such as fishing nets and boats, and refrigeration facilities, have been provided, and aid given in the construction of houses. The Department of Northern Affairs and National Resources recently established an Eskimo Loan Fund to assist individuals, or groups in carrying out approved projects for the improvement of their economy. Stone carving and other handicraft activities are proving to be a source of income to Eskimos in the eastern Arctic. Boat building has been successfully sponsored in other areas, while some families have been transferred or encouraged to move to areas where game or fur resources are more ample. The management of reindeer herds, introduced to the Reindeer Grazing Reserve near the mouth of the Mackenzie River in 1935 by Eskimos, is in the experimental stage, as are a number of other projects designed to diversify and strengthen the Eskimo economy. It is to be noted also that the great majority of the Eskimos who have accepted employment with either government departments or with mining companies have shown ability to adjust themselves to regular employment and have proved satisfactory workers.

Programmes such as these are obviously desirable. Even greater activity will have to be undertaken in the near future and constant attention given to easing the conditions and the adjustments which will be required from the Indian and Eskimo populations. Such aids should be generous but directed to preserve the independence and self-sufficiency of our fellow Canadians in the far reaches of the North.

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THE ROLE OF GOVERNMENT

As WE SAID in the first chapter, the interplay of supply and demand as expressed in the workings of a free and flexible market economy will make the greatest contribution to the growth and development which we foresee. Wide dissemination of the powers and responsibilities involved in making economic decisions among large numbers of people in the ordinary course of their business transactions, in other words the operation of a free market economy, has been responsible in large measure for the very considerable increase in living standards in Canada over the years. And we believe that if the continuing developments and the future improvements in income levels which we have forecast are to be realized, this will be dependent upon the maintenance of the free market system in the future. However, as our society becomes more complex and more highly organized, as the transition is completed from a country that was rural and agricultural in its outlook to one that is mainly urban and industrial in its character and requirements, we may expect the responsibility of government at all levels, federal, provincial and municipal, for maintaining an economic climate favourable to development and growth to continue. In the future, as in the past, government action will be needed in certain spheres of activity to supplement the role of private initiative and enterprise. But while government action may be needed to influence and guide the direction in which private initiative moves this does not mean that fundamental changes are needed in the operation of the system of the free market in Canada. It means, however, that in the changing conditions of the future, government action will be desirable in a number of different fields if obstacles to growth are to be avoided and difficulties are to be resolved.

This view of the complementary roles of private initiative and of government action is, of course, as old as Canada itself. There were compelling economic considerations as well as political reasons which led to the federation of the separate colonies in 1867.[1] Shortly afterwards British Columbia and Prince Edward Island were induced to enter Confederation mainly by the promise that they would be provided with transportation facilities. And Newfoundland received many financial and economic benefits by joining Canada in 1949. This is not to suggest that the political framework into which the several provinces came together was a logical entity in terms of either geography or economics. However, the great majority of Canadians have wanted to remain separate and independent from the United States and have been willing to pay a price for doing so. And despite certain natural disadvantages we have become one of the most prosperous nations of the world. But from the very beginning it has been necessary for Canadian governments, of whatever political party they may have been composed, to adopt an active role in economic affairs sometimes in order to stimulate private initiative and sometimes to undertake projects which were of little interest to, or were beyond the scope of, private enterprise. Huge grants and subsidies had to be paid for the construction of the railways which were a condition of Confederation. Public moneys have been expended on canals and other public works since the earliest days and are still being spent in this way. Shortly after Confederation, the "National Policy" of tariff protection was established to assist the development of a domestic manufacturing industry and a system of land grants was inaugurated to open up the West. Attempts have been made to assist the Maritime Provinces by changes and adjustments in the railway freight rate structure in that area. Freight rates on grain moving from the Prairies have not been increased since 1898 in accordance with the Crow's Nest Pass Agreement. Governments have not hesitated to assist the agricultural and fishing interests as occasion has demanded. And in the early days of the century immigration was encouraged on a very large scale indeed.

In more recent times and particularly since the War, the government has become increasingly concerned about the importance of maintaining, on the one hand, a high level of employment throughout the country and of controlling inflation, on the other. This twin objective has become and is likely to remain the principal preoccupation of the senior level of government in Canada in the field of domestic policy as it is in other countries, including the United States and the United Kingdom.

This report upon the studies we have made of Canada's economic prospects over the next quarter century is concerned primarily with long-term trends and the policies which can promote growth and development over a long period of years rather than with short-term fluctuations in the level of economic activity. But the forecasts we have made of Canada's economic prospects are possible of attainment only if there is no prolonged period of mass unemployment and only if inflation does not get out of hand. These are important reservations. If there is mass unemployment or if there is serious inflation, our forecasts are not likely to be realized. And quite apart from this, the upheavals and the misery which would result from such unemployment or inflation would probably bring in train some basic changes in the structure of our social and economic life.

These two objectives of governmental policy, encouragement and promotion of steady growth and development over the long term and the ironing out of peaks and valleys in the level of cyclical economic activity during short-term periods are not mutually exclusive. If long-term development policies are to be successful, a high level of employment will have to be maintained. If large numbers of people are unemployed for an extended period, growth and development would be suspended. It follows, therefore, that measures taken to promote a high level of employment or to avoid inflation, which if left unchecked may end up in depression, are consistent with, and are a necessary ancillary to, other policies designed to promote growth and development more directly. It is for these reasons that we think it appropriate to include in this report a brief review of the problems involved in maintaining economic stability in Canada over the short term. This we shall do in the first part of this final chapter.

Maintaining Economic Stability

Before we begin to speak about unemployment, it may be well to define our terms. "Cyclical unemployment", the kind we experienced on a massive scale in the '30's, is what we are most concerned about. The objective of governments is to even out or at least to moderate the peaks and valleys of the business cycle; to restrain the level of economic activity to some extent in periods of boom and to stimulate activity in times of recession or depression. In this way it is hoped that inflation will be avoided in periods of great activity and expansion and that deep "cyclical unemployment" will be avoided in periods of adjustment and recession.

In a free and dynamic economy in which people are entitled to change their occupations as they choose and to move from place to place and in which there are continually changing products, methods and consumer demands, there will always be those who are out of work at any given time. This cannot be avoided. It helps to keep the economy flexible and it enables people to seek better opportunities in other occupations or in different places. This we shall refer to as "frictional unemployment". If there were no "frictional unemployment", if 100 per cent of the working force were fully occupied all the time, which of course is a theoretical and not a practicable proposition, the inflationary pressures which would be created would be uncontrollable. The question to be answered, however, is where does "frictional unemployment" end and "cyclical unemployment" begin? Or, to put it another way, what is the maximum percentage of the total working force which should be idle or in process of changing jobs when we say that the Canadian economy has full employment in a practical sense? In our computations of the probable growth of the Gross National Product we have used a rate of 3 per cent for "frictional unemployment", the average rate of unemployment for the years 1951 to 1955. This includes provision for "seasonal unemployment" and for those people who are unemployable for one reason or another. Many people will think that we shall continue to be threatened with serious inflation if on the average only 3 per cent of the total working force are frictionally unemployed; especially so as this average figure includes "seasonal unemployment", which because of our climate is bound to be higher in Canada than in some other countries. It is possible that such fears may be justified. Professor Neil H. Jacoby, a former member of President Eisenhower's Council of Economic Advisers, has stated that "the consensus of American economists is that the United States economy has full employment in a practical sense when 96 per cent of the working force has jobs and about 4 per cent are in process of changing jobs. (Many believe that the ratios are closer to 95 per cent and 5 per cent.)"[2]

This question of the tolerable level of "frictional unemployment" in Canada requires a great deal more thought and study before there is likely to be any general agreement on the subject. And until there is some measure of agreement about it, at least in professional circles, the task of government in trying to avoid cyclical unemployment on the one hand and inflation on the other will be that much more difficult and uncertain.

We have mentioned "seasonal unemployment" which to some degree, as every Canadian knows, has always been endemic in our economy. This will continue to be the case in all probability but we would hope on a relatively decreasing scale. In recent years quite a bit of progress has been made in so planning construction jobs that they can be continued through the winter months. As we suggested in the chapter on secondary manufacturing, we believe there is scope for a greater degree of co-operation in the field of long-term planning between the purchasing departments of governments at all levels, the railways, the other large public utilities and other important buyers and their various suppliers. This also might help to mitigate to some extent the impact of "seasonal unemployment". But that there will always be some "seasonal unemployment" in Canada is one of the facts of geography and of climate that we shall have to be prepared to put up with.

From time to time there may be unemployment or underemployment in certain areas or regions despite the fact that generally speaking the level of economic activity is high in Canada and that according to the statistics there may appear to be a condition of more or less full employment taking the country as a whole. This we shall refer to as "regional unemployment". It usually arises when there is slack demand for the products of an industry or industries concentrated in an area or region of limited diversity of economic opportunities. In a region with little diversity of activity, members of the working force affected by a decline in the demand for their services in one employment may not have alternative opportunities open to them. Employment in some small towns may be dependent on the operations of local factories, e.g., textiles or furniture. If these industries are depressed and their operations curtailed as a result, despite a high level of business activity in the country as a whole, this may bring about a condition of "regional unemployment" in the more local sense. The prevention of, or the correction for, such instances of "regional unemployment" may not be easy to accomplish without introducing restrictions and rigidities into the picture which, if resorted to too freely, would soon distort the flexible workings of the whole economic structure. In some cases, however, some compromises with perfection will be called for, at least in the short term, and during periods of transition made necessary perhaps by technological or other changes.

A number of new instruments have been developed in recent years and are available for use by governments in attempting to achieve the twin objective of a high level of employment while avoiding inflation. These include progressive personal income taxes, unemployment insurance and social security payments such as family allowances and old age pensions. While the tax on corporation incomes is not progressive in its structure (except that the first $20,000 of income is taxed at a lower rate), governments can influence the timing and the rate of industrial expansion to some extent by making adjustments in the allowances granted for depreciation and depletion and by such incentives as the three-year exemption from taxation on the profits of new mines. In addition, the Bank of Canada, which was established only as recently as 20 years ago, can bring great influence to bear upon the rate of economic activity by judicious changes in monetary policy.

