ECONOMIC COUNCIL OF CANADA

Tenth Annual Review

Shaping the Expansion

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1973

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CONTENTS

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Introduction

THIS YEAR, the Economic Council of Canada is celebrating its tenth anniversary. Since its inception, it has published many works dealing with all aspects of the Canadian economy, and this body of analysis has contributed to a better comprehension of the mechanisms that aid or impede progress towards the major objectives of Canadian society.

Under the Act establishing it, the Council is required to issue an annual assessment of medium- and long-term prospects. While in the first years the *Reviews* complied by devoting a chapter to economic performance and prospects, in 1970 and 1971 they dealt with special topics, leaving performance assessment to separate reports. From now on, however, we shall be making the analysis of performance the only subject of the *Annual Review*. Studies on special subjects will be issued without a predetermined timetable, when the relevant research work has been completed to the satisfaction of the Council.[1].

This *Tenth Annual Review* is divided into two parts. The first describes the Council's theoretical approach and presents an analysis of economic events within the framework of the performance indicators introduced by the Council last year. The second part comprises supporting analysis covering a range of relevant topics.

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[1] In the past year, the Council has undertaken research in the following areas: Canadian commercial policy; cyclical instability in the construction industry; the development of social indicators; financial markets; the labour market; the long-term future; and regional development.

Chapter 1 describes the role that we hope will be played by our system of performance indicators and explains some of the relationships between the concept of potential previously used by the Council and the one now derived from simulations of the CANDIDE model. In Chapter 2, recent economic conditions are assessed in the light of the interim objectives proposed in last year's *Review*. We then propose, in Chapter 3, a new set of indicators relating to the years 1973 to 1976. This chapter also contains our general conclusions and recommendations.

The second part contains a comprehensive analysis of recent cyclical developments and structural changes in the Canadian economy. Chapter 4 summarizes recent cyclical developments in Canada in a medium-term perspective, while Chapter 5 discusses the external environment—particularly foreign growth and prices, and their effects on our trading position. Each of the next four chapters deals with a particular aspect of cyclical or structural changes in more detail. In Chapter 6, we examine important medium-term developments in the public sector, discussing both revenues and expenditures by type and by level of government. Chapter 7, on industrial structure, describes sectoral trends by sector in production, employment, and output per person employed. Chapter 8 contains a short preliminary study of the structure of unemployment, and the final chapter gives a detailed description of recent Canadian price and cost changes in a cyclical context.

Our analysis of the overall economic situation is focused on the period from 1968 to 1972. In certain cases, we refer to a more remote past in order to identify significant trends and, in others, we look ahead to 1975 or 1976 in an attempt to discern future events.

Part 1

1

The Role of Performance Indicators

FOR SEVERAL years now, the Economic Council of Canada and a number of other agencies have been calling for more effective co-ordination between the different levels of government, and between the government and private sectors, in the formulation of economic policy. Despite marked progress in some areas, such co-ordination has never been institutionalized or organized so as to provide an effective basis for jointly examining problems and opportunities. In the Council's view, not the will but the mechanism was lacking. No one yet knows the best way to proceed in order to evolve, choose, and implement a set of policies that will enjoy the widest possible support from Canadian citizens. It is evident that political institutions are at the core of policy-making processes, and it is important that they be used at every stage of the co-ordination process.

Although a fully satisfactory solution to these problems may never be found, it is important to strive towards it. In its *Ninth Annual Review* of 1972, the Council proposed, as a limited but operational basis for the co-ordination of economic policies, a framework of performance indicators. In addition, the Council recommended that use be made of an existing institution—the series of federal-provincial conferences—to harmonize government actions in developing and implementing medium-term expenditure objectives. For the private sector, a National Economic Conference is being organized, at the Council's suggestion, to foster a broad exchange of information in the context of systematic and regular discussions of the indicators.

These recommendations, which define a coherent approach to economic policy-making, are elaborated in this chapter.

The Potential of the Economy

From its *First Annual Review* in 1963, the Council has centred its analysis on economic potential—i.e., on an estimate of the productive (and consumptive) capacity of the economy in a long-term perspective. Potential was defined as being essentially the output of goods and services capable of being produced if the economy were to operate at full capacity—that is, if unemployment were at a low level, initially set at 3 per cent, and price pressures were not excessive. Economic potential is, by definition, a measure of the long-term equilibrium growth rate.

The initial concept of potential, which was defined by reference to employment only, had certain shortcomings. With the development of the CANDIDE model, the Council was able last year to present conceptually more refined estimates of potential than those previously developed. The current notion is that potential is realizable in many ways, depending on anticipated conditions and developments, thus offering alternative choices. In fact, in the *Ninth Review,* we described the results of six separate development paths, representing alternative configurations of demand, which are variants of the potential to be achieved.

Statistical assessments of potential typically cover a relatively long period and define a future in which productive resources will be fully employed. However, they do not solve the problem of how to move from a given situation towards potential without generating excess demand, although this is the type of problem confronting economic policy-makers.

The Performance Indicators

Any forecasting or planning agency can identify a number of options for the future, but it cannot predict which option will be chosen, or when. To shape the future, it is not enough to identify one or even several patterns of demand consistent with the achievement of the long-term potential of the economy. A medium-term growth path must also be defined that will serve as a bridge between the present and the long term. Another requirement is the adjustment of this growth path, if necessary, as information on the actual growth of the economy becomes available.

To provide a framework for such assessments, the Council last year developed a set of interim performance indicators covering the period three years into the future.

These indicators are primarily *medium-term targets*. Contrary to the opinions of certain analysts after reading the *Ninth Review*, these indicators are not forecasts, and their validity is not affected by the degree of precision with which they can predict in 1972 the developments in 1973. In no way is the validity of an objective lessened if actual performance falls short of it. Neither should conformity of an indicator to the subsequent situation be considered as confirmation of accuracy or reason to praise the Council's shrewdness.

It is important to understand that the indicators are averages applied to a three-year period. Economic life is, however, characterized by continual change. Thus the indicator averages may apply to a period characterized by different annual rates of change. It is clear, then, that a given indicator cannot be challenged on the basis of one observation only. It will be some time before full assessment of our indicators will be possible. The indicators represent, in the Council's opinion, performance over a given time period that is both satisfactory and attainable. Before selecting these particular indicators, the Council had to analyse a whole range of possibilities and then select the particular set of objectives that reflected the Council's priorities. The implications of such a target-setting process is that Canada has the power and the means to influence the economy, and that Canadians know what objectives they wish to achieve. This approach is, by nature, essentially normative. It is based, however, on what might be called the "econometrics of consistency"—i.e., on at least a conceptual cognizance of all feasible combinations.

The targets that result are expected to serve two purposes: (1) to reduce feelings of uncertainty among decision-makers about the overall development of the economy and its main components; and (2) to reduce forecasting errors and thus prevent some waste of resources. This double effect should result in greater efficiency of resource use and in a slightly lower average expected rate of return on investment. The time period covered by the targets should lengthen the time period now used by businesses, according to information available, as a basis for forecasting investment requirements. If it does, adoption of these targets may have the

additional effect of reducing the magnitude of cyclical fluctuations.

Since we have limited our preoccupations to such matters as overall growth and medium-term stabilization policies, the present indicators cover a relatively narrow area of social concern. They can, however, be extended at will, and it will eventually be necessary to include targets pertaining to social issues and priorities for the longer-term allocation of resources, thereby reflecting society's preferences relating to protection of the environment, the quality of life, preferred activities, and similar considerations. Such an extension will require a great deal of effort and will depend on our success in solving certain theoretical and quantitative problems. Nevertheless, work is already under way, and the Council hopes to release some preliminary results in the near future. At that time, the full significance of the approach will become clearer.

A second component of the approach is the *assessment of medium-term economic performance.* The following chapter contains such an evaluation, drawing upon the analysis of recent economic conditions that comprises the second part of this *Review*, and an attempt is made to identify the gaps that are likely to occur between actual and target performance over the next three years. This kind of performance assessment, together with a reappraisal of the targets, must be undertaken annually. It is logical, and indeed essential, that the indicator values be adjusted every year to take into account changing circumstances, new government policies, and possible miscalculations on our part. If the range of possibilities is altered, the scope for desirable achievements also changes. Thus we present, in Chapter 3 of this *Review*, a new set of indicators for the years 1973 to 1976. These indicators represent our current judgment as to what, in the medium run, is the most desirable of the possible outcomes.

An important third element of our approach is the identification of a set of *medium-term economic policies* that would result in attainment of the targets. This may be described as the "econometrics of the optimum". We start with a system of equations provided by the CANDIDE model that conceptually permits us to explore the full range of alternative paths of development. The exercise then consists of a search for an optimal solution, taking into account the major goals of economic policy. The resulting recommendations for economic policy can be of a general or a

specific nature but must, of course, reflect the mandate of the institution that makes them. Thus the Economic Council, by its very nature, can only suggest a general policy orientation and must—rightly—leave to the public authorities responsibility for translating its recommendations into specific actions. However, even if only for the sake of ensuring internal consistency, the Council must ensure that there is at least *one* solution compatible with the attainment of the whole set of targets put forward.

A further essential feature of the Council's proposals is the "concertation" process implied by the two suggested conferences. The French term *concertation* can be viewed as having two quite different meanings. The first and weaker sense of the term would imply that the main purpose of a conference is to disseminate information more effectively than would otherwise be possible. The importance of this dimension is generally underestimated, because it is taken for granted that economic decision-makers are able to keep themselves well informed through their own channels. We are not of this opinion. The National Economic Conference will primarily be a vehicle for the transmission of information and also a political exercise in the weak sense of the term "concertation". The stronger meaning implies efficient harmonization of decisions and therefore involves commitments by the participants. Specifically, we think that federal and provincial governments, within the framework of their own conferences, should adopt, as soon as possible, one or more performance indicators relating to overall government expenditure. Genuine harmonization of federal and provincial expenditures is, in our opinion, highly desirable.

The reason for setting up such an institutional concertation process is to generate a consensus around the basic national objectives we are striving to achieve. Once precisely defined, these objectives would serve as a focus for public and private decisions, provided sufficiently broad agreement had been reached, both by the public at large and in the government sector.

Further, it would be highly desirable for the federal government—at some future time—to adopt the system of performance indicators. The private sector could then make decisions with a clear and precise perception of the future orientation of economic policy. Immediate adoption of the indicators would, however, be premature, as they are still at testing stage. The system has to be tried by decision-makers, first, to determine whether it would be as useful in practice as it seems to be in theory.

The Council's approach to the formulation of economic policy may be summed up in four words: *targets, assessment, recommendations,* and *concertation.* While the Council's perspective is long-term, as reflected in the basic concept of economic potential underlying its work, it also recognizes the essential need for flexibility in proposing the system of interim, medium-term performance indicators. In conclusion, we believe that, for the sake of efficiency, it would be useful to bring together businesses, trade unions, and intermediate bodies in a comprehensive process of collective decision-making.

Now that our intentions are clear, we turn to the body of the *Review.*

TECHNICAL NOTE

The performance indicators suggested last year (see Table 2-1) were proposed average rates of change intended to cover the three time periods 1972-73, 1973-74, and 1974-75. When these indicators were developed, 1972 was not very far advanced, and available statistics covered only the very early months of the year. They were, therefore, actually developed from 1971-75 projected average rates of change. In the course of 1972, short-term developments in certain sectors resulted in performance that was either above or below these medium-term target rates. If the indicator rates of change were applied to the actual 1972 values, the implicit *levels* for 1975 would, in some cases, be significantly different from those we had estimated to be appropriate. Accordingly, we here apply the rates of change to realized 1971 values, rather than to realized 1972 values, in establishing the 1975 *levels* indicated on the charts in Chapter 2. In future, we shall eliminate this difficulty by including the current year in the period covered by our performance targets as well as the following three years. Our revised indicators, for example, cover the four-year period 1972-76. The value of each indicator in the base year 1972 is known, and the average growth rate can be applied to it in calculating an implicit 1976 *level*. If the change in an indicator between 1972 and 1973 is above or below the average target rate for 1972-76, the average change in the years 1973-76 will have to be adjusted accordingly. Our target rate of growth for real Gross National Product, for example, is 6 per cent for the 1972-76 period. If a growth rate of 7 per cent is actually achieved in 1973, the implicit target average for the years 1973-76 will drop to 5.7 per cent.

In undertaking this year's assessment of the economy's performance, we have faced great difficulties stemming from the revision of the National Accounts in the summer of 1972. CANDIDE Model 1.0, which was used in the simulations reported in the *Ninth Annual Review*, was necessarily based on unrevised National Accounts data. Despite the considerable amount of work we have put into re-estimating the model using the new data (Model 1.1), the results were not available for use in this report. To enable us to make comparisons for assessment purposes between recent data on the new National Accounts basis and the target levels on the same basis (particularly in the charts), it was necessary for us to apply the target *rates of growth* derived from simulations of Model 1.0 to the 1971 *revised* National Accounts values. Our judgment was that the National Accounts revisions primarily affected the levels rather than the recent and prospective rates of change of the variables concerned, and this approach therefore seemed sound. Such a procedure will be unnecessary in future, as the performance indicators will be based on simulations of CANDIDE Model 1.1 as soon as it is operational. The projected values will then be directly comparable with the published figures.

2

Current Conditions and the Performance Indicators

LAST YEAR, the Economic Council proposed a set of performance indicators, or quantitative targets, that were considered to represent desirable and attainable economic achievement for Canada over a three-year period. Since both the objectives and the potential of the economy change with circumstances, our overall approach to the indicators allows for the annual reassessment of such targets to take account of new statistical information on the recent past and of modified objectives as they relate to the following three years.

The purpose of this chapter is to make such an evaluation. Our horizon will be that of the first set of indicators—namely, the years 1973 to 1975.[1] Our analysis of recent developments will cover, for the most part, the years 1968 to 1972, though in some cases our examination of trends and development will take us as far back as the beginning of the 1960s.

In the following sections, we first provide an overview of the economy's performance in relation to the set of targets as a whole and then examine performance in relation to each indicator individually.

A Summary View

The Economic Council's *Ninth Annual Review* recommended the following set of 15 performance indicators to serve as guides for action between 1972 and 1975.

[1] As the indicator values are annual percentage changes, it will be understood that the target for 1973 is the change in 1973 with respect to 1972. Thus, by convention, the expressions "the period 1972-75" and "the years 1973 to 1975" refer to the same time period.

Shaping the Expansion

The first year covered by these indicators is 1973. As the year is not over (at time of writing), it is obvious that our assessment of performance in relation to the targets will be forward-looking, rather than retrospective. However, comparison of 1972 experience with the relevant estimates in our underlying projections gives some indication of the attainability of the subsequent targets. Before discussing individual indicators, we present a summary view of the main results.

TABLE 2-1—PERFORMANCE INDICATORS, 1972-75

(Applicable to constant (1961) dollar data)

	Proposed Average Annual Percentage Change
Part 1	
Gross National Expenditure	6.0
Consumer expenditures	5.5
Total investment	9.0
Investment in machinery and equipment, and nonresidential construction	10.0
Residential construction	5.0
Government current expenditures	5.0
Exports of goods and services	6.0
Imports of goods and services	6.5
Part 2	
Real disposable income per capita	4.7
Total output per person employed	2.8
Output per person employed in manufacturing	5.0
Total employment	3.1
Implicit price index of Gross National Expenditure	3.0
	Yearly Averages
Number of housing starts (thousands)	245
Rate of unemployment in 1975 (per cent)	4.5

SOURCE: Economic Council of Canada, *Ninth Annual Review: The Years to 1980* (Ottawa: Information Canada, 1972).

Aggregate growth in 1972 was not far out of line with the *average* rate proposed for the following three years, but it was markedly lower than we had expected for that year. We had anticipated

substantially faster growth in 1972 and 1973 than in 1974 and 1975.[2] The present expansion of total output, which has been under way since early 1971, proceeded in 1971 and 1972 at a pace (5.8 per cent per annum) only a little above the long-term (1966-77) "potential" rate of growth of the economy (5.5 per cent per annum). The gap between "actual" and "potential" output therefore narrowed only slightly, from 4.4 per cent in 1970 to 3.9 per cent in 1972. However, the pace of the expansion accelerated sharply in late 1972 and in early 1973, and the gap has therefore been closing quite rapidly. For 1973 as a whole, it could average out at substantially less than 2 per cent.[3] Growth in real output for other countries is, in the aggregate, broadly in line with our projections, with extra strength in the United States offsetting some weakness overseas.

The fiscal stance of the government sector, as measured by the National Accounts surplus or deficit, has been more expansive than we envisaged in our simulations. While the current dollar revenues of all levels of government combined were rising between 1970 and 1972 at about the anticipated rate, government sector expenditures after mid-1971 were rising much more rapidly than our projections allowed for. The result was the emergence of a substantial deficit in 1971-72, in contrast with the substantial surplus anticipated in our projections. The degree of stimulus that is now being applied to the Canadian economy is therefore considerably in excess of what then appeared necessary to achieve the performance targets. However, much of the difference is explained by upward revisions in the National Accounts estimates of government spending. Also, with unemployment higher than estimated, transfer payments have been considerably above the amounts projected, particularly with respect to the more generous benefits disbursed under the provisions of the new Unemployment Insurance Act.

Prices are also rising more rapidly than we had envisaged, reflecting strong demand pressure (in some cases, worldwide in scope) for a number of commodities, poor productivity improvement—at least in the early stages of the expansion—and probably failure of the CANDIDE model to portray every significant

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[2] Our expectations were based on the time paths indicated by the simulations of the CANDIDE model reported in the *Ninth Review*.

[3] We would caution that potential is a zone, rather than a sharply defined boundary. The gap estimates should therefore be regarded as useful primarily for indicating changes in the degree of demand pressure on supply. The existence of a gap—particularly if it is small—should not be equated with the complete absence of excess demand pressure.

feature of the extremely complex processes of wage and price determination. Growth of the labour force has been proceeding somewhat more rapidly than envisaged earlier, mainly because of a rapid unexpected rise in male participation. As a net result of these factors, unemployment has remained higher than anticipated, although falling sharply during 1973.

Individual Indicators and Actual Performance

With the broad developments in mind, we now begin an examination of performance in greater detail, comparing actual and projected results for each of the main performance indicators.

Gross National Product

The performance indicator for real Gross National Product was a growth rate to 1975 of 6.0 per cent. Actual increases since 1968 are set out in Table 2-2, and a visual portrayal of the 1975 target, in relation to both longer-term experience and recent quarterly movements, is provided by Chart 2-1. As the chart indicates, recent GNP growth, on a quarterly basis, has been quite erratic. Following a soft third quarter, growth in the fourth quarter of 1972 picked up strongly, and the strength continued into 1973. On an annual basis, the 1971-72 growth rate of 5.8 per cent is somewhat below the rate of 6.0 per cent established as the performance indicator for GNP. The slow growth experienced in 1972 was, as we noted earlier, rather surprising, as we had expected a somewhat stronger pick-up in the early years of the 1971-75 period, with some slowing down in later years. In this context, it is important to take a close look at the components of Gross National Expenditure in order to locate the causes of this unexpectedly sluggish performance.

TABLE 2-2—CHANGE OVER PREVIOUS YEAR IN REAL GROSS NATIONAL PRODUCT, 1968–72

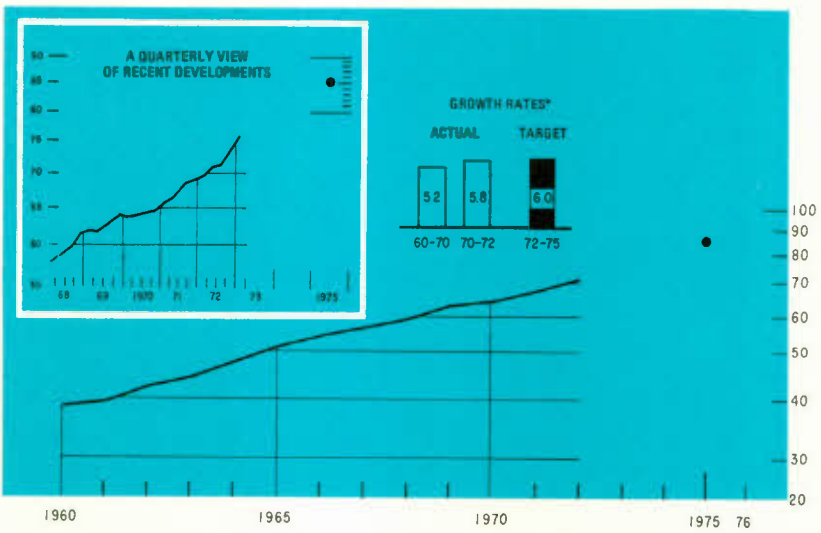
1968	1969	1970	1971	1972
		(Per cent)		
5.8	5.3	2.6	5.8	5.8

CHART 2-1

GROSS NATIONAL PRODUCT

(Billions of 1961 dollars)

Ratio Scale



***The growth rates shown on the charts in this chapter are mean year-to-year percentage changes, based on revised data. They are not directly comparable with the Council estimates provided in the Ninth Annual Review. On the other hand, since 1970 was a year of economic slowdown, the present expansion is apparent only in the 1970-71 and 1971-72 changes for most variables. This is the reason why the growth rate for 1970-72 is shown separately on all charts.**

Note: In all the charts of this chapter, the 1975 target level implicit in the average rate of change recommended last year is shown as a black dot.

Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

The areas that appear to have been particularly lacking in vigour, given external conditions and the expansive shift in the fiscal posture of the combined government sector, are exports less imports, and investment. Consumer expenditure and government current expenditures have both been growing at about the anticipated rates. On the external side, exports are weaker and imports considerably stronger than might have been expected, perhaps partly because of the effects of appreciation of the exchange rate since 1970 and the higher-than-expected relative rate of Canadian inflation vis-à-vis that of the United States in 1972. In the investment sector, the outstanding development was an unexpected decline in nonresidential construction in 1972. Normally, at this stage of the expansion, significant additions to plant capacity would have been under way, as indeed the CANDIDE

model solutions indicated. We consider this matter further in later sections devoted to the investment targets.

It is apparent that considerable acceleration in activity emerged in late 1972 and early 1973. In his February 1973 budget statement, the federal Minister of Finance indicated that the government anticipated 7 per cent real growth in the Canadian economy in 1973. This forecast could well turn out to have been conservative. It implied the realization of an average level for 1973 that would be over 4 per cent higher than the level achieved in the fourth quarter of 1972. Such a rate of increase is compatible with the target average of 6 per cent growth in the three years 1973 to 1975 only if slower growth rates are experienced in 1974 and 1975. If the widely forecast 1974 moderation in the rate of expansion of the U.S. economy is in fact realized, bringing with it a slower rate of increase in Canadian exports, such a deceleration in the Canadian rate of expansion will take place. However, one should not ignore the fact that the 1972-73 expansion has been very rapid in the United States and Canada, thereby moving the level of activity back very close to the potential zone.

Consumer Expenditures

The performance indicator for consumer expenditures on goods and services called for an average rate of increase in real terms of 5.5 per cent per annum. Actual rates of increase in previous years have been as shown in Table 2-3. The strong 1971-72 performance is also apparent in the graph provided in the inset panel of Chart 2-2, which depicts expenditures on a quarterly basis. Consumer expenditures have in fact been rising sharply since the start of the present expansion in early 1971.

TABLE 2-3—CHANGE OVER PREVIOUS YEAR IN REAL CONSUMER EXPENDITURES, 1968–72

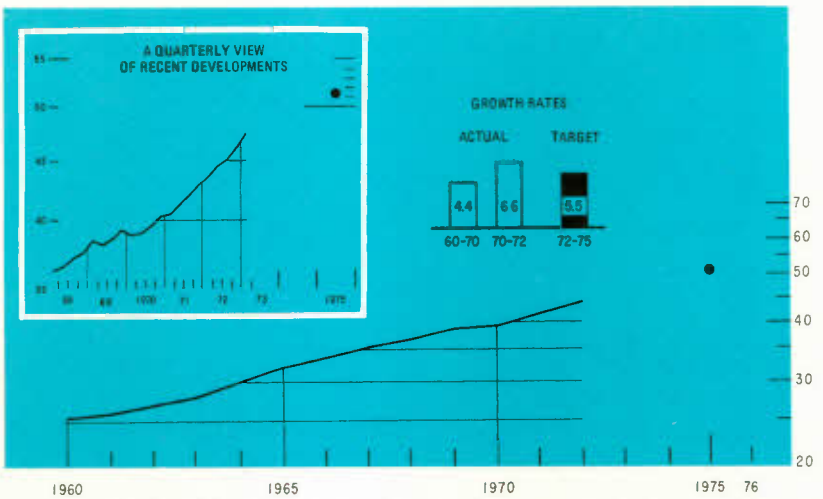
1968	1969	1970	1971	1972
		(Per cent)		
5.0	4.6	2.1	5.5	7.8

CHART 2-2

CONSUMER EXPENDITURES

(Billions of 1961 dollars)

Ratio Scale



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

Underlying the strength in consumer expenditures have been marked gains in expenditures on durables and semidurables, as indicated in Table 2-4.

TABLE 2-4—INCREASE OVER PREVIOUS YEAR IN COMPONENTS OF REAL PERSONAL EXPENDITURE, 1968-72

	1968	1969	1970	1971	1972
			(Per cent)		
Durables	7.0	5.5	−5.5	13.1	14.2
Semidurables	3.9	4.8	1.0	6.7	9.3
Nondurables	1.6	4.5	5.5	5.4	6.3
Services	7.5	4.3	2.9	2.1	5.6

SOURCE: Based on data from Statistics Canada.

Overall, the performance of consumer spending in 1972 was about in line with expectations. Growth in real personal disposable income was considerably higher than allowed for, however, so that

in relation to the growth in disposable income, the rise in consumer spending has actually been less buoyant than it might have been. A reflection of this weakness in relation to income is the recent rise in the rate of personal saving to quite high levels (Table 2-5).

TABLE 2-5—PERSONAL SAVING* AS A PERCENTAGE OF PERSONAL DISPOSABLE INCOME, 1968-72
(Calculated from current dollar data)

1968	1969	1970	1971	1972
		(Per cent)		
5.1	4.8	5.8	7.2	8.1

*Excluding farm inventory change.
SOURCE: Based on data from Statistics Canada.

The reasons for this rise in savings are not entirely clear, but the 1972 change, in particular, may have been related to the strong increase in personal disposable income associated with recent sharp increases in transfer payments and the less pronounced rise in the bite of personal income taxes (see Chapter 6). Recent higher rates could also reflect increasing down payments on houses, which are not included in consumer expenditures and therefore inflate the measured savings rate. Finally, some part of the rise may also be accounted for by feelings of uncertainty on the part of consumers, leading to rather cautious, conservative spending behaviour in relation to income. In any case, the achievement of this relatively high savings rate means that there could well have been a pronounced improvement in the net asset position of the personal sector and that, as a result, further strong gains in consumer expenditures could occur.

Both the target rate of growth in real consumer expenditures of 5.5 per cent and the new higher target rate proposed for the years 1973 to 1976 (Chapter 3) implicitly take into account the likelihood of larger increases in such spending in the early stages of the current expansion than in the later years, which are likely to be characterized by higher investment spending. Thus the above-target rate of increase apparent in 1972 (and probably in 1973) does not by itself indicate any lack of realism in the proposed target *average* increase for the entire period covered by the indicators.

However, in the next chapter, we propose a higher target rate to take into account an upward adjustment to the employment target.

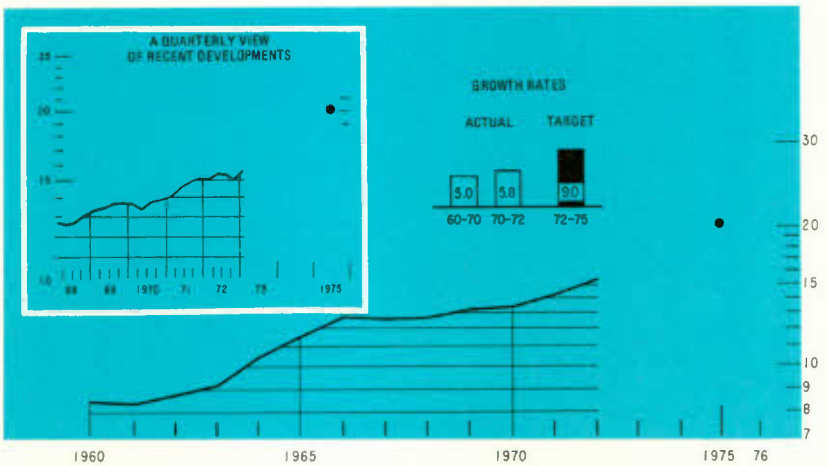
Total Fixed Investment

As we noted earlier, total investment has until very recently been performing rather less buoyantly than might have been expected on the basis of apparent past relationships and the phase of the business cycle. Total fixed investment represents the sum of the following four National Accounts categories of investment: government gross fixed capital formation; residential construction; business nonresidential construction; and business machinery and equipment purchases. The performance target of 9.0 per cent takes into account the need for investment to rise sharply, in line with the step-up in the rate of growth of output, if the stock of capital is to grow in line with the volume of output.

CHART 2-3

TOTAL INVESTMENT
(Billions of 1961 dollars)

Ratio Scale



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

This target rate of growth in total investment is quite rapid, particularly in relation to experience over the past few years, as is apparent from the annual data presented in Chart 2-3 and Table 2-6. Total fixed capital spending, as indicated by the private and public investment survey conducted by Statistics Canada and

the Department of Industry, Trade and Commerce, is projected to rise by about 13 per cent in *current* dollars in 1973, compared with 8.4 per cent based on preliminary results in 1972. This would imply real growth about in line with the target average for the period 1972-75.

TABLE 2-6—CHANGE OVER PREVIOUS YEAR IN TOTAL REAL FIXED INVESTMENT, 1968-72

1968	1969	1970	1971	1972
		(Per cent)		
0.1	4.9	0.9	7.9	3.6

SOURCE: Based on data from Statistics Canada.

It is worthwhile looking rather more closely at changes in the individual components of fixed investment, which are set out in Table 2-7. While residential construction and machinery and equipment expenditures reveal significant gains over the period—particularly over the past two years—nonresidential construction has been weak. The 1972 level of $3,930 million (in 1961 dollars) is almost identical to the $3,931 million achieved in 1966.

TABLE 2-7—CHANGE OVER PREVIOUS YEAR IN COMPONENTS OF TOTAL REAL FIXED INVESTMENT, 1968-72

	1968	1969	1970	1971	1972
			(Per cent)		
Government gross fixed capital formation	0.8	−2.4	−0.6	12.6	0.7
Residential construction	14.6	12.8	−8.2	18.9	9.1
Nonresidential construction	−0.8	−0.6	7.2	4.2	−3.0
Machinery and equipment	−6.6	9.1	2.3	2.4	7.2

SOURCE: Based on data from Statistics Canada.

Table 2-7 emphasizes the volatility of the various components of fixed investment and indicates the need for sustained increases in plant and equipment spending if the target rates are to be

achieved. Because the 1972 increase in total investment was only 3.6 per cent (in 1961 dollars), it would now have to increase at a rate somewhat above 9 per cent until 1975 to achieve the target level indicated for 1975. This target level allows for certain amounts likely to be associated with the development of natural resources, in addition to the normal volume of investment associated with changes in output, relative prices, and a number of other economic influences. Such expenditures are clearly difficult to predict accurately; yet the amounts involved are sufficiently large as to dominate year-to-year changes in total fixed investment. Realistic target-setting is therefore particularly difficult in relation to this area of expenditure. We discuss this matter further when analysing the business component of fixed investment in the next section.

Business Investment in Machinery and Equipment and Nonresidential Construction

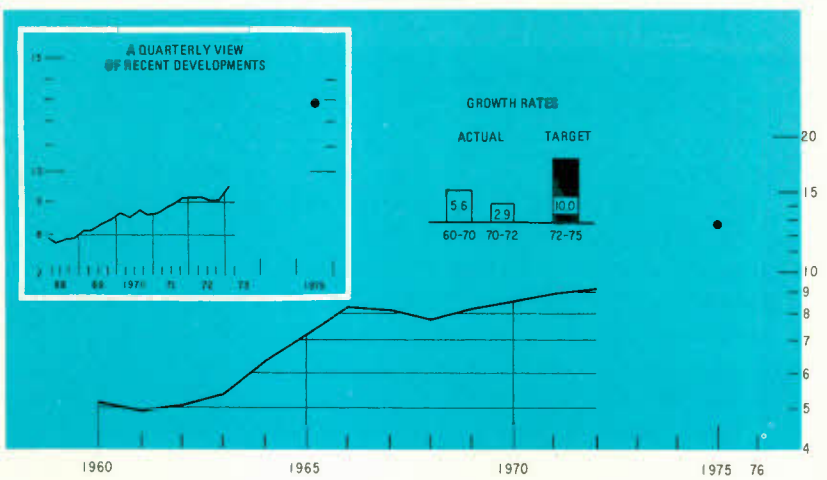
The performance indicator for business investment is an average rate of growth of 10 per cent per annum to 1975.

CHART 2-4

INVESTMENT IN MACHINERY AND EQUIPMENT AND NONRESIDENTIAL CONSTRUCTION

(Billions of 1961 dollars)

Ratio Scale



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

This rate of increase, which in turn strongly influences the target rate of rise of total investment discussed in the previous section, appears at first to be extremely high. It is particularly useful, therefore, to set these rates in longer-term perspective, as is done in Chart 2-4.

During a period such as that from the early to the middle 1960s, when growth accelerated and the gap between actual and potential output closed, investment tends to rise sharply. Such a movement is illustrated by Chart 2-4 and also by Table 2-8, which sets out the year-to-year percentage changes in machinery and equipment and nonresidential construction investment from the early to the late 1960s.

TABLE 2-8—CHANGE OVER PREVIOUS YEAR IN REAL EXPENDITURE ON BUSINESS MACHINERY AND EQUIPMENT AND NONRESIDENTIAL CONSTRUCTION, 1961-68

	1961	1962	1963	1964	1965	1966	1967	1968
				(Per cent)				
Expenditures								
Machinery and equipment	−8.8	6.9	8.4	18.0	17.3	19.2	1.9	−6.6
Nonresidential construction	1.0	−2.1	4.6	16.2	10.5	14.5	−6.4	−0.8
Total change	−3.8	2.2	6.5	17.1	13.9	16.9	−2.0	−4.0

SOURCE: Based on data from Statistics Canada.

The rise in real GNP from 1961 to 1966 was about 6.4 per cent per year, double that of the slow-growth period 1958-61. This compares with an implicit 1970-75 target growth rate of about 5.9 per cent—about a third higher than the rate experienced during the slow-growth period 1967-70. The acceleration of the real growth rate is substantially less than that in the early- to mid-1960s, and a smaller jump in investment could well be appropriate in such circumstances. Nonetheless, a significant acceleration of investment does seem to be called for and is indeed indicated by our simulations. Increases of about 19 per cent are now foreseen for total 1973 business fixed capital spending in the 1973 mid-year survey of capital spending intentions reported in *Private and*

Public Investment in Canada.[4] In real terms, the increase is perhaps about 15 per cent, considerably above the average target growth rate of 10 per cent until 1975. Most of the strength is seen as coming from expenditures on machinery and equipment. The real 1973 increase in business nonresidential construction is expected to be about 7 per cent.

Until quite recently, the behaviour of business investment, particularly nonresidential construction, was somewhat sluggish. However, it must be borne in mind that output growth in 1971 and 1972 was somewhat disappointing and less than anticipated. Since growth in total output partly determines investment, some of the lack of strength in investment was therefore probably simply a reflection of the below-target rate of growth arising from the other factors already mentioned: a higher rate of import growth than anticipated, slower export growth, and a high personal savings rate.

Certain other factors also impinge directly on investment decisions. Among these are changes in the taxation of mining companies and many uncertainties that appear to have contributed to earlier hesitancy in the growth of business investment—e.g., for manufacturing, as to rates of tax and depreciation allowances; for foreign companies, as to legislation to screen foreign takeovers; for mining and petroleum companies, as to provincial actions affecting royalties and other aspects of future operations; and, for virtually all industry, as to Canada's future trading relations with the United States and overseas countries. Within institutional investment, the decline in university enrolment is an evident source of weakness in university construction.

Earlier, it was pointed out that our target rates of growth for investment incorporated an allowance for certain additions to business capital formation likely to arise from resource-related development projects. These somewhat arbitrary additions, over and above the amounts calculated by the CANDIDE model equations, amounted to $225 million in 1973, $300 million in 1974, and $450 million in 1975, all in 1961 dollars. If these amounts had been excluded, the target growth rate for investment in plant and machinery over the next three years would have been reduced by about 1.4 percentage points.

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[4] Statistics Canada and the Department of Industry, Trade and Commerce, *Private and Public Investment in Canada: Outlook 1973*, Mid-Year Review and Regional Estimates (Ottawa: Information Canada, 1973).

Housing Construction and Housing Starts

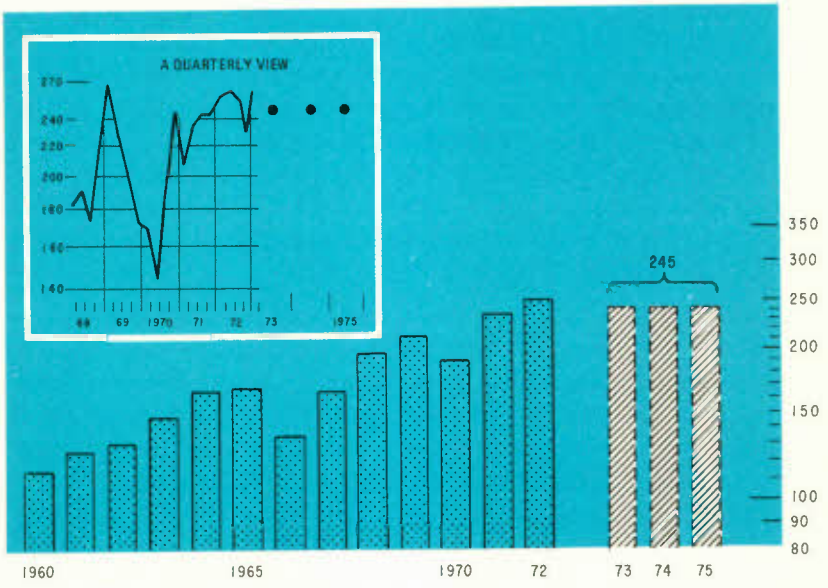
In the housing sector, the performance indicator called for a 5 per cent growth rate to 1975 in real residential construction investment and for an average of 245,000 housing starts a year (Chart 2-5). While the latter figure still appears to be appropriate, the growth rate figure for residential construction expenditure (originally based on growth to 1975 from a calculated 1971 value) now appears to be too high, as well as inconsistent with the proposed starts figure. Revision of the original target rate is called for in this case. Growth to 1975 of a little less than 1 per cent (0.8 per cent) per year from the 1972 value appears to be a more appropriate estimate. This is the rate implicit in the 1975 target level shown by the black dot in Chart 2-6.

CHART 2-5

NUMBER OF HOUSING STARTS

(Thousands of units)

Ratio Scale



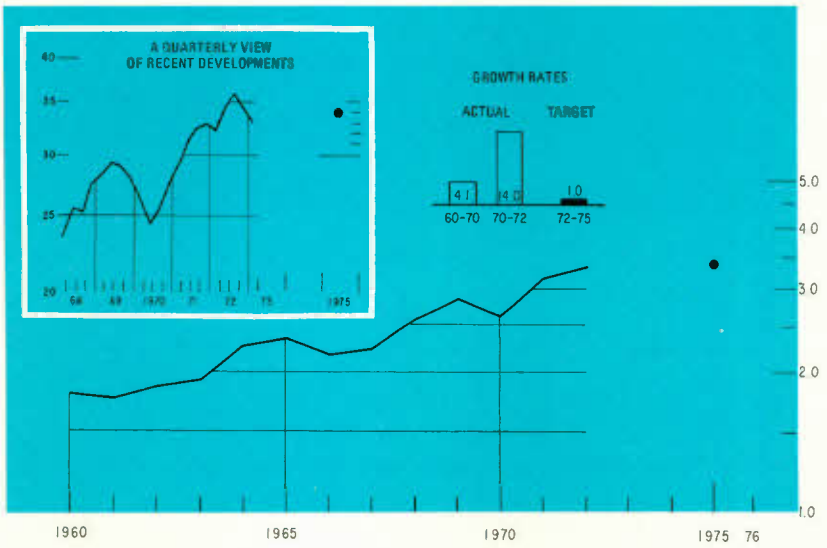
Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

CHART 2-6

HOUSING CONSTRUCTION

(Billions of 1961 dollars)

Ratio Scale



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

As indicated in Charts 2-5 and 2-6, housing activity has increased rapidly in the past few years. Starts climbed from an average level of around 160,000 in the mid-1960s to 250,000 in 1972. The actual numbers of starts from 1968 on are set out in Table 2-9. Residential construction expenditure also indicates strong growth in each year except 1970. Year-to-year percentage changes in these expenditures are given in Table 2-7 above.

TABLE 2-9—TOTAL HOUSING STARTS, 1968-72

1968	1969	1970	1971	1972
		(Thousands of units)		
196.9	210.4	190.5	233.7	249.9

SOURCE: Based on data from Statistics Canada.

The level of starts in the middle and latter part of 1972 was quite high, as indicated in Chart 2-5. Consequently, a substantial carry-over into 1973 took place. The 1973 mid-year issue of *Private and Public Investment in Canada* reports that government and private expenditures on housing in 1973 will probably be somewhat above those in 1972, in current dollars—that is, $4,933 million, versus $4,736 million. In real terms, this would involve some decline. In general, the housing target appears broadly realistic. An area of mounting concern, however, has been the rapidly rising costs of construction and serviced land in 1972 (Tables 2-10 and 2-11).

TABLE 2–10—CONSTRUCTION COST PER SQUARE FOOT, NHA SINGLE DETACHED DWELLINGS, 1968-72
(1961 = 100)

1968	1969	1970	1971	1972
130.5	139.8	142.5	146.4	156.1

SOURCE: Central Mortgage and Housing Corporation, *Canadian Housing Statistics*, 1972.

These strong increases may help to explain the fact that the rate of increase in the volume of housing expenditures in 1972 was rather less than we had anticipated on the basis of our CANDIDE projections.

TABLE 2–11—LAND COST, NHA SINGLE DETACHED DWELLINGS, 1968-72
(1961 = 100)

1968	1969	1970	1971	1972
144.0	161.5	163.6	187.8	200.8

SOURCE: Central Mortgage and Housing Corporation, *Canadian Housing Statistics*, 1971; data for 1972 direct from CMHC.

It is worth drawing attention to the fact that, while costs of construction increased by 61 per cent in the 11 years after 1961—substantially more than the rise in the implicit GNE deflator and the Consumer Price Index (Appendix Table 16)—serviced land prices doubled. Contributory factors have been the growing

relative scarcity of land in general and serviced land adjacent to urban areas in particular.

Government Current Expenditures

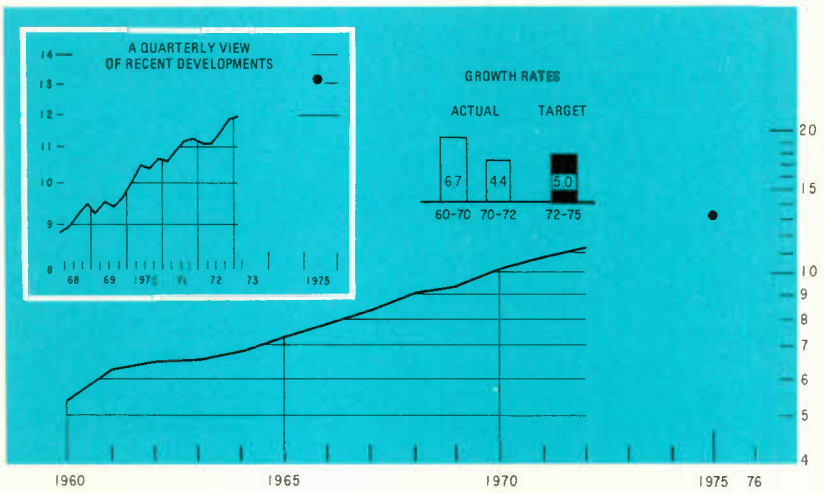
Last year, a performance indicator growth rate for government current expenditures of 5 per cent per year was judged to be compatible with the growth specified for the other components of aggregate demand and to represent satisfactory medium-term economic performance. Current expenditures, which constitute only a part of total government spending, cover government defence spending, wages and other employment costs, and the goods and services that governments buy from the private sector of the economy, but exclude government investment and all redistributive-type payments. Recent current expenditure levels are placed in the perspective of historical experience and the target to 1975 in Chart 2-7.

CHART 2-7

GOVERNMENT CURRENT EXPENDITURES

(Billions of 1961 dollars)

Ratio Scale



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

Shaping the Expansion

After picking up sharply in 1970, following a period of severe restraint during the government anti-inflation campaign in 1969, government current expenditures grew about in line with the suggested trend rate in 1971 and fell somewhat below it in 1972 (Table 2-12). By level of government, the gains recorded during the last two years were mostly concentrated at the provincial and municipal government levels and reflected strong employment growth. Rapidly increasing medicare payments have also been a factor at the provincial level, although to a somewhat lesser extent in 1972, since the implementation of medicare programs is now complete in all provinces.

TABLE 2-12—CHANGE OVER PREVIOUS YEAR IN REAL GOVERNMENT CURRENT EXPENDITURES ON GOODS AND SERVICES, 1968-72

1968	1969	1970	1971	1972
		(Per cent)		
7.6	3.7	10.0	5.3	3.4

SOURCE: Based on data from Statistics Canada.

'Statistics Canada and the Department of Industry, Trade and Commerce, *Private and Public Investment in Canada: Outlook 1973*, Mid-Year Review and Regional Estimates (Ottawa: Information Canada, 1973).

Looking into the future, whether the rate of growth in government spending proposed in the performance indicator is realized appears to depend on whether increases in federal spending are forthcoming. Provincial governments, which were responsible for an important part of the expenditure increases in 1971 and 1972, will no longer be experiencing a temporary upsurge in expenses related to medicare. Already, some provinces have indicated their intention to reduce growth in operating expenditures appreciably in the 1973-74 fiscal year. At the municipal level, governments will be facing important budgetary constraints, particularly in view of the sluggish growth in real property tax receipts in 1972—the smallest since 1964. At the federal level, the

projected 15.8 per cent rise in current nondefence expenditures and the 6.6 per cent increase in current defence expenditures (both in current dollars) announced by the Minister of Finance in the February 19, 1973, Budget will provide an important offset to reduced growth in spending by other governments. Although a high price tag is traditionally attached to current government spending because of the conventional assumption that productivity of public employees does not increase, the planned real increases appear nevertheless to be substantial. In summary, the government sector current expenditure target seems broadly appropriate. It does not appear likely to be significantly exceeded in the immediate future.

