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Service Account of the Balance of Payments

November 1978

One of a series of papers
on medium and long-term
economic issues



Department of Finance
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Ministère des Finances
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PREFACE

Canada's balance of payments on service account has traditionally been in deficit. However, the deficit widened rapidly in recent years from 2.1 per cent of GNE in 1974 to 3.4 per cent of GNE in 1977. This paper analyses the factors responsible for the sharp widening of the deficit on service account in recent years and examines the factors that will be important in determining the performance of the balance on service account over the medium term. The travel, investment income and other services accounts are examined in detail.

The paper shows that cyclical and price factors played a significant role in the widening of the deficit on service account. Cyclical factors were important in the case of the travel and investment income accounts. Developments on travel account were also significantly influenced by the worsening of the competitive position of the Canadian tourism industry. Over the medium term, the deficit on investment income account is likely to widen further relative to GNE. However, with economic recovery abroad and an improved domestic competitive position, the widening of the deficit on investment income account could be offset by a narrowing of the deficit on travel account. The paper emphasizes the importance of lower domestic rates of inflation for the performance of the balance on service account over the medium term.

The analysis contained in this paper has been discussed with persons in several independent organizations - the C.D. Howe Research Institute, Informetrica Ltd., the Institute for Policy Analysis of the University of Toronto and several faculty members in the Department of Economics at the University of British Columbia. Their comments, criticisms and suggestions have been extremely helpful. The responsibility for the views expressed in this paper, however, rests entirely with the Department of Finance.

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1. INTRODUCTION

The document, Canada's Economy,¹ underlined the importance of developments in the foreign sector in explaining Canada's current economic position and in shaping the medium-term development of the economy. A significant factor in the recent slowdown was the deterioration in the current account of the balance of payments. The current account deficit widened very rapidly from a small surplus in 1973 to annual deficits in excess of \$4 billion over the period 1975-1977. Relative to GNE, the current account deficit increased from one per cent in 1974 to 2.9 per cent in 1975. Although still high in dollar terms, the current account deficit subsequently declined somewhat in relation to GNE, to 2 per cent in 1976 and 1977.

The factors responsible for the sharp deterioration of Canada's external payments position in respect of current transactions emphasized in Canada's Economy covered cyclical, cost and structural factors. Cyclical factors were obviously very important, especially in the case of the trade account, as Canada operated through 1974 and 1975 much closer to capacity than did the economies of its trading partners. The narrowing of wage differentials between Canada and the United States, not fully offset by productivity gains, resulted in a much faster increase of unit labour costs in Canada than in the United States and in a significant deterioration of Canada's competitive position vis-à-vis the United States. Structural factors peculiar to certain sectors, especially the energy and auto sectors, were also important in influencing the behaviour of the external sector.

Against the experience of recent years, Canada's Economy envisaged a continued improvement in the foreign sector based on a recovery of the trade balance strong enough to offset widening deficits in respect of service transactions. This view was based on anticipations of continued economic recovery abroad and of an improved competitive position of Canadian industry. Canada's Economy, however, noted that there is, at present, an unusual degree of uncertainty surrounding balance of payments projections. It was also noted that it is not possible to say, at this stage, that the balance of payments will not represent a constraint to achieving the medium-term outlook.

The purpose of this paper is to provide a more detailed analysis of some of the factors responsible for the sharp deterioration of the performance of the external sector in recent years and of the medium-term outlook. A complete analysis would have to cover all components of the current and capital accounts of the balance of payments. The present analysis, however, deals only with the service component of the current account.

¹ Canada's Economy - Medium-Term Projections and Targets, Department of Finance, February, 1978.

The analysis presented in this paper, while limited in coverage, deals with what observers have identified as a critical element of Canada's balance of payments performance in the medium term. While the service deficit has grown steadily since the early 1960s, the rate of increase over the past three years has been unprecedented. The deficits on investment income and travel accounts widened, respectively, to \$3.5 billion and \$1.6 billion in 1977 from \$1.6 billion and \$0.3 billion in 1974. The deficit on other services account also widened from \$1.2 billion in 1974 to \$1.7 billion in 1977.

Concern has been expressed that the deterioration of recent years reflected more than cyclical factors. The size of the deterioration has been seen as indicative of fundamental shifts in Canada's external payments position. Such structural shifts and underlying rigidities in the service account could result in a faster pace of widening of the service deficit than could be offset by improvements in the performance of the trade account. The resulting pattern of current account deficits would then prevent the foreign sector from being a net contributor to growth over the medium term. As mentioned in Canada's Economy, while the needed current account performance could be achieved through a further depreciation of the dollar, such a policy would make the achievement of lower inflation rates more difficult. It is the need to simultaneously reduce the rates of unemployment and inflation which makes the performance of the current account so critical.

The evolution of the major components of the service account will be examined in this paper with a view to identifying the factors responsible for the widening deficit. Attention will be paid, in particular, to the following two questions: first, have there been significant shifts in the structural characteristics of the service account, and, second, have such structural shifts and underlying rigidities reduced the flexibility of response of the service account to changes in the exchange rate or to an improved price performance?

The second question above is analyzed in this paper in terms of the effects on the various components of the service account of a depreciation of the exchange rate. This is done to illustrate both the anticipated effect of the depreciation of the dollar and the effect of an improvement in the competitive position of the domestic economy, whether the improvement originates from a depreciation of the exchange rate or an improved domestic price performance. The external balance on travel is examined in section 2, the balance on investment income in section 3, and the balance on other services in section 4. The main conclusions of the paper are summarized in section 5.

The conclusion of the paper is that even with the depreciation of the dollar and the improvement in domestic price performance outlined in Canada's Economy, the deficit on service account is likely to remain high relative to the postwar experience. The available evidence, however, suggests that, with economic recovery abroad and an improved competitive position, the widening of the deficit on service account relative to GNE would be arrested.

In the absence of significant reductions in the deficit on service account, the improvement in Canada's foreign sector implies a strong surplus performance in merchandise trade. As mentioned in Canada's Economy, this will have to occur despite a likely deficit in the energy component, and a possible continuing large deficit in motor vehicles. In view of the sensitivity of both the merchandise trade and service accounts to the performance of domestic prices and costs relative to those abroad, the achievement of an improved inflation performance will be of great importance. The medium-term outlook for the service account and its various components, like other elements of the medium-term growth path outlined in Canada's Economy, thus depends importantly on the achievement of an improved inflation performance.

The attention paid to the service account in this document reflects the importance of the service account for the performance of the current account over the medium term. This attention, however, should not be interpreted to mean that improvements on service account are a necessary condition for an improved performance on current account. Unfavourable developments on service account would in time result in offsetting adjustments in other components of Canada's external payments position. Such unfavourable developments could also be offset by improving the competitiveness of Canadian services. Artificial impediments to international trade in services would likely merely shift pressures onto other components of the external payments position.

2. TRAVEL BALANCE

2.1 Introduction

Canada has been a net importer of travel services on a generally persistent basis over the last 25 years (1963 and 1967 being the only years in which surpluses were recorded reflecting, respectively, the effects of the 1960-1962 depreciation and of Expo 1967). However, three distinct historical sub-periods are clearly discernible in the evolution of Canada's travel balance.

The first period, characterized by steadily widening deficits, extended from the early 1950s until 1961 when sharp improvements in the travel balance with the United States, which recorded a surplus in 1962 for the first time in ten years (Table 1), significantly reduced the size of the overall deficit. During the second period, extending from 1962 through to 1974, the balance with the United States remained in surplus, partly offsetting the continuing deficit with other countries. However, with the reversal of the travel balance between Canada and the United States in 1975 and sharply increased payments to other countries, the overall deficit in respect of travel transactions started widening at an unprecedented pace.

The extent of the deterioration of the travel balance, at a time when other developments on current and capital accounts were also creating concern as to the viability of Canada's external payments position, has generated much discussion of the underlying causes of the travel deficit and the possible need for policy action. In particular, changes in tastes (as reflected, especially, in increased winter vacations to warmer climates), changes in travel regulations making air charters available for international but not domestic travel and other causes of a structural nature have received increasing attention. Such factors are suggestive of basic, in some cases difficult to reverse, changes in the underlying determinants of Canada's travel balance.

In order to assess the medium-term outlook for the travel balance and the need for policy initiatives, it is necessary to determine the relative importance of cyclical and structural factors in shaping the developments of recent years. To the extent that the sharp deterioration of the travel balance since 1974 is the result of emerging structural changes, then even with economic recovery abroad and improved domestic competitiveness, the travel deficit would remain somewhat larger than in the past.

This section examines the determinants of receipts and expenditures for travel with a view to identifying the factors responsible for the rapid widening of the travel deficit and to laying the basis for discussing the medium-term outlook for the travel balance. Subsections 2.2 and 2.3

Table 1

Balance of International Payments on Travel Account, 1950-1977

	With the United States	With Other Countries	Total
(millions of dollars)			
1950	67	-18	49
1951	12	-18	-6
1952	-37	-29	-66
1953	-25	-38	-63
1954	-37	-47	-84
1955	-60	-61	-121
1956	-82	-79	-161
1957	-78	-84	-162
1958	-104	-89	-193
1959	-97	-110	-207
1960	-87	-120	-207
1961	-24	-136	-160
1962	93	-136	-43
1963	161	-137	24
1964	109	-159	-50
1965	112	-161	-49
1966	102	-162	-60
1967	537	-114	423
1968	182	-211	-29
1969	72	-286	-214
1970	156	-372	-216
1971	194	-396	-202
1972	104	-338	-234
1973	87	-383	-296
1974	132	-416	-284
1975	-250	-477	-727
1976	-610	-581	-1,191
1977	-755	-886	-1,641

Source: Statistics Canada, Travel Between Canada and Other Countries, Cat. 66-201, Annual, 66-001 Quarterly.

examine, respectively, the importance and contribution of cyclical and price factors. Subsection 2.4 assesses the contribution of structural factors. The anticipated effects of a change in exchange rate are examined in 2.5 and the medium-term outlook is discussed in subsection 2.6.

On balance, the available evidence suggests that most of the recent rapid widening of the travel deficit in recent years is due to differences in the relative cyclical performance of the Canadian and United States economies and to the longer-term deterioration of the competitive position of the Canadian tourism industry. With economic recovery abroad and improved domestic competitiveness, some improvement of the performance of the travel balance relative to GNE can be expected. The anticipated improvement, however, is highly dependent on the projected performance of domestic costs and prices.

2.2 The Role of Cyclical Factors

Travel to and from Canada can be thought of as falling into three different categories - business, visiting friends or relatives and other pleasure recreation or holiday. Vacation-related travel, however, constitutes by far the most important reason for travel. About two-thirds of Canadians going abroad and foreigners visiting Canada do so for vacation.

Since vacations, unlike consumer durables, cannot be used as collateral for a loan, a vacation will generally be financed from savings accumulated in the course of the year. Travel receipts and expenditures can thus be expected to be quite sensitive to fluctuations in income since vacation-related budgets are likely to be adjusted, before necessities, in response to fluctuations in income. The income elasticity of travel expenditures can be expected to vary across countries but most empirical analysis of travel expenditures have found that such expenditures have a relatively high income elasticity.

Of particular interest for Canada's travel balance is the income elasticity of expenditures by Canadians for travel to the United States relative to the income elasticity of expenditures by residents of the United States for travel in Canada. Canadian travellers going to and remaining in the United States for more than a day¹ increased significantly as a proportion of the Canadian population, from 25 to 30 per cent in the early 1960s to more than 40 per cent in recent years. However, the increase in the proportion of the Canadian population visiting the United States was more than offset by the decline in expenditures per traveller relative to total consumption per capita resulting in a net reduction of the share of total Canadian consumption expenditures spent on travel to the United States (Table 2).

There has been no such decline in the share of U.S. consumption expenditures spent on travel to Canada. These differences in the long-term trend of the share of consumption expenditures spent on bilateral travel suggest that the demand for travel to Canada by United States residents is significantly more income elastic than is Canadian demand for travel to the United States. While these long-term trends in the share of consumption expenditures spent on bilateral travel were reversed in the last three years for both Canada and the United States, the reversal probably reflected the effect of the deterioration of the competitive position of the domestic tourist industry (see subsection 2.3 below).

¹ Long-term travelling (i.e., more than one day) accounts for about 90 per cent of payments to and receipts from the United States. The data on travellers refer to trips. Since some people travel more than once in a year, the proportion of the population visiting the United States is less than indicated in the text.

Table 2

Share of Total Consumption Expenditures Spent
on Bilateral Travel, Canada - United States, 1951-1977

	Canada	United States
	(per cent)	
1951-1955	1.90	0.12
1956-1960	1.86	0.12
1961-1965	1.55	0.14 ⁽¹⁾
1966-1970	1.69	0.15
1971	1.61	0.16
1972	1.48	0.14
1973	1.51	0.14
1974	1.43	0.15
1975	1.63	0.13
1976	1.77	0.13
1977	1.86	0.12

⁽¹⁾Excludes 1967

Source: Canadian data calculated from Statistics Canada, Travel Between Canada and Other Countries, Cat. 66-201, and National Income and Expenditure Accounts, Cat. 13-001. American data calculated from United States Department of Commerce, Survey of Current Business, and Economic Report of the President.

Table 3 shows estimates of the income elasticity of travel spending for both Canada-United States bilateral travel and travel between Canada and other countries. These estimates (and estimates of the elasticity of travel spending with respect to relative prices and exchange rates reported below) were obtained from a study of Canadian annual travel payments and receipts over the period 1962-1976. Estimates for Canada, the United States and other countries reported in similar studies are also shown for comparison purposes.

The estimates shown in Table 3 confirm that travel expenditures are sensitive to changes in the level of income. In the case of both receipts and payments, however, available estimates of income elasticity cover a rather wide range. As was mentioned above, of particular importance in the case of Canada's travel balance is the relative size of the income elasticity of Canadian and American travel spending in the neighbouring country. Table 3 shows that there is no agreement on this issue.

In contrast with some other studies, the LRSA estimates support the view that the elasticity of spending by United States residents for travel in Canada exceeds the corresponding Canadian elasticity of spending for travel in the United States. The estimates obtained from the study of Canadian and U.S. travel spending over the period 1962-1976 suggest that the elasticity of spending by United States residents for travel in Canada is 2 to 3 times greater than the corresponding Canadian elasticity for spending in the United States.

Table 3

Elasticity of Real Travel Spending with
Respect to Total Real Consumption Expenditures

	Long Range and Structural Analysis Division (LRSA)	Other Studies ^(1,2)	
		Low	High
Canadian receipts			
from United States	2.41 ⁽³⁾	0.58	1.73
same day travel	2.47*	n.a.	n.a.
long-term travel	2.40*	n.a.	n.a.
from other countries	1.83*	1.91	2.78
Canadian payments			
to United States	0.80 ⁽³⁾	0.59	1.10
same day travel	2.17*	n.a.	n.a.
long-term travel	0.66*	n.a.	n.a.
to other countries	1.78*	1.36	3.07

*Significantly different from zero at the 95 per cent level of confidence.
See Appendix I for complete specification.

(1) Estimates of elasticity of travel spending are generally for real travel expenditures with respect to real income.

(2) Part of the difference between the estimates reflects differences in the periods covered by the various studies, differences in specifications and differences in estimation procedures. Other differences between the studies include the use of quarterly data in some studies and of annual data in other.

(3) Weighted average of elasticity estimates for same day and long-term travel with weights equal to the respective share of each kind of travel in 1971.

Source: Jacques R. Artus, "An Econometric Analysis of International Travel", International Monetary Fund, Staff Papers, Vol. XIX, No. 3; Peter H. Gray, International Travel and International Trade, Heath Lexington Books, 1970; Marian E. Bond, "A Model of International Travel and Passenger Transportation", IMF (mimeo) DM/78/35, April 1978; Paul H. Lapointe, "Canada's International Travel Account; Price and Income Elasticities of Travel Expenditures Abroad", (mimeo) Treasury Board Secretariat, January 1978; Economic Analysis Division, Department of Finance; International Finance Division, Department of Finance; and Long Range and Structural Analysis Division, Department of Finance.