This new and very important preoccupation with the problem of ensuring a high level of employment and at the same time avoiding inflation has resulted in a changed approach to government budgeting. Projected changes in taxes, for example, may now be considered primarily from the standpoint of their probable effect upon economic activity and only secondarily as to their impact on government revenues. In times of expansion, when inflationary pressures are evident, governments should budget for surpluses; in periods of recession, governments should be prepared to reduce taxes and budget for deficits. But the trouble with this theory of cyclical budgeting is that the man in the street may not fully understand it; more importantly, whether or not he understands the theory, he may not like it. The average man, being a somewhat contrary individual, may resent being called upon to pay relatively high taxes even in good times. And under our democratic system, no government for long can run counter to the wishes or the prejudices of the average man if it is to remain in power. The problem of reconciling this elementary fact of political life with sound economic theory will not be easily resolved. We do not mean to suggest by this that the principle of cyclical budgeting should be abandoned. On the contrary, we believe it to be of the greatest importance. We raise the question, however, because we believe this is one of the problems to be overcome if, in the future, governments are to be successful in their attempts to ensure a high level of employment throughout the country without a rise in the level of prices.

While we do not wish to underestimate the difficulties which were referred to briefly in the preceding paragraph, it may help to get this problem of public acceptance of cyclical budgeting into better perspective if we review in somewhat more detail the progress which has been made in recent years in devising means for combatting unemployment and for containing inflation. At the same time, the shortcomings and weaknesses of these new measures should not be lost sight of. The Great Depression of the '30's made a lasting impression particularly on those Canadians who were of working age and responsible for the maintenance of themselves and their families at that time. (This, incidentally, may not include many people who are now under 45 or even 50 years of age.) Understandably, this meant that both prior to the War and particularly during its later stages, those who held positions of responsibility and authority were greatly concerned about the possibilities, at the completion of hostilities, of another period of mass unemployment with all the waste and misery and degradation which this would entail. Various measures were introduced which would tend to mitigate to some extent the evil effects of such a calamity. Three of these measures which are sometimes called "built-in stabilizers" and which we have referred to previously are the unemployment insurance plan and such social security payments as the family allowance and old age pension schemes. The objective of unemployment insurance is self-evident. Funds are set aside in good times which are available to be paid out during limited periods of unemployment and thus to cushion the shock of reduced incomes. Payments under the family allowance and old age pension schemes while desirable in any case from the point of view of social security would have the added advantage of providing people with some minimum income in depressed as well as in prosperous periods. The progressive tax on personal incomes has somewhat the same effect when times are poor: in times of high incomes a greater proportion of total income is drawn off in taxes; but when incomes fall, the amount payable in personal income tax falls more than proportionately and this tends to cushion the effect.

The government is in a position to influence the rate of economic activity to an appreciable extent by adjustments in the way in which corporate incomes are taxed. For example, in the years following the War, generous incentives were given to the mining and oil and gas industries which undoubtedly stimulated the activity which has occurred in these fields. Another way in which the timing of industrial expansion has been slowed or accelerated has been by reducing or increasing the allowances for depreciation and depletion on new capital expenditures.

But there are two main weaknesses or limitations in this connection which should be mentioned. In the first place, an appreciable time lag is bound to occur between the date of the announcement of any such changes in the tax arrangements and the time when the effects of such changes become manifest through changes in corporate policies. In the second place, there may be some understandable reluctance on the part of those in authority to withdraw tax incentives to particular industries until well after they have accomplished the purpose for which they were introduced originally.

If a serious degree of unemployment is threatened, governments can and unquestionably will be expected to do what they can to stimulate economic activity by reducing the level of taxes and by increasing expenditures. This, of course, means that governments can and should embark upon a policy of deficit financing if this is thought to be necessary in order to provide a stimulus to the economy and thus, if it is effective, to reduce unemployment. It may be noted in passing that the man in the street is not likely to be nearly as critical of the workings of this part of the theory of cyclical budgeting, reducing taxes and budgeting for deficits, as he is when the times call for budget surpluses and the maintenance of high tax rates.

We do not mean to suggest that governments are now in a position to prevent unemployment merely by the process of reducing taxes and increasing their expenditures. Tax changes cannot be made lightly, firstly, because levels of taxation represent compromises between the interests of the various groups in the community and, secondly, because in a democracy once a tax is reduced it is very difficult to get it increased again except in the case of dire emergency. It may be even more difficult to increase expenditures on public works quickly enough to bring any appreciable immediate relief if the degree of unemployment is at all severe. To begin with, there would need to be some consensus among governments at the federal, provincial and municipal levels if expenditures on such public works as highways, roads and streets, hospitals, schools and universities, municipal redevelopment schemes, public buildings, railway extensions and the like were to be introduced quickly enough to be worth while. No doubt an agreement among the different levels of government could be worked out reasonably quickly if the degree of unemployment was serious enough and if there was not too much quibbling about which government was to put up the funds. But it must be remembered that the planning and preliminary engineering of such public works as have been mentioned may take many months or even years. The actual work on the contemplated projects cannot be started until the preliminary planning is completed. Under such depressed conditions as we have been speaking about, it would be possible for the government to try to stimulate housing development by appropriate amendments to the National Housing

Act. But in any prolonged period of unemployment, it is probable that the rate of family formations would be reduced. This would have some bearing upon the demand for housing so that the government's efforts in this direction would not be likely to be fully effective.

The fact of the matter is that the problem of preventing unemployment or of correcting a condition of unemployment once it occurs has not been fully solved. There are things which governments can do under such conditions and if they are done at the right time and with sufficient vigour and forthrightness, we may be hopeful, perhaps cautiously optimistic would be a better way to put it, that they will be successful, depending upon the circumstances at the time and particularly upon conditions and circumstances in the United States. But the business of influencing the level of economic activity in a country is a new art which is relatively untried. And there is nothing certain or foolproof about it.

The whole matter is further complicated by the very important part which public confidence has to play. If businessmen and investors are confident and optimistic, it should not be hard for governments to encourage expansion of economic activity. On the contrary, it may be difficult for governments to hold things in reasonable check in order to avoid inflation and to prevent the creation and development of over-capacity of productive facilities. If, on the other hand, businessmen and investors lack confidence it will be extremely difficult for governments to persuade them to take chances and to expand their operations. This difficulty is particularly pertinent in Canada because of our close proximity and our sensitivity to economic conditions and to the climate of business opinion in the United States. If there should be a lack of public confidence in the United States and if the level of economic activity in that country should fall off as a result, its effects will assuredly be transmitted to Canada.

No one is in a position to say with assurance whether or not there will be periods of "cyclical unemployment" on a serious scale during the next twenty-five years. If there should be a serious depression in the United States during this period, its effects undoubtedly would spread to Canada as we have said and the problem of counteracting them will be difficult indeed. We are hopeful that there will not be a deep depression or serious unemployment in the United States or in Canada and all our forecasts are based upon this premise. But we are not unmindful of the fact that as recently as three years ago, there was a worrying amount of unemployment in Canada. It is true that it was somewhat spotty in its application but it was substantial nonetheless especially in some parts of Ontario and Quebec. This may happen again at any time and it will be surprising if it does not happen from time to time during the next twenty-five year period. In such event, the objective of governments should be to take whatever remedial action may be considered appropriate quickly enough to prevent unemployment from spreading without being stampeded into action which could lead to inflation. This will not be easy.

There will be some "frictional unemployment" at all times if we are to avoid inflation and if the free market system is to function. If the percentage of the working force which is frictionally unemployed tends to approach the maximum which may be considered tolerable, governments should begin to take action along one or more of the lines we have been discussing. We would expect also that governments in the future as they have in the past will think it proper to ease conditions of "regional unemployment" in areas where for one reason or another the principal industries are depressed. Subsidies to the gold mines and to the coal mining industry are cases in point. The assistance which these industries have received has permitted them to reduce their activities, including the numbers of their employees, gradually and over an extended period of time. In this way the employees involved have been given time to obtain employment in other occupations and the unhappy and disrupting effects of sudden "regional unemployment" on a large scale have been reduced. Undoubtedly there will be occasions when there is "regional unemployment" in some parts of Canada despite a condition of general prosperity and of inflationary pressures in the country as a whole. The measures which it may be necessary for governments to take in such cases, while tending to alleviate the particular problem, may well tend to aggravate the more general problem of inflation. It will not be easy to resolve such contradictory pressures.

Many people believe that the problem of maintaining a stable level of prices in the future will be even more difficult than preventing unemployment and that the dangers of inflation will be in our minds much of the time over the next quarter century. As we said in our opening chapter, there will be plenty of ways to spend our increasing wealth. But there will be competing claims on our resources and at any one time some of them may have to be deferred. To do otherwise will be, if not to court disaster, at least to run the serious risk of inflation which if uncontrolled can lead to recession or depression. This was stated in somewhat different words by the Governor of the Bank of Canada in his annual report to the Minister of Finance for the year 1956:

> "The object of economic policy in the world today is to promote high levels of economic activity and employment with stability of prices — to facilitate economic growth at the highest rate that can be sustained for years at a time without endangering the stability of the currency or the cost of living. A hectic attempt to expand too fast is inconsistent with these objectives, and is also self-defeating. In addition to promoting inflation, it is bound to create excesses and distortions, overcapacity in some fields and deficiencies

> in others, and to end in a recession or depression which brings expansion for a time to an end. The greater the excess of attempted expansion over that reasonably attainable, the sooner will the recession arrive and the worse will be its rigors and difficulties of adjustment."[3]

Inflation is not something that can be treated lightly or complacently. So-called "creeping inflation" of, say, 2 per cent or 3 per cent per year would mean a doubling of prices in 35 or 23 years if it continued to creep at the same rate for that long a period. But probably well before that time the rate of inflation would have developed into a walk or even a run with the inevitable results which have been mentioned. In the interim the public might lose its faith in the continuing value of the currency and serious stresses and distortions would be created in the Canadian economy.

