Medium-Term Prospects for the Canadian Economy 1980-1985

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Foreword

In this paper I am presenting the economic assumptions that underlie the projections of the government's revenues and expenditures included with my budget. In broad terms, the projection shows a recovery from the current recession beginning in 1981, with a gradual slowing in the rate of inflation over the period 1982-1985.

Choosing a set of economic assumptions for a six-year period is an extremely difficult task. At the best of times, a great deal of uncertainty is attached to such assumptions, and the potential for error is normally quite large. In the present economic circumstances, both domestic and international, the degree of uncertainty and the margin for error are now much greater. Because it is not possible to be very precise in predicting the movements of even the most aggregate economic variables, in both the short and medium term, we can only try to get the broad directions of change right. Even this, however, is not an easy task and projections must frequently be revised, often quite significantly.

Despite these difficulties, the events of the 1970s and the economic trends that emerged in that decade have demonstrated very clearly that we must adopt a longer-term policy framework if we are to meet successfully the challenges of the 1980s. Problems related to the achievement of energy independence, lower rates of inflation and unemployment, and more satisfactory rates of output and productivity growth require that we look beyond the short term and deal with the many issues involved in a medium-and longer-term context. The government's new energy program will contribute significantly to increased conservation and energy resource development, and reduce Canada's dependency on imported oil. I believe that the initiatives I am introducing in the budget, and the fiscal policy stance of the budget, are essential to the creation of an environment which is conducive to the attainment of an improved performance of price and real output growth over the medium term. The high priority attached by the government in its expenditure planning to industrial development, to research and development policies, and to manpower training and mobility, will provide support to investment and productivity growth, and to the development of our human resources. At the same time, our commitment to expenditure restraint and to deficit reduction will assist these supply side initiatives, not only by containing current inflationary pressures, but by contributing to their reduction over the medium term.

Notwithstanding the positive effects which we expect our policy initiatives to have, the performance of the Canadian economy projected over the next five years is disappointing. In many respects, this is the result of external developments over which we have no control. It also reflects, however, the extent to which inflationary pressures have become built in to the structure of the Canadian economy over the past several years. I believe that the Canadian economy is capable of generating higher rates of real growth and greater employment opportunities than current trends would suggest are likely. Achievement of this will depend upon a winding down of inflationary expectations now widely held in Canada, and the reflection of reduced inflationary expectations in changed price- and income-setting behaviour.

The challenges that we will face in the 1980s are indeed great. I believe that there needs to be a full and open discussion of our economic prospects, involving all Canadians. Many private and public research groups have already made very important contributions to this process. My Department has also released several technical reports which deal with a number of important medium-term economic issues, and I hope that the paper I am releasing today will contribute further to this process of dialogue and discussion.

Allan J. MacEachen

Minister of Finance

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Introduction

This paper sets out the current Department of Finance projection of developments in the Canadian economy to 1985. The immediate purpose of this paper is to describe the medium-term economic scenario that underlies the projection of the government's fiscal position contained in the budget. This paper is also intended to provide Canadians with a better understanding of the important economic forces that are likely to affect the economic environment of the first half of the 1980s.

The projection presented in this paper does not represent a set of goals or targets for the economy. It is similar to the projection released with the budget last December, in that it attempts to delineate a set of likely trends in domestic economic activity over the six years 1980 to 1985, on the basis of assumptions relating to the external environment, international oil prices, food prices, and a number of other economic variables.[1] The projection assumes that present policies of governments, including those measures contained in the budget, continue in the future. The assumptions underlying the projection are described in detail in Chapter 2.

A high degree of uncertainty is currently associated with each of the areas in which important assumptions must be made. This means that any projection of trends for even the main economic aggregates, over a period as long as six years, is subject to a considerable degree of potential error. For example, the outlook for the international price of oil, and the growth and inflation prospects for the U.S. economy in both the short and medium term, are two particularly important and very uncertain areas. International oil prices have risen more sharply than was forecast last fall, while 1980 U.S. price growth has been significantly stronger than was foreseen a year ago. As a result of these and other developments, Canada's economic performance during 1980 has differed somewhat from that set out in both government and private forecasts prepared a year ago, and the 1981 outlook is now significantly different from the 1981 outlook as forecast at the end of 1979. Because underlying assumptions can quickly become obsolete, both short- and medium-term projections of economic activity must be continually reassessed, and this can often lead to substantial revisions to the projections.

The projection is described in detail in Chapter 3. Real gross national expenditure (GNE) is projected to grow by 2.4 per cent per year over the period 1980-1985. This six-year average annual rate of growth is lower than the 3.1-per-cent average growth rate projected for the period 1980-1985 by the Department of Finance last December. The weakness in Canada's growth outlook in this projection compared to that of last December is concentrated in 1980 and 1981; relatively strong growth is anticipated to resume in 1982. Reflecting this growth profile, the unemployment rate is projected to rise above 8.5 per cent in 1981, but then to decline gradually into a range between

[1] *The Economic Assumptions Underlying the Fiscal Projections of the Budget*, Department of Finance (Ottawa, 1979).

7.5 and 8 per cent by the middle of the decade. Consumer prices are expected to increase at annual rates of about 10 per cent in the short term, but then to decline gradually over the rest of the projection period.

Chapter 3 also compares this projection with current projections prepared by a number of private and public forecast agencies. While the various projections differ in some respects, the trends in most major variables are similar. The differences between the Department of Finance projection and those of other groups reflect the often complex interaction of differences in methodologies and underlying assumptions, including the precise assumptions with respect to government policies in the fiscal, energy, and other areas.

The main features of the projection are summarized, and the conclusions of the paper are presented, in Chapter 4. The economic outlook for Canada is not dissimilar to the prospects for most of the major Organization for Economic Cooperation and Development (OECD) countries over the first half of the 1980s. There is a consensus in member countries of the OECD that the first half of the decade will likely be characterized by a fairly cautious approach to the use of general demand-supporting measures, and by average rates of output growth considerably lower than those which have been experienced over the last 20 years. A major priority of most OECD countries is a reduction in the strong inflation momentum that currently exists, a task which is complicated by factors such as the likelihood of higher energy costs and the possibility of continued poor productivity growth.

Canada's medium-term economic prospects will be affected by the degree of success of other countries, particularly the U.S., in dealing with these problems. However, the same problems, different only in degree, also exist in Canada. Developments in each of these areas will interact in a complex way to influence the growth prospects of the Canadian economy. The rate of growth of consumer prices has been increasing since 1977, and underlying cost pressures have recently begun to reinforce this upward momentum. This trend will have to be reversed if the economy is to achieve higher rates of growth later in the medium term. This will require that Canadians be willing to accept higher energy prices as part of the government's energy program to achieve energy independence by the end of the decade. It will also require that the rate of productivity growth recover from the very low average level recorded since 1973. Increased investment and the development of new technologies would contribute to an improved productivity performance as well as provide a stronger basis for longer-term growth.

Assumptions Underlying the Medium-Term Projection

Any projection or forecast rests upon a specific set of assumptions concerning the outlook for certain important economic variables. The purpose of this chapter is to review the main assumptions underlying the medium-term projection set out in this paper. In some cases assumptions can reasonably be chosen on the basis of past trends and behaviour. In other cases, however, historical information may be of little use because economic behaviour has changed, or because a variable is subject to frequent and unpredictable fluctuations. The process of choosing a particular assumption can thus often involve considerable research and analysis, as well as subjective judgements with respect to the likelihood, risks and implications of alternative assumptions. Therefore, any assumption finally chosen will usually have a fairly wide margin of error associated with it. This is especially true when making assumptions over a period as long as six years.

The External Environment

Canada's economy is very dependent upon foreign trade: total exports and imports accounted for 24 per cent and 28 per cent, respectively, of real GNE in 1979. Consequently, the outlook for the Canadian economy is heavily influenced by the outlook for the economic performance over the medium term of Canada's major trading partners—the United States, Japan, and a number of European OECD members.