While it is always difficult to be precise as to the value of elasticities, there appear to be strong theoretical and empirical reasons for arguing that the income elasticity of travel spending by U.S. residents in Canada exceeds the income elasticity of travel spending by Canadians in the United States. In particular, the evolution of Canada's bilateral travel balance with the United States since the early 1960s is more difficult to explain if one believes that the elasticities are equal.

The growth of Canadian consumption expenditures at constant prices over the period 1961-1973 exceeded the growth of real consumption expenditures in the United States by more than one per cent per year. Moreover, at the same time, the prices of travel-related activities were increasing steadily faster in Canada than in the United States, thus undermining the competitiveness of the Canadian tourist industry (see 2.3 below). With such differences in growth and price performance, and in view of the apparent high sensitivity of travel spending to relative prices, the narrowing of the travel surplus or the emergence of a travel deficit would have been expected. The Canadian travel surplus with the United States, however, remained relatively unchanged until 1975. This suggests that the favourable differential in income elasticities was sufficient to offset the effect on the travel balance of both the relatively high growth of consumption expenditures in Canada and the worsening competitive position of Canadian-based travel.

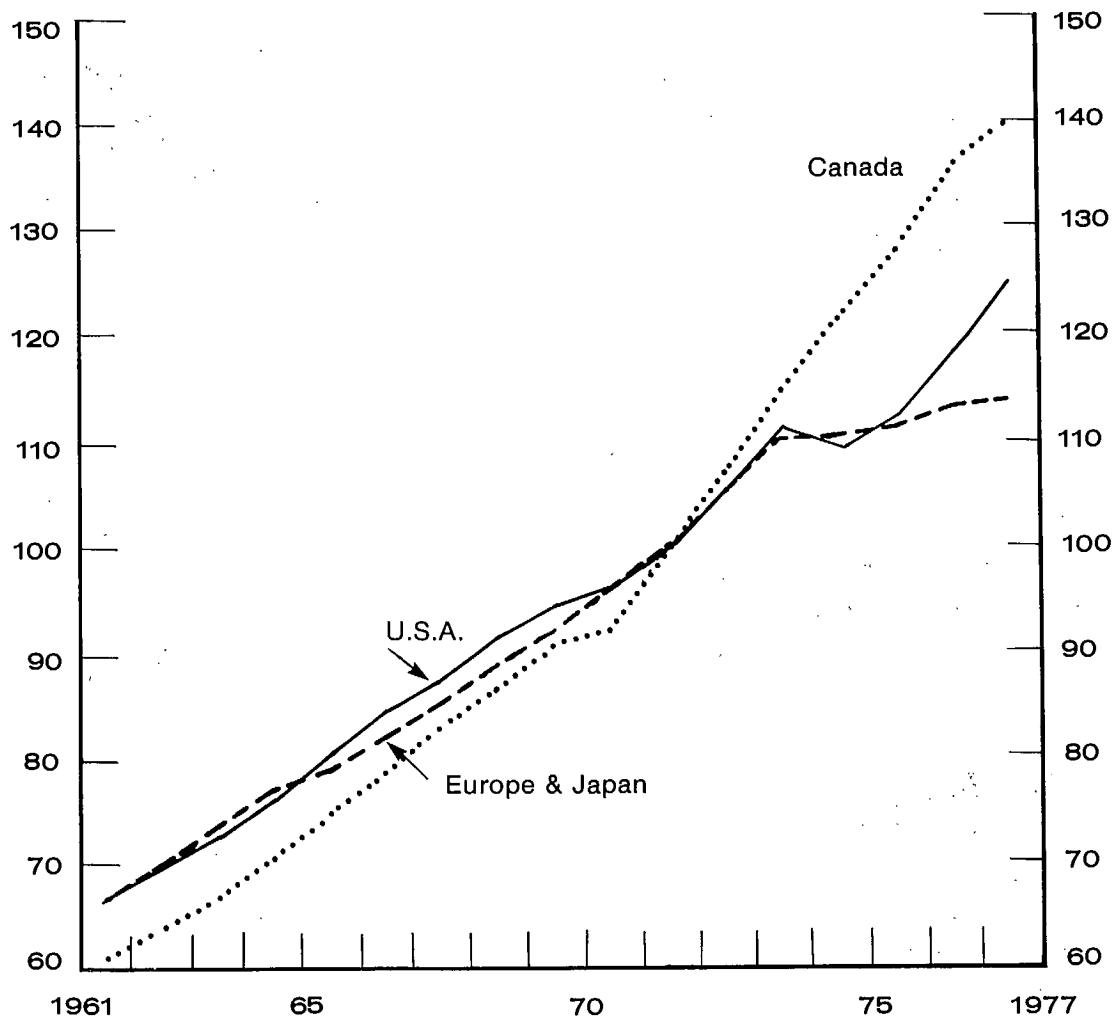
The larger income elasticity for U.S. travel spending in Canada could be the result either of the longer distances that must be travelled, on average, by United States residents than by Canadians to visit the neighbouring country or of different tastes¹. The longer distance that must be travelled, on average, by U.S. residents to reach the border increases the cost of trips to Canada. Trips to Canada may thus be more of a luxury for the U.S. traveller (and thus more sensitive to fluctuations in income) than trips to the United States by Canadians due to the southern concentration of the Canadian population.

As regards differences in tastes, the relatively high number of immigrants to Canada through the period since the Second World War may have imparted a preference for overseas travel to the Canadian population. As a result of the skill and other requirements of Canadian immigration policy, many of these immigrants probably have high enough incomes to finance such overseas travel. This latter factor may be responsible, in part at least, for the higher income elasticity of spending for travel overseas than to the United States shown in Table 3.

¹ Income elasticity estimates may also include the effect of longterm gradual changes such as the lengthening of paid vacation time (see below). Differences between the two countries as regards such longer term changes would also influence the relative size of the income elasticity estimates.

Chart 1

Indexes of Real Consumption Expenditure*, (1971 = 100),
Canada, the United States, Europe and Japan, 1961-1977



*Indexes for Canada and the United States are based on National Accounts estimates of real consumption. The Europe and Japan index is based on a weighted average of nominal consumption expenditures deflated by consumer price indexes, with weights equal to the share of the various countries in the origin of visitors to Canada; countries included are the United Kingdom, France, Germany, Switzerland, the Netherlands, Italy and Japan.

Source: Statistics Canada, National Income and Expenditure Accounts, cat. 13-531; United States Government, Economic Report of the President; IMF International Financial Statistics; Long Range and Structural Analysis Division, Department of Finance.

The relatively high income elasticity of U.S. travel spending in Canada thus exerted a favourable influence on the evolution of Canada's travel balance through the 1960s and early 1970s. A high income elasticity, however, also amplifies the downward effect on travel receipts of a contraction in the level of total consumption spending or of a slowdown in the rate of growth of consumption.

In 1974 and 1975, with the Canadian economy operating much closer to capacity than did the economy of the United States, consumption expenditures increased significantly faster in Canada than abroad (Chart 1). Consumption expenditures at constant prices actually declined in the United States in 1974. The slower growth of foreign consumption expenditures resulted in a sharp slowdown of the rate of increase of Canadian travel receipts. Receipts from the United States, in particular, increased by only \$9 million in current dollars in each of 1975 and 1976, representing an estimated cumulative decline at constant prices of \$232 million, equivalent to 17 per cent of 1974 receipts from the United States (see below).

2.3 The Role of Price Factors

Economic theory also suggests that the demand for travel, especially travel for vacation or holiday, should be responsive to differentials in the price of different travel packages. In some cases, increases in the prices of travel-related activities in an intended vacation area may increase the cost of a planned vacation beyond an individual's travel budget and force a change in vacation plans to a less preferred area. Alternatively, a reduction of prices in a different vacation area may result in some travellers altering previous vacation preferences.

The purpose of this subsection is to examine the performance of travel prices in Canada relative to prices in other countries and to identify the role played by such relative prices in shaping the evolution of Canada's travel balance. First, the performance of prices for travel-related goods and services in Canada relative to other countries is examined. Secondly, using these data on the cost of travel-related goods and data on the cost of transportation, the price of a domestic vacation relative to a foreign vacation is examined. Finally, the sensitivity of travel receipts and payments to relative price differences is examined.

The conclusion of the section is that, for Canadian travellers, domestic travel had become relatively more expensive than travel abroad. For foreign travellers, the price of a Canadian vacation relative to a domestic vacation may have increased or decreased depending on the share of the traveller's budget spent on international airfare. For example, the prices of travel-related goods and services increased faster in Canada than in the United Kingdom. Because of the small increase in international airfares, however, the price of a vacation in Canada relative to a domestic vacation still declined from the point of view of the U.K. traveller. In view of the relatively high sensitivity of travel spending to changes in relative prices, the deterioration of the competitiveness of Canada's tourist industry played a significant role in the evolution of Canada's travel balance.

2.3.1 Travel-Related Goods and Services

Data on the performance of prices and costs of vacation or holiday travel in different countries are generally either not readily available or not available over a period long enough to compare the relative performance of such prices and costs in different countries. Information is, however, available on the prices prevailing in different countries for goods and services on which travellers can be expected to spend a significant portion of their travel budget, for example, food, shelter, and transportation. Such price indexes for items entering the travellers' budget were used to construct travel price indexes for several countries.

Chart 2 shows the ratio of Canada's travel price index relative to that of other countries. This is an index of the cost of travel-related goods and services in Canada relative to other countries. A rising index indicates that prices were rising faster in Canada for such goods and services than in the other countries. In the case of international travel, changes in the relative price of travel in different areas may be the result of either or both differences in the rate of increase of prices in the different areas or changes in the exchange rate of the currency in which the traveller earns and saves his income. Chart 2 shows indexes both in domestic prices and with prices adjusted for changes in exchange rates.

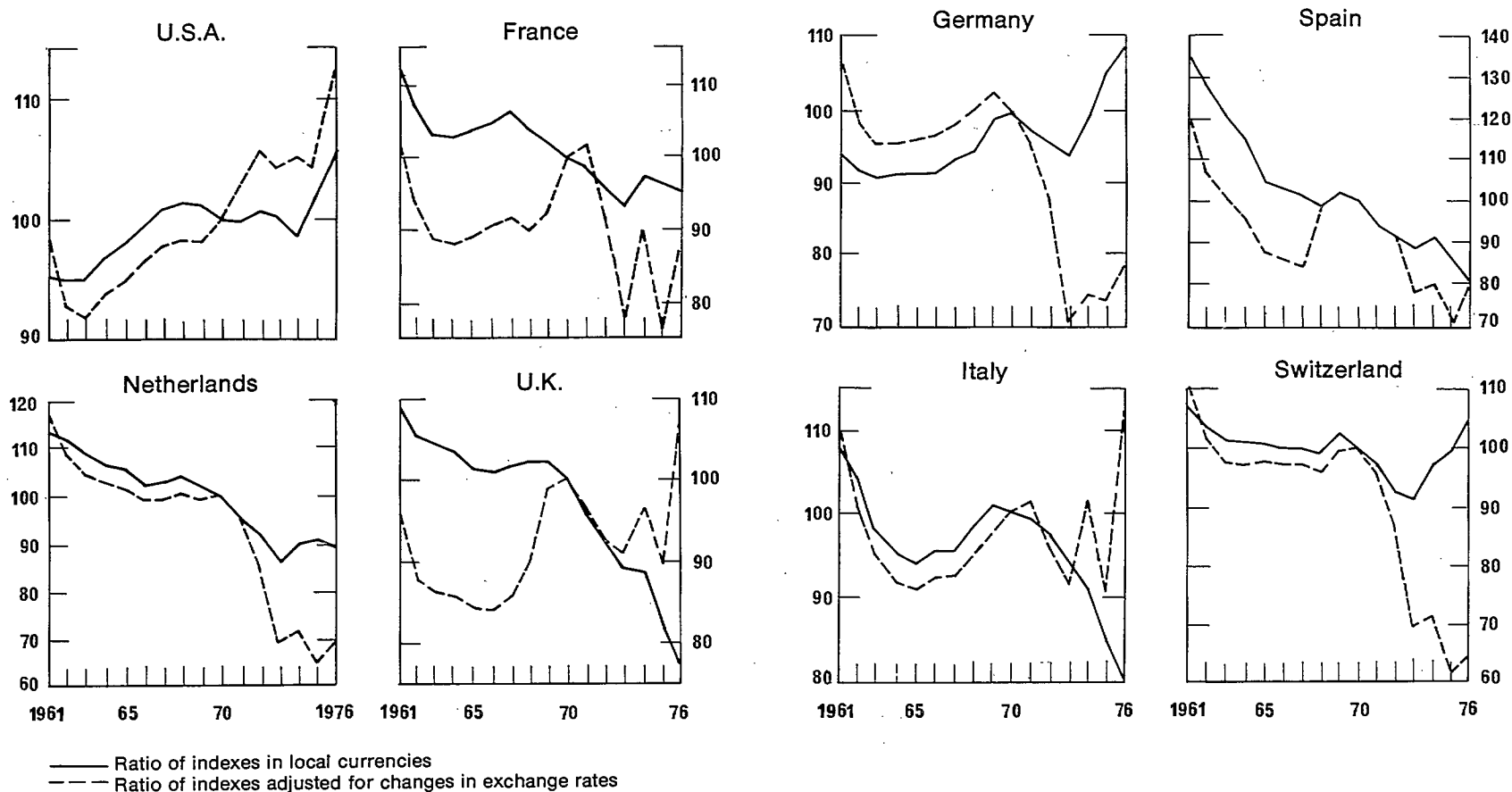
Except for the United States and Germany, the price of travel-related goods and services did not increase as fast in Canada as abroad when measured in domestic currencies. When the comparison is made between prices adjusted for changes in the exchange rate for the Canadian dollar, the relative cost of vacationing in Germany versus Canada, however, moved clearly in Canada's favour reflecting the appreciation of the German mark. The opposite reversal takes place in the case of the United Kingdom-Canada comparison, reflecting the depreciation of sterling. Taking into account changes in exchange rates, Canadian prices for travel-related goods and services increased less quickly than in most countries, but more importantly increased faster than prices in the United States and the United Kingdom, the main origins and destinations of travel to and from Canada.

Chart 3 provides a more detailed comparison of the prices of travel-related goods and services in Canada relative to the United States. It appears that the deterioration of the competitive position of Canada's tourism industry relative to the industry of the United States was particularly marked for non-transport-related expenditures, in particular,

¹ The methodology used in constructing the travel price indexes is described in Appendix II.