It may be remarked in passing that a high rate of saving will continue to be needed if the Canadian economy is to go on growing and developing; this would be less likely to occur if there should be any serious loss of faith in the continuing value of the currency. "Inflation forcibly restricts consumption by exacting the greatest sacrifice from those least able to bear it. It sets up many social and economic stresses, and it feeds on itself — the so-called spiral of inflation of prices and costs."[4] The people who get hit the hardest in a period of rising prices are pensioners, people who have retired and others with fixed incomes, the so-called white collar class whose salaries are relatively inflexible and particularly those who are not organized in trade union groups. Over the short term, organized wage earners may fare better than other groups; but if the inflation gets out of hand and leads to a recession or depression with its resulting unemployment, they will suffer in the long run along with all the others.

A lot is said these days about the inflationary pressures created by the so-called wage-price spiral. It seems probable that we shall be confronted with this phenomenon for many years to come and it may be appropriate to say a few words about it at this point. Because of improved technology, greater use of machinery and "automation" productivity in some industries is rising at a fast rate, much faster than the average increase in the rate of productivity for the nation as a whole. Not unnaturally the workers in these industries and their union leaders expect to share in the benefits from the increased productivity and therefore they demand increases in their wages. The increases which are granted may or may not exceed the reductions in costs resulting from the increased productivity. If they do not exceed such cost reductions, no harm may be done insofar as the particular industries are concerned (although reductions in the prices for the products of these industries which might otherwise have been possible will not be able to be made). However, a wage scale will have been established in these industries at a higher level than it was at before and higher than the scales prevailing in other industries. Seeing what has happened, the workers in such other industries demand that their wages be increased too even though the increase in productivity in their industries may be much smaller or even negligible. If they are strong enough their demands will be met and the prices for the products of such other industries will then have to be raised in order to meet the increased costs. In periods of full employment and with an increasing percentage of the working force employed in the service industries where gains in productivity are not likely to rise very rapidly, this can produce the so-called wage-price spiral of inflation.

There is no simple answer to this problem. Some people say that in industries where the rate of increased productivity is high, workers and their union leaders should exercise restraint in making wage demands. But to expect any highly organized group in our society to exercise restraint for long where their self-interests are concerned may prove to be a pious hope that is not likely to be substantiated by experience; workers in these favoured industries may fail to see why they should exercise restraint unless they can be assured that all other groups in our society will do the same. Other people say that managements should stand firm and should refuse to grant increased wage demands if this will lead to increased prices. But managements are paid to keep their companies going and to earn a profit. This is and must continue to be their principal preoccupation, although, like all responsible members of the community, including organized labour, they should not be unmindful of other and broader considerations of the public interest. One thing seems certain. We shall not find the answer to the problem of inflation by blaming one or other of the many groups and classes that together comprise what we refer to as the free market economy. This is one problem where the solution, if there is one, must lie within the area of government policy and action including leadership and continuing education in these matters.

The most pervasive, impersonal and effective way of combatting inflation is through monetary policy designed to raise interest rates or to reduce the amount of money and credit available or to do both of these things. This is the direct responsibility of the Bank of Canada, which was established according to the preamble of its Act of Incorporation for the following purposes:

> "Whereas it is desirable to establish a central bank in Canada to regulate credit and currency in the best interests of the economic life of the nation, to control and protect the external value of the national monetary unit and to mitigate by its influence fluctuations in the general level of production, trade, prices and employment, so far as may be possible within the scope of monetary action, and generally to promote the economic and financial welfare of the Dominion. Therefore ...."[5]

Monetary action initiated by the Bank of Canada can be very effective within considerable limits in influencing the level of economic activity throughout the country. It can be particularly effective when the times call for restraint in view of rising pressures of an inflationary character. But monetary action by itself should not be expected to do the whole job of controlling a substantial and persistent rise in prices. If it appears at any time that inflation seems to be getting out of hand, then monetary policy will need to be supported by policy changes in other fields, i.e., by fiscal measures and by the reduction of government expenditures which we shall refer to later. The need for monetary policy to be integrated with, and supported by, other measures may be all the more true in Canada, where monetary policy has to contend with a number of special conditions and considerations and thus is subject to some special limitations.

As we have pointed out before, many of our most dynamic and expanding industries are dominated by Canadian subsidiaries which are controlled by parent companies in the United States and other countries. The development programmes of these Canadian subsidiaries may be influenced only indirectly, if at all, by the workings of Canadian monetary policy. Their capital requirements may be supplied either by their foreign parent companies or by the ploughing back of their own earnings and deferring the payment of dividends to their parents. This gives these companies a decided advantage over their domestic competitors in Canada who must look to the security markets and to the commercial banks to meet their needs for capital. The competitive disadvantage of such domestic Canadian companies vis-à-vis Canadian subsidiaries of foreign concerns will be made more difficult by a severely restrictive monetary policy. Furthermore, if despite the operations of a restrictive monetary policy, capital developments in certain industries can be proceeded with more or less with impunity (including developments by Canadian subsidiaries of foreign concerns), they will tend to draw resources away from other sectors of the economy where development may be equally, if not more urgently, required. This is another reason why a restrictive monetary policy in Canada cannot be pushed too far. To do so might distort the situation and hold back development in such other sectors of the economy to a greater extent than may be thought desirable in the interests of an even growth.

Still another consideration which cannot be overlooked by our central bank authorities is that while monetary action can be an extremely effective and persuasive instrument for restraining a dangerously rapid rate of economic activity, it is nevertheless a somewhat blunt one. With the best will in the world on the part of all concerned, the effects of a restrictive monetary policy cannot be distributed evenly over all sections and classes in the country. The activities of the weaker credit risks, who are more likely to be the smaller businessmen, are apt to be restricted to a greater extent than those of larger concerns, including Canadian subsidiaries of foreign companies, which may be less dependent upon the security markets and upon bank credit. This has the further complication that the effects of a restrictive monetary policy may fall more heavily on those sections and regions of the country where a greater proportion of the business is conducted by smaller concerns than is the case in others. Monetary action cannot play favourites and it cannot discriminate between different classes of borrowers. As we have said, one of its great advantages is that it is impersonal in its application. In Canada, however, there may be times when it would be desirable if possible to promote economic activity in some parts of the economy while everything points to restraining the rate of activity in general. This is beyond the scope of monetary action. But it is a consideration nonetheless which places some limitation upon the extent to which monetary policy should be expected to operate by itself and without help.

There is also the question as to how far monetary policy in Canada may differ from monetary policy in the United States for any extended period. If, as a result of restrictive monetary policy, interest rates in Canada get too far out of line with those in the United States, some Canadian borrowers, including some Canadian municipalities, may turn to the United States market for the funds which they require. The very close and intimate relationships which exist between the economies of the two countries have been discussed in Chapter 3 and in the separate study, *Canada — United States Economic Relations*. Whether in these circumstances it would be possible for us for long to pursue an entirely different course in our monetary policy from that which is being followed in the United States is an open question. Our monetary policy has differed from that of the United States on occasion both in the matter of timing and in the degree and emphasis which it has placed on restraining or encouraging economic activity from time to time. It has never followed an entirely opposite and different course, however, for any extended period and we are inclined to think it would be very difficult for this to be done effectively. So far, however, there has been no call for this. Economic conditions in Canada and the United States have not differed very greatly and as a result more or less similar monetary policies have been appropriate in both countries.

There is one other special situation with which the operation of monetary policy has to contend in Canada which we should refer to very briefly. The working of monetary action may be hampered in its application and effectiveness to some extent by the lack of control over the operations of instalment finance companies which play such an important role in modern merchandising, and of small loan companies. The policies of these concerns in times of inflationary pressures may be directly opposite to those which the central bank is trying to promote through the operations of the commercial banks. In the past, in times of emergency when inflationary pressures were very severe, the operations of instalment finance companies have been subjected to direct controls; minimum down-payments and maximum periods for the repayment of instalment credit contracts have been established. Such direct controls would, of course, require action by Parliament.

Another type of direct control which could be used if necessary would be the screening of certain types of borrowing or financing, with some categories of borrowers exempt and all borrowers exempt under a certain size. Limiting the amount of certain categories of borrowing in this way could reduce inflationary pressures and at the same time make it somewhat easier for those to borrow who were not affected by the control. However, such a policy would require that some governmental body exercise discretion in adjudicating the claims of competing borrowers in order to achieve a different result from that produced by the impersonal processes of the market.

We do not propose to discuss the workings of the more all-embracing schemes of price and wage controls and rationing which can only be justified in periods of extreme emergency. These require a large administrative staff and a high degree of compliance and co-operation from business and consumers. Such schemes should not in our view be regarded as proper or practicable methods for restraining the kind of inflationary pressures which are likely to arise in times of peace.

As we have already stated, monetary action by itself should not be expected to do the whole job of controlling inflation if it is persistent and substantial in its proportions. It is here that monetary policy should be joined and co-ordinated with fiscal policy, particularly with tax policy and with debt policy. One major difficulty in using tax policy as an instrument in combatting inflation is that changes in taxes are not usually made more often than once a year at the time of the annual budget. Furthermore, tax changes, some of which for administrative reasons may not become effective immediately, must be based on forecasts of the economic outlook made weeks or months earlier and for the 12 months ahead. Under such conditions it is difficult to keep fiscal policy very closely or precisely in tune with constantly changing economic conditions. In addition, as we mentioned earlier, there is a considerable lag between the announcement of tax changes and the time when the effects of such changes begin to make themselves apparent. And quite apart from this, there is a natural and proper reluctance on the part of those in authority to tinker too much with the tax structure or to make changes indiscriminately. Monetary policy on the other hand is much more flexible because changes can be made frequently and at any time and the impact of such changes is felt immediately.

Some of the difficulties referred to of using tax policy to complement action in the monetary field were well summarized in a paper to the American Economic Association by Professor J. J. Deutsch, who for several years was Assistant Deputy Minister of Finance and Secretary to the Treasury Board:

> "The fiscal instrument has further disadvantages because it is not sufficiently flexible and because opportunities for changes tend to be governed quite strongly by the timetable of democratic processes. The timetable regarding parliamentary sessions and elections may or may not coincide with developments in the economic scene. Likewise, the expenditure side of the budget is subject to the influence of external events and social forces which at any particular time may dominate the budgetary situation. On the other hand, the very large budgetary surpluses which may be necessary for an effective counter to inflation undoubtedly weaken the traditional parliamentary procedures for the maintenance of economy in the operations and functions of government. In brief, fiscal measures in most countries are more directly and more immediately related to the 'stuff' of politics, than is monetary policy."[6]

Despite these difficulties and reservations, it may be necessary in the future to make greater use of fiscal policy as a complement to and in co-operation with monetary policy if a serious threat of inflation should arise and should persist. There is no really fundamental reason for example why budgets should not be introduced more often than once a year and in fact this has been done on a number of occasions. But whatever the difficulties may be, the fact remains that fiscal and monetary policies should be used in concert rather than separately when the occasion so demands.