The 1970s were turbulent years for all western industrialized countries. The decade recorded the most severe recession in the postwar period, while inflation rates rose to double-digit levels. In the seven major OECD countries (the U.S., Canada, Great Britain, France, West Germany, Italy and Japan), unemployment rates were higher in 1979 than in 1970, and in all of these countries except Japan consumer prices were increasing more rapidly in 1979 than in 1970. As the decade ended, four major OECD countries—the U.S., France, Italy and the U.K.—were once again experiencing double-digit rates of inflation, and all countries faced the prospect that the 1980s could begin with a recession, perhaps equal in severity to that of 1974-1975. All seven major OECD countries began the 1970s with current account surpluses; by the end of the decade five of the seven were experiencing deficits.

There is a widely held view in all the major industrialized countries that extremely difficult adjustments will be required over the next five to 10 years. The large increases in oil prices in 1973-1974, and again in 1979 and 1980, have made all countries painfully aware of their dependency on oil, and of their vulnerability to the unpredictable actions of a small number of oil-producing countries. Large oil price increases, and the subsequent large income transfers from oil-consuming to oil-producing countries, contributed significantly to the severe recession in 1974-1975 and to the double-digit rates of inflation of that period. The further doubling of world oil prices in 1979-1980 has led to the declines in rates of growth of economic activity and high rates of inflation now being experienced by most major industrialized countries. As well, much of the instability in the international monetary system, and the emergence of large current account and government deficits during the 1970s, can be traced to developments in world oil markets.

At the Tokyo Economic Summit in 1979, and again in Venice this year, the major industrialized countries reaffirmed their commitment to a concerted effort to reduce their dependency on oil and to develop alternative forms of energy supplies. All countries are acutely aware that the adjustments required both within individual countries and among countries to achieve these energy objectives will be difficult, and that in the short and medium term these adjustments could conflict with other economic objectives.

High on the list of the economic objectives of most countries is the reduction of rates of inflation over the medium term. No country is underestimating the difficulty of achieving this objective. Most countries are currently confronted with strong upward pressures on prices, as inflationary expectations have failed to subside substantially and as productivity growth has declined during the last half of the 1970s. These pressures could be exacerbated by the possibility of further large income transfers to oil-producing countries, and real income losses in industrialized nations as energy prices continue to rise over the medium term.

In the first half of the 1980s most OECD countries expect to try to strike a delicate balance between the reduction of inflationary pressures and the maintenance of growth sufficient to sustain productivity and investment growth. In contrast to the early 1970s, the potential for successfully stimulating growth in the short or medium term through general demand-supporting policies is now seen as being limited in most OECD countries. Indeed most countries now appear willing to err on the side of restraint in order to reduce the inflationary pressures which currently exist. Because of the high priority attached by governments to fighting inflation, and as well because of the apparent slowing in potential supply growth, real growth in the OECD area as a whole is unlikely to exceed 3 to 3.5 per cent per year in the next five years, compared to the 5-per-cent average annual growth rate of the 1960s and early 1970s.

External Assumptions

The specific external assumptions underlying the present projection are shown in Table 1. These assumptions are drawn from one of several recent projections of the U.S. economy prepared by Data Resources Incorporated (DRI), the largest private forecasting company in the U.S. The outlook for the U.S. is particularly important. The U.S. accounts for by far the largest proportion of Canada's external trade, and in addition there are close linkages between the two economies through financial markets and corporate arrangements.

U.S. real growth is assumed to average 2.5 per cent per year over the years 1980-1985, a rate of growth slightly lower than the current estimate of U.S. potential growth for this period. The average growth rate masks year-to-year variations in growth which are particularly significant to the Canadian outlook. The U.S. economy is expected to experience a sharp recession in the short term. A number of forecasters had been expecting the downturn to begin in early 1979. However, consumer spending, business non-residential investment and exports all remained strong in 1979 despite high energy prices and worsening inflation. In fact this persistent strength of aggregate private demand served to add to already increasing inflationary pressures, which led the authorities to tighten monetary conditions even further.

Table 1
External Assumptions, 1980-1985

	1980-1985	1982-1985
Average annual percentage growth rates of U.S. aggregates:		
Real GNE	2.5	3.9
GNE price deflator	8.7	8.5
Consumer price index	9.7	8.7
Wholesale price index	11.3	10.4
Average annual percentage growth rates, OECD European and Japanese indexes of industrial production:		
OECD Europe	2.8	3.3
Japan	5.2	6.6

Source: Data Resources Incorporated, *U.S. Long-Term Review*, Summer 1980, TRENDLONG0680, and the Department of Finance.

The expected downturn in U.S. economic activity did not materialize until the second quarter of 1980, when aggregate output declined at an annual rate in excess of 9 per cent. For the year as a whole, GNE is expected to be 1.5 per cent lower than in 1979. Real consumption, business non-residential investment, and residential investment are all expected to be below their 1979 levels. Modest real growth is expected to resume early in 1981. However, consumption is forecast to grow only weakly in 1981, while non-residential investment is expected to continue to decline. Consequently, U.S. GNE is expected to grow by only 1.1 per cent in 1981, before beginning to expand at a more rapid pace in 1982.

A number of important assumptions underlie the projected re-emergence of strong growth in the U.S. economy. It is assumed that the U.S. government will institute moderate-size tax cuts, beginning in 1981, to aid the process of recovery from the recession and to offset a portion of the increase in taxation that will result from substantial increases in social security taxes and the lack of indexation of the personal income tax system. Both personal and corporate taxes are assumed to be cut. Military spending is also expected to be increased. These policy assumptions, together with demographic and other assumptions, underlie a projected rebound in consumption, business investment and in particular residential investment in 1982. The real growth projected for the U.S. in 1982 exceeds 5 per cent. Much of the strength in consumer spending is projected to be concentrated in the durable goods sector, particularly in autos.

The projected strength and structure of U.S. final demand have a significant impact on the outlook projected for Canada. This is particularly true in 1982, the year in which almost all U.S. private sector demands are projected to rebound strongly. The projected configuration of U.S. demand is particularly favourable to strong Canadian export growth. If the U.S. economy does not expand strongly in 1982 and after, or if demand growth is concentrated in other areas of final demand, less stimulus will be provided to Canada's economy than is projected here.

A very important feature of these external assumptions is the projected persistence of inflation in the U.S. Despite the current recession, rates of inflation are anticipated to remain high. The rate of growth of the U.S. GNE price deflator, for example, is projected to moderate only slightly, averaging 8.7 per cent per year in the 1980-1985 period compared to 8.9 per cent in 1979. Some deceleration of price increases is assumed to occur in the 1982-1985 period; however, the projected annual growth rate of the GNE deflator does not fall below 8 per cent until 1985.

The U.S. inflation assumptions set out in Table 1 are broadly consistent with the views expressed by the Council of Economic Advisors (CEA) in its 1980 Annual Report:

> In the present environment we cannot realistically expect that price and wage increases will respond quickly and strongly to a moderate increase in the degree of slack in the economy. Nor can it be expected that a sharp but relatively short recession would have a lasting effect on inflation. Expectations of inflation have become much too deeply entrenched for that to happen.[2]

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[2] *The Annual Report of the Council of Economic Advisors*, United States Government (Washington, D.C., 1980), pp. 78-79.

Assumed rates of external price inflation are now significantly higher than were expected last December. U.S. inflation as measured by the wholesale price index (WPI) was anticipated at that time to average 9.5 per cent per year over the period 1979-1985. Recent developments in the U.S. economy and the evident strength of inflationary expectations have led to a general upward revision of price increase projections by all major forecasters. In this projection, the U.S. WPI is assumed to increase by 11.3 per cent per year on average over the period 1980-1985.

Although there are a number of current projections of U.S. medium-term economic developments, for the most part the differences among them are relatively minor. The basic message of these projections is quite similar: the U.S. economy is likely to experience only moderate growth on average over the first half of the 1980s, and inflation rates are likely to remain high.