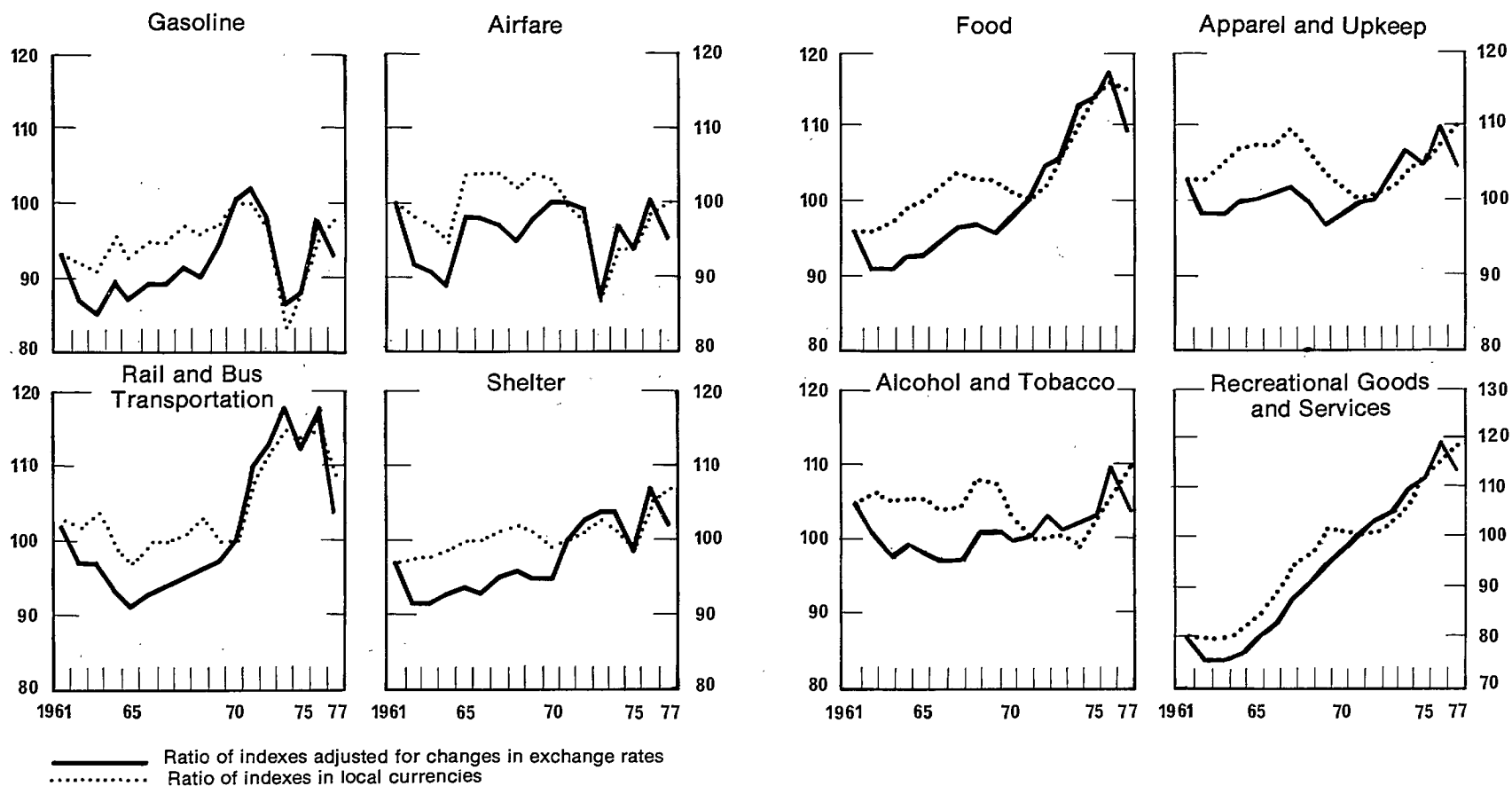
Chart 2

Ratios of the Canadian Travel Price Index to the Travel Price Indexes of Selected Other Countries, 1961-1976 (1970 = 100)



Source: Long Range and Structural Analysis Division, Department of Finance

Chart 3
Index of Relative Prices (Canada/US) of Travel-related Goods
and Services, 1961-1977



Source: Long-Range and Structural Analysis Division, Department of Finance.

recreational goods and services and food items. These items together account for an estimated 35 per cent of the traveller's budget¹.

2.3.2 Foreign vs. Domestic Vacations

Charts 2 and 3 concentrate on an international comparison of the evolution of the prices of travel-related goods and services within countries. However, another important component of the cost of overseas vacations, namely, airfare, must be taken into account in assessing the evolution of the relative price of domestic and foreign travel.

The relative stability of international airfares since the early 1960s lowered the relative cost of international air travel and resulted in a general reduction of the relative price of overseas vacations.^{2,3} Chart 4 illustrates an index of the relative cost to a traveller of a vacation in his home country compared to a vacation outside (after adjustments for changes in exchange rates). Chart 4 also shows indexes for the two component costs of a vacation - transport and non-transport.

The price of an overseas vacation relative to a domestic vacation is estimated to have declined by 20-30 per cent for both Canadian and British travellers during the period 1961-1977. In the case of the Canadian traveller, the decline in the relative price of a U.K. vacation reflected both the slower increase in the prices of travel-related goods and services in the United Kingdom (taking into account the depreciation of sterling) and the relatively slow increase of airfares. In the case of the U.K. traveller, the relative stability of international airfares more than offset the faster increase in the prices of travel-related goods and services in Canada (after adjustments for exchange rates).

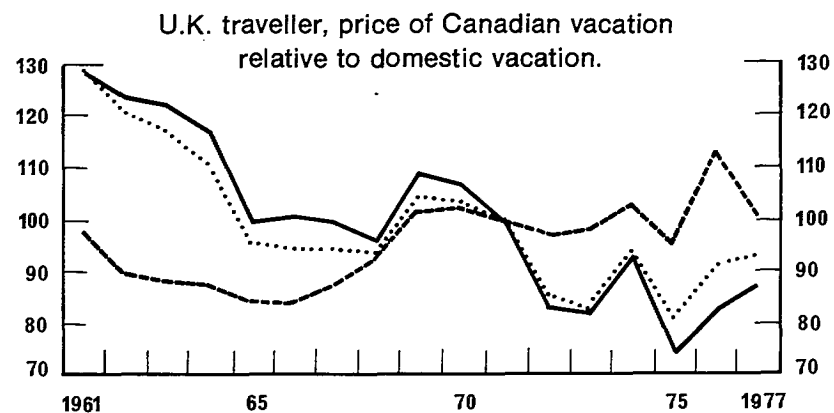
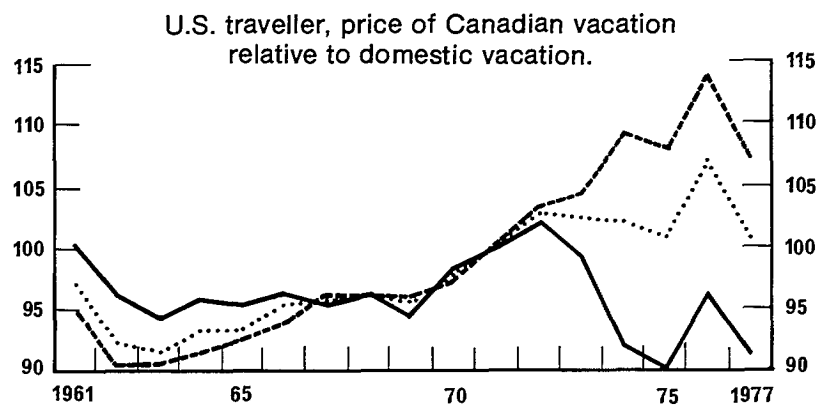
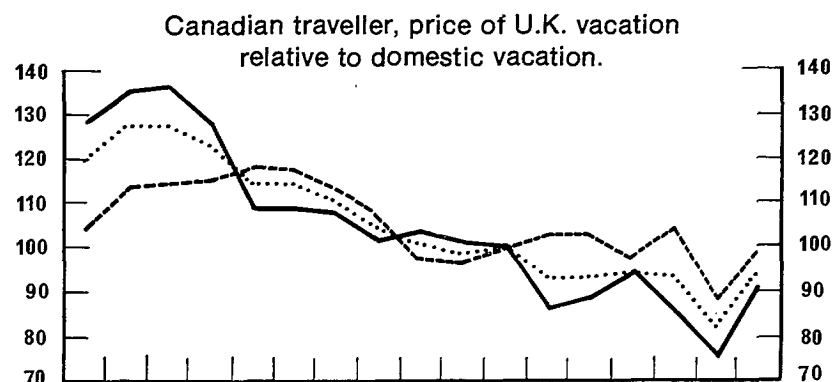
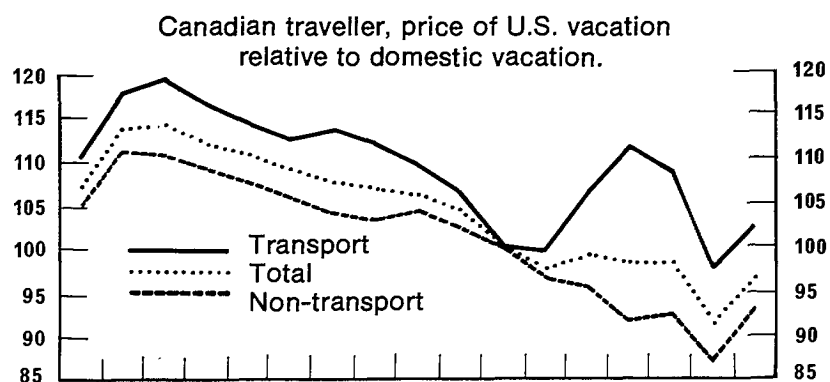
¹ A confidential study of relative prices and costs in a sample of hotels in Canada and the United States undertaken for the Department of Finance confirms that room rates, for example, increased faster in Canada than in the United States. The study also examines components of hotel operation costs to identify the sources of cost differentials. Travel cost differences between Canada and the United States are also examined in Tourism - Economic Performance, Discussion Paper, Department of Industry, Trade and Commerce and The Canadian Tourism Industry, Report by a Sector Task Force, 12 July, 1978.

² For example, the CP Air economy fare from Vancouver to Amsterdam increased at an average rate of 0.7 per cent per year over the 1961-1976 period compared to 4.6 per cent for the Canadian CPI. The increase in domestic airfares, although slower than the increase in CPI, exceeded the increase in international airfares. For example, the economy fare from Vancouver to Toronto increased from 26 per cent of the Vancouver-Amsterdam fare in 1961 to 42 per cent in 1976 and from 66 per cent of the Vancouver-Mexico City fare in 1961 to 93 per cent in 1976 (source: Canadian Aviation, June 1977, p. 39).

³ In the absence of information on charters and other promotional fares, economy fares were used to represent the cost of air travel. Since the relative importance of lower-fare packages increased during the period since the early 1960s, the airfare index underestimates the decline in the relative price of air travel.

Chart 4

Prices of Foreign Vacations Relative to Domestic Vacations, for
Canadian, American and United Kingdom Travellers,
1961-1977 (1971 = 100)



Source: Long Range and Structural Analysis Division, Department of Finance.

Chart 4 also shows the evolution of the relative price of a Canadian versus an American vacation (including airfare for travel between the two countries). The price of a vacation in the United States relative to the price of a vacation at home for a Canadian traveller is seen to have declined by about 20 per cent between 1962 and 1976. During this period, the bilateral travel balance turned from a surplus to a deficit. The long-term decline reflected the appreciation of the dollar after 1970, the relatively faster increase in domestic prices of travel-related goods and services and the relatively lower cost of air travel. Even with the depreciation of the dollar in late 1976 and 1977, the average price of a vacation in the United States in 1977 relative to the price of a Canadian vacation was still 15 per cent lower than in 1962 for a Canadian resident and 9 per cent for a resident of the United States. This differential, however, was reduced as the dollar continued to depreciate through 1977 and 1978.

2.3.3 Sensitivity of Travel Spending to Relative Prices

The evidence examined above suggests that the performance of Canadian prices for travel-related goods and services relative to other countries has been mixed. However, the competitive position of Canada's travel industry has gradually deteriorated relative to some countries, notably the United States and the United Kingdom, Canada's two most important travel partners.

In the case of Canada-U.S. travel, the relative price of a Canadian vacation has increased from the point of view of both Canadian and U.S. travellers. In the case of Canada-U.K. travel, the relative price of a vacation in the United Kingdom clearly declined from the point of view of the Canadian traveller. From the point of view of the U.K. traveller, however, the relative stability of international airfares offset the faster increase of Canadian prices and resulted in a reduction of the price of a vacation in Canada relative to a vacation in the United Kingdom.

To assess the importance of these developments on the evolution of Canada's travel balance it is necessary to look not only at the relative performance of Canadian travel prices but also at the sensitivity of travel payments and receipts to changes in such relative prices. Table 4 shows estimates of the elasticity of Canadian travel payments and receipts with respect to changes in relative prices and exchange rates. Estimates obtained in similar studies are again also shown for comparison purposes.

¹ The different magnitudes of changes in the relative price facing the residents of the two countries reflect the non-symmetrical impact of lower airfares on relative prices, making a vacation in the United States even cheaper for a Canadian and offsetting part of the higher cost of a Canadian vacation for a resident of the United States.

In some cases, the transport and non-transport components of the travel price indexes were separated for estimation purposes. In these cases, both individual elasticity parameters are reported, the one on the left referring to the transport component and the one on the right referring to the non-transport component. In all cases where the transport and non-transport components were separated, the elasticity of travel spending with respect to the price of non-transport goods and services was found to be greater than the elasticity of spending with respect to transport prices.

This latter result probably reflects the greater relative importance of non-transport expenditures in the traveller's budget. For example, non-transport expenditures are estimated to account for almost two-thirds of total travel spending in Canada and the United States. In the case of Canadian receipts from and payments to countries other than the United States, the failure to identify significant elasticity estimates for transport prices is probably due to the non-availability of a price index including charters and other such promotional fares. The only airfare index available related to economy air travel.

In many cases, the elasticity of travel spending with respect to exchange rates was found to differ from the elasticity of spending with respect to relative prices. Since domestic and foreign prices cannot be compared without converting foreign prices into domestic currency, the elasticity of travel spending with respect to exchange rates or relative prices would be expected to be the same.

However, similar differences between the elasticity of travel spending with respect to prices and to exchange rates have also been found in other studies. J. Artus¹, in particular, has suggested that such differences may be the result of differences in the quality or certainty of the traveller's knowledge. When planning his vacation, a traveller can learn easily about prevailing exchange rates but generally must be satisfied with less accurate information concerning foreign prices, relying on information obtained either at the time of a previous trip or from other travellers to the planned vacation area. The procedure followed in the study of elasticities allowed both for the possibility of equal elasticities with respect to relative prices and exchange rates and for the possibility of different elasticities. The final elasticity estimates were selected on the basis of goodness of fit statistics and significance of the estimates.

Once again, the available estimates of elasticity cover a rather wide range. The LRSA estimates suggest that travel expenditures by Canadians have been highly sensitive, during the period since the early 1960s, to changes in the relative price of domestic and foreign travel. Foreign travel to Canada was also found highly sensitive to changes in relative prices. However, some of the estimates in Table 4 seem rather high and may reflect the presence of collinearity between the independent variables.

¹ J. Artus, op. cit., p. 587.

Table 4

Elasticity of Real Travel Spending with Respect
to Relative Prices and Exchange Rates⁽¹⁾

Relative Prices	Long Range and Structural Analysis Division		Other Studies	
	Transport	Non-Transport	Low	High
Canadian receipts				
from United States		-3.63 ⁽²⁾	-1.44	-3.74
same day travel	-	: -3.55*	n.a.	n.a.
long-term travel	-1.16	: -5.34*	n.a.	n.a.
from other countries	-	: -1.81*	-0.61	-2.13
Canadian payments				
to United States		-2.30 ⁽²⁾	-1.21	-5.56
same day travel		-1.04	n.a.	n.a.
long-term travel	-1.59*	: -2.91*	n.a.	n.a.
to other countries	-	: -0.93*	-0.77	-1.18
<u>Exchange Rates</u>				
Canadian receipts				
from United States		-3.89 ⁽²⁾	-1.21	-2.38
same day travel		-3.55*	n.a.	n.a.
long-term travel		-3.94*	n.a.	n.a.
from other countries		-1.81*	-0.61	-2.86
Canadian payments				
to United States		0.63 ⁽²⁾	-1.21	-2.47
same day travel		1.04	n.a.	n.a.
long-term travel		-0.59	n.a.	n.a.
to other countries		-0.93*	-0.77	-2.48

*Significantly different from zero at the 95 per cent level of confidence.
See Appendix I for complete specification.

(1) Part of the differences between the estimates again reflects sample, specification and statistical differences between the various studies. In the case of estimates of price elasticity, differences in the quality of the data used to measure relative prices are probably most important. Some studies have used either CPI indexes as proxies for travel prices or travel price indexes constructed as weighted averages of price indexes for different expenditure categories but with weights significantly different from the ones used in this study.

(2) Weighted average of elasticity estimates for same-day and long-term travel with weights equal to the share of each kind of travel in 1971.

Source: Same as Table 3

In particular, it seems highly unlikely that receipts from the United States in respect of long-term travel could fall by half at constant prices in response to a 10 per cent increase in the relative price of the non-transport component of travel-related goods and services. This problem must be taken into account in drawing conclusions from the study.^{1,2} However, although the precise numerical estimates of elasticity may not be reliable, the study leaves little doubt that spending for travel to and from Canada is quite sensitive to changes in relative prices, whether such changes reflect differential rates of inflation or changes in exchange rates.