In periods of strong inflationary pressures, debt policy as well as fiscal policy should be reconciled and co-ordinated with monetary policy. In such periods, as we have said, governments should budget for surpluses. But the surpluses obtained should not necessarily be used to reduce government debt. If members of the public are induced to sell their government bonds, the supply of cash in the public's hands will be increased. And this may be contrary to the purpose of budgeting for surpluses in times when the rate of economic activity is very high and inflationary pressures are severe. If the government reduces its own bank balances to buy bonds from the public it may itself be adding to such pressures. This matter is referred to in more detail in *Financing of Economic Activity in Canada.*

In the chapter on secondary manufacturing we suggested that this sector of the economy could be encouraged and the industries in question made more efficient if they were allowed greater freedom in amortizing their capital expenditures on new machinery, equipment and factory buildings. But clearly this suggestion should not be implemented at a time when the central bankers are trying through the operations of monetary policy to restrain the rate of economic activity.

On the other hand, if inflationary pressures should become severe as a result in part of rapid expansion by the resource industries a case could be made for the cancellation insofar as new developments were concerned perhaps only temporarily, of the special tax incentives which such industries enjoy. An even stronger case should be made for such a change if it were believed that these industries, because of rapid expansion, were approaching a stage where there might be some excess capacity of their productive facilities.

Similarly an appropriate time to introduce the various suggestions we have made for moderating the influence which Canadian subsidiaries of foreign concerns have upon the economic life of this country would be during a period of strong inflationary pressures. Under such conditions, if the measures suggested resulted in even a slight and temporary slowing down in the inflow of foreign capital and of the expansion it brings forth, the effect would be beneficial.

As we have said before, we believe that preventing unemployment and avoiding inflation will be the major problem for our governments in the field of domestic policy in the future. When we say this we mean, of course, that preventing any substantial degree of unemployment and avoiding any appreciable measure of inflation will be the major problem for the Federal Government and its prime responsibility in the domestic field. If the power and influence of the federal authority should be seriously weakened through a series of extended conflicts with the provinces or as a result of voluntary abdication of responsibility by the Federal Government the results in the long run might prove to be very serious indeed. Responsibility for preventing any substantial unemployment and for controlling inflation cannot successfully be distributed among ten provincial parliaments. Those who believe as we do that this twin objective is of cardinal importance will wish to see that the federal authority is kept strong enough to shoulder its responsibilities effectively in this difficult and complex field.

As we said earlier, if a serious degree of unemployment should occur or should be threatened, governments at all levels will be expected to step up their expenditures considerably. Similarly, if there is severe inflation or the threat of it, governments at all levels should curtail expenditures. This is the theory of cyclical budgeting which, of course, if it is to be really effective should apply to the combined total of all government expenditures and revenues at federal, provincial and municipal levels and not just to those of the federal authority. This is more easily said than done in Canada.

In Canada the only restraint which can be brought to bear upon the level of expenditures at the provincial and municipal levels is through monetary action and through the by no means exclusive control which the federal authority has over certain fields of tax revenues. Such restraints may prove quite insufficient if inflationary pressures get too strong. No doubt in such event provincial and municipal authorities will be exhorted to reduce expenditures and slow down the rate of their various activities but how effective exhortation by itself would be is questionable, to say the least. This is a real problem for the future and as such it is our duty to report it even though we are not able to suggest how it should be resolved. The answer does not lie in weakening the federal authority, of that we feel quite certain. The problem of ensuring a high level of employment throughout the country without inflation will not be solved in our opinion if it is left to ten provincial governments and their municipalities to deal with independently.

One thing that could be helpful would be quicker publication of current statistics. We have been impressed throughout our work by the extent and the quality of the statistical material which is compiled and made available to the public by the Dominion Bureau of Statistics. And we acknowledge gratefully the help we have been given by the Dominion Statistician and by his staff. Not unnaturally, however, the Bureau, which is part of a department of the Federal Government, is not encouraged to publish tentative figures and approximations quickly. There is the danger that such tentative figures and approximations may have to be amended and that the Bureau or the Government will be criticized if this is so. But we believe it will be important in the future to encourage more members of the public, particularly those in university, professional and scientific circles, in finance and business, in organized labour, in farm groups, etc., to follow closely short-term movements in the economy and to express their opinions on current policies. Only in this way can those who are in places of authority receive the benefit of fresh and varied points of view on current questions which affect the smooth working of the economy. Authorities in the United States are much better served in this respect than are government leaders, civil servants and central bankers in Canada. This is made possible in the United States not only because of a seemingly greater willingness on the part of private citizens in that country to speak out on public issues but also, to some extent, because of the earlier publication of some current statistics in preliminary form. We think the same thing is needed here. More public discussion and debate about current issues in Canada would be bound to be helpful, providing the participants were reasonably well informed. This they cannot be without prompt information about current trends. What we have just said should not be interpreted as a criticism of the Dominion Bureau of Statistics. The work which has been done by the Bureau in the last decade or so has been of the first order of importance. But this work which has contributed so effectively to the improvement in the quality and variety of our economic statistics ought to be encouraged in every possible way. Such encouragement in this case means more money, more qualified staff and more co-operation from the business public.

Governments are large and complex institutions which are divided into numerous departments, crown companies and agencies. It is to be expected, therefore, that occasionally there may be honest differences of opinion between officials in the different departments about the probable level of economic activity in the future, depending in part at least upon the particular responsibilities and interests of the departments in which such officials serve. It would be unnatural if this were not the case in any government in any country or in fact in any large institution anywhere. The Council of Economic Advisers to the President was established in the United States some years ago in an attempt to resolve conflicting opinions of departmental officers about economic trends and conditions and the need for action to prevent unemployment or to control inflation. The Council is responsible to the President but its reports are published and are of great value to the public as well as to the Chief Executive. In Canada a corresponding role may now be filled to some extent by the officials of the Privy Council office who report directly to the Prime Minister. These officials work closely, intimately and we believe almost always most harmoniously, with the senior officials in all government departments and in the Bank of Canada. However, as civil servants in our governmental system, their role must be a silent one. Their anonymity is a source of strength in many ways and they cherish it accordingly. It would be quite improper for them to publish reports or make public their opinions about the impending dangers of unemployment or inflation, and the measures which should be taken in the circumstances. We believe it might be helpful if a body of economic experts were established whose function it would be to inform the government of changes which might be thought desirable in economic policy in order to ensure a high level of employment without inflation. One responsibility of this body would be to publish annual or semi-annual reports for the general information of the public. The success or failure of such an innovation would depend of course very largely upon the good judgment of the men who might be chosen for the task and also upon their reputations for objectivity and hence the confidence which the public would be likely to have in their opinions.

One thing that we hope will be apparent from this discussion of the instruments which are available to government for preventing unemployment on the one hand and inflation on the other, is the great need for more research into the workings of the business cycle and the ways in which its fluctuations can be evened out. At the same time, there is need for a great deal more study regarding the operation and results of the various measures which can be taken in the fields of fiscal and monetary policy. We would hope that our universities among others will consider that research work in these areas should be one of their most important and continuing responsibilities.

Promoting Economic Growth

We have made suggestions in preceding chapters which will affect the extent and character of growth in certain sectors of the economy or of the income levels of people who are engaged in certain industries or who are located in particular areas. There are other fields of governmental policy which apply more generally to the growth and development of the economy as a whole and which are bound to affect Canada's long-term economic prospects. There is, for example, the tariff and commercial policy; there is our need for trained manpower of every sort in this increasingly technological and scientific age; and there is the great importance of research. These are the questions we shall discuss in the following pages.

The Tariff and Commercial Policy

Canada has always had a protective tariff and the separate colonies had protective tariffs even before Confederation. There is nothing singular about this. It would be strange if it had been otherwise. It was, of course, to the very great advantage of Great Britain and France to adopt free trade in the nineteenth century because they were the first countries to supply the new techniques of the Industrial Revolution on a large scale and thus their industries were able to compete successfully with those of other nations in all the markets of the world.[7] But other countries, including Germany and the United States, which had aspirations of becoming industrial nations, established protectionist policies in the nineteenth century because they did not believe their industries otherwise could flourish or survive. Whether or not they were correct in this belief is somewhat academic now. The fact is that protectionist policies were introduced and national economies were developed along certain lines. Now, all industrial nations have protective tariffs and Canada is no exception. There have been fluctuations in the level of protection in Canada over the years but, with few exceptions, these fluctuations have not been very pronounced one way or another.

However, while we have always had tariff protection in Canada, while the fluctuations in the level of such protection over the years have not been very great and while it seems apparent that tariff protection at some level will continue, this does not mean that people have ever found this an easy subject to discuss quietly and objectively. The tariff was a political issue in this country for generations and as such could be relied upon to stir regional interests, feelings and antagonisms. And while in fact the level of the tariff may not have fluctuated so very much over the years this did not inhibit arguments in favour of free trade or of protectionism. However, this clear-cut issue of former times is no longer quite so white or quite so black as it may have seemed to some of the protagonists of the past. Many influences have been brought to bear which in the aggregate have tended to blur the outline at the edges. The distinctions between the interests and the points of view of people living in different parts of Canada are not quite so sharp as they once were. As the economy of certain areas which at one time were dependent solely on export trade become more diversified this trend may be expected to continue. Farmers are beginning to obtain some measure of insurance against violent fluctuations in their incomes, including a degree of protection against importations of agricultural products. Manufacturers, on the other hand, have managed to survive and prosper despite a considerable reduction in the tariff since the end of the last War. And some industrialists are now advocates of free trade. While the cost of the tariff bears more heavily on some areas which have little secondary manufacturing industry than on others, the distribution of government revenues and some other deliberate measures of government policy, including subsidy payments, have substantially offset this disparity in recent years. Furthermore, and of the greatest importance, as incomes rise the effect of the apparent cost of the tariff becomes relatively less significant and relatively less burdensome. This trend also seems likely to continue. Because of these various trends and influences, or partly because of them, the tariff does not seem any longer to be quite as controversial an issue as it used to be.