Government Transfer Payments

In its *Ninth Review*, the Council did not propose an indicator for government transfer payments to persons but noted that current dollar increases of around 10 per cent per annum would be consistent with the other indicators. The 10 per cent rate of increase, it was observed, would permit not only the maintenance of existing social programs, but some extension of them.

Actual growth rates of government transfers were close to 20 per cent in 1971 and 1972, following increases of 13 per cent in each of the years 1969 and 1970. The 1971-72 increases were thus at roughly double the rate felt to be consistent with achievement of the 1972-75 set of performance indicators. This naturally raises the question of whether these high rates may be expected to continue during the period covered by the performance indicators. Government transfers to persons in the period 1972-76 may be approximated by projecting longer-term trends in existing programs and by making reasonable assumptions about the impact of recently introduced and proposed changes. Our results and methods of calculation are presented in Table 2-13.

The average annual rate of change for 1972-75 is 15.5 per cent, and the corresponding average for 1972-76 is 13.5 per cent. These projected rates are also substantially in excess of the average rate recommended in the *Ninth Review*. It may be noted that transfer payments are projected to increase more rapidly at the provincial level than at the federal level, even if the new family allowance scheme is taken into account. This matter is taken up again in Chapter 3, which presents our conclusions and recommendations.

TABLE 2-13—PROJECTED TRANSFER PAYMENTS TO PERSONS, BY CATEGORY, 1972-76

	Provincial and Municipal Governments				Federal Government							
	Grants to Post-secondary Education	Welfare Payments	Other Provincial and Municipal Transfers to Persons	Total Provincial and Municipal Transfers	Family and Youth Allowances	Old Age Security Fund	Unemployment Insurance Benefits	Other Federal Transfers to Persons	Total Federal Transfers	Canada and Quebec Pension Plans	Total Transfers to Persons	Year-over-Year Percentage Change
	(Millions of current dollars)											
1972.....	1,203	1,094	1,181	3,478	611	2,430	1,869	1,208	6,118	250	9,846	19.3
1973.....	1,383	1,258	1,337	3,978	750	2,800	2,080	1,329	6,959	338	11,275	14.5
1974.....	1,591	1,441	1,513	4,545	1,800	3,070	2,311	1,462	8,643	456	13,644	21.0
1975.....	1,830	1,649	1,713	5,192	1,800	3,239	2,311	1,608	8,958	911	15,061	10.4
1976.....	2,104	1,889	1,939	5,932	1,800	3,417	2,311	1,769	9,297	1,094	16,323	8.4
	(Average annual percentage change)											
1972–76..	15.0	14.6	13.2	14.3	31.0	8.9	5.4	10.0	11.0	44.6	13.5	13.5

NOTE: The assumptions underlying these projections of transfer payments to persons are:

Grants to Postsecondary Education: The average annual growth rate postulated after 1972 is 15 per cent. This rate is in line with the less rapid growth expected in postsecondary enrolment during the 1970s.

Welfare Payments: This item comprises direct relief payments, old age and blind pensions, and mothers' and disabled persons' allowances. These payments have been increased by 15 per cent in 1973—a rate roughly in line with the 1973-74 federal Budget estimates of the Canada Assistance Plan payments. After 1973, welfare payments are projected to increase at their long-term average growth rate—i.e., 14.5 per cent per year.

Other Provincial and Municipal Transfer Payments to Persons: These include pensions to government employees, workmen's compensation benefits, grants to benevolent associations and private noncommercial institutions, and a miscellaneous category. It is assumed that such payments will increase by 13.2 per cent per year in line with the 1961-72 average growth rate.

Family and Youth Allowances: The increase of $140 million in 1973 reflects the raised allowance to $12 per head for the last three months of the year. The 1974 increase reflects this and the further projected rise in the allowance to $20. The 1975 and 1976 figures are held constant at the 1974 level.

Old Age Security Payments: The projections take into account the increase in basic pensions announced in the February 19, 1973, federal Budget Speech, the rise in population aged 65 years and over, and the full escalation scheme for price increases provided in the May 1972 Budget. Thus the basic pension has been estimated at an average of $95.72 per month in 1973, and the number of recipients at 1,850 thousand. In 1974 and subsequent years, the average basic pension is set at $100 per month; the number of recipients is increased by 2.0 per cent per year; and the cost-of-living adjustment is projected at 3.5 per cent per annum. Payments under the Guaranteed Income Supplement program have been assumed to rise by 5.5 per cent annually.

Other Federal Transfer Payments to Persons: Includes world war pensions, war veterans' allowances, pensions to government employees, scholarships and grants, and the adult occupational training program payments. A growth rate of 10 per cent representing the 1951-72 experience has been applied to the 1972 base.

Unemployment Insurance Benefits: The 1973 figure has been obtained residually by deducting the sum of Family and Youth Allowances, Old Age Security Payments, and Other Federal Transfers to Persons from the 1973-74 Budget estimate of total federal transfer payments to persons. In subsequent years, a rule has been applied relating benefits paid out to the number of unemployed persons. This rule also allows maximum insurable earnings to be escalated by the projected value of wages and salaries per person employed in the economy. The resulting figures have been distributed uniformly over the three-year period.

Canada and Quebec Pension Plans: The projections have been made along the lines of the "proposed plan—moderate inflation" contained in the December 31, 1969, actuarial report of the Canada Assistance Plan. The proposed plan was scheduled to be progressively implemented from 1972 to 1977. Our projections are more or less consistent with the implementation of the program from 1975 to 1977.

Exports and Imports of Goods and Services

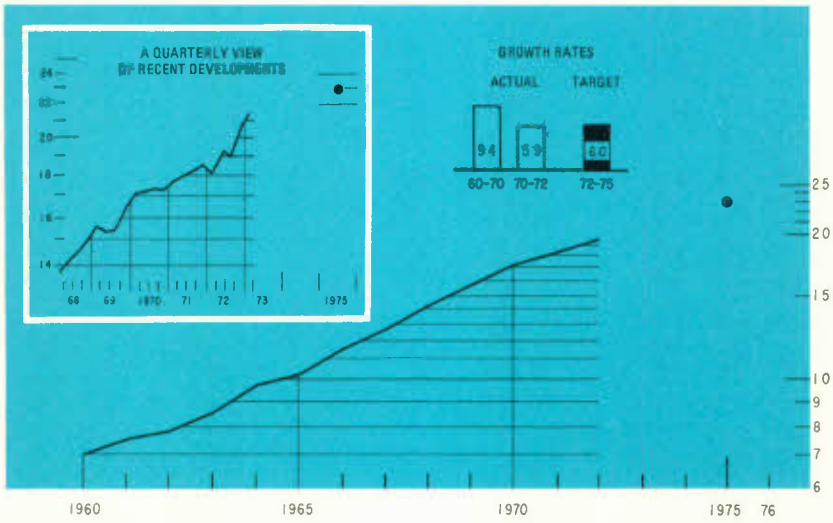
For exports, the performance indicator suggested an annual average rate of real growth of 6 per cent to 1975. Its implications in relation to past performance are illustrated in Chart 2-8.

CHART 2-8

EXPORTS OF GOODS AND SERVICES

(Billions of 1961 dollars)

Ratio Scale



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

Annual percentage changes since 1968 are set out in Table 2-14. The 6.7 per cent increase registered in 1972 was somewhat above the average target rate to 1975, but was nonetheless somewhat below what we anticipated for the year. Exchange appreciation in relation to the United States has played some role in dampening Canadian export growth. It seems, however, that offsetting factors in the future will be the recent improvement of Canada's competitive position vis-à-vis other countries. In addition, the devaluation of the U.S. dollar should stimulate the U.S. economy and, as a result, increase Canadian exports. At the moment, the export indicator still appears realistic.

TABLE 2–14—CHANGE OVER PREVIOUS YEAR IN REAL EXPORTS OF GOODS AND SERVICES, 1968-72

1968	1969	1970	1971	1972
		(Per cent)		
12.4	9.8	9.4	5.1	6.7

SOURCE: Based on data from Statistics Canada.

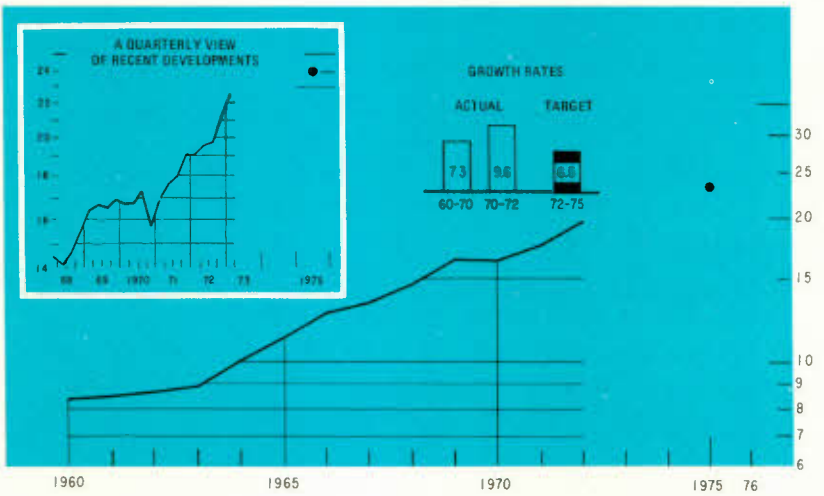
For imports of goods and services, the performance indicator suggests an average growth rate slightly in excess of that for exports, at 6.5 per cent. Its implications in comparison with past performance are illustrated in Chart 2-9.

CHART 2-9

IMPORTS OF GOODS AND SERVICES

(Billions of 1961 dollars)

Ratio Scale



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

Imports are sensitive, above all, to overall demand and have picked up strongly since the slowdown experienced in 1970. The year-to-year percentage changes are given in Table 2-15. As in the case of exports, the appreciation of the Canadian exchange rate vis-à-vis the U.S. rate appears to have favoured foreign suppliers.

An additional influence appears to have been machinery and equipment expenditures in 1972 that were considerably stronger than anticipated (see Table 2-7). A strong rise in imports is expected in 1973 as well, so that achievement of an average rate of growth as low as the 6.5 per cent called for by the performance indicator would call for significantly lower increases in 1974 and 1975. These seem unlikely to materialize, and some upward adjustment to this target thus appears to be appropriate. In view of its critical importance, the matter of Canada's trade performance in relation to the targets receives more extensive discussion in Chapter 5.

TABLE 2-15—CHANGE OVER PREVIOUS YEAR IN REAL IMPORTS OF GOODS AND SERVICES, 1968-72

1968	1969	1970	1971	1972
		(Per cent)		
8.8	13.3	−0.4	7.7	11.5

SOURCE: Based on data from Statistics Canada.

Real Disposable Income Per Capita

The performance indicator proposed for real disposable income per capita was an average annual rate of change to 1975 of 4.7 per cent. This is set against past experience in Chart 2-10. The actual year-to-year percentage changes since 1968 are provided in Table 2-16.

TABLE 2-16—CHANGE OVER PREVIOUS YEAR IN REAL DISPOSABLE INCOME PER CAPITA, 1968-72

1968	1969	1970	1971	1972
		(Per cent)		
2.7	3.2	1.3	6.0	6.7

SOURCE: Based on data from Statistics Canada.

The most recent rates of increase are appreciably higher than the target rate and reflect, to a considerable extent, the stage of the expansion. This target rate is an average rate and, as such, is consistent with higher rates of increase early in the expansion and lower rates in the later years. Nevertheless, personal income, less

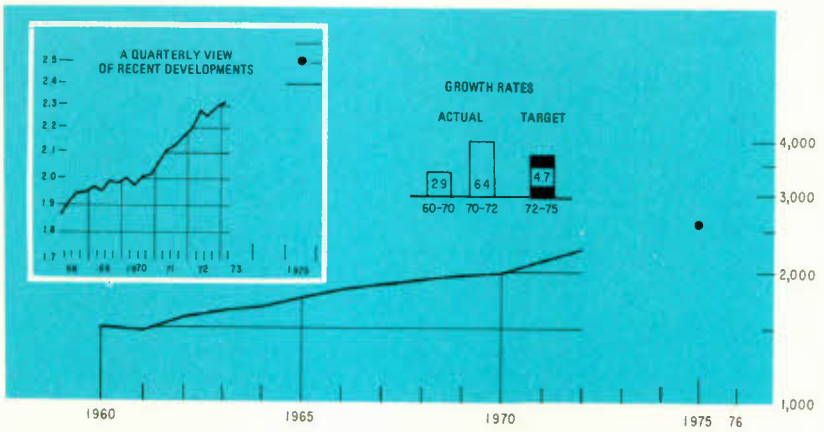
transfer payments from governments, has risen faster than expected, despite lower increases in real GNP up to the end of 1972. In addition, transfer payments from governments have risen much more rapidly than expected in the past two years, while transfers (other than direct taxes) from persons to governments first leveled out and then declined, instead of rising as expected. The rise in personal disposable income in current dollars has therefore been greater than allowed for and has been accentuated by the realization of somewhat lower than projected rates of population growth.

CHART 2-10

REAL DISPOSABLE INCOME PER CAPITA

(Dollars)

Ratio Scale



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

It is clear that this highly important measure, which records the average real income per capita available for private consumption expenditures, is subject to many influences and is particularly sensitive to government fiscal measures, as might be expected. Table 2-17 lays out the major factors determining the way this measure has evolved over the last few years. What stands out clearly in the table is the dramatic shift in the role of taxes and transfer payments in the determination of disposable income.

TABLE 2–17—COMPONENTS OF REAL DISPOSABLE INCOME PER CAPITA, 1967–72

		1967	1968	1969	1970	1971	1972
		(Billions of current dollars)					
	Wages, salaries, and supplementary labour income	35.3	38.4	43.1	46.7	51.3	56.8
plus	Other personal income[1]	10.6	11.8	12.6	13.0	13.8	15.2
plus	Transfer payments to persons	4.7	5.5	6.2	7.0	8.3	9.8
equals	Personal income	50.6	55.7	61.8	66.7	73.4	81.9
minus	Current transfers to governments[2]	7.5	8.9	10.9	12.6	14.1	15.6
	Income taxes included in current transfers	*4.9*	*5.9*	*7.5*	*8.8*	*10.1*	*11.4*
equals	Personal disposable income	43.1	46.8	50.9	54.1	59.3	66.3
divided by	Personal expenditure deflator (1961 = 1)	1.135	1.182	1.228	1.269	1.297	1.343
		(Billions of 1961 dollars)					
equals	Real personal disposable income	38.0	39.6	41.5	42.6	45.7	49.4
divided by	Population (millions)	20.4	20.7	21.0	21.3	21.6	21.8
equals	Real disposable income per capita (1961 dollars)	1,861	1,911	1,972	1,998	2,117	2,259

[1] Includes military pay and allowances; net income received by farmers from farming; interest, dividends, and miscellaneous investment income; current transfers from corporations; current transfers from nonresidents; capital assistance; and net income of nonfarm unincorporated business.

[2] Includes income taxes, succession duties and estate taxes, employer and employee contributions to social assistance, and government pension funds plus other current transfers.

SOURCE: Based on data from Statistics Canada.

Personal income taxes have risen from 11.8 per cent of personal income, excluding transfer payments, in 1968 to 15.8 per cent in 1972. Similarly, transfer payments to persons have risen from 10.9 per cent of personal income, excluding transfer payments in 1968 to 13.7 per cent in 1972. The importance of transfer payments in income is illustrated by the fact that in 1972 they represented 17.3 per cent of total wages, salaries, and supplementary labour income. They exceeded the net income of unincorporated businesses (other than farm) by more than 60 per cent and were over six times the income received in agriculture.

Table 2-18 shows the year-to-year percentage changes in the various components of personal disposable income appearing in Table 2-17. In addition to bringing out the jump in taxes and transfers, Table 2-18 shows the slowdown in wages and salaries during the 1970 recession and indicates the even sharper contraction occurring in the growth of other forms of personal income. Per capita real disposable income rose by only a little over 1 per cent in 1970. This is, of course, an average figure and does not exclude the possibility of real income losses for some individuals. By contrast, in 1971 real disposable income per capita rose by 6.0 per cent; in 1972, by 6.7 per cent. The latter increase is more than twice as high as the average for the 1960s (2.9 per cent) and represents a rather remarkable development. It has been a paradoxical feature of the recent economic situation that, while unemployment (usually considered to be an indication of hardship) reached over 6.3 per cent of the labour force, real per capita living standards rose very rapidly at the same time.

Increases of this magnitude, which arise from the conjunction of cyclical developments and shifts in the fiscal position of the government sector, are obviously not sustainable for long. If demand pressures continued unabated, inflation would accelerate, bringing about a growing gap between nominal and real income. More likely, the pace of the advance will slow down somewhat in 1974 and 1975. A substantial slowdown in per capita real income growth is thus likely, and it now appears that it would be a difficult task to attain our objective of 4.7 per cent growth between now and 1975. A new target rate for the years 1973 to 1976 is proposed below.

TABLE 2–18—CHANGE OVER PREVIOUS YEAR IN COMPONENTS OF REAL DISPOSABLE INCOME PER CAPITA, 1968–72

	1968	1969	1970	1971	1972
			(Per cent)		
Wages, salaries, and supplementary labour income	8.9	12.0	8.5	9.8	10.7
Other personal income[1]	10.8	7.0	3.0	6.6	9.8
Transfer payments to persons	17.3	12.6	13.1	18.4	19.3
Personal income	10.1	11.0	7.9	10.1	11.5
Current transfers to governments[2]	18.8	23.0	15.7	11.9	10.4
(Income taxes included in current transfers)	(20.7)	(26.0)	(18.0)	(15.1)	(12.5)
Personal disposable income	8.6	8.7	6.2	9.6	11.8
Personal expenditure deflator	4.1	3.9	3.3	2.2	3.5
Real personal disposable income	4.3	4.7	2.8	7.3	8.0
Population	1.6	1.4	1.4	1.3	1.2
Real disposable income per capita	2.7	3.2	1.3	6.0	6.7

[1] Includes military pay and allowances; net income received by farmers from farming; interest, dividends, and miscellaneous investment income current transfers from corporations; current transfers from nonresidents; capital assistance; and net income of nonfarm unincorporated business.

[2] Includes income taxes, succession duties and estate taxes, employer and employee contributions to social assistance, and government pension funds plus other current transfers.

SOURCE: Based on data from Statistics Canada.

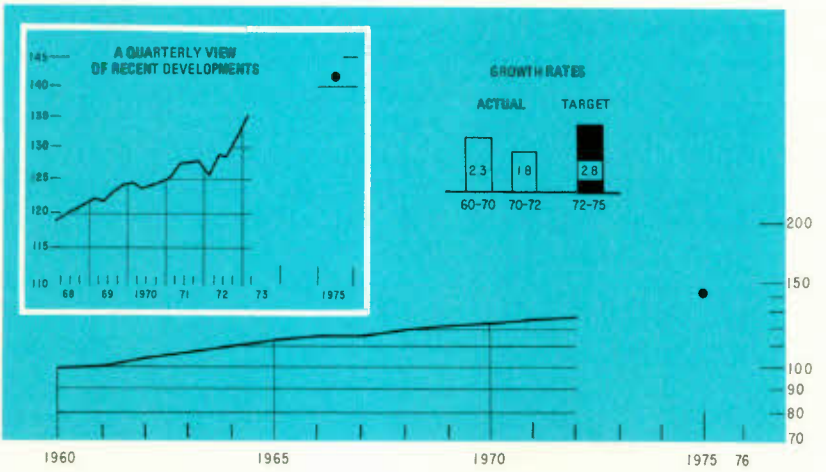
Output per Person Employed

For output per person employed, the proposed target is an annual growth rate of 2.8 per cent per annum to 1975. The 1975 level implied by this target rate of change is compared with the performance of the 1960s in Chart 2-11.

CHART 2-11

OUTPUT PER PERSON EMPLOYED
(1961=100)

Ratio Scale



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

Table 2-19 reveals the cyclical sensitivity in output per person employed. In 1970, the growth of total Real Domestic Product slowed to a greater extent than that of total employment.

TABLE 2-19—CHANGE OVER PREVIOUS YEAR IN OUTPUT PER PERSON EMPLOYED, 1968-72

1968	1969	1970	1971	1972
		(Per cent)		
3.0	2.2	1.1	2.2	1.3

SOURCE: Based on data from Statistics Canada.

Although moderate productivity gains were recorded in 1971, estimated 1972 performance was poor, perhaps attributable in part to the very disappointing third quarter, when output growth came to a virtual halt.[5] As noted earlier, our expectations were for a substantially stronger output performance in 1972. With stronger gains in total output being realized in 1973, stronger gains in output per employee could also be realized. But achievement of gains of the size that would now be required for attainment of the 1975 target level appears to be a rather formidable task.

Further perspective may be gained by considering realized longer-term productivity performance. The postwar (1948-70) trend rate of growth was 2.4 per cent. In the 1960s, growth averaged 2.3 per cent, although it was, of course, somewhat higher in the expansion of the early 1960s, as indicated in Table 2-20. Between 1961 and 1966, the average rate of productivity advance was about 3.2 per cent. Over that period, the rate of increase in Real Domestic Product was 6.7 per cent, compared with the 6.6 per cent implied for 1972-75 (change from the actual 1972 level to the level projected for 1975 in Chapter 4, *Ninth Review*). Although the percentages compare closely between decades, net excess capacity was considerably greater in 1961 than in 1972, making possible the exceptional rate of productivity increase from 1961 to 1965. These considerations and the results of simulations with modified versions of the CANDIDE model suggest that the 2.8 per cent target was somewhat too challenging and that a slightly lower rate would be more realistic. A revised target is suggested in Chapter 3.

TABLE 2-20—CHANGE OVER PREVIOUS YEAR IN OUTPUT PER PERSON EMPLOYED, 1961-67

1961	1962	1963	1964	1965	1966	1967
			(Per cent)			
0.5	4.0	2.9	3.1	3.2	2.6	0.0

SOURCE: Based on data from Statistics Canada.

[5] An alternative measure of global productivity is output per man-hour in the total economy. It reveals even more variability than output per person. The estimated increase in 1972 would still be small, as indicated by the following percentage changes over previous-year estimates: (1968) 5.7; (1969) 3.0; (1970) 2.1; (1971) 4.1; and (1972) 1.7.

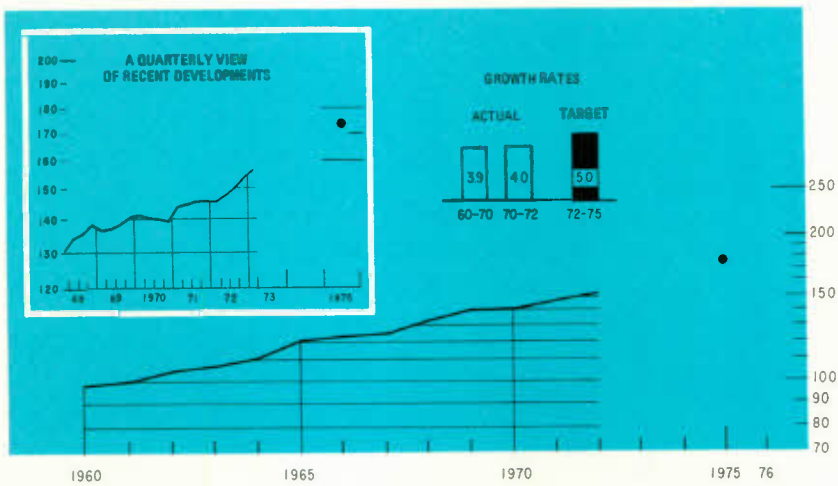
Output per Person Employed in Manufacturing

For output per person employed in manufacturing, an even more challenging rate of growth of 5 per cent per annum was proposed to 1975. The implicit target level, in comparison with recent and historical levels, is portrayed in Chart 2-12. Since productivity is cyclically quite variable, it is appropriate here to look at the recent and projected annual changes in relation to those experienced during earlier periods of cyclical expansion (Table 2-21).

CHART 2-12

OUTPUT PER PERSON EMPLOYED IN MANUFACTURING
(1961=100)

Ratio Scale



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

It is apparent that a rate of increase in manufacturing productivity above 5 per cent was achieved only in 1962, 1965, and 1968. The overall experience of the 1961-66 period of strong expansion was 4.4 per cent, and the overall postwar trend rate was 3.2 per cent. The 1968-72 trend rate was 2.6 per cent, and only a 3.1 per cent increase is estimated to have been achieved in 1972. Although stronger growth in total manufacturing output should be

accompanied by higher growth in output per person employed, the 5.0 per cent growth target now appears high. A moderately lower rate of increase now seems to be more realistic, and a revised target is suggested below.

TABLE 2-21—CHANGE OVER PREVIOUS YEAR IN OUTPUT PER PERSON EMPLOYED IN MANUFACTURING

1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
					(Per cent)					
5.4	3.1	3.1	9.9	0.5	1.8	7.5	3.4	0.2	4.8	3.1

SOURCE: Based on data from Statistics Canada.

Employment

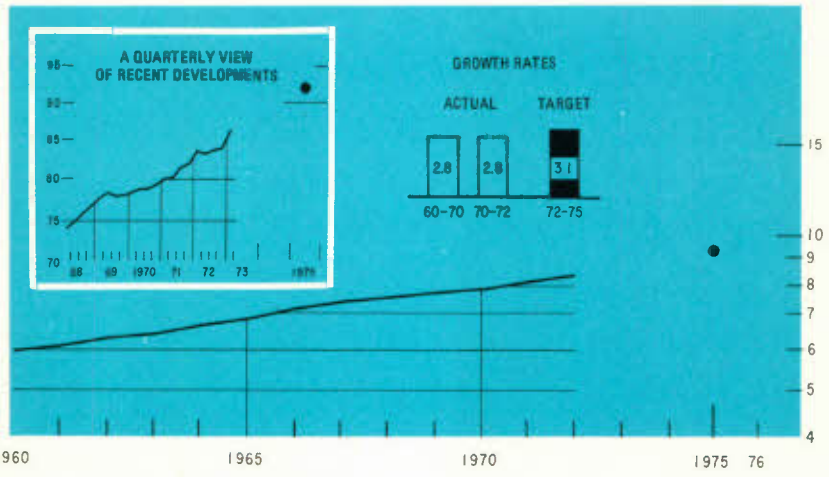
For employment, the proposed performance indicator value is 3.1 per cent per annum. This rate was, in fact, achieved in 1972.

CHART 2-13

TOTAL EMPLOYMENT

(Millions of persons)

Ratio Scale



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

Chart 2-13 presents the implicit target level for 1975 and realized levels over the recent and longer-term past. Actual year-to-year percentage changes since 1968 are set out in Table 2-22.

It is evident that the output, employment, productivity, and unemployment indicators are interrelated. If the productivity target is not realized, achievement of the output target will call for increases in employment above the target rate. Our judgment that the proposed rate of productivity advance represents too optimistic a target, therefore, implies the need of a somewhat higher rate of employment increase than envisaged earlier, if the output target is to be retained. Since the labour force is rising more rapidly than anticipated, a somewhat higher rate of increase in employment in fact appears to be feasible and likely. The implications for the achievement of the output target depend on whether the effects of lower productivity would be entirely offset by higher employment. Our estimates indicate that, over the period in question, this could be the case. The aggregate real output target therefore remains feasible. A higher employment target for the years 1973 to 1976 is proposed in the new set of indicators provided in Chapter 3.

TABLE 2-22—CHANGE OVER PREVIOUS YEAR IN EMPLOYMENT, 1968-72

1968	1969	1970	1971	1972
		(Per cent)		
2.1	3.2	1.3	2.5	3.1

SOURCE: Based on data from Statistics Canada.

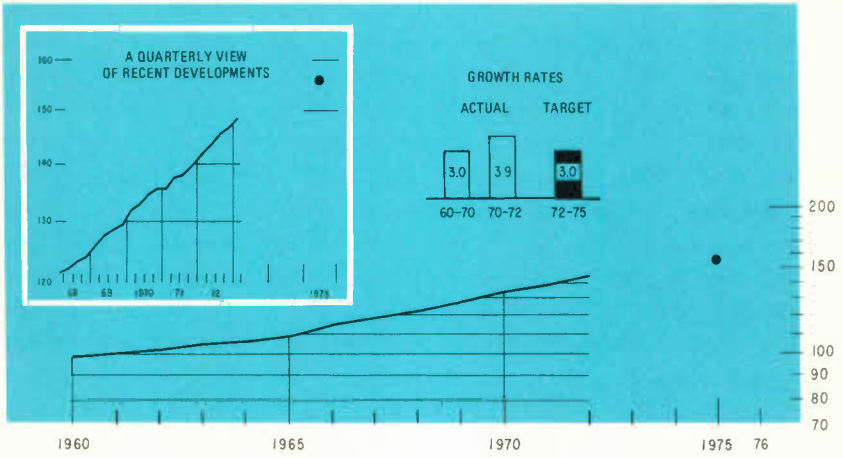
Implicit Price Index of Gross National Expenditure

In the sensitive matter of global price performance, as measured by the implicit GNE deflator, the suggested rate of increase was 3.0 per cent per annum to 1975. This rate was based on the rates of price increase yielded by the various CANDIDE model simulations presented in the *Ninth Review*. These, in turn, embodied the assumption of no change in Canadian indirect tax rates, as well as price increases anticipated in the United States.

CHART 2-14

IMPLICIT PRICE INDEX OF GROSS NATIONAL EXPENDITURE
(1961=100)

Ratio Scale



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

The implicit target level for the Canadian deflator is compared with past levels in Chart 2-14. Actual year-to-year changes since 1968 are shown in Table 2-23. The recent increases appear particularly high when account is taken of the fact that appreciation of the Canadian exchange rate vis-à-vis the U.S. dollar since 1970 has had the effect of tending to reduce the prices of imports from the United States and competing Canadian products.

TABLE 2-23—CHANGE OVER PREVIOUS YEAR IN THE IMPLICIT DEFLATOR OF GROSS NATIONAL EXPENDITURE, 1968-72

1968	1969	1970	1971	1972
		(Per cent)		
3.2	4.5	4.6	3.1	4.6

SOURCE: Based on data from Statistics Canada.

It must be frankly admitted that neither the CANDIDE model nor the sources we relied on for our U.S. price projections adequately captured the 1972-73 strength in prices, which, as shown in Chapter 9, originated to a significant degree in a number of complex and particular demand/supply situations. For example, the U.S. projections called for price increases of 4.7 per cent in 1971, 3.1 per cent in 1972, 3.7 per cent in 1973, and 4.4 per cent in 1974, whereas actual increases were 4.7 per cent in 1971, 3.3 per cent in 1972, and over 6 per cent at annual rates in the first two quarters of 1973. In the light of the renewed increase in the Canadian GNE deflator in 1972, as well as additional evidence of continuing inflationary pressure, it appears unlikely that any significant deceleration in the rate of price increases will occur in the period *immediately* ahead, given the stage of the expansion, some continuing bottlenecks, and selective shortages of labour. On the other hand, the strains underlying some of the more spectacular recent price increases will be easing in 1974. Moreover, the growth rate of the U.S. economy is also widely expected to experience a significant slowdown next year. The surge in prices that followed Phase 2 will have been expended and the effects of Phase 4 will be increasingly felt, as will fiscal and monetary restraints. Working against these influences in the United States will be the delayed effects of the two devaluations of the U.S. dollar, and possibly continuing grain shortages. On balance, however, it appears that prices may well increase more slowly in 1974-75.

Against this background, and with some slowing down in output growth in Canada likely in 1974, Canadian prices should not accelerate beyond 1973, and the rate of increase may even moderate. All things considered, however, we must accept the fact that achievement of an average rate of price increase as low as 3 per cent in 1972-75 is quite unlikely. We revert to this question in the next chapter, where we propose a new goal for prices.

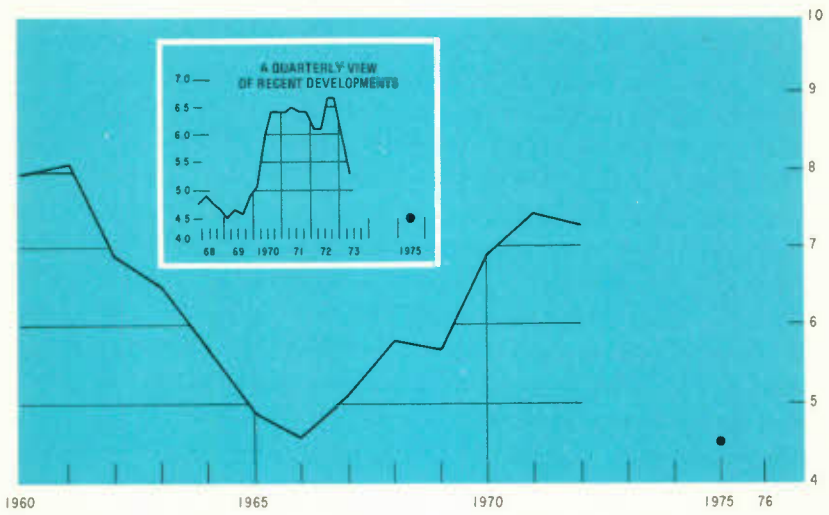
The Rate of Unemployment

The suggested target rate for unemployment is 4.5 per cent at the end of 1975. As may be seen in Chart 2-15, this level would be somewhat above that achieved in 1965 and 1966 but, of course, well below recent levels.

CHART 2-15

AGGREGATE RATE OF UNEMPLOYMENT

(As a percentage of labour force)



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

The actual values of the annual figures plotted on Chart 2-15 are set out for more convenient reference in Table 2-24.

TABLE 2-24—AGGREGATE RATE OF UNEMPLOYMENT, 1960-72

1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
(Per cent)												
7.0	7.1	5.9	5.5	4.7	3.9	3.6	4.1	4.8	4.7	5.9	6.4	6.3

SOURCE: Based on data from Statistics Canada.

Several particularly important questions arise in connection with this indicator. As noted earlier, the various performance targets are quite closely interrelated—i.e., the unemployment rate is determined by the labour force and employment; employment is determined, in turn, by the demand for output and productivity. Currently, labour force growth is running ahead of our earlier projections because of strongly rising participation rates. Continuance of this trend—which appears quite possible—will necessitate a higher rate of employment growth, if the same unemployment

target is to be achieved; but this, in turn, would call for a lower rate of productivity increase if the output target is retained. In fact, changes in both the productivity and employment targets are proposed below. In the present context, the 1975 unemployment target of 4.5 per cent still appears realistic but, as suggested earlier, a reduced rate of output growth in 1974 and 1975 will be required to prevent excessive pressures from developing in the labour market and elsewhere.

Our concept of the potential volume of output is geared to a particular value for the aggregate unemployment rate. As we indicate in Part 2, there are reasons for believing that a low level of unemployment today involves more intensive utilization of the economy's capacity than was the case a decade ago. The rate of unemployment is also perhaps our most important single social indicator. In this role, it is used more as a measure of human suffering than as an indicator of labour market tightness. However, in either case, this indicator is too rudimentary to measure adequately the complex social realities with which social and economic policies must deal. Those framing such policies need at least to take account of the main components of unemployment, such as the actual financial situation and behaviour of those affected. Some of these questions are briefly discussed in Chapter 8. A more definitive discussion must await the completion of the broader Council study of the labour market currently under way. The preliminary findings presented in this *Review* imply simply that there have been some significant shifts in the composition of unemployment over the past few years and that the implications of a given aggregate rate will have to be interpreted rather more carefully than in the past.

Conclusions

The assessment of performance in this chapter has been within the framework provided by the performance indicators. The studies in Part 2 complement this approach by providing a fuller analysis of developments in particular sectors. We have, in fact, referred to this analysis a number of times in writing this chapter.

In relation to the projections underlying our set of indicators, the major features of recent performance appear to be: slower growth of output; lower productivity; higher unemployment; and more rapid increases in prices. The slow growth of output, in turn,

appears mainly attributable to stronger imports, lower exports, lower nonresidential construction, and higher savings rates than were allowed for. The delayed effects of earlier exchange appreciation, plus some continued appreciation in 1972, coupled with poor relative price performance, seems to be the source of the deterioration of the balance of trade. Slightly higher expenditures on machinery and equipment than expected have also contributed to the increased imports. As for nonresidential construction, the delayed recovery may partly reflect uncertainty stemming from insufficient profits, since it was only at the end of 1972—after a period of five years—that they regained previous levels, measured as a percentage of GNP. It is not easy to explain the higher rates in personal savings, but consumer caution and uncertainty may have been contributory factors.

Productivity has not been as high as might have been expected, especially considering the cyclical phase we have been going through. Unemployment was higher than anticipated, partly because of the unexpected growth of the labour force, but the aggregate rate is perhaps less significant than it was in the past. Finally, price increases were higher than anticipated, but the more rapid rises seem to stem, at least in part, from the fact that salaries and wages are now less sensitive to slack demand (as measured by the aggregate unemployment rate). They also reflect the emergence of particular bottlenecks, as renewed expansion in the United States and Canada was concentrated in certain sectors such as housing. Finally, they have resulted from cyclical and long-term changes in the preferences of consumers—for example, with respect to meat consumption—and from poor harvests both in Canada and elsewhere. Cyclical pressures on prices normally accompany periods of expansion. What is exceptional in the present circumstances is that they have been superimposed on a situation in which previous inflationary pressures had only partly subsided and that they have been strongly reinforced by a number of special circumstances.

The conclusions we have drawn from our analysis have affected the establishment of our objectives for the years 1973 to 1976 in various ways. Where we thought it necessary, we adjusted the CANDIDE model equations to yield more realistic solutions. We also modified the initial objectives that appeared to be too ambitious. These questions are examined more closely in the next chapter.

3

Conclusions and Recommendations: Refining the Objectives

OUR ANALYSIS has involved a systematic assessment of the Canadian economy within the performance indicator framework that the Council proposed a year ago in the *Ninth Review*. Later in this chapter, we propose a new set of indicators for the period 1972-76, thus adhering to the flexible approach to economic stabilization that we suggested last year. First, however, we look at the implications of our discussions in Chapters 5 to 9 inclusive.

Conclusions

Here we discuss, in turn, our conclusions with respect to the external environment, fiscal posture, monetary policy, the structure of industry, unemployment, and prices.

External Environment

Our analysis of external conditions and prospects leads us to three main conclusions:

(1) The Canadian dollar should continue to float at least until such time as the stability of the international monetary system is re-established—probably throughout the 1973-75 period or even longer. The reasons for not fixing the exchange rate under present conditions have been set out in a study by A. F. W. Plumptre.[1] Unfortunately the recent

[1] A. F. W. Plumptre, *Exchange Rate Policy: Experience with Canada's Floating Rate*, Princeton Essays in International Finance, no. 81, 1970.

general floating of major currencies has increased the possibilities of countries working at cross-purposes in their policies. It is therefore urgent to press on with international monetary reform.

(2) Canada should exert every effort to contribute towards the successful beginning of the 1973-75 GATT trade negotiations in Tokyo this fall and towards the forwarding of these negotiations to successful completion. The issues of international trade negotiations and monetary reform are being treated as parts of one subject by the United States and its main trading partners. Since President Nixon's view appears to be that the status quo does not figure in the list of options, the choice for the participating countries thus lies between freer trade and more protection.

(3) The basic trading circumstances of the United States have changed dramatically since 1971 as a result of the devaluation of the U.S. dollar. This change will take time to affect the U.S. trade accounts, but considerable repercussions are sure to follow. A larger share of Canadian imports will come from the United States, and imports to North America as a whole from overseas countries will be reduced. Exports to overseas countries, in contrast, should increase, stimulating North American activity levels. However, some moderation in the rate of U.S. growth during 1974 is inevitable. Thus Canada cannot be certain of export-led growth throughout 1974.

Fiscal Posture

As is indicated in Chapter 6, the fiscal position of the government sector as a whole, on a National Accounts basis, swung from strong restraint in 1970 to a more stimulative posture in 1972, as did the balance on direct transactions between the government and personal sectors. These shifts will influence expenditure decisions for some time to come. In view of the acceleration in 1973 in the rate of U.S. and Canadian expansion, the emergence of an increasing number of bottlenecks, and current shortages of certain types of skilled manpower, it appears that further stimulation of the Canadian economy would tend to aggravate inflationary pressures, while not necessarily bringing about an appreciable reduc-

tion in the number of unemployed.[2] In fact, the full-employment budget surplus, on a National Accounts basis, had built up to well over 1 per cent of potential GNP in the first quarter of 1973, although its value was then inflated by special factors. In the fiscal year 1973-74, federal financing requirements will apparently be lower than anticipated at the beginning of the year. A continued fiscal posture for the combined government sector, involving a small full-employment budget surplus, appears to be appropriate at this time and compatible with attainment of the performance indicators in the years 1973 to 1976.

Of course, such a position could be achieved with different patterns of revenue and expenditure. We therefore wish to underline the importance of moderating the expansion of the public sector, a point we made explicit last year. In 1972, government transfer payments increased at a rate almost twice as high as we had suggested. Our forecasts for the next few years imply the continuance of these high rates of increase, and we make a recommendation on this subject later.

Monetary Policy

The money supply has increased greatly during the last two years. Until recently, expansion resulted from the need to stimulate domestic expansion and from the upward pressure on the Canadian dollar which, when superimposed on the effects of the 1970 appreciation, threatened the export industries. Present circumstances and prospects are rather different. As is evident, the economy has demonstrated many signs of strain in the past eight or nine months of extremely rapid growth, and continuance of the trend of the past few months towards a more moderate rate of growth in the money supply seems to be called for. If, in the pursuit of this policy, market conditions were such as to tend to give rise to an increase in the exchange rate of the Canadian dollar, we feel that some increase could be permitted to take place, provided it were limited to two or three points over the level prevailing in June 1973. Such a limited appreciation would serve to moderate the rate of overall price increase in Canada.

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[2]We emphasize, in our discussion of unemployment on p. 54, the need for a selective approach to reducing unemployment still further, based on knowledge of the location of unemployment by region, the incidence of unemployment by age, and the behaviour of those considered to be unemployed.

Shaping the Expansion

The Industrial Structure

Our analysis of industry output, employment, productivity, compensation, and prices in Chapter 7 was prepared with two objectives in mind. First, we wish to acquaint decision-makers in industry with the implications of our *Ninth Review* simulations in a format that will assist them in their planning. Therefore, we indicate major current trends—particularly in the output of the various sectors—and set out projections for 1973-76. Second, we hope the analysis will serve as a working document for discussions at the forthcoming National Economic Conference, where sectoral problems will be analysed within the total framework of the performance indicators developed by the Council. We believe that a fully rounded assessment of an industry's prospects requires careful examination of many complex questions, which can only be carried out by experts from the industry concerned. The consistent set of projections we have provided should represent a useful complement to the individual studies of industry prospects being prepared by the Conference committees.

The analysis does not lead to any policy conclusions at this stage. However, we note that, with roughly comparable rates of wage and salary increases in different sectors but with sharply differing rates of productivity growth, unit labour costs and prices in the different sectors follow quite divergent trends. Since price differences tend to induce buyers to increase purchases from sectors in which productivity has improved, flexibility in the establishment of relative prices should be allowed to continue. Only under such conditions would the mix of goods and services produced represent the optimum for consumers.

Unemployment

Our analysis of unemployment in Chapter 8 is in a sense a progress report on the broader study of the labour market being undertaken by the Council and thus deals mainly with the structural aspects of demand and supply. In the context of the present chapter, we concentrate on the following question: Is it necessary to stimulate the economy further or, on the contrary, should restraint be imposed, given the present view of medium-term prospects?

In July 1973, the seasonally adjusted unemployment rate sank to 5.2 per cent, after diminishing steadily (except in June) from December 1972, when it reached a peak of 6.7 per cent. This

significant reduction in unemployment was accompanied by a strengthening of overall economic expansion. Thus even if the rate remains at its present level or increases slightly before the end of the year, a notable improvement in the labour market will be registered for 1973 as a whole, compared with 1972. Thus considerable progress will have been made towards achieving the 4.5 per cent unemployment rate we proposed last year as a target for 1975. In fact, labour market tightness is already evident in a number of industries and regions of the country, and a more detailed examination of present conditions reveals signs of strain. In July 1973, the unemployment rate for men and women 25 and over was down to a seasonally adjusted level of 3.9 per cent, and the overall rate for Ontario was 3.7 per cent.

In the light of these developments, we feel that it would be inappropriate to apply additional measures to stimulate overall demand in order to foster more rapid growth in employment. Nor would it be appropriate to impose strong restraint, considering the prospects for the next three years, both domestic and foreign. At most, we suggest some measures of consolidation, as in monetary policy, which we discuss later.

Certainly the possibility of fiscal intervention at the regional level should again be examined. While unemployment has come down to a reasonable extent on a nationwide basis, it is still high in certain regions of the country such as the Atlantic Provinces, Quebec, and British Columbia, where the seasonally adjusted rates of unemployment in July 1973 were 9.0, 7.0 and 5.9 per cent, respectively. If these statistics accurately reflect the true situation, there is no reason to moderate economic expansion in these areas. In fact, we stress the need to support expansion in regions of high unemployment, both with policies aimed at stimulating local demand and with more widespread measures designed to reduce production costs.

It would not be appropriate here to review the regional policies presently in force nor to propose specific recommendations in this area, because the *Review* is concerned with the performance of the economy as a whole. However, the Council will have an opportunity to examine certain particular aspects of regional disparities in its study of the labour market, which will, it is hoped, provide necessary information on the behaviour of the unemployed and on the influence of general employment conditions and social programs on their behaviour. Specifically, the study will examine

unemployment rates for particular age groups and regions in order to evaluate the degree of strain in each of the various labour markets and to determine the appropriate orientation of demand-management policies. Whether greater emphasis on assessing the implications of these disaggregated unemployment rates is appropriate is also, of course, one of the issues to be examined. Until this work is completed, we retain our interim target of 4.5 per cent for the aggregate unemployment rate in 1975 and 1976.