In view of the contiguity of Canada and the United States, the similarity of the scenery and amenities on both sides of the border and the ease of travelling between the two countries, relative prices are likely to be especially important determinants of the travel balance between Canada and the United States. The estimates of the price elasticity of expenditures by residents of Canada and the United States in the neighbouring country shown in Table 4 confirm that such expenditures are indeed very sensitive to relative prices and much more so than travel expenditures by Canadians to countries other than the United States.

The gradual deterioration of the competitive position of the Canadian tourist industry relative to the industry of the United States thus probably contributed significantly to the worsening of the Canadian travel balance with the United States. The effect was probably felt most strongly in 1976 when, from the point of view of the Canadian traveller, the cost of a vacation in the United States fell by 7 per cent relative to a vacation in Canada. The 1976 decline reflected a 3 per cent appreciation of the Canadian dollar and a 9 per cent increase in the Canadian travel price index compared to only 5 per cent for the U.S. travel price index.

¹ The numerical magnitude of the elasticity of receipts from the United States with respect to relative prices and exchange rates is important for the discussions of subsection 2.5 on the effect of a depreciation of the exchange rate. The estimates presented in this latter section use both the estimates of elasticity reported above and lower estimates obtained from an alternative specification including the lagged rather than the current value of the exchange rate in an attempt to reduce the collinearity between the several independent variables. The elasticity estimates of travel receipts from the United States with respect to consumption, prices and exchange rates obtained from this latter specification were, on average, 30 per cent smaller than those reported above.

² It should be noted, however, that the overall elasticity estimate of Canadian receipts from the United States with respect to prices is remarkably close to the estimate obtained by Artus.

In the case of travel to and from countries other than the United States, it was found that the relatively small increase in airfares resulted in a reduction of the relative price of overseas vacations for both Canadian and foreign travellers. This should have resulted in increased international travel and, from the point of view of the Canadian tourism industry, increased the share of non-national guests and customers. To the extent that the demand for the use of Canadian tourism facilities by foreign travellers differs from that of Canadian travellers, the resulting change in the composition of travellers in Canada may have had a differentiated impact on the influx of tourists to different areas (e.g., urban vs. rural, or regional).

As regards the travel balance, Canada became relatively more attractive to Europeans and, in fact, Canadian travel receipts from overseas increased faster than payments (13.2 per cent vs. 12.5 per cent on average over the period 1950-1977). However, since Canada's travel balance with overseas countries is typically in deficit (and thus receipts increased faster but from a lower base) the decline in the relative price of overseas travel still contributed to a widening of Canada's travel deficit.

2.4 The Role of Structural Factors

Preceding sections of this paper have documented: (1) the development of intercountry differentials in the growth of consumption expenditures, and (2), the longer-term deterioration of the relative cost and price competitiveness of Canada's tourism industry. These developments were accentuated by the appreciation of the dollar after 1970 and the greater degree of economic contraction abroad in recent years. The elasticity of travel spending with respect to income and relative prices (including exchange rates) discussed above suggest that these developments played a significant role in shaping both the longer-term evolution of Canada's travel balance and the sharp widening of the travel deficit after 1974.

While most observers¹ agree that cyclical and price developments played a significant role in the widening of the travel deficit in recent years, structural factors have received increasing attention. As mentioned above, emphasis has been put, in particular, on changes in tastes, as reflected in increased winter vacations to warmer climates. This subsection reviews the experience of recent years with a view to assessing whether cyclical and price developments were sufficient to account for the sharp widening of the deficit on travel transactions or whether other factors of a structural nature were also of importance.

¹ See, in particular, Tourism - Economic Performance and The Canadian Tourism Industry, op. cit., and C.A. Barrett and A. London, "The Canadian Balance of Payments: Canada's Growing Travel Deficit", The Canadian Business Review, Summer 1977. The report of the tourism industry task force, The Canadian Tourism Industry, provides a detailed examination of structural factors.

Structural changes in the determinants of travel spending would show up in the form of a break in the relationship between travel spending and income-price factors. This would take the form of a change in the size of the structural parameters relating travel spending and income-price factors or of the inability to explain movements in the travel balance on the basis of income and price developments alone. The conclusion of this subsection is that the sharp widening of the travel deficit since 1974 reflected primarily cyclical and price developments.

The analysis does not make it possible to identify what role may have been played by longer-term, more gradual changes in the structure of the travel balance. Such longer-term changes would include, for example, trends in the length of paid vacation time and gradual changes in tastes. It is not possible to separate the effect of such long-term, gradual changes from that of other variables that also exhibit a stable pattern of change over time, in particular, consumption spending. Long-term, gradual changes, however, could not be responsible for the sudden sharp widening of the travel deficit after 1974.

Table 5 shows the evolution of the travel balance at current and at constant prices since 1970. The striking feature of this latter table is the very large contribution of changes in the volume of travel spending to the recent sharp widening of the travel deficit. These changes in travel spending at constant prices were quite large both on the receipt and on the payment side. On the receipt side, as was mentioned above, receipts from the United States increased by only \$9 million in current dollars in each of 1975 and 1976, representing an estimated cumulative decline at constant prices of \$232 million, equivalent to 17 per cent of 1974 receipts from the United States. On the payment side, even after expenditure figures are corrected for the rapid price increases of recent years, spending by Canadian travellers in the United States is estimated to have increased by 23 per cent per year, on average, in 1975 and 1976. Spending in countries other than the United States is estimated to have increased by 22 per cent in 1976.

Chart 5 shows a comparison of the actual balance on travel account (in constant 1971 dollars) with the balance obtained from a simulation of estimated equations for travel payments and receipts. The elasticities of travel spending with respect to total consumption expenditures, relative prices and exchange rates obtained from these equations were reported in subsections 2.2 and 2.3. In the case of both the Canada-United States bilateral flows and Canadian payments to and receipts from countries other than the United States, the estimated equations yield extremely good estimates of the travel balance over the 1962-1976 period. The equations also track remarkably well the sharp deterioration of the bilateral balance with the United States and of the overall travel balance in recent years.

As was mentioned earlier, the equations used in the above simulation were estimated over the period 1962-1976. It is possible that the success of the equations in explaining 1975 and 1976 is, in part at

Table 5
Yearly Changes in Travel Balance, 1970-1977

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
(millions of dollars)								
<u>Balance with the United States</u>								
Total								
Receipts	120.0	38.0	-69.0	137.0	168.0	9.0	9.0	179.0
Payments(-)	36.0	0.0	21.0	154.0	123.0	391.0	369.0	324.0
Balance	84.0	38.0	-90.0	-17.0	45.0	-382.0	-360.0	-145.0
Due to price changes (1)								
Receipts	39.3	28.0	42.8	74.9	147.4	141.1	108.5	102.1
Payments(-)	19.5	-4.6	10.7	70.4	139.2	94.9	22.9	270.2
Balance	19.8	32.6	32.1	4.5	8.2	46.2	85.6	-168.1
Due to volume changes (2)								
Receipts	80.7	10.0	-111.8	62.1	20.6	-132.1	-99.5	76.9
Payments(-)	16.5	4.6	10.3	83.6	-16.2	296.1	346.1	53.8
Balance	64.2	5.4	-122.1	-21.5	36.8	-428.2	-445.6	23.1
<u>Balance with other countries</u>								
Total								
Receipts	39.0	2.0	53.0	79.0	80.0	112.0	106.0	-84.0
Payments(-)	125.0	26.0	-5.0	124.0	113.0	173.0	210.0	221.0
Balance	-86.0	-24.0	58.0	-45.0	-33.0	-61.0	-104.0	-305.0
Due to price changes (1)								
Receipts	3.4	4.6	-4.4	10.8	49.9	27.4	29.6	n. a.
Payments(-)	7.9	24.2	12.9	81.4	75.6	124.0	-4.6	n. a.
Balance	-4.5	-19.6	-17.3	-70.6	-25.7	-96.6	34.2	n. a.
Due to volume changes (2)								
Receipts	35.6	-2.6	57.4	68.2	30.1	84.6	76.4	n. a.
Payments(-)	117.1	1.8	-17.9	42.6	37.4	49.0	214.6	n. a.
Balance	-81.5	-4.4	75.3	25.6	-7.3	35.6	-138.2	n. a.

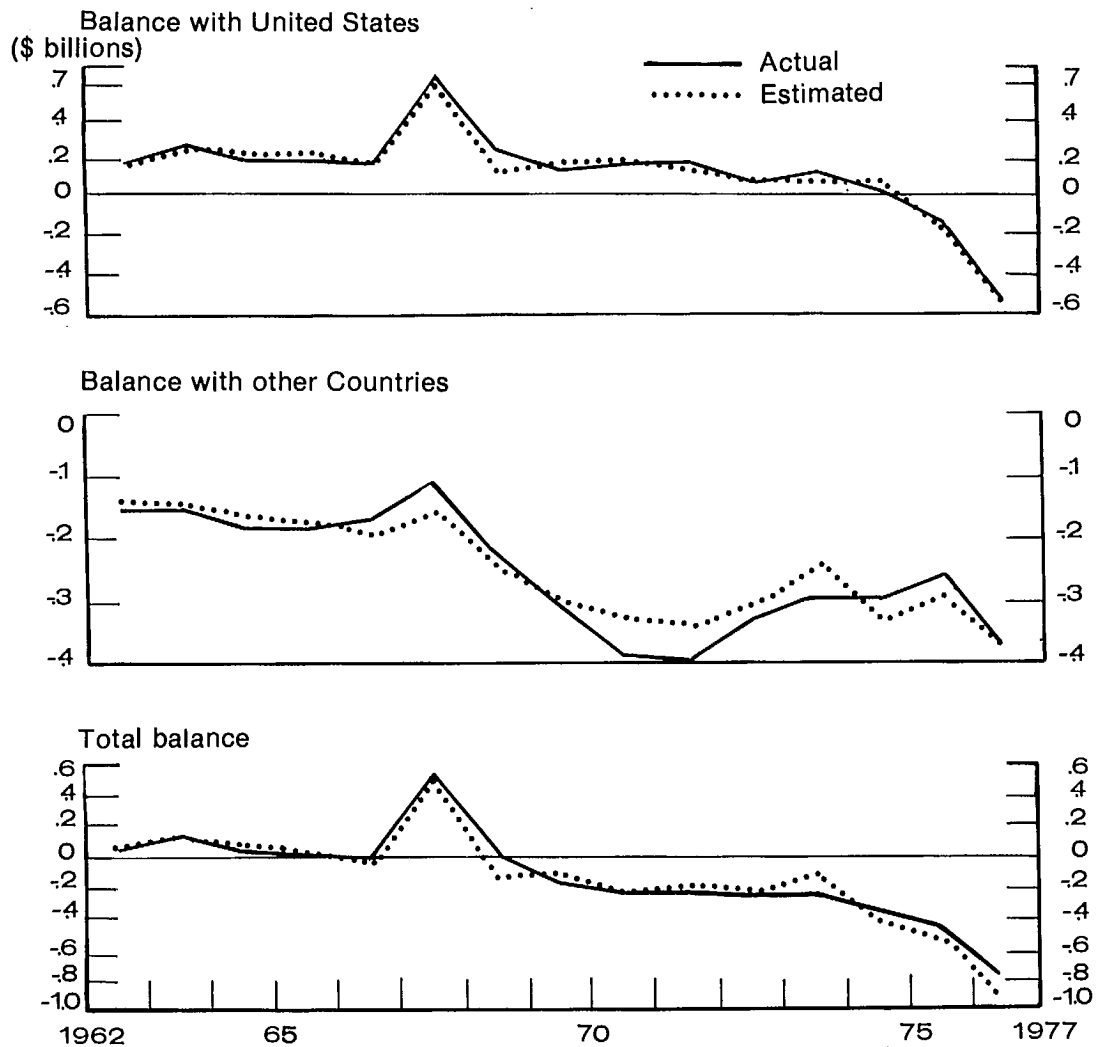
(1) Increases from previous year due to estimated travel price changes indexes.

(2) Calculated by difference.

Source: Statistics Canada, Travel Between Canada and Other Countries, Cat. 66-201, and Long Range and Structural Analysis Division, Department of Finance

Chart 5

Actual and Estimated Canadian Travel Balances
(in 1971 Dollars), 1962-1977



Source: Long Range and Structural Analysis Division, Department of Finance.

least, due to the fact that changes in the travel balance in these two years could have influenced the estimated equations sufficiently for the simulation exercise to successfully reproduce the deterioration of the travel balance without indication of a structural change in the equations.

To verify that this was not the case, the receipt and payment equations were re-estimated over sample periods excluding 1975 and 1976 and the estimated equations were used to "forecast" 1975 and 1976. The 1975 travel balance was projected using equations estimated over the period 1962-1974 and the 1976 travel balance on the basis of equations estimated over the period 1962-1975. The results of this latter exercise are reported in Table 6. As can be seen from Table 6, the estimates obtained from truncated sample periods perform as well as the estimates obtained from the equations estimated over the period 1962-1976 in explaining the sharp widening of the travel deficit in recent years.

Table 6

Comparison of Actual and Predicted
Travel Balances, 1975-1976

Travel Balances, 1973-1976						
	Balance with United States		Balance with Other Countries		Total Balance	
	(millions of 1971 dollars)					
	<u>Actual</u>	<u>Estimate</u>	<u>Actual</u>	<u>Estimate</u>	<u>Actual</u>	<u>Estimate</u>
1974	84.3	-	-292.5	-	-208.2	-
1975	-199.6	-112.3	-259.8	-309.9	-459.4	-422.2
1976	-516.0	-573.9	-364.4	-361.5	-880.4	-935.4

Source: Long Range and Structural Analysis Division, Department of Finance.

The important point to be noted is that none of the structural and/or occasional factors (e.g., the increase in customs exemptions, the bicentennial celebrations in the United States) often invoked to explain the sharp widening of the deficit in recent years were found to have been statistically significant. Hence, none of these structural and/or occasional factors were included in the equations used for the simulation. The estimated equations successfully generate the observed sharp deterioration of the travel balance without recourse to special events or factors. These factors do not as a result appear to have played a significant role in shaping recent developments.

The results also raise doubts concerning the argument most often put forward by the proponents of the thesis that recent developments are a reflection of fundamental structural changes, namely, that the recent deterioration of the travel balance is the result of increased winter vacationing to warmer climates. The trends toward increased paid vacation time and winter vacations to warmer climates may be responsible, in part at least, for the longer-term trends toward the gradual reduction of the surplus (in constant dollars) with the United States and toward the

gradual widening of the deficit (in constant dollars) with other countries apparent in Chart 5'. The sharp widening of the deficit in recent years, however, would appear to be primarily the result of the differentials in cyclical positions and the further worsening of the competitive position of the domestic tourism industry mentioned above.

The structuralist argument based on a significant sudden change in tastes reflected in increased vacations to warmer climates is also undermined by the observation that travel spending increased sharply both in summer and winter months over the period 1975-1977. Table 7 shows increases in travel payments to the United States and to other countries on a quarterly basis. Payments for travel often increased as much, in some years more, in summer as in winter months over the period 1975-1977.

Over the longer run, there has been a clear change in the seasonality of travel payments as winter months have gradually accounted for an increasing share of Canadian travel spending. If gradual changes in tastes have resulted in a gradual substitution of foreign winter vacations for domestic summer vacations rather than foreign summer vacations, the change in tastes would be reflected in a "structurally" wider deficit now than in earlier periods.² As mentioned above, this could account for the longer-term trends toward the gradual reduction of the travel surplus with the United States and toward the gradual widening of the travel deficit with countries other than the United States. The available evidence, however, does not support the view that there has been a significant sudden change in tastes in recent years.

The above suggests that there have been no significant sudden changes in the structure of Canada's payments and receipts on travel account. With economic recovery abroad and the favourable effect of the depreciation of the dollar on the competitive position of the domestic tourism industry, the sharp deterioration of recent years should, in part at least, be reversed.

¹ The longer-term worsening of the competitive position of the domestic tourism industry would also play a major role in this respect. As was mentioned earlier, it is not possible to separate the effect of long-term, gradual structural changes from the effect of other variables that also exhibit a relatively stable pattern of change over time.

² As was mentioned above, it is necessary to distinguish between changes in tastes, which constitute a structural change, from the normal response to relative price changes. A decline in the relative price of foreign vacations could lead to a shift from domestic summer vacations to foreign winter vacations if the decision to travel abroad rather than at home in response to a relative price change includes the decision to enjoy the sun in both seasons.