Canada has played a leading part since the Second World War in tariff reductions, in international efforts to bring about a general reduction in tariffs and other trade restrictions, and in promoting a greater degree of freedom of trade on a multilateral basis. Both the average rate of duty collected on dutiable imports and the average rate of duty collected on all imports into Canada have been reduced by approximately 25 per cent since 1939. Such percentage comparisons may tend to exaggerate the actual measure of the reduction in protection which has taken place during the period. On the other hand, the percentages themselves do not reflect the decline in the real degree of protection which has occurred as a result of changes in the form and administration of the customs tariff in recent years, including for example changes in the law respecting "dumping". Certainly the reduction in protection which has been afforded to the textile and machinery industries since the War has been substantial and the reductions in the case of certain other industries have not been inconsiderable. The average level of the Canadian tariff is now appreciably below that of 1939; it is also below the levels of the late 1920's. The tariff levels of the late 1920's are generally thought to represent a slight decline from those prevailing during the decade prior to the First World War and those, in turn, a decline from those existing in the 1890's and the 1880's following the introduction of the National Policy in 1879. In other words, the present level of the Canadian tariff is lower than it has been for nearly 80 years.

It is not possible to make exact comparisons of the level of protection or of the quantitative effects of tariff restrictions in different countries. It is a fact, however, that Canada's economy is a relatively open one compared with that of other nations which have an important industrial base. This is borne out by the fact that the ratio of imports and exports of goods and services to Gross National Expenditure is relatively high in Canada: 26 per cent and 21 per cent respectively in 1956.

There is no satisfactory way of measuring or estimating the true cost of the Canadian tariff in economic terms. It is possible to make comparisons of the prices of goods in Canada with world prices and to estimate what the differences attributable to the tariff amount to in total for all expenditures in this country. A comparison of this kind which was made by members of the Commission's staff and which purports to show that the differences in total might amount to perhaps 3½ per cent of the Gross National Product is of some interest. But this is very different from an estimate of the true economic cost of the Canadian tariff. Many assumptions, the validity of which would be open to serious question, would be necessary in any such calculations. We do not believe that discussion of the way in which the Canadian economy might possibly have developed in the absence of tariff protection can help very much in this connection. There has been tariff protection and the Canadian economy has developed in a certain way partly because of this. It may be more interesting to speculate about what the long-term results would be if the present tariff protection was removed. But we are doubtful if speculation along such lines will prove very fruitful either. Canada is now an important industrial nation. More than 25 per cent of the total working force is employed in manufacturing; 20 per cent is employed in secondary manufacturing. The expectation is that about the same percentage of an increasing labour force will be so employed in the future. Whatever the long-term results of the complete removal of the tariff might be, the short-term dislocations and upheavals would be tremendous. Such a course, therefore, is not likely to recommend itself to any government concerned with the problem of maintaining a high level of employment. Nor do we think that it should do so.

Similarly, there is no satisfactory way of measuring or evaluating the advantages the nation gains from having domestic manufacturing industries which provide it with assured sources of supply for many commodities and which give the economy a measure of diversification and thus a greater degree of stability than it might otherwise enjoy. It is worth remarking that it may be just as unwise for an economy as for an individual to become too specialized in this present age. An economy with too narrow a base is more vulnerable to technological changes, the pace of which is very fast nowadays, and thus could find itself in serious difficulty.

While, therefore, it is not possible to determine the true economic cost of the tariff in its entirety, and while there is no way of evaluating the advantages to the economy of some diversification of industry, we believe it can be stated with confidence that moderate increases or decreases in the tariff would not have any appreciable effect upon the average standard of living in Canada. More than a moderate decrease in the tariff would not seem to be a practical consideration for the reasons we have mentioned. Any substantial increase in the tariff would, we believe, be equally unwise; such a course not only would result in higher prices for consumers but might bring about retaliatory action by other countries against Canadian exports. It is within these rather narrow limits, therefore, that we shall proceed with the discussion.

In considering the "Prospects for World Trade" in Chapter 4, we arrived at the reluctant conclusion that the impetus which has been given by the United States to a policy of freer trade is now virtually exhausted. We expressed the hope that in the long run effective efforts will again be made to re-establish a more liberal system of world trade. But while we may hope that the international atmosphere in these matters will change in time, it would not in our view be realistic to count upon this happening in the more immediate future. One reason for this is that governments of most countries are now more concerned than they used to be with policies designed to maintain high levels of employment. Such policies can be pursued only at the national level and thus may run counter to measures which would otherwise tend to increase trade internationally. It is true also, as we have previously suggested, that as a country becomes industrialized and as its national income rises, the increased costs of providing it with some diversification of industry and thus with a greater degree of stability in times of stress become less noticeable and, in relative terms, less of a burden. These considerations tend to modify and counteract to some extent, in the minds of those responsible for the policies of the nations, the arguments in favour of freer trade and a greater degree of international specialization. However, we would not wish to seem too pessimistic about the prospects for freeing international trade. Proposals for a free trade area in Europe are evidence that the desirability of removing trade barriers have not been forgotten everywhere despite the preoccupation we have mentioned with other issues.

As we have pointed out in a previous chapter, our exports to the United States have increased very considerably in the last 20 years and it seems likely they will keep on increasing in absolute dollar terms. For the most part such exports consist of materials which Canada has in abundance and which the United States may become increasingly short of in the years ahead. In relative terms expressed as a percentage of Gross National Expenditure, our exports of goods and services to the United States have about held their own; from 15 per cent in 1937 and 13 per cent in 1938 to 13 per cent in 1956. Even when measured as a percentage of a greatly increased Gross National Expenditure in the future our exports to the United States may continue to about hold their own in relative terms. Our exports of goods and services to all other countries, on the other hand, have become relatively less important as a percentage of the total output of the economy. Measured in this way they have declined from 15 per cent of the Gross National Expenditure in 1937 and 13 per cent in 1938 to 8 per cent in 1956. We would expect this percentage to keep on falling in the years to come although perhaps at a slower rate.

In the light of these various considerations, we do not believe it would be wise for Canada to embark upon any general programme of tariff reduction on a unilateral basis. In fact, if our predictions about the nature, extent and direction of Canada's export trade are borne out by events, there may be less reason in the future for Canada to make concessions in the realm of commercial policy than there has been in the past or than there would be if our exports were or could reasonably be expected to be distributed more evenly over the countries of the world. In the meantime it would seem sensible for this country to hold the tariff line on the average at about its present level.

At the same time we should attempt to straighten out some of the anomalies which exist in the present tariff and to simplify the whole tariff structure as much as possible. No tariff is, or can be, constructed on a truly logical or scientific basis. But if we are going to have a tariff at all, and that seems both obvious and necessary in a practical sense, we might as well make it as tidy and as orderly as possible. It should also be reasonably flexible in the sense that we should not hesitate to amend and revise it as occasion demands from time to time. In fact, we would advocate a more or less continuing re-examination of the tariff having in mind continually changing industrial conditions, products and technology. In this connection if, as we believe, the best policy for Canada is to hold the present tariff levels on the average for the time being, any general revision of the tariff schedules will involve adjustments up as well as down in individual rates. In many cases, such revisions would require international negotiation. While not expressing any views on the details of the various agreements by which international trade is currently regulated, we are firmly of the opinion that efforts to promote a stable commercial regime in the international field, under which adjustments can be made in an orderly manner, are very much in Canada's interest.

The task which would be involved in any general revision of the Canadian tariff would be an extremely large one and to be successful it would need to be carefully planned and organized. Before the examination and revision of each section of the tariff is commenced, the Government should instruct those responsible for such examination on the objectives or criteria which should govern them in their review. Such criteria might differ depending upon the industry or section of the tariff under study, and perhaps depending to some extent upon the prevailing conditions of the day. The kind of criteria we have in mind, one or more of which might be applicable in some cases but not necessarily in others, would include such things as the number of people employed in the industry and those dependent upon it directly or indirectly; the relative stability of such employment and the alternative opportunities in the areas where the industry is located; the level of the rates of duty and the effect of such rates on consumer prices and on industrial costs; the reliability of alternative sources of supply; and our surplus or deficit on current account with the country or countries in which alternative sources of supply are located. This list is intended to be illustrative rather than comprehensive in its coverage.

As we pointed out in Chapter 12, the greatest handicap of Canadian manufacturers is their inability to take advantage of the economies of large-scale production to the same extent as may be done in some other countries, particularly the United States. One important objective in any re-examination of the tariff should be to design the tariff schedules in such a way that Canadian manufacturers would be encouraged to specialize on large volume lines and, if necessary, to discontinue production of small volume lines. If it were possible for manufacturers in this way to simplify their production programmes to some extent, their costs and, consequently, their selling prices should be reduced. Every effort should be made to reduce the number of separate items in the tariff and to eliminate whereever possible both "end use" items and items "of a class or kind not made in Canada". We suggest this in the interests of simplicity and because such items call for the exercise of a high degree of administrative discretion, the uniform application of which may be difficult to achieve. But care should be taken that any changes which are made with this as the objective do not result in any material alteration in the general level of the tariff either up or down. Again in the interests of simplicity, new "end use" items and items "of a class or kind not made in Canada" should be made sparingly and only in exceptional circumstances. In the case of tariff schedules to be established for new industries or new products, those responsible for the examination should be instructed to take into account both the economic desirability of the new industry or product in terms of the Canadian economy as a whole and the possibilities of such industry or product being able to prosper without tariff protection or with a lower rate of protection once it became established.

If the proposed examination and revision of the tariff were to be undertaken by the present Tariff Board, which would seem logical, that body would need to be strengthened quite considerably. To be specific it should be provided with an enlarged research staff competent to deal with the many and complicated problems that will be encountered. It might also be desirable to relieve the present Tariff Board of its responsibility for hearing appeals under the Customs Act and the Excise Tax Act.