Despite the relatively high degree of consensus reflected in current projections, it should be noted that there remains a good deal of uncertainty in the U.S. medium-term outlook. The severity and the duration of the U.S. recession remain difficult to predict. Recent movements in some economic indicators suggest that the worst of the recession is over, while other factors, such as the late summer upturn in interest rates, are less encouraging. Substantial revisions to the U.S. short-term outlook have been made in recent months; these revisions have been large enough to affect average growth rates projected over a six-year period. Further revisions to the U.S. short-term outlook could result in significant changes to the medium-term prospects.

As will be discussed in later sections, the Canadian economy is expected to perform slightly better than the U.S. economy in the short term, both in terms of real growth and inflation rates. As a result, some mild appreciation of the Canadian dollar could be expected. The value of the Canadian dollar is assumed to average slightly more than U.S. $.86 in 1980 and U.S. $.875 in 1981. In 1982, U.S. real growth is assumed to rebound strongly, causing some improvement in Canada's current account deficit and a further slight appreciation of the dollar. For the remainder of the projection period the relative price performance of the two economies is expected to be about the same, and as a result the Canadian dollar is assumed to remain stable at an average value of U.S. $.88.

International Oil Prices

As was noted in the Introduction, future international oil price increases are subject to a high degree of uncertainty. The events of 1979 and 1980 demonstrate this clearly. The outbreak of the Iranian revolution in early 1979 and the resulting interruption of Iranian oil exports created temporary tightness in world oil markets which put significant upward pressure on world oil prices. In little more than 12 months, the price for Saudi Arabian light crude oil (marker crude) was raised from U.S. $12.70 per barrel to U.S. $26 per barrel. It is difficult to predict at this time what effect the hostilities between Iran and Iraq may have on world oil prices.

Upward price pressures had eased somewhat in the months immediately preceding the Iran-Iraq hostilities. However, despite the weak growth anticipated in most industrialized countries and the resulting expected fall in oil demand, downward pressures on prices could be quickly reversed in response to supply disruptions or to production cutbacks.

In the past, several members of the Organization of Petroleum Exporting Countries (OPEC) have demonstrated their willingness and ability to restrain supplies in support of pricing actions.

The current price of Saudi Arabian light crude oil is U.S. $30 per barrel. For the purpose of this projection, the marker crude oil price is assumed to rise further in early 1981. Thereafter, prices are assumed to increase by 2 per cent per year in real terms (i.e., the annual rate of increase of crude oil prices is assumed to exceed the annual growth of the U.S. WPI by 2 per cent).

Food and Domestic Energy Prices

Table 2 provides the assumed annual rates of growth of food prices on a consumer price index (CPI) basis. Food prices are expected to show high rates of increase particularly next year, reflecting in part the effects of the drought in large areas of North America this year, as well as the rapid increases in energy prices and unit labour costs assumed in the projection. After 1981, the rate of increase of food prices is expected to moderate as unit labour cost growth slows, and as farm-gate prices respond to normal supply adjustments.

Table 2 also includes a profile of projected increases in the energy price component of the CPI. This price pattern reflects the oil and gas pricing policy as specified in the government's national energy program.

Table 2
Annual Percentage Rates of Growth of Food and Energy Prices, 1980-1985

	Food Prices(1)	Energy Prices(1)
1980	10.1	15.6
1981	12.0	21.9
1982	8.3	14.2
1983	7.8	12.1
1984	8.0	12.6
1985	7.8	11.5

(1) Consumer price index basis.
Source: Department of Finance.

Population and Labour Force Growth

Labour force growth depends upon the growth of the working-age population and the evolution of participation rates. There are two sources of working-age population growth: the natural increase in the population, and the net immigration of persons aged 15 and over. The natural-increase component of working-age population growth to 1985 is known with a high degree of certainty. This is not the case with respect to the growth in the working-age population resulting from net immigration. Because of the difficulty of predicting year-to-year changes in the factors influencing net immigration, medium-term projections are normally based upon assumptions about the average annual net immigration level. The population projection in this paper assumes average annual net immigration of 25,000 over the medium term. This is lower than was assumed in last December's projection, in which net immigration was assumed to average 50,000 per year. This change reflects the weaker economic growth and higher unemployment rates which are currently being projected. The growth rate of the working-age population is projected to slow down quickly over the medium term, from 1.7 per cent in 1980 to 1.0 per cent in 1985.

Since the early 1960s, the aggregate Canadian participation rate has increased in almost every year, and has accounted for a significant proportion of the labour force growth realized in the 1960s and 1970s. In large measure, the increase in the aggregate participation rate has resulted from steady and rapid increases in the participation rate of women aged 20 and over. The projection of adult female participation rates is thus a major element in the projection of the aggregate participation rate, and therefore labour force growth in Canada, over the medium term. However, the accurate projection of the participation rate of adult women has proven to be a difficult task; past projections have tended to underestimate the growth of the participation of adult women in the labour force.

A recent Department of Finance study of participation rate movements in Canada has concluded that a wide variety of sociological and economic factors, many of which are international in their scope, underlie the steady growth of adult women's participation rates since the 1950s.(3) These factors include among others the rising material aspirations of families, which can often be satisfied only if both husband and wife are working outside of the home; the dramatic change which has occurred in women's personal aspirations, and steady increases in the average educational attainment of women; and the major developments in birth control techniques during the postwar period.(4) Indicative of the strength of the various forces which have been operating to increase the labour force participation of women is the fact that, in the 1970s, the largest increases in participation rates have been recorded by women with children aged six years and younger present in the home. This is the group for which the inhibiting effect of children upon labour force participation would be expected to be the greatest.

The variety of forces working to increase women's participation rates and their evident strength suggest that the adult female participation rate is likely to continue to increase rapidly, at least over the medium term. The participation rate of women aged 20 and over is projected to increase from 48.6 per cent in 1979 to over 55 per cent in 1985. This represents a rate of increase only slightly lower than that recorded in the second half of the 1970s. This pattern of growth of the participation rate of adult women is the main factor underlying the projected increase in the aggregate participation rate from 63.3 per cent in 1979 to 67.0 per cent in 1985.

Table 3 provides the projected profile of labour force growth to 1985, along with the projected participation rate and increases in the working-age population. Strong

(3) For a discussion of this issue, see *Participation Rate and Labour Force Growth in Canada*, Department of Finance (Ottawa, 1980), pp. 1-2.

(4) *Ibid.*, pp. 8-10.

participation rate increases in the post-1981 period are projected to lead to annual labour force growth rates which are substantially higher than working-age population growth rates.

Table 3
Annual Percentage Increases in the Working-Age Population and the Labour Force; and the Aggregate Participation Rate, 1980-1985

	Percentage Increases in		
	Working-age Population	Labour Force	Participation Rate
			(per cent)
1980	1.7	2.7	63.9
1981	1.6	1.9	64.1
1982	1.2	2.2	64.8
1983	1.1	2.2	65.5
1984	1.0	2.1	66.2
1985	1.0	2.2	67.0

Source: Department of Finance.

Main Features of the Medium-Term Prospects

This chapter reviews the main features of the projection, focussing on the medium-term outlook for output, productivity and employment, wages and prices, and the structure of aggregate demand. The crucial roles of wage and price growth, productivity performance and investment growth in the projection are discussed in detail in the chapter. In addition, the major elements of the projection are compared to those of recent medium-term projections prepared by other private and public forecast agencies.

Given the assumptions which were reviewed in Chapter 2, the projection has been developed on the basis of what is known about the main behavioural relationships in the Canadian economy. Although no single econometric model has been used in this analysis, the individual sectors of the economy have been studied in detail and the results have been combined into a consistent projection within the national accounts framework. This process has required that judgements be made with respect to the nature of the current recession, the shape of the expected recovery, and the interaction of demand and supply forces over the remainder of the projection period.