Prices

While the employment situation is relatively satisfactory, recent price performance has not been so. With temporary controls being imposed in the United States, Canadian prices climbed more rapidly than U.S. prices in 1972, due mainly to jumps in the prices of food and wood products. Food prices rose because of supply difficulties related to poor crops and increases in production costs, and because of strong foreign demand for grains. High meat prices also reflect imbalances that result from the strong demand associated with the secular increase in both domestic and foreign consumption, the cyclical rise in incomes, and other temporary factors. Prices of wood products climbed because of pressure resulting from a very strong surge in domestic housing demand and a similar surge in foreign demand. The origin and selective nature of the increases show that, until fairly recently, the rising price level did not reflect excessive growth in aggregate demand. Unavoidably, however, such price increases tend to spread to the extent that they exert pressures on production costs, particularly salaries. This overall tendency could now be moderated by reducing the growth of total demand, however. The average growth rate in GNE that we propose for the years 1973 to 1976 is also lower than that recently experienced. To stabilize or reduce food prices, we believe that incentives to increase farm production would be appropriate. Such immediate direct measures need not be instituted for wood products and other construction materials because the pressure on their prices should slacken during the winter of 1973-74, following a period in which the number of housing starts should have stabilized.

Despite the importance that is rightly accorded to the need to keep inflation under control, we must recognize that there are practical limits to our freedom of action. The general level of prices in Canada is closely related to that in the United States,

and no extensive research is required to determine which predominates. As the Council pointed out in its *First Annual Review:*[3]

> "One of the most important factors affecting the level and structure of prices in Canada is the influence of world prices in general, and Unites States prices in particular. This influence is most apparent in the prices of products which play an important part in international trade, for example, major export commodities like wheat, base metals and newsprint, and major imports such as manufactured goods, industrial materials, and fresh fruits and vegetables. For products which are not normally traded across international boundaries, important price movements can occur in response to special pressures of domestic demand or supply. However, these internal price pressures tend to be held in check in Canada because of proximity to potential supplies in the United States. Influences from abroad which lead to widespread increases in domestic prices for manufactured goods will eventually be reflected in wages and prices for a wide range of services even though the latter initially might be relatively unaffected. It is clear that the Canadian economy cannot effectively be insulated from major price movements abroad."

The dependence of prices in Canada on those abroad holds for all countries that participate extensively in international trade. Differences between them relate to the speed with which each is obliged to align its prices (through exchange rate changes) with those in the rest of the world. Some can rely on a period of grace of as much as five or ten years, while others—Canada among them—must adjust rapidly.

Theoretically, the necessary alignment of prices can be effected through the variation of the exchange rate, and it may be argued that the adoption of a flexible exchange rate allows a country to pursue an independent policy with regard to domestic prices. However, we believe that, in practice, Canada is not in a position to apply a price policy that is significantly different from that of its partners. If attempts were made to reduce rates of price and cost increase below those being experienced in other countries, monetary restriction would likely lead to higher interest rates, an influx of capital, and an increase in the exchange rate, well before costs had in fact been lowered. The result would be a deterioration in the competitive position of the export industries and, consequently, lower output and higher unemployment. Canadian developments at the end of the 1950s, and again 10 years later, provide ample support for such a conclusion.

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[3] Economic Council of Canada, *First Annual Review: Economic Goals for Canada to 1970* (Ottawa: Queen's Printer, 1964), pp. 103-4.

Unfortunately, there is a tendency to interpret such statements as suggesting a "policy of surrender". Nothing could be further from reality. Once full employment was achieved, it would be quite disastrous to let prices rise faster in Canada than abroad, because relative inflation would then involve a net loss.

We do recognize, however, that Canada enjoys some degree of freedom in applying its policies. In a situation in which Canadian and foreign prices were performing satisfactorily but the level of Canadian unemployment was excessive, it would be appropriate to stimulate the economy in order to increase employment, even if such action involved a slightly higher rate of price increase, compensated by devaluation of the Canadian dollar. The reverse situation would be one of rapidly rising prices in Canada and abroad, but of lower domestic unemployment. This would call for a more restrictive policy in Canada than in other countries. We wish to emphasize once more the need to pursue a set of objectives in a consistent manner, so that no single one—not even price stability—is achieved by sacrificing others. Our new performance indicator for prices (see below) was set in accordance with this guiding principle.

Recommendations

In developing new indicators for 1972-76, the Council had to use the version of the CANDIDE econometric model employed for the simulations reported in the *Ninth Review,* based on National Accounts data that have since been revised. For the simulations that underlie the analysis in the present *Review,* this model was "tuned" so as to line up calculated values with recent actual values.

This process involved changes in interest rates, wages, some prices, and certain labour force participation rates. The manufacturing investment and inventory change equations were similarly modified. New exogenous estimates of relative import and export prices were used to improve the tracking of the import estimates.

Somewhat more fundamental adjustments were made to a number of labour demand equations so as to lower several of the implicit projections of labour productivity growth yielded by the model, which appeared too high. The overall result was a downward adjustment of the calculated rate of aggregate productivity increase and better estimates of the volume of employment in most industries. Additions were made to several equations for imports and for machinery and equipment investment.

Other important changes included the incorporation of new U.S. variables from the March 1973 solution of the Wharton Annual and Industry Forecasting Model, indicating a very strong expansion in 1973 and a slowdown in the rate of growth in 1974. Government transfer payments were increased to allow for a continued high rate of payment of unemployment insurance benefits and for increases in family allowance payments in 1974. Effective tax rates on personal income were also raised to cover these increased outpayments, to reflect the apparently higher progressivity of this tax than had originally been allowed for, and to dampen down otherwise excessive aggregate demand.

The simulations also incorporate additions to investment that are rather more specific than previous figures in their depiction of the time paths of certain large-scale investment projects, such as the Mackenzie Valley gas pipeline and the James Bay power development. These investment projects are assumed to involve very substantial expenditures within the 1972-76 period covered by the new indicators.[4] To accommodate expenditures of this size, we assumed a substantial increase in imports and some moderation in export growth, implying some deterioration in the current account balance and a corresponding increase in the extent of foreign financing. Alternative assumptions would have been a higher domestic savings rate or higher taxes. The former appeared unlikely, in the absence of new incentives to saving, and the latter appeared unreasonable, as the new simulation already involved an effective tax rate of 29 per cent in 1976 and 33 per cent in 1980, compared with 25 per cent and 27 per cent, respectively, in the Chapter 4 solution of the *Ninth Review*.[5]

We believe that, as a result of these modifications, the new indicators represent realistic target values for the years 1973 to 1976. The old and new indicators are compared in Table 3-1, and a pictorial comparison of the initial and revised targets is provided by Chart 3-1.

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[4] The James Bay project has already been started, and substantial expenditures are forecast for a number of years. Our calculations also assume that the Mackenzie Valley pipeline will be built and that the expenditures involved will increase rapidly between 1974 and 1976, reach their peak in 1977, and then decrease gradually.

[5] These rates compare with an actual effective rate of personal income tax on taxable income of 23.5 per cent in 1970. The effective rate of tax may be defined as the sum of personal income taxes paid by all taxpayers as a percentage of total taxable personal income. As such, it is determined by the average tax rate in each income group and by the weight of each group in total taxable personal income. Nominal rates of income tax would not necessarily have to rise

The new indicator values reflect both recent economic developments and various adjustments to the objectives. They also incorporate the effects of adding the year 1976 to the period of coverage of the indicators and take into account the impact of major long-term developments both within and beyond this period.

For *Gross National Expenditure,* a 6 per cent growth rate is retained for 1972-76, reflecting the persistence of a significant amount of slack in the Canadian economy in 1972. (The potential rate is only 5.5 per cent.) If the 6 per cent target for GNE growth is attained, the slack in the Canadian economy will be largely eliminated before or by 1976.[6] If, as appears possible, real growth in Canada in 1973 reaches over 7 per cent, average growth in the following period would need to be less than 6 per cent.

Consumer expenditures are set at 5.9 per cent, reflecting an allowance for some decline in the personal savings rate. The indicator for *total fixed investment* remains the same, at 9 per cent, with targets lower for *residential construction* but higher for *business fixed investment* because of assumed strong increases in energy-related investment from 1974 on. The *government expenditure* and *export* targets are unchanged, but the *import* indicator has been raised to correct for recent and current underestimation of imports and to allow for extra imports likely to be associated with the major energy-related investments.

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by the same percentage as the effective rate. As average incomes rise, the proportion of taxpayers in the higher nominal income groups, subject to higher average rates of taxation, also increases, raising the effective rate of tax. The 1970-80 increase in the effective rate projected in the Chapter 4 solution of the *Ninth Review* (from 23.5 per cent in 1970 to 27.0 per cent in 1980) was judged to be the effect of this interaction between rising income levels and the progressivity of the tax structure, as it stood in 1970, with unchanged nominal rates of taxation.

With this tax structure, our projection of higher rates of effective taxation than in the Chapter 4 simulation of the *Ninth Review* would imply higher average nominal rates of taxation. However, since 1970, two important changes have occurred. The 1971 fiscal reform enlarged the fiscal tax and modified the previous relationship between effective and nominal tax rates to an undetermined extent. The second change, the indexing of taxes proposed for 1974, will result in reducing the rate of increase in the effective tax rate. The implications of our projected rise in the effective tax rate for increases in nominal rates are therefore uncertain, although it seems clear that the latter would have to increase substantially.

Finally, we reiterate that the increase in effective rates that we have assumed is subject to the validity of our projections of economic conditions and the requisite budgetary surplus.

[6] The "gap" between actual and potential, with the latter defined as the output that would be produced if the unemployment rate were held at 3.8 per cent, is estimated at 3.9 per cent for 1972. However, as indicated in Chapter 2, potential is not precisely definable and is best regarded as a zone rather than a sharply defined boundary. It was also pointed out earlier that the aggregate unemployment rate is not necessarily an accurate indicator of the degree of tightness in the labour market or in the economy as a whole. This point is further discussed in Chapter 8.

TABLE 3-1—PERFORMANCE INDICATORS, 1972–75 AND 1972–76

(Calculated in 1961 dollars)

	Proposed Average Annual Percentage Change	
	1972–75[1]	1972–76[2]
	(Per cent)	
Part 1		
Gross National Expenditure	6.0	6.0
Consumer expenditure	5.5	5.9
Total investment	9.0	9.0
Investment in machinery and equipment and non-residential construction	10.0	12.0
Residential construction	5.0	1.5
Government current expenditures	5.0	5.0
Exports of goods and services	6.0	6.0
Imports of goods and services	6.5	7.5
Part 2		
Real disposable income per capita	4.7	4.2
Total output per person employed	2.8	2.4
Output per person employed in manufacturing	5.0	4.5
Total employment	3.1	3.4
Implicit price index of Gross National Expenditure	3.0	—
Differential between Canadian and foreign prices[3]	—	0
	Yearly Averages	
Number of housing starts (thousands)	245	245
Rate of unemployment in 1975 and 1976 (per cent)	4.5	4.5

[1]As shown in the *Ninth Annual Review* of 1972.

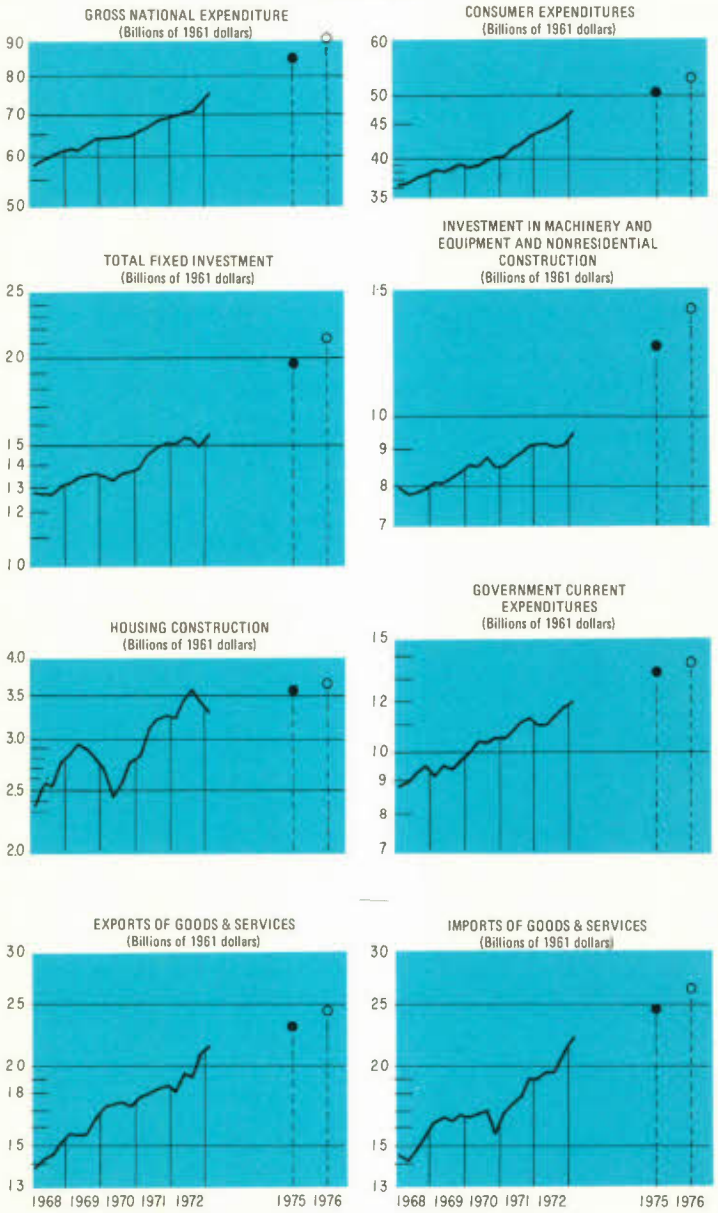
[2]1972 is the base year with respect to which the average annual percentage changes are applicable; 1973 is thus the transition year included in the period covered by the indicators for calculation purposes; the years 1974–76 are the years to which the indicators apply for policy purposes.

[3]Absolute difference between the percentage change in the Consumer Price Index in Canada and the percentage change in the weighted index of consumer prices in the United States, the United Kingdom, West Germany, Japan, France, and Italy.

CHART 3-1

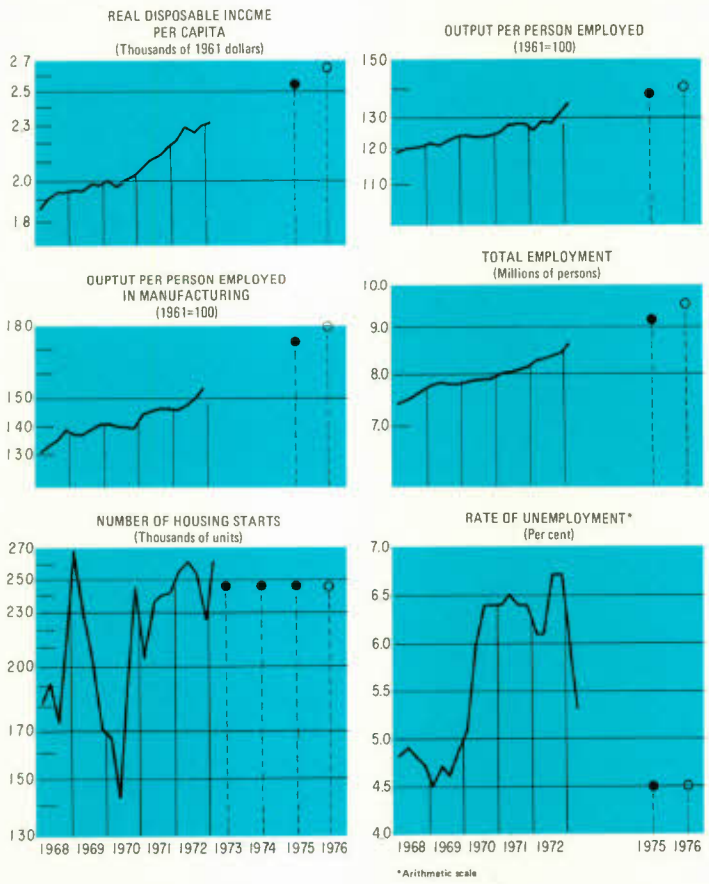
RECENT PERFORMANCE OF SELECTED MEASURES OF ECONOMIC ACTIVITY, AND IMPLICIT TARGET LEVELS, FOR THE 1972-75 AND 1972-76 PERFORMANCE INDICATORS

Ratio scale



●Level of the objective in 1975 implicit in the Ninth Annual Review recommendations.
○Level of the objective in 1976 implicit in the Tenth Annual Review recommendations.

CHART 3-1 (concl'd.)



The drop in the growth rate of *real disposable income per capita* arises mainly from lengthening the period covered by the indicator. It was depressed during the 1970 recession but came back very strongly with a renewal of expansion and the strong shift in the balance of government receipts from, and payments to, the personal sector. These influences are estimated to diminish in the period ahead, and the rate of growth should therefore slow markedly in

comparison with that experienced in the early stages of the expansion.[7]

The decrease to 2.4 per cent in the indicator for *total output per person employed* results from adjustments to the employment functions in the CANDIDE model so as to yield industry productivity growth estimates more closely in line with historical experience. A similar adjustment accounts for the lowering of the target for *manufacturing output per person employed* to what is judged to be a somewhat more realistic figure. One result of these changes is a faster projected rate of increase in *total employment.* However, as the labour force also increases more rapidly than expected earlier, the unemployment rate is not affected, and we retain a target rate for *unemployment* of 4.5 per cent in 1976. The *housing* target stays at 245,000 units, consistent with the leveling-off in the target for residential construction expenditures mentioned above.

For *prices,* we propose a new indicator that would establish a relative standard rather than an absolute one. This indicator compares changes in Canadian prices with those in other leading industrial countries. Since there are immense difficulties involved in insulating the Canadian economy from the influences of international price movements, we believe that Canadian rates of overall price increase cannot be made to differ substantially from those of our main trading partners without adversely affecting the achievement of other important economic objectives.[8]

Chart 3-2 presents a graphic illustration of the proposed measure of comparative price performance. From 1968 to 1971, consumer price increases in Canada were usually lower than those in the other major industrial countries mentioned. Adoption of the proposed standard would imply that there would be no immediate and inevitable need for strong response if Canadian price levels rose, provided the rise was in line with a broadly based increase in the international price level. However, the measure would signal

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[7] The higher rate of increase in real disposable income per capita than in output per person employed results from the fact that population is expected to grow far less rapidly than employment.

[8] In its *First Annual Review,* the Council proposed an initial goal of 2.0 per cent for the rate of change of the GNE deflator, and noted on page 105 that:

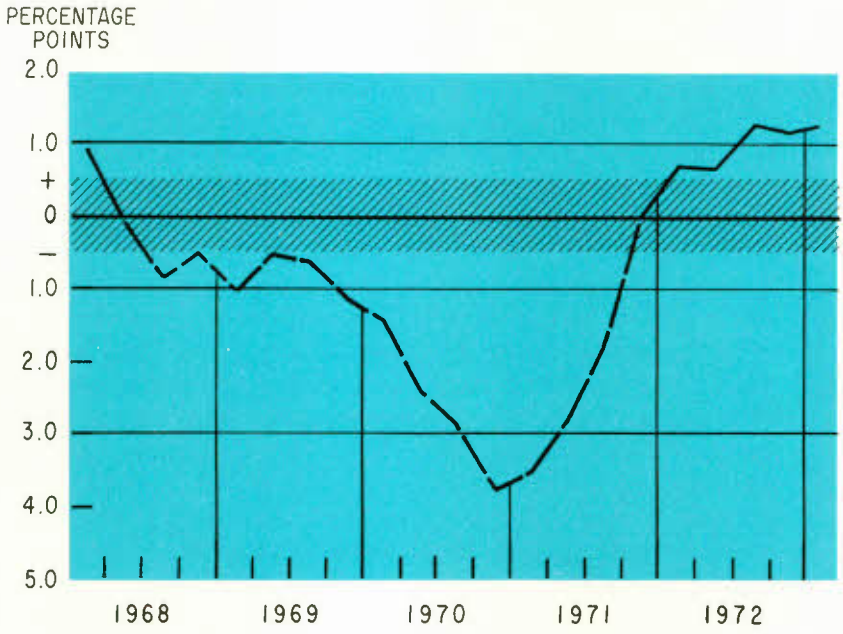
> "We have [. . .] assumed that there will not be strong international price pressures affecting the Canadian economy and, in particular, that reasonable price and cost stability will be maintained in the United States."

Unfortunately, in the decade since, this assumption has not held true. The Council's present recommendation that a relative price indicator be adopted is based on its perception of poorer prospects for international price stability now than apparently existed in the early 1960s.

the need for both close analysis and possible policy action if Canadian rates of price increase differed significantly from those occurring elsewhere or appeared likely to do so.

CHART 3-2

DIFFERENTIAL RATES OF PRICE CHANGE BETWEEN CANADA AND MAJOR INDUSTRIAL COUNTRIES



Note: This chart records the absolute difference between year-to-year relative changes in the Canadian Consumer Price Index and year-to-year relative changes in the weighted index of the Consumer Price Indexes of the principal OECD countries: United States, United Kingdom, West Germany, France, Japan, and Italy. The weights used for the latter are the proportions that each country's total bilateral import and export trade with Canada represents of the total import and export trade of the six countries combined with Canada. The trade weights are based on 1968-71 data.

Use of the price indicator will involve both judgment and flexibility. It has to be viewed in the same medium-term perspective that applies to other indicators. Thus significant departures from the zero level of the new index presented in Chart 3-2 could be observed or expected over relatively short periods without necessarily requiring changes in ongoing demand-management policies. Moreover, since some freedom of action should be retained so as to permit price policies to accommodate other objectives, we propose that for practical purposes a zone be

established around price parity. Thus domestic prices might be allowed to move within a band, the limits of which would be half a point on either side of parity, even in the medium term.

TABLE 3-2—INTERNATIONAL COMPARISON OF CONSUMER PRICES, CANADA AND SIX OECD COUNTRIES, 1960–72

	Canada (A)	Weighted Index of Six Countries (B)	(A − B)
	(Average annual rates of change)		
1960	1.34	1.60	−0.26
1961	0.81	1.57	−0.76
1962	1.19	1.83	−0.64
1963	1.73	1.78	−0.05
1964	1.81	1.71	0.10
1965	2.44	2.19	0.25
1966	3.75	3.16	0.59
1967	3.55	2.81	0.74
1968	4.10	4.20	−0.10
1969	4.50	5.32	−0.82
1970	2.83	4.83	−2.55
1971	2.83	4.84	−2.01
1972	4.76	3.81	0.95

NOTE: The annual data are ordinary averages of the values for four quarters, obtained with the formula $\frac{P_t - P_{t-4}}{P_{t-4}}$ where P_t is the quarterly Consumer Price Index.

SOURCE: From Organisation for Economic Co-operation and Development, *Main Economic Indicators*.

Table 3-2 provides average annual price changes in Canada and elsewhere since 1960. Clearly, during this period, inflation has increased markedly on a worldwide basis. Before 1965, prices increased at annual rates of less than 2 per cent. However, from 1968 to 1972, they rose at an average annual rate of 4.8 per cent according to the index that we have developed for the price changes of our main competitors. An upward movement is evident in Canada, as elsewhere, despite our past efforts at restraint.

If the criterion provided by the new price indicator (and the bounds suggested above) were to be applied year by year over the period since 1960, it would suggest that changes in Canadian prices were too high in 1966-67 and 1972,[9] so that stricter policies might

[9] In this respect, 1972 is obviously a special case because of the controls imposed by the United States and the high weight associated with U.S. price changes in the new index.

have been adopted. Price changes were too low during 1961-62 and 1969-70. These two periods were both characterized by unfavourable performance elsewhere in the economy and by relatively high levels of unemployment.

The application of the price indicator assumes, of course, that medium-term forecasts of foreign price behaviour exist. Among our own forecast assumptions, we have included one that deals with U.S. prices (mentioned later: implicit GNE deflator for 1972-76, 3.9 per cent a year). In future *Reviews*, we shall try to take account of external price prospects in the same way that we provide bases for all the other indicators.

In establishing the new set of indicators, we have been made aware of the real possibility that impressive growth in the Canadian economy over the next few years will be accompanied by an intense struggle among competing uses for the available capital and manpower resources. We foresee further large-scale expansion of social programs, as well as major new investment projects. Thus the present set of indicators is based on the assumptions of substantial increases in tax rates, partly to finance the enlarged social welfare programs, and the foreign financing of a substantial portion of the investment program. Alternatively, of course, either social welfare expenditures or energy investment could be curtailed. Analysis of such alternatives would be greatly assisted if governments themselves were to set out explicit targets for their revenues and expenditures during the period covered by our indicators.

From the foregoing, it will be apparent that, in developing the revised set of indicators, we have had to make a number of quite critical assumptions about the pattern of economic developments over the next three years. In view of their importance, it will be useful to summarize the major assumptions for the period 1973-76 inclusive:

1. In the period 1972-76, GNE in the United States will grow at 8.4 per cent annually in current dollars, with 3.8 per cent attributable to price increases.
2. Unemployment in the United States will maintain an average rate of 4.1 per cent in 1973-76.
3. U.S. commercial paper will yield 5.9 per cent.
4. The U.S. industrial bond rate will average 7.6 per cent in 1973-76.

5. For Canadian trade, export volume will grow at an average rate of 6 per cent and imports at 7.5 per cent, implying an increase in the current account deficit.
6. Labour force participation will continue at recent high levels.
7. Productivity increases in Canada (i.e., increases in output per person employed) will continue their long-term historical trend of 2.4 per cent per annum.
8. For investment expenditure, there will be large additions to the normal growth pattern, as described above.
9. In the public sector, the budget surplus will rise to 1.6 per cent of GNP in 1976. Government transfers to the personal sector will grow at an annual 13.1 per cent to 1976, and average effective rates of personal income tax will reach 29 per cent in 1976, compared with 23.5 per cent in 1970.

We now turn to the presentation of a number of formal recommendations.

Recommendation No. 1

We recommend the adoption of the interim performance indicator values for the years 1973 to 1976 set out above, including the new relative price indicator calling for domestic prices to remain in line with foreign prices.

* * * * *

In Chapter 6, we draw attention to transfer payments to persons. We note here that these payments rose by 18.4 per cent in 1971 and 19.3 per cent in 1972. According to our projections, they will increase by 14.5 per cent in 1973 and 21.0 per cent in 1974. Transfers will increase by about $2.4 billion in 1974, while total government expenditures will rise by about $5.8 billion. Thus the increase in transfers will represent about two-fifths of the increase in government expenditures. As Table 3-3 shows, transfers have increased much more rapidly than GNP or public expenditures in the last few years. This trend is expected to continue in the years 1973 to 1976 covered by our indicators.

This rapid growth of transfers is a source of concern. In our projections for the near future, the rise in transfers occurs at a time of strong economic activity when government expenditures are expected to follow roughly their medium-term trend. Unless we

assume that the public sector will make room for the increase in transfers by significantly reducing the rate of growth of other government expenditures, it will have to finance the additional transfers through increased taxation. We have, in fact, assumed that this will occur. As we pointed out earlier, the increase in the volume of taxes may have to be substantial, if account is taken of the significant budgetary surpluses that the anticipated economic conditions could well require. In Chapter 6, we show that the burden of financing public expenditures has fallen increasingly on personal income taxes. This tax has essentially affected low- and middle-income taxpayers who receive the bulk of income.[10] It may be noted that only 15 per cent of all assessed income in Canada in 1970 was received by those earning $15,000 or more. Therefore, redistribution through personal taxation mainly takes place among groups whose incomes are lower than $15,000.[11]

TABLE 3-3—GROWTH OF TRANSFER PAYMENTS AND OTHER VARIABLES

	Total Transfers to Persons	Gross National Product	Total Government Expenditures	Total Government Expenditures Excluding Transfers to Persons
	(Average annual percentage change)			
1968–72.....	15.8	9.3	12.9	12.1
1972–76.....	13.1	10.6	11.0	10.3

NOTE: Based on current dollar data. The 1972–76 figures are from the solution of the CANDIDE model undertaken for this *Review*. The transfer payment figures differ slightly from those shown in Table 2-13, as the simulation was carried out prior to the release of revised National Accounts figures for such transfers in June 1973.

[10] In 1970, the latest year for which data are available, over 80 per cent of total income taxes were paid by people earning under $20,000 per year. The approximately 12 per cent of taxpayers in the $10,000-to-$20,000 range paid over 28 per cent of total income taxes. The 41 per cent of taxpayers in the $5,000-to-$10,000 group paid approximately the same percentage (41.6 per cent) of total taxes.

[11] The distribution of assessed income will have been changed somewhat as a result of the 1971 tax reform, which now requires the incorporation of realized capital gains in declared income. It appears unlikely, however, that the resulting change in income distribution could seriously affect the conclusions we have drawn.

On the other hand, as we indicated last year, this tax increase could stimulate inflation. It could also multiply distortions, since not all workers have the same capacity to maintain their real disposable income. Because of complex adjustment mechanisms on both the supply and the demand side, one can therefore conceive of a situation in which transfer payments would reach a level at which they would no longer serve the interests of those whom they are intended to help.

All things considered, we have reached the conclusion that the expected rate of increase of transfer payments for the 1972-76 period should be reduced.

As it happens, these observations are made at a time when the federal government is implementing a new family allowance program that will generate an increase in transfers of $1.2 billion in 1974. While it would be easy to interpret our recommendation as opposition to this particular program, we feel, on the contrary, that this reform has taken too long in coming and that, among all social security measures with the exception of old age pension, increased family allowances may be the least likely to interfere with the workings of the labour market.

It would have been desirable, however, to apply this program more gradually. For the future, our recommendation means that an effort should be made to find means of reducing payments based on the number of dependents under other social programs, such as assistance, unemployment insurance, and retraining. Furthermore, it will be necessary to seek other measures aimed at moderating the increase in transfers, as we feel that equity requires compensation of the victims of inflation, which will undoubtedly produce an increase in disbursements made under existing programs.

In short, we wish to emphasize that we are not opposed to social security programs in general, nor to any program in particular. We *are* opposed to an increase in transfer payments that is too rapid, especially in a period of strong economic activity.

The degree of acceptable or tolerable increase is necessarily rather arbitrary. We are most unlikely to move from prosperity to disaster overnight. We have established the upper limit of the increases in transfer payments at an average annual growth rate of 11.2 per cent between 1972 and 1976. This is the increase recorded during the 1960s, and we incorporated it in our "high transfer

payments" solution for the 1970-80 decade in the *Ninth Review*. It is also a limit that corresponds roughly to the expected rise in total government expenditures for 1972-76 (see Table 3-3). We would have preferred to adhere to the 10 per cent rule mentioned last year for the 1972-75 period. However, because of previous spending commitments by government, there is no possibility of keeping it that low. Even the 11.2 per cent target that we propose now will be difficult to achieve: present forecasts indicate cumulative outlays of $56.3 billion for the years 1973-76, which is $4.6 billion more than would be realized if the growth rate were 11.2 per cent a year. It goes without saying that reductions must be made in provincial as well as federal programs dealing with transfers to the personal sector.

Now that our position is stated, it is appropriate to underline the chief role played by the political authorities in the determination of national priorities and in the acceptance of the costs related to each particular set of priorities.

If, in the light of their overall responsibilities, governments decide to maintain or even to accelerate the pace of increase in transfer payments beyond the level recommended by the Council, we suggest they do so only after a thorough appraisal of the goals and of the ultimate effects of the fiscal implications. As far as we are concerned, it is important that all the essential aspects of this question be aired publicly, whatever the final decision.

Recommendation No. 2

We recommend that the growth of government transfer payments to individuals not exceed an average yearly rate of approximately 11 per cent during the period 1973-76.

* * * * *

To achieve national interim economic targets such as those proposed by the Economic Council of Canada in its *Ninth Annual Review*, a number of important decisions must be made in both the public and the private sectors.

For the public sector, the Council recommended that, each year, one of the federal-provincial meetings of prime ministers or of ministers of finance be devoted to an examination of the medium-term performance indicators and to their implications for each government. The purpose of this recommendation was to secure better co-ordination between the federal and provincial levels of

government on expenditure policies directed towards the achievement of longer-term stabilization objectives. A first important step was taken when the Council was invited earlier this year to submit an outline of its views to a meeting of the federal and provincial ministers of finance.

The next step would be for the federal and provincial governments to direct a body of officials to undertake preparatory work towards formal harmonization of policies, which is virtually indispensable to the achievement of national economic targets.

Recommendation No. 3

We recommend that the federal and provincial governments establish, for themselves and for the public sector as a whole, one or more indicators of the desirable level of increase in public expenditures for a three-year period. To this end, we recommend that they entrust the preparation of background documents to the continuing committee of officials on fiscal and economic matters or to the Economic Council of Canada.

* * * * *

For the private sector, the Council recommended that, each year, a National Economic Conference be convened, to bring together representatives of the various sectors of economic activity in order to assess medium-term economic prospects within the framework of the performance indicators. After consultation with the federal government and other interested parties, the Council decided to organize the first of these conferences. A series of regional preparatory workshops and meetings with businessmen, union leaders, and other representatives of private organizations, has been held to discuss the projections to 1980 in the Council's *Ninth Annual Review,* the framework of performance indicators, and the target values for each of the indicators, as well as plans for the National Economic Conference. The first such conference, which will be convened in Montreal on December 13 and 14, 1973, will provide a forum in which information and views concerning medium-term economic prospects in the economy as a whole and in the major sectors of activity may be exchanged. A report on its findings will subsequently be published.

In addition, an appropriate public institutional setting should be established to ensure the co-ordination and continuity of all

major policies that affect the national economy. Canada enjoys a rich base of statistical information and benefits from abundant, varied, and comprehensive economic analyses and reports. These include, for example, the *National Accounts* published by Statistics Canada, the *Economic Review* of the Department of Finance, the *Annual Report* of the Governor of the Bank of Canada, the *Private and Public Investment Outlooks* prepared jointly by Statistics Canada and the Department of Industry, Trade and Commerce, the *Annual Reviews* and *Reports* of the Economic Council of Canada, certain analyses carried out by provincial governments, and the reports of private economic forums.

We must now find effective means of applying the results of such work to where the decisions will have the greatest impact. We invite the private sector to express its views within the framework of the National Economic Conference, and we have proposed that governments further co-ordinate their actions within the framework of the federal-provincial conferences. It would also be eminently desirable for Parliament to support these efforts by strengthening its capacity to participate in establishing national priorities for the medium and long term.

Parliament itself is in the best position to determine the form in which new initiatives are to be undertaken. Whatever form these may take, however, two conditions appear necessary: first, that appropriate witnesses be heard; second, that a report be tabled and debated.

Recommendation No. 4

We recommend that the House of Commons assign to an appropriate committee the task of periodically reviewing the overall economic situation of the country in the light of the performance indicators and debate the committee's report.

This proposal is analogous to one advanced in the Economic Council's *Third Annual Review* of 1966. However, it is considerably broader in scope in that it envisages not simply a discussion of annual budget policies, but a full appraisal of economic developments in a medium-term perspective.

Part 2

4

Recent Progress of the Canadian Economy

BEFORE focusing on particular aspects of our economic performance, it is useful to review the underlying progress of the economy in terms of its broad aggregates. In this chapter, we first provide a synoptic view of the main contours of recent economic developments, giving particular attention to output in relation to its potential level. Next, we turn to an examination of major fiscal and monetary developments and indicate their crucial role in determining the overall economic climate. Then we discuss the changing patterns of final demand and the associated movements in the main types of income.

A Synoptic View

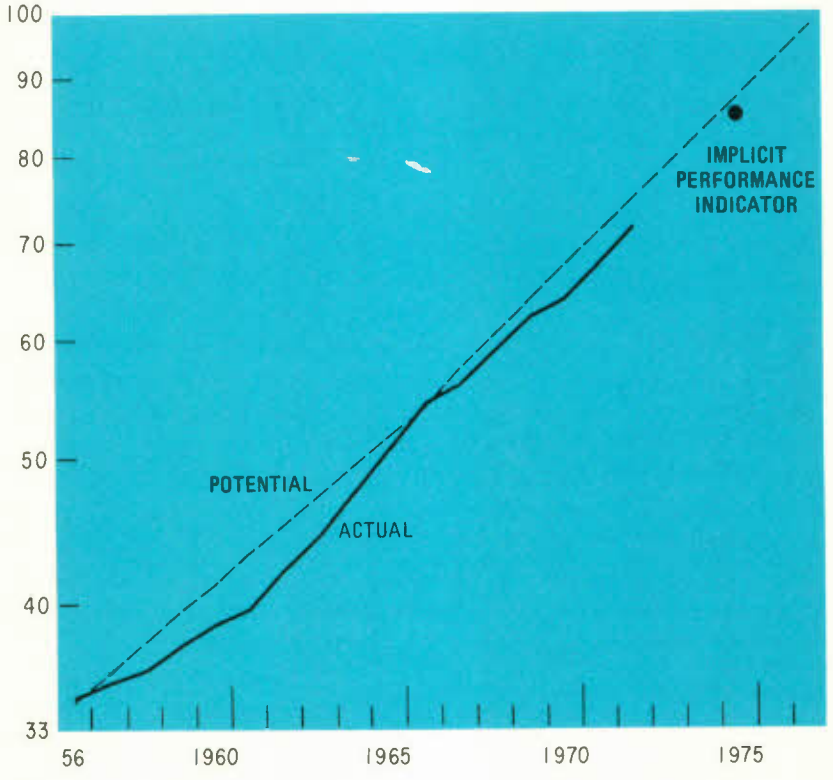
From the early to the middle 1960s, Canada and the United States experienced an economic upswing, which culminated in an investment boom in 1964-66. During this period, activity levels in relation to potential rose in both countries. By 1966, Canadian unemployment had dropped to 3.6 per cent, and output temporarily exceeded its potential level. Following a slowdown in 1967, economic activity again raced ahead rapidly in the United States, under the stimulus of increased military expenditures on the war in Viet Nam, and strong inflationary pressures developed. In Canada, growing fiscal restraint was accompanied by a widening gap between actual and potential output. Unemployment rose, and price inflation in Canada slowed in relation to that of most other countries, including the United States. It nonetheless remained appreciable.

CHART 4-1

ACTUAL AND POTENTIAL LEVELS OF REAL GROSS NATIONAL PRODUCT

(Billions of 1961 dollars)

Ratio scale



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

With the aim of further reducing inflationary pressures, fiscal and monetary policy in Canada became very restrictive during 1969, as in the United States. The result was markedly slower output and employment growth in 1970. As the labour force in Canada continued to grow rapidly, unemployment climbed to nearly 6 per cent. Since early 1971, with demand-management policies in Canada and the United States moving towards a more expansionary stance, economic activity in Canada has recovered and gained momentum. This has paved the way for resumed

expansion of employment, but an unexpectedly high rate of growth in the labour force until recently has prevented the unemployment rate from declining very much.[1] While slowing down following the 1970 weakness in the economy, the rate of inflation began to accelerate again during the past year, as selective shortages—some worldwide and attributable to special circumstances—appeared in the supply of primary outputs in relation to rapidly expanding demand.

The recent behaviour of actual output in relation to potential output is summarized and placed in longer-term perspective in Chart 4-1.[2]

Chart 4-1 also depicts the 1975 target level implied by the Council's performance indicator. It will be apparent that achievement of this target will significantly reduce the estimated gap between actual and potential levels of GNP by 1975. As now defined, this gap widened during the 1970 slowdown to about 4.4 per cent from 1.7 per cent in 1969 and 1.5 per cent in 1968. By 1972, the estimated gap had been reduced to about 3.9 per cent as

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[1] In the period from July 1971 to July 1973, total labour force and employment grew at an average of 3.4 and 3.9 per cent per year respectively.

[2] The estimate of potential output shown for the period prior to 1966 is the same as that employed by the Council in previous publications. For the 1966-77 period, the estimate of potential is that implicit in data obtained from simulation of the CANDIDE model reported in Chapter 4 of the *Ninth Annual Review*. It has been obtained by passing a smooth growth trend through the estimated output levels associated in 1966 and 1977 with 3.8 per cent aggregate unemployment. In some respects, this is a more refined concept of potential than could be calculated by other means. The estimate of potential growth from 1966 to 1977 is about 0.3 per cent higher than earlier estimates—that is, about 5.5 per cent compared with 5.2 per cent. This is attributable to higher rates of participation in the labour force than envisaged in earlier Council work. Additional simulations of the CANDIDE model since publication of the *Ninth Annual Review* suggest a potential growth rate to 1977 in real GNP of 5.3 per cent. The causes are the higher labour force growth mentioned above and a lower productivity growth than calculated in the *Ninth Review*. If these difference are confirmed, the slightly higher growth of potential will thereby be shown to be more dependent upon the continuance of recent high labour force participation rates than previously estimated.

The *level* of potential output shown in the chart, it should be noted, is defined as the estimated level associated with a 3.8 per cent aggregate unemployment rate. This definition of potential implicitly assumes (a) that the 3.8 per cent unemployment rate is achievable without imposing excessive demands on labour markets, and (b) that the 3.8 per cent rate represents the same degree of overall economic slack irrespective of time. Neither of these assumptions has been verified and there are some grounds for believing that, for any given unemployment rate, there may be less slack in the labour market (and in the economy as a whole) today than was the case a decade ago. Consequently, the present estimate of this gap is an approximate one. Reduction in the size of the 'gap' from the very low proportion of potential GNP that it represented in 1973 should proceed slowly and with considerable caution, taking into account supplementary information relating to the degree of pressure in labour and product markets. The objective should be to crawl along the potential ceiling but avoid breaking through it.

the actual growth of the economy exceeded the potential rate by about three-tenths of 1 per cent in both 1971 and 1972. In 1973, with growth in the economy exceeding the potential rate by a substantial margin, a further marked reduction in the size of the gap has been taking place, reducing it to a very small fraction of potential.

Demand-Management Policies

Fiscal and monetary policies in recent years have taken the form of:

—a vigorous move towards fiscal policy restraint from early 1968 to mid-1969, with the maintenance of a relatively tight fiscal-policy setting up to mid-1971 and the adoption of a strong expansionary stance from mid-1971 to date; and

—severe monetary restraint between the spring and autumn of 1969, followed by very strong expansion up to mid-1972 and a return to more moderate money supply growth in recent months.

These developments are illustrated in Charts 4-2 and 4-3 and are described more fully below.

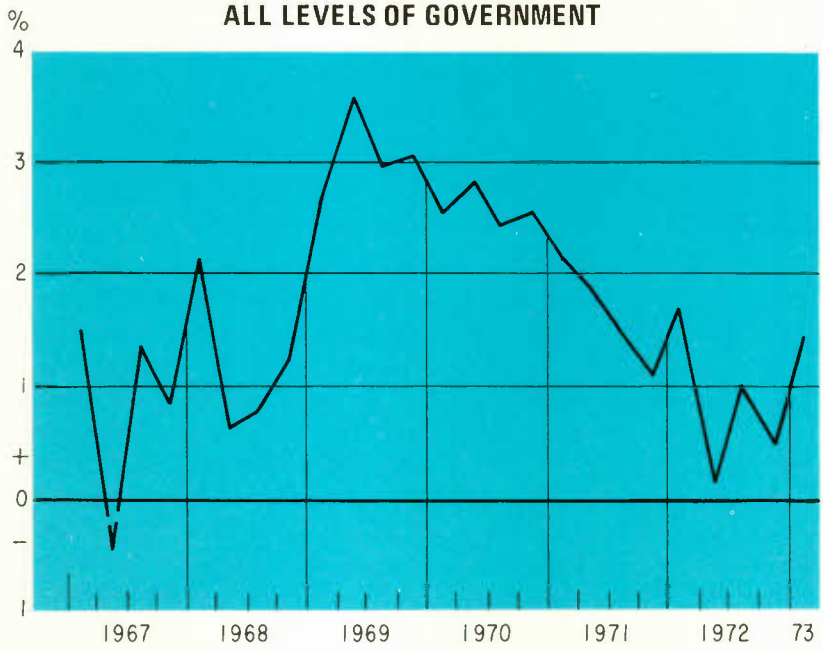
Chart 4-2 illustrates the evolution of the high-employment budget surplus at all levels of government between 1968 and 1972. According to this measure,[3] fiscal policy may be described as a sequence of strong restraint, gradual easing, and significant expansion. A useful illustration of this sequence is provided by the orientation given to federal Budget Speeches over that period. Between late 1967 and early 1973, nine federal Budget Speeches were delivered. The first four (November 1967, October 1968, June 1969, and March 1970) were highly restrictive in tone and aimed at reducing inflationary pressures in the economy through the almost exclusive use of government-revenue policy levers. During that period, the National Accounts full-employment budget surplus position, of all levels of government combined, moved from about $460 million in the second quarter of 1968 to $2.9 billion a year later and hovered around $2.4 billion until the end of 1970. Fiscal

[3] The government sector's high-employment budget surplus position, on a National Accounts basis, is not the only indicator of the degree of fiscal restraint or ease. Financing requirements may also be a useful measure. This question, insofar as it concerns the federal government, is discussed in Chapter 6.

policy then shifted towards less restraint, with the December 1970 Budget providing for increases in a number of government expenditures. However, it was only with the June 1971 Budget, the program of October 1971, and the following two Budgets—May 1972 and February 1973—that a strongly expansive fiscal posture was adopted, with a mix of increased expenditures and tax reductions being employed as policy instruments. Over the past two years, the budget surplus has come down substantially, reflecting major shifts not only at the federal level, but at provincial and municipal levels of government as well.