Many submissions were made to the Commission during the course of its public hearings on the subject of "dumping". It is probable that this term is often used rather loosely and that at times it is applied to importations of goods at perfectly *bona fide* prices. At times in the past, in other cases, some domestic manufacturers would seem to have had justifiable cause for complaint about the value placed on imported goods for duty purposes. Prior to 1948, "dumping duty" could be levied if goods were imported at less than their cost of production, plus a reasonable percentage to cover the costs of distribution, overhead and profit. This left considerable discretion in the hands of the officials responsible for administering the customs legislation. It is alleged by some that customs appraisers were more critical in their examination of values prior to 1948 than has been the case since Canada became a signatory of the General Agreement on Tariffs and Trade and since the amending legislation was passed. It is a fact that the amount of anti-dumping duties has declined very considerably in recent years as a percentage of the total amount of duty collected. In this connection it should be emphasized that the Customs Division of the Department of National Revenue has not a sufficient number of qualified investigators to do any appreciable amount of policing of values. If there have been cases of dumping, therefore, in the legitimate sense of the term, it has not been the fault of the relatively few officials employed on this phase of the work of the Department.

Established Canadian industries and the people employed by them should be safeguarded against importations of goods at dumped prices. Predatory dumping is most likely to take place at times when industry in the exporting country is operating, or in danger of operating, at less than capacity and thus is under pressure to find markets for additional production in order to increase or maintain the volume of its output. Special efforts to enforce the anti-dumping legislation should be made in such circumstances. With this in view, the Commission suggests that the Customs Division of the Department of National Revenue be authorized to recruit whatever staff may be required to investigate adequately this question of values for duty purposes. There should be no hesitation to use promptly the authority provided in the recently amended Section 35 of the Customs Act in order to prevent the dumping of goods from abroad at less than their fair market value. If the section referred to proves inadequate for this purpose, it should be strengthened.

It was represented to us that in some circumstances it might be necessary to take action to safeguard established Canadian industries threatened by a flood of imports at devastatingly low prices from countries where social conditions and the organization of production and trade are vastly different from those which prevail in Canada. Political instability in some parts of the world may contribute from time to time to difficulties of this kind. Safeguards might be particularly necessary if the prospective source of supply should not appear to be a reliable substitute for domestic production over the long term. In this connection it is worth noting that several recent trade agreements entered into by Canada include an escape clause against just such contingencies.

From time to time some Canadians are inclined to speculate about the possibilities of some broad measure of reciprocity with the United States, the objective of which would be to eliminate the restrictions on trade between the two countries. There is no reason at the present time to believe that United States authorities would be receptive to any such proposal, particularly if it implied the free entry into that country of the products of Canadian agriculture and fisheries at a time when there were very substantial surpluses of such products existing in the United States. It is quite possible, however, that the attitude of United States authorities will change at some time in the future as the United States becomes increasingly dependent upon importations of industrial raw materials including importations of such materials from Canada and, perhaps, as United States investment in this country grows. But quite apart from the reaction of the United States to any such suggestion, it may be well to remind ourselves that Canada is now an important industrial nation and, as previously stated, one-fifth of our total working force is employed in secondary manufacturing industries. Some Canadian industries might prosper if they had free access to the American market but many others would probably not be able to survive in their present form or on any appreciable scale. Under these circumstances it follows that any system of complete or even substantial reciprocity with the United States would entail an upheaval in the lives of a great many people in this country who would of necessity have to find employment in other occupations, in the United States if not in Canada.

It may be well to remind ourselves also that while inability to obtain access to United States markets played a part in the decision to introduce a greater measure of protection in the Canadian tariff in 1879, Canadians of that day did not believe a separate nation could be maintained on the northern half of this continent unless deliberate steps were taken to promote industry here and to stimulate a movement of trade on an east-west axis. Such political considerations have always tended to overshadow economic ones when major changes in our tariff structure have been in contemplation. In the past, Canadians for the most part have considered that the economic cost of the tariff whatever it may have been, was a legitimate price to pay for national independence. As we have said before, the cost of the tariff has become relatively less burdensome and it will continue to become relatively less burdensome as our national income rises. The price we pay in this way for national independence is now much less than it used to be.

In view of what has been said in the preceding paragraphs, broad reciprocity with the United States, in the opinion of the Commission, cannot now or in the foreseeable future be regarded as a practical proposition. This does not mean, however, that we should eliminate completely any thought of reciprocal arrangements of more limited scope with the United States, or with other countries, which may be consistent with Canada's international obligations.

The Needs for Trained Manpower and Research

The Canadian economy must accommodate itself continuously to the conditions of a highly competitive world in which the pace of growth and development will be determined largely by the ability to use the fruits of scientific research and technological improvements. The free flow of scientific and technical information between countries is in the interests of all. Canada has gained and will continue to gain from the process. But the rate of growth in Canada would be retarded if Canadian industry were to rely to too large an extent on innovations originating in other countries. In our own interest we must make a significant original contribution to technological advance. This means expansion of support for research and of the numbers of qualified research scientists, and an adequate supply of the skilled workers necessary to apply the new knowledge and techniques.

Our forecasts of industrial growth, including expansion in the service occupations, involve a continuously increasing flow of new workers with required skills. Over the period 1955 to 1980, we expect an average annual increase in the labour force of about 175,000 per year; it is estimated that employment in the resource industries (not including agriculture) will increase at the rate of about 10,000 per year; in construction about 10,000 per year; in manufacturing, primary and secondary combined, about 40,000 per year; and in the service occupations, about 115,000 per year. We have pointed out elsewhere that we expect the fastest growing secondary manufactures to be electrical apparatus, electronics and chemicals, followed by primary iron and steel, industrial machinery, oil refining, rubber products, and non-ferrous metals products. These are all industries which will require a high proportion of skilled workers. The service occupations include in order of the numbers employed at the present time, the distributive trades, professional services, personal services, government services, and finance. These are all occupations which will require a high level of general education, and in many cases extended specialized training.

It is not possible to predict, with any degree of accuracy, the growth over twenty-five years in the demands for different categories of workers. We have assumed that along with some net immigration, the total numbers of young people coming forward into industry will be sufficient to meet the total demand, and that in some way they will acquire the necessary skills to sustain the rate of economic growth we predict. The required skills will be of many different kinds, and the proportions in which they are required will change from time to time. Some old skills will disappear, and new skills will emerge. The rapidly changing demands of industry will call for workers with a high capacity to adapt themselves to new job requirements, and for frequent retraining. We can also be sure that the demand for skilled workers will increase more rapidly than the demand for unskilled workers.

From time to time particular shortages will be met by immigration and by retraining of Canadian workers. However, for the requisite numbers we will, in the long run, have to rely on the education and training of Canadian youth either in industry or in the formal educational system.

During the period 1941 to 1948, again in 1951, and more recently in 1956, there were acute shortages of skilled workers in Canada. In the period 1952 to 1955, the greatly increased immigration of skilled workers in the previous years assisted materially in meeting the demands. The net immigration (after deducting emigration to the United States) of skilled workers since the end of the War has been as follows:

Table 20. 1

ESTIMATED NET IMMIGRATION OF SKILLED WORKERS

(1946-56)

	Immigration	Emigration to United States	Net immigration
1946	2,172	1,177	995
1947	6,983	1,400	5,583
1948	12,995	1,491	11,504
1949	7,763	1,335	6,428
1950	5,106	1,400	3,706
1951	27,726	1,784	25,942
1952	19,011	2,572	16,439
1953	17,663	2,963	14,700
1954	18,287	2,733	15,554
1955	10,990	3,494	7,496
1956 (est.)	11,600	3,500	8,100

SOURCE: *Skilled and Professional Manpower in Canada, 1945-1965*, 1957, a study prepared for the Commission by the Economics and Research Branch, Department of Labour, Ottawa, Chap. 3, Table 21.

We have discussed the general prospects for immigration in Chapter 6. It is our view that the flow of intercontinental migration in the future is likely to be reduced; and that, for a number of years, unless there continue to be unusual movements stimulated by political events such as occurred in 1957, net immigration of skilled workers may not exceed an average of 8,000 per year. However, assuming there is no slackening of economic growth, lack of native-born entrants to the labour force will require continued immigration, with the customary high proportion of skilled workers, up to and beyond 1965.

While efforts should be made to encourage skilled workers to migrate to Canada, it seems improbable that we will be able to meet the increasing requirements of skilled manpower from immigration in the future, as we have done in the recent past. It is, therefore, important that increasing numbers of young Canadians coming into the labour force be trained to perform the growing number and variety of tasks requiring substantial degrees of skills. Unfortunately, although the number of Canadians entering the labour force will increase substantially over the next ten years, there may not be enough young men and women enrolling in training programmes to meet the demand. The varied skills required by industry and the service occupations may be obtained in a number of ways. Each of these avenues will have to be more fully exploited if adequate numbers of trained persons are to be assured.

More complex industrial processes and relationships and the necessity for adaptability in a rapidly changing economy will require a higher level of general ability. We must expect to achieve this through the educational system. Of the pupils entering Grade I, 80 per cent do not now complete junior matriculation and 90 per cent do not complete senior matriculation. The level of education reflected in these figures will not meet the requirements of the future. We must accommodate ourselves to a continuous expansion of school facilities first, because of increasing numbers of young people, and second, because of the necessity of providing a larger proportion of them with a more extended period of schooling. The rapid increase in the birth rate which occurred after the Second World War has made necessary heavy public expenditures on school buildings and has contributed to the familiar shortage of teachers. The pressure of numbers was first felt in the elementary schools, and later in the junior high schools. The wave of increased numbers has now reached the senior high schools, and by 1960 its effect will be evident in admissions to universities. However, the growing pressure of numbers on educational facilities at all levels is not a passing phenomenon. If our population estimates are anywhere near the mark, the wave will not subside; it will rather prove to be the initial impact of an increasing flow of young people. We expect that between 1955 and 1960, the number of young people up to and including 19 years of age will increase at a rate not much short of 200,000 per year; and that the annual average increase in this age range between 1955 and 1980 will be about 160,000. As we pointed out in our reference to school facilities in Chapter 15, "Present-day enrolment in secondary schools is equivalent to just over 50 per cent of the population of 14 to 17 years of age, inclusive; by 1980, the proportion may be 70 per cent". If these expectations are even approximately correct there will be a steady and substantial increase in the total demand for educational services — a demand which must be met if we are to provide industry with its requirements.