The Main Economic Aggregates

Table 4 provides projected growth rates of real GNE, productivity, employment, and the labour force, as well as the unemployment rate over the period 1980-1985. Real output growth in Canada is forecast to decline by 1 per cent in 1980 and to record only sluggish growth of 1 per cent in 1981, reflecting in part the poor performance of the U.S. economy in these years. As was noted earlier, this projected short-term performance of the economy is much weaker than that anticipated in December 1979;

growth rates for 1980 and 1981 projected by the Department of Finance at that time were 1 and 3 per cent, respectively. Real growth is projected to rebound to the 4-per-cent level in 1982 before decreasing gradually over the rest of the period. Over the period 1980-1985, Canadian real growth is projected to average 2.4 per cent per year, a rate lower than the 3.1-per-cent average annual growth achieved during the period 1974-1979 and projected last December for the years 1980-1985. A comparison of the main elements of this projection and the projection released with last December's budget is provided in the Appendix.

The main factors upon which the projected strong recovery in Canadian growth in the early 1980s is based include the assumed strong recovery of the U.S. economy, strong non-residential investment growth led by the energy sector, and renewed strength in consumption expenditures. The assumed rate of U.S. growth in the period 1982-1985 is in fact somewhat stronger than was projected last December.

Table 4
Annual and Average Annual Percentage Rates of Growth of GNE, Productivity, Employment and the Labour Force; and the Unemployment Rate, 1980-1985

	Rates of Growth				Unemployment Rate
	Real GNE	Productivity[1]	Employment	Labour Force	(per cent of Labour Force)
1980	−1.0	−3.3	2.4	2.7	7.7
1981	1.0	0.2	0.8	1.9	8.7
1982	4.0	1.5	2.5	2.2	8.4
1983	3.7	1.2	2.5	2.2	8.1
1984	3.6	1.1	2.5	2.1	7.8
1985	3.3	1.0	2.3	2.2	7.7
Average, 1980-1985	2.4	0.2	2.2	2.2	8.1
Average, 1982-1985	3.6	1.2	2.4	2.2	8.0

(1) Productivity is defined here as real GNE per employed person.
Source: Department of Finance.

Much of the reduction in growth rates which has occurred recently in OECD countries, and which is projected to continue into the 1980s, has been cyclical in nature. Part of this reduction, however, is attributable to the decline in potential growth rates in a number of OECD countries, including Canada. In Canada, potential growth has declined as a result of both declining labour force growth and a decline in trend productivity growth. Labour force growth during the first half of the 1980s is assumed to average only a little over 2 per cent per year, compared to 3.5 per cent between 1971 and 1975, and 3.0 per cent between 1976 and 1979. Allowing for some decline in the trend growth of productivity, the potential annual growth rate of the economy in the first half of the 1980s is expected to be about 3.5 per cent.

Although real output growth is forecast to decline by 1 per cent in 1980, employment is expected to grow relatively strongly, at the rate of 2.4 per cent this year. This growth will not be sufficient to offset strong labour force growth; the average 1980 unemployment rate is expected to increase to 7.7 per cent from last year's 7.5 per cent. The effects of the decline in output in 1980 and the slow growth in 1981 are expected to result in employment growth slowing to 0.8 per cent in 1981, a little less than one-half the expected growth rate of the labour force. Consequently, the unemployment rate is forecast to rise in 1981. The projected recovery of real growth beginning in 1982 should result in a steady decline in the unemployment rate over the rest of the projection period, to a level between 7.5 and 8 per cent by 1985.

Labour force growth through most of 1980 has been stronger than was anticipated in December of last year. However, employment growth in 1980 has been much more rapid than was forecast. As a result, the rate of unemployment currently forecast for 1980 is significantly lower than the 8.3 per cent rate forecast for 1980 last December.

Labour productivity, defined as real GNE per employed person, is forecast to drop by 3.3 per cent in 1980, a decline considerably larger than was forecast last December. The larger decline in productivity now forecast reflects the fall in real output currently forecast for 1980. Similarly, the lower rate of real growth now forecast for 1981 results in a projected growth rate of productivity of only 0.2 per cent in that year. However, a rebound in productivity growth is associated with the cyclical expansion of the economy projected to be well under way by 1982. The higher average rate of productivity growth of 1.2 per cent over the period 1982-1985, which is similar to that projected last December, is about half of the average productivity growth rate of 2.3 per cent which was recorded between the cyclical peaks of 1956 and 1973.

The cyclicality of productivity growth rates, which is reflected in the low rates of productivity growth recorded since 1973, is a well-established phenomenon. However, the degree to which the average growth rate of labour productivity has fallen since 1973 suggests that structural changes have also been occurring. A decline in the underlying rate of growth of productivity not only has adverse effects on the scope for real income increases, but also adds to the difficulty of achieving significant reductions in price pressures in the future.

The Department of Finance technical paper entitled *Recent Changes in Patterns of Productivity Growth in Canada* examined the behaviour of labour productivity measures over the postwar period, in an attempt to identify non-cyclical factors which may have contributed to the decline in the average productivity growth rate since 1973.[(5)] One conclusion of this study is that the decline in labour productivity growth as measured in terms of GNE per employed worker probably overstates the extent to which productivity growth has in fact slowed down. Official productivity estimates based on real domestic product (RDP) output measures show a smaller although still pronounced decline in productivity growth since 1973. The study also identified two non-cyclical factors which together accounted for about half of the post-1973 decline in productivity growth as measured on an RDP basis. The first of these factors was a very sharp decline in productivity in Canada's oil- and natural gas-related industries, which was attributable primarily to an essentially non-cyclical decline in oil production and a cessation of the growth of natural gas production. The second was a pronounced slowdown in the rate of growth of the capital intensity of production in most industries.

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(5) *Recent Changes in Patterns of Productivity Growth in Canada*, Department of Finance (Ottawa, 1980).

The results of this study thus suggest that there has been some decline in the trend rate of productivity growth during the 1970s. The decline has not been large enough, however, to represent a constraint on the attainment of the rates of productivity growth over the medium term which are projected here. Moreover, some of the non-cyclical downward pressure on productivity growth which existed during the 1970s may be in part reduced in the first half of the 1980s. Over the medium term, the domestic production of crude oil is expected to continue to decline, but natural gas production should rise strongly. Consequently, the depressing influence upon aggregate productivity growth of declining productivity in the oil- and gas-related industries may be substantially reduced in the 1980s. Also, as will be discussed below, business fixed capital formation is expected to be the strongest growing component of GNE in the medium term. This investment strength should lead to some reversal of the previous slowdown in the rate of growth of the capital-labour ratio.

The projected pattern of productivity growth is closely related to the projected profile of price increases. In the short term, the poor productivity performance which is forecast contributes to the high rates of price growth. After 1981, the relatively strong rebound in productivity growth which is projected, is closely associated with the projected decline in rates of inflation over the 1982-1985 period. The recovery of productivity growth is expected to lead to some reduction in inflationary pressures, directly through its effects on unit labour costs, and indirectly through its expected impact on wage demands. A recovery in productivity growth would be instrumental to the resumption of significant average real wage and salary growth, which in turn should lead to some moderation of nominal wage and salary demands.

Prices and Wages

In the 1970s Canada experienced two sustained surges of inflation.[6] The first, which began in 1973 and lasted through 1975, was common to all industrialized countries and in fact had many of its roots in international developments at that time: the rapid growth of aggregate demand in many of the OECD countries which led to substantial increases in the prices of many primary commodities, sharp food price increases stemming from supply disruptions in various agricultural markets, and the decision by OPEC in 1973 to raise crude petroleum prices and to cut back production. As the effects of these factors passed through to consumer prices, it appears that a major change occurred in inflationary expectations. Continued high rates of inflation began to be anticipated, and this led to sharp increases in wage demands as wage and salary earners attempted to protect their real incomes.