CHART 4-2

ESTIMATED HIGH-EMPLOYMENT BUDGET SURPLUS OR DEFICIT* AS PERCENTAGE OF POTENTIAL GROSS NATIONAL PRODUCT, ALL LEVELS OF GOVERNMENT



***High employment is defined for this purpose as the level of employment associated with 3.8 per cent unemployment. The high-employment budget position is calculated on a National Accounts basis and is derived by estimating the change in revenues that would be realized at high employment; expenditures are assumed to remain unchanged.**

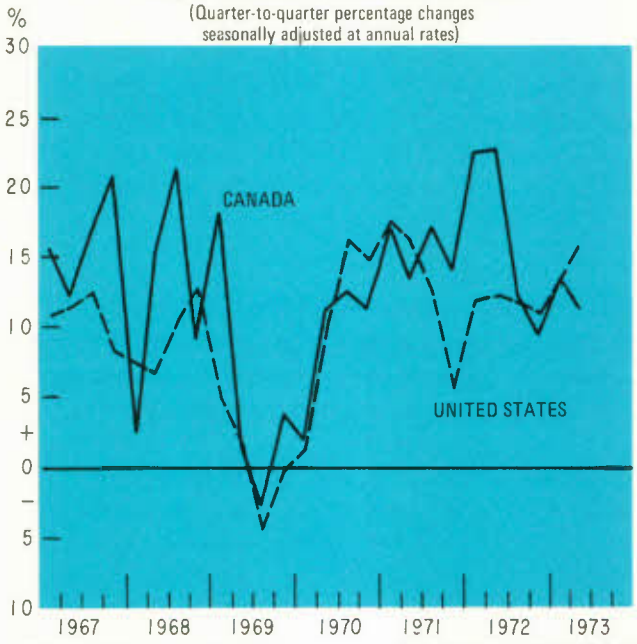
Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

In contrast with fiscal policy, monetary policy was slower in moving towards restraint and faster in shifting towards ease (see Chart 4-3). The period from the autumn of 1967 to early 1969 was

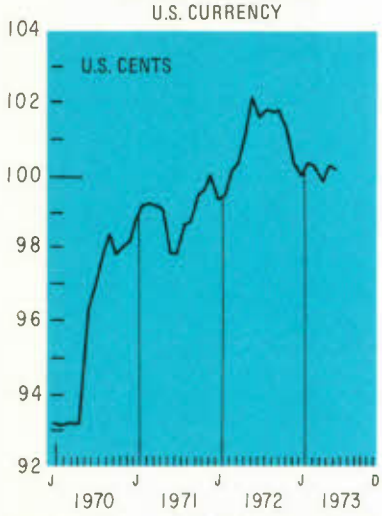
CHART 4-3

MAJOR FINANCIAL VARIABLES
CANADA AND UNITED STATES

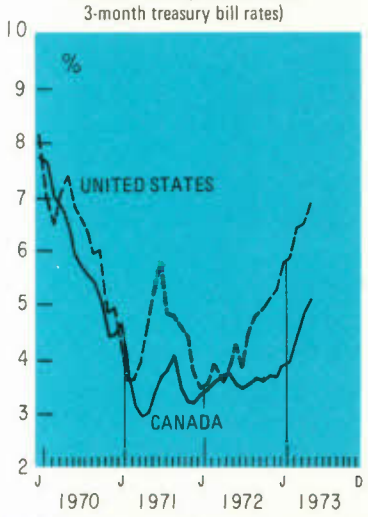
RECENT CHANGES IN THE SUPPLY OF MONEY*
(Quarter-to-quarter percentage changes seasonally adjusted at annual rates)



CANADIAN-DOLLAR EXCHANGE RATE IN RELATION TO U.S. CURRENCY



SHORT-TERM INTEREST RATES
(End-of-month quotation rates; 3-month treasury bill rates)



***The supply of money is here defined as follows: Canada – Currency outside banks and Canadian-dollar chartered bank deposits held by the general public; United States – Currency plus demand deposits, plus time deposits of commercial and mutual savings banks.**

Source: Based on data from Bank of Canada and the U.S. Federal Reserve Board.

characterized by a stop-go monetary policy, with monetary authorities split between the conflicting objectives of defending the value of the Canadian dollar on exchange markets and stimulating economic activity. By early 1969, however, as inflationary pressures continued to develop despite the application of severe fiscal restraints, money supply growth slowed down and monetary policy became more determinedly restrictive as the year progressed. Then, coinciding with a growing amount of slack and the prospect of an improving price performance, there was a gradual increase in the money stock, which accelerated appreciably as strong upward pressures on the Canadian dollar began to be felt. Following the floating of the Canadian dollar in May 1970, monetary policy remained moderately expansive. By the end of 1970 and early 1971, the expansion of the monetary supply was linked to the fact that short-term interest rates in Canada had risen above those in the United States, inducing capital inflows and further upward pressures on the exchange rate. By the end of 1971 and at the beginning of 1972, the exchange rate was moving upwards again; money supply therefore rose even faster, registering annual rates of increase in excess of 20 per cent during the first half of 1972. With some of the pressures off the exchange rate, money supply growth decelerated considerably during the last half of 1972 and the first half of 1973.

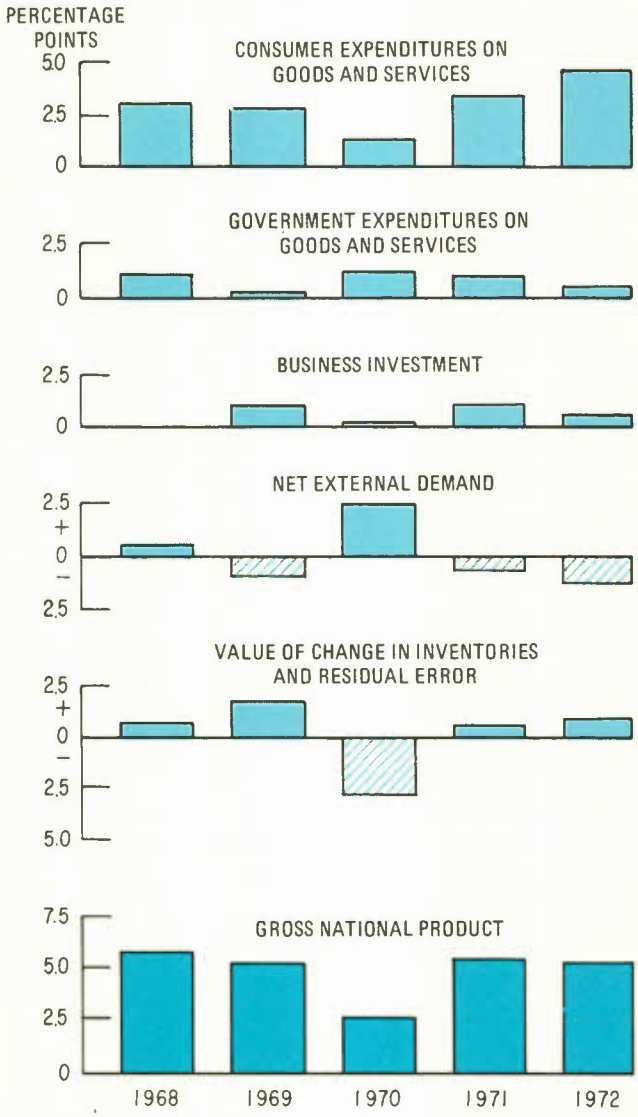
These marked changes in the orientation of economic policies, and the accompanying slowdown and upturn in economic activity, are also reflected in the changing patterns of demand and income over the period 1968 to 1972.

Changes in Demand

After providing much of the stimulus in 1968, exports moderated substantially in 1969, when major strikes considerably reduced shipments and more slack developed in the U.S. economy. As the year progressed, weakness in the external sector was accompanied by some softening in the growth of domestic demand, as restraints imposed by fiscal and monetary policy in 1968 and early 1969 began to be felt. By late 1969 and early 1970, the slowdown in domestic demand was becoming more widespread, but renewed support from the external sector, as exports to overseas markets picked up and imports fell, prevented a more severe downturn from materializing. In fact, most of the increase in total demand in 1970 was attributable to the surplus in the current account balance. In contrast, the economic recovery in 1971 and 1972 was due to

CHART 4-4

MAJOR SOURCES OF CHANGE IN THE VOLUME OF GROSS NATIONAL EXPENDITURE OVER THE PREVIOUS YEAR



Note: The bottom panel shows the total percentage change in the volume of Gross National Expenditure from the previous year. The other panels indicate the percentage-point contribution of the major components of demand to this total change.

Source: Based on data from Statistics Canada.

domestic demand. The GNP components sensitive to short-term fiscal and monetary measures, such as consumer durable expenditures and housing outlays, have been particularly strong. Government expenditures on goods and services have also played an important role in supporting the recovery of demand. As an offset, exports have been growing less rapidly than in 1970, and the current account balance on a National Accounts basis has swung from a substantial surplus to a moderate deficit. In some respects, net external demand has acted as a buffer in recent years, preventing the economy from falling much farther below its potential and preventing it from rising too rapidly. Chart 4-4 summarizes the contribution of the major final demand categories to the change in real Gross National Expenditure over the period 1968 to 1972.

Of the major components of demand, residential construction outlays made the strongest recovery from the 1970 trough. After declining in the last half of 1969 and the first half of 1970, house-building activity staged a sharp comeback under the stimulus of easier credit conditions and increased CMHC loans for low-cost housing. In 1971, housing starts reached 234,000 units—an increase of some 43,000 units over the level prevailing in 1970. In 1972, housing starts reached roughly 250,000 units.

Personal consumption expenditure was the other leading sector in the 1971 recovery. Durable goods outlays, which had declined by 5.5 per cent in volume in 1970 because of the slowdown in the growth of after-tax income and stringent credit conditions, showed the strongest gains at the consumer level in 1971. An upsurge in automobile purchases and household expenditures led the rise. In 1972, durable goods spending continued to increase rapidly, accompanied this time by improvements in expenditures on semi-durable and nondurable goods and services. Overall, the volume of consumer expenditures rose by 5.5 and 7.8 per cent in 1971 and 1972 respectively, compared with increases of 4.6 per cent in 1969 and 2.1 per cent in 1970.

As might be expected, business fixed capital investment did not contribute much strength to the increase in expenditure in the early stages of recovery, although business inventory investment apparently rose during 1971 and continued to strengthen in 1972 and early 1973. In 1971, plant and equipment outlays stood at only 3.3 per cent in real terms above the level reached in 1970. During 1972, with corporate profits continuing the upward trend apparent through 1971, demand remaining strong, production rising, and

rates of capacity utilization moving up, investment in machinery and equipment picked up strongly. Nonresidential outlays responded more sluggishly to the resurgence of aggregate demand, and the 1972 volume of expenditures was only marginally higher than that in 1970. An increase of about 12 per cent in current dollars is expected for 1973.

Following severe restraints in 1969, government spending was a major source of strength in 1970 and 1971. Government current expenditures on goods and services increased by more than 10 per cent in real terms in 1970.[4] Government investment also contributed to the rise in demand, increasing by 12.6 per cent in volume in 1971, after having run a flat course since 1967. During 1972, with governments putting heavier emphasis on policies to promote growth in personal incomes, the rate of rise of current and investment outlays weakened slightly.

From late 1970 to late 1972, there was some deterioration in the external sector. On the one hand, merchandise exports to the United Kingdom and overseas countries stagnated, following a major jump in 1970. On the other hand, imports climbed rapidly, propelled by the rise in domestic activity and further stimulated by the rise in the exchange rate. As a result, the merchandise trade balance was cut substantially—from a surplus of more than $3.0 billion in 1970 to about $1.5 billion in 1972. Given Canada's traditional deficit on nonmerchandise transactions—which increased only slightly over that period—the current account balance on a National Accounts basis swung from a surplus of about 1 per cent of GNP in 1970 to a deficit of three-quarters of 1 per cent of GNP in 1972.

The leading role of consumer and housing outlays, and to a lesser extent that of machinery and equipment, in the recent expansion of economic activity is closely linked to increasing incomes.

Changes in Incomes

Real disposable income per capita—a measure of the average standard of living—turned up strongly in each of the last two years, increasing by 6.0 and 6.7 per cent in 1971 and 1972

[4] Part of the increase was due, to some extent, to medicare programs and may therefore be merely a transfer of existing expenditures from the personal sector. Excluding provincial current expenditures on medicare, it is estimated that current expenditures on goods and services rose by approximately 7.5 per cent in 1970.

respectively, compared with only 1.3 per cent in 1970. This increase resulted from a pick-up in wages and salaries and other personal income, and from the marked change, alluded to earlier, in the impact of fiscal policy.

Within personal income, unincorporated business and investment income showed the most pronounced acceleration from the cyclical low in 1970, rising by 10.1 per cent in 1972 compared with 2.9 per cent in 1970. Wages and salaries and other labour income also resumed an upward trend after 1970 but, when account is taken of the strong employment growth, labour income per worker has accelerated only modestly, to only 7.4 per cent in 1972 from 7.2 per cent in 1970, with average increases remaining well below the peak reached in 1969.

Government policies, through rapidly rising transfer payments and a decelerating fiscal take, were also instrumental in sustaining the rise in personal disposable income over the last two years. Transfers from governments to the private sector rose by 18.4 per cent in 1971 and 19.3 per cent in 1972. Concurrently, growth in direct taxes and other transfers from persons slowed to 11.9 and 10.4 per cent in 1971 and 1972 respectively. This is in sharp contrast with the period 1968 to 1970, when governments adopted a highly restrictive policy stance, permitting direct taxes on persons to increase considerably faster—close to double the rate in 1969—than transfer payments to persons.

At the corporate level, profits before taxes recovered sharply from their 1969 and 1970 trough levels, increasing by 16.2 per cent in 1971 and 20.6 per cent in 1972. Part of the rise, however, reflected large inventory gains due to rising prices and thus was not directly attributable to current production. When adjusted for this factor, the gains nevertheless remain appreciable. In relation to Gross National Product, corporate profits regained their long-term average share, which now stands only marginally below that of 1968.

* * * * *

The Canadian economy is now in its third year of expansion. Over the first two years, government policy became progressively more expansive, and GNP grew more rapidly than its potential rate. The recovery in economic activity has broadened to include most of the major sectors of the economy, and the structure of income has established a more normal historical pattern.

5

The External Environment

IT IS AXIOMATIC that external developments are crucial in any analysis of Canada's economic performance and prospects. Similarly, in our simulations of future Canadian economic developments, the accuracy of our projections of external developments, particularly those in the United States, is critical. Since our 1972-75 performance indicators were based on such simulations, it is important to verify our assumptions about the external world.

Trade Performance

Canada's trade has been rising rapidly. Between 1968 and 1972, for example, merchandise exports and imports each increased in value by roughly 50 per cent, or about $6.3 billion. Recent trade performance has been influenced by massive changes in external conditions as well as the floating of the Canadian dollar in May 1970. External changes include U.S. policies that led to a preliminary realignment of many exchange rates in December 1971, with further changes in 1972 and 1973, and the entry of Britain into the European Economic Community (EEC). More specific influences, such as the Soviet crop failure in 1972 and strikes in several countries, have visibly affected the annual pattern of Canadian trade.

Prospects for 1973 and later are more uncertain than usual, since the effects of the general floating of currencies and the monetary negotiations are hard to assess. In addition, the possibility of restrictive trade action by the United States or other countries

TABLE 5-1—GROWTH RATES OF REAL GROSS NATIONAL PRODUCT IN THE MAJOR INDUSTRIAL COUNTRIES: ACTUAL GROWTH VS. GROWTH ASSUMED IN *NINTH REVIEW* (CHAPTER 4)

	1960–70	1971	1972	1973[1]	1970–73	1970–80
	(Average annual percentage change)					
United States						
Actual[2]	4.4	2.7	6.4	6.8	5.3	N/A
Assumed	N/A	2.7	5.9	5.9	4.8	4.5
EEC Six						
Actual[3]	5.2	3.5	4.0	5.4	4.3	N/A
Assumed	N/A	5.3	5.3	5.3	5.3	5.3
Japan						
Actual[4]	11.2	6.2	9.5	12.4	9.4	N/A
Assumed	N/A	10.0	10.0	10.0	10.0	10.0
United Kingdom						
Actual[3]	2.7	1.3	2.8	6.9	3.6	N/A
Assumed	N/A	3.2	3.2	3.2	3.2	3.2
Weighted Averages:						
Overseas countries						
Actual[5]	6.1	3.5	5.2	8.0	5.5	N/A
Assumed	N/A	6.0	6.0	6.0	6.0	6.0
United States and overseas countries						
Actual[6]	5.0	2.9	6.0	7.2	5.3	N/A
Assumed	N/A	3.8	5.9	5.9	5.2	5.0

N/A: Not applicable.

[1]Figures for the year 1973 are estimates based on data available early in 1973.

[2]Data to 1972 are based on U.S. Department of Commerce, *Survey of Current Business*. The figure for 1973 is based on a July 1973 solution of the Wharton Annual and Industry Forecasting Model of the U.S. economy.

[3]Figures are based on data in the National Institute of Economic and Social Research *Review*, May 1973, London, United Kingdom.

[4]Figures are on a calendar-year basis. Data from Japan Economic Research Center, June 1973.

[5]Fixed weights of 32.5, 30.0, and 37.5 are employed for the EEC Six, Japan, and the United Kingdom, respectively. Weights are based on recent Canadian export patterns. The same weights were used in the *Ninth Review* to combine industrial production indexes.

[6]Fixed weights of 66.7 and 33.3 are employed for the United States and overseas countries, respectively. Weights are based on recent Canadian export patterns. The same weights were used in the *Ninth Review* to combine industrial production indexes.

cannot be ruled out. Both the United States and Canada are concentrating on the 1973-75 GATT negotiations, and, although bilateral issues such as the Auto Agreement are the source of less tension than heretofore, we cannot lose sight of the fact that they are far from settled.

Nevertheless, we have good reason to expect a substantial increase in exports and imports this year. Both prices and volume of major exports (grain, minerals, and forest products) are notably higher than they were last year. The economies of the United States, Europe, and Japan are generally booming, and the Canadian economy is following suit. Such strong domestic growth always results in an increase in imports.

Foreign Growth

Recent patterns of external growth are set out in Table 5-1, which also shows the assumptions reported in Chapter 4 of the Council's *Ninth Review*. The table suggests that U.S. growth in 1970-73 has been and will be faster, and overseas growth slower, than assumed in that scenario,[1] although the estimates for 1973 were made about mid-year and are therefore still tentative. Exchange rate changes this year, the results of which are tantamount to floating as well as devaluing the U.S. dollar, will tend to accelerate U.S. growth and to retard Japanese and European growth.[2]

Price Patterns

Export prices of manufactured goods have risen faster in Canada than in the United States since 1968 (Chart 5-1). The more rapid rise of prices in overseas countries, however, has provided some offset to the decline in Canada's position vis-à-vis the United States.

During 1968-72, Canadian export prices of goods and services increased by an average of 2.1 per cent per annum, while import prices increased by an average of 2.4 per cent per annum. The respective rates in the year 1972 were 2.9 per cent and 2.6 per cent.

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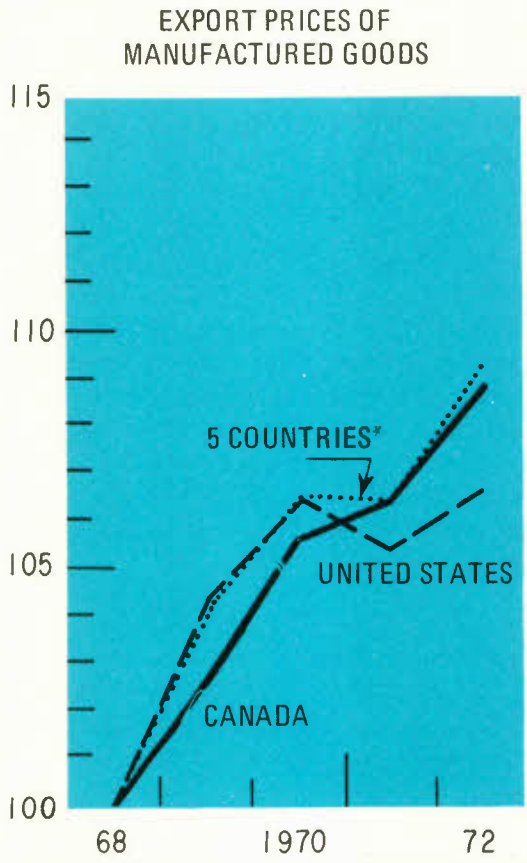
[1] This conclusion also holds for the five-year period 1968-73, since assumed and actual foreign growth rates for 1968-70 are identical.

[2] The U.S. and Canadian dollars were substantially devalued in early 1973 in relation to important overseas currencies. Subsequently, both dollars floated even lower in relation to overseas currencies. The estimates of Japanese and European growth shown in Table 5-1 take most of these exchange rate changes into account.

CHART 5-1

PRICE INDEXES IN CANADIAN DOLLARS, 1968-72

(Foreign price indexes adjusted for exchange rates)



***Weighted average of the export price indexes for manufactured goods of the five countries — i.e., the United States, the United Kingdom, France, West Germany, and Japan. The weights are based on Canadian two-way trade with these five countries.**

Source: Data derived from International Monetary Fund, *International Financial Statistics; Bank of Canada Review;* National Institute of Economic and Social Research, *Review;* and Statistics Canada. Data for 1972 are preliminary.

This year, trade prices might rise by around 9 per cent, with export rises exceeding import price increases. Revaluations of foreign currencies this year will tend to raise import prices more rapidly than would otherwise be the case.[3] These 1973 rates would imply a 1968-73 average price increase of about 2.9 per cent per annum for exports and 2.8 per cent for imports. Our 1972 scenario assumed an average rate of rise of about 2.0 per cent per annum from 1970 to 1980 for aggregate trade prices. In 1972, and apparently also in 1973, the strength of world demand has caused export prices to rise faster than import prices. Specific demands for Canadian products—grain, minerals, wood—have inflated export prices rapidly. In 1973, the prices of nearly all exported products are much higher than in 1972. Foreign inflation, plus devaluation of the Canadian dollar vis-à-vis overseas currencies, appears to have had a less substantial impact on import prices recently.

The patterns of foreign and Canadian prices during the balance of 1973 and into 1974 will be determined in part by exchange rates, which are largely floating. For this reason and others, the rate of price inflation is hard to predict.[4] The Canadian dollar itself has been floating independently since May 1970. The Japanese yen, the British pound, and the Italian lira are also floating independently. On the other hand, the German mark, the French franc, and some other European currencies are floating jointly—i.e., maintaining fixed rates among the group and market rates of exchange vis-à-vis other major currencies.

The trading nations of the world are now operating a system of generally floating currencies. In relation to nine major overseas currencies, the U.S. dollar depreciated in value by nearly a third between 1967 and June 1973, or by about 22.5 per cent if the lesser Canadian dollar appreciation relative to the U.S. dollar is included in the average.[5] A substantial part of this enormous

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[3] In the first half of 1973, export prices of goods and services rose by about 8.3 per cent; over the first half of 1972, import prices rose by roughly 6.3 per cent.

[4] For example, severe world food shortages and export controls by the United States and other countries may or may not continue into 1974, depending on 1973 world crop conditions.

[5] The nine overseas countries are Australia, Belgium, France, West Germany, Italy, Japan, the Netherlands, Switzerland, and the United Kingdom. The changes in exchange rates that have occurred began in 1967 with the devaluation of the pound sterling. From 1966 to mid-1973, exchange rate changes in these countries and Canada ranged from about a 7 per cent depreciation of the pound sterling to about a 65 per cent appreciation of the German mark relative to the U.S. dollar. The average figures in the text are calculated on the basis of two-way U.S. trade with each of the above countries in 1972.

depreciation of the U.S. dollar occurred during 1973. The inflationary consequences of the depreciation, particularly in the United States, require careful monitoring. The prices data in Table 5-2 indeed indicate a high rate of inflation for the U.S. economy between 1973 and 1975. The lagged effects of depreciation might result in rather more inflation than is indicated in Table 5-2.

TABLE 5-2—PROJECTED GROWTH OF U.S. GROSS NATIONAL PRODUCT AND GNP PRICES, 1972–75

	1973	1974	1975	Average 1972–75
	(Annual percentage change)			
GNP Growth				
Wharton Model, July 1973	6.8	2.3	2.3	3.8
Wharton Model, March 1972*	5.9	3.1	4.1	4.3
GNP Price Increase				
Wharton Model, July 1973	4.1	4.1	2.2	3.5
Wharton Model, March 1972*	3.7	4.4	3.7	3.9

*This 1972 solution is the one employed for the Chapter 4 discussion in the Council's *Ninth Review*. The U.S. figures in Tables 5–1 and 5–2 are based on the annual version of the Wharton Model. The quarterly Wharton Model (short-term) has indicated lower rates of U.S. growth in 1973 and 1974 than Table 5–2 suggests.

Merchandise Trade and Balance of Payments

Table 5-3 provides a quantitative view of Canadian merchandise trade and the current account balance between 1968 and 1973.[6] (The data for the current year are, obviously, preliminary estimates.) One feature highlighted by the table is the rise and decline of the merchandise trade surplus between 1968 and 1973. The current account balance moved into surplus in 1970 and back into deficit by 1972. The turnaround in the current balance from 1971 to 1972 was about $1.0 billion—a substantial drag on the economy at a time when domestic demand was weak. Also notable is the fact that the current account balance in 1973 will be almost the same as in 1972.

[6] The 1973 figures appear consistent with the growth and price developments already discussed and take account of information from a number of forecasting sources. However, they are not the product of a systematic exercise using a short-term model that displays the structural characteristics of trade.

TABLE 5–3—CANADA'S MERCHANDISE TRADE AND BALANCE OF PAYMENTS, 1968–73

	1968	1969	1970	1971	1972	1973
	(Billions of current dollars)					
Merchandise Exports						
Farm and fish products	1.61	1.46	1.87	2.10	2.33	3.20
Crude materials	2.47	2.46	3.06	3.19	3.54	4.50
Fabricated materials	4.86	5.16	5.87	5.79	6.53	7.50
End products	4.28	5.32	5.63	6.31	7.06	8.00
Total, including special transactions and re-exports	13.25	14.93	16.82	17.75	19.98	23.75
Merchandise Imports						
Farm and fish products	0.92	1.07	1.12	1.16	1.40	1.70
Crude materials	1.13	1.09	1.17	1.32	1.54	1.80
Fabricated materials	2.43	2.91	2.89	3.14	3.58	4.00
End products	7.62	8.89	8.62	9.82	11.99	14.40
Total, including special transactions	12.36	14.13	13.95	15.61	18.74	22.15
*Current Account Balances**						
Merchandise	1.41	0.97	3.05	2.40	1.50	1.60
Services and transfers	−1.57	−1.89	−1.97	−2.00	−2.08	−2.30
Total	−0.16	−0.92	1.08	0.40	−0.58	−0.70

*Adjusted to balance-of-payments basis.

SOURCE: Based on data from Statistics Canada and estimates for 1973 by the Economic Council of Canada. The 1973 projection is qualified by comments in the text. The merchandise detail is on a *Trade of Canada* basis.

Merchandise exports rose in current dollar value by 12.6 per cent in 1972, and our calculations suggest a rise of 18.8 per cent in 1973. The comparable figures for imports are 20.0 per cent and 18.2 per cent. The 1970 appreciation of the Canadian dollar was a major factor in the strong rise of imports in 1972 and, moreover, the recent depreciation of the Canadian dollar relative to currencies like the yen and the mark may tend to moderate the rise in import value after a time.[7] Since services and transfers—the other major category of exports—change slowly from year to year, the increase in the export value of goods and services together in 1972 was only 9.6 per cent. The increase in imports of goods and services together was 14.1 per cent in 1972. The rates of increase for trade in

[7] The appreciation in foreign currencies will tend to raise import prices and reduce import volume and, eventually, they will tend to reduce import value. For a short time, the price effect could outweigh the volume effect, resulting in a temporary tendency for import value to rise.

goods and services in 1973 are expected to approximate those for goods alone.

Some temporary factors helped to produce the high merchandise trade surplus in 1970. First, overall growth slowed that year, and imports decreased. Further, the automotive strike reduced imports more than exports. Other strikes had depressed some exports in 1969, and these shortfalls were largely recouped in 1970. Grain exports also turned sharply upwards in 1970.

The data in Table 5-4 show the growth of Canada's trade in goods and services between 1968 and 1973, according to the Chapter 4 scenario of the *Ninth Review* and according to later estimates available to the end of 1973. These estimates suggest that, by the end of 1973, import volume will have risen somewhat more rapidly than was indicated in the *Ninth Review*, despite the fact that real GNP actually grew less rapidly for the 1968-73 period.[8]

TABLE 5-4—GROWTH RATES OF CANADIAN TRADE, 1968-73: ACTUAL AND EXPECTED VS. *NINTH REVIEW* SCENARIO

	Average Annual Percentage Rate
Exports of goods and services	
Actual and expected*	8.0
Ninth Annual Review, Chapter 4	7.9
Imports of goods and services	
Actual and expected*	8.4
Ninth Annual Review, Chapter 4	8.1

*That is, including performance expected in 1973 on the basis of short-term projections included in this chapter.

SOURCE: Based on data from Statistics Canada and estimates by Economic Council of Canada, in 1961 dollars, on a National Accounts basis.

The Council's performance indicators for exports and imports in the three-year period 1973-75 show average annual growth rates of 6.0 per cent and 6.5 per cent, respectively. The indicators for trade should be approximately realized during 1973, as illustrated in Table 5-5. The actual growth of export volume from 1972 to 1975 may be higher because of special strength in sectors such as grain. Import volume is also likely to grow significantly faster if

[8] According to our estimates, the actual growth of real GNP is estimated to average 5.3 per cent per annum over the period 1968-73. The comparable rate in Chapter 4 of the *Ninth Annual Review* was 5.6 per cent.

the Canadian economy continues to grow rapidly in 1974. It is worth noting that the relative inflation of Canadian prices vis-à-vis those in the United States (taking into account the effects of the appreciation of the Canadian exchange rate) has contributed to the rapid rise in the volume of imports.

TABLE 5-5—PROJECTED ANNUAL GROWTH RATES OF TRADE IN GOODS AND SERVICES, 1973 TO 1975

(1961 dollars)

	1973	1974	1975
	(Percentage change over previous year)		
Ninth Review			
Chapter 4 export pattern	9.5	4.2	4.2
Later independent projection	9.4	n.a.	n.a.
Ninth Review			
Chapter 4 import pattern	10.6	3.9	4.9
Later independent projection	10.5	n.a.	n.a.

n.a.– not available.

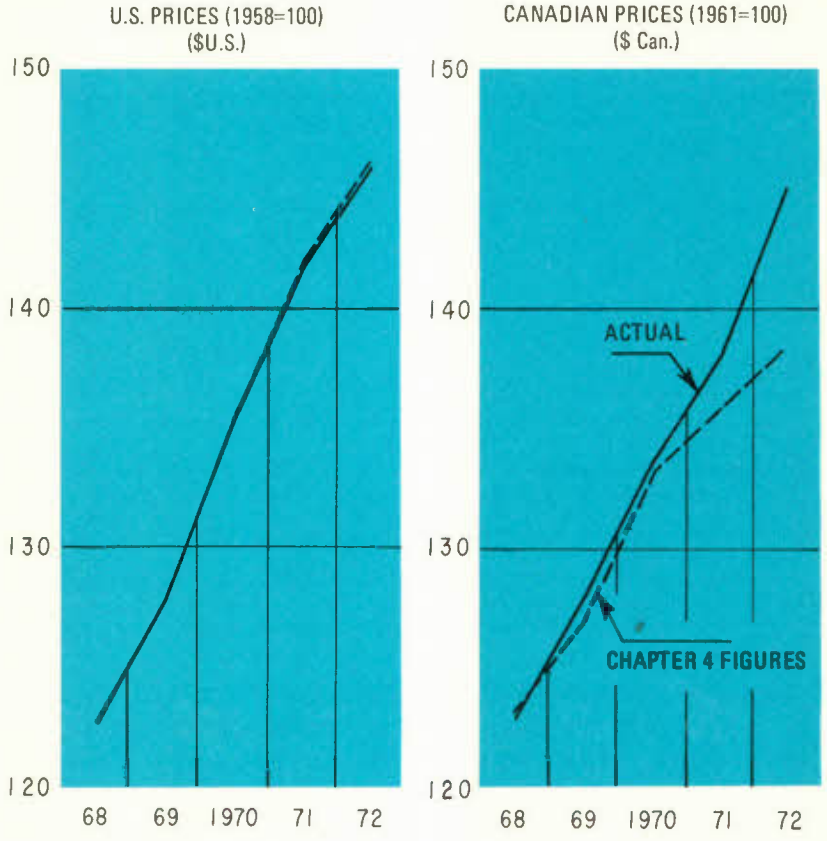
SOURCE: Based on the CANDIDE model solution associated with Chapter 4 of the *Ninth Annual Review*. The independent projection is a more recent estimate by Council staff, on which the figures in Tables 5-3, 5-4, and 5-5 are partly based.

Canadian price increases have been greater in relation to U.S. prices than was assumed in the *Ninth Review* and, partly as a result, imports have grown faster than projected (Table 5-4). Chart 5-2 shows that, from 1968 to 1972, U.S. prices corresponded closely with our assumptions. The Canadian GNP price index, however, rose faster in 1971 and 1972 than assumed. In addition, during 1972 the Canadian dollar was valued about 2.0 per cent higher in relation to the U.S. dollar than was assumed in the scenario; up to the middle of 1973, the Canadian dollar had been valued about 1.3 per cent higher than was assumed.

A direct comparison of prices in the United States and in Canada is also relevant. Between 1968 and 1972, the GNP implicit price index in the United States rose 4.5 per cent annually on average, as against a 4.3 per cent rise in Canada. In Canadian dollars, after adjusting for appreciation of the Canadian exchange rate, the GNP price index in the United States rose by 2.3 per cent per annum, or significantly more slowly than Canadian prices, measured in the same currency.

CHART 5-2

U.S. AND CANADIAN GNP PRICES, 1968-72



Source: Data from U.S. Department of Commerce, Survey of Current Business; Statistics Canada; and the CANDIDE and Wharton Model solutions associated with Chapter 4 of the Ninth Annual Review of the Economic Council of Canada.

Concluding Comments

Although there are year-to-year differences, the overall pattern in the balance of payments shown in Table 5-3 agrees fairly well with that calculated for the *Ninth Review* scenario. The current account balance appears to have returned to its traditional pattern of deficits. The years 1970 and 1971 are not typical when viewed in this perspective.

The analysis in this chapter implies that the export performance indicator will be met in 1973. There are also reasons for believing that exports will be close to the projected track in 1974 and 1975,[9] although U.S. growth is now expected to be lower than indicated in the 1972 scenario (see Table 5-2).

Since the overseas economies of Britain, the EEC Six, and Japan are still in a period of strong recovery (Table 5-3), it is reasonable to expect that growth in those areas will continue in 1974.[10] Exports of the major product groups that are subject to special influences—namely, grain and crude oil—are likely to continue at high levels in 1974. The devaluation of the Canadian dollar in relation to overseas currencies in 1973 should stimulate exports to overseas countries.

Table 5-4 indicates that actual import volume has risen faster than projected, despite the fact that actual GNP growth in Canada has been slower. This situation suggests that import growth in the 1973-75 period could exceed the 6.5 per cent average stated in the performance indicators, although import growth this year is not expected to be out of line (as noted in Table 5-5).

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[9] Provided, of course, that the nonquantitative assumptions associated with the Chapter 4 scenario hold—that is, that there are no sustained interruptions to trade as a result of governmental policy actions or long-lasting strikes, etc.

[10] The Japan Economic Center has projected Japanese growth at 11.0 per cent (at annual rates) in the first quarter of 1975.

6

The Public Sector

WHEN THE National Accounts for 1972 were released, government expenditures, excluding intergovernmental transfers, had reached 38.5 per cent of GNP at market prices.[1] In other words, close to 40 per cent of the country's income is now passing through the government sector, in the form either of purchases of goods and services or of transfer payments. This percentage clearly illustrates the extent of responsibilities now entrusted to the public sector; based on longer-term trends, the *Ninth Review* projected a share only marginally higher by 1980.

Since the end of the Second World War, all levels of government have been called upon to provide the population with an increasing and varied range of goods and services, at the cost of increasing their share of national output. From a timid beginning, the tendency towards expansion of the public sector has accelerated in recent years. Total expenditures of the three levels of government combined, which represented 22 per cent of GNP at the start of the 1950s, grew progressively but irregularly to close to 31 per cent up to 1966. Since then, their relative share has increased very rapidly. While it took 16 years to increase the share of public spending from 22 to 31 per cent, only 6 years were required to make it climb from 31 to about 39 per cent! This extensive participation of the public sector in economic activity has naturally necessitated

[1] Throughout this chapter, the treatment of government expenditures and revenues is in current dollars.

increased revenues. Thus the government revenue share of GNP has paralleled that of public spending, except that the trend has been smoother.

As noted in our *Ninth Review*, such a rapid enlargement of the role of governments in economic activity deserves careful examination. This chapter focuses on the period 1968 to 1972, using the experience of the early 1960s as a basis for comparison. The year 1972 is dealt with separately because of the partial and preliminary nature of available statistical information at the time of writing and because 1972 witnessed the implementation or expansion of major programs such as the tax reform, the new Unemployment Insurance Act, the amendments to the Old Age Security Program, and the Local Initiatives and the New Horizons Programs, to name only a few at the federal level of government. There was also a marked change in the orientation of policy itself, with governments moving into a substantial deficit posture after a period of considerable restraint between 1968 and part of 1971. The main findings are that, among the broad components of expenditure, transfer payments to persons have shown the most pronounced acceleration in recent years. On the government revenue side, personal income tax receipts have clearly dominated. The impact of government budget decisions on the personal sector and the overall fiscal position of governments is analysed in the last section.

Public Expenditures, 1968-71

Public expenditures consist of expenditures on goods and services and transfer payments. The sum of these two categories is equal to the sum of the better-known functional categories of expenditures, such as social welfare, health, defence, and education (with minor differences due to variations in accounting systems). Expenditures on goods and services, which are by far the most important, are usually divided between current and investment expenditures. Transfer payments include those paid to persons—such as family allowances, unemployment insurance benefits, and old age security payments—and those paid to other sectors of the economy in the form of subsidies and capital assistance. Interest on the public debt is also included in transfer payments. While expenditures on goods and services represent a direct claim on the country's resources, transfer payments involve the transfer of resources from one group of the population to

another. Table 6-1 and Chart 6-1 show the annual rates of change and the distribution of government expenditures, by main categories.

TABLE 6–1—GOVERNMENT EXPENDITURES (NET OF INTERGOVERNMENTAL TRANSFERS), BY TYPE, 1968–71

(Calculated in current dollars)

	1961–68[1]	1968–69	1969–70	1970–71	1968–71[1]
	(Average annual percentage change)				
Total expenditures on goods and services	11.2	10.2	14.3	12.3	12.5
Current expenditures	11.7	12.3	16.6	11.3	13.6
Gross capital formation[2]	9.5	1.6	3.2	17.5	7.3
Total transfer payments	11.2	13.1	14.3	14.9	14.2
To persons	11.4	12.6	13.1	18.4	14.8
To others[3]	11.0	14.0	16.2	9.3	13.2
Total government expenditures	11.2	11.3	14.3	13.2	13.1
Current Gross National Product	9.3	10.0	7.3	9.1	8.6

[1]Throughout this chapter, average annual growth rates are calculated using "restricted least squares", a method that takes into account individual, not terminal, years. A description of this method is contained in Economic Council of Canada, *The Economy to 1980: Staff Papers*, Annex to Paper No. 1 (Ottawa: Information Canada, 1972), pp. 19–23.

[2]Includes the value of physical change in government inventories.

[3]Includes subsidies, capital assistance, current transfers to nonresidents, and interest on public debt.

SOURCE: Based on data from Statistics Canada.

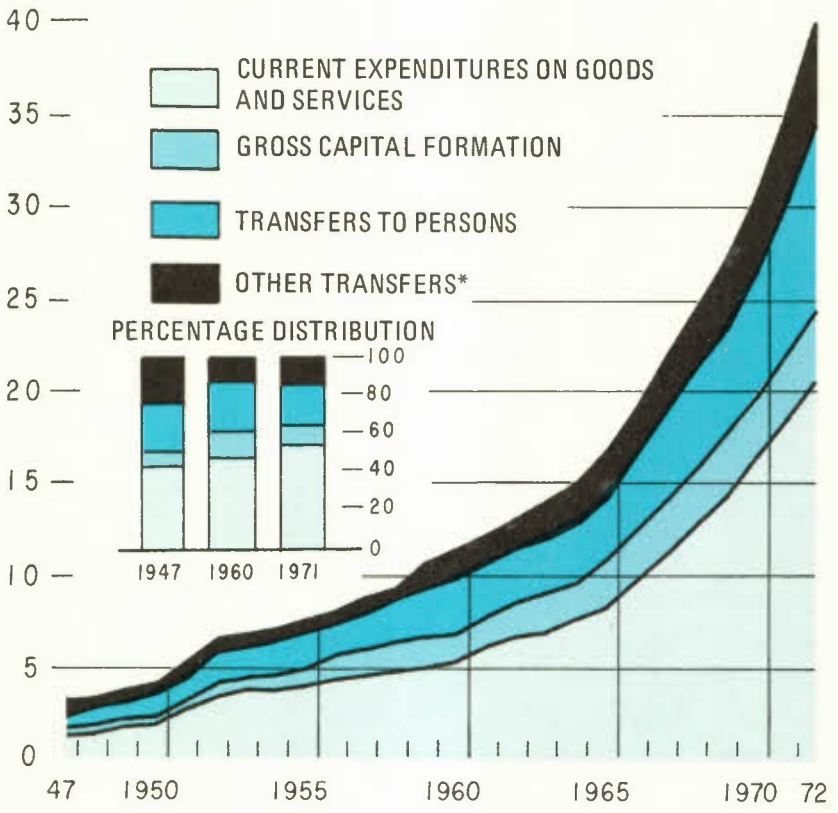
Between 1968 and 1971, government expenditures grew rapidly relative to both historical experience and the overall growth in the economy. Appendix Table 1 shows that, during that period, total government expenditures, net of intergovernmental transfers, rose from $24.5 to $35.2 billion. In terms of average annual change, this gain was slightly more rapid than that experienced in the early years of the 1960s—13.1 against 11.2 per cent—with provincial governments leading in the faster growth.[2] While the two broad categories of public spending grew at about the same rate from 1961 to 1968, transfer payments started to grow faster after 1968, due to heavier emphasis on policies that redistributed income.

[2] This implies a continuation of the shift in the proportion of expenditures accounted for by the various levels of government, with the federal share declining and the provincial-municipal share showing a corresponding rise. Thus, in 1961, provincial and municipal expenditures (net of intergovernmental transfers) accounted for about 43.9 per cent of net government expenditures. By 1968 their share had risen to 52 per cent and, in 1971, it stood at 54.8 per cent. Conversely, the share of federal expenditures declined from 49.7 per cent in 1961 to 40.3 per cent in 1968 and 37 per cent in 1971.

CHART 6-1

GOVERNMENT EXPENDITURES (NET OF INTERGOVERNMENTAL TRANSFERS), BY TYPE

(Billions of current dollars)



***Include subsidies, capital assistance, current transfers to nonresidents, and interest on public debt.**

Source: Based on data from Statistics Canada.

Expenditures on Goods and Services

In the category of expenditures on goods and services, current expenditures—wages and other employment costs, depreciation, and purchases from the private sector—grew significantly faster than investment in the course of recent years. By level of government, as Appendix Table 1 shows, the largest increases were registered by the provinces and the smallest by the federal government.

This slower growth in federal spending owes much to the virtual stagnation in expenditures related to national defence. For federal nondefence expenditures, increases were somewhat less in 1968-71 than during the early 1960s. A leveling-off in federal civilian employment growth following the austerity program initiated in 1969 caused wage and salary payments to decelerate (Appendix Table 2), but its effects were partly offset by more rapid increases in average rates of pay. Other federal current expenditures have also slowed down appreciably in recent years, reflecting lower rates of increase in both depreciation and purchases of goods and services. At the provincial level, current expenditures generally expanded faster during the period 1968 to 1971, with nonwage expenditures exhibiting the most pronounced acceleration, reflecting the inception and/or extension of medicare programs during the years 1969 and 1970.

In contrast with current expenditures on goods and services, the rate of increase in government sector investment was substantially lower from 1968 to 1971 than from 1961 to 1968—7.3 per cent on average per annum compared with 9.5 per cent (Appendix Table 3). The most significant slowdown appeared at the federal level, but municipal governments and hospitals also decelerated their investment spending. Only provincial investment outlays accelerated. By type of expenditure, the slowdown in government sector investment was attributable, to a large extent, to expenditures on machinery and equipment. During the course of the most recent period, these grew by only 4.4 per cent compared with 11.3 per cent during the earlier years of the 1960s. Nonresidential construction expenditures also slowed as a result of a decline in school construction, which reflected the flattening-out of school enrolment and the progressive phasing-out of capital assistance programs for technical and vocational training facilities. Despite this drop, nonresidential construction investment maintained an average annual growth rate of 8.5 per cent during the 1968-71 period owing to increased spending on the construction of highways, buildings other than schools, and other engineering construction.[3]

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[3] Available data do not permit a breakdown of investment expenditures by type and by level of government.

Transfer Payments

The period 1968 to 1971 witnessed a marked increase of 14.2 per cent in transfer payments compared with 11.2 per cent for the period 1961-68 (Table 6-1). Interest on the public debt was a significant component of this increase, reflecting the considerably higher interest rate paid on borrowing. This is particularly pertinent to provincial governments, where the sums necessary to service public debt almost doubled during the period 1968-71, increasing from $485 million to $884 million. Subsidies slowed down appreciably after 1968 as a result of reduced payments to railways and of lower payments by the Canadian Dairy Commission.

Transfer payments to the personal sector [4] have grown much faster in recent years—at an average rate of close to 15 per cent per year. Most of the acceleration in transfers to persons since 1968 has been related to a deterioration in economic conditions and an accompanying rise in unemployment, as illustrated in Chart 6-2. At the federal level, the more rapid increases have been attributable to the payment of unemployment insurance benefits (Appendix Table 4). These benefits, which declined from 1961 to 1966, resumed a sharp upward trend starting in 1967. Between 1968 and 1971, paid benefits more than doubled, from $438 million to $891 million, reflecting the increase in the number of unemployed as well as increases in the rates of benefit paid. At the provincial and municipal levels of government, direct relief payments increased by an average of 22 and 31 per cent per year, respectively. This increase reflects, in part, the introduction of the Canada Assistance Plan in 1966, which provided a basis for co-ordinating the various provincial welfare programs, with the federal government contributing 50 per cent of the sharable costs. The rise also reflects the gradual worsening of the employment situation, since a large proportion of payments are made to hard-core unemployed persons. In the period 1966 to 1971, the sum of unemployment insurance benefits and direct relief payments increased from $527 million to more than $1.8 billion, rising as a proportion of GNP from 0.9 to about 2.0 per cent.