Particular skills can be acquired and abilities developed by on-the-job experience, and this will remain an important means of obtaining the skills required. However, the tendency has been toward increasing emphasis on formal institutional training for the acquisition of particular skills, and the trend is likely to continue. Apprenticeship training programmes will have to expand, and more facilities will be required to increase the flow of qualified tradesmen. Governments may be expected to play an increasing role in fostering in-plant or apprenticeship training programmes; but it is to be hoped that skilled tradesmen's organizations and companies will themselves support the further development of these training techniques. There is evidence that some larger companies are becoming concerned about this problem and have instituted formalized training programmes of their own.

The development of new and more advanced techniques is adding to the demand for skilled technicians and creating new technical occupations at the semi-professional level. Existing technical and vocational training facilities and institutions should be expanded and new ones added. A large portion of this will occur as part of general programmes of high school expansion. But, in addition, it is important that more technical training schools for high school graduates be established. The advantages of post-high school training are that it gives young people more time to make up their minds about a career, that it is more suitable to highly specialized training (e.g., electronics) which requires some grounding in science and mathematics, that it will help to relieve the pressures of the universities to give what are, in effect, technical training courses, and that training at this level is likely to be more intensive and efficient than at the high school level. Good technical education in a formal sense has become a necessity because of the technological changes that have taken place in recent years, and it is imperative that the present facilities for such education be greatly expanded.

The universities are, and will remain, the principal source of professional workers in this country; and university graduates will be required in increasing proportion to the total labour force.

Post-war enrolments in Canadian universities reached a low point in 1951-52. By this year most of the student veterans had graduated, and admissions reflected the normal movement of students through the high schools, which was influenced by the low birth rate of the pre-war years. Total undergraduate enrolment was less than 60,000, and the number of graduations less than 15,700. Since 1951-52 admissions and enrolments have been increasing, at first slowly but recently at an accelerating rate. The causes of the increase include immigration, a higher proportion of Canadian students completing high school, and a higher proportion of students who have completed high school entering university. By 1955-56, enrolments had increased to 68,300, but graduations reflecting the declining enrolments of the previous years had decreased to about 11,900. Graduations began to increase in 1956-57. It has been estimated that total enrolments in 1957-58 will have reached 78,700, and graduations in 1958 will number some 13,400. However, the whole period from 1951-52 has been one in which there have been continuing and widespread shortages in the supply of university graduates, which has failed to keep pace with the demands of a buoyant economy.

As we look to the years immediately ahead we can expect a rapid increase in university enrolments and graduations. By projection of the trends it is estimated that the annual increase in enrolments will grow from 4,900 in 1957-58 to 8,500 in 1964-65, and that total enrolments in universities and colleges will reach 126,500 in the latter year. It is also estimated that graduations will increase from 13,400 in 1958 to 21,300 in 1965. With reference to this period (1958 to 1965) the study *Skilled and Professional Manpower in Canada, 1945-1965* concludes: "Comparing the outlook for professional workers with probable supplies, it appears likely that shortages of varying degrees will continue in many fields until about 1960, apart from the effects of any temporary slackening in economic expansion during these years. After that time, however, growing requirements and new supplies may come more closely into balance." The increases in numbers we anticipate are at a rate which will double enrolments and graduations in 12 years, and yet there is every reason to believe that the economy will prove capable of absorbing the increased numbers without difficulty.

The impending growth of university enrolments will require a substantial programme of planning and construction of physical facilities in advance of actual enrolments. Considering the whole period to 1980 we have estimated that an average of $40 million per year will be required for capital expenditures. Immediate requirements, and requirements for the next few years, will exceed $40 million if the universities are to be ready to meet the upsurge between now and 1965. University operating expenditures, at least in the short run, will have to increase more rapidly than student numbers. It is reasonable to assume that if the quality of instruction in universities is not to deteriorate, the ratio of instructors to students must be maintained. Indeed, if Canadian universities are to carry the responsibility of an increasing volume of graduate studies now provided by institutions in the United States, the ratio of instructors to students will have to increase. Salaries of academic staff constitute the major portion of instructional expenditures. If the quality of the academic staff of Canadian universities is to be maintained, immediate increases in salaries are necessary, and an effort must be made over the longer period to keep university salaries in line with those obtainable in alternative occupations requiring comparable qualifications.

The publication of the Dominion Bureau of Statistics, *Salaries and Qualifications of Teachers in Universities and Colleges, 1956-1957,* summarizes the returns from 51 Canadian universities and colleges. In 1956-57, the median salary for 3,954 full-time academic staff was $5,775; and three-quarters of the number were receiving salaries of less than $7,000 per year. The median salary for staff between the ages of 25 and 30 years was $4,423; and for staff with 5 to 10 years experience after receiving their first degree, the median salary was $4,793. Some increases in salary schedules have recently been made. But it is clear that the level of salaries which has prevailed for some years, and as it now stands, offers little inducement to embark on an academic career under the competitive conditions of today.

As we said in our *Preliminary Report*:

> "If salary scales are increased substantially, and if the whole status of the university teaching profession in Canada is raised and improved, it should become increasingly easier to persuade young Canadians of high quality to enter the teaching profession. Furthermore, it should be possible for Canadian universities to attract to their ranks Canadians and others who are at present teaching in United States colleges and, in addition, a number of scientists and scholars from Europe and elsewhere. What is being suggested in essence is that a deliberate and sustained effort be made to raise the quality and standards of Canadian universities to among the highest prevailing anywhere in the world. It is perhaps not going too far to suggest that no other single course of action would be so likely to have such an important and fundamental effect upon the long-term economic prospects for Canada."

Since the War, Canadian universities have experienced difficulties in performing their functions with the funds made available to them from the accustomed sources. During the immediate post-war years when the veteran students were in attendance, the universities found it necessary, and were prepared, to improvise. Temporary accommodation was provided, and instructional loads were increased. At the same time, revenues were supported by grants from the Federal Government. After 1947-48 the enrolment of student veterans, and revenues associated with veteran enrolments, declined; but costs increased. Under these circumstances, the Federal Government, in 1951-52, instituted a plan of grants-in-aid to universities. The total amount to be distributed was based on 50 cents per head of population, and was divided among the provinces on a population basis. Although the federal grants were not universally accepted, they did materially assist in meeting the immediate financial problems of the universities receiving them, and in providing some relief to the provinces in which the receiving universities were situated. It became apparent by 1955 that the impending increase in numbers would soon add substantially to the requirements for capital construction and operating expenses. Early in 1957 the Federal Government increased the grants-in-aid to $1 per capita, applicable in the fiscal year 1956-57. In addition, through the newly formed Canada Council, a fund of $50 million was established to provide construction grants to universities over a period of years. The larger federal grants-in-aid, along with increased revenues from other sources, have again brought a measure of relief to the hard-pressed universities to which they are available, and to the provinces; and the construction grants will assist in the building programme required over the next few years.

We believe that the principle, now well established in Canada, of expecting those who receive the benefits of university education, and who eventually reap its financial rewards, to make a significant contribution through fees toward the cost of their higher education, is sound; and that the arrangement of the academic year, which enables students to earn currently a portion of the cost of their university expenses, is not educationally unsound and is consistent with Canadian attitudes. As we expect real incomes to increase it would seem reasonable to expect that over the long period some part of the increase in university costs should be recovered through fees. However, higher fees must reduce the incentive to undertake the investment in higher education and will eliminate those capable students lacking the necessary financial means. Fees at the present level or at higher levels must be supported by a combination of scholarships, bursaries and loan funds and, to meet the needs of increasing numbers of students, funds for student assistance must be steadily augmented.

Some of the Canadian universities rely, to a considerable extent, on donations from individuals and corporations, and we believe that Canadian universities generally should look for support from these sources. Moreover, it is to be expected that private contributions to the universities will grow. Some limited measure of assistance might be given to the universities by increasing the amount of the deductions from taxable income now allowed to individuals and corporations for donations to educational institutions. This would not mean much by way of reduction in government revenues, but might be of some importance in the case of some universities.

We do not judge it to be the responsibility of this Commission to recommend how public funds should be provided in support of universities. We do, however, feel it our bounden duty to call attention as forcefully as we can to the vital part which the universities must play in our expanding and increasingly complex economy, and to the necessity of maintaining them in a healthy and vigorous condition. The functions of the universities touch every facet of our society. Through the preservation of our heritage they maintain our way of life, and through the interest they generate in the arts, they enrich it. They enliven the perception of social processes, and contribute to the orderly development of social institutions and relations. It is incredible that we would allow their services to society in these ways to lapse or to lag. But these contributions are not our direct concern. We are concerned with the contribution made by the universities to the increase in the national productivity and wealth of the country. In relation to this aspect of the national welfare Canadian universities occupy a key position. They are the source of the most highly skilled workers whose knowledge is essential in all branches of industry. In addition they make a substantial contribution to research and in the training of research scientists.

Industrial progress results from innovations applied to the productive process. Many productive innovations come about through the alert attention of individuals to the activities in which they are engaged and to the processes with which they are associated. Individual initiative in seeking for improved methods is an essential feature of enterprising management. Its exercise is necessary to industrial progress; in its absence industry would tend to stagnate. Research implies a systematic, planned and organized programme designed to add to knowledge; and in the high and rapidly advancing state of technology it is an indispensable partner to initiative. Increasingly, management is dependent upon the specialist who is skilled in the conduct of research to provide the new knowledge on which significant advances may proceed.

All techniques employed in industrial processes represent our control over natural forces and develop from our understanding of the operation of these forces, that is to say, from fundamental scientific knowledge. Growth of scientific knowledge opens the door to new means of bringing nature into subjection to human ends; and may give rise to advances in industrial techniques across a wide front. Any nation which desires to progress industrially must make its contribution to fundamental scientific research. Sometimes inquiries which are directed to specific problems, i.e., applied research, will incidentally throw light on fundamental processes but this is not their primary objective. It is understandable that research directed at fundamental knowledge, which is general in its application, should be publicly supported and that research applied to particular industrial problems should be undertaken by those engaged in the industry affected. In practice this simple division of responsibility is considerably modified.