In October 1975, the government introduced a system of wage and price controls aimed at breaking the wage-price spiral which had developed by that time. As part of the anti-inflation program, limits were placed on the size of negotiated wage settlements and firms' profit margins. In 1976, the rate of inflation slowed to 7.5 per cent from the 10.8 per cent recorded in 1975, and the first surge of inflation had apparently ended. In April 1978, the government lifted its mandatory wage-price controls, although contracts settled under the program remained in force. By this time, however, the rate of inflation had once again begun to increase. The CPI rose by 8.0 per cent in 1977, 8.9 per cent in 1978, and 9.1 per cent in 1979. Significant factors underlying these increases in the rate

[6] A detailed review of Canada's inflation experience in the 1970s is available in *Economic Review: A Perspective on the Decade,* Department of Finance (April, 1980), Chapter 7.

of inflation were the decline in the value of the Canadian dollar in the 1977-1979 period, and a major resurgence of food price inflation. The controls program led to a sharp decline in negotiated wage increases throughout the 1976-1978 period. In 1979, however, the growth rate of average wages and salaries began to increase again.

The expectation that prices will continue to increase at relatively high rates is now widely held in Canada, and is a major reason why inflation has developed a momentum of its own. Individuals who have experienced income losses to inflation and who expect further large price increases attempt to protect themselves by formulating wage demands aimed at recouping past losses and offsetting future price increases. The price-setting behaviour of firms is similar in many respects. Businesses see their actions as reflecting the passing through of past cost increases and the anticipation of future cost increases. In this situation, the effects of relative price shocks (i.e., large increases in the price of one or a few commodities such as oil) are magnified and can spread throughout the economy rapidly. With this type of income- and price-setting behaviour, the projected decline in output in 1980 and the slow growth forecast for 1981 cannot be expected to result in any rapid reduction in inflationary pressures.

The preceding chapter described the assumptions which have been made with respect to the growth rates of food, energy and external prices over the medium term. Large increases in all of these prices are forecast for the short term, but some slowdown is anticipated to occur later in the projection period. Each of these price profiles plays a role in shaping the projected pattern of aggregate domestic price increases. However, by far the largest component of domestic prices is unit labour costs. The profile of aggregate price increase is thus determined primarily by the rate at which unit labour costs increase and this, in turn, depends upon the growth rates of nominal wages and productivity.

The expected weakness in Canada's short-term productivity outlook will put upward pressure on costs and prices. The subsequent improvement in the projected post-1981 productivity performance, however, is an important factor contributing to the projected easing of cost pressures in the 1982-1985 period. With respect to nominal wage growth, it appears likely that some increase will materialize in the short term. One important source of potential upward pressure on wages and salaries is the decline in real wages (nominal wages and salaries per employee deflated by the CPI) which has occurred since 1976. In addition, the expectation of future inflation which the rates of CPI increase since 1976 have engendered can be expected to reinforce these upward pressures on wages in the short term.

Given these considerations, the wage-price profile incorporated in this projection could be described as being cautiously optimistic. As is shown in Table 5, average nominal wage increases are projected to peak in 1981, and then to decline slowly over the remainder of the period to 1985. The projected resumption of positive average real wage growth in 1981 contributes to the projected decline of nominal wage increases. The profile of unit labour cost increases set out in Table 5, coupled with the assumed increases in food, energy and U.S. prices discussed earlier, yields a projected pattern of annual CPI increases which peak at 10.2 per cent in 1981, and then decline gradually over the last four years of the projection period.

The CPI profile set out in Table 5 differs from the price projection underlying last December's budget, partly because the December projection included the then-proposed excise tax on gasoline. The average annual rate of inflation in the current projection, 9.1 per cent, falls about half-way between the average rates of CPI increase in the low-price and high-price scenarios described in last December's budget paper. The GNE price deflator is expected to increase at rates similar to the rates of increase of the CPI.

Table 5
Annual Percentage Increases in Average Wages, Unit Labour Costs, the Consumer Price Index, the GNE Deflator, and Productivity, 1980-1985

	Average Wages (Nominal)	Unit Labour Costs	Consumer Price Index	GNE Deflator	Average Wages (Real)[1]	Productivity[2]
1980	8.2	11.9	9.7	10.0	−1.5	−3.3
1981	10.6	10.5	10.2	10.0	0.4	0.2
1982	10.3	8.7	9.4	9.7	0.9	1.5
1983	9.8	8.5	8.8	8.6	1.0	1.2
1984	9.2	8.0	8.6	8.1	0.6	1.1
1985	8.9	7.9	8.2	7.7	0.7	1.0

(1) Average annual real wage growth, 1980-1985, is 0.4 per cent.
(2) Average annual productivity growth, 1980-1985, is 0.2 per cent.
Source: Department of Finance.

The wage-price profile which underlies this projection is one of many scenarios which could be described. It may be that the wage-price performance of the Canadian economy will turn out better then projected here. For example, if the inflation rates of Canada's major trading partners were lower than have been assumed here, lower import prices would reduce the rate of growth of Canadian prices. Higher productivity growth than has been projected, or a faster easing of inflationary expectations and wage increases than has been assumed, would also lead to a more rapid decline in the growth of Canadian prices over the medium term. Such developments would permit the achievement of higher growth and lower unemployment by the middle of the decade.

Canada's wage-price performance could also, however, be worse. For example, if Canadians are unwilling to accept the real income consequences of higher energy prices, and instead demand compensating wage and salary increases, the inflation profile could be significantly higher. The consequences of a poorer wage and price performance would be severe. Higher rates of inflation would act to discourage business investment as real rates of return on equity were eroded, with adverse effects upon the supply potential of the economy. In addition, a significant deterioration in domestic costs relative to those of Canada's major trading partners would result in a worsening trade performance, such as occurred in the mid-1970s. Higher rates of inflation could also tend to discourage real consumption growth, through their effects on personal savings rates. All of these developments would tend to reduce the rate of real GNE growth and lead to rates of unemployment higher than those projected here.

The Structure of Aggregate Demand

The preceding sections of this chapter have reviewed the projected patterns of change over the first half of the 1980s of the major economic aggregates: GNE, employment and unemployment, productivity, and wage and price growth. This section examines the projected composition of aggregate demand, which is a major element of the internal structure of the projection, in order to identify both those components of demand which are projected to support GNE growth and those areas which are expected to be sources of weakness.

Table 6 presents the projected growth rates of the main components of aggregate demand over the medium term. Real personal consumption expenditures, which account for over 60 per cent of GNE, are projected to grow more quickly than aggregate output in most years of the 1980-1985 period, and to provide significant support to the growth of GNE.

Table 6
Annual and Average Annual Percentage Rates of Growth of Components of Aggregate Demand, 1980-1985

	Consumption	Government[1]	Non-Residential Investment	Residential Investment	Total Exports	Total Imports	GNE
1980	0.2	−0.6	6.4	−13.8	−2.4	−2.4	−1.0
1981	1.3	0.0	0.7	4.6	2.4	2.0	1.0
1982	3.9	1.9	7.2	0.0	4.8	4.8	4.0
1983	3.8	1.6	5.8	1.7	4.7	5.2	3.7
1984	4.0	1.4	2.8	1.7	4.6	4.1	3.6
1985	3.6	1.4	2.0	1.7	4.7	3.9	3.3
Average, 1980-1985	2.8	1.0	4.1	−0.9	3.1	2.9	2.4
Average, 1982-1985	3.8	1.6	4.4	1.3	4.7	4.5	3.6

(1) Includes both current expenditures on goods and services and capital expenditures by all levels of governments.
Source: Department of Finance.

Total government final demand expenditures (current expenditures on goods and services plus capital expenditures), are projected to grow much more slowly than total output from 1980 to 1985. The projected 1-per-cent average annual growth rate of government expenditures reflects the general commitment to expenditure restraint at all levels of government in Canada.

Business investment in plant and equipment is projected to grow at an average yearly rate of 4.1 per cent from 1980 to 1985, a rate of growth considerably stronger than that of GNE. The growth rate of business non-residential investment spending is expected to be particularly strong in 1982 and 1983, but to decrease in the latter part of the projection period. Residential investment is projected to decline by about 1 per cent per year on average over the period 1980-1985; this reflects the effect of the large decline in 1980.

Real exports of goods and services are projected to decline at the same rate as real imports in 1980, and to recover slightly relative to imports in 1981. In 1982 and later years, both exports and imports are projected to grow strongly. The foreign sector is projected to be a small net contributor to real growth over the medium term.