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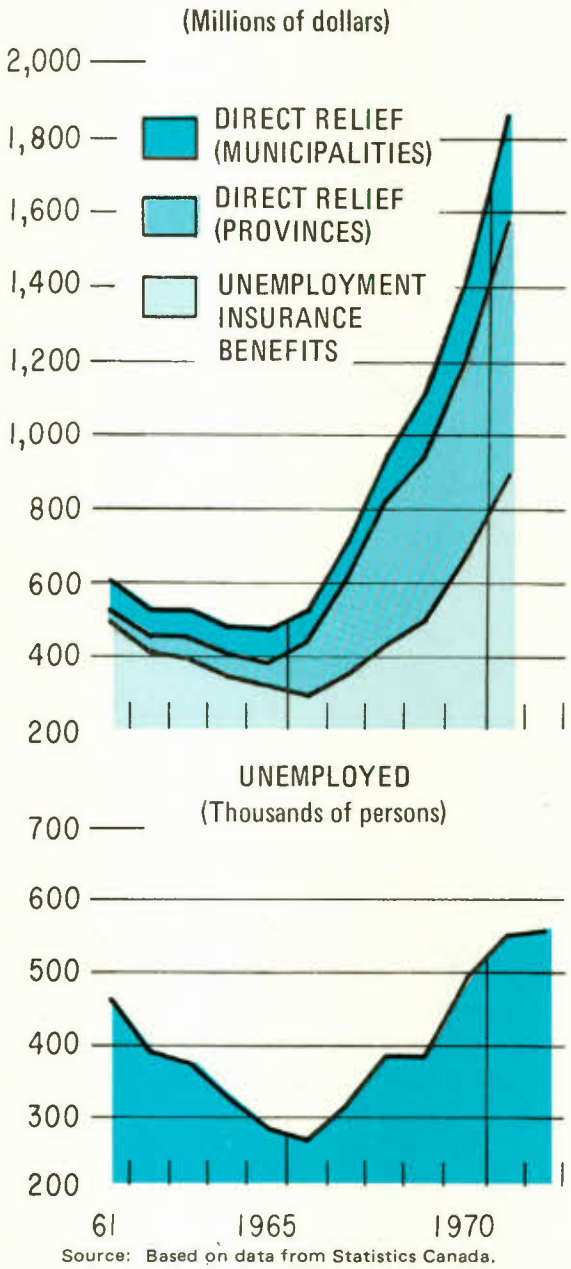
[4] In addition to persons, the personal sector includes nonprofit institutions (universities, social welfare agencies, cultural and recreational associations, etc.).

CHART 6-2

UNEMPLOYMENT INSURANCE BENEFITS AND DIRECT RELIEF PAYMENTS



Source: Based on data from Statistics Canada.

Growth in other transfers to persons was generally slower between 1968 and 1971. At the federal level, family and youth allowances have been pretty well flat since 1968, in line with the number of children eligible for them, while increases in old age security disbursements slowed down to 12.7 per cent per year from 13.9 per cent on average between 1961 and 1968. It will be recalled, however, that pensions increased between 1961 and 1968; an annual guaranteed supplement was introduced; and adjustments were made for increases in the cost of living. During the 1968-71 period, the growth reflected the more rapid rise in the number of eligible persons, the continued gradual reduction in the age at which pensions were paid, and a major rise in the guaranteed income supplement. At the provincial level, the single most important program was that of grants to postsecondary educational institutions. During the period 1968 to 1971, such grants grew at a slower rate, in parallel with some easing in the growth of postsecondary school enrolment.

Government Revenues, 1968-71

Public revenues are, by definition, the means of financing expenditures; thus the revenue and expenditure trends are roughly parallel. For particular years, however, rates of change may differ because revenues are closely tied to variations in the general economy and the overall fiscal policy of government.

Over the period 1968 to 1971, total government revenue grew at a somewhat slower rate than during the early 1960s—11.7 per cent compared with 12.6 per cent per year—in line with the slowdown in the growth of nominal Gross National Product. This general slowdown, however, masked very different rates of increase by type of revenue. Indeed, personal income tax receipts accelerated in comparison with the period 1961 to 1968. On the other hand, indirect taxes, corporate tax revenue and, to a lesser extent, taxes on nonresident income slowed down appreciably, as shown in Table 6-2 and Appendix Table 5.

As a result, important changes occurred in the shares of the different sources of total revenue. Between 1968 and 1971, direct taxes on persons—including social security—and other transfers increased their share from 35.5 to 39.9 per cent; indirect taxes declined from 41.3 to 37.0 per cent. The slow growth of direct taxes on corporations resulted in a reduction in the share of this type of revenue from about 11.4 to 9.7 per cent. Finally, other public

receipts increased their share from 11.9 to about 13.4 per cent. Chart 6-3 portrays the growth of government revenue, by type.

TABLE 6–2—GOVERNMENT REVENUE, (NET OF INTERGOVERNMENTAL TRANSFERS), BY TYPE, 1968–71

(Calculated in current dollars)

	1961–68	1968–69	1969–70	1970–71	1968–71
	(Average annual percentage change)				
Direct taxes on persons	18.3	22.0	14.6	12.7	15.7
Income taxes	17.5	26.0	18.0	15.1	18.7
Contributions to social insurance and public pension funds[1]	20.4	11.6	4.8	4.9	6.7
Other transfers from persons[2]	14.3	36.7	28.0	3.4	19.9
Indirect taxes	10.6	10.9	5.6	8.4	7.9
Corporate taxes	7.6	12.9	−4.8	11.7	5.1
Taxes on nonresidents	10.5	12.0	15.0	3.3	10.1
Investment income	14.5	27.9	19.6	15.5	19.9
Total government revenue	12.6	16.7	9.5	10.7	11.7

[1]Includes succession duties.

[2]Various fees, hospital and medicare insurance premiums, automobile licences, and others.

SOURCE: Based on data from Statistics Canada.

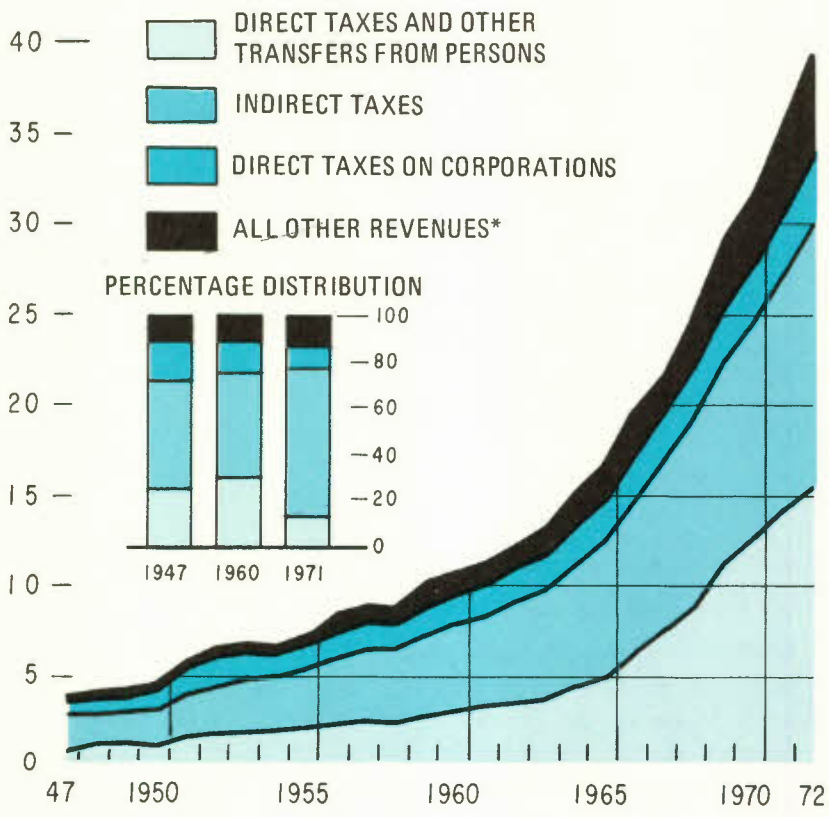
By level of government, increases in revenue, net of intergovernmental transfers, were more uniform over the period 1968-71, in sharp contrast to the period 1961-68, which had been characterized by numerous changes in federal-provincial tax-sharing arrangements. The growth rates for federal and provincial governments were 11.4 and 13.6 per cent, respectively. Municipal government and hospital revenue grew somewhat less, but a large proportion of their revenue (almost all revenue in the case of hospitals) is derived from transfers, mostly from provincial governments, which are not shown here.[5] Finally, governments have benefited in recent years from rapidly increasing revenue from the Canada and Quebec Pension Plans.

[5] In 1971, as a proportion of total revenues, federal and provincial-municipal revenues (net of intergovernmental transfers) stood at about their 1968 levels—i.e., 48.8 and 46.6 per cent, respectively. During the 1960s, the federal share declined from 59.6 per cent in 1961 to 48.9 per cent in 1968, while provincial-municipal revenues rose from 39.9 to 46.6 per cent.

CHART 6-3

GOVERNMENT REVENUE (NET OF INTERGOVERNMENTAL TRANSFERS), BY TYPE

(Billions of current dollars)



***Include investment income, direct taxes on nonresidents, and capital consumption allowances.**

Source : Based on data from Statistics Canada.

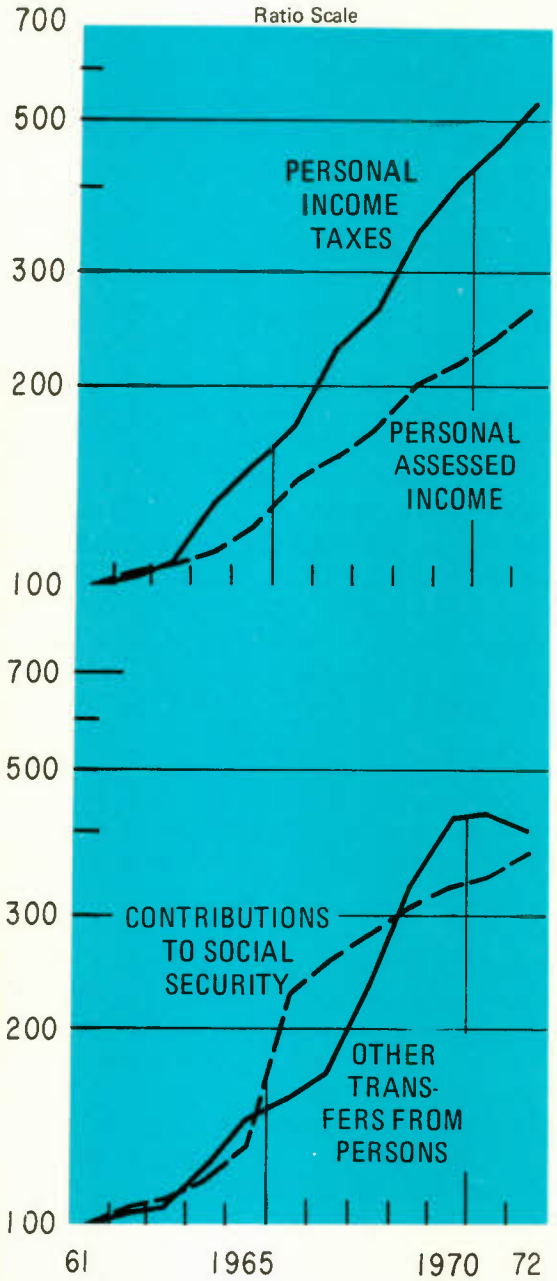
Direct Government Revenues from Persons

In the period 1968-71, an increasing proportion of government revenue was raised through personal income taxation. Personal income tax receipts increased at an annual rate of 18.7 per cent—about twice as fast as assessed income—as illustrated in Chart 6-4.

CHART 6-4

GOVERNMENT REVENUE FROM PERSONS

(1961 = 100)



Source : Based on data from Statistics Canada and estimates by the Economic Council of Canada.

This pattern reflects the inherent progressivity of the tax. When money income growth is maintained even though unemployment is rising, there is an upward movement in the income structure, so that higher rates of taxation are levied across the board and a thinner and thinner fraction of income is exempted from tax. In addition, increases in rates have occurred in several provinces, and new taxes, such as the social development tax and the 3.0 per cent surtax at the federal level, have been introduced.

In addition to income taxes, governments derive two other kinds of direct revenue from persons: contributions to social funds and public pension plans; and other transfers consisting of hospital and medicare insurance premiums, automobile licences, and various fees. Growth in receipts from both has accelerated sharply when new programs have been introduced or the scope of existing programs has been expanded. Contributions to social security grew rapidly in the 1961-68 period, particularly following the implementation of the Canada and Quebec Pension Plans in 1966, but have decelerated since. In the case of other transfers from persons, the sharp acceleration is attributable to increases in hospital and medical insurance premiums in certain provinces and to the introduction of medicare programs in others during 1968, 1969, and 1970. A pictorial view of these two sources of government revenue is presented in Chart 6-4.

Direct Taxes on Corporations

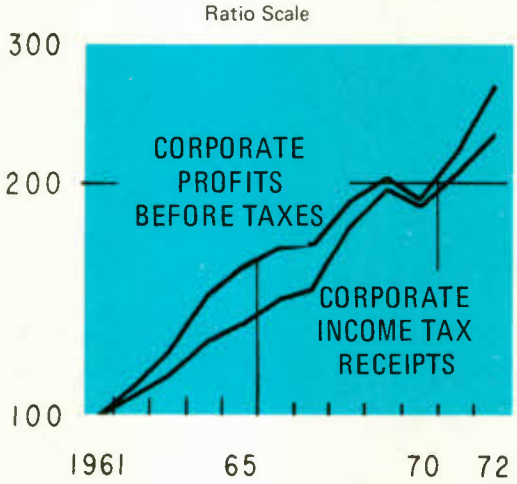
In contrast to personal income taxes, direct taxes on corporations increased by only 5.1 per cent per year over the period 1968-71, compared with 7.6 per cent in the 1961-68 period. However, as is evident from Chart 6-5, corporate profits decelerated faster than corporate taxes in the same period—the gap between the two lines being reduced appreciably during the latter part of the decade. This development reflects, first, the federal 3.0 per cent surtax on the taxable income of corporations in 1968—later extended to mid-1971—as well as increases in the rate of levy in some provinces. Second, the ratio of taxable profits to total corporate profits increased markedly because of two sets of stabilization measures initiated prior to 1968. One was the accelerated depreciation program in effect between 1963 and 1966 for manufacturing and processing investment, which, while it lasted, had the effect of depressing taxable income—and thus of depressing taxes in relation to profits—but when terminated had the opposite effect. The second consisted of the reduction of capital cost allowances for a

period of three years in certain classes of assets purchased between 1966 and 1967, which again had the effect of boosting taxable profits up to 1970.[6]

CHART 6-5

DIRECT TAXES ON CORPORATIONS

(1961 = 100)



Source : Based on data from Statistics Canada.

Indirect Taxes

Indirect taxes—the other large source of government revenue—also decelerated during the period 1968 to 1971, rising by 7.9 per cent compared with 10.6 per cent between 1961 and 1968. All levels of government participated in this slowdown, which resulted from different patterns of growth among the various types of tax bases and taxes. These are shown in Appendix Table 6 and illustrated in Chart 6-6.

The most important deceleration appears at the provincial level, where growth in retail sales taxes—the single largest source of provincial indirect tax revenue—declined to 11 per cent per year between 1968 and 1971, from 21.1 per cent between 1961 and 1968. This considerable slowdown is largely the result of greater stability in the rates of taxation, provincial governments having made

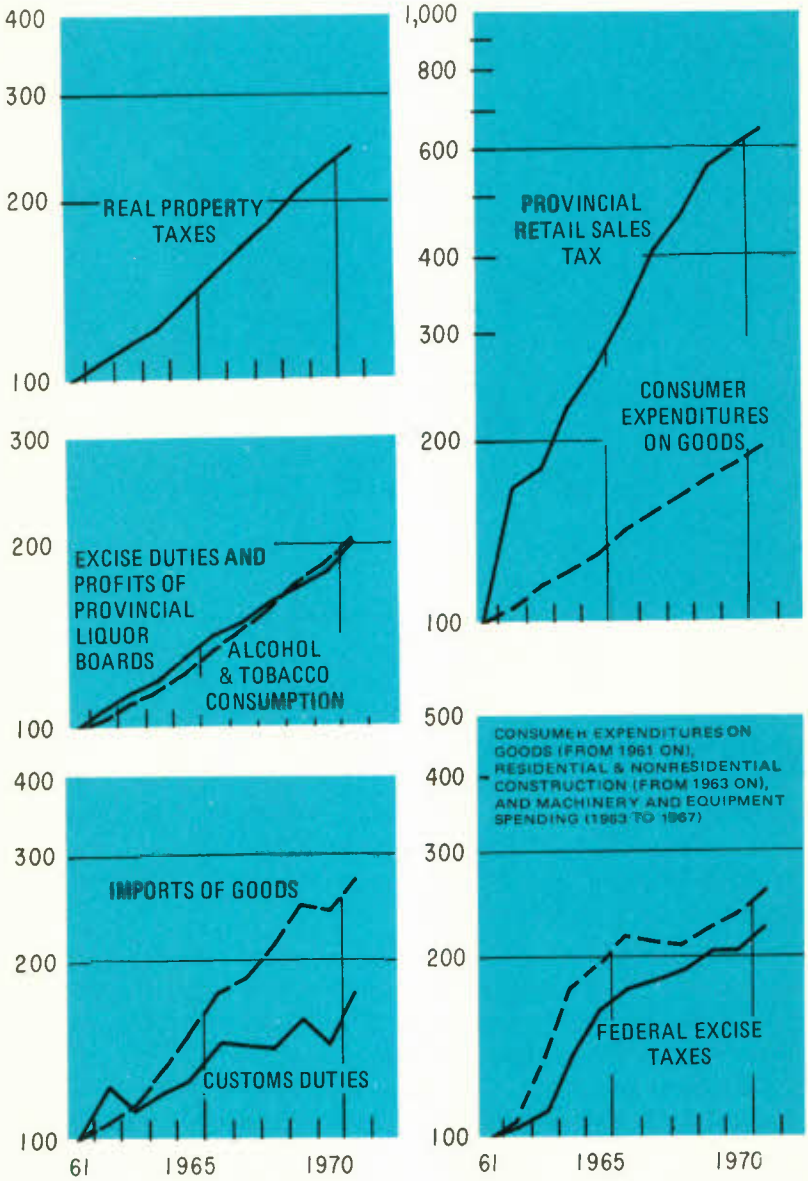
[6] For a brief elaboration of this point, see C.D.P. Bernier, "Forecasting the Yield of the Federal Taxes", *Canadian Tax Journal* 16, no. 6 (November-December 1968).

CHART 6-6

INDIRECT TAXES AND ESTIMATED ECONOMIC BASE

(1961 = 100)

Ratio Scale



Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

liberal use of this policy lever during the early 1960s. At the federal level, excise taxes have also grown at about half the rate registered during the period 1961 to 1968, reflecting mainly the slowdown in the growth of the base on which this tax is levied (see Chart 6-6). The rapid growth of these taxes between 1961 and 1968 was the result of the gradual increase in taxation on building materials, and machinery and equipment, at a time when investment in Canada was booming, in addition to the growth in sales of a wide array of consumer goods.

Customs import and excise duties, and the profits of provincial liquor boards, on the other hand, accelerated modestly during the late 1960s and early 1970s. The import duty pick-up occurred despite a slight moderation in the rate of import growth and would seem to reflect some flattening-out in the proportion of duty-free imports to total imports. This proportion, which had increased sharply from 46.0 to 59.3 per cent between 1961 and 1968, declined to 57.6 per cent in 1970, the latest year for which such data are available. As for excise duties and the profits of provincial liquor boards, the acceleration noted corresponds to increased consumption of alcohol and tobacco, reflecting the general growth in income and the size of the adult population.

Real property taxes grew at a fairly regular rate over the two periods considered here, as can be inferred from Chart 6-6. The rates amount to 9.5 and 9.2 per cent, respectively, for the periods 1961-68 and 1968-71, reflecting higher mill rates as well as higher assessments. No attempt is made here to examine the behaviour of property taxes in more detail, because mill rates and assessment practices, as well as types and levels of municipal services provided, vary widely from one local administration to another.

Other Government Receipts

Other government receipts consist of the withholding tax on investment income paid by nonresidents and government nontax receipts. Over the period 1968-71, revenue from the withholding tax increased by an average of 10.1 per cent per annum—a slight moderation from the rates experienced earlier (Appendix Table 5). Government investment income, on the other hand, expanded much more rapidly between 1968 and 1971—by an average of 19.9 per cent against 14.5 per cent between 1961 and 1968—following the sharp upward trend in interest rates over the period 1968 to 1970. Also of considerable importance over that period was

the investment income of the Quebec and Canada Pension Plans—which, since their inception, have contributed to rapidly increasing amounts of revenue—and the remittances from government business enterprises, which more than doubled over that period.

The Public Sector in 1972

In sharp contrast with previous years, the government sector moved into a much more expansionist position in 1972. The emphasis on transfer payments to persons has been accentuated further, especially at the federal level, through an important revision of the Unemployment Insurance Act, which substantially increased benefit rates and introduced more liberal conditions of elegibility for benefits, and through the introduction of various community programs. Coupled with increased transfers, there have been important reductions in personal income tax rates, which, although mostly initiated during the latter half of 1971, had their major impact in 1972. As a result, the government fiscal position swung from that of surplus to deficit for the first time in almost a decade. Table 6-3 and Appendix Tables 7 and 8 show the percentage change in the broad aggregates of public receipts and expenditures for the year 1972.

TABLE 6-3—GOVERNMENT EXPENDITURE AND REVENUE CHANGES (NET OF INTERGOVERNMENTAL TRANSFERS), 1971–72

(Calculated in current dollars)

Government Expenditure		Government Revenue	
	(Year-over-year percentage change)		
Expenditures on goods and services	10.3	Direct taxes on persons	11.8
Current expenditures	11.1	Other transfers from persons	−6.2
Gross capital formation	6.8	Indirect taxes	11.4
Transfer payments	17.6	Direct taxes on corporations	10.6
To persons	19.3	Taxes on nonresidents	3.6
To others	14.5	Government investment income	11.8
Total Government Expenditure	13.0	Total Government Revenue	10.9

SOURCE: Based on data from Statistics Canada.

The accounts indicate that total government spending in 1972, net of intergovernmental transfers, rose by 13.0 per cent—a rate in line with the average rate of the previous three years. The major increases again took place in transfer payments to persons and other transfers, which rose respectively by 19.3 and 14.5 per cent in

1972. The strong advance in transfer payments to persons is attributable, in turn, to a 31 per cent rise in federal transfers. Among these, paid unemployment insurance benefits more than doubled in 1972, under the effects of the new unemployment insurance legislation and the continuing high levels of unemployment. Higher old age pension rates and the introduction of the Local Initiatives Program also contributed to the increase in federal transfers. Within other transfers, interest on the public debt, and subsidies, registered the most noticeable gains. In 1972, current expenditures grew by 11.1 per cent, due mainly to higher wage and salary payments, including substantial retroactive amounts at the provincial and municipal levels. Government capital outlays continued to increase the least among public expenditures, registering, in 1972, a rate even lower than that for the 1968-71 period.

Growth in government revenue slowed slightly in 1972, down to 10.9 per cent from the 11.7 per cent average of the 1968-71 period. This slowdown was due largely to direct taxes on persons, reflecting a deceleration in the rate of personal income tax growth. This, in turn, reflected the repeal of the 3.0 per cent surtax in the June 1971 Federal Budget and the 3.0 per cent personal income tax cut in the October 1971 program, as well as other tax cuts at the provincial level. Other transfers from persons, which had increased rapidly in the preceding few years, declined by 6.2 per cent in 1972, due to the elimination of hospital and medicare premiums for the aged in Ontario. Direct taxes on corporations and indirect taxes, on the other hand, rose markedly—the former reflecting the sizable gain in corporate profits; the latter, the upsurge in consumer spending, as well as some increased rates of taxation on alcohol, tobacco, and gasoline at the provincial level. The pick-up in indirect taxes took place at the federal and provincial levels; real property taxes, the most important source of indirect taxation at the local level, rose only modestly in 1972.

With total expenditures rising more rapidly than revenues, the government sector swung from a surplus of $100 million in 1971 to a deficit of $634 million in 1972, on a National Accounts basis and including the Canada and Quebec Pension Plans. Most of this expansionary stance was beneficial to the personal sector because of the strong acceleration in transfer payments to persons and the slower income tax growth. We return to the effects of government operations on the personal sector in the next section of this chapter.

Net Budget Position

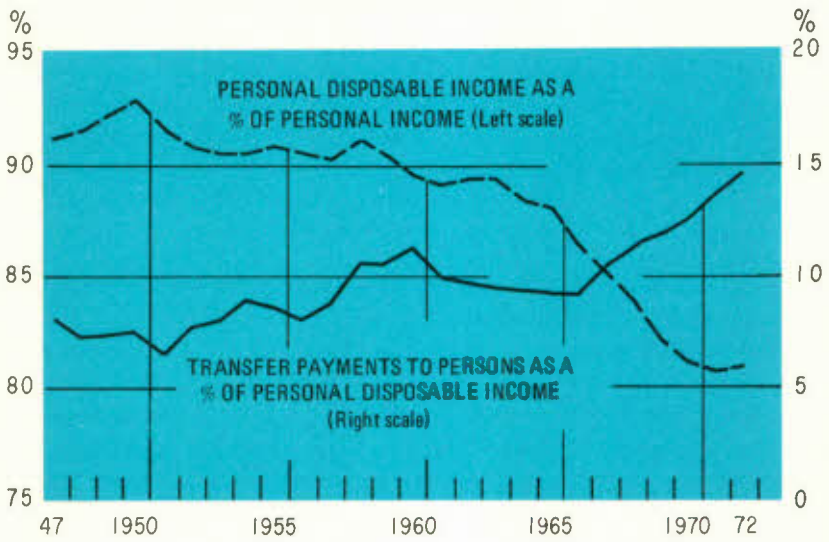
This brief review of government operations during the period 1968 to 1972 naturally leads to the conclusion that the enlargement of the role of the public sector in economic activity has been, to an important extent, attributable to acceleration in transfer payments to persons, on the expenditure side, and to more rapid growth in personal income tax receipts, on the revenue side.

To the extent that, on a net basis, transfer payments have been made to persons other than those taxed, government intervention has altered the distribution of income within the Canadian economy. Chart 6-7 provides a broad indication of the amounts involved in income redistribution in recent years. It shows that transfer payments to persons as a proportion of personal disposable income rose from 11.7 per cent in 1968 to 14.9 per cent in 1972 and that this increase was accompanied by a rise in the relative importance of the tax burden, as reflected by the decline in the ratio of personal disposable income to personal income—from 84.1 to 81.0 between the same two years.

In fact, government operations from 1968 to 1970 had the effect of increasing taxes far more rapidly than transfers (Chart 6-7).

CHART 6-7

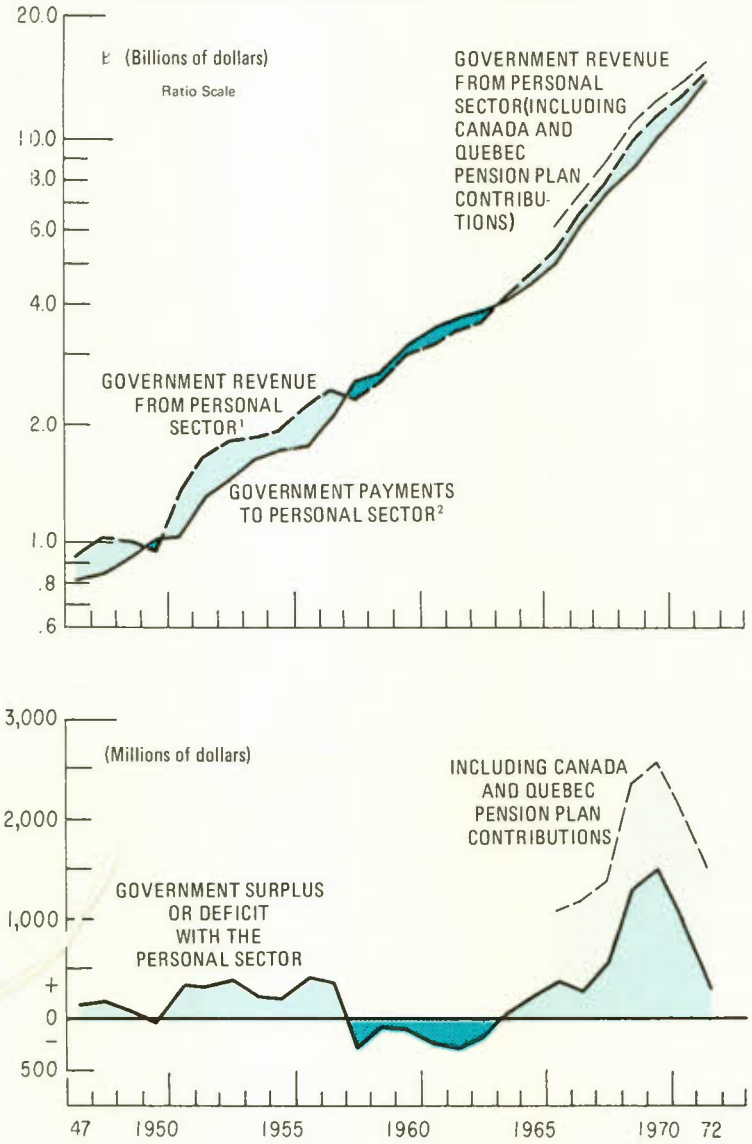
EFFECTS OF GOVERNMENT OPERATIONS ON PERSONAL INCOME



 Source: Based on data from Statistics Canada.

CHART 6-8

GOVERNMENT FISCAL POSITION IN DIRECT OPERATIONS AFFECTING THE PERSONAL SECTOR



[1] **Includes direct taxes and other transfers from persons to government but excludes Canada and Quebec Pension Plan contributions.**

[2] **Includes transfer payments to persons, transfers from provinces to hospitals, and current expenditures on goods and services related to medicare.**

Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

Thus governments developed a large surplus in their direct operations affecting the personal sector, and this constituted the essence of the policy of vigorous fiscal restraint applied during most of that period. By contrast, in 1971 and 1972, growth in personal disposable income turned up strongly, partly as a result of a shift in the position of the government vis-à-vis the personal sector.

The fiscal position of government with respect to *direct* operations affecting the personal sector is given in Chart 6-8. Government direct payments to the personal sector include, in addition to transfer payments to persons, grants from provinces to hospitals[7] and current expenditures on goods and services estimated to be incurred by provinces due to the implementation of medicare programs. Government revenues originating in the personal sector include personal income tax receipts, other transfers received from persons, and contributions to social security. Government receipts are shown both inclusive and exclusive of contributions to public pension funds. Chart 6-8 shows that, after an extended period of deficits between the years 1958 and 1963, the government fiscal position vis-à-vis the personal sector swung into surplus. Starting in 1964 and continuing up to 1968, a modestly rising surplus, averaging about $300 million per year (excluding pension fund receipts), developed in favour of the public sector. Between 1969 and 1971, this surplus grew to an average of over $1.3 billion. By 1972, reflecting the impact of stimulative policies, it had fallen back to $330 million. When pension plan contributions are counted with public sector revenue, the average surplus over the period 1969 to 1971 increases to $2.4 billion, against $800 million during the 1964-to-1968 period, and remains substantially high in 1972, at about $1.5 billion.

The evolution of the government sector budget position, on a National Accounts basis,[8] may be seen in Chart 6-9.

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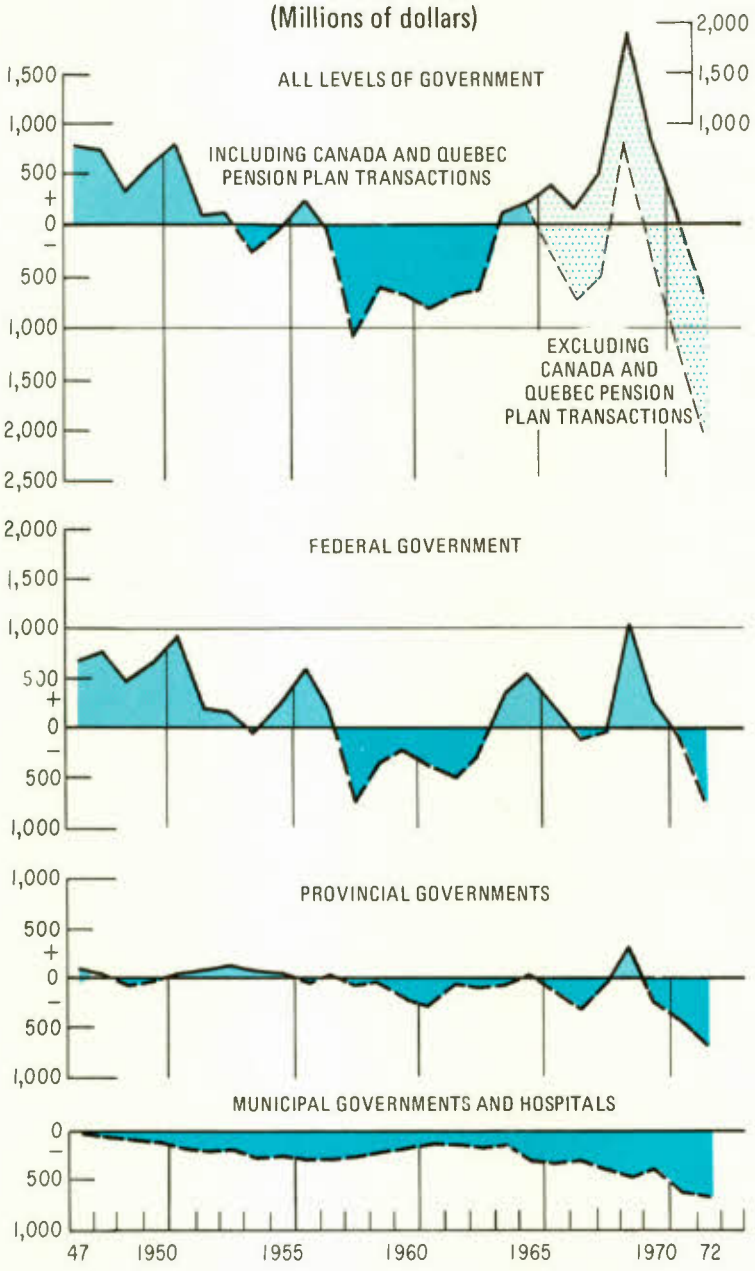
[7] Classified as transfer payments prior to 1961 but removed from this category with the reclassification of hospitals to the public sector in 1961.

[8] In addition to the items discussed vis-à-vis the personal sector, the overall fiscal position of government includes current expenditures on goods and services, fixed investment outlays, other transfer payments, and the change in the value of inventories, on the expenditure side; and indirect taxes, direct taxes on corporations, taxes on nonresidents' income, and government investment income, on the revenue side. The level of surplus or deficit in direct transactions with the personal sector (as defined here) is less important than the changes observed from one year to another.

CHART 6-9

GOVERNMENT SURPLUS OR DEFICIT POSITION ON A NATIONAL ACCOUNTS BASIS



Source: Based on data from Statistics Canada.

Shaping the Expansion

Fiscal policy between 1968 and 1971 was characterized by a sequence of vigorous restraints in 1968 and 1969 and the maintenance of a relatively tight setting up to mid-1971.[9] The fiscal position of all levels of government, including the Canada and Quebec

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[9] Three budget concepts are currently used to assess the government fiscal position: the administrative budget, the statement of government cash transactions, and the National Accounts presentation of the budget. The latter accounting base has been selected for the purpose of this chapter since it allows government operations to be tied in with other sectors of the economy—e.g., the personal sector—and it permits a comparable analysis of the accounts of the federal, provincial, and municipal levels of government. The following table illustrates the federal government position on the two most comprehensive accounting bases—the Government of Canada financial requirements excluding foreign exchange transactions and the National Accounts surplus or deficit position of the federal government excluding the Canada and Quebec Pension Plan transactions. The table shows a difference in level between the cash and the National Accounts balances. However, the stance of fiscal policy, as indicated by the year-to-year change in the surplus or deficit position, appears to be roughly the same under both accounting systems for the period under study.

ALTERNATIVE PRESENTATION OF THE FEDERAL BUDGET POSITION

Fiscal Year	Actual Surplus or Deficit Position		Year-to-Year Change in the Actual Surplus or Deficit Position	
	National Accounts Presentation	Total Financial Requirements*	National Accounts Presentation	Total Financial Requirements*
	(Millions of current dollars)			
1962–63	−404	−958		
1963–64	−187	−314	217	644
1964–65	396	24	583	338
1965–66	593	49	197	25
1966–67	236	−708	−357	−757
1967–68	−147	−1,420	−383	−712
1968–69	75	−895	222	525
1969–70	969	185	894	1,080
1970–71	−52	−1,182	−1,021	−1,367
1971–72	−194	−1,547	−142	−365
1972–73	−474	n.a.	−280	n.a.

*Excluding foreign exchange transactions.
n.a.—not available.
SOURCE: Based on data from Statistics Canada, and Department of Finance, *Economic Review*, April 1973, p. 72.

For a brief elaboration of the three budget concepts, see Economic Council of Canada, *Performance and Potential: Mid-1950s to Mid-1970s* (Ottawa: Information Canada, 1970), pp. 46–48; and Canadian Tax Foundation, *The National Finances, 1972–73*, Toronto, 1972, pp. 32–36 and pp. 238–42.

Pension Plan operations, moved from a surplus of $148 million in 1967 to a surplus of $502 million in 1968, reached a peak of $1,915 million in 1969, and then declined to $811 million and $100 million in 1970 and 1971 respectively. This has been followed by a strong expansionary stance from mid-1971 onward, generating a deficit of about $630 million in 1972.

Both the federal and provincial governments participated in this policy of restraint and subsequent expansion, although to varying degrees, while municipal governments and hospitals combined, which were largely financed through intergovernmental transfers, registered increasing deficits. At the federal level, fiscal policy moved towards restraint late in 1967 and maintained a highly restrictive posture till the end of 1970. The degree of fiscal restraint was subsequently reduced during the first half of 1971 and has been substantially eased since.[10] Fiscal policy followed a similar pattern at the provincial level. After maintaining a rather neutral posture between 1962 and 1967, provincial governments swung into a growing surplus position in 1969. They shifted towards less restraint in 1970 and by 1972 had come back to an easier stance (see Chart 6-9).

Concluding Comments

In the introduction to this chapter, we drew attention to the greatly expanded role of the state in economic activity. Apart from the increase that has taken place in the share of the government sector in national output, we have seen that profound changes have also taken place *within* the public sector. Taxes on the private sector have been rising strongly, accompanied by a redistribution of income. The share of each level of government in total expenditures has also continued to change in recent years, with expenditures becoming increasingly diffuse as a result of the increased proportion accounted for by provincial and local administrations. All of these changes have implications for the future of the economy, particularly in relation to economic stabilization, income redistribution, and the maintenance of growth. It therefore appears to have become increasingly important that programs and policies be harmonized within the government sector itself and that these, in turn, be integrated with decision-making in the private sector, to better ensure the attainment of long-term national economic objectives.

[10] Federal fiscal policy is discussed in somewhat more detail earlier in this *Review* (see Chapter 4.

Shaping the Expansion

Another area of concern is the large swings that have taken place in fiscal policy in recent years and the shifts that have occurred in the balance of direct transactions between the government and the personal sector. The extended period of restraint between 1968 and part of 1971 appeared at a time when economic activity in Canada had slowed down and a gap had emerged between potential supply and actual demand, accompanied by a rising rate of unemployment. At the same time, the rate of price inflation, although high, was significantly lower than that experienced by our major trading partners. If taxes on the personal sector had not risen as much after 1968, the overall government fiscal posture would have shifted away from one of large surplus. The increase in the fiscal burden of the personal sector may have been conducive to the intensification of cost-inflation pressures in the economy despite the anti-inflationary purpose of the restraints. The hypothesis has previously been suggested by the Council that workers, in order to maintain their real after-tax income, tend to attempt to compensate for tax increases as well as for price increases by making higher wage demands.[11] This hypothesis seems the more plausible in relation to the period considered here, because the gap was growing between the amounts levied on and received by the personal sector; because the increased transfer payments involved elements of redistribution that benefited only certain groups of taxpayers; and because the increased fiscal burden has been borne by a decreasing proportion of the working-age population.

In its *Ninth Review,* the Economic Council proposed orienting demand-management policies towards the achievement of a set of interim performance targets that implied bringing the economy steadily back towards its potential level of operation. The proposed indicators were compatible with some flexibility in stabilization policy, although they precluded large fluctuations. However, as economic objectives can be achieved in various ways, particularly by increasing or lessening the importance of the government role, it is important to agree on general orientation. It is therefore desirable that not only the government sector *in toto,* but each government separately, should share in working out and harmonizing economic policies. We have dealt with this matter in our recommendations.

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[11] See Economic Council of Canada, *Ninth Annual Review: The Years to 1980* (Ottawa: Information Canada, 1972), pp. 100-102; and *idem, Performance and Potential, op. cit.,* pp. 29-30.

7

The Industrial Structure

IN THIS chapter, which deals with changes in industrial structure and productivity, the focus is on recent industrial growth compared with past performance and with prospects for the immediate future. First, output, employment, and productivity measures are presented, and trend growth rates since 1948 and over the recent 1968-72 period are compared. This comparison is provided for the 11 major industrial sectors included in aggregate Real Domestic Product. Next, year-to-year changes for each sector in the 1968-72 period are compared with the changes projected for 1972-76 in the CANDIDE model solution reported in Chapter 4 of the Council's *Ninth Review*. Chart 7-1 provides a visual summary of historical and recent experience and the projections to 1976. Finally, additional detail is given concerning real output changes by industry, particularly industries within the manufacturing sector. The object of all these comparisons is to illustrate the industrial dimensions of past growth and to facilitate appraisal of the 1972-76 projections.

Recent and Longer-Term Performance

Overall, 1968 to 1972 has been a period of slow growth, centred as it is on the recession year 1970. Real output dropped from a historical trend rate of about 5 per cent a year to about 4 per cent. Perhaps surprisingly, the contraction was reflected solely in productivity; the long-term rate of growth in employment was maintained. Individual sectors, of course, had diverse experiences.

CHART 7-1

INDEXES OF OUTPUT, EMPLOYMENT, AND OUTPUT PER PERSON EMPLOYED, BY SECTOR, 1948-76 (1961=100)

Ratio Scale

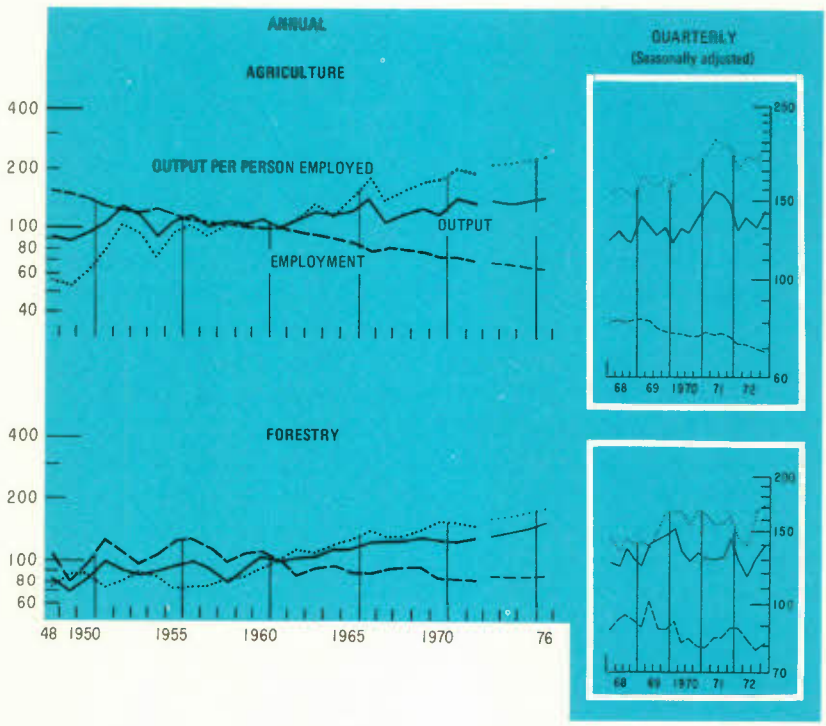
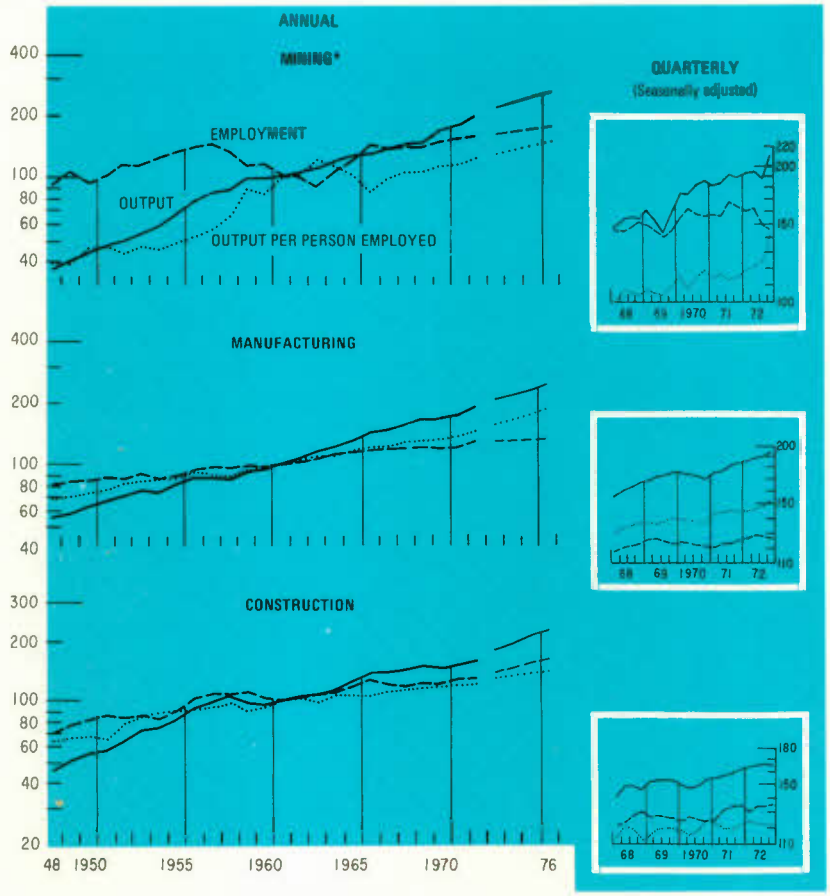


CHART 7-1 (cont'd.)



*Employment growth in the past few years has been running somewhat below expectations, implying a higher rate of increase in output per man than expected. The actual numbers involved are quite small, and the relationship between changes in output and employment over short time periods is rather tenuous.

CHART 7-1 (cont'd.)