Traditionally, fundamental research designed to broaden the base of scientific knowledge has been a function of universities either publicly supported or privately endowed; and universities have been assigned the function of training research scientists. In practice much of the research conducted in Canadian universities is applied research. This is not undesirable as long as the primary function of fundamental research is not neglected. The balance effected depends to a considerable extent on the sources of funds available for support of research in universities. Lack of balance, with neglect of fundamental research, results when universities must rely for research on funds which are provided for specific and applied purposes. Fundamental research can only be given its proper emphasis when available funds can be used to this end. It may not be possible to define precisely the volume of fundamental research which should be undertaken in Canadian universities, but we feel it necessary to warn against a tendency to subordinate fundamental to applied research, and to point out that as our universities grow the proper performance of their functions will require increasing support for research of a fundamental nature.

Research in universities is not unrelated to their unique function of training research scientists. The training of a research scientist goes far beyond the limits of an undergraduate programme. The supply of scientists to universities, research organizations, and industry depends on the availability of post-graduate programmes of research and instruction. Post-graduate programmes designed to develop research scientists must include the opportunity to engage in research; and direction must be given by instructors with qualifications beyond those which may be sufficient for teaching at the undergraduate level. Universities which are to offer post-graduate programmes must therefore have facilities for research, and funds to support the specific projects on which graduate students are to engage. They must also be in a position to attract and retain staff with the necessary qualifications to guide advanced students. Unfortunately, as a general rule these conditions have been available to graduates of Canadian universities only in institutions in other countries. Canadian universities, generally speaking, have had neither the facilities nor the staff to offer adequate post-graduate programmes. We should all be grateful to the institutions in other countries which have allowed Canadian scientists to get their essential training. However, Canadian graduate students have contributed to research in other countries; and many of them have not returned to Canada. It is our view that Canadian universities should have an opportunity to expand their post-graduate programmes in the science departments. To do this they will require improved facilities, up-to-date and more expensive equipment, post-graduate fellowships, and the opportunity to bid for and secure the best available scientists.

While all other research activities are dependent on the universities for trained research workers, the universities are not the only organizations conducting research essential to the growth of the economy. Organized research is undertaken and supported by the Federal Government, provincial governments, voluntary organizations and some industries and firms. Government research and expenditures on research, through departments of the Federal Government and provincial research councils and foundations reflect the early and continuing concern to promote the development and utilization of natural resources. This concern, and the typically small size of the producing unit in some of the industries involved, have directed particular attention to research in agriculture, mining, fisheries and forestry. The pulp and paper industry is an example of a primary industry in which the relatively large size of firms has made possible the development of research programmes within the industry. Considerable government support for industrial research developed during, and carried over after the Second World War; but the volume of research in Canadian industries is relatively slight. This is due in some measure to the corporate relations of many Canadian industrial firms. Firms with parent companies in other countries have been able to draw from research conducted by the parent companies, but this has limited the opportunities for corporative research on an industry basis.

During our hearings we received a submission from the President of the National Research Council on "Canadian Research Expenditures". This statement drew attention to the difficulty of securing reliable and comparable data but concluded, first, that expenditure on research by the Federal Government seems to compare favourably with government expenditure in Britain and the United States, when related to population, government budgets and the Gross National Product; second, that although government support for research in Canadian universities is substantial and has been expanding, total support for university research is at a much lower level than in the United States; and third, that expenditure on research by industry in Canada is relatively very low although there has been an encouraging expansion since the War.

Our own conclusions concerning the importance of research may be summarized as follows. In the first place, we believe that the rate of technical advance in Canada must accelerate if we are to maintain our position in relation to other countries and to achieve the growth of the economy which we have predicted. This means a continuously expanding research effort. Secondly, the levels at which research will be conducted and technical progress achieved will be more demanding in terms of skills and facilities than has been the case in the past. This means generally more elaborate provision for research. Third, in many areas the scale on which research must be conducted and the elaborate facilities required will necessitate industry co-operation and substantial government participation. Finally, while the results of well directed research effort will yield substantial returns, it is important that the total research effort should be continuously under review in order to avoid duplication and to detect gaps; and that research information when available should be rapidly and effectively communicated to those who can use it.

It seems to us that the time is opportune to make a careful appraisal of the total national research effort, and in this way to prepare ourselves for the increasing activities in this vitally important field that will be required.

Conclusion

In this report, we have had occasion to discuss many of the problems which seem likely to arise in future in connection with the probable economic development of Canada. In some cases, we have made suggestions or proposals for dealing with the problem under discussion; in others, we have noted the problem without proposing in specific terms how it should be dealt with. There are still other problems which we foresee which for one reason or another we have not mentioned, or which we have referred to only in passing, and which we have not studied in the detail they deserve. By far the most important of these is the whole question of the continuing relationship of the federal, provincial and municipal levels of government, and the tax revenues which each should have in order adequately to carry out its responsibilities.

The fact that we have not studied this central issue in any detail should not be interpreted as meaning that we have doubts about its fundamental importance. However, when this Commission was established in June, 1955, the whole subject of federal-provincial tax agreements had been under study for many months by the officials of the respective governments preparatory to a Federal-Provincial Conference on the subject. In fact, we delayed commencement of our public hearings so as not to conflict with this Conference. It would have been presumptuous on our part under these circumstances to have launched a parallel inquiry into this highly controversial question on which at the time Canada's political leaders and all the acknowledged experts were engaged. And quite apart from this, it would not have been possible for us to recruit the expert staff which would have been needed for such a study.

We have stated the reasons why we did not ourselves embark upon a comprehensive study of this problem. We believe, however, that it is a problem that will have to be resolved, if not completely then at least in part, if the needs of our changing population are to be met, if the difficulties of an increasingly urban industrial society are to be dealt with effectively and if the claims of certain parts of Canada are to be honoured in the best interests of national unity.

Neither did we think it possible for us to undertake the kind of exhaustive study of the tax system which would have been necessary to enable us to express opinions about the present level of taxation and the effect which this may have upon the development of the economy, important as this question may be. A study, *Certain Aspects of Taxation Relating to Investment in Canada by Non-Residents,* was prepared for us in connection with our research into, and consideration of, the question of foreign investment in Canada. But we felt the much more comprehensive examination of the tax structure which would have been needed if we were properly to consider the effects of tax levels on economic development and investment was beyond the limits of our staff resources.

We did not make a separate study of the proper conservation of our natural resources, although references are made to various aspects of this important subject in several places in this report. Speaking generally, we believe the rate at which our resources are likely to be exploited during the next twenty-five years will be influenced in the main by questions of demand rather than by limitations of supply. But this does not mean, of course, that we can afford to be profligate or careless in the use of our resources during the next quarter century or indeed at any time. We believe the careful husbandry of our resources — including land, forests, oil and gas and other minerals, and water — will become increasingly important in the years to come. We hope the question of the proper conservation of these resources will receive the serious study in the future which clearly should be given to it.

We should have liked to have conducted research in a number of other fields, including the effects which changes in public thinking and psychology may have on economic development in the future. What stresses and strains are likely to arise as a result of the rapid rate of industrialization and of urbanization that is going on? What will be the effects of shorter working hours, of greatly increased opportunities for leisure and of a much easier way of life on future generations? Will there be greater similarity in the future in the way people work and are entertained and go about the business of living? And, if so, will this mean greater conformity in thinking as in other things? Such questions were, we thought, beyond our means of tackling. We hope others will be encouraged to go on from where we have felt it necessary to leave off.

In closing this report we wish to emphasize that we have no illusions about our competence to forecast accurately the economic prospects of this nation over the next quarter century, even on the basis of the premises we have set forth. Assuredly, many things will happen and many events will occur that cannot now be foreseen which will result in important changes in the picture we have portrayed. However, we hope the attempt we have made to forecast the general direction in which the Canadian economy seems to be headed and the shape or structure of the economy that may emerge in twenty-five years' time has helped to indicate a number of problems which should be dealt with. None of these problems may seem unduly serious, particularly if one compares Canada's present relative prosperity and bright future prospects with economic conditions and prospects in most other countries of the world. Nevertheless, our future prospects will be enhanced if the right decisions are taken in dealing with the various problems we have noted; and, conversely, our prospects will be less bright if the wrong decisions are made or if no action is taken with respect to some of them.

We wish to emphasize again how important it is that Canadian policies should not be fixed or rigid. We have taken it for granted that they will be flexible and will be changed from time to time as conditions and circumstances demand. We have also assumed that we shall avoid policies which are contrary to sound economic sense. The adoption of policies designed to interfere with, or to frustrate, the natural flow of trade or of economic development could reduce or nullify the optimistic forecasts we have made.

One of our basic premises is that there will not be a serious depression or prolonged periods of mass unemployment during the next twenty-five years. In many circles there is still considerable lack of knowledge and suspicion about the instruments which are available to governments for stimulating employment or containing inflation and considerable misunderstanding about the limitations of such instruments. It was partly for this reason that we devoted the first part of this last chapter to a discussion of this subject. As we have said, we believe the major preoccupation of the Federal Government in the field of domestic policy in the future will be the maintenance of economic stability throughout the nation.

Finally, our forecasts have been predicated on the avoidance of global war in which nuclear weapons and intercontinental ballistic missiles would almost certainly be used. The developments which have been made in these instruments of mass destruction have been phenomenal, even during the short period of 2½ years during which this Commission has been at work. There is every reason to expect that further developments in the future will be equally rapid, startling and frightening. If we are to avoid annihilation and the destruction of civilization as we know it, the main effort of all civilized peoples must be devoted to the creation of some kind of international organization with power to control these forces of destruction. That may seem a strange note on which to close a report upon Canada's economic prospects, which on certain assumptions are most promising. But the briefest reflection will remind us that there may be no future at all, if the forces for destruction in this mid-twentieth century are ever let loose. If these forces are controlled, if the other premises on which our forecasts are based are supported by events, if we are given leadership, flexible policies and a bit of luck — then, as we said in our *Preliminary Report,* "Canadians have every reason to look forward with optimism and confidence to the continued economic development of our country and to a rising standard of living in the years to come".

ALL OF WHICH WE RESPECTFULLY SUBMIT FOR YOUR EXCELLENCY'S CONSIDERATION.

W. L. Gordon

Chairman

Omer Lussier

A. E. Grauer.

Andrew Stewart

R Gushue

D. V. LePan,
Secretary and Director of Research

November 28, 1957.