The following sections discuss in detail the factors which are expected to influence the behaviour of the major components of aggregate demand over the medium term.

Consumer Expenditures

Consumer expenditure growth in 1980 and 1981 is now expected to be significantly lower than was forecast in December 1979. The lower growth of consumption now anticipated is the result of slower personal income growth and higher personal savings rates now forecast. Over the period 1982-1985, consumer expenditures are expected to grow by 3.8 per cent annually on average, and thus provide support to GNE growth over the medium term.

The personal savings rate is projected to decline gradually over the period to 1985. This projected reduction in the savings rate accounts in part for the fact that consumption is expected to grow more strongly than aggregate income over the medium term. A recent Department of Finance technical paper which examined patterns of movement in the personal savings rate concluded that the acceleration of inflation in Canada contributed to an important extent to the sharp increase in the personal savings rate in the early and mid-1970s.[7] There are a number of direct linkages between inflation and the measured savings rate within Canada's national accounting system. For example, increasing rates of inflation are usually associated with rising nominal interest rates, which in turn lead to increases in the current dollar interest income receipts of individuals. To the extent that individuals do not spend the inflation-premium component of their interest receipts, the measured personal savings rate will rise. Other types of linkages between inflation and savings behaviour include, for example, a precautionary motive for savings (the climate of uncertainty associated with inflation can promote increased savings), as well as possible efforts to restore the real value of previous savings which have been eroded by inflation.

As was discussed in the previous section, the rate of inflation is expected to decline after 1981. This suggests that a modest reduction in the savings rate, which would provide some stimulus to consumption, can be anticipated.

Government Final Demand Expenditures

Government spending on goods and services is the portion of total government expenditure which is a component of final demand, and which has a direct impact on

[7] *The Recent Behaviour of the Personal Savings Rate*, Department of Finance (Ottawa, 1980).

the level and rate of growth of GNE. The policy of expenditure restraint which has been adopted at all levels of government in Canada is expected to be continued through the medium term. Consequently, government sector final demand expenditures are projected to grow less quickly than GNE, in both real and nominal terms, over the period to 1985.

Over 75 per cent of total government expenditures on goods and services is accounted for by the provincial-local-hospital sector. The growth rate of PLH-sector final demand spending is expected to exceed that of the federal government. Increasing demand for health services is projected to be the major growth factor in PLH spending on goods and services. The growth of health care expenditures is anticipated to offset the possibilities for expenditure reductions which stem from projected declines in elementary and secondary school enrolments.

Business Non-Residential Investment

There are substantial differences between energy investment and much of the investment expenditure which is made in the non-energy sectors of the economy. A large part of energy investment consists of very large projects which have long gestation periods and which may take several years to complete once construction has started. The initiation and construction of such projects do not for the most part depend upon the cyclical position of the economy. On the other hand, much business investment in non-energy sectors consists of expenditure on small- or medium-scale projects, whose planning and construction phases are shorter and whose timing often depends upon cyclical developments in the economy. For these reasons, energy and non-energy investment expenditures are projected separately here. The energy investment projection has been prepared in consultation with the Department of Energy, Mines and Resources. This projection allows for the impact of initiatives included in the government's new energy program.

In aggregate, energy-related investment growth is projected to grow by nearly 5 per cent per year on average during the first half of the 1980s. This is a lower rate of growth than was projected last December, and reflects primarily a lowering of anticipated investment in the electricity generation and distribution industry. Planned investment in this area has been reduced significantly in recent years, as a result of slower than anticipated economic growth, the expectation of slower growth in the future, and the effects on demand of both increases in electricity rates and measures aimed at promoting the conservation of electricity. Decisions have been made in the past year to postpone some major projects, including Ontario Hydro's Darlington nuclear plant. Electrical utility investment is projected to decline in the short term, and to grow by about 4 per cent per year on average during the period 1982-1985.

Strong investment growth, on the other hand, is projected in the oil and natural gas industry. A number of major oil- and gas-related projects are assumed to be initiated in the projection period. Construction is expected to start on the Cold Lake heavy oil plant, the Alsands tar sands plant, and an additional oil sands plant. Expenditures on the recently approved pre-built portion of the Alaska Highway gas pipeline and on the extension of a gas pipeline from Montreal to Quebec City and Halifax are also incorporated in the projection.

The non-energy component of business non-residential investment is projected to grow at an average annual rate of nearly 4 per cent over the period 1980-1985. Relative to the projected growth rate of GNE, this is a robust growth rate, one which provides a substantial amount of support to the projected overall growth rate of the economy.

The existence of sufficiently high rates of return on new capital is a precondition to achieving the non-energy investment growth profile projected here. The corporate-sector real rate of return on equity (i.e., the rate of return adjusted for the effects of inflation) which is implicit in this projection remains at about its long-term average over the first half of the 1980s. However, as the Department of Finance technical paper entitled *Rates of Return and Investment Profitability* has noted, the aggregate rate of return in the corporate sector may mask divergent movements in rates of return in energy and non-energy industries. In 1979, the real rate of return on equity in the corporate non-financial sector had risen to its long-term average level, after having been depressed for a number of years. Within the non-energy component of this broad industrial sector, however, the real rate of return on equity recorded in 1979 remained somewhat lower than rates of return obtained in previous periods of strong investment growth. The higher relative prices of energy inputs which have been recorded since 1973 have operated to raise rates of return in the energy sector and lower them somewhat in the non-energy sector, particularly in the non-manufacturing industries.[8]

Given the projected increases in energy prices, real rates of return on equity in the energy sector can be expected to remain high. Rates of return in the non-energy sector, on the other hand, could decline below their long-term average during the period 1980-1985. However, even if the average rate of return on capital in the non-energy sector were to remain relatively depressed, rates of return on new investment, particularly on energy-efficient plant and equipment, could still be high enough to support the non-energy investment growth profile projected here. In addition, the high priority assigned by the government in the budget to economic development, in particular in the areas of research and development and new transportation facilities, should support the investment profile. It remains the case, however, that rates of inflation higher than those projected here, or a deeper U.S. recession than has been assumed, could depress economy-wide average rates of return well below their historical averages. Under these latter circumstances, it would be difficult to envisage the non-energy investment profile of this projection being attained.

Residential Investment

Housing starts in 1980 are now anticipated to be lower than was forecast last December, as a result of the higher-than-expected interest rates which have been recorded this year. Consequently, the volume of residential construction expenditures is forecast to decline sharply in 1980. Some recovery in residential investment is expected in 1981. The average number of housing starts projected over the medium term is lower than the average recorded over the 1970s. This is related primarily to the demographic profile of the projection, and to the reduced rates of family formation which are associated with it. In addition, the likelihood that mortgage interest rates will remain at relatively high levels can also be expected to reduce housing starts, and thus the growth of residential construction expenditures.

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[8] *Rates of Return and Investment Profitability*, Department of Finance (Ottawa, 1980).

A significant proportion of investment in residential construction consists of repair and renovation expenditures. Continued growth in this type of housing expenditure should support residential investment in the latter part of the projection period despite the low levels of projected housing starts. Nevertheless, the volume of residential construction expenditures are projected to be lower in 1985 than in 1979, and hence the average annual growth rate for the period 1980-1985 is projected to be negative.

Exports and Imports

Canadian exports of goods and services are projected to expand significantly after 1981, in sharp contrast to the weak export performance anticipated in the short term. Import growth is expected to parallel the pattern of export growth closely over most of the first half of the 1980s.

The volume of Canada's merchandise exports is projected to decline in the short term, but then to grow at an average annual rate of about 4.5 to 5 per cent in the period 1982-1985. Among the major products which Canada exports, natural gas, agricultural products and lumber are projected to record the highest average growth rates. Natural gas exports are projected to increase from a current level of about 900 billion cubic feet per year to 1.4 trillion cubic feet per year by 1985. It is quite conceivable that gas exports could be even higher during this period if U.S. demand increases more sharply than has been assumed. It is also possible that gas exports could be lower than are projected here. At present, gas exports to the U.S. are substantially below the volumes which could be exported under existing licenses. This situation reflects both the current depressed levels of economic activity in the U.S., and strong competition from domestic U.S. gas and other competing fuel supplies in Canada's traditional gas export markets.