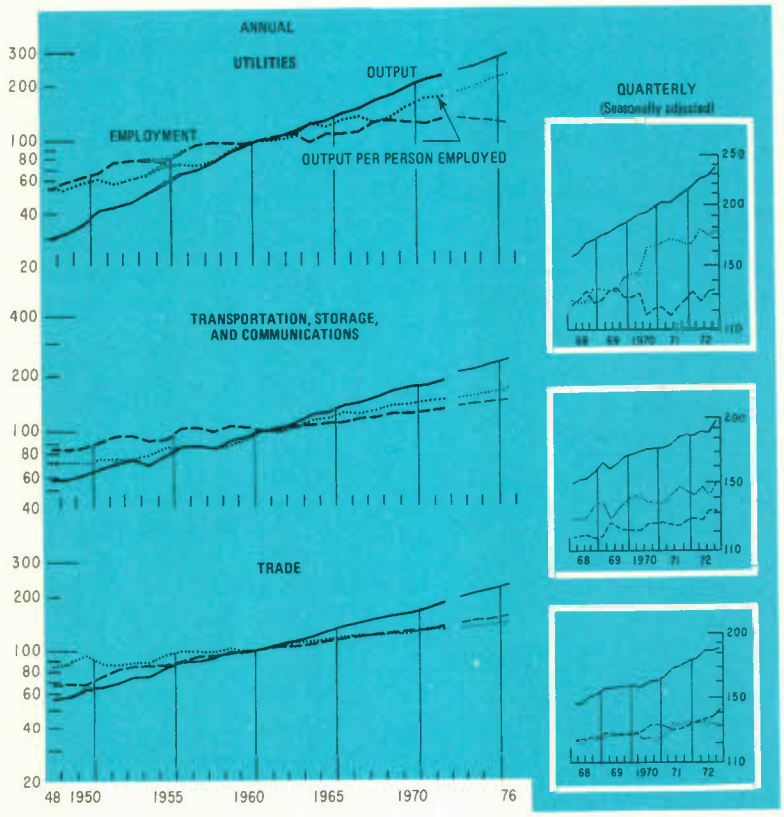
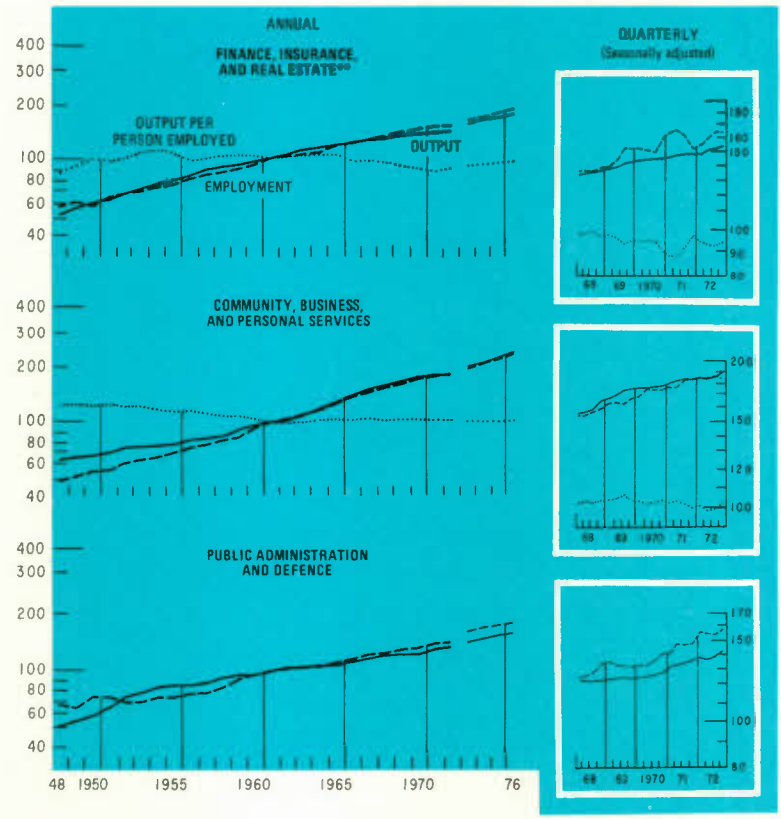


CHART 7-1 (concl'd.)



****Includes Housing.**

Source: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

TABLE 7–1—GROWTH RATES[1] OF REAL OUTPUT, EMPLOYMENT, AND PRODUCTIVITY, BY SECTOR

	1948–70				1968–72			
	Output Ranking	Output	Employment	Productivity	Output Ranking	Output	Employment	Productivity
		(Average annual percentage change)				(Average annual percentage change)		
Utilities	(1)	8.3	3.3	5.1	(1)	8.4	−0.2	8.5
Mines, quarries, and oil wells	(2)	6.5	1.4	4.9	(2)	7.2	2.2	5.0
Manufacturing	(3)	5.4	2.0	3.2	(6)	3.7	1.0	2.6
Transportation, storage, and communications	(3)	5.4	1.6	3.6	(3)	5.1	2.1	3.0
Community, business, and personal services	(5)	5.2	6.2	−1.2	(5)	4.1	4.7	−0.6
Wholesale and retail trade	(6)	5.0	2.9	2.0	(4)	4.8	2.6	2.1
Construction	(7)	4.9	2.5	2.6	(9)	3.0	1.6	1.4
Finance, insurance, and real estate[2]	(8)	4.4	4.6	0.1	(10)	2.8	4.3	−1.5
Public administration and defence	(9)	3.4	3.7	0.1	(7)	3.6	4.9	−1.2
Forestry	(10)	2.7	−1.1	4.2	(11)	−0.4	−3.4	2.9
Agriculture	(11)	1.4	−3.4	4.6	(8)	3.1	−3.0	6.2
Total[3]		4.9	2.4	2.4		4.1	2.4	1.7

[1]Growth rates are restricted-least-squares estimates. See Economic Council of Canada, "Calculating Growth Rates", *The Economy to 1980: Staff Papers*, Annex to Paper No. 1 (Ottawa: Information Canada, 1972).

[2]Includes Housing.

[3]Includes Fishing.

NOTE: Attention is drawn to the fact that, in a number of sectors, real output is difficult to define and/or measure. In some cases measures of labour input are, of necessity, used as indicators of output. These reservations apply particularly to the service industries. Estimates of productivity, as well as output, are deficient in these industries. However, projected *changes* in growth rates of output and employment remain significant. Productivity growth for public administration and defence is set at zero in the National Accounts.

SOURCE: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

Table 7-1 shows the average growth rates for the 1948-70 and 1968-72 periods, ranking the 11 sectors according to their long-term rates of growth of output in the 1948-to-1970 period. Utilities and mining headed the list as output leaders in both the historical and recent periods, although their employment and productivity characteristics differed significantly. For utilities, although output growth rates were maintained throughout 1968-72, high historical employment growth gave way to a leveling-off of employment, so that productivity (output per person employed) increased markedly, reaching a rate of 8.5 per cent a year over the period. In contrast, mining experienced a high output growth rate in 1968-72—7.2 per cent a year versus a historical 6.5 per cent—but this was realized mainly through more rapid employment growth, while the rate of productivity growth showed little change at 5 per cent per year.

The more cyclically sensitive manufacturing industries, which placed third in the output-growth-rate ranking in the historical period, slid to sixth place in the 1968-72 period. Declining output in 1970 and a weak recovery in 1971 combined to drop the output rate to 3.7 per cent, in contrast with a historical rate of 5.4 per cent. This weaker output growth particularly hit employment, the increase in which declined from 2.0 per cent a year to 1.0 per cent.

The next three sectors roughly maintained their respective rankings in the 1968-72 period, after allowing for the drop in the position of manufacturing. Services are usually characterized by high employment and low productivity growth rates. However, the transportation, storage, and communication industry had an exceptionally high trend growth rate of 3.6 per cent a year in productivity compared with a growth rate of 1.6 per cent a year in employment. The community, business, and personal service, and the wholesale and retail trade industries were more typical in that the trend growth rate for output was generated by high employment growth rates—6.2 and 2.9 per cent, respectively. The latter two industries also had in common somewhat weaker output growth in the 1968-72 period, reflected in a slowing of employment growth rather than productivity growth. Actually, community, business, and personal services experienced declining productivity rates in both periods. However, it should be emphasized again that there are difficult problems in defining and measuring output in such areas as health and education; thus output and productivity in this industry may be underestimated. Further, the CANDIDE

employment measures are taken from the *Labour Force Survey*, which provides the only global employment measures for the Canadian economy, and these are hardly the most accurate series for sector employment statistics. Ideally, too, one would wish to obtain employment and output data from the same source, but it is not possible.

There are few similarities in behaviour among the remaining sectors in Table 7-1, although, with the exception of public administration and agriculture, all experienced significant slowdowns in output growth in the 1968-72 period compared with their trend values over the 1948-70 period. Growth in agricultural output in the more recent period was markedly higher. The continuing improvement in agricultural productivity and the associated decline in employment are particularly worthy of note. In both the construction and the finance, insurance, and real estate sectors, the cutback in output growth resulted in a sharper contraction in productivity growth than in employment growth, as it did in the economy as a whole.

Past Performance and Projections

In Table 7-2, our projections for 1972-76 are compared with the long-term growth rates and the recent annual changes of output, employment, and productivity. The projections are from the simulation of the CANDIDE model reported in Chapter 4 of the Council's *Ninth Review*. The input-output system in the model enabled us to estimate the volume of output in each industry that would be consistent with the consumer, government, investment, export, and other demands on the economy that have been projected for the 1970s. Obviously, detailed industry projections such as these are subject to a considerably wider margin of error than are the aggregate figures—and, of course, they are dependent on the special set of assumptions underlying this particular simulation. Further, some of the CANDIDE model labour demand equations used in the *Ninth Review* simulations yield rates of productivity increase that are somewhat high by historical standards. Thus both the industry productivity and employment figures are judged to be of a lower order of accuracy than the industry output estimates. Nevertheless, estimates for individual sectors are consistent within themselves and with the final demand projections, both domestic and foreign, reported in the *Ninth Review*.

Our justification for releasing these admittedly tentative estimates is twofold. First, the Council is well aware that many decision-makers in the private sector of the economy find it difficult to relate their activities directly to the behaviour of national economic aggregates, although they can relate them to the behaviour of their own industries. Second, while the Council recognizes the severe limitations inherent in using a national econometric model to project sector trends, because much of the information relevant to an industry's future is available only from industry sources and at the industry level, it also believes that industry projections undertaken without reference to national aggregate developments are likely to be deficient. Clearly, realistic appraisal of future developments calls for both industry-specific and economywide information. In presenting these estimates by sector, as uncertain as they are, the Council is attempting to initiate a necessary dialogue with the industry experts who are directly concerned with making such appraisals. The proposed National Economic Conference, sponsored by the Council and planned for December of this year, is oriented towards discussion of industry problems and prospects, and will, it is hoped, carry this dialogue forward.

In Table 7-2, then, the employment figures are rough and subject to substantial margins of error, particularly where the absolute numbers involved are quite small, as in utilities and mining. It will be apparent from the table that the slowdown in output in the 1970 recession was particularly marked in manufacturing, construction, and trade. The overall effect was a slowdown in total Real Domestic Product to a 2.4 per cent growth rate in 1970 from over 5 per cent in the preceding two years. The pick-up since 1970 has been disappointing, with 1972 achieving only a 4.4 per cent growth rate—down somewhat from the 4.8 per cent rate of 1971. The fall-off in aggregate growth in 1970 occurred in both employment and productivity, with each dropping to about half its long-term trend rate; since then, employment growth has surpassed trend rates, while productivity growth has been lagging significantly. The projected improvement in growth rates as suggested by the *Ninth Review* simulation for the period 1972 to 1976 is substantial. Total real output growth at a rate of 5.8 per cent a year is almost one full percentage point above the trend rate—in other words, a boom. Productivity is projected to hold at about the trend rate, with the pick-up being reflected in faster employment growth.

TABLE 7-2—GROWTH RATES OF REAL OUTPUT, PRODUCTIVITY, AND EMPLOYMENT, BY SECTOR

	1948–70							1972–76	
	Output Ranking	Average Annual Percentage Change	Percentage Change over Previous Year					Output Ranking	Average Annual Percentage Change[1]
			1968	1969	1970	1971	1972		
			(Actual)						(Projected)
Utilities									
Output	(1)	8.3	7.7	9.2	8.4	6.7	10.3	(3)	6.7
Productivity		5.1	−5.3	6.9	13.2	9.2	3.2		7.0
Employment		3.3	13.8	2.2	−4.3	−2.2	6.9		−0.3
Mines, quarries, and oil wells									
Output	(2)	6.5	7.3	0.7	16.3	4.6	5.0	(2)	7.1
Productivity		4.9	4.5	1.5	7.9	1.4	9.2		4.1
Employment		1.4	2.6	−0.9	7.8	3.2	−3.9		2.8
Manufacturing									
Output	(3)	5.4	6.6	6.7	−0.2	4.0	6.0	(5)	6.2
Productivity		3.2	6.8	2.9	1.4	3.7	2.5		5.5
Employment		2.0	−0.2	3.8	−1.6	0.3	3.5		0.6
Transportation, storage, and communications									
Output	(3)	5.4	5.4	6.8	4.7	4.0	5.8	(6)	5.8
Productivity		3.6	5.0	3.6	4.2	2.0	2.1		3.3
Employment		1.6	0.3	3.1	0.5	2.0	3.6		2.4
Community, business, and personal services									
Output	(5)	5.2	5.0	7.4	3.7	3.6	2.5	(4)	6.6
Productivity		−1.2	−0.6	2.4	−1.8	−0.9	−1.1		0.3
Employment		6.2	5.6	4.9	5.6	4.6	3.6		6.2

Wholesale and retail trade									
Output	(6)	5.0	4.1	5.1	1.0	6.5	7.2	(7)	5.5
Productivity		2.0	1.2	2.5	−1.1	5.7	1.1		2.5
Employment		2.9	2.9	2.5	2.2	0.8	6.0		3.0
Construction									
Output	(7)	4.9	4.4	3.2	−1.0	5.5	4.9	(1)	7.8
Productivity		2.6	5.5	0.6	1.3	0.4	3.6		2.8
Employment		2.5	−1.1	2.6	−2.3	5.1	1.2		4.8
Finance, insurance, and real estate[2]									
Output	(8)	4.4	2.7	3.7	2.5	2.7	2.5	(8)	5.2
Productivity		0.1	−1.7	−3.4	−1.7	−2.6	2.5		0.9
Employment		4.6	4.5	7.4	4.3	5.5	0.0		4.2
Public administration and defence									
Output	(9)	3.4	2.8	2.3	2.5	5.2	4.1	(10)	2.8
Employment		3.7	3.2	3.5	2.5	7.0	6.3		3.4
Forestry									
Output	(10)	2.7	0.7	6.3	−1.9	−1.3	−3.4	(9)	5.1
Productivity		4.2	−0.6	6.3	9.0	−1.3	−2.0		3.6
Employment		−1.1	1.3	0.0	−10.0	0.0	−1.4		1.5
Agriculture									
Output	(11)	1.4	6.2	5.8	−1.4	16.2	−10.0	(11)	1.4
Productivity		4.6	8.6	8.0	3.2	16.4	−4.4		3.7
Employment		−3.4	−2.2	−2.0	−4.5	−0.2	−5.9		−2.2
Total[3]									
Real Domestic Product		4.9	5.1	5.6	2.4	4.8	4.4		5.8
Productivity		2.4	3.0	2.3	1.1	2.2	1.3		2.5
Employment		2.4	2.1	3.2	1.2	2.6	3.1		3.2

[1]Terminal-year growth rates, Chapter 4 solution of Economic Council *Ninth Review*, 1972.
[2]Includes Housing.
[3]Includes Fishing.
SOURCE: Based on data from Statistics Canada, and estimates by the Economic Council of Canada.

The effect of the 1970 recession in manufacturing was an actual contraction in output and employment and a drop in the productivity rate to about half its trend rate of growth. By 1972, manufacturing output had surpassed the trend rate, but it fell short of the rates achieved in 1968 and 1969. Productivity growth in 1972 was relatively weak considering the strength expected in the early stages of a recovery. However, for the period 1972 to 1976, increased productivity is seen as the main impetus to accelerated growth. An output growth rate of about 6 per cent—somewhat above the longer-term trend rate—is expected to be achieved by a productivity growth rate of about 4 per cent,[1] leaving employment to grow at about the long-term trend rate. This higher growth in manufacturing is compatible with the above-trend rate of growth projected for total real Gross National Product from 1972 to 1976.

Other cyclically sensitive industries are construction, and wholesale and retail trade. Construction declined sharply in output and employment in 1970. In wholesale and retail trade, productivity growth apparently fell significantly more than employment growth. Both the construction and trade industries recovered in 1971 and 1972, with trade showing exceptional advances in real output in both years and a strong overall advance in productivity. In the projection period, sharp advances are envisaged for both output and employment in construction, as a result of a projected upsurge in nonresidential construction, while more modest advances are expected in wholesale and retail trade.

Other important industries, in terms of weight and contribution to the overall advance in real output to 1976, are community, business, and personal services; finance, insurance, and real estate; and transportation, storage, and communications. With the exception of the latter, these service industries have experienced, in the past, high output growth in conjunction with high employment growth, but with negligible productivity growth. For the projection period, however, productivity is estimated to take the lead, and employment growth is relatively unchanged from previous trends. In the case of transportation, storage, and communications, traditionally high productivity growth rates are projected to ease somewhat in the projection period, with employment accelerating in line with the higher rate of output growth.

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[1] The high productivity rate of 5.5 per cent for 1972 to 1976 in Table 7-2, projected by the CANDIDE model, is suspect. A rate of 4.5 per cent is suggested as more reasonable in the light of historical experience (see Chapter 3). The labour demand functions within the CANDIDE model are currently being reassessed.

The projected growth rates in Table 7-2 show some interesting divergences from those in Table 7-1, although they are not implausible in relation to projections featuring above-average aggregate growth, high investment, and a return to potential. Construction takes over first place from utilities, moving up from seventh place. A growth rate of 7.8 per cent is projected, compared with a trend rate of some 5 per cent, reflecting the high projected growth rate of nonresidential construction to 1976. The increased output is projected to result mainly from increased employment growth. The same situation prevails for mining, which maintains its second place because of expected continuing strong domestic and foreign demand. The growth rate increment from the trend rate of 6.5 per cent to the projected 7.1 per cent is estimated to be achieved through a pick-up in employment growth, to a rate of 2.8 per cent compared with a historical 1.4 per cent. Industries are ranked much the same as over the long-term 1948-70 period, except that the utilities sector is now followed by community, business, and personal services. This industry, which has the highest employment content of the major groups and has been a leader in employment growth, is projected to increase output from a trend growth rate of 5.2 per cent to 6.6 per cent in the projection period. The increment to output is projected to come from an improvement in productivity, as the high 6.2 per cent employment growth will remain unchanged. Manufacturing now follows the community, business, and personal service sector, where, as already mentioned, output is projected to increase significantly until 1976.

More Detailed Projections

Finer industrial detail within mining; manufacturing; and community, business, and personal services is presented in Table 7-3, permitting important areas with divergent growth trends to be distinguished. Within mining, for instance, the growth rate of gas and petroleum—at some 10 per cent per year in the 1948-70 period—is twice that of all other mining. This high rate was maintained over the 1968-to-1972 period, whereas other mining showed considerable variation. Production in 1969-70 was affected by strikes. In the projection period to 1976, the higher-than-trend output rate projected for total mining is attributable to increased "other mining" output, as the rate for gas and petroleum output is estimated to vary somewhat from the trend rate.

TABLE 7-3—GROWTH RATES OF REAL OUTPUT, BY SECTOR

	Percentage Change over Previous Year						
	1948–70	1968	1969	1970	1971	1972[1]	1972–76[2]
				(Actual)			(Projected)
Agriculture	1.4	6.2	5.8	−1.4	16.2	−10.0	1.4
Forestry	2.7	0.7	6.3	−1.9	−1.3	−3.4	5.1
Mines, quarries, and oil wells	6.5	7.3	0.7	16.3	4.6	5.0	7.1
Gas and petroleum	10.3	10.2	8.7	12.3	7.3	15.2	7.9
Mines	4.9	5.7	−3.8	18.9	3.1	−0.3	6.6
Manufacturing[3]	5.4	6.6	6.7	−0.2	4.0	6.0	6.2
Food and beverages	4.4	2.7	2.8	4.0	2.9	3.5	4.0
Textiles, knitting, and clothing	4.2	7.5	8.0	−2.7	4.2	7.1	4.0
Pulp and paper mills	3.1	7.3	10.8	0.3	−0.8	8.6	5.2
Metals and machinery	5.6	6.7	6.6	3.4	1.6	5.0	5.5
Motor vehicles and parts	9.5	22.1	12.1	−12.1	17.0	6.9	8.8
Electrical products	7.4	4.5	6.8	−4.4	3.4	5.7	8.9
Chemicals	7.9	8.2	9.8	5.1	3.1	4.5	6.3
Construction	4.9	4.4	3.2	−1.0	5.5	4.9	7.8
Utilities	8.3	7.7	9.2	8.4	6.7	10.3	6.7
Transportation, storage, and communications	5.4	5.4	6.2	4.7	4.0	5.8	5.8

	Percentage Change over Previous Year						
	1948–70	1968	1969	1970	1971	1972[1]	1972–76[2]
				(Actual)			(Projected)
Wholesale and retail trade	5.0	4.1	5.1	1.0	6.5	7.2	5.5
Finance, insurance, and real estate[4]	4.4	2.7	3.7	2.5	2.7	2.5	5.2
Community, business, and personal services	5.2	5.0	7.4	3.7	3.6	2.5	6.6
Education and related services	8.0	8.1	9.5	5.0	3.7	1.8	N/A
Health and welfare services	5.5	7.7	6.0	3.2	3.3	1.6	N/A
Motion picture and recreational services	N/A	6.6	4.7	3.7	4.0	4.2	N/A
Services to business management	5.7	4.4	6.0	1.2	5.8	5.6	N/A
Personal services	N/A	−0.3	6.6	1.6	3.2	2.7	N/A
Public administration and defence	3.4	2.8	2.3	2.5	5.2	4.1	2.8
All sectors[5]	4.9	5.1	5.6	2.4	4.8	4.4	5.8

N/A—Not applicable.
[1]Based on 1972 data, as reported in May 1973.
[2]Terminal-year growth rates, Chapter 4 solution of Economic Council *Ninth Review*, 1972.
[3]The breakdown of manufacturing industries is not all-inclusive. Metals and machinery comprise primary metal industries, metal fabricating industries, and machinery industries.
[4]Includes Housing.
[5]Includes Fishing.
SOURCE: Based on data from Statistics Canada and estimates by the Economic Council of Canada.

Only a selection of manufacturing industries is presented in Table 7-3, although, in aggregate, these represent about 70 per cent of the weight of total manufacturing. Sizable variations in long-term growth rates, varying from 3.1 per cent a year for pulp and paper mills to 9.5 per cent for motor vehicles and parts, are apparent within this industry selection. Apart from the food and beverage sector, all industries listed experienced either contractions or reduced growth rates in one or both of the years 1970 and 1971. Declines in output were recorded in 1970 by textiles, knitting, and clothing; motor vehicles and parts; and electrical products. However, with the exception of electrical products, they have since recovered. Pulp and paper showed considerable weakness in 1970 and 1971, when U.S. demand weakened and the effects of the Canadian exchange rate appreciation exerted a depressing effect on this export-oriented industry. For metals, machinery, and chemicals, the rebound in 1972 fell short of a genuine recovery from the slack-growth years of 1970 and 1971.

In comparing past and projected medium-term growth of the selected manufacturing industries presented in Table 7-3, it will be noted that electrical products, one of the leaders in output growth historically, is projected to increase output from 7.4 per cent a year to 8.9 per cent. Some falling-off in growth rates is projected for such industries as motor vehicles and parts, and chemicals, both of which previously experienced high output growth. Of the remaining industries mentioned, all are estimated to roughly maintain trend rates, with the exception of pulp and paper, which is projected to improve its output rate to about 5 per cent a year from about 3 per cent.

Education and health—two important categories within the community, business and personal service industry—conform to the pattern of growth apparent at the total level, where a general weakening set in during 1970 and continued into 1971 and 1972. Similarly, in the education and health services categories, growth rates declined sharply in 1970, with the weakening continuing into 1972. Rates below 2 per cent a year in 1972 contrast with trend rates of 8.0 and 5.5 per cent a year for education and related services, and health and welfare services, respectively. For the aggregate industry, however, the projection for 1972 to 1976 is a growth rate of 6.6 per cent, significantly above the trend rate of 5.2 per cent.

In conclusion, we reiterate that the projections presented in this chapter depend upon the particular set of assumptions underlying the Chapter 4 simulation in the *Ninth Review*, and upon the structure of the economy portrayed by the equations of CANDIDE Model 1.0 used in that simulation. The projections contain some surprises and raise some questions not answered in this chapter. The reconciliation of these projections with industry-specific analyses and forecasts will be an interesting and useful task. The National Economic Conference will provide the forum for initial steps in this reconciliation.

8

Unemployment

THE UNEMPLOYMENT rate is perhaps the most quoted indicator of the state of the economy. It is variously interpreted to reflect the cyclical phase of the economy, the degree of utilization of potential, the tightness of the labour market, and the extent of social "hardship".

Those who use this convenient yardstick—economists, businessmen, politicians, and others—are beginning to recognize that it is merely the net outcome of a complex array of underlying forces and interrelationships. For example, behind the overall rate lie considerable differences in unemployment, by region, by industry and occupation, and by age and sex group. These variations are themselves the result of changes in such factors as the working-age population, participation rates, and labour demand, which in turn reflect many social influences that affect labour force participation, job turnover, and job search behaviour. It is hardly surprising, then, that the aggregate unemployment rate may constitute a less than adequate indicator for some of the purposes to which it is put.

To gain a better understanding of the many factors affecting unemployment, the Economic Council has initiated a study that will explore their relationships in detail.[1] This chapter, in its presentation of preliminary statistics, emphasizes the need for such a study to enable the aggregate unemployment rate to be interpreted in the light of its underlying structure.

[1] The results of our work in this area will be published in 1974.

While the experience of the recent past is frequently useful to help formulate short-term projections, the perspective of a longer-run historical pattern is necessary to identify structural changes. Accordingly, the time span of the following examination sometimes goes back as far as 1953, although more generally the focus is upon the 1960s and the 1970s up to the end of 1972. In the first section, data concerning the major labour market variables—population, participation rates, labour force, employment, and unemployment—are examined for various segments of the labour market at the national level. The following three sections present breakdowns by region, by age and sex, and by industry and occupation. These are followed by a discussion of the duration of unemployment, and the last section provides a summary and our conclusions.

Major Components of Labour Supply at the Aggregate Level

A number of broad trends are readily discernible in the components of labour supply for the period 1953-72, as can be seen in Appendix Table 9. First, the historical significance of immigration for the Canadian economy is clearly evident in this period. A large proportion of the annual increase in the labour force—typically about one-third—has been accounted for by immigrants.

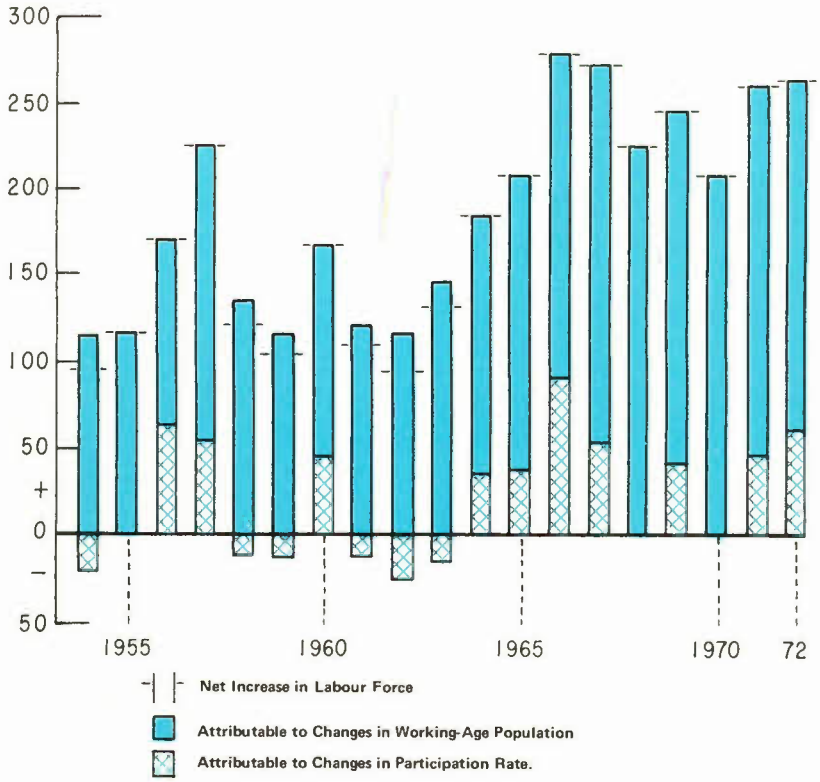
Second, the role of the female worker in the labour market is of increasing quantitative significance: participation rate, labour force, employment, and unemployment figures for women have followed a continuous upward path almost without exception.

Third, a rapid and uninterrupted increase in female participation rates has more than offset the continual decline, at a more modest rate, of male participation. The net effect, combined with increases in the working-age population, has produced one of the most rapidly expanding labour forces of any industrialized country. These two components of labour force growth—changes in the participation rate and increases in population—are portrayed in Chart 8-1. The effect on the growth of the labour force of changes in the participation rate is seen to be rather volatile; indeed, in 1954, 1958, and 1959—and again in 1961, 1962, and 1963—when the Canadian economy was cyclically depressed, the net effect was negative. By contrast, in 1966, 1971, and 1972, the participation rate exercised a substantial positive effect upon labour force growth.

CHART 8-1

GROWTH OF THE CANADIAN LABOUR FORCE, 1954-72

(Thousands of persons)



Source: Estimates based on data from Statistics Canada.

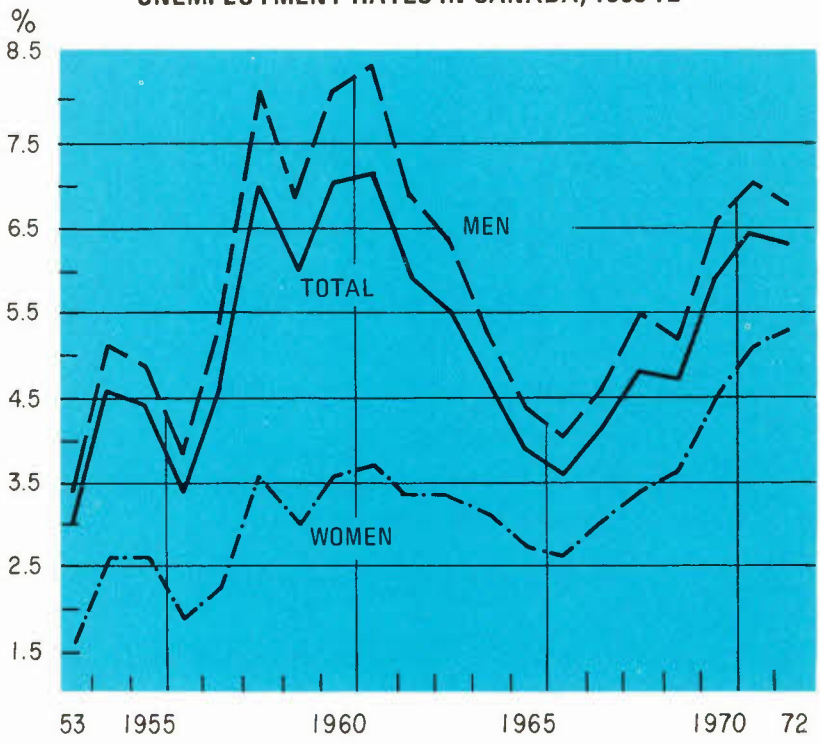
Fourth, unlike the situation in other industrial countries, including the United States, rates of unemployment for women have remained consistently below those for men. This fact is depicted graphically in Chart 8-2, which indicates a considerable narrowing of the gap between the male and female rates during the 1960s.

Two further aspects of the total labour market statistics deserve comment. First, Canadian unemployment rates are high by international standards; for the latter half of the 1960s they exceeded those of West Germany, Japan, Sweden, France, Italy, Britain,

and the United States.[2] Second, part-time work has greatly increased in importance in Canada. In 1972, about 12.5 per cent of employment was part-time, as opposed to less than 4 per cent in 1953. Moreover, close to 6 per cent of the unemployed in recent years have been persons seeking part-time work. The quantitative significance of this phenomenon is apparent from the fact that exclusion of persons seeking part-time work from the calculation of the unemployment rate reduces the rate by 0.3 percentage points in each year from 1968 to 1972 (Table 8-1).

CHART 8-2

UNEMPLOYMENT RATES IN CANADA, 1953-72



Source: Based on data from Statistics Canada.

[2] N. Tandan, "A Comparison of Unemployment in Selected Industrial Countries", *Notes on Labour Statistics, 1972*, Statistics Canada, Cat. No. 72-207, annual, pp. 55-64.

TABLE 8–1—THE UNEMPLOYMENT RATE, EXCLUDING PERSONS SEEKING PART-TIME WORK, CANADA, 1968–72

	Total Unemployed	Unemployed Seeking Part-Time Work	Total Unemployment Rate	Unemployment Rate, Excluding Persons Seeking Part-Time Work
	(Thousands)		(Per cent)	
1968	382	23	4.8	4.5
1969	382	23	4.7	4.4
1970	495	30	5.9	5.6
1971	552	29	6.4	6.1
1972	562	34	6.3	6.0

SOURCE: Based on data from Statistics Canada.

Labour Market Patterns at the Regional Level

The national data described in the preceding section obviously mask considerable regional differences in unemployment. Appendix Table 10 shows that, while Ontario and the Prairies have experienced unemployment rates consistently lower than the national average, Quebec, British Columbia, and the Atlantic Provinces typically have rates higher than the average. The rate for each region is, of course, a function of the complex underlying patterns of change in participation rates, labour force, and the process of job creation.[3] These structural features are presented in Appendix Tables 11, 12, and 13, respectively.

The Atlantic Region, which has been characterized by the highest rate of unemployment in recent years, has a comparatively low participation rate (10 to 15 percentage points lower than in the other regions of Canada) and the slowest rate of labour force

[3]The basic labour market relationships may be seen from the following simple identities: (1) $P \equiv L + N$, (2) $L \equiv E + U \equiv rP$, and (3) $u = U/L$, where P is the working-age population; L is labour force; N stands for not in the labour force; E and U are employment and unemployment, respectively; r is the participation rate; and u is the unemployment rate. From (2) and (3) we may write (4) $u = \frac{rP - E}{rP}$, or $u = 1 - E/rP$,

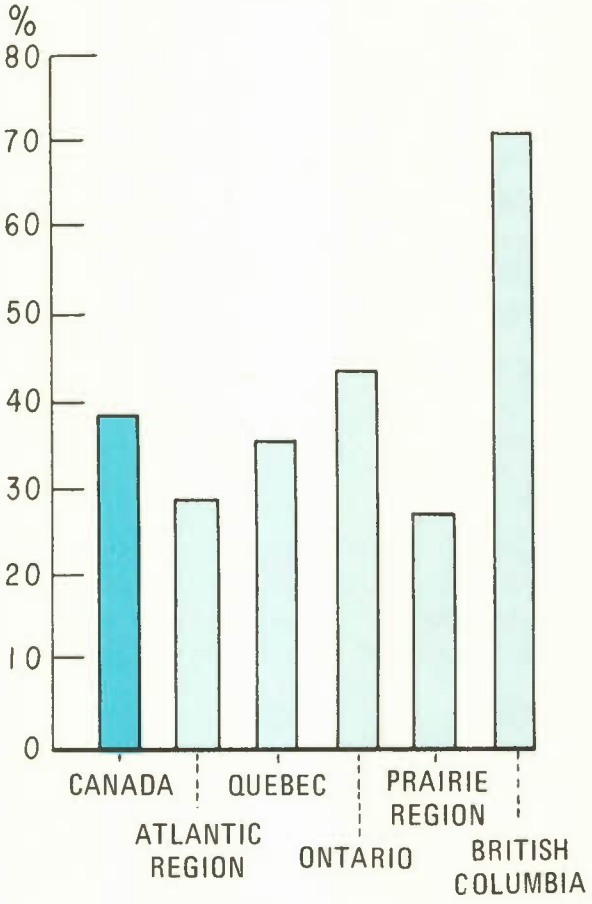
which clearly shows that the unemployment rate depends upon what is happening to the size of the working-age population, the participation rate, and the process of job creation, for the particular age-sex group, region, or industry under consideration.

growth. By contrast, Ontario's participation rate has been higher than average and the rate of umemployment lower than average.

The rate of job creation also differs among the regions. British Columbia and the Atlantic Region, for example, both have above-average unemployment rates, but British Columbia's average annual percentage increase in employment far outstripped the corresponding growth in the Atlantic Provinces during the 1960s (Chart 8-3).

CHART 8-3

PERCENTAGE INCREASE IN EMPLOYMENT BY REGION, 1960-72



Source: Based on data from Statistics Canada.

It is clear, then, that the regional pattern is far more complex than a simple division into regions of high and low unemployment would suggest. Ontario, with above-average participation, labour force growth, and job creation, and below-average unemployment, clearly leads the other regions. The intermediate ranks are held by the Prairies, British Columbia, and Quebec. The Prairie Region has experienced unemployment rates even lower than those of Ontario, but its job creation record is surpassed by all regions. British Columbia's rate of employment creation has exceeded that of all other regions, but its very rapid labour force growth has nevertheless resulted in above-average rates of unemployment. Quebec's net position is also a mixture of different forces; although it has the second highest unemployment rate, its record of job creation has been superior to that of the Prairie and Atlantic Regions. Its labour force has grown faster than in either of these two regions, however—possibly due in part to a lower rate of out-migration. Finally, the Atlantic Region, with its high unemployment rate, low participation rate, slow labour force growth, and relatively poor record of employment creation, ranks lowest on the scale.

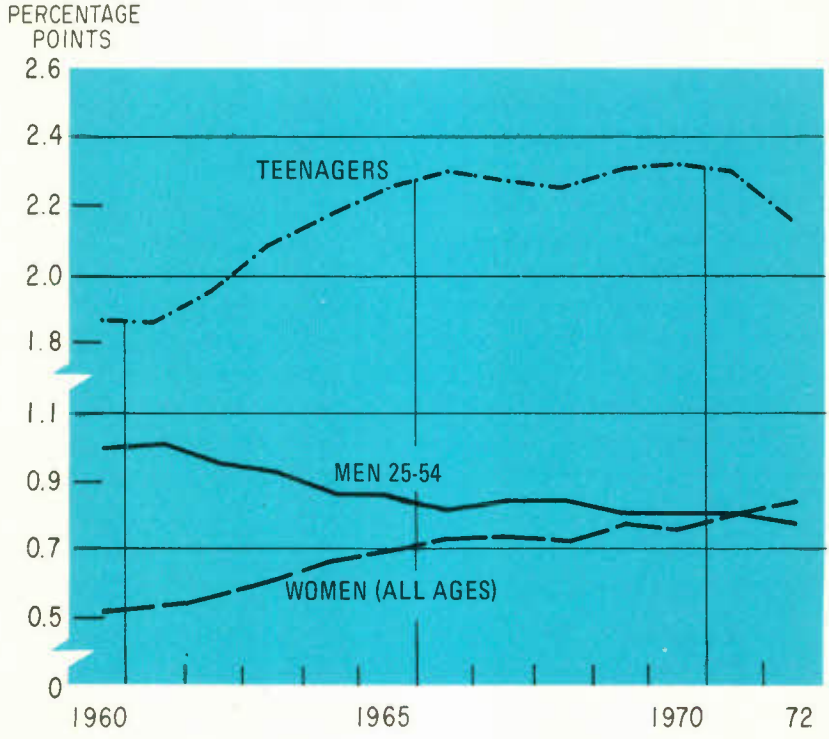
The Age-Sex Composition of Unemployment

The age-sex structure of unemployment presented in Appendix Table 14 shows typically high rates of unemployment for young persons (aged 14-19) of both sexes and a consistently low rate for women as a group. More interesting, perhaps, is that some trends are visible, and these have been depicted graphically in Chart 8-4. First, the ratio of the unemployment rate of "prime working-age" males—i.e., men 25-54—to the national unemployment rate decreased throughout the 1960s and, after a leveling-off from 1969 through 1971, again in 1972. Second, the equivalent ratio for females rose consistently throughout the same period, with exceptions only in 1968 and 1970.

Examination of the labour force growth rates for these groups in recent years (shown in Table 8-2) yields a partial explanation of the prevailing high levels of unemployment: the labour force of teenagers, with consistently high unemployment rates, has increased rapidly in recent years. The labour force growth of men aged 25-54, whose relative unemployment rate has declined, has, by contrast, been comparatively modest.

CHART 8-4

RELATIVE UNEMPLOYMENT RATES* FOR SOME SELECTED AGE-SEX GROUPS CANADA, 1960-72



***Defined as the ratio of the group unemployment rate to the national rate.**
Source: Based on data from Statistics Canada.

The important role of participation rates in determining the size and composition of labour supply is clearly apparent in Table 8-2. The generally declining rates for men 25-54 in the period 1968-72 produced a negative effect upon the labour force growth of that group. For women, by contrast, the participation rate contributed positively to net labour force growth throughout the period. Participation rates for teenagers, which had been falling for a number of years, increased in 1971 and 1972 and made rather large contributions to the group's labour force growth.

TABLE 8-2—ANNUAL PERCENTAGE INCREASE IN THE LABOUR FORCE OF SOME SELECTED AGE-SEX GROUPS, CANADA, 1968–72

	Men 25–54			Women			Teenagers		
	Attributable to:		Net Increase in Labour Force	Attributable to:		Net Increase in Labour Force	Attributable to:		Net Increase in Labour Force
	Increase in Population	Change in Participation Rate		Increase in Population	Change in Participation Rate		Increase in Population	Change in Participation Rate	
1968	2.1	−0.5	1.6	2.9	1.8	4.7	2.6	−0.4	2.2
1969	1.9	−0.2	1.7	2.7	2.4	5.1	3.1	−2.4	0.7
1970	2.1	−0.2	1.9	2.6	0.8	3.4	2.5	0.0	2.5
1971	2.0	0.0	2.0	2.5	2.7	5.2	2.3	1.6	3.9
1972	2.3	−0.4	1.9	2.5	1.8	4.3	2.6	3.8	6.4

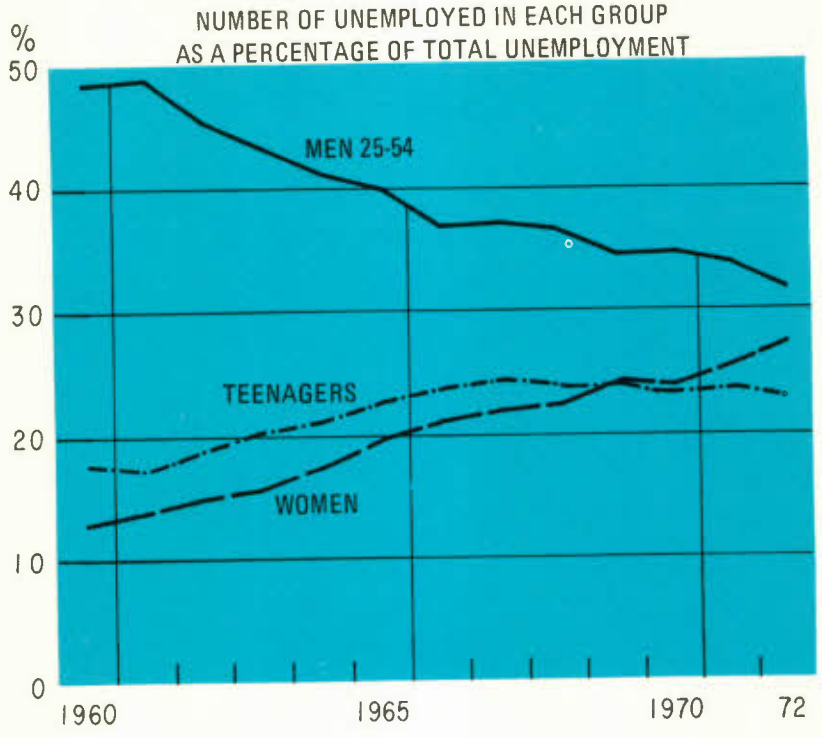
SOURCE: Estimates based on data from Statistics Canada.

Shaping the Expansion

With shifts taking place both in unemployment rates and in the relative size of the labour force in the different age-sex groups, substantial changes have emerged in the composition of total unemployment. Whereas men in the 25-54 age group accounted for 48.7 per cent of total unemployment in 1960, they accounted for only 32.6 per cent in 1972. On the other hand, women represented only 13.5 per cent of the total unemployed in 1960 but 27.9 per cent in 1972.[4] These shifts are graphically displayed in Chart 8-5.

CHART 8-5

UNEMPLOYMENT SHARES FOR SOME SELECTED AGE-SEX GROUPS, CANADA, 1960-72



Source: Based on data from Statistics Canada.

[4] In 1960 and 1972 the corresponding labour force shares for men 25-54 were 49.3 per cent and 41.8 per cent, respectively; for women, 25.8 per cent and 33.2 per cent, respectively.

However, it is probable that the same total unemployment rate that in one case included mainly men in the 25-54 age group and in another a much greater proportion of women or younger people would have different implications for the state of the labour market, as well as for wages and prices, and for the appropriate orientation of stabilization policies.[5] That is the reason for studying the structural aspects of unemployment.

Composition of Employment and Unemployment, by Industry and Occupation

The type of work an individual performs, and the industry in which he performs it, are two factors affecting the probability of his being unemployed. Therefore, despite the well-known problems concerning the attribution of unemployment to a particular occupation and/or industry source,[6] such a breakdown is of obvious interest because it permits an examination of the structural shifts in unemployment that accompany the process of growth. Moreover, the production characteristics of particular industries affect an important aspect of Canadian unemployment—namely, its seasonality.

As Table 8-3 shows, the level of the unemployment rate differs considerably among industry sectors. It has been particularly high in recent years for construction workers—2.5 times greater than for the economy as a whole. Further, when quarterly unemployment rates are expressed as percentages of the annual average, it is clear that, while unemployment varies with the season in all industries, the movements are marked in construction and the primary industries, and rather slight in the service industries. In construction in 1971, for instance, unemployment was three times higher in the first quarter than in the third.

Each industry's share of total labour force and total unemployment is shown in Chart 8-6, and several useful items of information are discernible. First, it can be determined whether a sector has a proportionate or disproportionate amount of unemployment.