Table 7

Growth of Travel Payments
Quarterly, 1970-1977⁽¹⁾

	Quarter			
	I	II	III	IV
	(per cent)			
<u>Payments to the United States</u>				
1970	4.4	1.6	1.7	14.5
1971	0.9	-5.3	-1.4	10.6
1972	6.0	0.4	3.1	-1.3
1973	27.1	16.6	7.0	20.6
1974	12.7	8.0	8.1	20.3
1975	46.3	27.4	32.0	20.9
1976	17.9	30.8	17.7	31.6
1977	18.6	17.4	21.2	5.3
1978	12.1	n. a.	n. a.	n. a.
<u>Payments to other countries</u>				
1970	57.4	40.4	35.0	-6.2
1971	-1.0	-3.8	3.6	31.6
1972	9.5	3.1	-8.3	1.0
1973	44.2	16.8	11.0	32.7
1974	29.3	15.0	15.1	8.2
1975	14.9	21.6	23.2	30.3
1976	39.9	26.2	11.6	14.3
1977	15.7	16.7	22.1	21.3
1978	2.5	n. a.	n. a.	n. a.

(1) Increase over corresponding quarter of preceding year.

Source: Paul Lapointe, "Canada's International Travel Account, Price and Income Elasticities of Travel Expenditures Abroad", Treasury Board Secretariat, January 1978; and Statistics Canada, The Canadian Balance of International Payments, Cat. 67-001

2.5 Effects of a Depreciation of the Exchange Rate

In view of the relatively high sensitivity of travel payments and receipts in real terms to changes in the relative price of domestic and foreign vacations, the depreciation of the dollar can be expected to have a significant impact on the travel balance. This subsection examines the effect of a change in the exchange rate on the travel balance. First, the anticipated effect of a depreciation on the basis of the estimated elasticities of travel payments and receipts with respect to changes in exchange rates is outlined. These elasticities were reported in subsection 2.3. The evolution of the travel balance following the earlier depreciation of the dollar in 1960-1962 and in 1977-early 1978 is subsequently examined.

Since all receipts and payments flows in real terms displayed a relatively high sensitivity to changes in relative prices, all foreign currency flows comprising the travel balance can be expected to respond favourably to a depreciation of the exchange rate. On the receipts side, receipts from both the United States and other countries should increase reflecting both increases in the volume of travel to, and spending in, Canada and the increase in the rate at which foreign currencies are converted into Canadian dollars. The increase will be particularly marked in the case of receipts from the United States.

On the payments side, the depreciation should result in a significant decline of the volume of travel and spending abroad by Canadian travellers thus reducing the demand for foreign currencies in respect of travel payments. The valuation effect of the depreciation, however, may be sufficient to offset the decline in the volume of travel and spending abroad and result in higher payments measured in current Canadian dollars.

Simulations of the effect of a change in the exchange rate using the estimated elasticities of travel receipts and payments shown in Table 4 suggest that a 10 per cent depreciation of the exchange rate (without offsetting differences in domestic and foreign rates of inflation) would have a significant effect, reducing Canada's travel deficit by \$0.6 to \$1.1 billion in the first year following the depreciation. The estimated impact increases to \$0.9 to \$1.8 billion after three years.

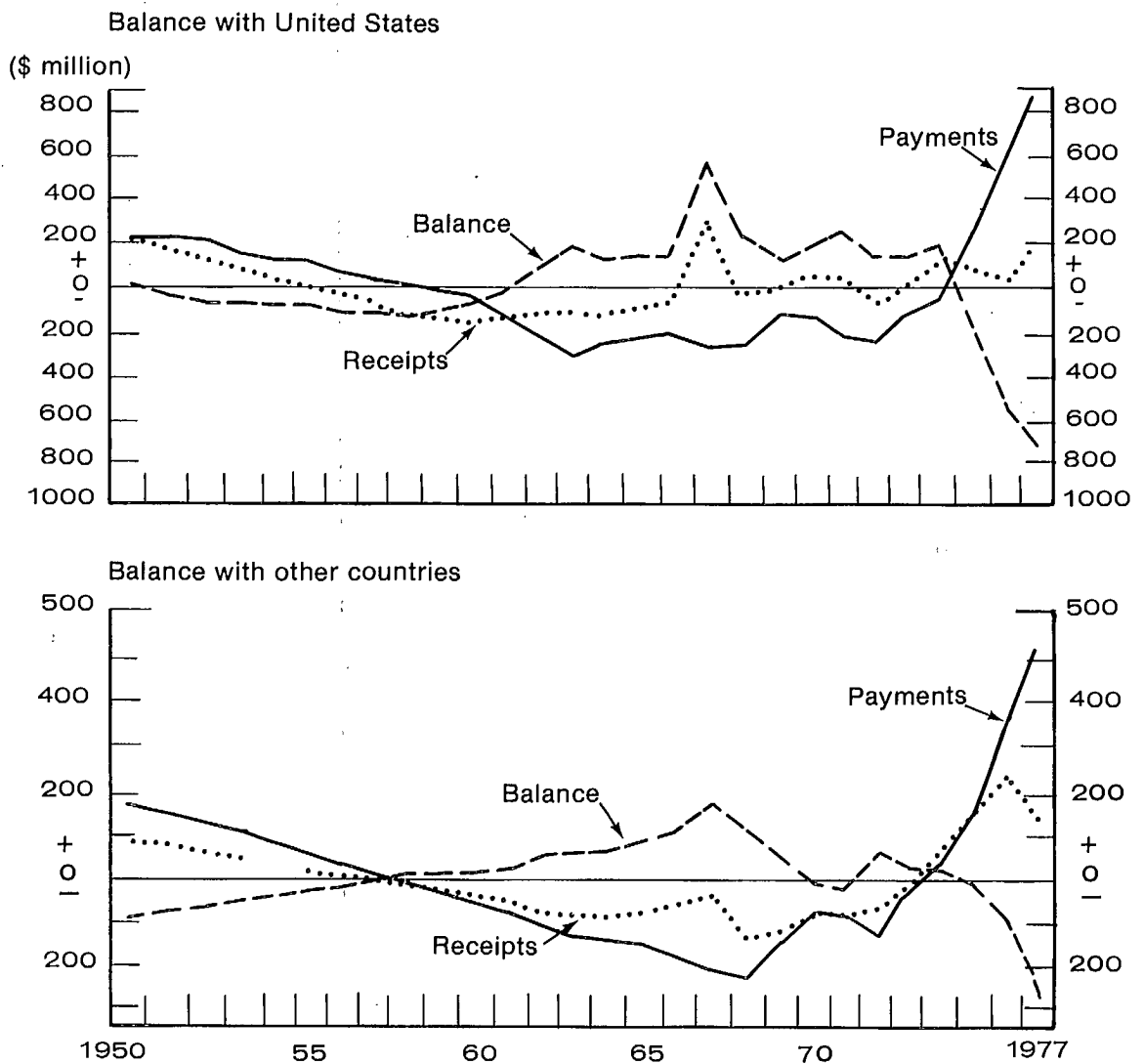
In the absence of apparent significant changes in the structure of Canada's payments for and receipts from travel, the evolution of the balance on travel account in the period following the 1960-1962 depreciation of the Canadian dollar² is of interest in discussing the anticipated effects of the recent depreciation. As was mentioned earlier, the travel balance with the United States registered a surplus in 1962 for the first time in ten years. The improvement in the travel balance with the United States is also illustrated in Chart 6 which shows the evolution relative to trends of both the bilateral balance with the United States and the balance with other countries since 1950.

¹ The low and high estimates reflect different assumptions concerning the income, price and exchange rate elasticities of long-term travel receipts from the United States. The higher estimate uses the elasticity parameter values reported in Tables 3 and 4. The lower estimate uses elasticity parameter values that are, on average, 30 per cent lower than those reported in Tables 3 and 4.

² The dollar depreciated from U.S. \$1.05 in early 1960 to U.S. \$0.925 in May 1962. There was also a reduction of duty free exemptions in June 1962 from 300 dollars to 100 dollars for travellers staying abroad more than 14 days and from 100 dollars to 25 dollars for those staying abroad from 48 hours to 13 days. The effects described in the text may reflect the interaction of both policy actions. As was mentioned in the preceding section, however, changes in the level of duty free exemptions were not found to have been statistically significant.

Chart 6

Deviations from the Trend of Receipts and Payments for Travel, Canada, 1950-1977



*For payments and receipts, deviations from linear trend (1950-77); for balances, difference between deviations from trend of receipts and payments

Source: Statistics Canada, Travel Between Canada and Other Countries, cat. 66-201, and Long Range and Structural Analysis Division, Department of Finance.

Of particular interest in this latter chart is the indication that the depreciation also had a favourable effect on the travel balance with countries other than the United States as both the bilateral balance with the United States and the balance with other countries improved markedly relative to trends. In the case of the travel balance with countries other than the United States, the effect of the depreciation was to slow down the pace of widening of deficits.

Some of the specific changes that underlay the improvement of the travel balance are shown in Table 8. In particular, the number of long-term visitors to the United States fell by 4.5 per cent in 1961 and by 9.7 per cent in 1962 and did not again exceed its earlier peak level until 1965. Spending per visitor to the United States declined for both same-day and longer-term travellers and did not again exceed earlier peak levels until 1969.

Table 8

Effects of 1960-1962 Depreciation: Travellers,
Expenditures per Traveller, Total Payments

	Travellers to U.S. ('000)		Expenditures per Traveller (\$U.S.)		Travel Payments (\$U.S.)	
	Same-day	Long-term	Same-day	Long-term	to U.S.	to other countries
1959	22,295	5,695	2.50	74.15	467	156
1960	23,321	5,725	2.48	72.08	476	170
1961	23,818	5,470	2.37	71.96	453	181
1962	23,007	4,938	1.96	69.14	392	174
1963	24,414	4,977	2.04	61.47	360	183
1964	27,016	5,148	1.95	75.28	446	214
1965	27,191	6,242	1.95	71.52	508	230
1966	27,423	7,257	1.95	71.47	583	252
1967	24,709	7,791	2.13	66.28	581	248
1968	24,798	7,898	2.41	69.24	635	277
1969	25,334	8,611	3.06	79.12	801	371
1970	25,072	8,986	3.26	82.07	860	502

Source: Statistics Canada, Travel Between Canada and Other Countries, Cat. 66-201, and Long Range and Structural Analysis Division, Department of Finance.

As regards the evolution of the travel balance in 1977 and early 1978, although much of the effects of the depreciation are still to be felt, the signs of improvement are quite clear. The payments deficit on travel account in current Canadian dollars widened further in 1977. The available evidence, however, suggests that the large deficit in respect of Canada-United States bilateral travel was due in its entirety to price changes (partly reflecting the valuation effect of the depreciation of the exchange rate). The bilateral balance with the United States at constant prices is estimated to have registered a small improvement (Table 5).

The improvement in the bilateral balance with the United States in 1977 reflected both an increase in receipts and a much smaller increase in payments than in previous years. The improvement took place despite more rapid increases in the prices of travel-related goods and services in Canada than in the United States and probably reflected the faster increase in real consumption expenditures in the United States and the depreciation of the dollar.

The improvement of the travel balance seems to have continued in the first quarter of 1978. Almost 90 per cent of the increase in the travel deficit in current Canadian dollars in the first quarter of 1978 relative to the first quarter of 1977 reflected the valuation effect of the depreciation of the exchange rate in the preceding year. The full effect of the depreciation on the demand by Canadians for foreign travel, however, can be expected to be reflected later in 1978 and in 1979. Since the Canadian dollar started depreciating only in late 1976 and continued to depreciate through 1977, much of the effect is probably still to come.

2.6 Medium-Term Outlook

The preceding subsections have examined the factors responsible for the sharp deterioration of the travel balance in recent years. In particular, it was found that cyclical and price factors were probably responsible for most of the sharp widening of the deficit in respect of travel transactions. The continued weakness of real consumption expenditures in the United States and the further worsening of the relative performance of Canadian travel-related prices appear to have played a preponderant role. The recovery of consumption expenditures in the United States and the depreciation of the dollar appear to have already resulted in some improvement of the travel balance in 1977 and early 1978.

Measures aimed specifically at improving the competitiveness of the Canadian tourist industry can be expected to contribute to the improvement of the travel balance over the medium-term. In particular, the suspension of sales taxes on hotel rooms in Quebec and Ontario and measures to introduce or increase tip differentials in setting minimum wage levels

in the same two provinces have improved the competitive position of the domestic tourist industry. Other measures include the promotion of attractive travel packages, for both Canadian and non-resident travellers.¹

The analysis of the effects of the depreciation of the dollar in the preceding subsection indicates that the depreciation should contribute significantly toward improving the travel balance relative to GNE. With economic recovery abroad and further improvements of the competitiveness of Canada's tourist industry associated with the achievement of lower rates of domestic inflation, the original improvement of the travel balance would be maintained. The improvement of the external payments performance in respect of travel transactions is, however, closely linked to success in reducing the domestic rate of inflation and to the growth of consumption expenditures in the United States and elsewhere.

As a general proposition, a depreciation of the exchange rate may not be sufficient to compensate fully for the longer-term deterioration of the competitiveness of the Canadian tourist industry. This would be the case if the favourable effect of the depreciation on the competitive position of the domestic industry were offset by faster increases of prices and costs domestically than abroad. Moreover, in view of the apparent relatively rapid increase of prices of travel-related goods and services in Canada, the re-establishment of the competitiveness of the domestic tourist industry may require that the increase in the price of travel-related goods and services be kept below the overall rate of domestic inflation.

While the determinants of changes in exchange rates in the short and medium term comprise several factors, the relative importance of each being subject to considerable debate, analysts generally agree that over the medium and long term, relative rates of inflation are major determinants of the exchange rates between different currencies. Even during the recent period of higher rates of inflation and fluctuations in exchange rates, changes in exchange rates have tended to offset differences in the rate of inflation among the major industrial countries.² These offsetting price and exchange rate movements maintain or re-establish average or overall patterns of competitiveness.

¹ Industry proposals to further improve the competitive position and attractiveness of travel in Canada can be found in The Canadian Tourism Industry, op. cit. Most of the government policies and structural factors examined in the industry report have been long-standing and thus did not provoke the sudden sharp widening of the travel deficit. Further policy and structural improvements, however, could strengthen the recovery of the travel balance over the medium term. A similar conclusion was reached in Tourism - Economic Performance, op. cit.

² For evidence since early 1973, the beginning of the period of generalized floating, see International Monetary Fund, Annual Report 1977, pp. 28 passim.

However, the competitiveness of sectors that experience faster than average cost and price increases may remain undermined unless similar sectors in other countries also inflate faster than average. The international comparison shown in Table 9 indicates that the performance of Canada's tourist industry has been mixed. Canada's travel price index increased faster than the consumer price index. This was not the case in either the United States or the United Kingdom. A depreciation of the exchange rate sufficient to compensate for the faster rate of overall domestic inflation would thus not be sufficient to re-establish the competitiveness of the Canadian tourist industry relative to the United States and the United Kingdom, the origin and destination of most travel to and from Canada.

Table 9

Ratio of Travel Price Indexes to
Consumer Price Indexes, 1965-1977,
Selected Years (1970 = 100)

	Canada	United States	United Kingdom	Germany	France	Switzer- land	Nether- lands
1961	97.0	101.9	98.8	n.a.	n.a.	n.a.	n.a.
1963	96.3	101.9	99.4	n.a.	n.a.	n.a.	n.a.
1965	97.9	101.8	100.1	n.a.	n.a.	n.a.	n.a.
1967	98.6	101.3	101.2	101.7	97.1	95.4	98.7
1969	99.2	100.7	100.2	100.9	100.0	97.2	97.8
1971	100.6	99.5	99.3	101.0	99.5	99.9	101.1
1972	99.4	99.0	99.2	101.2	100.3	101.6	100.6
1973	98.1	99.3	99.6	102.2	101.7	100.8	105.2
1974	100.6	103.4	98.3	102.6	97.4	97.7	103.9
1975	101.2	102.3	96.4	101.2	97.8	100.0	104.8
1976	102.8	101.6	95.5	102.6	98.8	101.8	106.9
1977	102.4	101.1	94.6	n.a.	n.a.	n.a.	n.a.