Major products whose export volumes are expected to grow only slowly on average over the medium term include motor vehicles, pulp and paper, and metals and minerals. The weakness in U.S.-Canada automotive trade forecast for the short term reflects both the impact of the current recession in North America, and the incomplete adjustments made by North American automobile manufacturers to their product lines in response to higher world energy prices. A return towards more normal growth rates of automotive exports is expected to occur by 1982. The projected slow growth in pulp and paper products reflects expected strong competition in the north-eastern U.S. market from a number of new mills located in the southern U.S. With respect to metals and minerals, Canadian prices and costs in some product areas became uncompetitive in the mid-1970s. This led to the loss of some long-term export contracts, many of which will not be renegotiated until after 1985. Until then, only slow real growth in metals and minerals exports can be anticipated.

Crude petroleum exports, which have been greatly reduced since the early 1970s, will be virtually eliminated by 1985. Light crude oil exports have already been terminated; at present, Canada exports only heavy crude oil to the U.S. Imports of crude oil are projected to be lower than current levels by 1985. The 1985 trade deficit in respect of crude oil and petroleum products is projected to be substantially lower than that which would obtain in the absence of the national energy program. This program is expected to have a strong impact on conservation and inter-fuel substitution. The improvement in the deficit also reflects assumed strong growth in crude oil production from non-conventional reserves.

The major categories of imports which are expected to grow most strongly over the medium term include industrial materials, machinery and equipment, construction materials and consumer goods. This projected pattern of import growth by product reflects the medium-term strength projected in non-residential investment and personal consumption in Canada.

These merchandise trade patterns are projected to result in a significant expansion of Canada's merchandise trade surplus, as is shown in Table 7. The merchandise trade surplus measured in current dollars is projected to increase steadily over the first half of the 1980s. Between 1979 and 1985, the merchandise trade surplus is projected to rise as a share of current dollar GNE from 1.5 to 2.5 per cent. However, Canada's large deficit on services trade is also expected to grow rapidly over the medium term. The service account deficit is projected to decline slowly after 1980 as a share of GNE, but to rise in level from $9.7 billion in 1979 to over $17 billion in 1985.

Table 7
The Current Account Deficit and its Components, Levels and Percentage Shares of GNE, 1979-1985

	Merchandise Trade Surplus		Service Account Deficit		Total Deficit	
	$ billion	Per cent of GNE	$ billion	Per cent of GNE	$ billion	Per cent of GNE
1979	4.0	1.5	– 9.7	–3.7	–5.8	–2.2
1980	5.2	1.8	–11.4	–4.0	–6.2	–2.2
1981	6.5	2.1	–12.0	–3.8	–5.5	–1.7
1982	9.1	2.5	–13.1	–3.6	–4.0	–1.1
1983	9.9	2.4	–14.8	–3.7	–4.9	–1.2
1984	11.4	2.5	–16.5	–3.6	–5.1	–1.1
1985	12.6	2.5	–17.6	–3.5	–5.0	–1.0

Source: Statistics Canada, *National Income and Expenditure Accounts*, Cat. 13-001, and Department of Finance.

The largest element of the service account deficit is the deficit on investment income—dividends, long-term interest payments, and miscellaneous income. The growth in the investment income deficit reflects both the cost of financing the current account deficit in the medium term, and the need to refinance maturing debt at higher interest rates. This is particularly significant late in the projection period, when many of the bonds placed in the European market in 1976-1977 are projected to mature. Some expansion of the deficits on Canada's travel account and "other services" account (business services payments such as royalties and licence fees paid to foreigners) is also anticipated.

The final columns of Table 7 provide the projected level of the current account deficit, and its percentage share of GNE. The level of the deficit is projected to rise in 1980, then fluctuate in the $4 to $5.5 billion range from 1981 to 1985. The levels of the current account deficit projected here over the medium term are significantly lower than those expected last year. Thus far in 1980, Canada's merchandise trade balance has been substantially larger than was anticipated last December. Smaller current account deficits in both the short and medium term are now projected.

It is worth emphasizing that the current account deficit and balances on the merchandise and service accounts represent the differences between very large export and import values. Projected export and import flows measured in current dollars each exceed $100 billion per year over most of the period to 1985. Small differences in the projected values of either exports or imports can thus result in large differences in the current account balance.

A Comparison of Medium-Term Projections of the Canadian Economy

This section compares the most recent projections prepared by Informetrica Ltd., Data Resources Incorporated (Canada) (DRI), and the Economic Council of Canada with the projection outlined in this paper. The four projections, whose main elements are summarized in Table 8, present broadly similar outlooks for the Canadian economy over the first half of the 1980s. Output growth is expected to be weak, and price inflation is expected to reach double-digit rates in the short term, although some improvement is recorded in the latter years of the projection period. Views on the prospects for real growth have become more pessimistic since the fall of 1979, when projections for average GNE growth rates to 1985 made by these groups ranged from 3 to 3.8 per cent per year. The corresponding range of projected real growth rates is now 2.2 to 3 per cent.

There is a fairly wide range of views as to how the growth of GNE will be distributed between growth in employment and growth in productivity. The projections for average annual productivity growth range from almost no growth to 1.2 per cent. The Finance productivity projection falls towards the low end of this range. Projected average annual employment growth rates fall within the narrower range 1.8 to 2.2 per cent.

The differences in projected labour force growth arise mainly from differences in the projections for the participation rate. Finance projects the participation rate to reach 67 per cent by 1985, while the other groups project participation rates in the range 64.9 to 66.2 per cent in 1985. The 1985 unemployment rate in the Finance projection, 7.7 per cent, is the highest among the four projections.

Projected average annual increases in the CPI range from 8.4 to 9.5 per cent. With regard to the average annual growth in unit labour costs, the single most important factor in the outlook for inflation, the projections span the fairly narrow range 8.5 to 9.3 per cent. This is the main reason for the similarity in the projections for inflation. While there is greater variation among the forecasts in the projected growth rates of food, energy and import prices, these differences are not large enough to create major differences in the projections for inflation.

With respect to the structure of aggregate demand, non-residential investment is projected to provide the greatest support to GNE growth in all the projections. Both Finance and DRI project consumption expenditures to grow more quickly than GNE. The Economic Council and Informetrica, on the other hand, expect consumption expenditures to decline as a share of real GNE. Each projection assumes that government sector expenditures on goods and services will continue to grow more slowly than GNE. Except in the case of DRI, residential investment is expected to be the slowest-growing component of aggregate demand. Only the Finance projection shows the foreign sector making a positive contribution to growth, although the net contribution is quite small. DRI is the most pessimistic with respect to the balance of import and export growth; it projects the foreign sector to exert a fairly substantial drag on growth over the medium term.

Table 8
Main Elements of the Most Recent DRI, Informetrica, and Economic Council Projections, Compared to the Department of Finance Projection, 1980-1985[1]

	Finance	Economic Council	Informetrica	DRI
Main Aggregates				
GNE	2.4	2.2	2.8	3.0
Productivity	0.2	0.1	0.7	1.2
Employment	2.2	2.2	2.1	1.8
Labour force	2.2	2.0	2.0	1.8
Unemployment rate (1985)	7.7	6.5	7.0	7.4
Prices and Wages				
CPI	9.1	9.5	8.4	9.1
Average wages (nominal)	9.5	8.9	9.4	10.6
Average wages (real)	0.4	−0.6	0.9	1.4
Aggregate Demand Components				
Consumption	2.8	2.0	2.6	3.6
Government expenditures	1.0	1.3	1.8	2.0
Residential investment	−0.9	0.2	0.2	3.0
Non-Residential investment	4.1	6.0	5.9	4.2
Total exports	3.1	2.2	3.1	1.8
Total imports	2.9	2.4	3.1	3.1
Deficit on goods and services ($ billions, 1985)	−5.0	−11.8	−13.9	−11.1

[1] Figures given in this table are average annual percentage growth rates calculated over the six-year period 1980-1985, except for the unemployment rate and the deficit on goods and services, which are the levels projected to obtain in 1985.