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[5] See, for example, Economic Council of Canada, *Performance in Perspective, 1971* (Ottawa: Information Canada, 1971), Appendix A.

[6] See S. Ostry and M. Zaidi, *Labour Economics in Canada* (Toronto: Macmillan, 1972), p. 137, fn. 11.

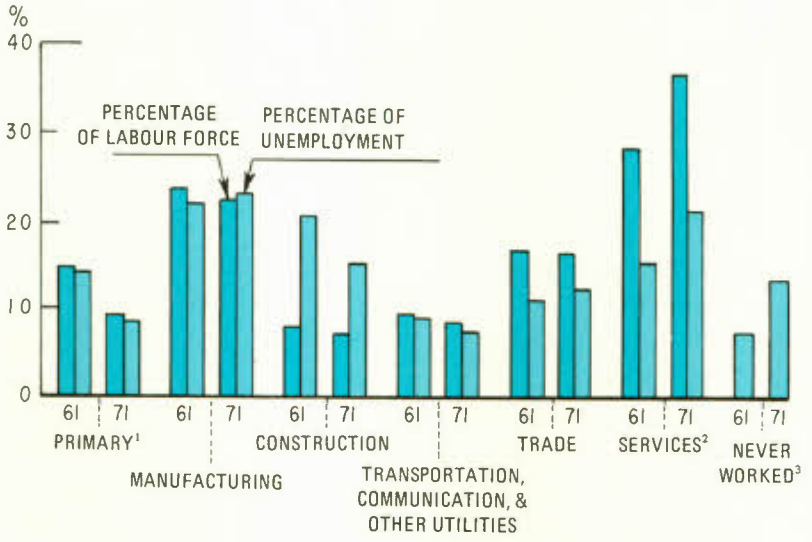
TABLE 8–3—QUARTERLY UNEMPLOYMENT RATES, BY SECTOR, CANADA, 1970–72

		All Sectors		Primary Industries[1]		Manufacturing		Construction		Transportation[2]		Trade		Services[3]	
	Quarter	Quarterly Rate	Percentage of Annual Rate	Quarterly Rate	Percentage of Annual Rate	Quarterly Rate	Percentage of Annual Rate	Quarterly Rate	Percentage of Annual Rate	Quarterly Rate	Percentage of Annual Rate	Quarterly Rate	Percentage of Annual Rate	Quarterly Rate	Percentage of Annual Rate
1970.....	I	6.5	110	8.4	147	6.5	108	21.9	143	5.8	121	4.6	110	3.1	97
	II	6.3	107	6.1	107	6.0	100	15.8	103	5.3	110	4.4	105	3.3	103
	III	5.3	90	3.2	56	5.1	85	9.9	65	4.1	85	3.8	90	3.3	103
	IV	5.7	97	5.3	93	6.2	103	14.7	96	4.3	90	4.1	98	3.2	100
Annual average.....		5.9	100	5.7	100	6.0	100	15.3	100	4.8	100	4.2	100	3.2	100
Relative unemployment rate[4].....		1.00		0.97		1.02		2.59		0.81		0.71		0.54	
1971.....	I	8.0	125	8.7	147	8.5	131	25.4	173	6.9	135	5.8	121	4.1	108
	II	6.8	106	6.1	103	6.6	102	14.3	97	4.9	96	4.8	100	3.8	100
	III	5.3	83	3.5	59	5.1	78	7.9	54	4.2	82	4.1	85	3.4	89
	IV	5.7	89	5.6	95	5.8	89	12.2	83	4.6	90	4.6	96	3.6	95
Annual average.....		6.4	100	5.9	100	6.5	100	14.7	100	5.1	100	4.8	100	3.8	100
Relative unemployment rate[4].....		1.00		0.92		1.02		2.30		0.80		0.75		0.59	
1972.....	I	7.5	119	9.1	169	7.6	121	23.0	154	6.6	135	5.9	126	4.1	98
	II	6.4	102	5.3	98	6.4	102	14.6	98	5.0	102	4.7	100	4.1	98
	III	5.5	87	2.9	54	5.1	81	8.8	59	3.9	80	4.4	94	4.3	102
	IV	6.0	95	4.8	89	6.1	97	14.3	96	4.3	88	4.1	87	4.5	107
Annual average.....		6.3	100	5.4	100	6.3	100	14.9	100	4.9	100	4.7	100	4.2	100
Relative unemployment rate[4].....		1.00		0.86		1.00		2.37		0.78		0.75		0.67	

[1]Includes agriculture; forestry; fishing and trapping; and mines, quarries, and oil wells.
[2]Actually "transportation, communication, and other utilities".
[3]Includes community, business and personal services; public administration; and finance, insurance, and real estate.
[4]Defined as the ratio of the sector unemployment rate to the national rate.
SOURCE: Statistics Canada, *The Labour Force*, Cat. No. 71-001, December 1972, Table S1–1.

CHART 8-6

PERCENTAGE DISTRIBUTION OF LABOUR FORCE AND UNEMPLOYED, BY SECTOR CANADA, 1961 AND 1971



[1] Includes agriculture; forestry; fishing and trapping; and mines, quarries and oil wells.

[2] Includes community, business and personal services; public administration; and finance, insurance and real estate.

[3] Comprises unemployed persons who never had a full-time civilian job lasting two weeks or more.

Source: Estimates based on data from Statistics Canada.

The construction industry, for example, accounted for only 7 per cent of the labour force, but 15 per cent of the unemployed, in 1971. Services, by contrast, accounted for 37 per cent of the labour force but only 21 per cent of the unemployed. Second, a comparison of labour force shares in 1961 and 1971 indicates which industries have grown over the decade and which have declined; the expansion of the service industries is apparent, as is the decline of the primary industries. Third, a comparison of the unemployment and labour force shares in the two years shows whether the *relative* incidence of unemployment in an industry has changed. The construction industry affords a good example.

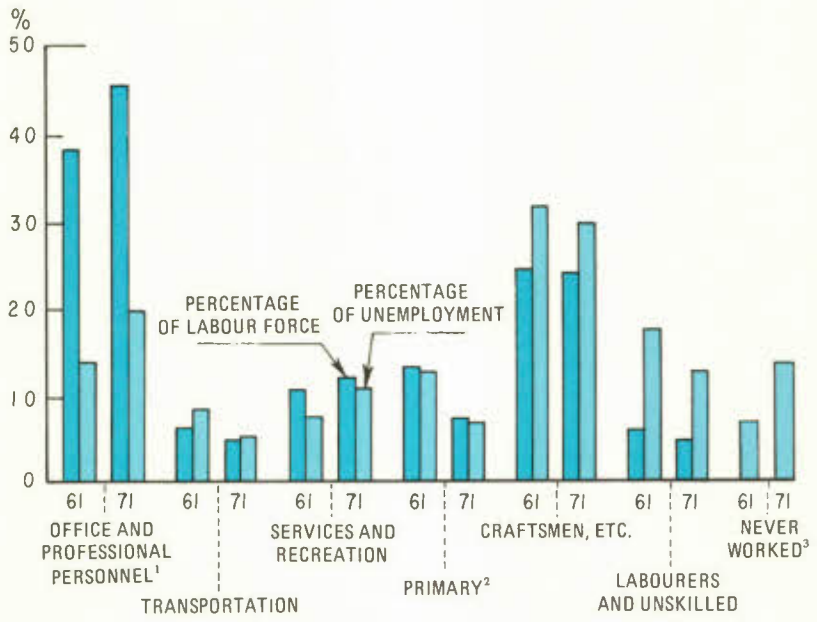
Shaping the Expansion

While the labour force in construction has remained at about 7 per cent of the total, the industry's share of unemployment has dropped from 21 per cent to 15 per cent. These observations obviously apply only to the two years 1961 and 1971, and do not necessarily indicate a trend.

The shares of labour force and unemployment, by occupation, also show changes over the decade. The figures for 1961 and 1971 are shown in Chart 8-7. First, the shares of craftsmen and of labourers in unemployment exceed their shares in the labour force.

CHART 8-7

PERCENTAGE DISTRIBUTION OF LABOUR FORCE AND UNEMPLOYED, BY OCCUPATION CANADA, 1961 AND 1971



[1] Includes managerial, professional, and technical; clerical, sales, and communication occupations.

[2] Includes farmers and farm workers; fishermen, trappers and hunters; loggers and related workers; miners, quarrymen and related workers.

[3] Comprises unemployed persons who never had a full-time civilian job lasting two weeks or more.

Source: Estimates based on data from Statistics Canada.

Next, it can be seen that the relative shares of labour force and unemployment increased markedly for office and professional workers, and declined for transportation workers and workers in primary industries. However, the *relative* incidence of unemployment among office and professional personnel has increased. This group's labour force share increased by 17 per cent over the decade, while its share of unemployment rose by 43 per cent. On the other hand, it is worth noting that this category experienced much lower unemployment than the others, accounting for 46 per cent of the labour force in 1971, but only 20 per cent of total unemployment.

Duration of Unemployment

In this section, the focus is on the incidence of unemployment of different duration among specific age-sex groups in the work force over the period 1966-72. As might be expected during a period of steadily increasing unemployment, the distribution of unemployment has shifted somewhat from the shorter- to the longer-duration categories (Table 8-4).

TABLE 8-4—DISTRIBUTION OF UNEMPLOYMENT, BY DURATION CATEGORY, CANADA, 1966 AND 1972

	On Temporary Layoff up to 30 Days	Less than 1 month	1–3 Months	4–6 Months	More than 6 months	Total Unemployment
			(Percentage of total)			
1966.....	7.4	31.2	37.4	14.2	9.9	100
1972.....	5.3	22.4	35.0	19.4	18.0	100

SOURCE: Data supplied by Statistics Canada.

The details of this shift are documented in Appendix Table 15, which shows the percentage distribution of the unemployed in each age-sex group by duration of unemployment in each year from 1966 to 1972. The detailed figures tend to support the general shift suggested by Table 8-4. However, for several age-sex groups, 1971 appears to be a turning point. Thus the proportion of unemployed males 14-24 years old who were unemployed for less than a month declined from 1967 through 1971, then increased in 1972.

TABLE 8-5—UNEMPLOYMENT RATES OF LONG-TERM UNEMPLOYED IN SELECTED AGE-SEX GROUPS, CANADA, 1966–72

	14–24 years			25–44 years			45 years and over		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
					(Per cent)				
1966	0.5	*	0.4	0.3	*	0.2	0.6	*	0.5
1967	0.5	*	0.5	0.3	*	0.3	0.7	*	0.5
1968	0.9	0.5	0.8	0.5	*	0.4	0.9	*	0.7
1969	1.0	0.6	0.8	0.5	0.5	0.5	1.1	*	0.9
1970	1.4	0.8	1.2	0.7	0.4	0.6	1.3	0.7	1.1
1971	2.3	1.5	1.9	1.1	0.6	1.0	1.5	0.6	1.3
1972	1.7	1.0	1.4	1.0	0.8	0.9	1.4	0.8	1.2

*Data based on very small samples are not published, as they are considered unreliable estimates.
SOURCE: Data supplied by Statistics Canada.

Meanwhile the proportion of the same group who were unemployed for more than six months increased through 1971 and then decreased in 1972.

Because of its serious economic and social implications, considerable attention is devoted to long-term unemployment—what is popularly referred to as the "hard core". Examination of this phenomenon is facilitated by the calculation of so-called "long-term unemployment rates".[7] Table 8-5 shows the number of long-term unemployed (six months or more) in particular age-sex groups as a percentage of the labour force in each group. Two main features are apparent: first, the incidence of long-term joblessness is greater for men than for women; second, the rates for prime-age workers are consistently lower than for younger or older workers. These percentages take on added significance when it is recognized that in 1972 the chronically unemployed rose to 101,000, divided almost equally among the three age groups in Table 8-5.

Concluding Comments

A number of points emerge from the data presented in the foregoing sections. First, it is apparent that significant compositional changes have been taking place in the Canadian labour force—particularly the continually increasing proportion of women and, except for a slowdown in the late 1960s, of teenagers. Moreover, the aggregate unemployment figures hide wide variations in unemployment among geographical areas, industries, occupations, and age-sex categories. In addition, the relative unemployment experience of subgroups within these categories has been changing.

It is therefore questionable whether the aggregate unemployment rate, alone, is adequate as a measure of the state of the labour market or of the well-being of the population.[8] One suggestion that has appeared with some frequency of late is that the total unemployment rate should be studied in conjunction with the

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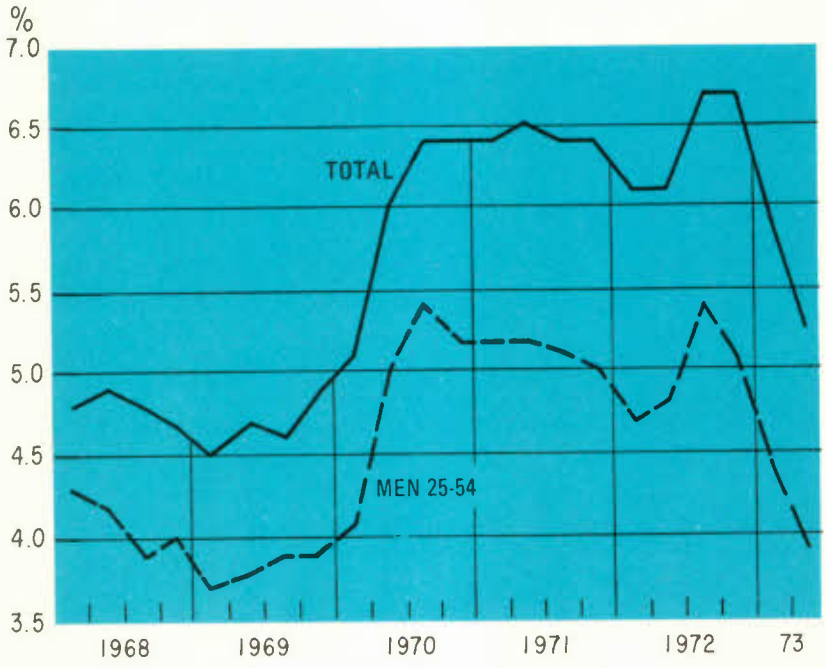
[7] See Ostry and Zaidi, *op. cit.*, p. 139.

[8] G. L. Perry, for example, has argued that because of such developments, "the aggregate unemployment rate in recent years has been an increasingly misleading proxy for evaluating the current labour market". See "Changing Labor Markets and Inflation", *Brookings Papers on Economic Activity*, No. 3 (Washington, D.C.: The Brookings Institution, 1970), p. 411. See also Economic Council, *Performance in Perspective, 1971, op. cit.*, Appendix A, and Helen Buckley, "Interpreting the Unemployment Statistics", *Notes on Labour Statistics 1972*, Statistics Canada, Cat. No. 72-207, pp. 5-8.

CHART 8-8

TOTAL UNEMPLOYMENT RATE AND UNEMPLOYMENT RATE OF MALES 25-54, QUARTERLY CANADA, 1968-72



Source : Estimates based on data from Statistics Canada.

unemployment rate for prime-age males.[9] This group is less affected than others by changing work patterns, since most part-time work and casual labour force attachments are found among people in the female or younger-age groups.[10]

From Chart 8-8 it may be seen that the unemployment rates for the economy and for males 25-54 tend to fluctuate together but that the latter rate is lower in absolute terms. More significantly, the gap between the two rates is progressively widening. The data for males in the 25-54 age group, along with detailed statistics for other age and sex groups, may help to "refine and supplement the message conveyed by the overall rate".[11]

It would be premature at this stage to attempt to draw conclusions concerning the adequacy of the aggregate unemployment rate in the various uses to which it is commonly put. The data presented above do, however, serve to illustrate the essentially heterogeneous nature of the Canadian labour market and the need for a comprehensive interpretation of aggregate labour market statistics.

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[9] Perry, *op. cit.*, pp. 413-415; Economic Council of Canada, *Performance in Perspective, 1971, op. cit.;* and Buckley, *op. cit.*, p. 6.

[10] *Ibid.* Mrs. Buckley mentions that concentration upon the unemployment of primary workers stems in part from "the feeling that unemployment representing secondary workers is inflated by the not-so-anxious seekers".

[11] *Ibid.* This is but one of many possible supplements to the interpretation of the overall rate. The regional picture, for instance, is particularly relevant in Canada.

9

Prices and Costs

THIS CHAPTER, which provides a fairly comprehensive description of recent Canadian price and cost developments, emphasizes measures that indicate whether rates of price and cost increases have been accelerating and where pressures have been concentrated. No attempt is made here to assess whether these increases are justified.

Our statistical data do not readily permit close study of the dynamic processes underlying acceleration in the price measures. However, as noted earlier, taxation may have had a rising impact on costs in the longer term. Significant shifts have taken place over time in the structure of wage and salary bargaining, and these have also played a role. Moreover, since 1970, a strong cyclical surge in housing has led to rapidly rising costs of residential building materials and residential construction. Cyclical recovery of consumer purchases has also given rise to increased prices for consumer goods and services. Worldwide shortages of primary commodities in relation to rapidly expanding demand have added to these domestic sources of price and cost pressure.

In the following sections, we first provide an overview of price developments since 1961; second, we look in detail at price and cost changes from 1968 to 1972; third, we discuss the particular situation with respect to food and wood prices and, finally, we indicate some very recent developments.

An Overview of Price Developments

Recent price performance can usefully be viewed in longer-term perspective. Table 9-1 sets out the 1972 values of the most commonly employed indexes of price behaviour, which may be compared with 1961, when each index stood at 100.[1] Over this period, the Wholesale Price Index (WPI) rose less than all other indexes, whereas the prices of residential building materials rose more than all the others.[2] The Consumer Price Index (CPI) rose noticeably less than the overall GNE price deflator, with the food component slightly ahead of the nonfood component.

Table 9-2, which gives the annual percentage changes in these indexes, shows that markedly higher rates of price increase have occurred since the mid-1960s than during the 1961-65 period.[3] In the more recent period, moderate checks to the rate of price increase occurred during or following the economic slowdowns of 1967 and 1970. In 1972, the effects of the expansion that began in early 1971 were felt, and prices again accelerated. Rates of increase in the GNE deflator, the Consumer Price Index, its food price component, wholesale prices, and residential building material prices were all higher in 1972 than at any other time in the 12-year period. The 1972 performance is particularly disturbing when account is taken of the fact that the aggregate unemployment rate was 6.3 per cent for the year.

Despite this poor domestic performance, 1968-72 changes in Canadian prices may be compared favourably with those experienced in many developed countries. For example, using consumer prices as a basis for comparison, inflation was considerably less pronounced in Canada than in other countries between 1968 and 1972.[4] The Canadian experience of a 16.4 per cent increase compares with 20.3 per cent in the United States, 24.8 per cent in France, 19.0 per cent in West Germany, 25.7 per cent in Japan, and 31.1 per cent in the United Kingdom,[5]

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[1] The pattern of changes appears in Appendix Table 16.

[2] Note that the WPI covers only goods, whereas the CPI and the GNE include a combination of goods and services

[3] The similar pattern for the United States has been described as "a dragging inflationary anchor for the rest of the world" under the reserve currency system. See the contribution of Harry G. Johnson to the Universities-National Bureau Conference on Secular Inflation, March 1972.

[4] See Appendix Table 17.

[5] These figures are based on an international comparison of prices in the U.S. Department of Commerce, *Business Conditions Digest*.

TABLE 9–1—1972 LEVELS OF PRINCIPAL PRICE INDEXES: A HISTORICAL PERSPECTIVE

	Gross National Expenditure Price Deflator	Total Consumer Price Index	Consumer Price Index (excl. Food)	Consumer Price Index Food Component	Consumer Price Index Housing Component	Wholesale Price Index	Prices of Residential Building Materials
				(1961 = 100)			
1972	144.2	139.8	139.1	141.4	143.2	133.0	161.2

SOURCE: Based on data from Statistics Canada.

TABLE 9-2—CHANGE OVER PREVIOUS YEAR IN PRINCIPAL PRICE INDEXES, 1961-72: A HISTORICAL PERSPECTIVE

	Gross National Expenditure Price Deflator	Total Consumer Price Index	Consumer Price Index (excl. Food)	Consumer Price Index Food Component	Consumer Price Index Housing Component	Wholesale Price Index	Prices of Residential Building Materials
				(Per cent)			
1961	0.5	0.9	0.5	1.5	0.4	1.0	−0.7
1962	1.4	1.2	1.0	1.8	1.2	2.9	0.7
1963	1.8	1.8	1.2	3.2	1.1	1.9	3.4
1964	2.5	1.7	1.9	1.6	1.6	0.3	5.2
1965	3.2	2.5	2.4	2.6	1.8	2.0	5.8
1966	4.5	3.7	2.8	6.4	2.7	3.6	4.1
1967	3.9	3.6	4.4	1.3	4.3	1.8	4.0
1968	3.2	4.1	4.4	3.3	4.6	2.2	5.4
1969	4.5	4.5	4.6	4.2	5.1	4.6	5.4
1970	4.5	3.3	3.8	2.3	5.0	1.4	−1.1
1971	3.1	2.9	3.5	1.1	4.5	1.2	5.6
1972	4.6	4.8	3.7	7.6	4.7	7.0	10.9

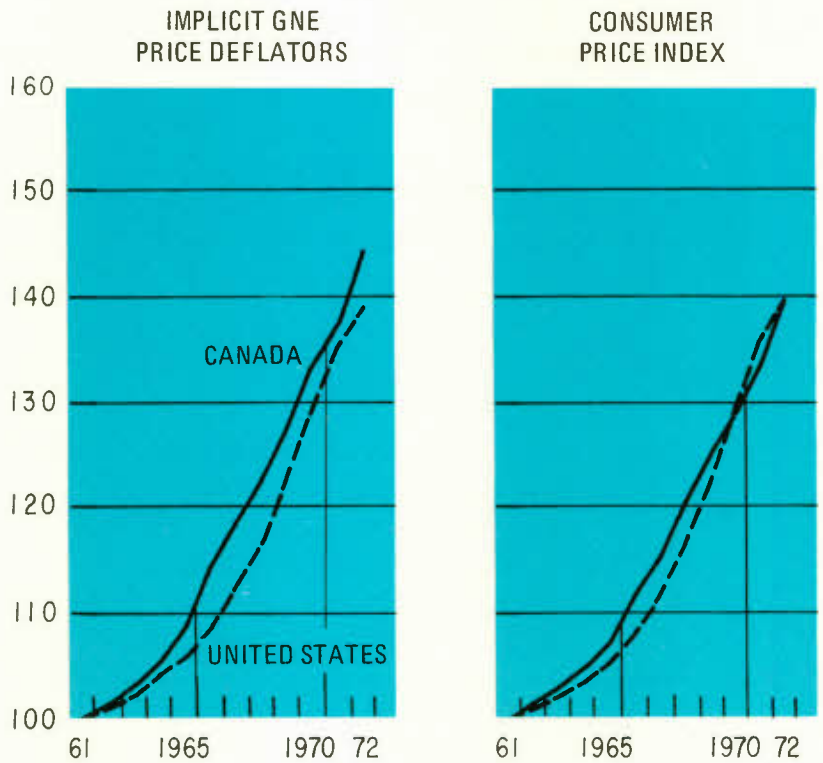
SOURCE: Based on data from Statistics Canada.

With the exception of the United States, the situation was similar over the longer period extending back to 1961. Consumer prices increased by about the same proportion in both Canada and the United States (39.8 per cent), but the implicit price deflator of Gross National Expenditure rose by 44.2 per cent in Canada in contrast with a gain of 39.4 per cent recorded in the United States. These developments are illustrated in Chart 9-1.

CHART 9-1

CANADA-UNITED STATES PRICE COMPARISONS

(1961 = 100)



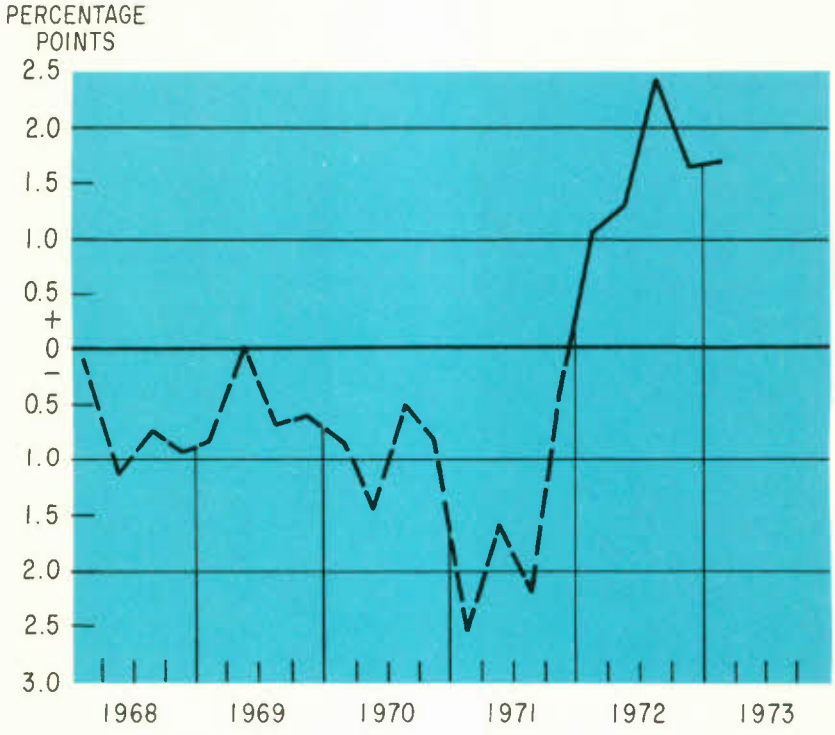
Source: Based on data from Statistics Canada and U.S. Economic Report of the President.

Canadian and U.S. price changes tend to conform to similar overall patterns but may nonetheless diverge over some periods. Chart 9-2 illustrates the relative changes in the implicit price

deflators for Gross National Expenditure in Canada and the United States since 1968. The negative values recorded up to 1972 reflect both a greater degree of slack in the Canadian economy and the stresses in the U.S. economy that led first to fiscal and monetary restraint and, subsequently, to the imposition of controls on prices and incomes. Later values indicate the role of these controls in temporarily moderating the rate of inflation experienced in the United States.

CHART 9-2

DIFFERENTIAL RATE OF CANADIAN GROSS NATIONAL EXPENDITURE PRICE CHANGE RELATIVE TO U.S. PRICE CHANGE*



***Figures are differences between annual percentage changes, by quarter, in the GNE deflator for the two countries.**

Source: Based on data from Statistics Canada and U.S. Department of Commerce, Survey of Current Business.

Price and Cost Changes in Canada, 1968-72

Here, we review price and cost developments in the 1968-72 period by considering changes in various price indexes, including the price deflator for Gross National Expenditure, the Consumer Price Index, and the Wholesale Price Index.

Implicit Price Deflator of GNE

Movements in the implicit price deflator of GNE and its principal components for the last five years are represented in Chart 9-3. Following the general declines that occurred between 1969 and the end of 1970, resumption of output growth caused the usual cyclical strengthening in prices, particularly in the sectors leading the recovery—namely, personal consumption expenditures and residential construction. Quarterly increases in the latter sector were particularly marked in 1972, the annual rates moving from 7.0 and 9.2 per cent in the first and second quarters of the year to 9.0 and 8.8 per cent in the third and fourth. These changes can be identified with a major rise in the prices of building materials, which is discussed in the next section. Export, import, and business nonresidential construction deflators all rose appreciably after the third quarter of 1970. The rising trend in export prices has been particularly strong. No clear recent trend is discernible in the erratic price changes for machinery and equipment. The implicit price deflator of GNE is not a pure price index because its components are weighted by current sales volume, and these changes thus reflect both price movements and shifts in quantities sold. Quarterly changes at annual rates for 1972 in the total GNE deflator were 4.9, 5.4, 5.3, and 2.8 per cent.

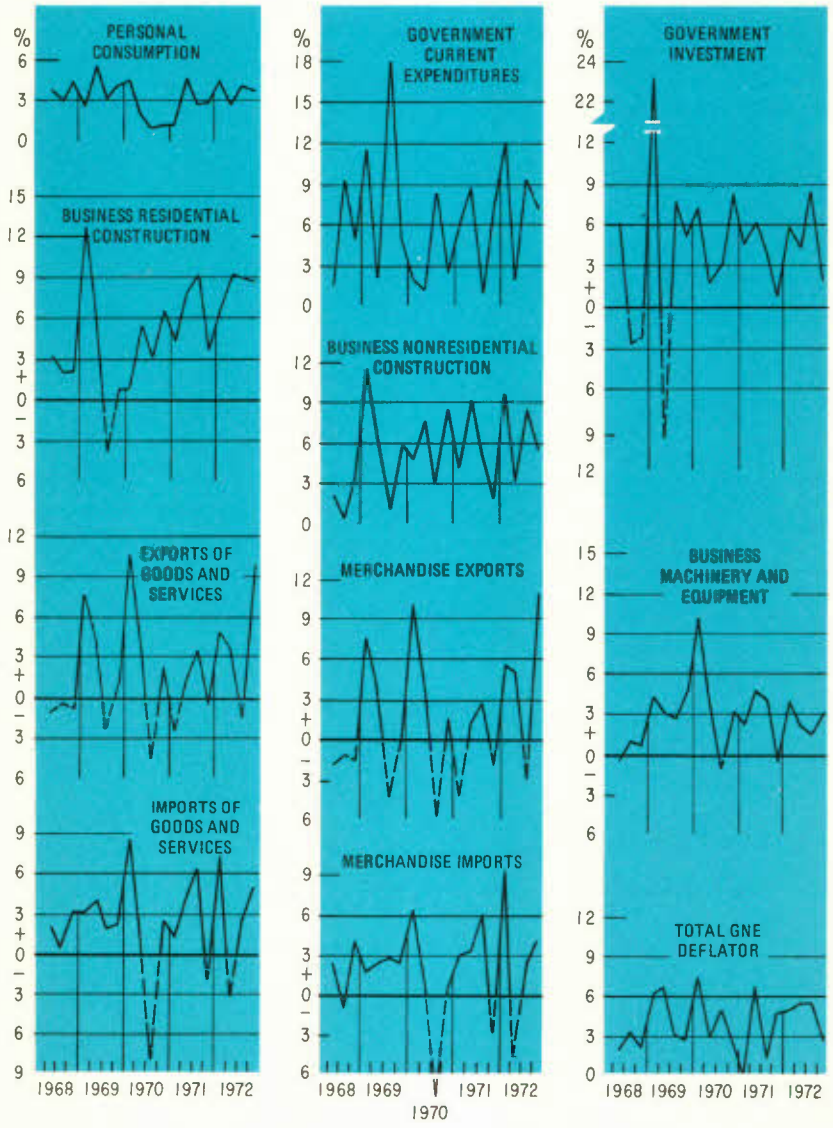
Consumer Price Index

Quarterly changes in the Consumer Price Index and its principal components are illustrated in Chart 9-4. There is evidence of both a rising price trend from late 1970 and a significant acceleration in 1972, apart from the notable exceptions of durables, services, and transportation. The CPI rose at annual rates of 4.1 and 6.1 per cent during the two halves of 1972 and by 5.1 per cent between December 1971 and December 1972. Much of this increase is due to the rise in food prices during July and August and, to a lesser extent, in both September and December of 1972.

CHART 9-3

GROSS NATIONAL EXPENDITURE PRICE DEFLATORS

(Quarterly changes at annual rates)

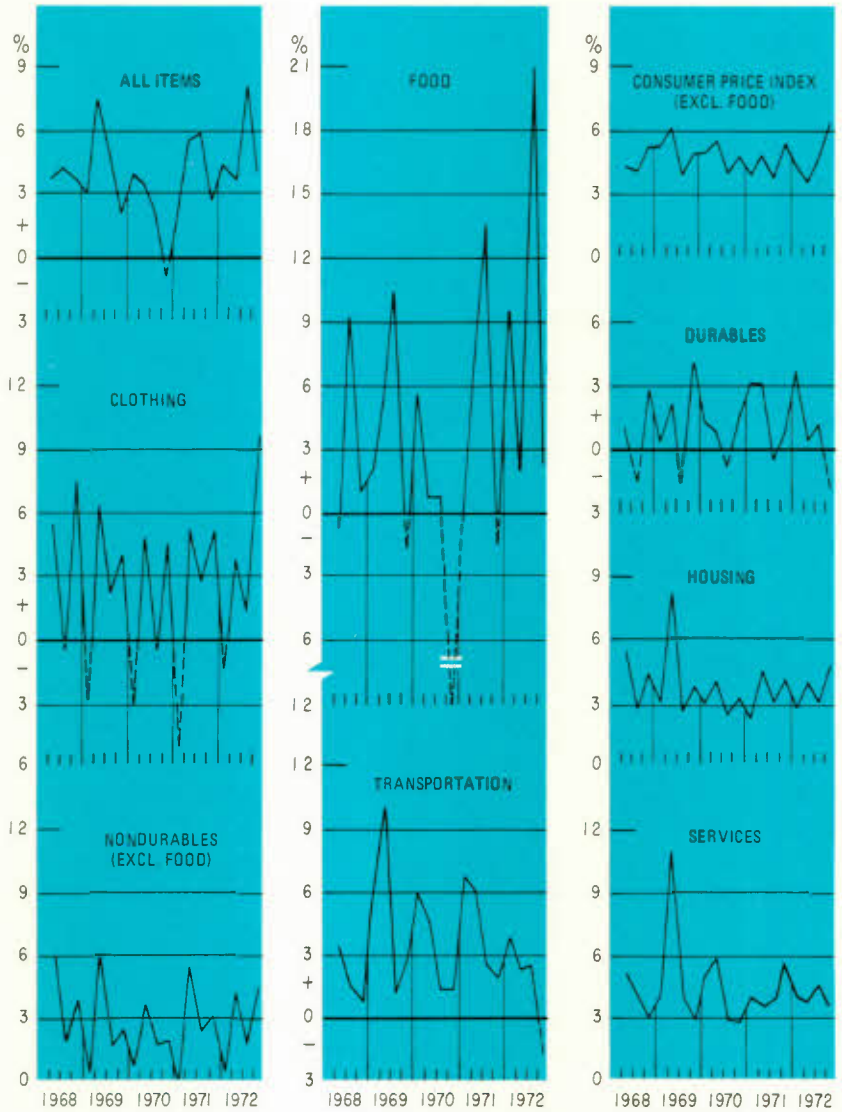


Source: Based on data from Statistics Canada.

CHART 9-4

CONSUMER PRICE INDEX

(Quarterly changes at annual rates)



Source: Based on data from Statistics Canada.

During the third quarter of 1972, food prices rose at an annual rate of over 21 per cent, contributing to three-quarters of the rise registered by the total CPI. Within the nonfood components, the rate of price increase in both durables and transportation declined until December, but the rate of increase in the housing component was rising for much of the year. The average quarterly change for the housing index was at an annual rate of 5.0 per cent for 1972—slightly higher than for 1971. Finally, there were large increases in the prices of clothing at the end of the year.

Wholesale Price Index

A substantial proportion of the Wholesale Price Index relates to primary materials, so that it is highly sensitive to business cycles and to commodity gluts and shortages. The recent behaviour of this index has been more inflationary than that of the GNE deflator or the Consumer Price Index, reflecting scarcities in a number of primary products. Chart 9-5 illustrates the quarterly movements of the WPI and its principal components. It reveals rapid but erratic acceleration since the end of 1970.

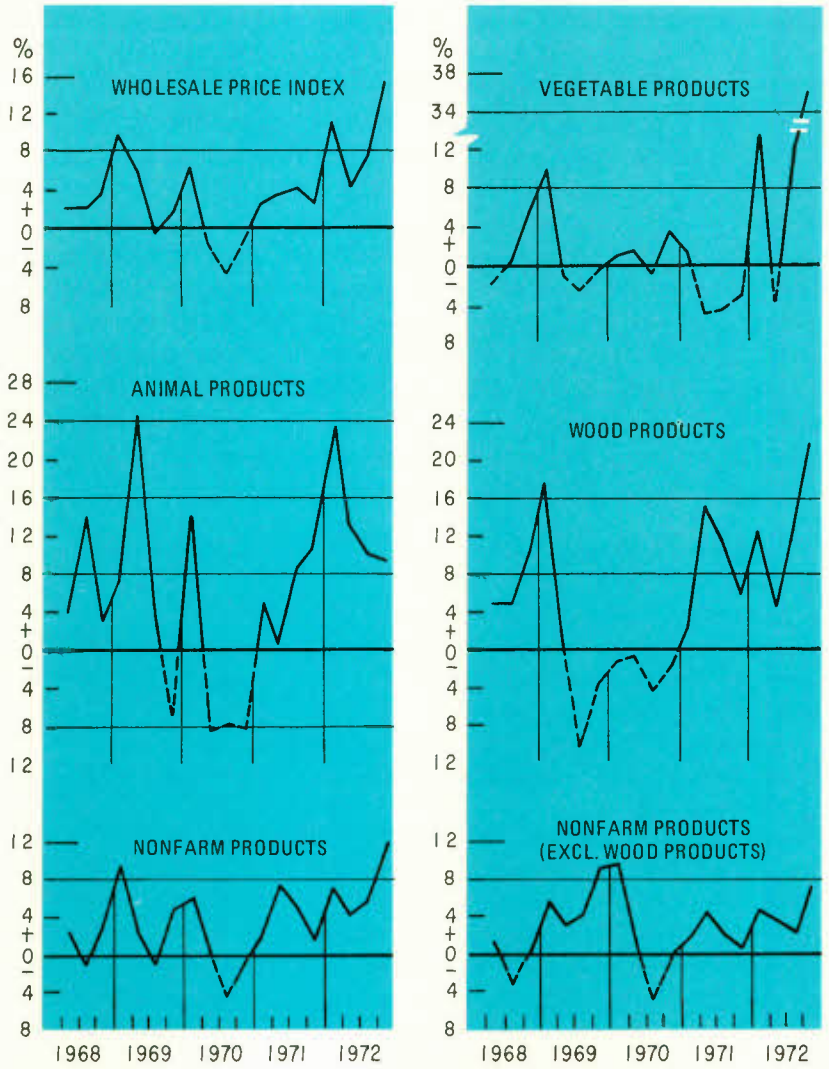
Two main groups of products played important roles in recent developments—namely, wood products and farm products, including both animal and vegetable products. Since 1971, the main sources of inflationary pressures on the index have been wood and animal products. In both areas, developments partly reflect recoveries from periods of declining prices. For wood products, prices accelerated rapidly at the end of 1970 and, despite two short intervals of deceleration, price increases remained substantial, with quarterly changes rising again to 11.6 and 21.9 per cent at annual rates in the second half of 1972. Among farm products, rapid acceleration in the prices of animal products throughout 1971 was counterbalanced by declines in vegetable prices. However, in 1972, a reversal in the trend for vegetable prices, a spectacular increase in prices of animal products, and further acceleration in wood prices, caused the WPI to increase rapidly. Some abatement of acceleration in the prices of animal products in the second half of the year was insufficient to prevent this aggregate acceleration.

When farm and wood products are omitted from the WPI, little acceleration occurred in the index during 1972.

CHART 9-5

WHOLESALE PRICE INDEX

(Quarterly changes at annual rates)



Source: Based on data from Statistics Canada.

Costs

Less information is available for costs than for prices, and recent figures remain tentative. The following account summarizes recent developments in average hourly earnings, base wage rates, and wage and salaries per unit of output.

The average percentage increase in average hourly earnings during 1972 was generally less than that registered in 1971, but there was an increase in the latter part of the year. In manufacturing, the quarterly average rose from 7.3 per cent for the first quarter to 8.2 per cent for the final quarter, with intermediate figures of 7.5 and 8.7 per cent. Corresponding averages for construction were 8.9, 6.7, 8.6, and 9.6 per cent, whereas those for mining were 6.5, 5.6, 7.8, and 9.6 per cent. Although some acceleration thus appears to have been emerging as 1972 progressed, note should be taken of the fact that significant irregularities were introduced into the data by quarter-to-quarter differences in the number of new wage contracts and by the unequal spread of the pay increases over the length of the contracts.

Wage contracts negotiated for 1972 in all industries except construction provided for increases in basic wage levels similar to those for 1971, although there appears to have been an acceleration in manufacturing due to increases associated with contracts of different lengths, at least after the first quarter. For average annual changes in basic wage levels, values of 7.6 and 7.8 per cent, respectively, for the manufacturing and nonmanufacturing sectors in 1971 have to be compared with 8.8 and 7.3 per cent in 1972.

Wages and salaries per unit of output increased by 5.3 per cent from the fourth quarter of 1971 until the fourth quarter of 1972, compared with 4.8 per cent in the preceding year. Corporate profits per unit of output in the commercial sector accelerated throughout 1971 and in the first and fourth quarters of 1972. Their average quarterly rate of increase for 1972 was 14.4 per cent, markedly above the 11.3 per cent registered for 1971; the change in the last quarter of 1972 with respect to the last quarter of 1971 was still 10.8 per cent. Less information is available with respect to corporate profits in the manufacturing sector, but provisional figures suggest that they declined in the second and third quarters of 1972. A strong gain in the second quarter for net farm incomes caused these to increase by 5.6 per cent for the whole year.

Areas of Concern

The change in any aggregate price index depends both upon price changes in its components and the relative "weights" or importance of these components. These weights may be used to assess the relative contribution of specific inflationary movements to aggregative developments.

TABLE 9–3—CONTRIBUTIONS TO CHANGES IN CONSUMER PRICE INDEX, JANUARY 1971 TO JANUARY 1973

Component	Weight	Average Annual Percentage Change	Share of Change in Consumer Price Index
Food	27	9.3	46.1
Housing	32	5.2	30.5
Clothing	11	3.0	6.1
Transportation	12	2.7	6.0
Health and personal care	7	4.0	5.1
Recreation and reading	5	2.7	2.5
Tobacco and alcohol	6	3.3	3.6
Total	100	5.4	100.0

SOURCE: Based on data from Statistics Canada.

TABLE 9–4—CONTRIBUTIONS TO CHANGES IN WHOLESALE PRICE INDEX, JANUARY 1971 TO JANUARY 1973

Component	Weight	Average Annual Percentage Change	Share of Change in Wholesale Price Index
Vegetable products	23	9.5	25.2
Animal products	16	14.3	26.5
Iron products	14	4.1	6.6
Textile products	10	6.7	7.7
Wood products	15	14.1	24.4
Nonferrous metals	10	3.6	4.1
Nonmetallic minerals	8	4.1	3.8
Chemical products	4	3.9	1.8
Total	100	8.7	100.0

SOURCE: Based on data from Statistics Canada.

Tables 9-3 and 9-4 reveal how food, housing, and vegetable, animal, and wood products affected inflation during 1971-72. The percentage change in each component over the last two years is multiplied by its weight in either the Consumer Price Index or the Wholesale Price Index to reveal the role played by each in the overall change recorded by one or the other of these two aggregate indexes. Some striking results emerge. Over three-quarters of the change in the Consumer Price Index during 1971 and 1972 can be attributed to changes in the prices of food and housing. Similarly, over three-quarters of the change in the Wholesale Price Index during this period was due to changes in the prices of vegetable, animal, and wood products.

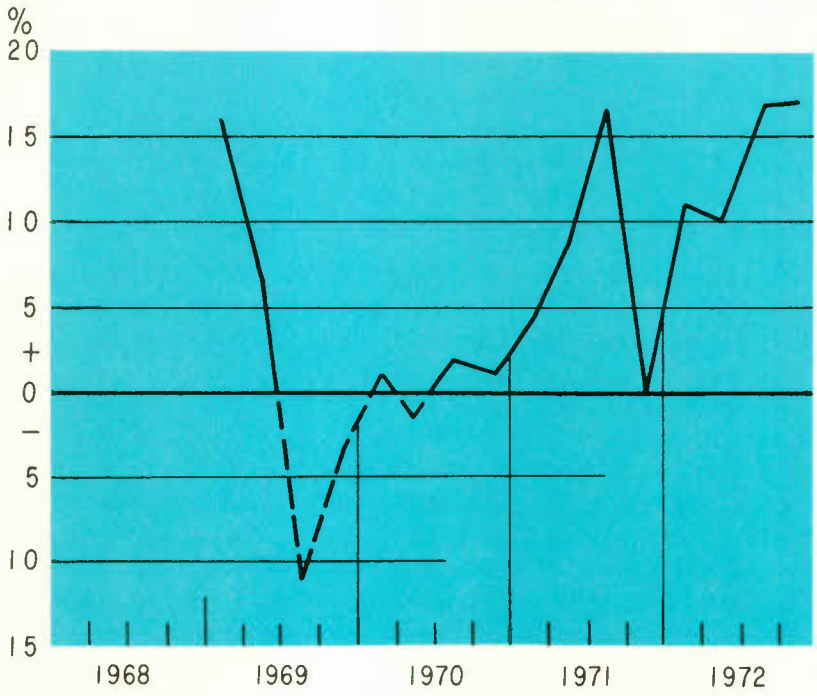
Further insight into recent price behaviour can be gained by looking at changes in the price index for residential building materials, as illustrated in Chart 9-6. Note that this index does not represent the cost of housing but rather the cost of materials, which would affect the prices of existing houses only marginally through costs of improvement and substitution between new and existing housing. Rapid acceleration of prices for building materials is clearly identifiable. (This acceleration did not show convincing signs of abatement until May 1973.) The principal determinant of the price increases appears to be the price of lumber and lumber products, which rose by 21.8 per cent between December 1971 and December 1972. Changes in the prices of other building materials were relatively minor: for example, prices of concrete products rose only 7.0 per cent during the same period; prices of plumbing and heating equipment remained relatively unchanged; and prices of wallboard and insulation rose by 3.6 per cent.

In this survey, at least two specific areas of concern have emerged. Both the prices of food and those of wood products have been experiencing severe inflation. However, because these two areas are strikingly visible, they cause more than proportional discomfort. Since the individual is generally anxious to maintain his own position in the face of inflationary movement, increases in prices of food and wood may cause grave concern, despite relatively moderate rates of increase in certain aggregate indicators. Moreover, it is not easy for the individual to safeguard his income share in an inflationary environment. If he were able to protect his income level easily and simply, then the costs of inflation might be substantially reduced, at least in human terms, although problems relating to the preservation of economic efficiency would persist.

CHART 9-6

PRICE INDEX OF RESIDENTIAL BUILDING MATERIALS

(Quarterly changes at annual rates)



Source: Based on data from Statistics Canada.