Source: Staniland Hall, "Comparative Indices of Tourist Prices";
International Monetary Fund, International Financial Statistics; and
Long Range and Structural Analysis Division, Department of Finance.

The medium-term outlook for the travel balance is also very sensitive to foreign economic developments. Although real consumption expenditures in Canada may continue increasing faster than in the United States, the lower Canadian income elasticity of spending for travel in the United States could prevent the travel deficit with the United States from widening. Too wide a differential between the growth of consumption expenditures in Canada and the United States, however, would intensify pressures on the travel balance and increase the importance of improvements in the competitive position of the domestic tourism industry. Both the Wharton School and Data Resources Inc. (DRI) recently reduced their projections of U.S. consumption growth over the 1978-1981 period (by 1 per cent in the case of the Wharton School's optimistic forecast and 0.6 per cent for DRI). Success in reducing the rate of increase of prices of travel-related goods and services is thus very important for the medium-term performance of the travel balance.

3. THE BALANCE ON INVESTMENT INCOME

3.1 Introduction

A major portion of Canadian capital formation has been, and continues to be, financed through foreign capital inflows, either in the form of foreign equity investment in Canada or through sales of bonds and debentures to non-residents. As a result, Canada has traditionally experienced net deficits on investment income flows (interest and dividends) with non-residents - the investment income account of the balance of payments. The deficit in respect of investment income has been a major contributor both to Canada's historical current account deficits in the period since 1950 and to the recent sharp deterioration of the balance on current account.

The rapid widening of the deficit in respect of interest and dividends since 1974 reflected primarily the sharp increase in interest payments which grew at an average rate of almost 40 per cent per year over the period 1975 to 1977. Arithmetically about 80 per cent of the increase in interest payments resulted from increased foreign borrowing. The remainder of the increase in interest payments reflected the effect of higher average interest rates on the stock of Canada's external indebtedness. Reflecting these developments, the deficit on investment income account widened rapidly from 1.1 per cent of GNE in 1974 to 1.7 per cent in 1977.

This section examines the implications of the volume and pattern of the foreign borrowing of recent years for Canada's external payments position over the medium term. The structural characteristics of the balance on investment income account are reviewed in subsection 3.2. Particular attention is paid to the implications of recent changes in the volume and pattern of foreign capital inflows. The discussion of the structural characteristics of the investment income account is further used in subsection 3.3 as a basis for examining the anticipated response of the balance on this account to a change in the exchange rate. The medium-term outlook for the balance on investment income is discussed in subsection 3.4.

The conclusion of the section is that the level and form of foreign borrowing in recent years have significantly changed the structural characteristics of the investment income account. Reflecting these changes, a depreciation of the exchange rate would now have a smaller immediate effect on the deficit on investment income than in earlier years. This is due to an increase in the relative importance of payments showing little or no immediate response to a change in the exchange rate. However, these payments are still small relative to

total payments and receipts for current international transactions. The flexibility of response of the current account to a depreciation of the exchange rate thus would not seem to have been greatly affected.

3.2 Structural Characteristics

An important development in the pattern of foreign borrowing over the period since 1950 has been the sharp increase in the share of foreign capital raised through issues of bonds and debentures. Issues of Canadian bonds and debentures abroad have become an increasingly important source of funds, accounting for most of the long-term capital inflows since the early 1960s. The increased borrowing over the period 1975 to 1977 resulted in an average increase of 29 per cent per year in the stock of Canadian bonds held abroad as foreign borrowing through issues of bonds and debentures amounted to \$17.1 billion compared to \$3.5 billion in the previous 3 years.

An analysis of the factors underlying the shift of foreign capital inflows to debt from equity would require additional research. At least part of the shift, however, likely reflects a similar shift in the composition of total financing - from domestic and foreign sources - and certain factors specific to the composition of foreign financing.

The shift in the composition of total financing - from domestic and foreign sources - reflected both the increase in the financial requirements of the provinces and their enterprises and the gradual increase in corporate debt/equity ratios. The increase in the financial needs of provinces and their enterprises reflected the large increase in their capital expenditures over the last 15 years. The share of debt capital in corporate financing has increased gradually, resulting in an upward trend of the corporate sector debt/equity ratio from 0.92 in 1962 to 1.17 in 1976. Similar trends in corporate debt/equity ratios have also been observed in the United States and many European countries.

In the case of factors specific to the composition of foreign financing, government legislation probably exerted an important influence. For example, the suspension of the 15 per cent withholding tax on interest payments abroad by Canadian corporations in June 1975 probably played a significant role in the subsequent large increase of foreign-pay corporate bond issues. The adoption of tax measures as early as 1960 to limit or reduce foreign control, the adoption of guidelines governing the acquisition of Canadian enterprises by foreigners and the acquisition by the Canada Development Corporation and provincial governments and agencies of foreign-owned enterprises operating in Canada may also have contributed to the relative reduction of the net inflow of foreign direct investment. Also, since provinces traditionally borrow a larger proportion of their funds on foreign markets than do other

¹ As defined for balance of payments purposes.

Canadian borrowers, the increase in the financial requirements of the provinces and their enterprises contributed to the increase in the share of capital inflows raised through bond issues.

The effect of the shift in the form of foreign borrowing to debt from equity on the composition of the flow of payments for investment income is illustrated in Table 10. The share of interest payments increased from 25-35 per cent through the 1950s and early 1960s to 45-50 per cent in the early 1970s. The share of interest payments further increased to 57 per cent in 1976 and 63 per cent in 1977 reflecting primarily the sharp increase in the stock of external indebtedness. The share of total payments for current international transactions accounted for by interest payments increased gradually from 2 per cent in the 1950s to 3 per cent in the 1960s and the first half of the 1970s, and to a high of 4.7 per cent in 1977.

Table 10

Composition of Investment Income Account, 1953-1977

	Payments			Receipts		
	Total (\$ millions)	Per Cent Interest	Dividends	Total (\$ millions)	Per Cent Interest	Dividends
1953	406	29.8	70.2	164	38.4	61.6
1954	424	30.7	69.3	147	36.1	63.9
1955	473	26.8	73.2	161	33.5	66.5
1956	524	24.4	75.6	142	26.8	73.2
1957	594	25.9	74.1	153	28.8	71.2
1958	614	29.5	70.5	167	37.7	62.3
1959	671	31.3	68.7	180	38.9	61.1
1960	656	36.4	63.6	171	44.4	55.6
1961	764	33.9	66.1	213	37.1	62.9
1962	783	35.0	65.0	202	39.6	60.4
1963	860	36.5	63.5	230	43.0	57.0
1964	1010	33.2	66.8	332	25.3	74.7
1965	1086	35.3	64.7	322	29.2	70.8
1966	1140	37.6	62.4	318	34.6	65.4
1967	1211	38.9	61.1	295	34.6	65.4
1968	1259	43.4	56.6	353	28.9	71.1
1969	1366	47.5	52.5	451	35.5	64.5
1970	1550	48.0	52.0	528	45.6	54.4
1971	1699	46.2	53.8	558	44.8	55.2
1972	1713	50.1	49.9	665	38.2	61.8
1973	2050	47.2	52.8	790	36.6	63.4
1974	2435	42.3	57.7	882	39.1	60.9
1975	2879	45.2	54.8	926	35.2	64.8
1976	3297	56.6	43.4	825	36.5	63.5
1977	4300	63.3	36.7	820	32.4	67.6

Source: Statistics Canada, The Canadian Balance of International Payments, Cat. 67-201.

The significance of these shifts in the form of foreign borrowing and in the composition of payments for investment income lies in the different characteristics of the borrowing instruments and the resulting differences in the flow of service payments. Bonds and debentures are issued for a specified period of time, pay interest at a fixed annual rate over that period, and are serviced in the currency of denomination of the obligation. Dividends, on the other hand, are payable on direct investments and stock holdings - instruments which generally do not have a specified life, do not usually offer a contractually specified rate of return and are normally serviced in the currency in which profits are earned.

The currency composition of new issues of bonds and debentures since 1973 and still outstanding at the end of 1977 is shown in Table 11. Since about 80 per cent of bonds and debentures sold to non-residents are denominated in currencies other than Canadian dollars, the shift to debt from equity significantly increased the share of payments for investment income denominated in foreign currencies. Of the stock of foreign held bonds outstanding at the end of 1977, 73 per cent or \$27.6 billion were denominated in U.S. dollars, 10 per cent or \$4 billion were denominated in other foreign currencies, and only 17 per cent or \$6.4 billion were denominated in Canadian dollars.

Table 11

Share of New Issues Denominated in Foreign
Currencies by Borrower and Year of Issue, 1973-1977^(1,2)

	Government Direct	Government Guaranteed	Corporate	Total
	(per cent)			
1973	87	97	52	79
1974	89	74	77	80
1975	87	76	47	74
1976	92	99	61	83
1977	84	99	70	83

(1) Excludes the portion of issues denominated in foreign currency but purchased by Canadians.

(2) Includes only issues still outstanding at the end of 1977.

Source: Statistics Canada, and Long Range and Structural Analysis Division, Department of Finance.

The effects of the change in the form of capital inflows in recent years on the currency composition of payments for investment income is amplified over time by differences in the maturity of bonds issued in different markets. As can be seen from the top portion of Table 12,

only 15.6 per cent of the end-1977 debt denominated in U.S. dollars will have been amortized by 1985 compared to 67 per cent in the case of the debt denominated in Canadian dollars. Reflecting the shorter maturity of bonds denominated in Canadian dollars, Canadian dollar bonds will account for only 7.7 per cent of the 1977 debt outstanding at the end of 1985 compared to 15.7 per cent in 1980 (middle portion of Table 12). The share of interest payments in foreign currencies to service the end-1977 debt still outstanding in 1985 will by then have increased to 92.0 per cent compared to 83.3 per cent in 1980 (bottom portion of Table 12).

Table 12

Repayment and Interest Characteristics of End-1977
External Debt, by Currency

	\$ Can.	\$ U.S.	Other
	(per cent)		
<u>Per cent of 1977 stock outstanding at year end</u>			
1980	87.8	97.2	86.4
1985	33.0	84.4	55.0
1990	19.1	69.4	14.3
1995	9.4	53.9	2.1
<u>Currency composition of 1977 stock outstanding at year end</u>			
1980	15.7	74.7	9.6
1985	7.7	84.4	7.9
1990	5.9	91.4	2.7
1995	3.9	95.6	0.5
<u>Currency composition of interest payments on 1977 stock</u>			
1980	16.7	74.9	8.4
1985	8.1	85.5	6.5
1990	6.1	91.5	2.4
1995	4.0	95.5	0.5

Source: Statistics Canada, and Long Range and Structural Analysis
Division, Department of Finance.

The volume and pattern of recent capital inflows have thus significantly altered the structural characteristics of the balance on investment income. The large portion of capital inflows in the form of foreign debt has increased both the volume of payments for investment income fixed on a contractual basis and the share of external obligations and

associated service payments denominated in foreign currency. The implications of these shifts in the volume and pattern of foreign capital inflows for the response of the foreign sector to a change in the exchange rate is examined in the following subsection.

3.3 Effects of a Depreciation of the Exchange Rate

This subsection examines the effects of a change in the exchange rate on the balance on investment income. Attention is paid, in particular, to the effects of the structural changes described above on the response of the investment income account to a change in the exchange rate. First, the effect of a depreciation on receipts from investment income is outlined. The effect on payments for investment income is subsequently examined. The overall effect of a depreciation of the exchange rate on the balance on investment income is discussed both in terms of the balance measured in foreign currencies and in terms of the balance measured in Canadian dollars.

In the case of the investment income account measured in foreign currencies, it will be shown that the structural changes described above have reduced the flexibility of response of the investment income account to a change in the exchange rate. The immediate effect of a depreciation would still be to reduce the deficit on investment income measured in foreign currencies. However, the deficit would now be reduced by a proportionately smaller amount than in earlier years. This is due to a reduction in the importance of payments and receipts responding favourably to a depreciation relative to total flows on this account.

In the case of the investment income account measured in current Canadian dollars, a depreciation of the dollar would now result in a widening of the deficit on investment income. This is a reflection of the smaller effect of a depreciation on the investment income account measured in foreign currencies. From the point of view of the balance of payments, however, the depreciation should be looked at in terms of the effect of the balance measured in foreign rather than domestic currency. If a depreciation reduces the deficit measured in foreign currency, it reduces the net demand for foreign currencies and thus reduces pressures on foreign exchange reserves.

Investment income receipts are typically denominated in foreign currency and comprise earnings from Canadian direct and equity investment abroad (dividend receipts); and income on holdings by Canadians of debt instruments issued by non-residents (interest receipts), including income on net official holdings of foreign exchange. Changes in the level of investment income receipts thus reflect changes in the stock of foreign investment by Canadian residents and, in the case of dividend receipts, changes in the profitability of Canadian foreign equity investment.

Except for income on net official holdings of foreign exchange, the value of investment income receipts measured in foreign currency is thus likely, initially, to remain unchanged in response to changes in the domestic economy. In the case of income on net official holdings

of foreign exchange, domestic policies that affect the overall performance of the balance of payments may result in larger net official holdings of foreign exchange and thus higher income in the form of interest on such holdings.

As was noted above, bonds and debentures held by non-residents give rise to interest payments at fixed annual rates and are serviced in the currency of denomination of the obligation. On the other hand, dividend payments reflect the profitability of foreign equity investments in Canada and are normally serviced in the currency in which profits are earned. The immediate effect of a depreciation on the payments side of the investment income account will thus be to reduce the foreign currency value of dividend payments and of interest payments denominated in Canadian dollars.

Over the medium term, a depreciation of the exchange rate or an improved price performance may narrow the imbalance between domestic investments and savings. This would result in a reduction in new foreign borrowings and lower debt service payments. In the shorter term, however, the response of the investment income account to a depreciation of the exchange rate will reflect the responses of receipts and payments outlined above.

The significance of the high level of foreign borrowing in recent years and of the changes in the composition of foreign capital inflows is the reduction in the relative importance of the receipts and payments flows responding favourably to a depreciation of the exchange rate. On the receipts side, interest receipts on net official holdings of foreign exchange reserves account for 20 per cent of receipts from investment income. These interest receipts on net official holdings of foreign exchange reserves are, however, equivalent to only 4 per cent of payments for investment income.

¹ The evidence available suggests that dividend outflows are affected by changes in the exchange rate. This may reflect the fact that, as the exchange rate depreciates, the profits of domestic producers of tradeables (exports and import substitutes) increase. To the extent that these firms are foreign owned, dividends would be affected. It may also reflect attempts to maintain the foreign currency value of dividends despite the depreciation. The evidence available, however, suggests that the effect of a change in the exchange rate on dividends is small. The statistical significance of this effect is also fairly weak.

Additional research would be needed, however, to investigate the profits/exchange rate link in the medium term. This would reflect in part the decision of domestic producers of tradeables to either maintain their domestic currency prices unchanged (thus improving their competitiveness in domestic and foreign markets) or to maintain their foreign currency prices unchanged (thus raising their profits). In practice, the average decision probably lies somewhere between these two polar alternatives.

On the payments side, reflecting the increase in the share of interest payments, dividend payments accounted for only 37 per cent of total investment income payments in 1977 compared to between 65 per cent and 70 per cent in the early 1960s. Thus, while the favourable response of the investment income account measured in foreign currencies remains, the narrowing of the deficit on investment income account in response to a depreciation of the exchange rate would be proportionately much smaller now than in the early 1960s.