Source: 1980 Pre-workshop II reference solution of Informetrica Ltd.; CONTROL6YR0880 solution, August 1980, DRI; an unpublished simulation of the Economic Council of Canada entitled "Domestic Oil Price Increase $4/bb1/year—External Outlook Low", August 1980; and the Department of Finance.

Summary and Conclusions

The previous chapters have described in detail the medium-term projection of economic developments in Canada which underlies the fiscal calculations of the budget. Weak growth in the short term is anticipated to be followed after 1981 by a recovery in economic activity. However, the projected 1980-1985 annual average growth rate of 2.4 per cent is low by historical standards. The unemployment rate is expected to rise above 8.5 per cent by 1981 before declining slowly over the rest of the projection period. The rate of inflation is projected to reach double-digit levels in the short term, and to decline slowly after 1981.

It would have been possible to put together a projection which described a more attractive set of domestic developments over the period to 1985. Such a projection could have been based on more optimistic external assumptions: lower rates of increase in world oil prices, for example, or lower rates of inflation in the U.S. over the medium term. On the domestic side as well, more favourable price- and income-setting behaviour could have been assumed. A combination of more optimistic domestic and external assumptions could have formed the basis of a projection of higher real growth and lower rates of unemployment and inflation in Canada over the medium term.

At the same time, however, it would have been possible to develop a projection of poorer Canadian growth and price performance over the medium term, given some of the risks which there are in the outlook. Underlying the main risks in the projection is the current vulnerability of the Canadian economy. As a relatively small economy heavily dependent upon trade with other countries, Canada has often experienced major fluctuations in incomes and prices which have resulted from changes in patterns of economic activity outside its borders. A number of severe depressions in the 19th century, and the Great Depression of the 1930s, demonstrated that output in Canada could fail to grow, or could decline for several years in a row, because of factors outside of Canada's control. By the same token, the sustained high growth rates of output and low employment rates recorded in Canada in the 1960s and early 1970s reflected to a large extent the rapid growth occurring in most major industrialized countries, and the concomitant vigorous expansion of world trade.

Events since the early 1970s have highlighted once again the extent to which Canada's economic prospects depend upon conditions elsewhere in the world. There is now, however, and extra dimension to this vulnerability. This lies in the fact that, as a result of the changes which have occurred in the international oil market since 1973, the U.S. and the other major industrial economies of the world have themselves become increasingly vulnerable to events beyond their control. The second recession in less than a decade to have been brought on by dramatic increases in oil prices is now under way. It is likely to be some time before industrialized economies can look forward to sustained periods of high growth at relatively low rates of inflation. The Canadian economy, because of its openness to external forces, is significantly exposed to the new fragility in world economic relationships.

The Canadian economy is also vulnerable to the possibility of a renewed outbreak of inflation stemming from domestic sources. The rate of inflation is projected to decline only gradually over the first half of the 1980s. Yet this projection assumes that, by and large, Canadians understand that domestic energy prices will have to rise faster than other prices over the medium term. The projection also assumes that the real wage and salary declines which have been experienced over the past three years are not recaptured to a significant extent. The average annual rate of real wage growth over the period 1980-1985 is projected to exceed the average rate of productivity growth by only a marginal amount.

To the extent that Canadian wage-earners demand higher wage and salary increases, or businesses attempt to increase prices at more rapid rates than have been projected here, a wage-price spiral of equal or even greater destructiveness than that of the mid-1970s could develop. For the variety of reasons reviewed in this paper, such a spiral would almost inevitably lead to lower real growth, higher unemployment, and lower investment and productivity growth.

Appendix:

A Comparison of Department of Finance Medium-Term Projections; October 1980 and December 1979

Table 9 summarizes the main elements of the Department of Finance medium-term projections released with the present budget and with that of December 1979. As can be seen from the table, the short-term outlook has changed significantly since December of last year. However, the current economic projection covering the period 1982-1985 remains very similar to that of last fall.

Table 9
A Comparison of the Main Elements of the Department of Finance Medium-Term Projections, October 1980 and December 1979

	October 1980			December 1979		
	1980	1981	1982-1985[1]	1980	1981	1982-1985[1]
Main Aggregates						
GNE	–1.0	1.0	3.6	1.0	3.0	3.7
Productivity	–3.3	0.2	1.2	–0.4	0.8	1.3
Employment	2.4	0.8	2.4	1.4	2.2	2.4
Labour force	2.7	1.9	2.2	2.1	2.3	2.2
Unemployment rate (1985)	7.7	8.7	7.7	8.3	8.3	7.5
CPI	9.7	10.2	8.7	11.0	11.4[2]	8.8[2]
Aggregate Demand Components						
Consumption	0.2	1.3	3.8	2.3	2.6	3.7
Government expenditures	–0.6	0.0	1.6	–0.3	0.5	1.4
Residential investment	–13.8	4.6	1.3	2.2	7.1	4.0
Non-Residential investment	6.4	0.7	4.4	4.5	3.6	6.0
Total exports	–2.4	2.4	4.7	–0.6	4.4	4.6
Total imports	–2.4	2.0	4.5	0.5	3.1	4.4

[1] The 1982-1985 figures given in this table are average annual growth rates calculated over the four-year period, except for the unemployment rate, which is the level projected to obtain in 1985.
[2] High-price scenario.
Source: Department of Finance.

Last December, real GNE growth of 1 per cent and 3 per cent was forecast for 1980 and 1981, respectively. Currently, it appears that output will decline by 1 per cent in 1980, and increase by only 1 per cent next year. Employment growth has been stronger in 1980, and the performance of productivity much weaker, than were anticipated last December. The 1980 unemployment rate is now expected to be lower than was forecast last fall. However, the unemployment rate is now forecast to rise in 1981, rather than remaining at the 1980 level.

Average price growth in 1980 and 1981 is now expected to be lower than was forecast in December 1979. Last year's price projections included the effects of the excise tax on gasoline proposed in the budget, but not enacted into law. Food price increases have also been lower in 1980 than were anticipated last year. Consumer prices are currently forecast to increase by 9.7 and 10.2 per cent in 1980 and 1981, respectively; these rates of increases are 1.2-1.3 percentage points lower than those forecast in December 1979.

Most components of aggregate demand are now expected to record lower rates of growth in 1980 and 1981 than were anticipated last fall. The unexpected large increases in interest rates in the winter and spring of 1980 played a major role in reducing the volumes of both residential construction expenditures and consumer expenditures from previously forecast levels. As well, current high costs of financing together with lower than anticipated demand growth are likely to lead to a significant reduction in inventories later this year and early in 1981. Real exports are now expected to decline more sharply in 1980 than were forecast last December, as the recession in the U.S. has spread with unexpected speed to other OECD countries, and to recover more slowly in 1981. Import growth is also currently expected to be lower than was forecast last fall. Business non-residential investment growth is now expected to be stronger in 1980 than was forecast last year. Non-residential investment in the early part of 1980 was stronger than was originally anticipated; this reflected in part the recovery of real rates of return in 1978 and 1979. In 1981, however, only marginal growth in this component of demand is now projected.

In contrast to the changed short-term outlook, the projected 1982-1985 average annual rates of growth of GNE, productivity, employment and the labour force are very similar to those projected last December. The projected 1985 unemployment rate is only slightly higher than that projected last year. The average annual rate of CPI growth is also very similar to that of the December 1979 projection.

Most of the components of aggregate demand—consumption, government expenditures, exports and imports—are also projected to grow over the 1982-1985 period at rates similar to those forecast last December. Residential and non-residential investment expenditure growth is now projected to be weaker. This reflects both the expectation that interest rates will be higher on average over the medium term than was expected to be the case last year and, as well, the lowering of the projected growth of electricity investment.