More general considerations underlie the recent increases in food prices.[6] It has been suggested that short-run adjustments in the supply of meat products have necessarily been less rapid than the increase in worldwide demand for them (the latter being due to both rising incomes and a widening of traditional markets for the products). In addition, there has been a resurgence of export demand for grains from North America since the low in 1969. This growth was accentuated in the last crop year by very poor harvests in the U.S.S.R. and in Australia, as well as by the faltering growth of production in certain developing nations. This experience has

[6] A more comprehensive account of these increases is provided in the *Bank of Canada Review* for June 1973.

effects not only on grain prices, but also on the costs of feeding livestock and poultry in North America. In the short run, the strongest effect is on poultry, which are raised quickly, but earlier increases in grain prices from the 1969 lows would also have raised the costs and slowed the rate of expansion of hog production. Two additional factors on the supply side are the curtailment of Australian exports of frozen beef and lamb to North America due to drought in Australia, and the poor harvests of fruit and vegetables in a number of areas of North America in 1972. Finally, growth in North American incomes has had particularly strong effects on the demand for beef and some fruits and vegetables.

Farmers appear to be recovering from the severe profit squeeze during 1970 and 1971, when prices for their produce actually fell while costs increased. During 1972, prices of agricultural products and costs of inputs both rose, but at different rates. The ratio of prices received to prices paid by farmers rose from a low of 85.6 in 1971 (1961 = 100) to 93.6 by the fourth quarter of 1972. Also, retailers may be recovering profit margins lost during the food price war of 1970. Data recorded in the submission by Statistics Canada to the Special Committee on Trends in Food Prices[7] illustrate that some of the gaps between retail and industry selling prices increased from 1961 through 1972. Unfortunately, it is not easy to determine the real significance of the divergence between the two index levels.

Strong inflationary pressures on prices of wood and wood products largely stemmed from spectacular increases in activity in the residential construction sector in both Canada and the United States. Housing starts, for example, rose from 190,000 units in 1970 to 250,000 units in 1972 in Canada, and they have also been running at a high level in the United States.

The Recent Picture

The end of 1972 and the first half of 1973 represent a very critical stage for price developments. A number of unsettling events have possibly exerted widespread influence in the recent past and will potentially affect prices in the period covered by the indicators. These would include: substantial changes in U.S. government prices and incomes policies, oil shortages, strengthened bargaining positions for suppliers of raw materials, international

[7] S. Ostry, *Food Price Statistics, and Recent Trends in Food Prices*, Statistics Canada, submission to Special Committee on Trends in Food Prices in Canada, February 8, 1973.

realignments of currencies and the integration of the British economy into the European Economic Community. The full impact of these events cannot be assessed at this time because of their complexity and because responses to them are delayed. In some cases, recent adjustments are incomplete as, for example, in the determination of exchange rates within the European Economic Community and the establishment of joint monetary rules there. Similarly, the system of flexible exchange rates is developing in an unexpected manner and may become a source of instability.

These price uncertainties are reflected in the variations in forecasts provided by specialist bodies. For example, the Federal Reserve Bank of St. Louis has published[8] alternative estimates of U.S. price changes for 1973 and 1974. These are conditional upon two assumptions as to the efficiency of the U.S. control program of incomes and prices. They vary by as much as 1.4 per cent for individual quarterly changes and by 0.9 per cent for the 1973 annual price increase. Similarly, within two months, projections issued from the Wharton Model changed from a pattern of persistent acceleration in the implicit price deflator of GNE throughout the indicator period, with a peak in price changes to be reached in 1975, to a pattern of deceleration after a peak in 1973. These projections have the same average level of inflation at about 4 per cent per year, but markedly different year-to-year behaviour Differences were caused by adjustments that sought to capture developments after the initiation of Phase 3 of the U.S. stabilization program in January 1973.

Prices in the United States rose rapidly in the first quarter of 1973, following the relaxation of the strict Phase 2 controls. The implicit price deflator for GNE rose to 6.1 per cent at an annual rate. The Consumer Price Index and the Wholesale Price Index rose by 5.6 per cent and 19.2 per cent, respectively, at annual rates. For the most part, these increases were only a normal consequence of pressures that already existed, since they were based mainly on food prices (19.0 per cent) in the case of the CPI, and farm products (65.6 per cent) and lumber and wood products (32.8 per cent) in the case of the WPI. Over the year ending in the first quarter of 1973, food prices in the United States rose over 8.0 per cent; farm product prices, by 27.3 per cent; lumber and

[8] Federal Reserve Bank of St. Louis, *Review*, March 1973, p. 9.

wood product prices, by 17.7 per cent. These figures indicate a very significant aspect of the price problem in Canada, in that they clearly show that the problem is not unique to us.

The Phase 3 program was terminated by the imposition of a 60-day price freeze on June 13th, extending until August 12th and a month beyond that date in the case of beef products. In the succeeding Phase 4 program, the limits proposed on increases in wages and benefits were the same as those in effect in Phases 2 and 3—namely, 5.5 per cent per annum (plus 0.7 per cent in fringe benefits). If realized, or even closely approached, in the period ahead, the expected slowdown in the overall rate of economic expansion should produce some moderation in the rates of price and cost increase. The prospects for U.S. price stability over the coming months depend critically on the outcome of major wage contract negotiations.

In Canada, the implicit price deflator for GNE rose at a 7.1 per cent annual rate in the first quarter of 1973 (Table 9-5).

TABLE 9–5—CHANGES AT ANNUAL RATES IN IMPLICIT DEFLATORS OF GROSS NATIONAL EXPENDITURE

	1972 Average Quarterly Change	1973 First Quarter Change
Total	4.6	7.1
Personal expenditures	3.8	4.7
Government		
Current expenditures	7.8	11.6
Fixed capital formation	5.1	4.8
Business		
Residential construction	8.5	7.2
Nonresidential construction	6.7	8.8
Machinery and equipment	2.7	4.8
Exports		
Goods and services	4.3	13.1
Merchandise	4.7	15.7
Imports		
Goods and services	2.9	13.7
Merchandise	2.9	16.4

SOURCE: Based on data from Statistics Canada.

Apart from the prices of durables, this aggregate figure reflects increases in all major categories of expenditure, with the highest figures recorded for the prices of consumer nondurables, imports, and exports, but with generally high values throughout. The overall Consumer Price Index rose at an annual rate of 7.4 per cent in this quarter (Table 9-6). Food and housing were important contributors to this increase, with individual changes of 14.9 per cent and 7.7 per cent, respectively, at annual rates. Rapid increases persisted, so that, by April, the change recorded over the preceding 12-month period in the CPI was 6.6 per cent. In the same period, food prices rose by 12.9 per cent; those of housing by 6.0 per cent; and those of services by 5.9 per cent. Within the food category, changes in meat prices were prominent, although egg prices rose by 43 per cent, vegetable prices by 22 per cent, and fruit prices by 13 per cent. With regard to meat prices, there was continuing evidence of an increased demand for beef, reflected by the 16 per cent increase in its price and by pressure on partial substitutes such as pork (30 per cent) and poultry (26 per cent).

TABLE 9-6—CHANGES AT ANNUAL RATES IN COMPONENTS OF CONSUMER PRICE INDEX

	1972 Average Quarterly Change	1973 First Quarter Change
All items	5.1	7.4
Food	8.8	14.9
Housing	4.7	7.7
Clothing	3.1	−0.8
Transportation	1.8	0.1
Durables	1.0	1.0
Nondurables (excluding food)	2.8	4.4
Services	4.0	3.1
All items (excluding food)	3.7	4.4

SOURCE: Based on data from Statistics Canada.

Changes in the Wholesale Price Index reached staggering proportions in the first quarter of 1973, although they were less for some components than those recorded in the United States (Table 9-7). The overall WPI rose at an annual rate of 25.7 per cent, with major contributions coming from all three of the problem areas cited above. The prices of vegetable products,

animal products, and wood products rose by 34.7, 34.4, and 24.3, respectively, in percentage terms at annual rates. In the 12 months since March 1972, the prices of these three categories have risen by 21.9, 18.0, and 19.3 per cent, respectively.

TABLE 9–7—CHANGES AT ANNUAL RATES IN COMPONENTS OF WHOLESALE PRICE INDEX

	1972 Average Quarterly Change	1973 First Quarter Change
Total	9.8	25.7
Vegetable products	14.6	34.7
Animal products	14.1	34.4
Wood products	12.6	24.3
Nonfarm products	7.2	21.0
Nonfarm products (excluding wood)	4.5	19.3

SOURCE: Based on data from Statistics Canada.

In summary, it is apparent that price inflation is broadly based in Canada, the United States, and other major trading countries, and that it has undergone significant recent acceleration as expansion has matured. Moderation in the pace of North American growth in the years ahead, if realized, should be accompanied by some reduction in the pressure of demands against available supplies. Improved crops in North America and overseas could reduce pressure on certain agricultural commodities, thus moderating price rises in one area of particular inflationary importance in the recent past. Against these possibilities must be set the growing pressure on costs in a high-employment economy, with a strongly rising consumer price level, and the rather slow adjustment of meat supplies to the persistently rising levels of demand.

On the international front, future developments will, as noted earlier, be affected by attempts to reform methods of international payments and to realign exchange rates. Since the Canadian dollar is restricted within moderate bounds of parity with the U.S. dollar due to the interdependency of the two economies, any further revaluations of European and Japanese currencies will affect our overseas trading prices. Recent changes encourage inflationary pressures both directly, through increases in the prices of

some imported commodities,[9] and indirectly, as Canadian producers attempt to adjust their output and take advantage of the opportunities, both domestic and foreign, presented by the devaluation vis-à-vis the currencies of overseas countries. An additional source of concern is the potential repercussions of inflation in the United States, following exchange adjustments between the United States, Japan, and the European Economic Community.

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[9] These pressures have a marked influence, but they directly affect only a small proportion of our trade. The predominance of Canada-U.S. trade reduces their overall impact.

APPENDIX

APPENDIX TABLE 1—GOVERNMENT EXPENDITURES, BY TYPE AND BY LEVEL OF GOVERNMENT, 1961–71

(Net of intergovernmental transfers)

	1961	1968	1971	1961–68	1968–71
	(Millions of current dollars)			(Average annual percentage change)	
Total expenditures on goods and services	7,888	15,697	22,199	11.2	12.5
Current expenditures on goods and services	6,206	12,684	18,485	11.7	13.6
—federal	2,584	3,883	4,926	6.6	8.1
—defence	1,613	1,812	1,926	1.8	2.3
—nondefence	971	2,071	3,000	13.0	12.5
—provincial	1,040	2,716	4,750	17.1	22.5
—municipal	1,968	4,438	6,374	12.8	12.5
—hospitals	614	1,625	2,407	15.5	13.9
—Canada Pension Plan	—	14	20	—	12.1
—Quebec Pension Plan	—	8	8	—	1.1
Gross capital formation*	1,682	3,013	3,714	9.5	7.3
—federal	306	500	514	12.2	0.4
—provincial	546	958	1,409	9.0	14.0
—municipal	680	1,338	1,550	9.6	5.4
—hospitals	150	217	241	6.0	3.9
Total transfer payments	4,312	8,775	13,030	11.2	14.2
To persons	2,709	5,473	8,252	11.4	14.8
—federal	2,005	3,295	4,663	7.6	12.6
—provincial	625	2,030	3,148	20.9	15.4
—municipal	79	133	269	6.9	30.0
—Canada Pension Plan	—	11	129	—	88.8
—Quebec Pension Plan	—	4	43	—	86.8
Other	1,603	3,302	4,778	11.0	13.2
Subsidies	321	641	752	11.2	5.5
—federal	285	522	513	9.4	0.1
—provincial	36	119	239	19.8	27.0
Current transfers to non-residents—federal	77	170	248	17.5	14.6
Capital assistance	21	100	215	11.9	34.3
—federal	18	78	171	9.0	34.9
—provincial	3	22	44	57.8	32.2
Interest on public debt	1,184	2,391	3,563	10.4	14.2
—federal	786	1,409	1,992	8.3	12.4
—provincial	160	485	884	17.7	20.7
—municipal	223	475	652	11.8	11.6
—hospitals	15	22	35	5.3	18.3
Total government expenditures	12,200	24,472	35,229	11.2	13.1
—federal	6,061	9,857	13,027	7.8	9.8
—provincial	2,410	6,330	10,474	16.4	19.1
—municipal	2,950	6,384	8,845	11.8	11.5
—hospitals	779	1,864	2,683	14.0	12.9
—Canada Pension Plan	—	25	149	—	67.9
—Quebec Pension Plan	—	12	51	—	54.9

*Includes value of physical change in government inventories.

SOURCE: Based on data from Statistics Canada.

APPENDIX TABLE 2—GOVERNMENT CURRENT EXPENDITURES ON GOODS AND SERVICES, 1961–71

	1961	1968	1971*	1961–68	1968–71
	(Millions of current dollars)			(Average annual percentage change)	
Federal	2,584	3,897	4,858	6.6	7.5
Defence	1,613	1,812	1,926	1.8	2.3
Wages and salaries	703	1,397	1,937	11.4	10.4
Other	268	688	995	17.5	13.5
Provincial	1,040	2,724	4,586	17.1	20.8
Wages and salaries	634	1,531	2,333	14.7	15.1
Other	406	1,193	2,253	21.1	27.7
Municipal	1,968	4,438	6,482	12.8	13.3
Wages and salaries	1,364	3,245	4,710	13.8	13.1
Other	604	1,193	1,772	10.5	14.0
Hospitals	614	1,625	2,435	15.5	14.4
Wages and salaries	484	1,312	1,888	16.1	12.9
Other	130	313	547	13.2	20.0
Total current expenditures	6,206	12,684	18,361	11.7	13.4

*Prior to National Accounts revision of June 1972.
SOURCE: Based on data from Statistics Canada.

APPENDIX TABLE 3—GOVERNMENT GROSS CAPITAL FORMATION
1961–71

	1961	1968	1971	1961–68	1968–71
	(Millions of current dollars)			(Average annual percentage change)	
By level of government					
Federal	306	500	514	12.2	0.4
Provincial	546	958	1,409	9.0	14.0
Municipal	680	1,338	1,550	9.6	5.4
Hospitals	150	217	241	6.0	3.9
By type of expenditure					
Residential construction	9	15	18	11.4	7.0
Nonresidential construction	1,479	2,591	3,310	8.9	8.5
Machinery and equipment	186	377	426	11.3	4.4
Value of physical change in inventories	8	30	−40	—	—
Total gross capital formation	1,682	3,013	3,714	9.5	7.3

SOURCE: Based on data from Statistics Canada.

APPENDIX TABLE 4—GOVERNMENT TRANSFER PAYMENTS[1]
1961–71

	1961	1968	1971*	1961–68	1968–71
	(Millions of current dollars)			(Average annual percentage change)	
Transfer payments to personal sector[2]	2,709	5,473	8,324	11.4	15.2
Federal level[2]	2,005	3,295	4,692	7.6	12.8
Family & youth allowances	517	615	619	2.8	0.2
Old age security fund payments	597	1,478	2,114	13.9	12.7
Unemployment insurance benefits	494	438	891	−3.5	29.1
Provincial level[2]	625	2,030	3,180	20.9	15.9
Direct relief	34	381	684	56.9	21.9
Grants to postsecondary educational institutions	139	662	1,174	30.7	20.6
Municipal level[2]	79	133	281	6.9	30.4
Direct relief	75	131	279	7.8	30.8
Other transfer payments	1,603	3,302	4,674	11.0	12.2
Subsidies	321	641	707	11.2	3.4
Capital assistance	21	100	199	11.9	29.4
Transfers to nonresidents	77	170	248	17.5	14.6
Interest on public debt	1,184	2,391	3,520	10.4	13.6
Federal	786	1,409	1,992	8.3	12.4
Provincial	160	485	885	17.7	20.7
Municipal	223	475	617	11.8	9.1
Total transfer payments	4,312	8,775	12,998	11.2	14.1

*Prior to National Accounts revision of June 1972.
[1]Excludes intergovernmental transfers.
[2]Details do not add to total because miscellaneous entries are not shown separately.
SOURCE: Based on data from Statistics Canada.

APPENDIX TABLE 5—GOVERNMENT REVENUE, BY TYPE AND BY LEVEL OF GOVERNMENT, 1961–71

(Net of intergovernmental transfers)

	1961	1968	1971	1961–68	1968–71
	(Millions of current dollars)			(Average annual percentage change)	
Direct taxes—persons	2,944	8,244	12,993	18.3	15.7
Federal	2,629	5,125	8,271	11.2	16.1
Provincial	315	2,194	3,619	27.9	18.5
Canada Pension Plan	—	686	817	—	5.8
Quebec Pension Plan	—	239	286	—	6.5
Income taxes	2,125	5,922	10,143	17.5	18.7
Contributions to social security	819	2,322	2,850	20.4	6.7
Other transfers from persons	256	613	1,110	14.3	19.9
Federal	2	4	4	14.8	0.0
Provincial	211	541	1,037	15.6	21.4
Municipal	41	65	65	8.2	0.7
Hospitals	2	3	4	2.8	7.9
Indirect taxes	5,159	10,303	13,072	10.6	7.9
Federal	2,188	3,761	4,480	8.6	5.5
Provincial	1,270	3,447	4,594	14.8	9.6
Municipal	1,701	3,095	3,998	9.2	8.7
Direct taxes—corporations	1,649	2,852	3,424	7.6	5.1
Federal	1,345	2,107	2,518	6.8	4.8
Provincial	304	745	906	10.3	5.8
Investment income	710	1,765	3,118	14.5	19.9
Federal	382	821	1,456	12.0	19.0
Provincial	298	720	1,169	13.6	17.3
Municipal	28	105	113	21.7	3.7
Hospitals	2	4	5	10.5	9.3
Canada Pension Plan	—	80	270	—	47.0
Taxes on nonresidents (federal)	116	209	278	10.5	10.1
Total government revenue	11,365	24,974	35,329	12.6	11.7
Federal	6,779	12,218	17,252	9.5	11.4
Provincial	2,554	7,966	11,761	16.9	13.6
Municipal	1,982	3,658	4,714	9.5	8.7
Hospitals	50	92	124	9.4	10.6
Canada Pension Plan	—	766	1,087	—	12.3
Quebec Pension Plan	—	274	391	—	12.0

SOURCE: Based on data from Statistics Canada.

APPENDIX TABLE 6—INDIRECT TAXES, 1961–71

	1961	1968	1971*	1961–68	1968–71
	(Millions of current dollars)			(Average annual percentage change)	
By type					
Excise taxes	1,302	2,494	2,943	10.7	5.2
Excise duties and profits of liquor commissions	546	882	1,098	7.2	7.5
Provincial retail sales tax	317	1,483	2,076	21.1	11.0
Customs import duties	515	740	925	5.0	6.7
Real and personal property taxes	1,496	2,785	3,641	9.5	9.2
All others	983	1,919	2,357	10.3	6.9
By level of government					
Federal	2,188	3,761	4,482	8.6	5.5
Provincial	1,270	3,447	4,529	14.8	9.1
Municipal	1,701	3,095	4,029	9.2	9.0
Total indirect taxes	5,159	10,303	13,040	10.6	7.8

*Prior to National Accounts revision of June 1972.
SOURCE: Based on data from Statistics Canada.

APPENDIX TABLE 7—GOVERNMENT REVENUE, BY TYPE AND BY LEVEL OF GOVERNMENT, 1971–72

(Net of intergovernmental transfers)

	1971	1972	1972 Percentage Change over Previous Year
	(Millions of current dollars)		
Direct taxes—persons	12,993	14,530	11.8
Federal	8,271	9,253	11.9
Provincial	3,619	4,088	13.0
Canada Pension Plan	817	869	6.4
Quebec Pension Plan	286	320	11.9
Other transfers from persons	1,110	1,041	−6.2
Federal	4	4	—
Provincial	1,037	965	−6.9
Municipal	65	68	4.6
Hospitals	4	4	—
Indirect taxes	13,072	14,565	11.4
Federal	4,480	5,120	14.3
Provincial	4,594	5,209	13.4
Municipal	3,998	4,236	6.0
Direct taxes—corporations	3,424	3,788	10.6
Federal	2,518	2,762	9.7
Provincial	906	1,026	13.2
Investment income	3,118	3,485	11.8
Federal	1,456	1,636	12.4
Provincial	1,169	1,260	7.8
Municipal	113	117	3.5
Hospitals	5	5	—
Canada Pension Plan	270	334	23.7
Quebec Pension Plan	105	133	26.7
Taxes on nonresidents (federal)	278	288	3.6
Total government revenue	35,329	39,179	10.9
Federal	17,252	19,334	12.1
Provincial	11,761	13,032	10.8
Municipal	4,714	5,022	6.5
Hospitals	124	135	8.9
Canada Pension Plan	1,087	1,203	10.7
Quebec Pension Plan	391	453	15.9

SOURCE: Based on data from Statistics Canada.

APPENDIX TABLE 8—GOVERNMENT EXPENDITURES, BY TYPE AND BY LEVEL OF GOVERNMENT, 1971–72

(Net of intergovernmental transfers)

	1971	1972	1972 Percentage Change over Previous Year
	(Millions of current dollars)		
Current expenditures on goods and services	18,485	20,536	11.1
Federal	4,926	5,389	9.4
Provincial	4,750	5,234	10.2
Municipal	6,374	7,165	12.4
Hospitals	2,407	2,710	12.6
Canada Pension Plan	20	23	15.0
Quebec Pension Plan	8	9	12.5
Gross capital formation	3,714	3,966	6.8
Federal	514	631	22.8
Provincial	1,409	1,514	7.5
Municipal	1,550	1,607	3.7
Hospitals	241	214	−11.2
Transfer payments to persons	8,252	9,846	19.3
Federal	4,663	6,118	31.2
Provincial	3,148	3,204	1.8
Municipal	269	274	1.9
Canada Pension Plan	129	192	48.8
Quebec Pension Plan	43	58	34.9
Other transfers	4,778	5,471	14.5
Subsidies	752	854	13.6
—federal	513	601	17.2
—provincial	239	253	5.9
Current transfers to nonresidents (federal)	248	271	9.3
Capital assistance	215	242	12.6
—federal	171	183	7.0
—provincial	44	59	34.1
Interest on public debt	3,563	4,104	15.2
—federal	1,992	2,280	14.5
—provincial	884	1,071	21.2
—municipal	652	717	10.0
—hospitals	35	36	2.9
Total government expenditures	35,229	39,813	13.0
Federal	13,027	15,473	15.8
Provincial	10,474	11,335	8.2
Municipal	8,845	9,763	10.4
Hospitals	2,683	2,960	10.3
Canada Pension Plan	149	215	44.3
Quebec Pension Plan	51	67	31.4

SOURCE: Based on data from Statistics Canada.

APPENDIX TABLE 9—MAJOR COMPONENTS OF CANADIAN LABOUR SUPPLY, 1953–72

	Total Immigration	Immigrants Destined to the Labour Force	Working-Age Population			Participation Rate			Labour Force			Employment			Unemployment			Unemployment Rate		
			Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
	(Thousands of persons)		(Thousands)			(Per cent)			(Thousands)			(Thousands)			(Thousands)			(Per cent)		
1953	169	91	5,075	5,089	10,164	82.9	23.4	53.1	4,206	1,191	5,397	4,063	1,172	5,235	143	19	162	3.4	1.6	3.0
1954	154	84	5,188	5,203	10,391	82.2	23.7	52.9	4,263	1,231	5,493	4,044	1,199	5,243	218	32	250	5.1	2.6	4.6
1955	116	58	5,290	5,306	10,597	82.1	23.9	52.9	4,341	1,269	5,610	4,128	1,236	5,364	213	33	245	4.9	2.6	4.4
1956	165	91	5,398	5,409	10,807	82.2	24.9	53.5	4,437	1,346	5,782	4,266	1,320	5,585	171	26	197	3.9	1.9	3.4
1957	282	151	5,559	5,564	11,123	82.3	25.8	54.0	4,573	1,435	6,008	4,329	1,402	5,731	244	33	278	5.3	2.3	4.6
1958	125	63	5,684	5,703	11,388	81.7	26.2	53.9	4,641	1,496	6,137	4,263	1,442	5,706	377	54	432	8.1	3.6	7.0
1959	107	54	5,785	5,820	11,605	81.0	26.7	53.8	4,687	1,554	6,242	4,363	1,507	5,870	325	47	372	6.9	3.0	6.0
1960	104	54	5,890	5,942	11,831	80.7	27.9	54.2	4,754	1,657	6,411	4,368	1,597	5,965	386	60	446	8.1	3.6	7.0
1961	72	35	5,991	6,061	12,053	79.8	28.7	54.1	4,782	1,739	6,521	4,381	1,674	6,055	401	65	466	8.4	3.7	7.1
1962	75	37	6,094	6,186	12,280	79.1	29.0	53.9	4,819	1,797	6,615	4,488	1,737	6,225	331	60	390	6.9	3.3	5.9
1963	93	46	6,215	6,320	12,536	78.5	29.6	53.8	4,879	1,870	6,748	4,567	1,808	6,375	312	62	374	6.4	3.3	5.5
1964	113	56	6,351	6,466	12,817	78.1	30.5	54.1	4,961	1,972	6,933	4,698	1,911	6,609	264	61	324	5.3	3.1	4.7
1965	147	74	6,505	6,623	13,128	77.9	31.3	54.4	5,065	2,076	7,141	4,842	2,020	6,862	224	56	280	4.4	2.7	3.9
1966	195	99	6,678	6,796	13,475	77.8	32.8	55.1	5,193	2,227	7,420	4,983	2,169	7,152	209	58	267	4.0	2.6	3.6
1967	223	120	6,876	6,997	13,874	77.5	33.8	55.5	5,329	2,365	7,694	5,083	2,296	7,379	246	70	315	4.6	3.0	4.1
1968	184	95	7,070	7,194	14,264	77.0	34.4	55.5	5,443	2,476	7,919	5,146	2,391	7,537	297	85	382	5.5	3.4	4.8
1969	162	84	7,255	7,383	14,638	76.6	35.2	55.8	5,560	2,602	8,162	5,272	2,508	7,780	288	94	382	5.2	3.6	4.7
1970	148	78	7,441	7,575	15,016	76.4	35.5	55.8	5,684	2,690	8,374	5,310	2,569	7,879	374	121	495	6.6	4.5	5.9
1971	122	61	7,622	7,766	15,388	76.1	36.5	56.1	5,800	2,831	8,631	5,392	2,687	8,079	408	144	552	7.0	5.1	6.4
1972	122	59	7,795	7,952	15,747	76.2	37.1	56.5	5,938	2,953	8,891	5,533	2,796	8,329	405	157	562	6.8	5.3	6.3

SOURCE: Based on data from Statistics Canada; Department of Manpower and Immigration, *Immigration Statistics;* and Department of Manpower and Immigration, *Quarterly Immigration Bulletin.*

APPENDIX TABLE 10—RELATIVE UNEMPLOYMENT RATES*
BY REGION, CANADA, 1960-72

	(1) Canada	(2) Atlantic Region	(3) (2) ÷ (1)	(4) Quebec	(5) (4) ÷ (1)	(6) Ontario	(7) (6) ÷ (1)	(8) Prairie Region	(9) (8) ÷ (1)	(10) British Columbia	(11) (10) ÷ (1)
1960.....	7.0	10.7	1.5	9.1	1.3	5.4	0.8	4.2	0.6	8.5	1.2
1961.....	7.1	11.2	1.6	9.2	1.3	5.5	0.8	4.6	0.6	8.5	1.2
1962.....	5.9	10.7	1.8	7.5	1.3	4.3	0.7	3.9	0.7	6.6	1.1
1963.....	5.5	9.5	1.7	7.5	1.4	3.8	0.7	3.7	0.7	6.4	1.2
1964.....	4.7	7.8	1.7	6.4	1.4	3.2	0.7	3.1	0.7	5.3	1.1
1965.....	3.9	7.4	1.9	5.4	1.4	2.5	0.6	2.5	0.6	4.2	1.1
1966.....	3.6	6.4	1.8	4.7	1.3	2.5	0.7	2.1	0.6	4.5	1.3
1967.....	4.1	6.6	1.6	5.3	1.3	3.1	0.8	2.3	0.6	5.1	1.2
1968.....	4.8	7.3	1.5	6.5	1.4	3.5	0.7	3.0	0.6	5.9	1.2
1969.....	4.7	7.5	1.6	6.9	1.5	3.1	0.7	2.9	0.6	5.0	1.1
1970.....	5.9	7.6	1.3	7.9	1.3	4.3	0.7	4.4	0.7	7.6	1.3
1971.....	6.4	8.6	1.3	8.2	1.3	5.2	0.8	4.5	0.7	7.0	1.1
1972.....	6.3	9.0	1.4	8.3	1.3	4.8	0.8	4.5	0.7	7.6	1.2

*These are the ratios of the individual regional rates to the national rate.
SOURCE: Data supplied by Statistics Canada.

APPENDIX TABLE 11—REGIONAL PARTICIPATION RATES
CANADA, 1960–72

	Canada	Atlantic Region	Quebec	Ontario	Prairie Region	British Columbia
1960	54.2	47.1	53.6	57.0	54.7	51.7
1961	54.1	48.1	52.8	56.7	55.6	51.8
1962	53.9	47.8	52.5	56.3	55.7	52.3
1963	53.8	46.8	52.6	56.5	55.0	52.8
1964	54.1	47.0	52.6	57.0	55.1	53.6
1965	54.4	48.1	53.2	56.7	55.5	53.8
1966	55.1	48.6	54.3	57.2	55.7	54.9
1967	55.5	48.5	54.9	57.6	55.8	55.8
1968	55.5	48.2	54.3	57.7	56.8	56.0
1969	55.8	48.1	54.5	58.0	56.9	56.7
1970	55.8	47.5	54.3	58.0	57.1	57.3
1971	56.1	48.1	54.9	58.3	57.0	57.2
1972	56.5	48.6	54.7	59.1	57.5	57.5

SOURCE: Data supplied by Statistics Canada.

APPENDIX TABLE 12—REGIONAL LABOUR FORCE GROWTH, CANADA, 1960-72

	Canada		Atlantic Region		Quebec		Ontario		Prairie Region		British Columbia	
	Labour Force	Annual Percentage Increase	Labour Force	Annual Percentage Increase	Labour Force	Annual Percentage Increase	Labour Force	Annual Percentage Increase	Labour Force	Annual Percentage Increase	Labour Force	Annual Percentage Increase
1960...	6,411	2.7	550	1.7	1,803	2.6	2,377	3.3	1,115	2.9	565	1.6
1961...	6,521	1.7	571	3.8	1,820	0.9	2,401	1.0	1,154	3.5	575	1.8
1962...	6,615	1.4	578	1.2	1,852	1.8	2,422	0.9	1,175	1.8	590	2.6
1963...	6,748	2.0	577	−0.2	1,904	2.8	2,476	2.2	1,181	0.5	610	3.4
1964...	6,933	2.7	588	1.9	1,951	2.5	2,556	3.2	1,199	1.5	639	4.8
1965...	7,141	3.0	611	3.9	2,022	3.6	2,614	2.3	1,228	2.4	666	4.2
1966...	7,420	3.9	626	2.5	2,116	4.6	2,719	4.0	1,248	1.6	710	6.6
1967...	7,694	3.7	635	1.4	2,196	3.8	2,834	4.2	1,268	1.6	762	7.3
1968...	7,919	2.9	643	1.3	2,227	1.4	2,934	3.5	1,318	3.9	797	4.6
1969...	8,162	3.1	654	1.7	2,290	2.8	3,031	3.3	1,351	2.5	836	4.9
1970...	8,374	2.6	658	0.6	2,328	1.7	3,130	3.3	1,380	2.1	878	5.0
1971...	8,631	3.1	676	2.7	2,394	2.8	3,249	3.8	1,401	1.5	911	3.8
1972...	8,891	3.0	698	3.3	2,426	1.3	3,381	4.1	1,436	2.5	950	4.3

SOURCE: Data supplied by Statistics Canada.

APPENDIX TABLE 13—REGIONAL EMPLOYMENT GROWTH, CANADA, 1960-72

	Canada		Atlantic Region		Quebec		Ontario		Prairie Region		British Columbia	
	Employment	Annual Percentage Increase	Employment	Annual Percentage Increase	Employment	Annual Percentage Increase	Employment	Annual Percentage Increase	Employment	Annual Percentage Increase	Employment	Annual Percentage Increase
1960...	5,965	1.6	492	2.1	1,639	1.2	2,249	2.3	1,069	1.9	516	−1.0
1961...	6,055	1.5	507	3.0	1,652	0.8	2,269	0.9	1,100	2.9	527	2.1
1962...	6,225	2.8	516	1.8	1,713	3.7	2,317	2.1	1,129	2.6	551	4.6
1963...	6,375	2.4	522	1.2	1,762	2.9	2,382	2.8	1,138	0.8	571	3.6
1964...	6,609	3.7	542	3.8	1,827	3.7	2,473	3.8	1,162	2.1	605	6.0
1965...	6,862	3.8	566	4.4	1,912	4.7	2,548	3.0	1,196	2.9	639	5.6
1966...	7,152	4.2	586	3.5	2,016	5.4	2,651	4.0	1,222	2.2	678	6.1
1967...	7,379	3.2	593	1.2	2,080	3.2	2,745	3.5	1,238	1.3	723	6.6
1968...	7,537	2.1	596	0.5	2,082	0.1	2,830	3.1	1,280	3.4	750	3.7
1969...	7,780	3.2	605	1.5	2,132	2.4	2,936	3.7	1,312	2.5	795	6.0
1970...	7,879	1.3	609	0.7	2,144	0.6	2,996	2.0	1,320	0.6	810	1.9
1971...	8,079	2.5	618	1.5	2,197	2.5	3,079	2.8	1,338	1.4	847	4.6
1972...	8,329	3.1	635	2.8	2,225	1.3	3,218	4.5	1,372	2.5	879	3.8
Growth Rate, 1960–72*		2.9		2.1		2.7		3.2		2.1		4.8

*Using the restricted-least-squares (RLS) estimation method described in Economic Council of Canada, "Calculating Growth Rates", *The Economy to 1980: Staff Papers*, Annex to Paper No. 1 (Ottawa: Information Canada, 1972), pp. 19–23.

SOURCE: Data supplied by Statistics Canada.

APPENDIX TABLE 14—ACTUAL AND RELATIVE UNEMPLOYMENT RATES,* BY SEX AND AGE GROUP CANADA, 1960–72

	Canada	Men		Women		Men 14–19		Men 20–24		Men 25–54		Women 14–19		Women 20–24		Teenagers	
	Unemployment Rate	Unemployment Rate	Relative Rate	Unemployment Rate	Relative Rate	Unemployment Rate	Relative Rate	Unemployment Rate	Relative Rate	Unemployment Rate	Relative Rate	Unemployment Rate	Relative Rate	Unemployment Rate	Relative Rate	Unemployment Rate	Relative Rate
1960	7.0	8.1	1.16	3.6	.51	16.4	2.34	12.2	1.74	6.9	0.99	8.6	1.23	3.9	.56	13.1	1.87
1961	7.1	8.4	1.18	3.7	.52	16.4	2.31	11.8	1.66	7.2	1.01	8.6	1.21	4.2	.59	13.2	1.86
1962	5.9	6.9	1.17	3.3	.56	14.4	2.44	10.0	1.69	5.6	0.95	7.9	1.34	3.7	.63	11.6	1.97
1963	5.5	6.4	1.16	3.3	.60	14.0	2.55	9.6	1.75	5.1	0.93	7.7	1.40	4.1	.75	11.5	2.09
1964	4.7	5.3	1.13	3.1	.66	12.3	2.62	7.9	1.68	4.1	0.87	7.6	1.62	3.3	.70	10.3	2.19
1965	3.9	4.4	1.13	2.7	.69	10.2	2.62	5.7	1.46	3.4	0.87	6.9	1.77	3.1	.79	8.8	2.26
1966	3.6	4.0	1.11	2.6	.72	9.7	2.69	5.3	1.47	3.0	0.83	6.4	1.78	2.5	.69	8.2	2.28
1967	4.1	4.6	1.12	3.0	.73	10.9	2.66	6.1	1.49	3.5	0.85	7.3	1.78	3.2	.78	9.3	2.27
1968	4.8	5.5	1.15	3.4	.71	12.7	2.65	7.7	1.60	4.1	0.85	8.3	1.73	4.2	.88	10.8	2.25
1969	4.7	5.2	1.11	3.6	.77	12.3	2.62	7.5	1.60	3.8	0.81	8.9	1.89	3.7	.79	10.8	2.30
1970	5.9	6.6	1.12	4.5	.76	15.0	2.54	10.5	1.78	4.8	0.81	11.4	1.93	5.1	.86	13.6	2.31
1971	6.4	7.0	1.09	5.1	.80	16.3	2.55	11.3	1.77	5.2	0.81	12.4	1.94	6.1	.95	14.6	2.28
1972	6.3	6.8	1.08	5.3	.84	15.2	2.41	11.6	1.84	4.9	0.78	11.3	1.79	6.6	1.05	13.6	2.16

*These are the ratios of the individual group rates to the national rate.
SOURCE: Data supplied by Statistics Canada.

APPENDIX TABLE 15—PERCENTAGE DISTRIBUTION OF UNEMPLOYMENT, BY AGE-SEX GROUP, IN VARIOUS UNEMPLOYMENT DURATION CATEGORIES, CANADA, 1966–72

	Age	Sex	1966		1967		1968		1969		1970		1971		1972	
			000's	%	000's	%	000's	%	000's	%	000's	%	000's	%	000's	%
Under 1 month*..	14–24	M	31	41.2	39	42.8	42	37.0	40	36.1	52	33.3	48	28.1	53	29.5
		F	14	44.0	18	44.6	20	38.7	21	40.2	26	37.1	24	29.1	27	31.5
		T	45	42.1	57	43.3	61	37.4	62	37.3	77	34.4	73	28.5	80	30.1
	25–44	M	27	39.8	34	40.0	36	34.7	33	34.2	38	30.9	35	25.9	35	26.9
		F	6	42.2	8	45.4	8	40.1	9	35.2	10	33.0	10	25.3	13	27.7
		T	34	40.3	41	40.7	44	35.3	42	34.6	49	31.1	44	25.7	49	27.3
	45+	M	21	31.0	22	30.9	22	27.9	21	27.0	25	26.2	22	21.9	19	20.7
		F	4	37.4	5	39.1	5	35.7	5	30.5	5	27.2	7	26.5	7	28.6
		T	24	31.8	26	32.0	27	28.5	27	27.5	30	26.3	29	22.9	27	22.7
1–3 months.....	14–24	M	30	40.3	35	38.7	44	39.2	42	37.3	58	37.8	63	36.2	69	38.7
		F	12	38.0	15	36.5	19	38.7	20	38.8	27	39.0	31	37.8	33	39.1
		T	42	39.6	50	38.0	64	39.0	62	37.7	85	38.2	94	36.6	102	38.9
	25–44	M	26	38.5	31	36.2	37	36.1	34	35.9	45	35.8	45	33.9	44	33.4
		F	5	32.8	6	32.9	8	36.5	9	33.6	11	34.6	14	34.4	16	33.2
		T	31	37.4	37	35.6	45	36.2	43	35.6	56	35.5	58	33.9	60	33.3
	45+	M	23	34.2	24	33.7	27	33.6	23	28.4	27	28.5	28	27.8	27	28.7
		F	3	35.7	4	33.3	5	33.3	6	33.0	6	31.8	7	30.5	7	28.6
		T	26	34.4	28	33.6	32	33.4	28	29.3	33	29.0	35	28.2	34	28.6
4–6 months.....	14–24	M	9	12.3	11	12.3	17	14.8	18	15.9	27	17.3	32	18.7	34	19.1
		F	4	11.3	5	11.6	7	13.0	6	11.6	9	13.5	13	16.2	14	17.0
		T	13	12.0	16	12.1	23	14.1	24	14.4	36	16.1	46	17.9	49	18.4
	25–44	M	9	13.4	12	14.6	17	16.9	15	15.9	23	18.6	26	19.2	27	20.1
		F	**	**	**	**	**	**	**	**	6	18.8	9	21.7	9	19.1
		T	12	14.1	15	14.4	20	16.3	19	15.4	29	18.7	34	19.8	36	19.9

	Age	Sex	1966		1967		1968		1969		1970		1971		1972	
			000's	%	000's	%	000's	%	000's	%	000's	%	000's	%	000's	%
	45+	M	12	17.8	13	18.6	15	18.9	15	19.2	18	19.3	22	21.5	20	21.7
		F	**	**	**	**	**	**	**	**	4	19.2	5	19.6	4	17.8
		T	13	17.3	15	18.0	18	18.9	18	18.6	22	19.3	26	21.2	25	21.1
Over 6 months...	14–24	M	5	6.3	6	6.3	11	9.4	12	10.8	18	11.5	30	17.1	23	12.8
		F	**	**	**	**	5	9.0	5	9.6	7	10.5	14	16.9	10	12.0
		T	7	6.4	9	6.6	15	9.2	17	10.4	25	11.3	43	17.0	33	12.5
	25–44	M	6	8.3	8	9.3	13	12.5	13	13.7	19	14.8	28	21.1	26	19.7
		F	**	**	**	**	**	**	5	18.4	4	13.9	7	18.5	9	19.5
		T	7	8.2	10	9.3	15	12.2	18	14.9	23	14.7	35	20.5	35	19.6
	45+	M	11	17.0	12	16.8	16	19.3	20	25.0	24	25.6	29	28.4	27	28.8
		F	**	**	**	**	**	**	**	**	5	23.4	5	23.3	6	24.2
		T	13	16.5	13	16.3	18	19.0	23	24.0	29	25.2	34	27.6	33	27.8
Total unemployed....	14–24	M	75	100.0	90	100.0	113	100.0	113	100.0	155	100.0	173	100.0	179	100.0
		F	32	100.0	40	100.0	50	100.0	52	100.0	69	100.0	83	100.0	85	100.0
		T	107	100.0	130	100.0	163	100.0	165	100.0	224	100.0	256	100.0	263	100.0
	25–44	M	68	100.0	85	100.0	103	100.0	95	100.0	125	100.0	133	100.0	133	100.0
		F	16	100.0	18	100.0	21	100.0	25	100.0	32	100.0	39	100.0	48	100.0
		T	84	100.0	103	100.0	124	100.0	120	100.0	157	100.0	172	100.0	181	100.0
	45+	M	67	100.0	71	100.0	81	100.0	80	100.0	94	100.0	102	100.0	93	100.0
		F	10	100.0	12	100.0	14	100.0	17	100.0	20	100.0	23	100.0	25	100.0
		T	76	100.0	82	100.0	95	100.0	97	100.0	114	100.0	125	100.0	118	100.0

*This category includes persons on temporary layoff up to 30 days.
**Data based on very small samples are not published, as they are considered unreliable estimates.
SOURCE: Estimates based on data from Statistics Canada.

APPENDIX TABLE 16—LEVELS OF PRINCIPAL PRICE INDEXES: A HISTORICAL PERSPECTIVE, 1961–72

(1961 = 100)

	Gross National Expenditure Price Deflator	Total Consumer Price Index	Consumer Price Index (excl. Food)	Consumer Price Index Food Component	Consumer Price Index Housing Component	Wholesale Price Index	Prices of Residential Building Materials
1961	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1962	101.4	101.2	101.0	101.8	101.2	102.9	100.7
1963	103.2	103.0	102.2	105.1	102.3	104.8	104.1
1964	105.8	104.8	104.1	106.8	103.9	105.2	109.5
1965	109.2	107.4	106.6	109.6	105.8	107.3	115.8
1966	114.1	111.4	109.6	116.6	108.7	111.2	120.5
1967	118.6	115.4	114.4	118.1	113.4	113.2	125.3
1968	122.4	120.1	119.4	122.0	118.6	115.7	132.1
1969	127.9	125.5	124.9	127.1	124.7	121.0	139.2
1970	133.7	129.7	129.6	130.0	130.9	122.8	137.6
1971	137.8	133.4	134.1	131.4	136.8	124.3	145.3
1972	144.2	139.8	139.1	141.4	143.2	133.0	160.8

SOURCE: Based on data from Statistics Canada.

APPENDIX TABLE 17—INTERNATIONAL COMPARISON OF CONSUMER PRICE INDEXES 1968 I - 1973 I

(Annual proportional changes, by quarter)*

	1968				1969				1970			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
United States	3.72	4.06	4.29	4.71	4.75	5.50	5.69	5.80	6.16	5.97	5.63	5.64
Japan	5.34	5.60	5.99	4.59	3.33	5.06	6.59	5.93	8.97	8.36	5.96	7.78
France	4.07	4.14	4.74	5.37	5.65	6.39	6.31	5.77	6.09	6.01	5.86	5.45
West Germany	1.53	1.35	1.53	2.71	2.49	2.57	2.75	2.81	3.47	3.88	3.97	4.02
United Kingdom	2.97	4.51	5.66	5.59	6.28	5.47	5.03	5.13	5.03	5.82	6.83	7.75
Italy	1.98	1.63	0.68	0.76	1.27	2.03	3.38	3.96	4.76	5.13	4.74	5.34
Canada	4.53	4.09	3.57	4.19	3.80	4.77	4.94	4.51	4.73	3.68	2.92	2.17
Relative Index	0.87	0.01	−0.81	−0.49	−0.92	−0.59	−0.63	−1.14	−1.39	−2.33	−2.78	−3.70

	1971				1972				1973	
	I	II	III	IV	I	II	III	IV	I	Weights
United States	4.92	4.44	4.31	3.48	3.53	3.19	3.08	3.44	4.11	0.81722
Japan	5.70	6.12	7.16	5.40	4.26	4.65	4.47	4.48	7.10	0.05079
France	4.88	5.21	5.61	5.92	5.69	5.53	6.10	6.79	6.43	0.01164
West Germany	4.19	4.90	5.56	5.83	5.55	5.15	5.89	6.44	6.76	0.02650
United Kingdom	8.59	9.88	10.14	9.21	7.91	6.15	6.47	7.71	7.96	0.08174
Italy	5.02	4.80	4.84	4.77	4.78	4.95	6.03	7.19	8.80	0.01211
Canada	1.73	2.23	3.22	4.15	4.74	4.30	4.83	5.17	5.95	
Relative Index	−3.51	−2.77	−1.77	0.01	0.71	0.69	1.25	1.16	1.22	

* $\frac{W_t - W_{t-4}}{W_{t-4}}$ where t is quarterly index.

SOURCE: Organisation for Economic Co-operation and Development, *Main Economic Indicators*.

LIST OF TABLES

LIST OF CHARTS

CHAPTER 9

Prices and Costs