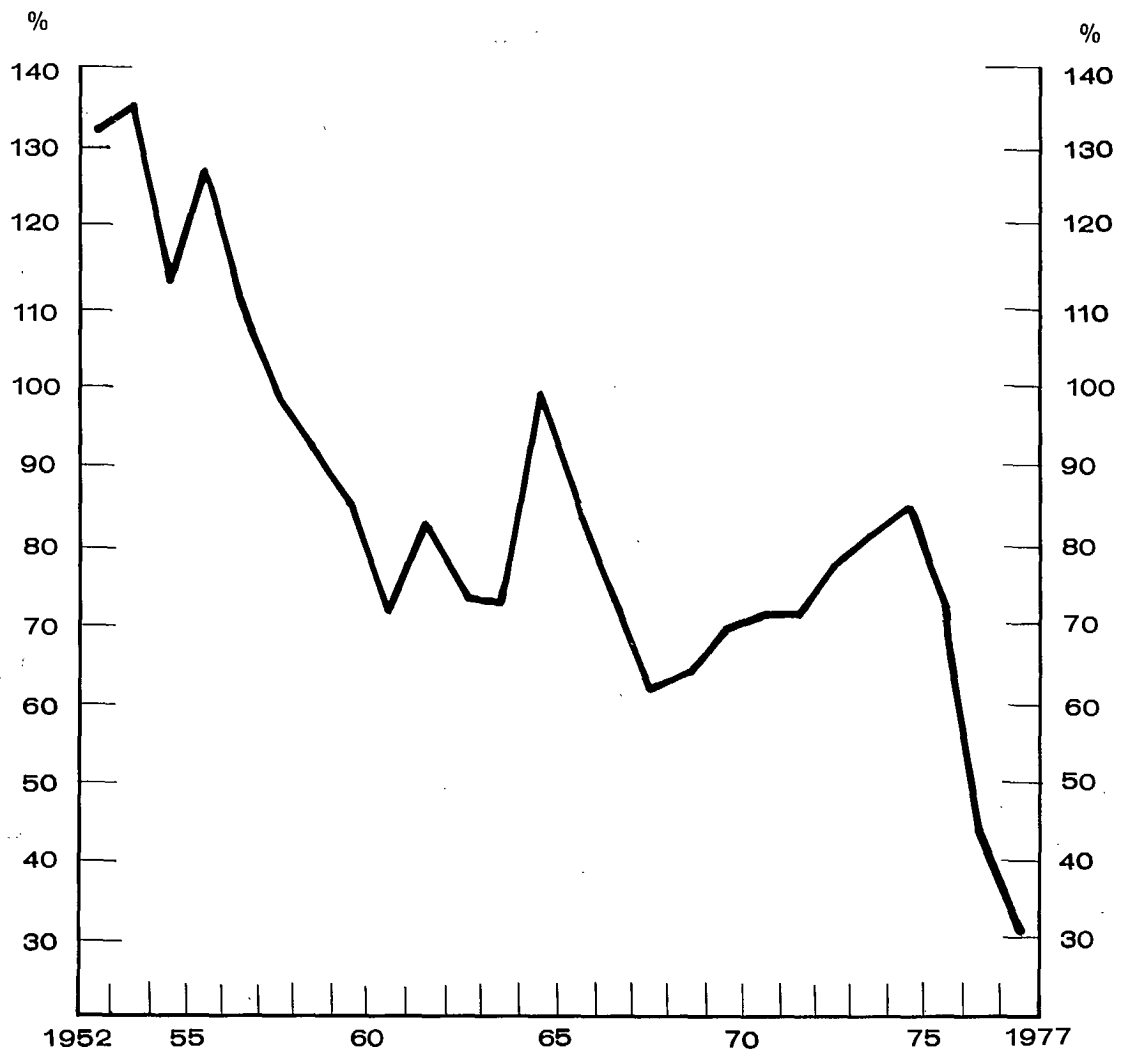
In the case of the investment income account measured in current Canadian dollars, a depreciation of the exchange rate would, however, now result in a widening of the deficit on investment income. This reflects the proportionately smaller favourable effect of a depreciation of the dollar on the net demand for foreign currencies for investment income payments. A change in the exchange rate has an immediate and direct effect on the Canadian dollar value of interest and dividends through the mechanical operation of converting foreign currency flows at different rates. The Canadian dollar value of dividends and interest receipts and of interest payments denominated in foreign currencies would increase in proportion with the change in the exchange rate. However, in view of the size of the imbalance between payments and receipts and of the large portion of such payments denominated in foreign currencies the net effect of the depreciation in the short-term would be to widen the deficit on investment income in current Canadian dollars.

Chart 7 traces the evolution of investment income receipts as a proportion of interest payments. Under the assumption that all investment income receipts are denominated in foreign currency, the relative sizes of the ratio of investment income receipts to interest payments and of the share of interest payments payable in foreign currency are critical determinants of the effect of a depreciation on the investment income account measured in current Canadian dollars. If the share of interest payments payable in foreign currency exceeds the ratio of investment income receipts to interest payments, a depreciation of the exchange rate would increase payments measured in current Canadian dollars more than receipts. The ratio of investment income receipts to interest payments thus represents the upper limit of the share of interest payments payable in foreign currency beyond which a depreciation of the exchange rate would result in a widening of the deficit on investment income account measured in current Canadian dollars.

In 1961, investment income receipts were equivalent to 82.2 per cent of interest payments. Since the share of interest payments payable in foreign currency was probably less than 82.2 per cent, the 1961-1962 depreciation of the dollar probably resulted in a narrowing of the deficit on the investment income account measured in Canadian dollars. The ratio of investment income receipts to interest payments, however, subsequently declined sharply, to only 30 per cent in 1977. Since more than 80 per cent of interest payments are now payable in foreign currency, a depreciation of the exchange rate would now increase the Canadian dollar value of payments more than receipts and result in a widening of the deficit on investment income account measured in Canadian dollars.

Chart 7

Interest and Dividend Receipts as a Percentage of Interest Payments, Canada 1952-1977



Source: Statistics Canada, The Canadian Balance of International Payments, cat. no. 67-201.

For example, a difference of U.S. \$0.125 in the value of the Canadian dollar¹ is estimated to have resulted in a small narrowing of the deficit on investment income account measured in Canadian dollars in the early 1960s. Assuming that 75 per cent of interest payments were payable in foreign currency, the deficit measured in Canadian dollars was reduced, on average, by \$3 million per year over the period 1962-1965. A similar change in the exchange rate would now add about \$400 million to the annual interest payments over the period 1978-1981. About \$120 million of the increase would be offset by the increase of interest and dividend receipts measured in current Canadian dollars, resulting in a net increase of the deficit on investment income account of about \$280 million.

This section has shown that the high level and form of foreign borrowing in recent years have reduced the sensitivity of the investment income account measured in foreign currencies to a change in the exchange rate. In the case of the investment income account measured in current Canadian dollars, a depreciation of the exchange rate would now result in a widening of the deficit. These changes in the response of the investment income account are the result of the increase in the importance of interest payments relative to total payment and receipt flows for investment income. The increase in the value of interest payments, while important in terms of the response of the investment income account to a change in the exchange rate, has not, however, significantly affected the flexibility of the overall balance on total current international transactions.

Although interest payments increased rapidly in recent years, they still accounted for less than 5 per cent of total payments for current international transactions in 1977. The flexibility of response of the current account to a depreciation of the exchange rate thus would not seem to have been greatly affected. The widening of the deficit on investment income account in current Canadian dollars is also quite small, equivalent, in the above illustration to only 1.3 per cent of total corporate profits and 0.6 per cent of government current expenditures for goods and services in 1977.

3.4 Medium-Term Outlook

In view of the relatively long maturity of foreign debt, recent developments as regards the volume and pattern of foreign capital will have a lasting impact on the investment income account of the balance of payments. As can be seen from Table 13, more than 50 per cent of the end-1977 debt will be outstanding through 1990. The decay schedule is even slower in the case of interest payments reflecting the generally higher rates of interest on bonds sold in recent years relative to earlier placements.

¹ The dollar depreciated from U.S. \$1.05 in early 1960 to U.S. \$0.925 in May, 1962.

Table 13

Repayment and Interest Characteristics of End-1977
External Indebtedness

	Per Cent of 1977 Stock Outstanding at Year-End	Interest Payable on End-1977 Debt as Per Cent of 1978 Interest
1978	98.9	100.0
1979	97.7	99.1
1980	94.5	97.7
1981	90.0	94.2
1982	83.5	89.1
1983	79.1	82.4
1984	75.9	79.1
1985	72.6	76.3
1986	68.3	73.4
1987	62.8	68.7
1988	59.4	64.3
1989	57.0	61.8
1990	55.1	59.9
1991	53.0	58.3
1992	48.9	55.9
1993	46.4	52.3
1994	43.9	50.1
1995	40.9	47.7
1996	31.8	40.9

Source: Statistics Canada, and Long Range and Structural Analysis
Division, Department of Finance.

When viewing the medium term, the interest payments on the debt outstanding at the end of 1977 constitute a locked-in component of the investment income account. While the relative importance of the locked-in component will decline over time, the decline will be rather slow. For example, even if the relatively high rate of net borrowing that prevailed in 1977 (with gross new issues and retirements equivalent to, respectively, 19.8 per cent and 1.9 per cent per year of opening stock) was assumed to continue through to 1981, pre-1978 issues would still constitute almost half of the stock of outstanding debt at the end of 1981. The major portion of interest payments to non-residents in the medium term will be payments to service bonds sold before 1978.

Payments for investment income over the medium term will also reflect payments in respect of new borrowings. As was noted in Canada's Economy, the sharp increase in foreign borrowing in recent years reflected primarily large financial requirements combined with persistent interest rate differentials between Canada and foreign financial markets. A portion of the borrowing also appears to have been contracted in anticipation of future cash requirements and was invested

in liquid assets which were used in place of borrowing in 1977. The large financial requirements reflected the strong investment performance which continued through the third quarter of 1976 and the cyclical contraction of gross provincial savings.

In 1977, capital inflows fell markedly, primarily reflecting sharply lower portfolio transactions. Net new bond issues sold abroad by governments and corporations fell from 42 per cent of opening stock in 1976 to 18 per cent in 1977 (Table 14). Relative to GNE, net new bond issues abroad fell from 4.5 per cent in 1976 to 2.5 per cent in 1977. This reflected both lower total borrowing requirements and a narrower long-term interest differential between Canada and the United States. The proportion of debt capital raised in foreign markets by governments and their enterprises fell from 40 per cent in 1976 to 21 per cent in 1977. For corporations, the proportion fell from 74 per cent in 1976 to 45 per cent in 1977.

Table 14

Growth of Foreign-Held Canadian Bonds, 1965-1977

	1965-1974	1975	1976	1977
Net issues as per cent of opening stock	10.1	27.7	42.2	17.9
Net issues as per cent of GNE	1.2	2.7	4.5	2.5

Source: Statistics Canada, The Canadian Balance of International Payments, Cat. 67-001, Financial Flow Accounts Volume II, Cat. 13-563, and National Income and Expenditure Accounts, Cat. 13-001; and Long Range and Structural Analysis Division, Department of Finance.

Over the medium term, the size and composition of foreign capital inflows will reflect the evolution of the financial requirements of the private and public sectors as well as policy and interest rate developments. Aggregate financial requirements over the medium term will be determined by the strength of investment spending. Public and private investments will, in particular, be needed in the energy sector. The recent large increase in borrowing on behalf of, and in guarantees of borrowing by, provincial utilities is likely to continue exerting an important influence on capital flows reflecting the continued increase in the importance of electricity as a source of energy. The resulting increase in the debt of provincial governments may, however, be offset in part by attempts to limit other borrowing requirements. With economic recovery, provincial budgetary borrowing requirements would also be reduced.

Partly because of the relatively large size of the likely inflows and partly also reflecting a continuation of the long-term shift to debt from equity, foreign capital raised through issues of bonds and debentures is likely to account for most of the inflow of capital over the medium term. The rate of increase in the stock of foreign-held Canadian debt over the medium term is thus likely to remain high by historical standards, although lower than in 1975-1976. Reflecting the slow decline in the value of interest payments on end-1977 debt and the relatively large size of likely new foreign borrowings, payments for investment income are likely to increase further over the medium term, both in absolute terms and relative to GNE. The rate of increase, however, should be significantly lower than in recent years.

4. THE BALANCE ON OTHER SERVICES

4.1 Introduction

Recent discussions of Canada's current account position have focused on the performance of merchandise trade, the expanding travel deficit and the growing deficit on interest and dividends. The other services item of the service account has drawn little attention as none of the individual surplus or deficit positions in respect of the various categories of service transactions which comprise this item have displayed changes of a magnitude comparable to those of other components of the current account. This section will briefly review the composition and structural characteristics of the deficit on the other services account to facilitate its integration into the discussion of the medium-term outlook of the balance of payments.

The services discussed in this section cover all services included in the "other services account" of the balance of payments. Neither freight and shipping nor the withholding tax levied on income distributions and service payments to non-residents are included. In the case of the withholding tax, there is a corresponding offsetting entry in the transfer account. Its inclusion or exclusion thus does not affect the analysis of the overall balance on current account. Freight and shipping is discussed briefly below.

Canada's net external payments position in respect of other services has traditionally been in deficit. After having expanded at a relatively rapid pace and exhibited significant fluctuations in the period until 1957, the deficit on other services account stabilized at 0.7-0.8 per cent of GNE in the subsequent period. The deficit in respect of such services has been the second largest component of the service account deficit through most of the period since 1950. In 1977, the deficit on other services was \$1.7 billion, compared to a deficit of \$3.5 billion on interests and dividends and a deficit of \$1.6 billion on the travel account.

Recent developments in the balance on other services are reviewed in subsection 4.2. Subsections 4.3 and 4.4 examine, respectively, the anticipated effect of a change in the exchange rate and the medium-term outlook for this account. While little information is available in this area, the available evidence suggests that the balance on other services is not likely to be much affected by a change in the exchange rate or in relative price performance. No significant change is expected in the size of the deficit relative to GNE over the medium term.

4.2 Recent Developments

There are three major types of transactions recorded in the other services account: government transactions relating primarily to the operation and maintenance of diplomatic and military representation in Canada and abroad; miscellaneous investment income flows not covered on the interest and dividend account; and business and other service transactions between Canadians and non-residents. Since the late 1950s, Canada has normally experienced deficits in all three categories of transactions with non-residents - the largest typically being experienced on business and other services (\$1 billion in 1977), the smallest on government transactions (\$0.2 billion in 1977), while the miscellaneous income deficit falls in the middle in this period, standing at 0.4 billion dollars in 1977.

Table 15 shows the evolution of the payments balance in respect of major categories of other services in recent years. The rates of increase of both payments and receipts of the various sub-categories of transactions comprising the balance on the other service account have generally accelerated in recent years. This reflected the acceleration of domestic and world inflation and, in the case of some flows, the effect of developments peculiar to these accounts.

Table 15

Balance on Other Services Account, 1970-1977

	1971	1972	1973	1974	1975	1976	1977
	(millions of dollars)						
Government	-25	-43	-73	-58	-71	-148	-238
Miscellaneous income							
Interest	-261	-255	-246	-465	-514	-521	-606
Other	96	39	4	93	265	184	172
Business and other services							
Business services	-686	-720	-798	-924	-960	-1091	-1316
Other	111	95	86	139	172	240	278
Total	-765	-884	-1027	-1215	-1108	-1336	-1709

Source: Statistics Canada, special tabulation.

The most significant development has been the rapid widening of the deficit in respect of the business component of the business and other services account. The deficit on business services expanded by \$518 million in the last four years to \$1.3 billion in 1977, equivalent to 0.6 per cent of GNE. Although the annual rates of increase on this account have been higher for receipts than for payments, the faster rate of increase of receipts has not been sufficient to compensate for the original imbalance in the account.

Movements in the government service account have been dominated by increases in payments which have grown at a rate of about 20 per cent per year since 1973. While the rapid increase of government service payments was offset by large increases in receipts in 1974-1975, the subsequent tapering off of the rate of increase of receipts has resulted in a widening of the deficit by \$167 million during the last two years.

The slowdown in the rate of increase of receipts from governments resulted in a further reduction of their relative importance in total receipts from other services to only 11 per cent in 1977 compared to 52 per cent in 1955-1956. The long-term decline in the relative importance of receipts from governments reflected primarily lower levels of U.S. defense-related expenditures in Canada since the mid 1950s as receipts from governments fell from \$200 million per year in 1955-1956 to only \$100-110 million per year through the first half of the 1960s. Except for 1970, receipts from governments did not again exceed their earlier peak level until 1974.

Movements in the miscellaneous service income account have been dominated in recent years by increases in interest payments on short and long-term claims reflecting increased domestic recourse to foreign intercompany and bank loans. While a significant part of the increased deficit in respect of interest on short and long-term claims was offset by the increase in the surplus on revenues from operations of chartered banks and insurance companies, the latter surplus has declined rapidly in the last two years.

4.3 Effects of a Depreciation of the Exchange Rate

Little information is available at present on the behavioural determinants of the flows comprising the other services account. A priori, however, these flows are not expected to exhibit much sensitivity to a depreciation of the exchange rate or an improved relative price performance, at least not immediately. Receipts and payments in respect of government services reflect primarily the cost of foreign operations and commitments and are unlikely to be significantly affected in response to a change in relative prices. While the other two categories of transactions are likely to exhibit some flexibility, the determination of the size and speed of the response will require further research.

In the case of the miscellaneous income account, payments related to the operations of bank and insurance companies and interest on short-term claims can be expected to be affected by the stance of economic policies affecting the profitability of domestic operations or the locale of

¹ Interest payments and receipts on short and long-term intercompany and bank loans, mortgages, short-term money market instruments, etc. are segregated, for balance of payments presentation purposes, from the flows on investment income account which record primarily income from long-term direct and portfolio investments. For analytical purposes, however, interest payments on both types of long-term borrowing represent the net cost of using foreign capital.

trade and other financing. The balance on interest in respect of long-term claims, however, is expected to exhibit more of the locked-in characteristics examined above in the case of payments for investment income.

Little immediate flexibility is also expected in the case of the balance on the business and other income account. As mentioned above business service flows account for most of the level and movements in the deficit in respect of business and other services. Because of the nature of payments for business services, little immediate flexibility is expected on this account: the latest Statistics Canada survey showed that payments to and receipts from affiliates accounted, respectively, for 80 per cent and 70 per cent of total business service payments and receipts (Table 16). In the longer run, however, Canadians may shift away from higher priced foreign services while the foreign sector may increase its demand for relatively lower priced Canadian services.

Table 16

Composition of Receipts and Payments
for Business Services, 1973

	Receipts From	Payments To
	(per cent)	
Affiliates: Total	69.1	78.7
Canadian controlled	11.0	3.0
Foreign controlled	58.1	75.7
Non-Affiliates: Total	30.9	21.3
Canadian controlled	11.2	7.3
Foreign controlled	19.7	14.0

Source: Statistics Canada, The Canadian Balance of International Payments 1973-1974, Cat. 67-201.

The deficit on other services account measured in foreign currencies is thus expected to remain largely unchanged following a depreciation of the exchange rate or an improved relative price performance. As in the case of the investment income account, a depreciation would thus result in a widening of the deficit measured in Canadian dollars.

4.4 Medium-Term Outlook

On the basis of the evidence presently available on recent developments and on the structural characteristics of the flows comprising the balance on other services, little change is expected in the evolution of the deficit on the other services account in the medium term. Quantitative studies have generally found overall payments and receipts on this account to follow closely the overall level of economic activity and/or

the stock of foreign or total investment. The size of the deficit relative to GNE is not expected, over the medium term, to depart from its very stable level of the last 20 years. Because of the still relatively high level of the deficit on business services and the relatively rapid widening of the deficit in recent years, the evolution and the flexibility of this account in response to the stance of economic policies will deserve more attention in the future.

¹ The freight and shipping component of the current account deficit has not been discussed in this chapter. The deficit on freight and shipping accounted for 0.06 per cent of GNE in 1977. Receipts and payments for freight and shipping closely follow movements in merchandise trade: receipts reflect changes in the volume of exports and payments reflect changes in the volume of imports. No significant change is expected in the size of the deficit on freight and shipping relative to GNE over the medium term.

5. CONCLUSION

Recent developments in Canada's external payments position have raised questions concerning the viability or sustainability of Canada's balance of payments. The external balances on energy, manufactured goods, foreign travel and investment income, in particular, have been identified as particularly worrisome. Although both the trade and service balances contributed to the sharp widening of the current account deficit after 1974, the trade balance improved significantly in 1976 and 1977.

No apparent gains, however, have been achieved in respect of service transactions as the deficit on non-merchandise current external transactions continued to widen rapidly, reaching 3.4 per cent of GNE in 1977. The factors underlying the sharp widening of the payments deficit in respect of service transactions were examined in this paper. The issue of whether recent developments have reduced the flexibility of response of the service account (and, thus, of the current account) and various factors of importance in the determination of the medium-term performance of the service account were also examined. The major conclusions of the paper are summarized in this section.

As regards the factors responsible for the rapid widening of the deficit on travel account in recent years, the evidence examined in section 2 suggests that most of the recent increase in the travel deficit was the result of differential cyclical and price developments. Arithmetically, two-thirds of the increase in the overall deficit on travel since 1974 resulted from the swing in the bilateral account with the United States. As was pointed out above, the sharp reversal of the travel balance with the United States reflected primarily developments in the volume of travel transactions, i.e., increased travelling and spending abroad by Canadians and reduced travelling and spending in Canada by residents of the United States. The weakness of consumption expenditures in the United States and unfavourable developments in the price of travel-related goods and services in Canada relative to the United States appear to have been sufficient to account for most of the sharp deterioration of the travel balance.

The evidence examined in section 2 suggests that no significant sudden changes have taken place that have reduced the response of the travel balance to improvements in the performance of relative prices or a depreciation of the exchange rate. Both the estimated elasticities of travel payments and receipts with respect to changes in exchange rates and the adjustment of the travel balance following the depreciation of 1960-1962 suggest that the travel balance should significantly improve in response to the depreciation of the dollar.

In the case of the investment income account, the widening of the deficit largely reflected the effect of the large increase in foreign borrowing

in recent years. Foreign borrowing increased both in response to large financial requirements for investment and to compensate for the cyclical contraction of gross provincial savings, and in response to interest rate differentials between Canadian and foreign financial markets.

It was found in section 3 that the large increase in interest payments due to the borrowing of recent years and the resulting increase in the share of payments set on a contractual basis and denominated in foreign currencies have reduced the flexibility of response of the balance on investment income. Reflecting the smaller favourable effect of a depreciation of the dollar on the net demand for foreign currencies for investment income payments, a depreciation would now probably result in a widening of the deficit on investment income measured in current Canadian dollars. The burden of adjustment to be borne by other components of the current account is thus increased.

However, interest payments, despite their rapid increase of recent years, still accounted for less than 5 per cent of total payments for current international transactions in 1977. The flexibility of response of the current account to a depreciation of the exchange rate thus would not seem to have been greatly affected.

Even with a significant improvement of domestic price and cost performance, the growth path outlined in Canada's Economy did not envisage that the service account deficit relative to GNE would improve significantly compared to 1977. The service account deficit is expected to remain relatively high compared to the experience since the early 1960s. While short-term international developments could result in further sharp fluctuations of the service account, the continued increase of interest payments makes it unlikely that a more ambitious medium-term performance could be achieved.

The overall deficit on service account, however, need not expand further relative to GNE over the medium term. The deficit on investment income account may expand further relative to GNE reflecting further increases in interest payments. The widening of the deficit on investment income account, however, could be offset by an improved performance on travel account relative to GNE reflecting the improved competitiveness of the domestic tourism industry following the depreciation of the dollar. As was emphasized above, the performance of the travel balance will depend importantly on growth performance abroad and on the performance of domestic prices and costs in the domestic tourism industry.

APPENDIX I: DEFINITION OF VARIABLES
AND SPECIFICATION OF ESTIMATED
EQUATIONS

A. Travel Receipts and Payments (Millions of Dollars)

EUSCLT = receipts from the United States for long-term travel at constant 1971 prices.

EUSCST = receipts from the United States for same-day travel at constant 1971 prices.

EOTHCL = receipts from countries other than the United States at constant 1971 prices.

ECUSLT = payments to the United States for long-term travel at constant 1971 prices.

ECUSST = payments to the United States for same-day travel at constant 1971 prices.

ECOTHCL = payments to countries other than the United States at constant 1971 prices.

B. Prices and Exchange Rates (1971 = 100)

PT = index of transport prices measured in local currencies.

PNT = index of non-transport prices measured in local currencies.

P = index of transport and non-transport prices measured in local currencies.

CPI = consumer price index.

EXR = Canadian dollars per U.S. dollar, annual average.

EXRQ3 = Canadian dollars per U.S. dollar, annual average, three quarter lag.

EXR_{OTH} = Canadian dollars per foreign currencies.

C. Activity Variables

CON = Canadian consumption expenditures at constant 1971 prices.

CONUS = U.S. consumption expenditures at constant 1971 prices.

CONOTH = index of real consumption expenditures, other countries (1971 = 100).

IPROD = index of industrial production, Canada (1971 = 100).

D. Others

EXP067 = 1 in 1967
 = 0 otherwise

EXP067* = 1 in 1967
 = -1 in 1968
 = 0 otherwise

OLYMPIC = 1 in 1976
 = 0 otherwise

EXP070 = 1 in 1970
 = 0 otherwise

Estimated Equations, Canadian Travel Receipts and Payments⁽¹⁾

A. Travel Receipts

$$\text{EUSCLT} = -56.92 + 1.16 \frac{\text{PT}_{\text{US}}}{\text{PT}_{\text{CAN}}} \times 100 + 5.33 \frac{\text{PNT}_{\text{US}}}{\text{PNT}_{\text{CAN}}} \times 100 + 3.94 \text{EXR} + 2.40 \text{CONUS} + 0.51 \text{EXP067} \quad \bar{R}^2 = 0.92, \text{D.W.} = 2.67$$

(4.6) (1.9) (5.2) (4.1) (7.6) (8.8)

$$\text{EUSCST} = -27.71 + 3.55 \frac{\text{PNT}_{\text{US}}}{\text{PNT}_{\text{CAN}}} \times \text{EXR} + 2.47 \text{CONUS} + 0.36 \text{EXP067} \quad \bar{R}^2 = 0.83, \text{D.W.} = 1.87$$

(3.7) (3.4) (5.5) (3.9)

$$\text{EOTH} = -11.69 + 1.80 \frac{\text{P}_{\text{OTH}}}{\text{P}_{\text{CAN}}} \times \text{EXR}_{\text{OTH}} + 1.83 \text{CONOTH} + 0.34 \text{EXP067}^* + 0.35 \text{OLYMPIC} \quad \bar{R}^2 = 0.97, \text{D.W.} = 1.96$$

(13.3) (4.6) (5.2) (4.9) (3.3)

B. Travel Payments

$$\text{ECUSLT} = 22.86 - 1.59 \frac{\text{PT}_{\text{US}}}{\text{PT}_{\text{CAN}}} \times 100 - 2.91 \frac{\text{PNT}_{\text{US}}}{\text{PNT}_{\text{CAN}}} \times 100 - 0.59 \text{EXRQ3} + 0.66 \text{CON} \quad \bar{R}^2 = 0.97, \text{D.W.} = 2.09$$

(1.8) (3.5) (2.3) (0.6) (2.5)

$$\text{ECUSST} = -9.19 - 1.04 \frac{\text{CPI}_{\text{US}}}{\text{CPI}_{\text{CAN}}} \times \text{EXR} + 2.17 \text{CON} - 1.14 \text{IPROD} - 0.17 \text{EXP067} \quad \bar{R}^2 = 0.95, \text{D.W.} = 2.28$$

(0.8) (0.7) (3.7) (2.5) (2.4)

$$\text{ECOTH} = -8.99 - 0.93 \frac{\text{PNT}_{\text{OTH}}}{\text{PNT}_{\text{CAN}}} \times \text{EXR}_{\text{OTH}} + 1.78 \text{CON} + 0.22 \text{EXP070} \quad \bar{R}^2 = 0.97, \text{D.W.} = 1.59$$

(5.8) (2.5) (20.4) (2.7)

(1) Estimation period 1962-1976. Numbers in brackets are t-statistics. All equations estimated in log-linear form.

APPENDIX II: CONSTRUCTION OF TRAVEL
PRICE INDEXES

The travel price indexes used in this study are weighted averages of CPI component indexes with weights equal to the estimated share of different expenditure categories in the traveller's budget. The travel price indexes can be obtained from the Long Range and Structural Analysis Division, Department of Finance. The data sources and weights are specified below.

Data Sources

The CPI component indexes are from Statistics Canada, The Consumer Price Index, Cat. 62-001, for Canada; from the Bureau of Labour Statistics, Monthly Labor Review, for the United States; and from Central Statistical Office, Monthly Digest of Statistics, for the United Kingdom. For France, Germany, the Netherlands, Spain, Switzerland and Italy, the travel price indexes are from Staniland Hall, Economic Advisers and Business Forecasters, "Comparative Indices of Tourist Prices" for the period 1967-1976. The travel price indexes for these latter countries were extended backwards to 1961 using CPI indexes. No travel price index was available for Japan and the Japanese CPI was used. CPI indexes were obtained from International Monetary Fund, International Financial Statistics.

The airfare indexes for international travel were obtained from Canadian Aviation, June 1977 and from Transport Canada.

Weights

Relatively little information is available on the composition of travel budgets. Such information is needed to weight the different component indexes in order to construct an overall travel price index. In the case of Canada, the 1971 Canadian Travel Survey is the only nation-wide survey that included extensive questioning on travel expenditures. Similar weights are available for the United States based on the U.S. Department of Labor's 1960-1961 Consumer Expenditure Survey. Despite the fact that these surveys are for different countries and were taken at different times, the weights for different categories of expenditures are remarkably similar. The weights used in this study to construct travel price indexes for Canada and the United States were based primarily on the above surveys. In the case of the United Kingdom, the weights were obtained from Staniland Hall, op. cit., and also reflect survey information.

¹ A travel price index for Canada is also computed by the Education, Science and Culture Division of Statistics Canada. The index for Canada, and the U.S. Travel Data Center's index for the United States over the period 1971-1977, are published in Culture Statistics, Cat. 87-001, Vol. 1, No. 3, June 1978.

The weights for Canada and the United States used in this study and the weights obtained from the surveys of travel expenditures mentioned above are shown in Table 17. In the case of the United Kingdom, Staniland Hall use different weights for resident and non-resident travellers reflecting differences in the spending pattern of the two kinds of travellers. The weights for U.K. residents travelling at home were used in the construction of the relative price index for foreign travel in the analysis of Canadian travel receipts. The weights for foreign residents travelling in the U.K. were used in the construction of the relative price index for foreign travel in the analysis of Canadian travel payments.

Table 17

Weights for Travel Price Indexes

		Canada-U.S.		U.K.	
	LRSA	Canada Survey	U.S. Survey	Residents	Non-Residents
		(per cent)			
<u>Transportation</u>	<u>36.5</u>	<u>35.5</u>	<u>37.6</u>	<u>9.0</u>	<u>9.0</u>
Gasoline	21.9	20.0	23.9	n.a.	n.a.
Air fares	12.8	9.9	13.1	n.a.	n.a.
Train fares	0.9	2.8	0.2	n.a.	n.a.
Bus fares	0.9	1.9	0.4	n.a.	n.a.
Other (or unidentified)	0.0	0.9	0.0	n.a.	n.a.
<u>Non-transportation</u>	<u>63.5</u>	<u>64.5</u>	<u>62.4</u>	<u>91.0</u>	<u>91.0</u>
Shelter	14.6	14.4	<25.0	36.0	29.0
Food at home	7.6	8.7	n.a.	0.0	0.0
Food away from home	17.8	15.9	18.9	12.0	14.0
Recreational services	4.4	3.6	4.5	10.0	10.0
Recreational goods	5.1	n.a.	n.a.	n.a.	n.a.
Apparel and upkeep	12.1	n.a.	n.a.	5.0	12.0
Tobacco products	0.6	n.a.	n.a.	6.0	5.0
Alcoholic beverages	1.3	n.a.	n.a.	10.0	9.0
Other (or unidentified)	0.0	21.9	<20.0	12.0	12.0

Source: Canadian Travel Survey, 1971; "Travel Price Index: Structure and Methodology", United States Travel Data Center, October 1974; "Comparative Indices of Tourist Prices", Staniland Hall Associates Ltd. (various issues); Long Range and Structural Analysis Division, Department of Finance.

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